



**Fiscal Years 2016-2017 All Funds Capital Budget
Approved Biennial Capital Investment Program**

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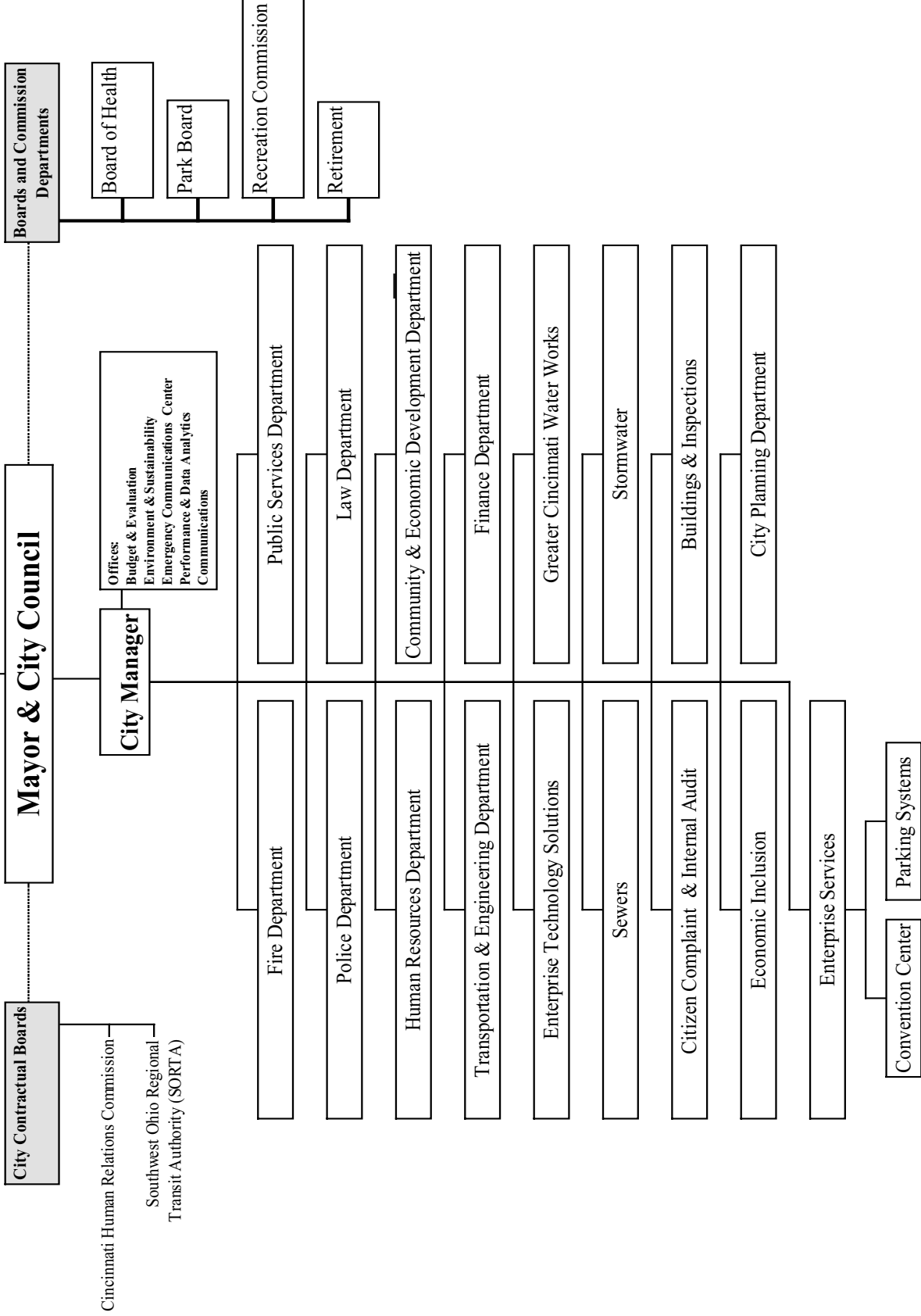
July 1, 2013

Executive Director

The Government Finance Officers Association of the United States and Canada (GFOA) presented an Award for the Distinguished Budget Presentation to the City of Cincinnati for its annual budget beginning July 1, 2013.

In order to receive this award, a governmental unit must publish a budget document that meets program criteria as a policy document, as an operations guide, as a financial plan, and as a communications medium. The FY 2016-FY 2017 Budget Document will be submitted for consideration to the GFOA after final approval.

Citizens of Cincinnati



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The City of Cincinnati's Fiscal Years 2016-2017 Approved Biennial Budget is also available via the City of Cincinnati's web site – www.cincinnati-oh.gov. Copies have also been provided to the Cincinnati/Hamilton County Public Library's Main Branch.



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I. INTRODUCTION

This document includes the Approved Fiscal Years (FY) 2016-2017 Capital Budget for the City of Cincinnati. The Capital Budget, which provides funding for improvements with a useful life of at least five years, includes General Capital projects, Restricted Funds Capital projects, and projects supported with Federal and State Capital Grant Matching Funds. This budget represents the first two years of a six-year Capital Investment Program.

Following this introduction is the Overview of Available Resources and then the Overview of Expenditures. After the overview sections are two summary reports: Projects by Program and Projects by Neighborhood. The summary reports are followed by the Operating Budget Impact report, which provides a description of the Capital Budget's impact on the Operating Budget. Next is the Capital Acceleration Plan, which is designed to address the City's aging roads and vehicles. An individual section for each departmental FY 2016-2021 Capital Improvement Program follows the Capital Acceleration Plan. The appendix includes a report illustrating the level of consistency of each project with the City's comprehensive plan and how the projects included in the CIP align with each of the five initiative areas in Plan Cincinnati the comprehensive plan.

A capital improvement or capital project is defined as the purchase or improvement of a City asset, including construction or rehabilitation which provides an asset for the City's use or, in the case of an existing asset, increases the value of the public asset or extends its useful life. Capital improvements are made to improve the value of City assets, and are relatively large expenditure items compared with operating budget items. The City Council may also designate a capital improvement through its authority to establish public policy and identify a public purpose when making capital improvement expenditures. A capital improvement is expected to have a useful life of at least five years, compared to operating budget items which are consumed in the daily delivery of City services.

The nature of a capital improvement lends itself to long-term planning and a combination of financing mechanisms. In Cincinnati, General Capital improvements are primarily funded by property tax-supported bond proceeds, earmarked income tax receipts, and Southern Railway note proceeds. The necessary lead time involved in engineering a project, acquiring and clearing sites, or in securing State or Federal funds may require the funding of project phases over several years. Enterprise and Special Revenue capital projects are generally funded by user fees to operate and maintain facilities, such as the Water Works system.



A six-year Capital Investment Program (CIP) is a plan for capital investment in Cincinnati's future through improving City streets, bridges, recreation facilities, parks, health facilities, and buildings, all of which enhance the delivery of services and the quality of life in Cincinnati. The Fiscal Year (FY) 2016-2021 CIP coordinates the financing and timing of improvements to maximize the value to the public.

This Capital Budget process began with city departments making requests for capital projects. These requests include ongoing projects, improvements to existing assets, previously funded phased projects, and new projects. The requested capital projects were reviewed by the City Planning Department to assess each project's level of consistency with Plan Cincinnati, the City's Comprehensive Plan. The Capital Budget development process aims to align the CIP with the prioritized citywide strategies outlined in Plan Cincinnati, which serves as a long-range guide to manage growth, protect the environment, and influence future development in the City. All department capital project requests were reviewed by the Capital Committee, which is a group of department directors and an Assistant City Manager, chaired by an Assistant City Manager and the Finance Director. The City Manager reviewed the recommendations of the Capital Committee and, in turn, developed the Capital Budget recommendations which are submitted to the Mayor for further consideration prior to submission to the City Council. Public comment was solicited during public hearings in late May and early June 2015. The City Council approved the FY 2016-2017 Biennial Capital Budget on June 17, 2015 and immediately amended the budget during the same meeting of City Council. The amendments are reflected in this document.

Evaluation Criteria

The following criteria were used in developing the Capital Budget, which are listed in descending priority sequence:

1. Hazard Elimination: to eliminate or reduce definite and immediate health and safety hazards;
2. Legal Mandates: to comply with a court order or other specific legal directive (consent decree, etc.);



3. Regulatory Compliance: self-initiated improvement in compliance with a federal, state, or local rule or regulation affecting capital assets;
4. Project Completion: to finish phased projects with related and already committed or expended funding;
5. Prevent Failure: to systematically, and according to schedule, improve assets which if not periodically improved would fail;
6. Extend Useful Life: to improve an asset by making a capital investment to increase the asset's service life;
7. Cost-Benefit Justified: to make a capital investment which is supported by benefits equal to or greater than the cost of investment (e.g., benefits may be in jobs, revenue, cost savings, matching funds, etc.);
8. Service Betterment: to accommodate growth in service demand, or to otherwise increase the quality of service provided by the capital asset.





I. FY 2016–2017 ALL FUNDS CAPITAL BUDGET SUMMARY

The Approved FY 2016-2017 Biennial All Funds Capital Budget totals \$694.9 million: \$427.7 million for FY 2016 and \$267.2 million for FY 2017. The Approved FY 2016-2021 Capital Investment Program totals \$1.5 billion. Included are budgets for General Capital projects, Restricted Funds Capital projects, Special Revenue Capital projects, and projects supported with Federal and State Capital Grant Matching Funds. When compared to the FY 2015 All Funds Capital Budget, the FY 2016 All Funds Capital Budget increases by 25.8%. In FY 2017, the All Funds Capital Budget decreases by 37.5% compared to FY 2016. The capital budgets will vary somewhat from year-to-year to reflect the timing of projects and changes in resources.

Exhibit 1 illustrates the All Funds Capital Budget Summary.

[Note: Due to a difference in fiscal year timing, funding for the projects in the Department of Sewers reflect funding for calendar years (CY) 2015 – 2019, although these figures are reflected as in this document as the City's fiscal years (FY) 2016- 2020.]





Capital Investment Program

Exhibit 1: All Funds Capital Budget Summary

Agency/Account	FY 2015 Approved Budget	FY 2016 Approved	FY 2017 Approved	FY 2016-2021 Approved
GENERAL CAPITAL	60,966,200	77,595,200	75,478,700	443,544,600
RESTRICTED CAPITAL FUNDS				
General Aviation	629,100	642,300	656,400	4,122,700
Convention Center	230,000	230,000	230,000	1,380,000
Income Tax Transit	100,000	100,000	100,000	600,000
Stormwater Management	1,400,000	1,725,000	700,000	3,725,000
Water Works PIF	53,360,000	35,392,000	34,276,000	213,265,000
MSD Capital Improvements	211,246,244	297,416,616	152,118,886	823,624,229
Telecommunications Services	30,000	30,000	30,000	180,000
Parking System Facilities	100,000	100,000	100,000	600,000
TOTAL RESTRICTED CAPITAL FUNDS	267,095,344	335,635,916	188,211,286	1,047,496,929
SPECIAL REVENUE CAPITAL FUNDS				
Special Housing PIF	300,000	976,530	600,000	1,576,530
Urban Renewal Debt Retirement	0	835,000	0	835,000
TOTAL SPECIAL REVENUE CAPITAL FUNDS	300,000	1,811,530	600,000	2,411,530
GRANTS AND MATCHING FUNDS				
Fed Aviation Grants	150,000	1,000,000	1,000,000	2,000,000
Roads/Bridges Grants	11,521,200	11,688,000	1,872,800	13,560,800
TOTAL GRANTS AND MATCHING FUNDS	11,671,200	12,688,000	2,872,800	15,560,800
TOTAL ALL FUNDS CAPITAL BUDGET	340,032,744	427,730,646	267,162,786	1,509,013,859





Highlights of the Approved General Capital Budget

- 1. \$20.2 Million to Renovate/Replace City Facilities.** The Approved FY 2016–2017 Capital Budget includes \$8.3 million in FY 2016 and \$12.0 million in FY 2017 to renovate or replace existing City-owned facilities. Approved funding over the biennium for renovations includes \$6.3 million for Recreation facilities, \$4.0 million for Park facilities, and \$342,900 for Health facilities. In addition, the City Facility Renovation and Repairs project is approved at a funding level of \$4.5 million over the biennium. This project provides resources to continue ongoing repairs, alterations, and upgrades to General Fund City facilities, such as those used by Police, Fire and Public Services. The City Facility Renovation and Repairs project also takes into account capital improvement needs at Findlay Market, which was previously funded in a separate project. The Music Hall Renovations project is approved for \$4.0 million in FY 2017. This project will support major renovations to Music Hall in partnership with the Music Hall Revitalization Company. This complies with Ordinance No. 84-2013, which was approved by the City Council on April 10, 2013 and directs the Administration to allocate up to \$10.0 million to this project over four years starting in FY 2016. The Community Facilities Improvement project is also included in the Approved FY 2016–2017 Capital Budget for \$1.0 million.
- 2. \$36.6 million for Street Rehabilitation and Street Improvement Projects.*** The Approved FY 2016–2017 Capital Budget for rehabilitation and improvement of existing streets and roads totals \$18.9 million in FY 2016 and \$17.7 million in FY 2017. This includes funding the Street Rehabilitation program in the amount of \$15.4 million in FY 2016 and \$15.7 million in FY 2017. Approved funding for the Street Rehabilitation Program includes adequate resources to rehabilitate a minimum average of 100 lane miles over the biennium.

Also included in the Approved Capital Budget is \$3.5 million in FY 2016 and \$2.1 million in FY 2017 for various street and road improvement projects. Major projects over the biennium include \$1.4 million for the Street Improvements project; \$1.0 for the Duck Creek Connector; \$0.9 million for the Uptown Access Improvements West MLK Drive project; \$0.8 million for the Spot Infrastructure Replacement Program; \$0.8 million for the Curb Ramps-Street Rehabilitation project; \$0.5 million for the Pavement Management project; \$150,000 for Safety Improvements; and \$93,000 for Colerain Corridor Improvements I-74 to Spring Grove.



In addition to the Street Rehabilitation and Street Improvement projects approved in the FY 2016-2017 biennium, funding to several other notable transportation infrastructure projects is included. This includes the following projects: \$1.5 million for the Bridge Rehabilitation Program; \$1.3 million for Neighborhood Transportation Strategies; \$1.4 million for the Wall Stabilization and Landslide Correction Program; \$0.8 million for the Bicycle Transportation Program; and \$0.6 million for the Sidewalk Repair Program.

(*Note: This does not include the Street Rehabilitation components of the Capital Acceleration Plan. Refer to #7 for additional information.)

3. **\$14.0 Million for Equipment.** ** The Approved Capital Budget for equipment is \$6.6 million in FY 2016 and \$6.8 million in FY 2017, excluding projects pertaining to Information Technology. This includes \$10.9 million over the biennium to replace automotive equipment in agencies supported by the General Fund**.

The Approved FY 2016–2017 Capital Budget also includes \$725,000 for the Police Department to replace the aging and unserviceable departmental TASERS currently in service with All-Digital TASER X26P Smart Weapons for all sworn law enforcement officers. An amount of \$475,000 was previously approved for FY 2015, and the department has already begun the process to replace 380 TASERS issued to sworn officers. The approved FY 2016 amount for this project would replace approximately 580 remaining aging and unserviceable TASERS which are currently still in use by the department. In order to provide the necessary matching resources for a grant supporting Police Body Cameras, resources in the amount of \$700,000 are included in FY 2016. An amount of \$645,000 is approved for digital video storage of the Police Department's in-car camera recordings. This project will provide resources for a wireless mobile digital video (in-car camera) storage system with connectivity for file download to a central storage platform as well as purchasing new in-car cameras. An amount of \$474,000 was approved in FY 2015 and the department has begun the process of replacing the in-car cameras that have failed and cannot be repaired. Video storage is a legal mandate per the Federal Court Memorandum of Agreement (MOA) with the United States Department of Justice (DOJ). Additional significant equipment projects include \$464,500 for Firefighter Personal Protection Equipment (PPE), and \$340,600 for trash receptacles.



Various other projects totaling \$293,000 are included in the Approved FY 2016–2017 Capital Budget. (**Note: This does not include the Fleet Lease Purchase component of the Capital Acceleration Plan. Refer to #7 for additional information.)

4. **\$14.8 Million for Economic Development.** The Approved FY 2016–2017 Capital Budget for economic development initiatives is \$10.0 million in FY 2016 and \$4.8 million in FY 2017. This includes \$3.2 million over the biennium to repair or replace the current parking garage structure located at the intersection of Fourth Street and Race Street. Also over the biennium, \$2.2 million is approved for the Retail/Commercial Opportunities project and \$1.5 million is approved for the Neighborhood Business District (NBD) Public Improvements project. The Walnut Hills Development Gap, Focus 52 project is approved for \$2.0 million in FY 2016. The Approved Capital Budget includes \$1.0 million in FY 2016 for the College Hill Development Gap, Focus 52 project. The Mercy Health Infrastructure Improvements project is approved for funding of \$1.0 million. The Approved Capital Budget for economic development initiatives also includes the Commercial & Industrial Public Improvements project for \$950,000, the Race Street Revitalization project for \$900,000, the Community Development Focus District project for \$540,000, and \$1,466,000 is approved for various other projects over the biennium.
5. **\$6.1 Million for Housing Development Projects.** The Approved Capital Budget includes \$2.9 million in FY 2016 and \$3.3 million in FY 2017 to support housing development in the City. Other significant housing development projects being funded in the Approved FY 2016–2017 Capital Budget include \$1.5 million for the Neighborhood Market Rate Housing project, \$1.3 million for the Core 4 Strategic Housing Notice of Funding Availability, \$1.3 million for the Hazard Abatement/Demolition program, \$0.8 million for Citirama, \$0.5 million for the Downtown Housing Development project, \$0.5 million for Price Hill Neighborhood Improvements, and \$0.1 million for both Neighborhood Studies and CCAT Bed Expansion.
6. **\$4.6 Million for Information Technology Initiatives and Upgrades.** Support for new or upgraded information technology systems is approved at a level of \$1.9 million in FY 2016 and \$2.7 million in FY 2017. Over the biennium, this includes \$1.4 million for the Information Technology Efficiency Initiatives project, which would be used as a pool of resources available to support enterprise information technology capital projects as identified and approved by the Enterprise Technology Solutions (ETS) Governance Board.



This project complies with the City Council directive to “scale up technology applications that will increase productivity and reduce costs” (Doc. #200900970).

Approved information technology initiatives over the biennium also include \$1.3 million for the 800 MHz Radios project, which will provide resources to fund the first phase of a manufacturer-required upgrade to the radio system used by most City Departments including Police and Fire. The system, placed in service in 2005, will be going out of full manufacturer support in 2015. The manufacturer has quoted a total cost of approximately \$12 million to bring the system into full support beyond that date. Other approved projects include \$302,000 for the Data Center Infrastructure Replacement project, \$300,000 for the Disaster Recovery Infrastructure project, \$279,000 for the Information Systems Acquisition project, \$212,000 for the Cincinnati Budget System Upgrades, \$203,300 for the CAGIS Infrastructure project, and \$200,000 for the Accela Permits Migration – Mobile Field Software project. Various other information technology projects totaling \$422,200 are also included in the Approved FY 2016–2017 Capital Budget.

7. **\$41.5 Million for Capital Acceleration Projects.** In order to maintain a better overall quality of streets within the City and to promote maintaining the City's fleet vehicles and equipment within lifecycle, additional resources are included in the Approved FY 2016-2021 CIP. This includes additional resources for Street Rehabilitation in the amount of \$14.6 million in FY 2016 and \$14.4 million in FY 2017. When combined with the current CIP, this will provide a total of \$30.0 million in both FY 2016 and FY 2017 for a total of \$60.0 million over the biennium. The Street Rehabilitation Acceleration will require additional debt service payments within the Capital Budget. Starting in FY 2017, this amount is \$100,000.

The Capital Acceleration Plan also includes additional resources for a Fleet Lease Purchase Acceleration project, which will provide \$6.5 million in FY 2016 and \$4.5 million in FY 2017. These additional resources will provide opportunities to lease purchase vehicles and motorized equipment in order to better align vehicle and equipment replacement with the prescribed lifecycle. New equipment will help achieve the goal of a cleaner and more efficient fleet. In addition, department productivity will likely increase due to less vehicles being unavailable while requiring repairs. The Fleet Lease Purchase Acceleration will require additional payments within the Capital Budget. Starting in FY 2017, this amount is \$1.4 million. For additional information pertaining to the Capital Acceleration Plan, please refer to the "Capital Acceleration Plan" section of this document.



Capital Investment Program
Exhibit 2: General Capital Investment Program

2015-2021 General Capital Investment Program

General Capital	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2016-2021 Total
Program Resources								
Income Tax Capital Revenue	12,132,000	14,103,000	13,859,500	15,366,000	15,375,000	18,375,000	17,875,000	94,953,500
Property Tax Supported Bonds	19,000,000	15,000,000	15,000,000	15,000,000	15,000,000	15,000,000	15,000,000	90,000,000
Property Tax Supported Debt - Capital Acceleration	0	0	10,000,000	9,000,000	0	0	0	19,000,000
Southern Railroad Note Proceeds	18,775,000	20,613,000	20,819,200	21,027,500	21,237,700	21,450,100	21,664,400	126,811,900
Income Tax Supported Debt	7,000,000	6,000,000	5,000,000	4,000,000	3,000,000	0	0	18,000,000
Income Tax Supported Debt - Capital Acceleration	0	14,600,000	4,400,000	2,400,000	11,100,000	9,000,000	8,500,000	50,000,000
Income Tax Supported Equip. Lease Purchase-Cap. Acceleration	0	6,500,000	4,500,000	4,500,000	4,500,000	4,500,000	4,000,000	28,500,000
Miscellaneous Other Revenue - Capital Acceleration	0	0	1,400,000	1,200,000	2,800,000	3,900,000	3,700,000	13,000,000
Reprogramming	4,059,200	779,200	500,000	500,000	500,000	500,000	500,000	3,279,200
Total Resources	60,966,200	77,595,200	75,478,700	72,993,500	73,512,700	72,725,100	71,239,400	443,544,600
Program Expenses								
Debt Service Payments	1,000,000	977,500	2,197,500	3,667,500	4,037,500	6,007,500	7,077,500	23,965,000
Economic Development	11,208,100	10,000,000	4,769,900	3,363,600	3,508,400	2,621,300	2,218,000	26,481,200
Environment	106,700	153,500	240,700	229,200	224,200	130,800	136,600	1,115,000
Equipment	5,562,980	15,679,900	13,954,300	13,914,600	13,678,200	13,805,300	12,532,700	83,565,000
Housing_Neighborhood Development	250,000	2,856,300	3,277,300	2,803,300	3,478,000	2,231,200	2,493,700	17,139,800
Infrastructure(Smale Commission)	37,751,430	45,703,000	50,729,000	48,805,300	48,376,400	47,719,000	46,570,900	287,903,600
New Infrastructure	5,086,990	2,225,000	310,000	210,000	210,000	210,000	210,000	3,375,000
Total Expenses	60,966,200	77,595,200	75,478,700	72,993,500	73,512,700	72,725,100	71,239,400	443,544,600
Available Balance	0	0	0	0	0	0	0	0





II. OVERVIEW OF AVAILABLE RESOURCES

GENERAL CAPITAL RESOURCES

The total FY 2016-2021 General Capital Investment Program forecast is \$443.5 million in available resources (see Exhibit 2, General Capital Investment Program). For the six-year period, program resources equal the approved program expenses for all projects in the amount of \$443.5 million. Estimated resources for FY 2016 are \$77.6 million and for FY 2017 are \$75.5 million, which match the project amounts for FY 2016 and FY 2017. (Exhibit 3 provides a percentage breakdown of total program resources for FY 2016-2017.) This section provides a description of each resource category for the General Capital Budget.

City Income Tax

The City Income Tax is a locally levied tax applied to gross salaries, wages, and other personal compensation, and net profits earned by all City residents and to earnings of nonresidents working in the City limits. The City's income tax of 2.1% is subdivided into four components: general operations (1.55%), transit (0.3%), infrastructure (0.1%), and capital (0.15%). The 0.1% portion of the 2.1% City Income Tax, along with the local motor vehicle license tax and gasoline tax, is dedicated to infrastructure spending, but is not included as a capital resource. These resources go into special revenue funds, which are used in the operating budget for the maintenance and repair of infrastructure, but this can also be used for infrastructure capital in accordance with each resource's definition of eligibility per statute or ordinance. These resources will be presented for the City Council's review in the biennial Operating Budget.

As shown in Exhibit 2, City Income Tax resources for FY 2016 and FY 2017 are \$14.1 million and \$13.9 million, respectively. The FY 2016-2021 total City Income Tax resource is \$95.0 million.

Property Tax Supported Bonds

The assessed valuation of property within the City subject to ad valorem taxes includes real property, public utilities property, and tangible personal property. In accordance with State law, some general obligation debt may be issued without a vote of the public. The debt cannot be issued unless there are sufficient tax proceeds for the payment of the debt service on the bonds. The estimate for Property Tax Supported Bonds (unvoted bonds) in Exhibit 2 will allow the City to



maintain the property tax millage of 6.5 mills to meet the debt service requirements. The City is within the unvoted statutory debt limitation of 5 ½% of assessed value in the City.

As shown in Exhibit 2, the Property Tax Supported Bonds resource for FY 2016 is \$15.0 million and for FY 2017 is \$15.0 million. The FY 2016-2021 total Property Tax Supported Bonds resource is \$90.0 million, with \$15.0 million each year from FY 2018 through FY 2021. The Property Tax Supported Debt – Capital Acceleration resource for FY 2017 is \$10.0 million and \$9.0 million in FY 2018. This resource is necessary to support the Capital Acceleration Plan.

Approximately 74% of the City's current outstanding general obligation property tax and self-supported debt of \$534 million will be retired by December 31, 2025. Credit quality and affordability issues, used by bond rating agencies to determine the City's bond rating, continue to be indicators for the City. The per capita debt of \$3,695 and debt outstanding of 6.01% of the market value of taxable property are two examples.

Although the City currently utilizes general obligation bonded debt for self-supporting bond issues (such as urban renewal/economic development, parking system, and recreational facilities), self-supporting revenue sources have been, and are expected to be, sufficient to pay principal and interest requirements on all self-supporting debt. Beginning in 2000, the City Council approved a policy to use revenue bonds to support future Water Works capital projects.

The City also issues bonds with debt service to be paid by a portion of the 0.15% income tax earmarked for capital purposes. This strategy has been utilized by the City Council to leverage funds for special projects such as emerging development opportunities. The City uses this strategy sparingly, in order to have funds available for pay-as-you go (cash) projects.

Southern Railway Note Proceeds

Cincinnati owns the Cincinnati Southern Railway and leases its use. In 1987, the City renegotiated the terms of the lease for a more favorable annual income. The City Council endorsed a policy by resolution to dedicate funds generated by the Southern Railway to infrastructure projects. The notes issued and interest income provides a resource for infrastructure projects.



As shown in Exhibit 2, the Southern Railway Note Proceeds resource for FY 2016 is \$20.6 million and for FY 2017 is \$20.8 million. The FY 2016-2021 Southern Railway Note Proceeds resource totals \$126.8 million.

Income Tax Supported Debt

The Approved FY 2016-2017 Biennial Capital Budget and the FY 2016-2021 Capital Investment Program includes the use of City Income Tax Supported Debt as a resource for project expenditures. The ability to use City Income Tax proceeds to support debt will be determined annually by forecasted income tax revenues.

As shown in Exhibit 2, the Income Tax Supported Debt resource is \$6.0 million in FY 2016 and \$5.0 million in FY 2017. The FY 2016-2021 total Income Tax Supported Debt resource is \$18.0 million. In order to support the Capital Acceleration Plan, the Income Tax Supported Debt – Capital Acceleration resource is \$14.6 million in FY 2016 and \$4.4 million in FY 2017. The FY 2016-2021 total Income Tax Supported Debt – Capital Acceleration resource is \$50.0 million.

Income Tax Supported Equipment Lease Purchase

The Approved FY 2016-2017 Biennial Capital Budget and the FY 2016-2021 Capital Investment Program includes the use of City Income Tax Supported Equipment Lease Purchase – Capital Acceleration as a resource is necessary to support the equipment lease portion of the Capital Acceleration Plan. The ability to utilize this resource to support lease purchasing will be reevaluated annually.

As shown in Exhibit 2, the Income Tax Supported Debt – Capital Acceleration resource is \$6.5 million in FY 2016 and \$4.5 million in FY 2017. The FY 2016-2021 total Income Tax Supported Equipment Lease Purchase – Capital Acceleration resource is \$28.5 million.

Miscellaneous Other Revenue

Proceeds from the sale of the Blue Ash Property are reflected as a miscellaneous revenue resource. As shown in Exhibit 2, the Miscellaneous Other Revenue – Capital Acceleration resource is \$1.4 million in FY 2017 and totals \$13.0 million over the six-year plan.



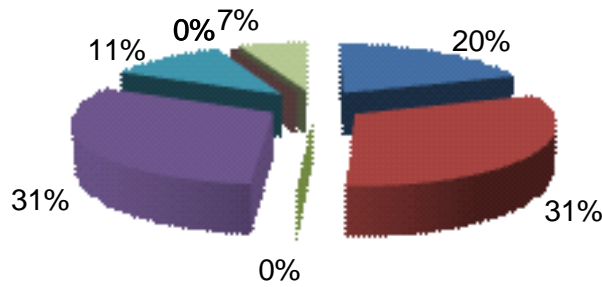
Reprogramming Resources

Reprogramming resources are unused funds recaptured from projects that are completed. The remaining balances are available for use in new projects. As shown in Exhibit 2, the FY 2016 Reprogramming resource amount is \$779,200 and the FY 2017 resource amount is \$500,000. For FY 2016-2021, Reprogramming Resources total \$3.3 million.



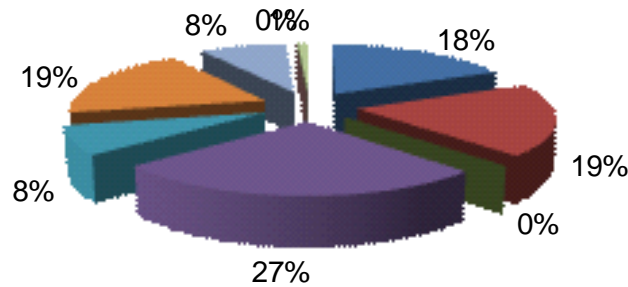
TOTAL PROGRAM RESOURCES

FY 2015



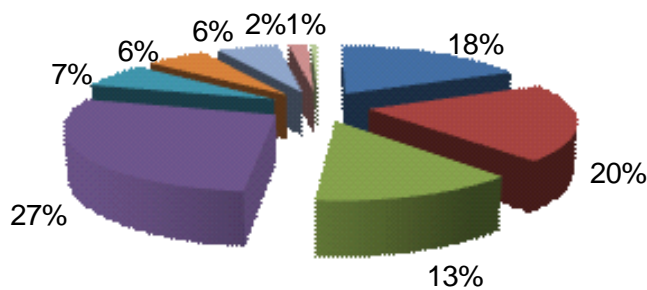
\$60,966,200

FY 2016



\$77,595,200

FY 2017



\$75,478,700

- Income Tax Capital Revenue
- Property Tax Supported Bonds
- Property Tax Supported Debt - Capital Acceleration
- Southern Railroad Note Proceeds
- Income Tax Supported Debt
- Income Tax Supported Debt - Capital Acceleration
- Income Tax Supported Equip. Lease Purchase-Cap. Acceleration
- Miscellaneous Other Revenue - Capital Acceleration





III. OVERVIEW OF EXPENDITURES

GENERAL CAPITAL FUND EXPENDITURES

Planned General Capital projects for the FY 2016-2021 Capital Investment Program total \$443.5 million, which matches the total estimated resources for FY 2016-2021 of \$443.5 million. For the FY 2016-2017 General Capital Budget, projects total \$153.1 million (\$77.6 million in FY 2016 and \$75.5 million in FY 2017), which is balanced to resources.

The following table illustrates the General Capital projects over the FY 2016-2017 biennium by Expenditure Category in each department. (Please see Exhibit 4.) The table also shows the total in each department for the FY 2016-2021 six-year plan for each Expenditure Category. These categories include: Debt Service Payments, Economic Development, Environment, Equipment, Housing and Neighborhood Development, Infrastructure (Smale Commission), and New Infrastructure. The Debt Service Payments category was added in 2002. This category includes a project related to the City's commitment for the expansion of the Duke Energy Convention Center. The New Infrastructure category was added for the 1997/1998 Biennial Budget to distinguish new capital improvements from Infrastructure (Smale Commission) projects, which provide for the renovation or replacement of existing City assets.

Exhibit 5 provides a percentage breakdown of expenditures in the General Capital Budget by expenditure category for FY 2016 and FY 2017.

For a complete description of the General Capital projects, please refer to the separate departmental sections in this document.





Capital Investment Program

Exhibit 4: Approved Projects by Expenditure Category

General Capital

Priority	Project Title	FY 2016	FY 2017	FY 2016-2017 Total	FY 2016-2021 Total
Expenditure Category: Debt Service Payments					
Department: Public Services					
15	Fleet Lease Purchase Payments - Capital Acceleration	0	1,400,000	1,400,000	16,900,000
Department: Transportation & Engineering					
3	MLK/I-71 Interchange SIB Loan	727,500	697,500	1,425,000	3,915,000
40	Convention Center Expansion	250,000	0	250,000	250,000
43	Street Rehabilitation Debt - Capital Acceleration	0	100,000	100,000	2,900,000
Debt Service Payments Total		977,500	2,197,500	3,175,000	23,965,000
Expenditure Category: Economic Development					
Department: Community & Economic Development					
1	Retail/Commercial Opportunities	1,000,000	1,248,900	2,248,900	6,340,200
2	Neighborhood Business District Improvements	700,000	800,000	1,500,000	4,700,000
7	Commercial & Industrial Public Improvements	350,000	600,000	950,000	3,050,000
8	Tax Incentive/Enterprise Zone	85,000	100,000	185,000	570,000
9	Race Street Revitalization	200,000	700,000	900,000	1,550,000
10	Community Development Focus District	340,000	200,000	540,000	1,340,000
13	Neighborhood Business Property Holding	10,000	21,000	31,000	111,000
14	Viable Small Business Development	0	100,000	100,000	505,000
15	Mercy Health Infrastructure Improvements	1,000,000	0	1,000,000	1,000,000
16	4th and Race Garage	2,165,000	1,000,000	3,165,000	3,165,000
17	Walnut Hills Development Gap, Focus 52	2,000,000	0	2,000,000	2,000,000
18	College Hill Development Gap, Focus 52	1,000,000	0	1,000,000	1,000,000
20	BLOC Ministries	250,000	0	250,000	250,000
22	Westwood Town Hall Area Improvements	250,000	0	250,000	250,000
25	Ensemble Theatre	200,000	0	200,000	200,000
26	Shakespeare Theater	200,000	0	200,000	200,000
27	Greater Cincinnati African American Chamber	250,000	0	250,000	250,000
Economic Development Total		10,000,000	4,769,900	14,769,900	26,481,200
Expenditure Category: Environment					
Department: City Manager					
6	Center Hill Gas & Leachate	110,000	116,800	226,800	666,800
7	Regulatory Compliance & Energy Conservation	33,500	113,900	147,400	388,200
8	Emergency Environmental Cleanup/UST	10,000	10,000	20,000	60,000
Environment Total		153,500	240,700	394,200	1,115,000
Expenditure Category: Equipment					
Department: Buildings & Inspections					
6	Accela Permits Migration - Mobile Field Software	200,000	0	200,000	200,000
Department: City Manager					
1	Cincinnati Budget System Upgrades	212,000	0	212,000	212,000
4	CitiCable Playback System Upgrade	200,000	0	200,000	200,000
14	Keltron Alarm System	40,000	0	40,000	40,000
Department: Enterprise Technology Solutions					
1	Disaster Recovery Infrastructure	100,000	200,000	300,000	300,000
2	Information Tech. Efficiency Initiatives	973,700	400,000	1,373,700	2,318,500
4	Enterprise Networks and Security Enhancements	62,000	52,200	114,200	114,200
5	Data Center Infrastructure Replacement	30,000	272,000	302,000	1,155,000

Capital Investment Program

Exhibit 4: Approved Projects by Expenditure Category



General Capital

Priority	Project Title	FY 2016	FY 2017	FY 2016-2017 Total	FY 2016-2021 Total
6	Electronic Gov't (eGov) Web Enhancement	100,000	30,000	130,000	130,000
7	Cincinnati Financial System Upgrades	0	100,000	100,000	400,000
8	Office 365 Full Deployment	0	0	0	876,200
9	Mobile Expense Management	0	15,000	15,000	15,000
10	IT Service Desk	0	63,000	63,000	63,000
13	800 MHz Radios	0	1,300,000	1,300,000	6,500,000
14	CAGIS Infrastructure	87,300	116,000	203,300	350,000
Department: Fire					
1	Firefighter PPE	201,700	262,800	464,500	1,574,900
2	Appliances for Existing Firehouses	26,500	26,500	53,000	159,000
Department: Police					
1	Taser Replacement	725,000	0	725,000	725,000
2	Police Mobile Digital Video (In-Car Camera) Storage 2015	335,000	310,000	645,000	1,700,300
3	Police Body Cameras	700,000	0	700,000	700,000
Department: Public Services					
1	Fleet Replacements	4,893,100	5,980,800	10,873,900	35,366,300
4	Trash Receptacles	154,100	186,500	340,600	1,086,600
14	Fleet Lease Purchase - Capital Acceleration	6,500,000	4,500,000	11,000,000	28,500,000
Department: Transportation & Engineering					
1	Information Systems Acquisition	139,500	139,500	279,000	879,000
Equipment Total		15,679,900	13,954,300	29,634,200	83,565,000
Expenditure Category: Housing_Neighborhood Development					
Department: Buildings & Inspections					
4	Hazard Abatement/Demolition Program	350,000	923,000	1,273,000	4,160,700
Department: City Planning					
1	Neighborhood Studies	60,000	58,900	118,900	419,600
Department: Community & Economic Development					
3	Core 4 Strategic Housing Notice of Funding Availability	286,200	986,200	1,272,400	4,772,200
5	Neighborhood Market Rate Housing	665,800	850,000	1,515,800	4,030,800
11	Citirama	800,000	0	800,000	800,000
12	Downtown Housing Development	69,300	459,200	528,500	2,331,500
21	Price Hill Neighborhood Improvements	500,000	0	500,000	500,000
24	CCAT Bed Expansion	125,000	0	125,000	125,000
Housing_Neighborhood Development Total		2,856,300	3,277,300	6,133,600	17,139,800
Expenditure Category: Infrastructure(Smale Commission)					
Department: Health					
1	Facilities Renovation and Repairs	151,000	191,900	342,900	1,149,600
Department: Parks					
1	Park Infrastructure Rehabilitation	2,300,000	1,748,700	4,048,700	11,401,500
Department: Public Services					
2	City Facility Renovation and Repairs	2,232,000	2,295,300	4,527,300	16,336,600
3	Sign Replacement	330,000	330,000	660,000	1,980,000
5	KRONOS Time Keeping System Upgrade	50,000	0	50,000	100,000
6	Music Hall Renovations	0	4,000,000	4,000,000	10,000,000
7	Community Facility Improvements	600,000	400,000	1,000,000	2,600,000



Capital Investment Program

Exhibit 4: Approved Projects by Expenditure Category

General Capital

Priority	Project Title	FY 2016	FY 2017	FY 2016-2017 Total	FY 2016-2021 Total
Department: Recreation					
1	Recreation Facilities Renovation	312,000	2,065,400	2,377,400	6,137,650
2	Aquatics Facilities Renovation	1,678,000	396,100	2,074,100	9,108,600
3	Athletics Facilities Renovation	287,500	498,000	785,500	1,665,830
4	Outdoor Facilities Renovation	205,000	215,000	420,000	2,113,620
5	Compliance with ADA	100,000	100,000	200,000	600,000
6	Oakley Aquatic Facility Additional	422,900	0	422,900	422,900
Department: Transportation & Engineering					
2	SCIP Loan Repayment	341,120	306,140	647,260	1,796,060
4	Bridge Rehabilitation Program	550,000	950,000	1,500,000	5,500,000
5	Traffic Signal Installation & Renovation	300,000	1,200,000	1,500,000	6,500,000
6	Street Rehabilitation	15,376,100	15,636,400	31,012,500	103,226,400
7	Street Improvements	597,380	811,060	1,408,440	4,780,140
8	Neighborhood Transportation Strategies	700,000	600,000	1,300,000	3,700,000
9	OKI Corridor Studies	200,000	210,000	410,000	1,250,000
10	Computerized Traffic Signal System	172,000	0	172,000	1,872,000
11	Wall Stab. & Landslide Correction	550,000	850,000	1,400,000	4,845,300
12	LED Traffic and Pedestrian Signals	250,000	110,000	360,000	800,000
14	Sidewalk Repair Program	200,000	400,000	600,000	2,225,000
15	Curb Ramps - Street Rehab	390,000	400,000	790,000	2,590,000
16	Safety Improvements	50,000	100,000	150,000	550,000
17	Traffic Signal Controllers & Detectors	100,000	300,000	400,000	1,675,000
18	Bicycle Transportation Program	300,000	485,000	785,000	2,510,000
19	Spot Infrastructure Replacement	250,000	550,000	800,000	3,050,000
20	Street Light Replacement Project	80,000	160,000	240,000	920,000
21	Pavement Management	240,000	250,000	490,000	1,530,000
23	Downtown Infrast. Coord. & Implemtn	200,000	210,000	410,000	1,290,000
24	Uptown Access Imprmts West MLK Dr.	900,000	0	900,000	900,000
25	Colerain Corr. Imp. I-74 to Spring Grv	93,000	0	93,000	93,000
26	Traffic Control Device Installation & Renovation	50,000	100,000	150,000	599,400
27	Duke Street Light Installation and Renovation	150,000	275,000	425,000	1,825,000
28	ROW Ordinance Implementation	50,000	25,000	75,000	75,000
33	Downtown Streetlight Maintenance/Repair	25,000	60,000	85,000	365,000
35	Hillside Stairway Rehabilitation Program	50,000	100,000	150,000	550,000
42	Street Rehabilitation - Capital Acceleration	14,600,000	14,400,000	29,000,000	69,000,000
44	Glenway Avenue Gateway Wall	270,000	0	270,000	270,000
Infrastructure(Smale Commission) Total		45,703,000	50,729,000	96,432,000	287,903,600
Expenditure Category: New Infrastructure					
Department: Transportation & Engineering					
13	Neighborhood Gateways/Greenways Imprvmnt	115,000	210,000	325,000	1,165,000
22	Ohio River Trail	140,000	0	140,000	140,000
34	ORT Kellogg Ave - Salem to Sutton	120,000	100,000	220,000	220,000
39	Elmore to Central Parkway Connector	300,000	0	300,000	300,000
41	Duck Creek Connector	1,000,000	0	1,000,000	1,000,000
45	Mill Creek Greenway Trail	250,000	0	250,000	250,000

Capital Investment Program

Exhibit 4: Approved Projects by Expenditure Category

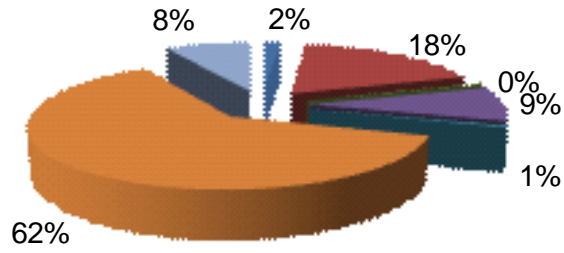


General Capital

Priority	Project Title	FY 2016	FY 2017	FY 2016-2017 Total	FY 2016-2021 Total
46	Brewery Heritage Trail	300,000	0	300,000	300,000
	New Infrastructure Total	2,225,000	310,000	2,535,000	3,375,000
	Total: General Capital	77,595,200	75,478,700	153,073,900	443,544,600

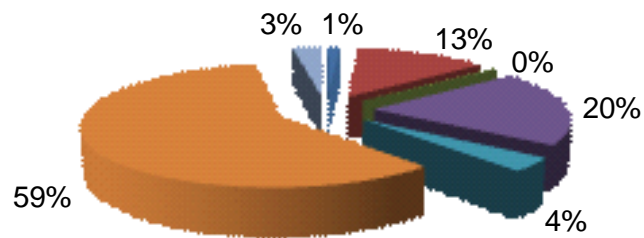


TOTAL PROGRAM EXPENDITURES
FY 2015



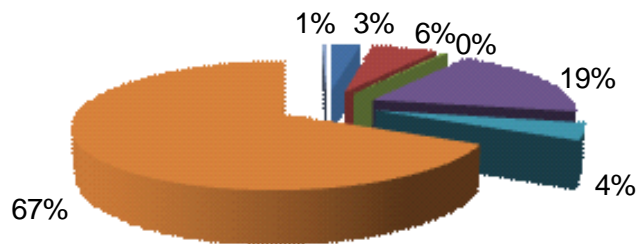
\$60,966,200

FY 2016



\$77,595,200

FY 2017



\$75,478,700

- Debt Service Payments
- Economic Development
- Environment
- Equipment
- Housing_Neighborhood Development
- Infrastructure(Smale Commission)
- New Infrastructure





RESTRICTED FUND EXPENDITURES

The resources for Restricted Fund capital projects come primarily from fees and charges. After operating and maintenance costs, current debt service, and reserve requirements are covered, the remaining available funds are used for capital purposes. Fund forecast information, including projected fund balance information, may be found in the FY 2016-2017 Operating Budget document. As shown in Exhibit 1, the Restricted Funds Capital Budget totals \$335.6 million in FY 2016 and \$188.2 million in FY 2017. For the six-year Capital Investment Program, the total is \$1.0 billion.

Exhibit 6 illustrates the approved projects over the FY 2016-2017 biennium in Restricted Funds in each department. Exhibit 6 also shows the total approved amount in each department for the FY 2016-2021 six-year plan for each Restricted Fund. These Restricted Funds include: Parking Facilities; Convention Center; General Aviation; Stormwater Management; Telecommunications Services; MSD Capital Improvements; Water Works; and Income Tax Transit.

The following provides a brief description of the approved budget for each restricted fund for FY 2016 and FY 2017. For a complete description of the approved projects in the Restricted Funds, please refer to the separate departmental sections in this document.

1. In the Parking Facilities Fund (102), \$100,000 is approved in both FY 2016 and FY 2017 for the Structural Maintenance and Repair project. The total approved budget over the biennium of \$200,000 for this project will provide resources for improvements, maintenance, and repair of City parking assets.
2. In the Convention Center Fund (103), \$230,000 is approved in FY 2016 for two projects and \$230,000 in FY 2017 for three projects. In FY 2016, the Building Equipment project is approved in the amount of \$160,000 and the Capital Maintenance project is approved in the amount of \$70,000. In FY 2017, the Building Equipment project is approved in the amount of \$104,200, the Capital Maintenance project is approved in the amount of \$43,000, and the Furniture, Fixtures, and Equipment project is approved in the amount of \$82,800.
3. In the General Aviation Fund (104), \$642,300 is approved in FY 2016 and \$656,400 is approved in FY 2017 for facility and infrastructure improvements at Lunken Airport. Funding for the



following projects is approved in both years of the biennium: Airport Infrastructure Improvements; FAA/ODOT Local Match; and Facility Improvements.

4. In the Stormwater Management Fund (107), \$1,725,000 is approved in FY 2016 for nine projects and \$700,000 is approved in FY 2017 for two projects. The major driver of the Stormwater Management Fund's Capital Budget has been and continues to be projects related to the Barrier Dam. These approved capital improvements to the Barrier Dam are critical to the proper functioning of the dam.
5. In the Telecommunications Services Fund (336), \$30,000 is approved in both FY 2016 and FY 2017 for the Radio Communications Equipment project. The total approved budget over the biennium of \$60,000 for this project will provide resources for the replacement of equipment used by the Radio Services Section to maintain radio communications equipment and the outdoor warning siren.
6. In the MSD Capital Improvements Fund (704), \$297.4 million is approved in CY 2016 for seventy-three projects and \$152.1 million is approved in CY 2017 for seventy-eight projects. Hamilton County has authority and control of the Sewer System (the City is the managing agent) and the Hamilton County Commissioners vote on the capital investment program. The final capital investment program for MSD is submitted to the City after it has been approved by the Hamilton County Commissioners.
7. In the Water Works Capital Improvement Fund (756), \$35.4 million is approved in FY 2016 for twenty-three projects and \$34.3 million is approved in FY 2017 for thirty-six projects. The Greater Cincinnati Water Works (GCWW) financial plan includes a cash contribution of 20% in each year of the biennium, which equates to \$7,078,400 in FY 2016 and \$6,855,200 in FY 2017.
8. In the Income Tax-Transit Fund (759), \$100,000 is approved in both FY 2016 and FY 2017 for the Transit/Rail Corridor Preservation Acquisition project. The total approved budget over the biennium of \$200,000 for this project will provide resources for the acquisition of property and related costs associated with the preservation and reuse of existing railroad corridors.



Capital Investment Program
Exhibit 6: Restricted Funds Approved Projects

Fund: 102 Parking System Facilities

Priority	Project Title	FY 2016	FY 2017	FY 2016-2017 Total	FY 2016-2021 Total
Department: ES: Parking Facilities					
4	Structural Maintenance & Repair	100,000	100,000	200,000	600,000
Parking System Facilities Total		100,000	100,000	200,000	600,000

Fund: 103 Convention Center

Priority	Project Title	FY 2016	FY 2017	FY 2016-2017 Total	FY 2016-2021 Total
Department: ES: Convention Center					
1	Building Equipment	160,000	104,200	264,200	681,000
2	Furniture, Fixtures, and Equipment	0	82,800	82,800	414,000
3	Capital Maintenance	70,000	43,000	113,000	285,000
Convention Center Total		230,000	230,000	460,000	1,380,000

Fund: 104 General Aviation

Priority	Project Title	FY 2016	FY 2017	FY 2016-2017 Total	FY 2016-2021 Total
Department: Transportation & Engineering					
29	Airport Infrastructure Improvements	140,000	140,000	280,000	840,000
30	FAA/ODOT Local Match	200,000	200,000	400,000	1,200,000
31	Facility Improvements	302,300	316,400	618,700	2,082,700
General Aviation Total		642,300	656,400	1,298,700	4,122,700

Fund: 107 Stormwater Management

Priority	Project Title	FY 2016	FY 2017	FY 2016-2017 Total	FY 2016-2021 Total
Department: Stormwater Management					
1	Barrier Dam Crane Rehabilitation	200,000	0	200,000	200,000
2	Barrier Dam Phase II Facility Plan	200,000	0	200,000	200,000
3	Barrier Dam Radial Gates - Hydraulic Actuators Replacements	300,000	600,000	900,000	1,800,000
4	Closed Circuit Television (CCTV) Truck	250,000	0	250,000	250,000
5	Barrier Dam Concrete Rehabilitation	100,000	100,000	200,000	600,000
6	Grand Avenue Drainage Improvements	175,000	0	175,000	175,000
7	Rookwood Overpass Drainage Improvements	300,000	0	300,000	300,000
8	Oakview Pump Station Business Case Evaluation	50,000	0	50,000	50,000
9	Water Street Storm Sewer Rehabilitation	150,000	0	150,000	150,000
Stormwater Management Total		1,725,000	700,000	2,425,000	3,725,000

Capital Investment Program

Exhibit 6: Restricted Funds Approved Projects



Fund: 336 Telecommunications Services

Priority	Project Title	FY 2016	FY 2017	FY 2016-2017 Total	FY 2016-2021 Total
Department: Enterprise Technology Solutions					
12	Radio Communications Equipment	30,000	30,000	60,000	180,000
Telecommunications Services Total		30,000	30,000	60,000	180,000

Fund: 704 MSD Capital Improvements

Priority	Project Title	FY 2016	FY 2017	FY 2016-2017 Total	FY 2016-2021 Total
Department: Sewers					
10	Muddy Creek Basin Storage and Conveyance Sewer	0	0	0	761,600
11	Muddy Creek Interceptor Rehabilitation	0	0	0	300,000
12	River Road Near Muddy Creek WWTP Conveyance Sewer	0	0	0	780,600
13	Werk and Westbourne Enhanced High Rate Treatment Facility	59,141,670	0	59,141,670	59,141,670
14	East Branch Muddy Creek Interceptor Extension	0	0	0	1,000,000
15	West Branch Muddy Creek Interceptor	0	0	0	2,843,400
16	Muddy Creek WWTP Add New Belt Filter Press	5,190,000	0	5,190,000	5,190,000
17	Glenview Pump Station Upgrade	812,300	0	812,300	812,300
18	SSO 1048 Conveyance Sewer	0	0	0	450,870
19	SSO 587 Conveyance Sewer	0	0	0	275,640
20	SSO 700 Integrated Watershed Action Plan Implementation	0	0	0	10,200,180
21	Pleasant Run Interceptor Replacement	0	0	0	310,720
22	Ludlow and Lafayette Parallel Sewer	0	3,161,000	3,161,000	3,161,000
23	CSO 507 Improvements	0	0	0	83,210
24	CSO 509 Improvements	0	0	0	83,210
25	CSO 510 Improvements	0	0	0	83,210
26	CSO 508 Sewer Separation	0	0	0	284,670
27	CSO 513 Sewer Separation	0	0	0	378,040
28	CSO 514 Sewer Separation	0	0	0	193,700
29	CSO 179 Sewer Separation	1,553,300	0	1,553,300	1,553,300
30	SSO 1000 Elimination	0	0	0	465,900
31	SSO 228 Elimination	0	1,416,900	1,416,900	1,416,900
32	Little Miami WWTP Electrical Feeders	588,800	0	588,800	588,800
33	Little Miami WWTP Solids Handling Improvements	1,523,100	0	1,523,100	21,099,400
34	Little Miami WWTP Electrical and Disinfection Improvements	0	1,575,900	1,575,900	18,320,600
35	Little Miami WWTP Preliminary Treatment Improvements	0	0	0	2,631,500
36	CSO 135 Improvements	0	0	0	63,000
37	CSO 43 Improvements	0	0	0	59,850
38	CSO 54 Improvements	0	208,700	208,700	208,700
39	CSO 214 Storage Facility	0	0	0	869,000
40	CSO 551 Sewer Separation	0	0	0	1,292,800
41	CSO 552 Improvements	0	0	0	742,000
42	CSO 553 Sewer Separation	0	0	0	56,000
43	Sewer Relining Trenchless Technology Program 2015	5,200,000	0	5,200,000	5,200,000
44	Sewer Relining Trenchless Technology Program 2016	0	5,200,000	5,200,000	5,200,000
45	Sewer Relining Trenchless Technology Program 2017	0	0	0	5,200,000



Capital Investment Program
Exhibit 6: Restricted Funds Approved Projects

Fund: 704 MSD Capital Improvements

Priority	Project Title	FY 2016	FY 2017	FY 2016-2017 Total	FY 2016-2021 Total
46	Sewer Relining Trenchless Technology Program 2018	0	0	0	5,200,000
47	Sewer Relining Trenchless Technology Program 2019	0	0	0	5,200,000
48	Manhole Rehabilitation Trenchless Technology Program 2015	1,000,000	0	1,000,000	1,000,000
49	Manhole Rehabilitation Trenchless Technology Program 2016	0	1,000,000	1,000,000	1,000,000
50	Manhole Rehabilitation Trenchless Technology Program 2017	0	0	0	1,000,000
51	Manhole Rehabilitation Trenchless Technology Program 2018	0	0	0	1,000,000
52	Manhole Rehabilitation Trenchless Technology Program 2019	0	0	0	1,000,000
53	Home Sewer Treatment System Extensions 2015	200,000	0	200,000	200,000
54	Home Sewer Treatment System Extensions 2016	0	200,000	200,000	200,000
55	Home Sewer Treatment System Extensions 2017	0	0	0	200,000
56	Home Sewer Treatment System Extensions 2018	0	0	0	200,000
57	Home Sewer Treatment System Extensions 2019	0	0	0	200,000
58	Wet Weather Program Management and Support Services 2015	5,300,000	0	5,300,000	5,300,000
59	Wet Weather Program Management and Support Services 2016	0	5,300,000	5,300,000	5,300,000
60	Wet Weather Program Management and Support Services 2017	0	0	0	5,300,000
61	Wet Weather Program Management and Support Services 2018	0	0	0	5,300,000
62	Wet Weather Program Management and Support Services 2019	0	0	0	5,400,000
63	Hamilton County Utility Oversight and Coordination 2015	2,700,000	0	2,700,000	2,700,000
64	Hamilton County Utility Oversight and Coordination 2016	0	2,700,000	2,700,000	2,700,000
65	Hamilton County Utility Oversight and Coordination 2017	0	0	0	2,700,000
66	Hamilton County Utility Oversight and Coordination 2018	0	0	0	2,700,000
67	Hamilton County Utility Oversight and Coordination 2019	0	0	0	2,700,000
68	North Fairmount Bioswale Project	0	0	0	381,000
69	Lower Muddy Creek Sustainable Watershed Evaluation Plan	0	300,000	300,000	300,000
70	East Branch Upper South Mill Creek Sustainable Watershed Eva	0	149,000	149,000	149,000
71	W Branch Winton Woods Sustainable Watershed Evaluation Plan	0	618,000	618,000	618,000
72	CSO 488/490 Interstate 75 Reconstruction Coordination	0	0	0	1,613,000
73	CSO 21 Interstate 75 Reconstruction Coordination	0	0	0	2,999,000
74	East Duck Creek Watershed Plan	411,000	0	411,000	411,000
75	Lick Run Valley Conveyance System	102,964,600	0	102,964,600	102,964,600
76	Lick Run Property Demolitions	2,488,600	0	2,488,600	2,488,600
77	CSO 181 Real Time Control	0	3,498,600	3,498,600	3,498,600
78	Wyoming and Minion Avenues Sewer Separation	0	2,824,000	2,824,000	2,824,000
79	Quebec Road Sewer Separation	0	6,733,600	6,733,600	6,733,600
80	Queen City Avenue Sewer Separation Phase 2	10,262,000	0	10,262,000	10,262,000
81	Queen City and Cora Avenues Right-of-Way Sewer Separation	0	2,582,500	2,582,500	2,582,500
82	Quebec Heights Sewer Separation	3,122,600	0	3,122,600	3,122,600
83	CSO 12 Sewer Separation Phase A.3 West Martin Luther King Dr	0	499,350	499,350	499,350
84	CSO 12 Sewer Separation Phase A.4b	0	0	0	7,085,100
85	CSO 217/483 Source Control Phase A	3,772,400	0	3,772,400	3,772,400
86	CSO 217/483 Source Control Phase B	0	13,902,400	13,902,400	13,902,400
87	CSO 217/483 Source Control Phase A2	0	5,557,700	5,557,700	5,557,700
88	Upper Muddy Creek Interceptor Replacement	0	0	0	14,306,800
89	Upper Muddy Creek Interceptor Replacement Contract A	0	939,000	939,000	939,000
90	Mt. Airy Receiving Sewer Upgrade	0	0	0	3,151,100

Capital Investment Program

Exhibit 6: Restricted Funds Approved Projects



Fund: 704 MSD Capital Improvements

Priority	Project Title	FY 2016	FY 2017	FY 2016-2017 Total	FY 2016-2021 Total
91	Ledgewood Avenue Sewer Replacement	0	0	0	75,000
92	McHenry Avenue Sewer Replacement	0	0	0	250,000
93	911 McPherson Avenue Sewer Replacement	0	0	0	330,000
94	Davey Avenue Sewer Replacement	0	0	0	225,000
95	Congress Run Stream Restoration/Bank Stabilization	0	0	0	60,000
96	Mandarin Court Sewer Replacement	0	0	0	270,000
97	Harvey Avenue - MLK Drive to 400 NW Sewer Evaluation	0	0	0	6,000
98	Hickman Avenue Sewer Evaluation	0	0	0	24,000
99	Depot Street Sewer Evaluation	0	0	0	300,000
100	Banning Alley Sewer Replacement	0	0	0	45,000
101	High Point Pump Station Evaluation	0	0	0	500,000
102	5053 Ridge Avenue Sewer Replacement	0	0	0	45,000
103	Mayland Dr, Woodlark Dr, and Lusanne Terrace Sewer Study	0	225,000	225,000	225,000
104	Programmatic Contingency	11,500,000	10,000,000	21,500,000	51,500,000
105	Bridgetown Road Local Sewer (HNs 8477-8647)	0	0	0	501,100
106	West Fork Road Local Sewer (HNs 5311-5472)	475,000	0	475,000	475,000
107	Parrakeet Drive Local Sewer (HNs 6002-6068)	0	266,100	266,100	266,100
108	Ramblingridge Drive and Twinwillow Lane Local Sewer	0	0	0	3,243,000
109	Kern Drive and Springdale Road Local Sewer	0	457,400	457,400	457,400
110	Mapleknoll Drive Local Sewer (HNs 9420-9562)	0	304,200	304,200	304,200
111	Reemelin Road Local Sewer (HNs 3489-3860)	0	1,265,700	1,265,700	1,265,700
112	Crestnoll Lane Local Sewer (HNs 3491-3609)	0	919,700	919,700	919,700
113	Old Blue Rock Road Local Sewer (HNs 5240-5327)	238,100	0	238,100	238,100
114	Russell Heights Drive Local Sewer	0	0	0	792,800
115	Brierly Creek Road Local Sewer (HNs 6040-6100)	0	181,900	181,900	181,900
116	Werk Road Local Sewer (HNs 5544-5686)	751,300	0	751,300	751,300
117	Upper Road Local Sewer (HNs 6340-6434)	0	171,000	171,000	171,000
118	Carpol Avenue, Honeywell Avenue & E. Kemper Road Local Sewer	0	0	0	1,044,700
119	North Bend Road Local Sewer (HNs 504-565)	355,500	0	355,500	355,500
120	Coldstream Drive and Asbury Road Local Sewer	0	3,639,800	3,639,800	3,639,800
121	State Road Local Sewer (HNs 7737-7849)	459,800	0	459,800	459,800
122	Mt. Carmel Road Vicbarb Lane Apple Blossom Lane Local Sewer	1,491,000	0	1,491,000	1,491,000
123	Boomer Road Sewer Lateral Assessment	32,100	0	32,100	32,100
124	Foley Road Sewer Laterals (HNs 5579, 5583-5599, 5602)	58,400	31,400	89,800	89,800
125	Werk Road Sewer Lateral Assessment (HN 6052)	42,300	0	42,300	42,300
126	E. Galbraith Road Sewer Lateral Assessment (HN 4454)	47,400	0	47,400	47,400
127	Pottinger Road Sewer Lateral Assessment (HN 10444)	42,300	0	42,300	42,300
128	Enyart Road Sewer Lateral Assessments (HNs 11258 and 11262)	23,300	0	23,300	23,300
129	Enyart Road Sewer Lateral Assessment	42,300	0	42,300	42,300
130	E. Kemper Road Sewer Lateral Assessment (HN 269)	27,000	0	27,000	27,000
131	E. Kemper Road Sewer Lateral Assessment	52,500	0	52,500	52,500
132	Drake Road Sewer Lateral Assessment (HN 7315)	37,200	0	37,200	37,200
133	Woodruff Road Sewer Lateral Assessment (HNs 8145, 8167,8237)	0	75,000	75,000	75,000
134	Great Miami WWTP	5,000,000	0	5,000,000	60,000,000
135	Bruestle Avenue Pump Station Elimination	0	989,100	989,100	989,100



Capital Investment Program

Exhibit 6: Restricted Funds Approved Projects

Fund: 704 MSD Capital Improvements

Priority	Project Title	FY 2016	FY 2017	FY 2016-2017 Total	FY 2016-2021 Total
136	Rackacres Drive and Crestnoll Lane Area Sewer	0	1,237,500	1,237,500	1,237,500
137	Whitewater Township Regional Sewer District Phase III SR 128	0	6,142,500	6,142,500	6,142,500
138	CSOs 404, 405, 410, 411 Outfall Reconstruction	0	656,800	656,800	656,800
139	Westport Village Pump Station Elimination	0	1,236,150	1,236,150	1,236,150
140	Barrington Hills, Barrington Hills BLK. F, Gil Volz, and Kir	0	0	0	7,396,900
141	Lower Muddy Creek Interceptor SSO Remediation	0	6,101,600	6,101,600	6,101,600
142	Addyston Extraneous Stormwater Removal	0	0	0	748,800
143	Addyston Creek and Sewer Rehabilitation	0	517,100	517,100	517,100
144	CSO 125 Stream Separation	0	9,591,500	9,591,500	9,591,500
145	CSO 217/483 Source Control Phase C	0	4,782,800	4,782,800	4,782,800
146	Cora Avenue Sewer Replacement	647,100	0	647,100	647,100
147	German Cemetery Sewer Replacement	695,000	0	695,000	695,000
148	Millbrook #2 Pump Station Upgrade	870,200	0	870,200	870,200
149	Mt. Airy Forest Sewer Replacement	5,183,700	0	5,183,700	5,183,700
150	3934 Winding Way Sewer Replacement	0	216,500	216,500	216,500
151	Lower Mill Creek HW/DW Protection	0	0	0	3,820,000
152	SSO 603 and 704 Improvements	0	1,338,100	1,338,100	1,338,100
153	MCWWTP Solids Handling Improvements Phase 1	12,159,200	0	12,159,200	12,159,200
154	Wilder Avenue Sewer Replacement	342,900	0	342,900	342,900
155	Glen Landing Pump Station Improvements	0	0	0	182,200
156	Otte Avenue Sewer Replacement	0	0	0	485,700
157	3568 Bogart Avenue Sewer Replacement	140,500	0	140,500	140,500
158	McKeone Avenue Sewer Replacement	0	103,000	103,000	103,000
159	Timbers Pump Station Elimination	0	0	0	922,800
160	Quebec Road Sewer Replacement	0	427,400	427,400	427,400
161	Rose Hill Avenue Sewer Relocation	0	522,300	522,300	522,300
162	Carpenters Run Pump Station Upgrade	0	631,400	631,400	631,400
163	CSO 005 Water Connection	71,000	0	71,000	71,000
164	CSO 5 (Lick Run RTC) Improvements	0	200,000	200,000	200,000
165	Ponderosa Woods Pump Station Elimination	0	0	0	299,900
166	Sharp Alley Sewer Replacement	502,700	0	502,700	502,700
167	Freeland Avenue Area Sewer Replacement	0	0	0	99,500
168	Berkley Avenue Sewer Replacement	583,300	0	583,300	583,300
169	Pleasant Run Central Force Main Repairs	1,068,000	0	1,068,000	1,068,000
170	Colton Lane Sewer Replacement	0	0	0	88,100
171	Vinton Street - Beekman Street to Liddell Street Sewer	0	0	0	204,200
172	Spring Grove Avenue Sewer Replacement and Rehabilitation	0	540,900	540,900	540,900
173	Fairbanks Avenue Sewer Replacement	282,500	0	282,500	742,000
174	Hosea Street Sewer Replacement	0	397,900	397,900	2,595,100
175	Bahama Gardens Pump Station Upgrade and Force Main Replace	0	785,400	785,400	785,400
176	Foraker Avenue Sewer Replacement-Alms Place to E. Terminus	0	0	0	83,900
177	Wahl Terrace Sewer Replacement	0	577,800	577,800	1,361,300
178	Yoast Avenue Sewer Improvements	0	135,500	135,500	135,500
179	Mt. Pleasant Avenue Sewer Replacement	0	344,600	344,600	344,600
180	Mayhew and Leath Avenues Sewer Replacement	0	0	0	247,100

Capital Investment Program

Exhibit 6: Restricted Funds Approved Projects



Fund: 704 MSD Capital Improvements

Priority	Project Title	FY 2016	FY 2017	FY 2016-2017 Total	FY 2016-2021 Total
181	Freeman Avenue - Klotter to McMicken Sewer Replacement	0	89,900	89,900	89,900
182	Victory Parkway Sewer Rehabilitation	0	0	0	106,400
183	Cypress Street - Ashland Avenue Sewer Replacement	0	0	0	147,300
184	Faehr Street Sewer Replacement	0	134,900	134,900	134,900
185	Spring Grove Avenue - Township Street Sewer Improvement	0	695,200	695,200	695,200
186	Central Parkway Sewer Replacement (HN 2402)	129,200	0	129,200	129,200
187	Pardee Alley Sewer Replacement - Oswald Alley to 200' North	0	0	0	154,600
188	Kemper Mill Village Pump Station Upgrade	0	0	0	552,000
189	Schulte Drive Sewer Replacement	145,100	0	145,100	554,200
190	Overflow Parking Lot for MSD Engineering and Administration	480,000	0	480,000	480,000
191	MCWWTP Enhanced Incinerator Emission Controls	9,440,100	0	9,440,100	9,440,100
192	MCWWTP Two-Bay Solids Receiving Facility	0	1,008,100	1,008,100	12,807,100
193	MCWWTP Main Substation Improvements	496,700	0	496,700	2,988,700
194	MCWWTP Power Building Medium Voltage Switchgear	517,400	0	517,400	517,400
195	MCWWTP Electrical Arc Flash Protection	0	238,000	238,000	238,000
196	MCWWTP Secondary Treatment Capacity Enhancements	0	0	0	2,355,000
197	MCWWTP Primary Sludge Pumping Improvements	0	0	0	1,053,000
198	MCWWTP Primary Treatment Odor Control Improvements	0	0	0	1,103,800
199	MCWWTP Biological Nutrient Removal Facilities	0	0	0	3,629,100
200	MCWWTP Standby Power Distribution System Improvements	0	0	0	3,327,100
201	MCWWTP South Raw Sewage Pump Station Pump Replacement	0	0	0	3,467,100
202	MCWWTP North Pump Station Odor Control System Replacement	0	0	0	1,893,400
203	MCWWTP Biosolids Dewatering Facility Addition	0	0	0	4,297,100
204	Wastewater Collection Maintenance Shop Improvements	144,850	1,018,490	1,163,340	1,163,340
205	Hackberry Street Sewer Replacement	0	280,900	280,900	280,900
206	Montana Avenue Sewer - Ferncroft Drive to Mustang Drive	0	3,073,300	3,073,300	3,073,300
207	SSO 700 Facility Improvements	8,509,500	0	8,509,500	8,509,500
208	Polk Run WWTP Reliability and Service Upgrades	0	0	0	6,964,100
209	Huntington Pump Station Elimination	0	212,000	212,000	212,000
210	Polk Run Ultraviolet System/Post Aeration Improvements	225,000	1,510,000	1,735,000	1,735,000
211	Polk Run Non-Potable Water Upgrades	102,000	255,000	357,000	357,000
212	South Clippinger Force Main Replacement/Pump Station Upgrade	0	0	0	500,000
213	Dry Run Area Sewers Phase 2 Contract Round Bottom Road	7,181,100	0	7,181,100	7,181,100
214	Dry Run Sewers - Contract Eight Mile Road	0	5,331,500	5,331,500	5,331,500
215	Dry Run Sewers Contract Broadwell Road	0	2,794,000	2,794,000	2,794,000
216	Camargo Canyon Pump Station Elimination	0	620,100	620,100	620,100
217	Little Miami WWTP Scum Removal and Handling	0	0	0	788,000
218	Catholic Calvary Cemetery Sewer Replacement	168,700	0	168,700	168,700
219	Portsmouth Avenue Sewer Replacement	0	365,600	365,600	365,600
220	Wasson Ravine Sewer Replacement	0	0	0	1,147,600
221	Airport and Robb Avenue Sewer Replacement	0	312,200	312,200	312,200
222	Grove Avenue Sewer Replacement	211,000	0	211,000	211,000
223	Columbia Parkway at Delta Avenue Sewer Replacement	299,000	0	299,000	299,000
224	3981 Watterson Road Sewer Replacement	0	0	0	184,400
225	Paxton Avenue Sewer Rehabilitation	332,600	0	332,600	332,600



Capital Investment Program

Exhibit 6: Restricted Funds Approved Projects

Fund: 704 MSD Capital Improvements

Priority	Project Title	FY 2016	FY 2017	FY 2016-2017 Total	FY 2016-2021 Total
226	Delta and Griest Avenues Sewer Replacement	0	0	0	297,700
227	CSO 83 and 472 Dynamic Underflow Control	404,000	0	404,000	2,839,810
228	East Hill Avenue Sewer Replacement	279,700	0	279,700	1,745,200
229	Capital Improvement Program (CIP) Project Planning	1,750,000	2,500,000	4,250,000	11,750,000
230	WWT System Asset Renewal 2015	2,000,000	0	2,000,000	2,000,000
231	WWT System Asset Renewal 2016	0	3,000,000	3,000,000	3,000,000
232	WWT System Asset Renewal 2017	0	0	0	3,000,000
233	WWT System Asset Renewal 2018	0	0	0	3,000,000
234	WWT System Asset Renewal 2019	0	0	0	3,000,000
235	Hydraulic Modeling 2015	1,000,000	0	1,000,000	1,000,000
236	Hydraulic Modeling 2016	0	1,000,000	1,000,000	1,000,000
237	Hydraulic Modeling 2017	0	0	0	1,000,000
238	Hydraulic Modeling 2018	0	0	0	1,000,000
239	Hydraulic Modeling 2019	0	0	0	1,000,000
240	Emergency Sewer Repairs 2015	8,000,000	0	8,000,000	8,000,000
241	Emergency Sewer Repairs 2016	0	8,000,000	8,000,000	8,000,000
242	Emergency Sewer Repairs 2017	0	0	0	7,500,000
243	Emergency Sewer Repairs 2018	0	0	0	7,500,000
244	Emergency Sewer Repairs 2019	0	0	0	7,500,000
245	System-Wide Sensor Installation	750,000	0	750,000	750,000
246	High Risk Asset Renewal 2015	4,000,000	0	4,000,000	4,000,000
247	High Risk Asset Renewal 2016	0	4,000,000	4,000,000	4,000,000
248	High Risk Asset Renewal 2017	0	0	0	3,500,000
249	High Risk Asset Renewal 2018	0	0	0	3,500,000
250	High Risk Asset Renewal 2019	0	0	0	3,000,000
251	Water Quality Modeling 2015	500,000	0	500,000	500,000
252	Water Quality Modeling 2016	0	500,000	500,000	500,000
253	Water Quality Modeling 2017	0	0	0	500,000
254	Water Quality Modeling 2018	0	0	0	500,000
255	Water Quality Modeling 2019	0	0	0	500,000
256	SSO 1048 Conveyance Sewer Phase 2	0	0	0	375,350
257	Stonebridge Apartments Sewer Study	0	300,000	300,000	1,000,000
258	Stanley Avenue Lateral Relocations	148,700	0	148,700	148,700
259	SSO 700 Integrated Watershed Action Plan	750,000	1,500,000	2,250,000	2,250,000
260	Rockdale Avenue and Windham Avenue Sewer Evaluation	0	0	0	30,000
261	Reading Road - 12th Street to E. Liberty Street	0	0	0	60,000
262	Phase 2 Wet Weather Improvement Plan Design Allocation	0	0	0	20,000,000
263	Old Ludlow Ave Right-of-Way Sewer Replacement	0	0	0	90,000
264	Morrison Avenue Sewer Replacement	0	0	0	75,000
265	MCWWTP Service Water (NPW) Reliability and Service Upgrade	0	0	0	4,592,300
MSD Capital Improvements Total		297,416,620	152,118,890	449,535,510	823,624,270

Capital Investment Program

Exhibit 6: Restricted Funds Approved Projects



Fund: 756 Water Works PIF

Priority	Project Title	FY 2016	FY 2017	FY 2016-2017 Total	FY 2016-2021 Total
Department: Water Works					
1	Replacement Water Mains Allocation Program	18,150,000	19,316,000	37,466,000	116,466,000
2	Street Improvement Allocation Program	5,000,000	5,000,000	10,000,000	31,000,000
3	Castings/Street Improvements	300,000	420,000	720,000	2,490,000
4	Private Development Allocation Program	400,000	420,000	820,000	2,540,000
5	Mt. Airy Exterior Renovation	2,899,000	0	2,899,000	2,899,000
6	Bolton High Service Pumps	2,000,000	100,000	2,100,000	2,100,000
7	Computers, Servers, and Software	472,000	492,000	964,000	2,764,000
8	Regeneration Furnace Equipment	75,000	75,000	150,000	450,000
9	Electrical Transformers	150,000	150,000	300,000	1,050,000
10	Large Motor Rewind Program (Annual)	125,000	125,000	250,000	800,000
11	Station Valve Equipment	100,000	100,000	200,000	600,000
12	Mobile Computer Replacement	170,000	0	170,000	170,000
13	Tank Coating	350,000	1,000,000	1,350,000	3,450,000
14	Miscellaneous Concrete/Pavement Replacement	377,000	377,000	754,000	1,953,000
15	Roof Replacement	1,000,000	600,000	1,600,000	3,200,000
16	Valve Replacement Program	100,000	275,000	375,000	1,475,000
17	Billing System Replacement	2,795,000	631,000	3,426,000	4,860,000
18	Aluminum Heating and Insulation	65,000	0	65,000	65,000
19	Miller Plant Filter Rebuild	400,000	413,000	813,000	2,313,000
20	Tank Aeration Irwin Simpson	100,000	0	100,000	100,000
21	Winton Road Booster Chlorination	60,000	0	60,000	60,000
22	Motor Control Center Equipment	180,000	180,000	360,000	760,000
24	SCADA Remote Terminal Units	124,000	124,000	248,000	558,000
25	Budd Street -Eighth Street - Dalton Avenue to Evans Street	0	0	0	4,700,000
26	Crane Equipment Improvements	0	50,000	50,000	250,000
27	Backup Power Generator - Western Hills Pump Station	0	885,000	885,000	3,095,000
28	Continuous Water Quality Monitors	0	145,000	145,000	172,000
29	Miscellaneous Masonry Replacement	0	150,000	150,000	750,000
30	Miller Plant Sand Filter Valves	0	400,000	400,000	2,000,000
31	Gas Chromatograph-Volatile Organic Compounds Analysis	0	0	0	165,000
32	Gas Chromatograph-Synthetic Organic Compound Analysis	0	150,000	150,000	150,000
33	Document Management Upgrade	0	50,000	50,000	50,000
34	Master Plan Upgrade	0	500,000	500,000	1,500,000
35	Gas Chromatograph Flame Ionization Detector	0	0	0	120,000
36	Ion Coupled Plasma Mass Spectrophotometer	0	0	0	190,000
37	Outlying Pump Station Improvements	0	50,000	50,000	50,000
38	Vertical Pumps Upgrade	0	60,000	60,000	60,000
39	Security Cameras and Digital Video Recorder (DVR)	0	50,000	50,000	150,000
40	Tennyson Pump Discharge Valve Upgrade	0	150,000	150,000	450,000
41	Main Station Backup Generator	0	0	0	4,200,000
42	Field Application Replacement on Large Pumps	0	60,000	60,000	300,000
43	Bolton Plant Lime Residual Site Work	0	460,000	460,000	5,080,000
44	Chem East Concrete Repair	0	584,000	584,000	740,000
45	Miller Plant Network Upgrade	0	250,000	250,000	250,000



Capital Investment Program
Exhibit 6: Restricted Funds Approved Projects

Fund: 756 Water Works PIF

Priority	Project Title	FY 2016	FY 2017	FY 2016-2017 Total	FY 2016-2021 Total
46	Medium Voltage Stations Backup Breakers	0	84,000	84,000	420,000
47	Control Valve at Riverside Drive	0	0	0	250,000
48	Queen City Avenue - Western Hills Viaduct to WH Pump Station	0	0	0	3,900,000
49	Booster Chlorination in Distribution System	0	0	0	750,000
50	Lamella Sludge Collection Upgrade	0	400,000	400,000	1,400,000
Water Works PIF Total		35,392,000	34,276,000	69,668,000	213,265,000

Fund: 759 Income Tax Transit

Priority	Project Title	FY 2016	FY 2017	FY 2016-2017 Total	FY 2016-2021 Total
Department: Transportation & Engineering					
32	Transit/Rail Corridor Preservation Acq.	100,000	100,000	200,000	600,000
Income Tax Transit Total		100,000	100,000	200,000	600,000
Restricted Funds Total		335,635,920	188,211,290	523,847,210	1,047,496,970





SPECIAL REVENUE FUNDS

The FY 2016-2017 Biennial Capital Budget for the Special Housing Permanent Improvement Fund (SHPIF) includes \$1,576,530 over the biennium (\$976,530 in FY 2016 and \$600,000 in FY 2017). This fund, which is supported from net rental income and tax increment payments, provides revenue for the New Housing Development program and the Core 4 Strategic Housing Notice of Funding Availability project administered by the Department of Community and Economic Development. The New Housing Development Program (\$276,530 of SHPIF resources in FY 2016) supports the development of new market-rate housing. The Core 4 Strategic Housing Notice of Funding Availability project will provide resources (\$700,000 of SHPIF resources in FY 2016) for targeted investments in housing projects consisting of at least four housing units throughout the City's neighborhoods.

Allocations from the Urban Renewal Debt Retirement Fund total \$835,000 in FY 2016. This fund is supported by payments in lieu of taxes from various urban renewal projects in the downtown area. The 4th and Race Garage project, which will repair or replace the current 1,100 space parking structure, will be partially supported by resources in the amount of \$835,000 from Urban Renewal Debt Retirement Fund.

FEDERAL and STATE CAPITAL GRANTS

The City receives Federal and State grants and matching funds and also manages State and County funds to improve the City's roads and bridges. The General Aviation Division of the Department of Transportation and Engineering typically receives funding from the Federal Aviation Administration (FAA). The amount of funds granted by the FAA varies from year to year. Once grants are received, the resulting projects are budgeted and matching City funds will be recommended to the City Council for approval. As shown in Exhibit 1, Federal and State Capital Grants total \$12.7 million in FY 2016 and \$2.9 million in FY 2017.

SMALE INFRASTRUCTURE APPROPRIATION REQUIREMENTS MET

In order to maintain the 0.1% portion of the City income tax dedicated to infrastructure maintenance, the City must appropriate and spend at levels determined by the ballot language formula approved by the voters in 1988. The City must annually appropriate at a calculated base requirement (for FY 2016 the base requirement is \$61,095,600) and expend at least 90% of the base



requirement for eligible Smale Infrastructure expenditures from any given calendar year within three years of the appropriation. The City must appropriate and spend at these levels in order to satisfy the requirements for the continuation of the 0.1% earnings tax dedicated to Smale Infrastructure.

The FY 2016 Capital Budget includes \$45.7 million for projects categorized as Smale Infrastructure projects. The base-line requirement for FY 2016 is \$61.1 million. When considering estimated Operating Budget expenditures related to infrastructure (\$34.9 million), the projected Smale Infrastructure coverage (\$80.6 million) for FY 2016 is 132.0%, pending operating and the Capital Acceleration Plan. The City typically budgets a coverage ratio of 110% - 120% in order to safeguard against potential delays in implementing some capital projects caused by weather, property acquisition, and other unforeseen factors.

PLAN CINCINNATI

Plan Cincinnati, the City's comprehensive plan, was adopted by the City Council on November 21, 2012. The comprehensive plan serves as a long-range guide to manage growth, protect the environment, and influence future development. In order to better align capital resource allocation with the strategic priorities outlined in Plan Cincinnati, the City Planning Department reviews each project for its alignment and level of consistency with the comprehensive plan. The Appendix section of this document includes a report illustrating the level of consistency of each project with the plan and how the projects included in the CIP align with each of the five initiative areas in Plan Cincinnati.



ALL FUNDS

FY 2016-2017 CAPITAL IMPROVEMENT PROGRAM
PROJECTS by PROGRAM

This report shows all projects in the FY 2016-2017 Biennial Capital Budget. The projects are identified by department and each program within a department. Projects include General Capital projects, as well as Restricted Fund Capital projects. However, Special Revenue Capital and Federal/State Capital Matching funds are not included in this list. The capital project total for each program is included with this report.

Programs within a department represent a group of similar activities, or a type of service, which is organized as a sub-unit of a department for planning and performance measure purposes.





Capital Investment Program

Capital Budget Program Allocation

Department	Project Title	FY 2016	FY 2017	FY 2016-2017 Total
Buildings & Inspections				
Program: Property Maintenance Code Enforcement				
	Accela Permits Migration - Mobile Field Software	200,000	0	200,000
	Hazard Abatement/Demolition Program	350,000	923,000	1,273,000
	Program Total:	550,000	923,000	1,473,000
City Manager				
Program: Emergency Communications Center				
	Keltron Alarm System	40,000	0	40,000
	Program Total:	40,000	0	40,000
Program: Office of Budget and Evaluation				
	Cincinnati Budget System Upgrades	212,000	0	212,000
	Program Total:	212,000	0	212,000
Program: Office of Communications				
	CitiCable Playback System Upgrade	200,000	0	200,000
	Program Total:	200,000	0	200,000
Program: Office of Environment and Sustainability				
	Center Hill Gas & Leachate	110,000	116,800	226,800
	Emergency Environmental Cleanup/UST	10,000	10,000	20,000
	Regulatory Compliance & Energy Conservation	33,500	113,900	147,400
	Program Total:	153,500	240,700	394,200
City Planning				
Program: City Planning - Administration				
	Neighborhood Studies	60,000	58,900	118,900
	Program Total:	60,000	58,900	118,900
Community & Economic Development				
Program: Economic Development Division				
	4th and Race Garage	2,165,000	1,000,000	3,165,000
	BLOC Ministries	250,000	0	250,000
	College Hill Development Gap, Focus 52	1,000,000	0	1,000,000
	Commercial & Industrial Public Improvements	350,000	600,000	950,000
	Community Development Focus District	340,000	200,000	540,000
	Ensemble Theatre	200,000	0	200,000
	Greater Cincinnati African American Chamber	250,000	0	250,000
	Mercy Health Infrastructure Improvements	1,000,000	0	1,000,000
	Neighborhood Business District Improvements	700,000	800,000	1,500,000
	Neighborhood Business Property Holding	10,000	21,000	31,000
	Race Street Revitalization	200,000	700,000	900,000
	Retail/Commercial Opportunities	1,000,000	1,248,900	2,248,900
	Shakespeare Theater	200,000	0	200,000
	Tax Incentive/Enterprise Zone	85,000	100,000	185,000
	Viable Small Business Development	0	100,000	100,000
	Walnut Hills Development Gap, Focus 52	2,000,000	0	2,000,000
	Westwood Town Hall Area Improvements	250,000	0	250,000
	Program Total:	10,000,000	4,769,900	14,769,900

Capital Investment Program
Capital Budget Program Allocation



Department	Project Title	FY 2016	FY 2017	FY 2016-2017 Total
Housing Division				
	CCAT Bed Expansion	125,000	0	125,000
	Citirama	800,000	0	800,000
	Core 4 Strategic Housing Notice of Funding Availability	286,200	986,200	1,272,400
	Downtown Housing Development	69,300	459,200	528,500
	Neighborhood Market Rate Housing	665,800	850,000	1,515,800
	Price Hill Neighborhood Improvements	500,000	0	500,000
	Program Total:	2,446,300	2,295,400	4,741,700
Enterprise Services				
Duke Energy Convention Center				
	Building Equipment	160,000	104,200	264,200
	Capital Maintenance	70,000	43,000	113,000
	Furniture, Fixtures, and Equipment	0	82,800	82,800
	Program Total:	230,000	230,000	460,000
Off-Street Parking				
	Structural Maintenance & Repair	100,000	100,000	200,000
	Program Total:	100,000	100,000	200,000
Enterprise Technology Solutions				
CAGIS Consortium Operations				
	CAGIS Infrastructure	87,300	116,000	203,300
	Program Total:	87,300	116,000	203,300
CIT-E Operations				
	Cincinnati Financial System Upgrades	0	100,000	100,000
	Data Center Infrastructure Replacement	30,000	272,000	302,000
	Disaster Recovery Infrastructure	100,000	200,000	300,000
	Electronic Gov't (eGov) Web Enhancement	100,000	30,000	130,000
	Information Tech. Efficiency Initiatives	973,700	400,000	1,373,700
	Program Total:	1,203,700	1,002,000	2,205,700
CTS Operations				
	800 MHz Radios	0	1,300,000	1,300,000
	Enterprise Networks and Security Enhancements	62,000	52,200	114,200
	IT Service Desk	0	63,000	63,000
	Mobile Expense Management	0	15,000	15,000
	Radio Communications Equipment	30,000	30,000	60,000
	Program Total:	92,000	1,460,200	1,552,200
Fire				
Support Services				
	Appliances for Existing Firehouses	26,500	26,500	53,000
	Firefighter PPE	201,700	262,800	464,500
	Program Total:	228,200	289,300	517,500
Health				
Health Administration				
	Facilities Renovation and Repairs	151,000	191,900	342,900
	Program Total:	151,000	191,900	342,900



Capital Investment Program

Capital Budget Program Allocation

Department	Project Title	FY 2016	FY 2017	FY 2016-2017 Total
Parks				
Program: Planning & Design				
	Park Infrastructure Rehabilitation	2,300,000	1,748,700	4,048,700
	Program Total:	2,300,000	1,748,700	4,048,700
Police				
Program: Neighborhood Policing				
	Police Body Cameras	700,000	0	700,000
	Police Mobile Digital Video (In-Car Camera) Storage 2015	335,000	310,000	645,000
	Taser Replacement	725,000	0	725,000
	Program Total:	1,760,000	310,000	2,070,000
Public Services				
Program: Director's Office				
	KRONOS Time Keeping System Upgrade	50,000	0	50,000
	Program Total:	50,000	0	50,000
Program: Fleet Services				
	Fleet Lease Purchase - Capital Acceleration	6,500,000	4,500,000	11,000,000
	Fleet Lease Purchase Payments - Capital Acceleration	0	1,400,000	1,400,000
	Fleet Replacements	4,893,100	5,980,800	10,873,900
	Program Total:	11,393,100	11,880,800	23,273,900
Program: Neighborhood Investment Services				
	Trash Receptacles	154,100	186,500	340,600
	Program Total:	154,100	186,500	340,600
Program: Property Management				
	City Facility Renovation and Repairs	2,232,000	2,295,300	4,527,300
	Community Facility Improvements	600,000	400,000	1,000,000
	Music Hall Renovations	0	4,000,000	4,000,000
	Program Total:	2,832,000	6,695,300	9,527,300
Program: Traffic Control, Pavement & Structure Maint.				
	Sign Replacement	330,000	330,000	660,000
	Program Total:	330,000	330,000	660,000
Recreation				
Program: Aquatics				
	Aquatics Facilities Renovation	1,678,000	396,100	2,074,100
	Oakley Aquatic Facility Additional	422,900	0	422,900
	Program Total:	2,100,900	396,100	2,497,000
Program: Athletics				
	Athletics Facilities Renovation	287,500	498,000	785,500
	Outdoor Facilities Renovation	205,000	215,000	420,000
	Program Total:	492,500	713,000	1,205,500
Program: West Region Community Center Operations				
	Compliance with ADA	100,000	100,000	200,000
	Recreation Facilities Renovation	312,000	2,065,400	2,377,400
	Program Total:	412,000	2,165,400	2,577,400

Capital Investment Program
Capital Budget Program Allocation



Department	Project Title	FY 2016	FY 2017	FY 2016-2017 Total
Sewers				
	Program: Wastewater Engineering			
	3568 Bogart Avenue Sewer Replacement	140,500	0	140,500
	3934 Winding Way Sewer Replacement	0	216,500	216,500
	Addyston Creek and Sewer Rehabilitation	0	517,100	517,100
	Airport and Robb Avenue Sewer Replacement	0	312,200	312,200
	Bahama Gardens Pump Station Upgrade and Force Main Replace	0	785,400	785,400
	Berkley Avenue Sewer Replacement	583,300	0	583,300
	Boomer Road Sewer Lateral Assessment	32,100	0	32,100
	Brierly Creek Road Local Sewer (HNs 6040-6100)	0	181,900	181,900
	Bruestle Avenue Pump Station Elimination	0	989,100	989,100
	CSO 005 Water Connection	71,000	0	71,000
	CSO 12 Sewer Separation Phase A.3 West Martin Luther King Dr	0	499,350	499,350
	CSO 125 Stream Separation	0	9,591,500	9,591,500
	CSO 179 Sewer Separation	1,553,300	0	1,553,300
	CSO 181 Real Time Control	0	3,498,600	3,498,600
	CSO 217/483 Source Control Phase A	3,772,400	0	3,772,400
	CSO 217/483 Source Control Phase A2	0	5,557,700	5,557,700
	CSO 217/483 Source Control Phase B	0	13,902,400	13,902,400
	CSO 217/483 Source Control Phase C	0	4,782,800	4,782,800
	CSO 5 (Lick Run RTC) Improvements	0	200,000	200,000
	CSO 54 Improvements	0	208,700	208,700
	CSO 83 and 472 Dynamic Underflow Control	404,000	0	404,000
	CSOs 404, 405, 410, 411 Outfall Reconstruction	0	656,800	656,800
	Camargo Canyon Pump Station Elimination	0	620,100	620,100
	Capital Improvement Program (CIP) Project Planning	1,750,000	2,500,000	4,250,000
	Carpenters Run Pump Station Upgrade	0	631,400	631,400
	Catholic Calvary Cemetery Sewer Replacement	168,700	0	168,700
	Central Parkway Sewer Replacement (HN 2402)	129,200	0	129,200
	Coldstream Drive and Asbury Road Local Sewer	0	3,639,800	3,639,800
	Columbia Parkway at Delta Avenue Sewer Replacement	299,000	0	299,000
	Cora Avenue Sewer Replacement	647,100	0	647,100
	Crestnoll Lane Local Sewer (HNs 3491-3609)	0	919,700	919,700
	Drake Road Sewer Lateral Assessment (HN 7315)	37,200	0	37,200
	Dry Run Area Sewers Phase 2 Contract Round Bottom Road	7,181,100	0	7,181,100
	Dry Run Sewers - Contract Eight Mile Road	0	5,331,500	5,331,500
	Dry Run Sewers Contract Broadwell Road	0	2,794,000	2,794,000
	E. Galbraith Road Sewer Lateral Assessment (HN 4454)	47,400	0	47,400
	E. Kemper Road Sewer Lateral Assessment	52,500	0	52,500
	E. Kemper Road Sewer Lateral Assessment (HN 269)	27,000	0	27,000
	East Branch Upper South Mill Creek Sustainable Watershed Eva	0	149,000	149,000
	East Duck Creek Watershed Plan	411,000	0	411,000
	East Hill Avenue Sewer Replacement	279,700	0	279,700
	Emergency Sewer Repairs 2015	8,000,000	0	8,000,000
	Emergency Sewer Repairs 2016	0	8,000,000	8,000,000



Capital Investment Program Capital Budget Program Allocation

Department	Project Title	FY 2016	FY 2017	FY 2016- 2017 Total
	Enyart Road Sewer Lateral Assessment	42,300	0	42,300
	Enyart Road Sewer Lateral Assessments (HNs 11258 and 11262)	23,300	0	23,300
	Faehr Street Sewer Replacement	0	134,900	134,900
	Fairbanks Avenue Sewer Replacement	282,500	0	282,500
	Foley Road Sewer Laterals (HNs 5579, 5583 - 5599, 5602)	58,400	31,400	89,800
	Freeman Avenue - Klotter to McMicken Sewer Replacement	0	89,900	89,900
	German Cemetery Sewer Replacement	695,000	0	695,000
	Glenview Pump Station Upgrade	812,300	0	812,300
	Great Miami WWTP	5,000,000	0	5,000,000
	Grove Avenue Sewer Replacement	211,000	0	211,000
	Hackberry Street Sewer Replacement	0	280,900	280,900
	Hamilton County Utility Oversight and Coordination 2015	2,700,000	0	2,700,000
	Hamilton County Utility Oversight and Coordination 2016	0	2,700,000	2,700,000
	High Risk Asset Renewal 2015	4,000,000	0	4,000,000
	High Risk Asset Renewal 2016	0	4,000,000	4,000,000
	Home Sewer Treatment System Extensions 2015	200,000	0	200,000
	Home Sewer Treatment System Extensions 2016	0	200,000	200,000
	Hosea Street Sewer Replacement	0	397,900	397,900
	Huntington Pump Station Elimination	0	212,000	212,000
	Hydraulic Modeling 2015	1,000,000	0	1,000,000
	Hydraulic Modeling 2016	0	1,000,000	1,000,000
	Kern Drive and Springdale Road Local Sewer	0	457,400	457,400
	Lick Run Property Demolitions	2,488,600	0	2,488,600
	Lick Run Valley Conveyance System	102,964,600	0	102,964,600
	Little Miami WWTP Electrical Feeders	588,800	0	588,800
	Little Miami WWTP Electrical and Disinfection Improvements	0	1,575,900	1,575,900
	Little Miami WWTP Solids Handling Improvements	1,523,100	0	1,523,100
	Lower Muddy Creek Interceptor SSO Remediation	0	6,101,600	6,101,600
	Lower Muddy Creek Sustainable Watershed Evaluation Plan	0	300,000	300,000
	Ludlow and Lafayette Parallel Sewer	0	3,161,000	3,161,000
	MCWWTP Electrical Arc Flash Protection	0	238,000	238,000
	MCWWTP Enhanced Incinerator Emission Controls	9,440,100	0	9,440,100
	MCWWTP Main Substation Improvements	496,700	0	496,700
	MCWWTP Power Building Medium Voltage Switchgear	517,400	0	517,400
	MCWWTP Solids Handling Improvements Phase 1	12,159,200	0	12,159,200
	MCWWTP Two-Bay Solids Receiving Facility	0	1,008,100	1,008,100
	Manhole Rehabilitation Trenchless Technology Program 2015	1,000,000	0	1,000,000
	Manhole Rehabilitation Trenchless Technology Program 2016	0	1,000,000	1,000,000
	Mapleknoll Drive Local Sewer (HNs 9420-9562)	0	304,200	304,200
	Mayland Dr, Woodlark Dr, and Lusanne Terrace Sewer Study	0	225,000	225,000
	McKeone Avenue Sewer Replacement	0	103,000	103,000
	Millbrook #2 Pump Station Upgrade	870,200	0	870,200
	Montana Avenue Sewer - Ferncroft Drive to Mustang Drive	0	3,073,300	3,073,300
	Mt. Airy Forest Sewer Replacement	5,183,700	0	5,183,700
	Mt. Carmel Road Vicbarb Lane Apple Blossom Lane Local Sewer	1,491,000	0	1,491,000

Capital Investment Program
Capital Budget Program Allocation



Department	Project Title	FY 2016	FY 2017	FY 2016-2017 Total
	Mt. Pleasant Avenue Sewer Replacement	0	344,600	344,600
	Muddy Creek WWTP Add New Belt Filter Press	5,190,000	0	5,190,000
	North Bend Road Local Sewer (HNs 504-565)	355,500	0	355,500
	Old Blue Rock Road Local Sewer (HNs 5240-5327)	238,100	0	238,100
	Overflow Parking Lot for MSD Engineering and Administration	480,000	0	480,000
	Parrakeet Drive Local Sewer (HNs 6002-6068)	0	266,100	266,100
	Paxton Avenue Sewer Rehabilitation	332,600	0	332,600
	Pleasant Run Central Force Main Repairs	1,068,000	0	1,068,000
	Polk Run Non-Potable Water Upgrades	102,000	255,000	357,000
	Polk Run Ultraviolet System/Post Aeration Improvements	225,000	1,510,000	1,735,000
	Portsmouth Avenue Sewer Replacement	0	365,600	365,600
	Pottinger Road Sewer Lateral Assessment (HN 10444)	42,300	0	42,300
	Programmatic Contingency	11,500,000	10,000,000	21,500,000
	Quebec Heights Sewer Separation	3,122,600	0	3,122,600
	Quebec Road Sewer Replacement	0	427,400	427,400
	Quebec Road Sewer Separation	0	6,733,600	6,733,600
	Queen City Avenue Sewer Separation Phase 2	10,262,000	0	10,262,000
	Queen City and Cora Avenues Right-of-Way Sewer Separation	0	2,582,500	2,582,500
	Rackacres Drive and Crestnoll Lane Area Sewer	0	1,237,500	1,237,500
	Reemelin Road Local Sewer (HNs 3489-3860)	0	1,265,700	1,265,700
	Rose Hill Avenue Sewer Relocation	0	522,300	522,300
	SSO 228 Elimination	0	1,416,900	1,416,900
	SSO 603 and 704 Improvements	0	1,338,100	1,338,100
	SSO 700 Facility Improvements	8,509,500	0	8,509,500
	SSO 700 Integrated Watershed Action Plan	750,000	1,500,000	2,250,000
	Schulte Drive Sewer Replacement	145,100	0	145,100
	Sewer Relining Trenchless Technology Program 2015	5,200,000	0	5,200,000
	Sewer Relining Trenchless Technology Program 2016	0	5,200,000	5,200,000
	Sharp Alley Sewer Replacement	502,700	0	502,700
	Spring Grove Avenue - Township Street Sewer Improvement	0	695,200	695,200
	Spring Grove Avenue Sewer Replacement and Rehabilitation	0	540,900	540,900
	Stanley Avenue Lateral Relocations	148,700	0	148,700
	State Road Local Sewer (HNs 7737-7849)	459,800	0	459,800
	Stonebridge Apartments Sewer Study	0	300,000	300,000
	System-Wide Sensor Installation	750,000	0	750,000
	Upper Muddy Creek Interceptor Replacement Contract A	0	939,000	939,000
	Upper Road Local Sewer (HNs 6340-6434)	0	171,000	171,000
	W Branch Winton Woods Sustainable Watershed Evaluation Plan	0	618,000	618,000
	WWT System Asset Renewal 2015	2,000,000	0	2,000,000
	WWT System Asset Renewal 2016	0	3,000,000	3,000,000
	Wahl Terrace Sewer Replacement	0	577,800	577,800
	Wastewater Collection Maintenance Shop Improvements	144,850	1,018,490	1,163,340
	Water Quality Modeling 2015	500,000	0	500,000
	Water Quality Modeling 2016	0	500,000	500,000
	Werk Road Local Sewer (HNs 5544-5686)	751,300	0	751,300



Capital Investment Program Capital Budget Program Allocation

Department	Project Title	FY 2016	FY 2017	FY 2016- 2017 Total
	Werk Road Sewer Lateral Assessment (HN 6052)	42,300	0	42,300
	Werk and Westbourne Enhanced High Rate Treatment Facility	59,141,670	0	59,141,670
	West Fork Road Local Sewer (HNs 5311-5472)	475,000	0	475,000
	Westport Village Pump Station Elimination	0	1,236,150	1,236,150
	Wet Weather Program Management and Support Services 2015	5,300,000	0	5,300,000
	Wet Weather Program Management and Support Services 2016	0	5,300,000	5,300,000
	Whitewater Township Regional Sewer District Phase III SR 128	0	6,142,500	6,142,500
	Wilder Avenue Sewer Replacement	342,900	0	342,900
	Woodruff Road Sewer Lateral Assessment (HNs 8145, 8167,8237)	0	75,000	75,000
	Wyoming and Minion Avenues Sewer Separation	0	2,824,000	2,824,000
	Yoast Avenue Sewer Improvements	0	135,500	135,500
	Program Total:	297,416,620	152,118,890	449,535,510
Stormwater Management				
	Program: Stormwater - Operations & Maintenance			
	Closed Circuit Television (CCTV) Truck	250,000	0	250,000
	Program Total:	250,000	0	250,000
	Program: Stormwater - Planning/Design			
	Barrier Dam Concrete Rehabilitation	100,000	100,000	200,000
	Barrier Dam Crane Rehabilitation	200,000	0	200,000
	Barrier Dam Phase II Facility Plan	200,000	0	200,000
	Barrier Dam Radial Gates - Hydraulic Actuators Replacements	300,000	600,000	900,000
	Grand Avenue Drainage Improvements	175,000	0	175,000
	Oakview Pump Station Business Case Evaluation	50,000	0	50,000
	Rookwood Overpass Drainage Improvements	300,000	0	300,000
	Water Street Storm Sewer Rehabilitation	150,000	0	150,000
	Program Total:	1,475,000	700,000	2,175,000
Transportation & Engineering				
	Program: Director's Office			
	Information Systems Acquisition	139,500	139,500	279,000
	Program Total:	139,500	139,500	279,000
	Program: Engineering			
	Bicycle Transportation Program	300,000	485,000	785,000
	Bridge Rehabilitation Program	550,000	950,000	1,500,000
	Colerain Corr. Imp. I-74 to Spring Grv	93,000	0	93,000
	Curb Ramps - Street Rehab	390,000	400,000	790,000
	Duck Creek Connector	1,000,000	0	1,000,000
	Elmore to Central Parkway Connector	300,000	0	300,000
	Glenway Avenue Gateway Wall	270,000	0	270,000
	Hillside Stairway Rehabilitation Program	50,000	100,000	150,000
	MLK/I-71 Interchange SIB Loan	727,500	697,500	1,425,000
	Mill Creek Greenway Trail	250,000	0	250,000
	ORT Kellogg Ave - Salem to Sutton	120,000	100,000	220,000
	Ohio River Trail	140,000	0	140,000
	Pavement Management	240,000	250,000	490,000
	ROW Ordinance Implementation	50,000	25,000	75,000

Capital Investment Program
Capital Budget Program Allocation



Department	Project Title	FY 2016	FY 2017	FY 2016-2017 Total
	SCIP Loan Repayment	341,120	306,140	647,260
	Sidewalk Repair Program	200,000	400,000	600,000
	Spot Infrastructure Replacement	250,000	550,000	800,000
	Street Improvements	597,380	811,060	1,408,440
	Street Rehabilitation	15,376,100	15,636,400	31,012,500
	Street Rehabilitation - Capital Acceleration	14,600,000	14,400,000	29,000,000
	Street Rehabilitation Debt - Capital Acceleration	0	100,000	100,000
	Uptown Access Imprmts West MLK Dr.	900,000	0	900,000
	Wall Stab. & Landslide Correction	550,000	850,000	1,400,000
	Program Total:	37,295,100	36,061,100	73,356,200
Program: General Aviation				
	Airport Infrastructure Improvements	140,000	140,000	280,000
	FAA/ODOT Local Match	200,000	200,000	400,000
	Facility Improvements	302,300	316,400	618,700
	Program Total:	642,300	656,400	1,298,700
Program: Traffic Engineering				
	Computerized Traffic Signal System	172,000	0	172,000
	Downtown Streetlight Maintenance/Repair	25,000	60,000	85,000
	Duke Street Light Installation and Renovation	150,000	275,000	425,000
	LED Traffic and Pedestrian Signals	250,000	110,000	360,000
	Street Light Replacement Project	80,000	160,000	240,000
	Traffic Control Device Installation & Renovation	50,000	100,000	150,000
	Traffic Signal Controllers & Detectors	100,000	300,000	400,000
	Traffic Signal Installation & Renovation	300,000	1,200,000	1,500,000
	Program Total:	1,127,000	2,205,000	3,332,000
Program: Transportation Planning and Urban Design				
	Brewery Heritage Trail	300,000	0	300,000
	Convention Center Expansion	250,000	0	250,000
	Downtown Infrast. Coord. & Implemtn	200,000	210,000	410,000
	Neighborhood Gateways/Greenways Imprvmt	115,000	210,000	325,000
	Neighborhood Transportation Strategies	700,000	600,000	1,300,000
	OKI Corridor Studies	200,000	210,000	410,000
	Safety Improvements	50,000	100,000	150,000
	Transit/Rail Corridor Preservation Acq.	100,000	100,000	200,000
	Program Total:	1,915,000	1,430,000	3,345,000
Water Works				
Program: Commercial Services				
	Billing System Replacement	2,795,000	631,000	3,426,000
	Document Management Upgrade	0	50,000	50,000
	Program Total:	2,795,000	681,000	3,476,000
Program: Departmental Support Services				
	Computers, Servers, and Software	472,000	492,000	964,000
	Miller Plant Network Upgrade	0	250,000	250,000
	Mobile Computer Replacement	170,000	0	170,000
	Program Total:	642,000	742,000	1,384,000



Capital Investment Program Capital Budget Program Allocation

Department	Project Title	FY 2016	FY 2017	FY 2016- 2017 Total
Program: Distribution				
	Valve Replacement Program	100,000	275,000	375,000
	Program Total:	100,000	275,000	375,000
Program: Engineering				
	Backup Power Generator - Western Hills Pump Station	0	885,000	885,000
	Bolton Plant Lime Residual Site Work	0	460,000	460,000
	Castings/Street Improvements	300,000	420,000	720,000
	Chem East Concrete Repair	0	584,000	584,000
	Miscellaneous Concrete/Pavement Replacement	377,000	377,000	754,000
	Miscellaneous Masonry Replacement	0	150,000	150,000
	Mt. Airy Exterior Renovation	2,899,000	0	2,899,000
	Private Development Allocation Program	400,000	420,000	820,000
	Replacement Water Mains Allocation Program	18,150,000	19,316,000	37,466,000
	Roof Replacement	1,000,000	600,000	1,600,000
	Street Improvement Allocation Program	5,000,000	5,000,000	10,000,000
	Tank Coating	350,000	1,000,000	1,350,000
	Program Total:	28,476,000	29,212,000	57,688,000
Program: Supply				
	Bolton High Service Pumps	2,000,000	100,000	2,100,000
	Crane Equipment Improvements	0	50,000	50,000
	Electrical Transformers	150,000	150,000	300,000
	Field Application Replacement on Large Pumps	0	60,000	60,000
	Lamella Sludge Collection Upgrade	0	400,000	400,000
	Large Motor Rewind Program (Annual)	125,000	125,000	250,000
	Medium Voltage Stations Backup Breakers	0	84,000	84,000
	Miller Plant Sand Filter Valves	0	400,000	400,000
	Motor Control Center Equipment	180,000	180,000	360,000
	Outlying Pump Station Improvements	0	50,000	50,000
	Regeneration Furnace Equipment	75,000	75,000	150,000
	SCADA Remote Terminal Units	124,000	124,000	248,000
	Security Cameras and Digital Video Recorder (DVR)	0	50,000	50,000
	Station Valve Equipment	100,000	100,000	200,000
	Tennyson Pump Discharge Valve Upgrade	0	150,000	150,000
	Vertical Pumps Upgrade	0	60,000	60,000
	Program Total:	2,754,000	2,158,000	4,912,000
Program: Water Quality Science & Treatment				
	Aluminum Heating and Insulation	65,000	0	65,000
	Continuous Water Quality Monitors	0	145,000	145,000
	Gas Chromatograph-Synthetic Organic Compound Analysis	0	150,000	150,000
	Master Plan Upgrade	0	500,000	500,000
	Miller Plant Filter Rebuild	400,000	413,000	813,000
	Tank Aeration Irwin Simpson	100,000	0	100,000
	Winton Road Booster Chlorination	60,000	0	60,000
	Program Total:	625,000	1,208,000	1,833,000
	Grand Total	413,231,120	263,689,990	676,921,110





ALL FUNDS

FY 2016-2017 CAPITAL IMPROVEMENT PROGRAM
PROJECTS by NEIGHBORHOOD

This report provides the budget amounts for all the projects approved for each of the City's 52 recognized neighborhoods, as well as project allocations that are Citywide or Systemwide for all funds. Citywide projects are those projects which benefit all 52 neighborhoods, while the Systemwide projects are those that benefit all 52 neighborhoods, as well as areas in Hamilton County. Additional categories describe if a project is inside or outside of the City or Hamilton County. These designations are assigned to each project by the departments. Projects are for the FY 2016-2017 Biennial Capital Budget and are identified by department and the project departmental priority. Projects include General Capital projects, as well as Restricted Fund Capital projects. However, Special Revenue Capital and Federal/State Capital Matching funds are not included in this list.

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Capital Investment Program Projects by Neighborhood

Neighborhood Agency	Priority Project Title	FY 2016	FY 2017	FY 2016-2017 Total
Avondale				
Sewers				
	150 3934 Winding Way Sewer Replacement	0	216,500	216,500
	157 3568 Bogart Avenue Sewer Replacement	140,500	0	140,500
	MSD Capital Improvements Total	140,500	216,500	357,000
	Avondale Total	140,500	216,500	357,000
Bond Hill				
Community & Economic Development				
	15 Mercy Health Infrastructure Improvements	1,000,000	0	1,000,000
Recreation				
	2 Aquatics Facilities Renovation	9,000	0	9,000
	3 Athletics Facilities Renovation	0	65,000	65,000
	General Capital Total	1,009,000	65,000	1,074,000
Sewers				
	168 Berkley Avenue Sewer Replacement	583,300	0	583,300
	MSD Capital Improvements Total	583,300	0	583,300
	Bond Hill Total	1,592,300	65,000	1,657,300
CUF				
Transportation & Engineering				
	3 MLK/I-71 Interchange SIB Loan	727,500	697,500	1,425,000
	General Capital Total	727,500	697,500	1,425,000
Sewers				
	186 Central Parkway Sewer Replacement (HN 2402)	129,200	0	129,200
	MSD Capital Improvements Total	129,200	0	129,200
	CUF Total	856,700	697,500	1,554,200
California				
Transportation & Engineering				
	34 ORT Kellogg Ave - Salem to Sutton	120,000	100,000	220,000
	General Capital Total	120,000	100,000	220,000
Water Works				
	8 Regeneration Furnace Equipment	75,000	75,000	150,000
	18 Aluminum Heating and Insulation	65,000	0	65,000
	19 Miller Plant Filter Rebuild	400,000	413,000	813,000
	30 Miller Plant Sand Filter Valves	0	400,000	400,000
	32 Gas Chromatograph-Synthetic Organic Compound Analysis	0	150,000	150,000
	38 Vertical Pumps Upgrade	0	60,000	60,000
	44 Chem East Concrete Repair	0	584,000	584,000
	45 Miller Plant Network Upgrade	0	250,000	250,000
	50 Lamella Sludge Collection Upgrade	0	400,000	400,000
	Water Works PIF Total	540,000	2,332,000	2,872,000
	California Total	660,000	2,432,000	3,092,000
Camp Washington				
Sewers				
	172 Spring Grove Avenue Sewer Replacement and Rehabilitation	0	540,900	540,900

Capital Investment Program

Projects by Neighborhood



Neighborhood Agency	Priority Project Title	FY 2016	FY 2017	FY 2016-2017 Total
	185 Spring Grove Avenue - Township Street Sewer Improvement	0	695,200	695,200
	MSD Capital Improvements Total	0	1,236,100	1,236,100
	Camp Washington Total	0	1,236,100	1,236,100
Carthage				
Recreation				
	3 Athletics Facilities Renovation	0	40,000	40,000
	General Capital Total	0	40,000	40,000
	Carthage Total	0	40,000	40,000
Clifton				
Sewers				
	22 Ludlow and Lafayette Parallel Sewer	0	3,161,000	3,161,000
	29 CSO 179 Sewer Separation	1,553,300	0	1,553,300
	83 CSO 12 Sewer Separation Phase A.3 West Martin Luther King Dr	0	499,350	499,350
	MSD Capital Improvements Total	1,553,300	3,660,350	5,213,650
	Clifton Total	1,553,300	3,660,350	5,213,650
College Hill				
Community & Economic Development				
	18 College Hill Development Gap, Focus 52	1,000,000	0	1,000,000
	General Capital Total	1,000,000	0	1,000,000
	College Hill Total	1,000,000	0	1,000,000
Columbia Tusculum				
Sewers				
	121 State Road Local Sewer (HNs 7737-7849)	459,800	0	459,800
	221 Airport and Robb Avenue Sewer Replacement	0	312,200	312,200
	223 Columbia Parkway at Delta Avenue Sewer Replacement	299,000	0	299,000
	258 Stanley Avenue Lateral Relocations	148,700	0	148,700
	MSD Capital Improvements Total	907,500	312,200	1,219,700
	Columbia Tusculum Total	907,500	312,200	1,219,700
Corryville				
Transportation & Engineering				
	24 Uptown Access Imprmts West MLK Dr.	900,000	0	900,000
	General Capital Total	900,000	0	900,000
	Corryville Total	900,000	0	900,000
Downtown				
Enterprise Services				
	1 Building Equipment	160,000	104,200	264,200
	2 Furniture, Fixtures, and Equipment	0	82,800	82,800
	3 Capital Maintenance	70,000	43,000	113,000
	Convention Center Total	230,000	230,000	460,000
Community & Economic Development				
	9 Race Street Revitalization	200,000	700,000	900,000
	12 Downtown Housing Development	69,300	459,200	528,500
	16 4th and Race Garage	2,165,000	1,000,000	3,165,000
	26 Shakespeare Theater	200,000	0	200,000



Capital Investment Program Projects by Neighborhood

Neighborhood Agency	Priority Project Title	FY 2016	FY 2017	FY 2016-2017 Total
Downtown				
Transportation & Engineering				
	23 Downtown Infrast. Coord. & Implemtn	200,000	210,000	410,000
	33 Downtown Streetlight Maintenance/Repair	25,000	60,000	85,000
	40 Convention Center Expansion	250,000	0	250,000
	General Capital Total	3,109,300	2,429,200	5,538,500
Enterprise Services				
	4 Structural Maintenance & Repair	100,000	100,000	200,000
	Parking System Facilities Total	100,000	100,000	200,000
Stormwater Management				
	9 Water Street Storm Sewer Rehabilitation	150,000	0	150,000
	Stormwater Management Total	150,000	0	150,000
	Downtown Total	3,589,300	2,759,200	6,348,500
East End				
Transportation & Engineering				
	29 Airport Infrastructure Improvements	140,000	140,000	280,000
	30 FAA/ODOT Local Match	200,000	200,000	400,000
	31 Facility Improvements	302,300	316,400	618,700
	General Aviation Total	642,300	656,400	1,298,700
Transportation & Engineering				
	22 Ohio River Trail	140,000	0	140,000
	General Capital Total	140,000	0	140,000
Sewers				
	32 Little Miami WWTP Electrical Feeders	588,800	0	588,800
	33 Little Miami WWTP Solids Handling Improvements	1,523,100	0	1,523,100
	34 Little Miami WWTP Electrical and Disinfection Improvements	0	1,575,900	1,575,900
	MSD Capital Improvements Total	2,111,900	1,575,900	3,687,800
Stormwater Management				
	7 Rookwood Overpass Drainage Improvements	300,000	0	300,000
	Stormwater Management Total	300,000	0	300,000
Water Works				
	40 Tennyson Pump Discharge Valve Upgrade	0	150,000	150,000
	Water Works PIF Total	0	150,000	150,000
	East End Total	3,194,200	2,382,300	5,576,500
East Price Hill				
Community & Economic Development				
	21 Price Hill Neighborhood Improvements	500,000	0	500,000
Recreation				
	3 Athletics Facilities Renovation	5,000	25,000	30,000
Transportation & Engineering				
	44 Glenway Avenue Gateway Wall	270,000	0	270,000
	General Capital Total	775,000	25,000	800,000
Sewers				
	82 Quebec Heights Sewer Separation	3,122,600	0	3,122,600
	173 Fairbanks Avenue Sewer Replacement	282,500	0	282,500
	MSD Capital Improvements Total	3,405,100	0	3,405,100

Capital Investment Program

Projects by Neighborhood



Neighborhood Agency	Priority Project Title	FY 2016	FY 2017	FY 2016-2017 Total
Stormwater Management				
	6 Grand Avenue Drainage Improvements	175,000	0	175,000
	Stormwater Management Total	175,000	0	175,000
	East Price Hill Total	4,355,100	25,000	4,380,100
East Westwood				
Sewers				
	178 Yoast Avenue Sewer Improvements	0	67,750	67,750
	MSD Capital Improvements Total	0	67,750	67,750
	East Westwood Total	0	67,750	67,750
Evanston				
Sewers				
	205 Hackberry Street Sewer Replacement	0	280,900	280,900
	218 Catholic Calvary Cemetery Sewer Replacement	168,700	0	168,700
	MSD Capital Improvements Total	168,700	280,900	449,600
	Evanston Total	168,700	280,900	449,600
Hartwell				
Sewers				
	204 Wastewater Collection Maintenance Shop Improvements	144,850	1,018,490	1,163,340
	MSD Capital Improvements Total	144,850	1,018,490	1,163,340
	Hartwell Total	144,850	1,018,490	1,163,340
Hyde Park				
Sewers				
	219 Portsmouth Avenue Sewer Replacement	0	365,600	365,600
	228 East Hill Avenue Sewer Replacement	279,700	0	279,700
	MSD Capital Improvements Total	279,700	365,600	645,300
	Hyde Park Total	279,700	365,600	645,300
Kennedy Heights				
Recreation				
	3 Athletics Facilities Renovation	0	78,000	78,000
	General Capital Total	0	78,000	78,000
Sewers				
	31 SSO 228 Elimination	0	1,416,900	1,416,900
	MSD Capital Improvements Total	0	1,416,900	1,416,900
	Kennedy Heights Total	0	1,494,900	1,494,900
Linwood				
Sewers				
	227 CSO 83 and 472 Dynamic Underflow Control	404,000	0	404,000
	MSD Capital Improvements Total	404,000	0	404,000
	Linwood Total	404,000	0	404,000
Lower Price Hill				
Community & Economic Development				
	20 BLOC Ministries	250,000	0	250,000
	General Capital Total	250,000	0	250,000
Sewers				
	153 MCWWTP Solids Handling Improvements Phase 1	12,159,200	0	12,159,200



Capital Investment Program Projects by Neighborhood

Neighborhood Agency	Priority Project Title	FY 2016	FY 2017	FY 2016-2017 Total
	154 Wilder Avenue Sewer Replacement	342,900	0	342,900
	190 Overflow Parking Lot for MSD Engineering and Administration	480,000	0	480,000
	191 MCWWTP Enhanced Incinerator Emission Controls	9,440,100	0	9,440,100
	192 MCWWTP Two-Bay Solids Receiving Facility	0	1,008,100	1,008,100
	193 MCWWTP Main Substation Improvements	496,700	0	496,700
	194 MCWWTP Power Building Medium Voltage Switchgear	517,400	0	517,400
	195 MCWWTP Electrical Arc Flash Protection	0	238,000	238,000
	MSD Capital Improvements Total	23,436,300	1,246,100	24,682,400
Stormwater Management				
	1 Barrier Dam Crane Rehabilitation	200,000	0	200,000
	2 Barrier Dam Phase II Facility Plan	200,000	0	200,000
	3 Barrier Dam Radial Gates - Hydraulic Actuators Replacements	300,000	600,000	900,000
	5 Barrier Dam Concrete Rehabilitation	100,000	100,000	200,000
	Stormwater Management Total	800,000	700,000	1,500,000
	Lower Price Hill Total	24,486,300	1,946,100	26,432,400
Madisonville				
Recreation				
	2 Aquatics Facilities Renovation	9,000	0	9,000
Transportation & Engineering				
	41 Duck Creek Connector	1,000,000	0	1,000,000
	General Capital Total	1,009,000	0	1,009,000
	Madisonville Total	1,009,000	0	1,009,000
Mt. Adams				
Public Services				
	7 Community Facility Improvements	200,000	200,000	400,000
	General Capital Total	200,000	200,000	400,000
	Mt. Adams Total	200,000	200,000	400,000
Mt. Airy				
Recreation				
	3 Athletics Facilities Renovation	5,000	0	5,000
	General Capital Total	5,000	0	5,000
Sewers				
	149 Mt. Airy Forest Sewer Replacement	5,183,700	0	5,183,700
	175 Bahama Gardens Pump Station Upgrade and Force Main Replace	0	785,400	785,400
	MSD Capital Improvements Total	5,183,700	785,400	5,969,100
Water Works				
	5 Mt. Airy Exterior Renovation	2,899,000	0	2,899,000
	Water Works PIF Total	2,899,000	0	2,899,000
	Mt. Airy Total	8,087,700	785,400	8,873,100
Mt. Washington				
Recreation				
	3 Athletics Facilities Renovation	3,000	0	3,000
	General Capital Total	3,000	0	3,000

Capital Investment Program

Projects by Neighborhood



Neighborhood Agency	Priority Project Title	FY 2016	FY 2017	FY 2016-2017 Total
Sewers				
	103 Mayland Dr, Woodlark Dr, and Lusanne Terrace Sewer Study	0	225,000	225,000
	MSD Capital Improvements Total	0	225,000	225,000
	Mt. Washington Total	3,000	225,000	228,000
North Avondale				
Sewers				
	161 Rose Hill Avenue Sewer Relocation	0	522,300	522,300
	MSD Capital Improvements Total	0	522,300	522,300
	North Avondale Total	0	522,300	522,300
North Fairmont				
Sewers				
	178 Yoast Avenue Sewer Improvements	0	67,750	67,750
	MSD Capital Improvements Total	0	67,750	67,750
	North Fairmont Total	0	67,750	67,750
Northside				
Recreation				
	4 Outdoor Facilities Renovation	0	105,000	105,000
Transportation & Engineering				
	25 Colerain Corr. Imp. I-74 to Spring Grv	93,000	0	93,000
	39 Elmore to Central Parkway Connector	300,000	0	300,000
	General Capital Total	393,000	105,000	498,000
Sewers				
	144 CSO 125 Stream Separation	0	9,591,500	9,591,500
	MSD Capital Improvements Total	0	9,591,500	9,591,500
	Northside Total	393,000	9,696,500	10,089,500
Oakley				
Recreation				
	2 Aquatics Facilities Renovation	1,490,000	0	1,490,000
	4 Outdoor Facilities Renovation	130,000	0	130,000
	5 Compliance with ADA	100,000	0	100,000
	6 Oakley Aquatic Facility Additional	422,900	0	422,900
	General Capital Total	2,142,900	0	2,142,900
Sewers				
	225 Paxton Avenue Sewer Rehabilitation	332,600	0	332,600
	MSD Capital Improvements Total	332,600	0	332,600
Stormwater Management				
	8 Oakview Pump Station Business Case Evaluation	50,000	0	50,000
	Stormwater Management Total	50,000	0	50,000
	Oakley Total	2,525,500	0	2,525,500
Over-the-Rhine				
Community & Economic Development				
	25 Ensemble Theatre	200,000	0	200,000
Public Services				
	6 Music Hall Renovations	0	4,000,000	4,000,000



Capital Investment Program Projects by Neighborhood

Neighborhood Agency	Priority Project Title	FY 2016	FY 2017	FY 2016-2017 Total
Transportation & Engineering				
	46 Brewery Heritage Trail	300,000	0	300,000
	General Capital Total	500,000	4,000,000	4,500,000
Sewers				
	166 Sharp Alley Sewer Replacement	502,700	0	502,700
	181 Freeman Avenue - Klotter to McMicken Sewer Replacement	0	89,900	89,900
	MSD Capital Improvements Total	502,700	89,900	592,600
	Over-the-Rhine Total	1,002,700	4,089,900	5,092,600
Pleasant Ridge				
Recreation				
	1 Recreation Facilities Renovation	55,000	1,875,400	1,930,400
	3 Athletics Facilities Renovation	8,000	55,000	63,000
	5 Compliance with ADA	0	100,000	100,000
	General Capital Total	63,000	2,030,400	2,093,400
Sewers				
	38 CSO 54 Improvements	0	208,700	208,700
	MSD Capital Improvements Total	0	208,700	208,700
	Pleasant Ridge Total	63,000	2,239,100	2,302,100
Queensgate				
Public Services				
	7 Community Facility Improvements	400,000	200,000	600,000
	General Capital Total	400,000	200,000	600,000
	Queensgate Total	400,000	200,000	600,000
Riverside				
Sewers				
	138 CSOs 404, 405, 410, 411 Outfall Reconstruction	0	656,800	656,800
	MSD Capital Improvements Total	0	656,800	656,800
	Riverside Total	0	656,800	656,800
Sayler Park				
Recreation				
	2 Aquatics Facilities Renovation	10,000	0	10,000
	General Capital Total	10,000	0	10,000
Sewers				
	16 Muddy Creek WWTP Add New Belt Filter Press	5,190,000	0	5,190,000
	MSD Capital Improvements Total	5,190,000	0	5,190,000
	Sayler Park Total	5,200,000	0	5,200,000
South Fairmount				
Sewers				
	75 Lick Run Valley Conveyance System	102,964,600	0	102,964,600
	76 Lick Run Property Demolitions	2,488,600	0	2,488,600
	79 Quebec Road Sewer Separation	0	6,733,600	6,733,600
	163 CSO 005 Water Connection	71,000	0	71,000
	164 CSO 5 (Lick Run RTC) Improvements	0	200,000	200,000
	177 Wahl Terrace Sewer Replacement	0	577,800	577,800
	MSD Capital Improvements Total	105,524,200	7,511,400	113,035,600
	South Fairmount Total	105,524,200	7,511,400	113,035,600

Capital Investment Program

Projects by Neighborhood



Neighborhood Agency	Priority Project Title	FY 2016	FY 2017	FY 2016-2017 Total
Spring Grove Village				
Recreation				
	3 Athletics Facilities Renovation	161,800	120,000	281,800
Transportation & Engineering				
	45 Mill Creek Greenway Trail	50,000	0	50,000
	General Capital Total	211,800	120,000	331,800
Water Works				
	12 Mobile Computer Replacement	170,000	0	170,000
	17 Billing System Replacement	2,795,000	631,000	3,426,000
	33 Document Management Upgrade	0	50,000	50,000
	Water Works PIF Total	2,965,000	681,000	3,646,000
	Spring Grove Village Total	3,176,800	801,000	3,977,800
Walnut Hills				
Community & Economic Development				
	17 Walnut Hills Development Gap, Focus 52	2,000,000	0	2,000,000
	General Capital Total	2,000,000	0	2,000,000
Sewers				
	147 German Cemetery Sewer Replacement	695,000	0	695,000
	MSD Capital Improvements Total	695,000	0	695,000
	Walnut Hills Total	2,695,000	0	2,695,000
West End				
Community & Economic Development				
	24 CCAT Bed Expansion	125,000	0	125,000
	General Capital Total	125,000	0	125,000
	West End Total	125,000	0	125,000
West Price Hill				
Sewers				
	78 Wyoming and Minion Avenues Sewer Separation	0	2,824,000	2,824,000
	158 McKeone Avenue Sewer Replacement	0	103,000	103,000
	160 Quebec Road Sewer Replacement	0	427,400	427,400
	184 Faehr Street Sewer Replacement	0	134,900	134,900
	189 Schulte Drive Sewer Replacement	145,100	0	145,100
	MSD Capital Improvements Total	145,100	3,489,300	3,634,400
	West Price Hill Total	145,100	3,489,300	3,634,400
Westwood				
Community & Economic Development				
	22 Westwood Town Hall Area Improvements	250,000	0	250,000
Recreation				
	1 Recreation Facilities Renovation	35,000	0	35,000
	3 Athletics Facilities Renovation	4,000	0	4,000
	General Capital Total	289,000	0	289,000
Sewers				
	80 Queen City Avenue Sewer Separation Phase 2	10,262,000	0	10,262,000
	81 Queen City and Cora Avenues Right-of-Way Sewer Separation	0	2,582,500	2,582,500
	146 Cora Avenue Sewer Replacement	647,100	0	647,100



Capital Investment Program Projects by Neighborhood

Neighborhood Agency	Priority Project Title	FY 2016	FY 2017	FY 2016-2017 Total
	206 Montana Avenue Sewer - Ferncroft Drive to Mustang Drive	0	3,073,300	3,073,300
	MSD Capital Improvements Total	10,909,100	5,655,800	16,564,900
	Westwood Total	11,198,100	5,655,800	16,853,900
Winton Hills				
City Manager				
	6 Center Hill Gas & Leachate	110,000	116,800	226,800
Recreation				
	2 Aquatics Facilities Renovation	0	246,100	246,100
Transportation & Engineering				
	45 Mill Creek Greenway Trail	200,000	0	200,000
	General Capital Total	310,000	362,900	672,900
Sewers				
	85 CSO 217/483 Source Control Phase A	3,772,400	0	3,772,400
	86 CSO 217/483 Source Control Phase B	0	13,902,400	13,902,400
	87 CSO 217/483 Source Control Phase A2	0	5,557,700	5,557,700
	145 CSO 217/483 Source Control Phase C	0	4,782,800	4,782,800
	MSD Capital Improvements Total	3,772,400	24,242,900	28,015,300
Water Works				
	21 Winton Road Booster Chlorination	60,000	0	60,000
	Water Works PIF Total	60,000	0	60,000
	Winton Hills Total	4,142,400	24,605,800	28,748,200
Citywide				
Buildings & Inspections				
	4 Hazard Abatement/Demolition Program	350,000	923,000	1,273,000
	6 Accela Permits Migration - Mobile Field Software	200,000	0	200,000
City Manager				
	1 Cincinnati Budget System Upgrades	212,000	0	212,000
	4 CitiCable Playback System Upgrade	200,000	0	200,000
	7 Regulatory Compliance & Energy Conservation	33,500	113,900	147,400
	8 Emergency Environmental Cleanup/UST	10,000	10,000	20,000
	14 Keltron Alarm System	40,000	0	40,000
City Planning				
	1 Neighborhood Studies	60,000	58,900	118,900
Community & Economic Development				
	1 Retail/Commercial Opportunities	1,000,000	1,248,900	2,248,900
	2 Neighborhood Business District Improvements	700,000	800,000	1,500,000
	3 Core 4 Strategic Housing Notice of Funding Availability	286,200	986,200	1,272,400
	5 Neighborhood Market Rate Housing	665,800	850,000	1,515,800
	7 Commercial & Industrial Public Improvements	350,000	600,000	950,000
	8 Tax Incentive/Enterprise Zone	85,000	100,000	185,000
	10 Community Development Focus District	340,000	200,000	540,000
	11 Citirama	800,000	0	800,000
	13 Neighborhood Business Property Holding	10,000	21,000	31,000
	14 Viable Small Business Development	0	100,000	100,000
	27 Greater Cincinnati African American Chamber	250,000	0	250,000

Capital Investment Program

Projects by Neighborhood



Neighborhood Agency	Priority	Project Title	FY 2016	FY 2017	FY 2016-2017 Total
Enterprise Technology Solutions					
	2	Information Tech. Efficiency Initiatives	973,700	400,000	1,373,700
	10	IT Service Desk	0	63,000	63,000
	13	800 MHz Radios	0	1,300,000	1,300,000
Fire					
	1	Firefighter PPE	201,700	262,800	464,500
	2	Appliances for Existing Firehouses	26,500	26,500	53,000
Health					
	1	Facilities Renovation and Repairs	151,000	191,900	342,900
Parks					
	1	Park Infrastructure Rehabilitation	2,300,000	1,748,700	4,048,700
Police					
	1	Taser Replacement	725,000	0	725,000
	2	Police Mobile Digital Video (In-Car Camera) Storage 2015	335,000	310,000	645,000
	3	Police Body Cameras	700,000	0	700,000
Public Services					
	1	Fleet Replacements	4,893,100	5,980,800	10,873,900
	2	City Facility Renovation and Repairs	2,232,000	2,295,300	4,527,300
	3	Sign Replacement	330,000	330,000	660,000
	4	Trash Receptacles	154,100	186,500	340,600
	5	KRONOS Time Keeping System Upgrade	50,000	0	50,000
	14	Fleet Lease Purchase - Capital Acceleration	6,500,000	4,500,000	11,000,000
	15	Fleet Lease Purchase Payments - Capital Acceleration	0	1,400,000	1,400,000
Recreation					
	1	Recreation Facilities Renovation	222,000	190,000	412,000
	2	Aquatics Facilities Renovation	160,000	150,000	310,000
	3	Athletics Facilities Renovation	100,700	115,000	215,700
	4	Outdoor Facilities Renovation	75,000	110,000	185,000
Transportation & Engineering					
	1	Information Systems Acquisition	139,500	139,500	279,000
	2	SCIP Loan Repayment	341,120	306,140	647,260
	4	Bridge Rehabilitation Program	550,000	950,000	1,500,000
	5	Traffic Signal Installation & Renovation	300,000	1,200,000	1,500,000
	6	Street Rehabilitation	15,376,100	15,636,400	31,012,500
	7	Street Improvements	597,380	811,060	1,408,440
	8	Neighborhood Transportation Strategies	700,000	600,000	1,300,000
	9	OKI Corridor Studies	200,000	210,000	410,000
	10	Computerized Traffic Signal System	172,000	0	172,000
	11	Wall Stab. & Landslide Correction	550,000	850,000	1,400,000
	12	LED Traffic and Pedestrian Signals	250,000	110,000	360,000
	13	Neighborhood Gateways/Greenways Imprvmnt	115,000	210,000	325,000
	14	Sidewalk Repair Program	200,000	400,000	600,000
	15	Curb Ramps - Street Rehab	390,000	400,000	790,000
	16	Safety Improvements	50,000	100,000	150,000
	17	Traffic Signal Controllers & Detectors	100,000	300,000	400,000
	18	Bicycle Transportation Program	300,000	485,000	785,000



Capital Investment Program Projects by Neighborhood

Neighborhood Agency	Priority Project Title	FY 2016	FY 2017	FY 2016-2017 Total
	19 Spot Infrastructure Replacement	250,000	550,000	800,000
	20 Street Light Replacement Project	80,000	160,000	240,000
	21 Pavement Management	240,000	250,000	490,000
	26 Traffic Control Device Installation & Renovation	50,000	100,000	150,000
	27 Duke Street Light Installation and Renovation	150,000	275,000	425,000
	28 ROW Ordinance Implementation	50,000	25,000	75,000
	35 Hillside Stairway Rehabilitation Program	50,000	100,000	150,000
	42 Street Rehabilitation - Capital Acceleration	14,600,000	14,400,000	29,000,000
	43 Street Rehabilitation Debt - Capital Acceleration	0	100,000	100,000
	General Capital Total	61,523,400	64,240,500	125,763,900
Transportation & Engineering				
	32 Transit/Rail Corridor Preservation Acq.	100,000	100,000	200,000
	Income Tax Transit Total	100,000	100,000	200,000
Stormwater Management				
	4 Closed Circuit Television (CCTV) Truck	250,000	0	250,000
	Stormwater Management Total	250,000	0	250,000
Enterprise Technology Solutions				
	12 Radio Communications Equipment	30,000	30,000	60,000
	Telecommunications Services Total	30,000	30,000	60,000
	Citywide Total	61,903,400	64,370,500	126,273,900
Inside Hamilton County/Inside & Outside City				
Sewers				
	69 Lower Muddy Creek Sustainable Watershed Evaluation Plan	0	300,000	300,000
	70 East Branch Upper South Mill Creek Sustainable Watershed Eva	0	149,000	149,000
	71 W Branch Winton Woods Sustainable Watershed Evaluation Plan	0	618,000	618,000
	74 East Duck Creek Watershed Plan	411,000	0	411,000
	141 Lower Muddy Creek Interceptor SSO Remediation	0	6,101,600	6,101,600
	MSD Capital Improvements Total	411,000	7,168,600	7,579,600
	Inside Hamilton County/Inside & Outside City Total	411,000	7,168,600	7,579,600
Inside Hamilton County/Outside City				
Sewers				
	13 Werk and Westbourne Enhanced High Rate Treatment Facility	59,141,670	0	59,141,670
	17 Glenview Pump Station Upgrade	812,300	0	812,300
	77 CSO 181 Real Time Control	0	3,498,600	3,498,600
	89 Upper Muddy Creek Interceptor Replacement Contract A	0	939,000	939,000
	106 West Fork Road Local Sewer (HNs 5311-5472)	475,000	0	475,000
	107 Parrakeet Drive Local Sewer (HNs 6002-6068)	0	266,100	266,100
	109 Kern Drive and Springdale Road Local Sewer	0	457,400	457,400
	110 Mapleknoll Drive Local Sewer (HNs 9420-9562)	0	304,200	304,200
	111 Reemelin Road Local Sewer (HNs 3489-3860)	0	1,265,700	1,265,700
	112 Crestnoll Lane Local Sewer (HNs 3491-3609)	0	919,700	919,700
	113 Old Blue Rock Road Local Sewer (HNs 5240-5327)	238,100	0	238,100
	115 Brierty Creek Road Local Sewer (HNs 6040-6100)	0	181,900	181,900
	116 Werk Road Local Sewer (HNs 5544-5686)	751,300	0	751,300
	117 Upper Road Local Sewer (HNs 6340-6434)	0	171,000	171,000
	119 North Bend Road Local Sewer (HNs 504-565)	355,500	0	355,500

Capital Investment Program

Projects by Neighborhood



Neighborhood Agency	Priority Project Title	FY 2016	FY 2017	FY 2016-2017 Total
	120 Coldstream Drive and Asbury Road Local Sewer	0	3,639,800	3,639,800
	122 Mt. Carmel Road Vicbarb Lane Apple Blossom Lane Local Sewer	1,491,000	0	1,491,000
	123 Boomer Road Sewer Lateral Assessment	32,100	0	32,100
	124 Foley Road Sewer Laterals (HNs 5579, 5583-5599, 5602)	58,400	31,400	89,800
	125 Werk Road Sewer Lateral Assessment (HN 6052)	42,300	0	42,300
	126 E. Galbraith Road Sewer Lateral Assessment (HN 4454)	47,400	0	47,400
	127 Pottinger Road Sewer Lateral Assessment (HN 10444)	42,300	0	42,300
	128 Enyart Road Sewer Lateral Assessments (HNs 11258 and 11262)	23,300	0	23,300
	129 Enyart Road Sewer Lateral Assessment	42,300	0	42,300
	130 E. Kemper Road Sewer Lateral Assessment (HN 269)	27,000	0	27,000
	131 E. Kemper Road Sewer Lateral Assessment	52,500	0	52,500
	132 Drake Road Sewer Lateral Assessment (HN 7315)	37,200	0	37,200
	133 Woodruff Road Sewer Lateral Assessment (HNs 8145, 8167,8237)	0	75,000	75,000
	134 Great Miami WWTP	5,000,000	0	5,000,000
	135 Bruestle Avenue Pump Station Elimination	0	989,100	989,100
	136 Rackacres Drive and Crestnoll Lane Area Sewer	0	1,237,500	1,237,500
	137 Whitewater Township Regional Sewer District Phase III SR 128	0	6,142,500	6,142,500
	139 Westport Village Pump Station Elimination	0	1,236,150	1,236,150
	143 Addyston Creek and Sewer Rehabilitation	0	517,100	517,100
	148 Millbrook #2 Pump Station Upgrade	870,200	0	870,200
	152 SSO 603 and 704 Improvements	0	1,338,100	1,338,100
	162 Carpenters Run Pump Station Upgrade	0	631,400	631,400
	169 Pleasant Run Central Force Main Repairs	1,068,000	0	1,068,000
	174 Hosea Street Sewer Replacement	0	397,900	397,900
	179 Mt. Pleasant Avenue Sewer Replacement	0	344,600	344,600
	207 SSO 700 Facility Improvements	8,509,500	0	8,509,500
	210 Polk Run Ultraviolet System/Post Aeration Improvements	225,000	1,510,000	1,735,000
	211 Polk Run Non-Potable Water Upgrades	102,000	255,000	357,000
	213 Dry Run Area Sewers Phase 2 Contract Round Bottom Road	7,181,100	0	7,181,100
	214 Dry Run Sewers - Contract Eight Mile Road	0	5,331,500	5,331,500
	215 Dry Run Sewers Contract Broadwell Road	0	2,794,000	2,794,000
	216 Camargo Canyon Pump Station Elimination	0	620,100	620,100
	222 Grove Avenue Sewer Replacement	211,000	0	211,000
	257 Stonebridge Apartments Sewer Study	0	300,000	300,000
	259 SSO 700 Integrated Watershed Action Plan	750,000	1,500,000	2,250,000
	MSD Capital Improvements Total	87,586,470	36,894,750	124,481,220
Water Works				
	27 Backup Power Generator - Western Hills Pump Station	0	885,000	885,000
	Water Works PIF Total	0	885,000	885,000
	Inside Hamilton County/Outside City Total	87,586,470	37,779,750	125,366,220
Outside Hamilton County/Outside City				
Sewers				
	209 Huntington Pump Station Elimination	0	212,000	212,000
	MSD Capital Improvements Total	0	212,000	212,000
Water Works				
	6 Bolton High Service Pumps	2,000,000	100,000	2,100,000



Capital Investment Program Projects by Neighborhood

Neighborhood Agency	Priority Project Title	FY 2016	FY 2017	FY 2016-2017 Total
	20 Tank Aeration Irwin Simpson	100,000	0	100,000
	37 Outlying Pump Station Improvements	0	50,000	50,000
	43 Bolton Plant Lime Residual Site Work	0	460,000	460,000
	Water Works PIF Total	2,100,000	610,000	2,710,000
	Outside Hamilton County/Outside City Total	2,100,000	822,000	2,922,000
Systemwide				
Enterprise Technology Solutions				
	1 Disaster Recovery Infrastructure	100,000	200,000	300,000
	4 Enterprise Networks and Security Enhancements	62,000	52,200	114,200
	5 Data Center Infrastructure Replacement	30,000	272,000	302,000
	6 Electronic Gov't (eGov) Web Enhancement	100,000	30,000	130,000
	7 Cincinnati Financial System Upgrades	0	100,000	100,000
	9 Mobile Expense Management	0	15,000	15,000
	14 CAGIS Infrastructure	87,300	116,000	203,300
	General Capital Total	379,300	785,200	1,164,500
Sewers				
	43 Sewer Relining Trenchless Technology Program 2015	5,200,000	0	5,200,000
	44 Sewer Relining Trenchless Technology Program 2016	0	5,200,000	5,200,000
	48 Manhole Rehabilitation Trenchless Technology Program 2015	1,000,000	0	1,000,000
	49 Manhole Rehabilitation Trenchless Technology Program 2016	0	1,000,000	1,000,000
	53 Home Sewer Treatment System Extensions 2015	200,000	0	200,000
	54 Home Sewer Treatment System Extensions 2016	0	200,000	200,000
	58 Wet Weather Program Management and Support Services 2015	5,300,000	0	5,300,000
	59 Wet Weather Program Management and Support Services 2016	0	5,300,000	5,300,000
	63 Hamilton County Utility Oversight and Coordination 2015	2,700,000	0	2,700,000
	64 Hamilton County Utility Oversight and Coordination 2016	0	2,700,000	2,700,000
	104 Programmatic Contingency	11,500,000	10,000,000	21,500,000
	229 Capital Improvement Program (CIP) Project Planning	1,750,000	2,500,000	4,250,000
	230 WWT System Asset Renewal 2015	2,000,000	0	2,000,000
	231 WWT System Asset Renewal 2016	0	3,000,000	3,000,000
	235 Hydraulic Modeling 2015	1,000,000	0	1,000,000
	236 Hydraulic Modeling 2016	0	1,000,000	1,000,000
	240 Emergency Sewer Repairs 2015	8,000,000	0	8,000,000
	241 Emergency Sewer Repairs 2016	0	8,000,000	8,000,000
	245 System-Wide Sensor Installation	750,000	0	750,000
	246 High Risk Asset Renewal 2015	4,000,000	0	4,000,000
	247 High Risk Asset Renewal 2016	0	4,000,000	4,000,000
	251 Water Quality Modeling 2015	500,000	0	500,000
	252 Water Quality Modeling 2016	0	500,000	500,000
	MSD Capital Improvements Total	43,900,000	43,400,000	87,300,000
Water Works				
	1 Replacement Water Mains Allocation Program	18,150,000	19,316,000	37,466,000
	2 Street Improvement Allocation Program	5,000,000	5,000,000	10,000,000
	3 Castings/Street Improvements	300,000	420,000	720,000
	4 Private Development Allocation Program	400,000	420,000	820,000
	7 Computers, Servers, and Software	472,000	492,000	964,000

Capital Investment Program

Projects by Neighborhood



Neighborhood Agency	Priority	Project Title	FY 2016	FY 2017	FY 2016-2017 Total
	9	Electrical Transformers	150,000	150,000	300,000
	10	Large Motor Rewind Program (Annual)	125,000	125,000	250,000
	11	Station Valve Equipment	100,000	100,000	200,000
	13	Tank Coating	350,000	1,000,000	1,350,000
	14	Miscellaneous Concrete/Pavement Replacement	377,000	377,000	754,000
	15	Roof Replacement	1,000,000	600,000	1,600,000
	16	Valve Replacement Program	100,000	275,000	375,000
	22	Motor Control Center Equipment	180,000	180,000	360,000
	24	SCADA Remote Terminal Units	124,000	124,000	248,000
	26	Crane Equipment Improvements	0	50,000	50,000
	28	Continuous Water Quality Monitors	0	145,000	145,000
	29	Miscellaneous Masonry Replacement	0	150,000	150,000
	34	Master Plan Upgrade	0	500,000	500,000
	39	Security Cameras and Digital Video Recorder (DVR)	0	50,000	50,000
	42	Field Application Replacement on Large Pumps	0	60,000	60,000
	46	Medium Voltage Stations Backup Breakers	0	84,000	84,000
Water Works PIF Total			26,828,000	29,618,000	56,446,000
Systemwide Total			71,107,300	73,803,200	144,910,500
Grand Total			413,231,120	263,689,990	676,921,110



ALL FUNDS

**FY 2016-2021 CAPITAL INVESTMENT PROGRAM
IMPACT ON THE OPERATING BUDGET**

This report describes the relationship between the Capital Investment Program (CIP) and the Operating Budget. The debt service impact is provided for the General Capital Budget and the Restricted Funds Capital Budget. The net impact of estimated new operating and maintenance costs (or savings) related to a capital project is provided by Department for General Capital as well as Restricted Fund Capital projects. Special Revenue Capital and Federal/State Capital Matching funds are not included in this report.

Impact of FY 2016-2021 Capital Investment Program on the Operating Budget

The Capital Investment Program (CIP) has a direct and significant impact on the Operating Budget. A major factor in this relationship is the debt service costs in the Operating Budget for bonds issued for capital projects that require long-term financing. The FY 2016 Approved Operating Budget includes a total of \$260.8 million in debt service expenses: \$90.8 million related to the General Capital Budget and \$170.0 million related to the Restricted Funds Capital Budget (see following table).

FY 2016-2017 Approved Capital Budget Debt Services in the Operating Budget		
Fund	FY 2016 Debt Service	FY 2017 Debt Service
Bond Retirement	\$90,775,000	\$91,775,000
Restricted Funds Capital	<u>\$169,987,910</u>	<u>\$171,889,190</u>
Total	\$260,762,910	\$263,664,190
* The Bond Retirement Fund is utilized to pay the debt service on general obligation bonds and notes issued to raise funding for General Capital improvement projects. Other self-supported debt is also paid through this fund.		



Capital Projects' Impact on Operating Budget

When a capital project is developed, the new operating or maintenance costs associated with that new project are determined and this impact on the Operating Budget is considered before project commitments are made. Conversely, any savings to the Operating Budget are also considered when developing a new capital project. The construction of a new police station may generate increased maintenance costs, for example, because the new facility may be larger than the old facility, requiring more telecommunication and computer services. However, these increased costs may be offset by reduced utility costs, resulting from energy efficient doors, windows, and construction materials.



Operating Budget Impact
2016-2021 Capital Improvement Program
Net Operating and Maintenance Costs or Savings (Estimated)

Note: Positive figures indicate Operating Budget additional costs; negative figures indicate savings.

Department of Buildings & Inspections

Capital Project: Hazard Abatement/Demolition Program 2016-2021 CIP Project Funding: \$4,160,700	Estimated Impact on Operating Budget Per Year					
	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021
	(13,000)	(35,000)	(30,000)	(35,000)	(20,000)	(25,000)
Description of Operating Impact This is an annual allocation project representing capital investments that are routine in nature. Additionally, the estimated savings are related to no longer requiring non-personnel resources to barricade the same buildings once hazardous structures are demolished.						
Description of Non-Financial Impact This project will reduce the number of unsafe and blighted buildings in the City.						

Department of City Manager

Capital Project: Regulatory Compliance & Energy Conservation 2016-2021 CIP Project Funding: \$388,200	Estimated Impact on Operating Budget Per Year					
	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021
	(35,370)	(51,900)	(67,900)	(83,620)	(83,620)	(83,620)
Description of Operating Impact Most City departments are anticipated to realize a non-personnel savings related to their Duke Energy electric expenditures.						
Description of Non-Financial Impact The non-financial impact of implementing this project will be increased energy conservation efforts, saving natural resources, and better comfort/productivity in City-owned buildings.						

Department of Enterprise Technology Solutions

Capital Project: Office 365 Full Deployment 2016-2021 CIP Project Funding: \$876,200	Estimated Impact on Operating Budget Per Year					
	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021
	0	0	0	650,000	650,000	650,000
Description of Operating Impact There would be an increase of 650k to operating for annual licenses and data lines.						
Description of Non-Financial Impact This project would keep the City properly licensed to run the latest release of Microsoft Office products.						

Capital Project: Mobile Expense Management 2016-2021 CIP Project Funding: \$15,000	Estimated Impact on Operating Budget Per Year					
	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021
	0	0	15,000	15,000	15,000	15,000
Description of Operating Impact There would be an increase of 15k to operating for annual subscription .						
Description of Non-Financial Impact This project will enable implementation of mobile expense management subscription software, designed to simplify analysis, distribution, and review of mobile billing.						

Capital Investment Program

Operating Budget Impact



Capital Project: IT Service Desk 2016-2021 CIP Project Funding: \$63,000	Estimated Impact on Operating Budget Per Year					
	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021
	0	0	13,000	13,000	13,000	13,000
Description of Operating Impact There would be an increase of 13k to operating for annual maintenance .						
Description of Non-Financial Impact This project will enable implementation of an IT service desk system with improved automation, order tracking, and performance management capability. The proposed system will replace a simple, custom built system, which lacks these capabilities.						

Department of Stormwater Management

Capital Project: Closed Circuit Television (CCTV) Truck 2016-2021 CIP Project Funding: \$250,000	Estimated Impact on Operating Budget Per Year					
	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021
	(50,000)	0	0	0	0	0
Description of Operating Impact The estimated Savings-Non Personnel are related to the need to contract less work out, less repairs, and less borrowing equipment.						
Description of Non-Financial Impact This project will improve the condition of City storm sewers.						

Department of Transportation & Engineering

Capital Project: LED Traffic and Pedestrian Signals 2016-2021 CIP Project Funding: \$800,000	Estimated Impact on Operating Budget Per Year					
	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021
	(20,000)	(20,000)	(20,000)	(20,000)	(20,000)	(20,000)
Description of Operating Impact The estimated annual saving is approximately \$20,000 in the non-personnel budget from reduced wash/relamp contracts (\$5,000) and savings of traffic signal energy (\$15,000).						
Description of Non-Financial Impact This project will reduce traffic signal outages by replacing incandescent-type traffic and pedestrian signals with energy efficient and longer life Light-Emitting Diode (LED) types.						

Department of Water Works

Capital Project: Billing System Replacement 2016-2021 CIP Project Funding: \$4,860,000	Estimated Impact on Operating Budget Per Year					
	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021
	2,052,000	1,448,000	1,764,000	1,927,000	1,085,000	(348,000)
Description of Operating Impact The new billing system is a cloud hosting system and will require annual hosting fees, maintenance, and license fees.						
Description of Non-Financial Impact This new system will allow GCWW to pursue a broader customer base for billing services.						



FY 2016-2021 CAPITAL ACCELERATION PLAN

The following section outlines a capital acceleration plan designed to address aging roads and City vehicles. Through leveraging existing debt capacity, the City has identified additional resources in the six-year capital investment plan to improve streets and bring the City's fleet of vehicles back into life cycle.





Capital Acceleration Program for the City of Cincinnati's Priority Areas of Investment





Background

- Nearly 30 years ago, the Smale Commission delivered the “City of Cincinnati Infrastructure Commission Report” to City Council, which provided multiple recommendations to address the City’s aging infrastructure.
- As a result of the Smale Commission the City took several steps to increase the level of funding for infrastructure including the implementation of new revenue sources specifically for infrastructure/capital funding.
- Unfortunately, not all of the Smale Commission’s recommendations were fully implemented. In addition, the revenues dedicated to the City’s capital infrastructure have not kept pace with the cost of maintaining infrastructure as a result of inflation and an increase in the amount of infrastructure.
- Today, nearly 30 years after the original Smale Commission, the City again faces the challenge of addressing the upkeep and maintenance of infrastructure. The Top Priority Areas include:

1. **Transportation (i.e. Streets)**
2. **Fleet (i.e. Ambulances, Police Cruisers, Fire Apparatus, etc.)**





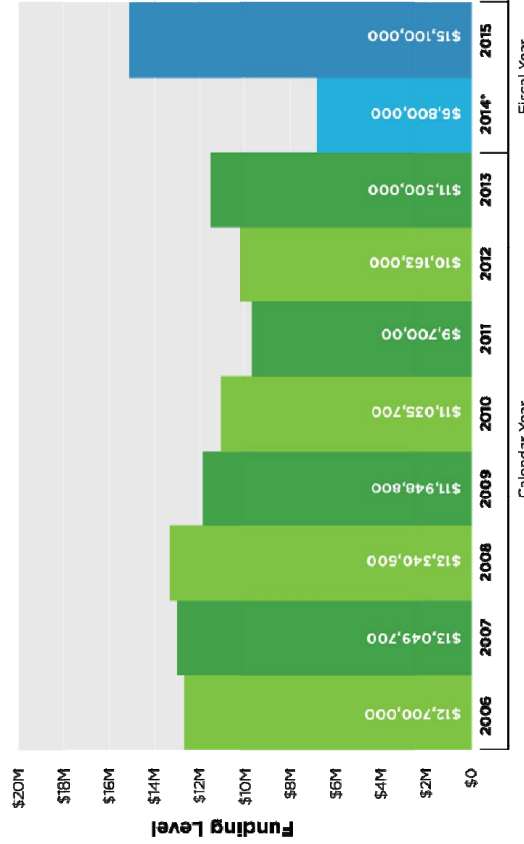
Background (cont.)

- The City has identified a need to:
 1. Fund “Catch-Up” projects related to the Top Priority Areas; and,
 2. Increase annual funding for Capital Investment including enhanced Rehabilitation and Preventative Maintenance in order to reduce future costs to the City.
- At current funding levels these pent up needs will continue to grow and the City will fall further behind in the upkeep and maintenance of its capital infrastructure.
- “Kicking the Can” further on this issue will cost the City - and its tax payers - an ever increasing amount.
- As such, the City worked with outside financial and legal consultants to develop a sustainable, multi-year strategy to enhance the funding available for capital infrastructure. This strategy is known as the “Capital Acceleration Program” or “CAP.”



Current State of Transportation Funding (Streets)

- City street rehabilitation funding declined from 2008 to 2013 and has only recently increased.
- Currently, only 51% of the City's streets are in "good" or "better" condition.
- Roughly 20% are in are "poor" or worse.
- Even with the increased level of funding in fiscal year 2015, the average condition of the City's streets will continue to deteriorate.
- Additional funding for streets needs to be identified in order to maintain and/or enhance the condition of the City's streets.



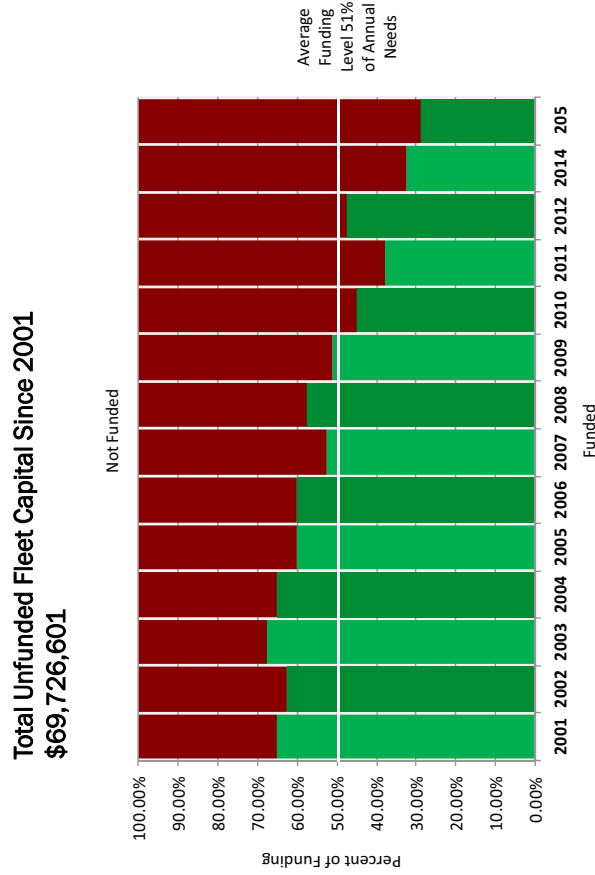
*In 2014, Cincinnati transitioned from a January-December "Calendar Year" based Fiscal Year to a July-June Fiscal Year. 2014 Funding was provided for the six month transition budget.





Current State of Fleet Funding

- Since 2001, the capital funding of fleet has been eroding, from about 70% of needs in 2001 to about 30% of needs today.
- As a result of the declining funding levels, approximately 60% of the City's Fleet equipment is out of life cycle, with critical needs in Police Cruisers, Ambulances and Fire Trucks.





The CAP Strategy

- The CAP Strategy is designed to maximize funding for the identified priority areas over the next six years.
- The CAP Strategy strategically leverages existing revenue streams to accelerate funding without diminishing the ability of the City to continue funding its capital needs into the future (i.e. after year 6 of the current multi-year CIP).
- Critical assumptions used in development of the CAP Strategy are as follows:
 - No new revenue sources over and above the current projected amounts are used;
 - No material change in the funding available for other General Capital Investment (i.e. non-Streets and Fleet);
 - In order to be conservative, no growth in the assessed value of real property is assumed in the planning projections;
 - Limited growth in income tax revenues is assumed mirroring University of Cincinnati forecasts;
 - The program is guided by a series of recommended Financial Policy Guidelines that are in line with Credit Rating Agency “Best Practices” and highly rated “AA” local governments;
 - The amount of long-term debt vs. cash funding is maintained at a responsible level going forward (i.e. approximately 55% debt / 45% cash).





CAP Strategy Summary Results

	A vs. B		
	A	B	
	Existing Funding Levels	Enhanced Funding Levels with CAP Strategy	
Transportation (Streets) Rehabilitation	\$103.2 million planned to be funded FY2016 to 2021 or an average of \$17.2 million per year	\$150 million funded FY2016 to 2021 or an average of \$25 million per year	\$46.8 million more funded FY2016 to 2021 or an increase of 45%
Transportation (Streets) Preventative Maintenance	\$600,000 in annual funding per year or \$3.6 million in total	\$4.3 million in annual funding FY2016 to 2021 or \$25.8 million in total	\$22.2 million more funded FY2016 to 2021 or an increase of 617%
Fleet (FY2016 to FY2021) ⁽¹⁾	\$35.4 million over the FY2016 to FY2021 time period or an average of \$5.9 million per year	\$28.5 million of "catch-up" needs added to the \$35.4 million for FY2016 to FY2021 for a total of \$63.9 million.	\$28.5 million more funded FY2016 to 2021 or an increase of 81%.
Aggregate General CIP Funding	\$373 million funded FY2016 to 2021 or an average of \$62.2 million per year	\$463.8 million funded FY2016 to 2021 or an average of \$77.3 million per year	\$90.8 million more funded FY2016 to FY2021 or an increase of 24%

(1) An additional \$11.5 million is planned for "back-log" needs over the FY2022 to FY2027 time period.





General CIP After CAP Strategy

Sources of Funding	2016	2017	2018	2019	2020	2021	Total
Income Tax Cash	\$14.1	\$13.9	\$15.4	\$15.4	\$18.4	\$17.9	\$95.0
less: Income Tax Cash Used to Support CAP	0.0	(1.5)	(3.0)	(3.4)	(5.3)	(6.6)	(19.8)
Net Income Tax Cash after CAP	14.1	12.4	12.4	12.0	13.0	11.3	75.2
Southern Railway Note Proceeds	20.6	20.8	21.0	21.2	21.5	21.7	126.8
Reprogramming	0.8	0.5	0.5	0.5	0.5	0.5	3.3
Misc. Other Revenue	0.0	1.4	1.2	2.8	3.9	3.7	13.0
Statutory G.O. Bonds	55.0	15.0	15.0	15.0	15.0	15.0	130.0
Income Tax Bonds	6.0	5.0	4.0	3.0	0.0	0.0	18.0
CAP Statutory G.O. Bonds for Transport.	0.0	10.0	9.0	0.0	0.0	0.0	19.0
CAP Income Tax Bonds for Transport.	14.6	4.4	2.4	11.1	9.0	8.5	50.0
CAP Income Tax Lease for Equipment / Fleet	6.5	4.5	4.5	4.5	4.5	4.0	28.5
Total CIP Sources After CAP Strategy	\$117.6	\$74.0	\$70.0	\$70.1	\$67.4	\$64.6	\$463.8

Debt Funded Portion	\$245.5	53%
Cash Funded Portion	218.3	47%
Total	\$463.8	100%

Uses of Funding	2016	2017	2018	2019	2020	2021	Total
Transportation Funding in Base CIP	\$15.4	\$15.6	\$17.3	\$17.6	\$18.4	\$18.9	\$103.2
Transportation Funding from CAP	14.6	14.4	11.4	11.1	9.0	8.5	69.0
Total Transportation Funding	30.0	30.0	28.7	28.7	27.4	27.4	172.2
Fleet Funding in Base CIP	4.9	6.0	6.1	6.0	6.1	6.3	35.4
Fleet Funding from CAP	6.5	4.5	4.5	4.5	4.5	4.0	28.5
Total Fleet Funding	11.4	10.5	10.6	10.5	10.6	10.3	63.9
Funding for other General CIP Projects	76.2	33.5	30.7	31.0	29.4	26.9	227.7
Total Uses of Funds	\$117.6	\$74.0	\$70.0	\$70.1	\$67.4	\$64.6	\$463.8

Transportation	\$172.2	37%
Fleet	63.9	14%
Other General CIP	227.7	49%
Total	\$463.8	100%

In addition to the CAP Strategy, the General CIP incorporates \$40 million of Statutory General Obligation Bonds for the Street Car project. This \$40 million borrowing will reimburse the City for monies already spent on the Street Car project. Issuing General Obligation Bonds for the Street Car will result in a lower cost of funding than a Revenue Bond issue given the same market conditions. This authorization is consistent with previously approved authorization to convert short term Street Car related financing to permanent financing. The G.O Bond financing mechanism also provides the City with flexibility to fund economic development projects that are not eligible to be funded from Statutory G.O. Bonds.





Rationale for the CAP Strategy

- The CAP Strategy creates a significant increase in capital funding over the FY2016 to FY2021 time period for critical City capital needs that benefit all citizens.
- The CAP Strategy does not require additional revenue beyond what is already planned for the future.
- The CAP Strategy can be accomplished within the limits of recommended Financial Policy Guidelines.
- Increasing capital funding for critical infrastructure in the near term is more efficient – and less costly – than pushing off these critical needs to future generations.
 - Without corrective action, the “back log” of capital needs will continue to increase every year and the impact of inflation over time will make the cost to future generations grow exponentially.
 - The increase in Preventative Maintenance funding for Streets allows will save the City money because it is less costly to repair a road than it is to rehabilitate or replace a street.
 - In addition, modernizing the City’s Fleet will ultimately save the City \$2 to \$3 million per year in reduced maintenance and fuel costs.





ALL FUNDS

FY 2016-2021 CAPITAL INVESTMENT PROGRAM
DEPARTMENTAL BUDGETS

The following reports provide a departmental summary of the projects included in each department's FY 2016-2021 Capital Improvement Program. The descriptions for each project follow the departmental summary.





Department of Buildings & Inspections

Priority	Project Title	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2016-2021 Total
General Capital Fund								
4	Hazard Abatement/Demolition Program	350,000	923,000	833,400	980,000	700,000	374,300	4,160,700
6	Accela Permits Migration - Mobile Field Software	200,000	0	0	0	0	0	200,000
General Capital Total		550,000	923,000	833,400	980,000	700,000	374,300	4,360,700
Department of Buildings & Inspections Total		550,000	923,000	833,400	980,000	700,000	374,300	4,360,700



General Capital Fund

Hazard Abatement/Demolition Program

Dept. Priority: 4

Description

This project will provide resources for the demolition of unsafe and public nuisance buildings and is targeted for areas where Community Development Block Grant funding is impractical, usually in commercial or historical districts.

Purpose

The purpose of this project is to address public safety concerns of existing structures and to reduce the number of unsafe and blighted buildings in the City.

Phases	Prior Year	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2016-2021 Total
Other	0	350,000	923,000	833,400	980,000	700,000	374,300	4,160,700
General Capital Total	0	350,000	923,000	833,400	980,000	700,000	374,300	4,160,700
Estimated Personnel Cost	0	0	0	0	0	0	0	0

Accela Permits Migration - Mobile Field Software

Dept. Priority: 6

Description

This project will provide resources for mobile field application software for inspectors.

Purpose

The purpose of this project is to enhance functionality of recently acquired field tablet computers for real time data entry and efficiency.

Phases	Prior Year	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2016-2021 Total
Other	0	200,000	0	0	0	0	0	200,000
General Capital Total	0	200,000	0	0	0	0	0	200,000
Estimated Personnel Cost	0	0	0	0	0	0	0	0



Department of City Manager

Priority	Project Title	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2016-2021 Total
General Capital Fund								
1	Cincinnati Budget System Upgrades	212,000	0	0	0	0	0	212,000
4	CitiCable Playback System Upgrade	200,000	0	0	0	0	0	200,000
6	Center Hill Gas & Leachate	110,000	116,800	110,000	110,000	110,000	110,000	666,800
7	Regulatory Compliance & Energy Conservation	33,500	113,900	109,200	104,200	10,800	16,600	388,200
8	Emergency Environmental Cleanup/ UST	10,000	10,000	10,000	10,000	10,000	10,000	60,000
14	Keltron Alarm System	40,000	0	0	0	0	0	40,000
General Capital Total		605,500	240,700	229,200	224,200	130,800	136,600	1,567,000
Department of City Manager Total		605,500	240,700	229,200	224,200	130,800	136,600	1,567,000



General Capital Fund

Cincinnati Budget System Upgrades

Dept. Priority: 1

Description

This project will provide resources for an upgrade to the Cincinnati Budget System to the latest version of the software, which is 3.10.

Purpose

The purpose of this project is to keep the Cincinnati Budget System updated to maintain support from the program's vendor.

Phases	Prior Year	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2016-2021 Total
Other	0	212,000	0	0	0	0	0	212,000
General Capital Total	0	212,000	0	0	0	0	0	212,000
<hr/>								
Estimated Personnel Cost	0	0	0	0	0	0	0	0

CitiCable Playback System Upgrade

Dept. Priority: 4

Description

This project will provide resources for replacement and upgrade of a playback system in CitiCable, including expanded compatibility with Cincinnati Bell cable communications.

Purpose

The purpose of this project is to allow for continued provision of playback service, and to enable an upgrade to expand compatibility with Cincinnati Bell cable communications.

Phases	Prior Year	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2016-2021 Total
Equipment	0	200,000	0	0	0	0	0	200,000
General Capital Total	0	200,000	0	0	0	0	0	200,000
<hr/>								
Estimated Personnel Cost	0	0	0	0	0	0	0	0



Center Hill Gas & Leachate

Dept. Priority: 6

Description

This project will provide resources for the continued operation and maintenance of the methane gas and leachate collection systems at the former Center Hill Landfill, and support compliance with State and Federal solid waste regulations.

Purpose

The purpose of this project is to maintain compliance with State and Federal solid waste regulations. The City must control, collect, and dispose of all leachate and methane gas until the Ohio Environmental Protection Agency decides that no further action is necessary.

Phases	Prior Year	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2016-2021
								Total
Other	106,700	110,000	116,800	110,000	110,000	110,000	110,000	666,800
General Capital Total	106,700	110,000	116,800	110,000	110,000	110,000	110,000	666,800
Estimated Personnel Cost	0	0	0	0	0	0	0	0

Regulatory Compliance & Energy Conservation

Dept. Priority: 7

Description

This project will provide resources for addressing regulatory compliance issues and energy efficiency projects. Project funding would also provide for feasibility and design activities necessary to support budget requests for larger capital projects addressing regulatory compliance or energy conservation. These resources would be available to assist any General Fund operation in any City department. Examples of projects include, but are not limited to, the purchase of a storage unit for hazardous waste prior to off-site shipment and the installation of occupancy sensors in City facilities to reduce lighting expenses.

Purpose

The purpose of this project is to assist City departments in achieving and maintaining compliance with environmental regulations, and conserving energy resources.

Phases	Prior Year	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2016-2021
								Total
Other	0	33,500	113,900	109,200	104,200	10,800	16,600	388,200
General Capital Total	0	33,500	113,900	109,200	104,200	10,800	16,600	388,200
Estimated Personnel Cost	0	0	0	0	0	0	0	0

Emergency Environmental Cleanup/UST

Dept. Priority: 8

Description

This project will provide resources for covering costs related to emergency environmental cleanup as needed. Frequently, this is related to clean up of fuel or chemical spills, abandoned chemical containers, or



underground storage tanks that are discovered in construction projects and require immediate actions. Once an underground tank removal is completed, the City may be reimbursed for these costs by the State of Ohio.

Purpose

The purpose of this project is to provide funding for emergency environmental cleanup as needed.

Phases	Prior Year	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2016-2021
								Total
Other	0	10,000	10,000	10,000	10,000	10,000	10,000	60,000
General Capital Total	0	10,000	10,000	10,000	10,000	10,000	10,000	60,000
Estimated Personnel Cost	0	0	0	0	0	0	0	0

Keltron Alarm System

Dept. Priority: 14

Description

This project will provide resources for a Keltron Alarm System which includes monitoring equipment panels for both fire and burglary at various locations around the City. This would replace the current alarm monitoring equipment which is no longer operating at the level needed to provide safety for these locations.

Purpose

The purpose of this project is to replace and upgrade alarm equipment that no longer has the capabilities to provide adequate alarm monitoring at designated locations. The equipment is critical since it provides a direct security link from hospitals, libraries, City Hall, Parking Garages, etc. to the alarm monitoring for fire and burglary at the Emergency Communications Center.

Phases	Prior Year	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2016-2021
								Total
Equipment	0	40,000	0	0	0	0	0	40,000
General Capital Total	0	40,000	0	0	0	0	0	40,000
Estimated Personnel Cost	0	0	0	0	0	0	0	0



Department of City Planning

Priority	Project Title	FY 2016-2021						Total
		FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	
General Capital Fund								
1	Neighborhood Studies	60,000	58,900	61,700	58,800	90,000	90,200	419,600
General Capital Total		60,000	58,900	61,700	58,800	90,000	90,200	419,600
Department of City Planning Total		60,000	58,900	61,700	58,800	90,000	90,200	419,600



General Capital Fund

Neighborhood Studies

Dept. Priority: 1

Description

This project will provide funding to prepare neighborhood requests for plans which will lead to actual capital investments and to respond to Council referred planning studies and projects.

Purpose

The purpose of this project is to allow the Department of Planning and Buildings to respond to both immediate neighborhood planning needs as it relates to upcoming capital investments by the City and to respond to requests made by City Council.

Phases	Prior Year	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2016-2021	
								Total	
Other	0	60,000	58,900	61,700	58,800	90,000	90,200	419,600	
General Capital Total	0	60,000	58,900	61,700	58,800	90,000	90,200	419,600	
Estimated Personnel Cost	0	0	0	0	0	0	0	0	



Department of Community & Economic Development

Priority	Project Title	FY 2016-2021						Total
		FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	
General Capital Fund								
1	Retail/Commercial Opportunities	1,000,000	1,248,900	1,042,600	1,303,400	945,300	800,000	6,340,200
2	Neighborhood Business District Improvements	700,000	800,000	800,000	900,000	800,000	700,000	4,700,000
3	Core 4 Strategic Housing Notice of Funding Availability	286,200	986,200	886,200	986,200	641,200	986,200	4,772,200
5	Neighborhood Market Rate Housing	665,800	850,000	622,000	850,000	400,000	643,000	4,030,800
7	Commercial & Industrial Public Improvements	350,000	600,000	500,000	700,000	500,000	400,000	3,050,000
8	Tax Incentive/Enterprise Zone	85,000	100,000	80,000	125,000	80,000	100,000	570,000
9	Race Street Revitalization	200,000	700,000	650,000	0	0	0	1,550,000
10	Community Development Focus District	340,000	200,000	200,000	300,000	200,000	100,000	1,340,000
11	Citirama	800,000	0	0	0	0	0	800,000
12	Downtown Housing Development	69,300	459,200	400,000	603,000	400,000	400,000	2,331,500
13	Neighborhood Business Property Holding	10,000	21,000	16,000	25,000	21,000	18,000	111,000
14	Viable Small Business Development	0	100,000	75,000	155,000	75,000	100,000	505,000
15	Mercy Health Infrastructure Improvements	1,000,000	0	0	0	0	0	1,000,000
16	4th and Race Garage	2,165,000	1,000,000	0	0	0	0	3,165,000
17	Walnut Hills Development Gap, Focus 52	2,000,000	0	0	0	0	0	2,000,000
18	College Hill Development Gap, Focus 52	1,000,000	0	0	0	0	0	1,000,000
20	BLOC Ministries	250,000	0	0	0	0	0	250,000
21	Price Hill Neighborhood Improvements	500,000	0	0	0	0	0	500,000
22	Westwood Town Hall Area Improvements	250,000	0	0	0	0	0	250,000
24	CCAT Bed Expansion	125,000	0	0	0	0	0	125,000
25	Ensemble Theatre	200,000	0	0	0	0	0	200,000
26	Shakespeare Theater	200,000	0	0	0	0	0	200,000
27	Greater Cincinnati African American Chamber	250,000	0	0	0	0	0	250,000
General Capital Total		12,446,300	7,065,300	5,271,800	5,947,600	4,062,500	4,247,200	39,040,700
Department of Community & Economic Development Total		12,446,300	7,065,300	5,271,800	5,947,600	4,062,500	4,247,200	39,040,700



General Capital Fund

Retail/Commercial Opportunities

Dept. Priority: 1

Description

This project will provide resources to enable the City to pursue retail and commercial tenants by offering incentives to leverage private investment. Project funding will also be used for project administration costs, predevelopment work, and to cover carrying costs (i.e., property taxes) on City-owned sites overseen by the Economic Development Division.

Purpose

The purpose of this project is to create new employment opportunities while retaining existing jobs. The project would also foster positive business relationships, encourage business growth and investment, facilitate property development for commercial purposes, and cover carrying costs (i.e, real estate taxes) for City-owned properties overseen by the Economic Development Division.

Phases	Prior Year	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2016-2021
								Total
Other	900,000	1,000,000	1,248,900	1,042,600	1,303,400	945,300	800,000	6,340,200
General Capital Total	900,000	1,000,000	1,248,900	1,042,600	1,303,400	945,300	800,000	6,340,200
Estimated Personnel Cost	90,000	100,000	124,890	104,260	130,340	94,530	80,000	634,020

Neighborhood Business District Improvements

Dept. Priority: 2

Description

This project will provide funding for the design and construction of streetscape improvements, parking improvements, and other infrastructure/capital investments intended to stabilize, sustain, and revitalize the City's designated Neighborhood Business Districts. The Neighborhood Business District Improvement Program (NBDIP) has both a City Capital and a Community Development Block Grant component. Individual projects are vetted by City staff as well as peer reviewed in a competitive grant process involving a citizen advisory group.

Purpose

The purpose of this project is to enhance the economic viability of each Neighborhood Business District (NBD) and the communities they serve. This project would also increase employment opportunities.

Phases	Prior Year	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2016-2021
								Total
Engineering	15,000	30,000	30,000	30,000	30,000	30,000	25,000	175,000
Other	48,800	80,000	80,000	100,000	100,000	80,000	70,000	510,000
Construction	436,200	590,000	690,000	670,000	770,000	690,000	605,000	4,015,000
General Capital Total	500,000	700,000	800,000	800,000	900,000	800,000	700,000	4,700,000
Estimated Personnel Cost	50,000	70,000	85,000	80,000	90,000	75,000	75,000	475,000



Core 4 Strategic Housing Notice of Funding Availability

Dept. Priority: 3

Description

This project will provide resources for targeted investments in housing projects consisting of at least four housing units throughout the City's neighborhoods. Core 4 Strategic NOFA will work in tandem with the Hand Up Initiative to provide housing opportunities on all spectrums: affordable rental housing, affordable starter homes (Homesteading Program) and market rate rental/homeownership.

Purpose

The purpose of this project is to provide targeted investment in eight City neighborhoods (four per year) to increase availability of quality diverse housing options in thriving urban neighborhoods.

Phases	Prior Year	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2016-2021
								Total
Construction	0	250,000	862,000	781,200	862,000	566,200	862,000	4,183,400
Other	0	36,200	124,200	105,000	124,200	75,000	124,200	588,800
General Capital Total	0	286,200	986,200	886,200	986,200	641,200	986,200	4,772,200
Estimated Personnel Cost	0	29,000	99,000	88,000	99,000	64,000	99,000	478,000

Neighborhood Market Rate Housing

Dept. Priority: 5

Description

This project will provide resources for the development of market-rate housing in Cincinnati neighborhoods. City assistance may take the form of acquisition, site preparation, infrastructure development, and direct assistance for construction or rehabilitation. Project funding will also be available to assist projects that will be recommended in the Strategic Housing Initiatives Program (SHIP).

Purpose

The purpose of this project is to increase market-rate housing in City neighborhoods. This program is designed to improve the City's competitive edge in retaining and attracting middle income residents by increasing the supply and variety of available market rate housing.

Phases	Prior Year	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2016-2021
								Total
Construction	0	585,800	740,000	547,000	740,000	352,000	568,000	3,532,800
Other	0	80,000	110,000	75,000	110,000	48,000	75,000	498,000
General Capital Total	0	665,800	850,000	622,000	850,000	400,000	643,000	4,030,800
Estimated Personnel Cost	0	65,000	85,000	60,000	85,000	40,000	65,000	400,000

Commercial & Industrial Public Improvements

Dept. Priority: 7

Description

This project will provide resources for planning activities and public improvements in accordance with existing and future plans. Public improvements would include any specific infrastructure improvements, development and predevelopment activities to facilitate retention, expansion, and attraction of businesses

Capital Improvement Plan

Community & Economic Development



within commercial and industrial areas of the City. The Economic Development Division will continue to target locations in the City which are identified by the GO Cincinnati study as Growth Opportunity Areas.

Purpose

The purpose of this project is to stimulate additional development and to leverage private investment within commercial and industrial areas of the City outside of the Central Business District (CBD).

Phases	Prior Year	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2016-2021
								Total
Construction	0	290,000	500,000	400,000	600,000	400,000	300,000	2,490,000
Engineering	0	40,000	50,000	50,000	50,000	50,000	50,000	290,000
Other	0	20,000	50,000	50,000	50,000	50,000	50,000	270,000
General Capital Total	0	350,000	600,000	500,000	700,000	500,000	400,000	3,050,000
Estimated Personnel Cost	0	35,000	60,000	50,000	70,000	50,000	60,000	325,000

Tax Incentive/Enterprise Zone

Dept. Priority: 8

Description

This project will provide resources to operate the CRA property tax abatement program and the State of Ohio designated Enterprise Zone Program, including coordination with the State of Ohio as well as compliance and monitoring activity for existing agreements. The City administers these programs to provide an incentive to encourage renovation and new construction of commercial property, as well as to incentivize businesses to expand, renovate, or relocate within the City.

Purpose

The purpose of this project is to encourage businesses to remain, expand or relocate to the Downtown Area.

Phases	Prior Year	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2016-2021
								Total
Other	83,100	85,000	100,000	80,000	125,000	80,000	100,000	570,000
General Capital Total	83,100	85,000	100,000	80,000	125,000	80,000	100,000	570,000
Estimated Personnel Cost	83,100	85,000	100,000	80,000	125,000	80,000	100,000	570,000

Race Street Revitalization

Dept. Priority: 9

Description

This project will provide resources for the existing and potential retail district on Race Street between 4th Street and 7th Street. The project would include new streetscape, lighting, signage, and other improvements within this corridor to make it a destination place and regional shopping district.

Purpose

The purpose of this project is to make physical and other improvements to draw shoppers to downtown and create a unique and place specific experience. Cincinnati already has retail assets downtown. The challenge



now is to find ways to be proactive, work with the private sector, and build on the momentum already evident.

Phases	Prior Year	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2016-2021 Total
Engineering	0	200,000	700,000	650,000	0	0	0	1,550,000
General Capital Total	0	200,000	700,000	650,000	0	0	0	1,550,000
Estimated Personnel Cost	0	0	0	0	0	0	0	0

Community Development Focus District

Dept. Priority: 10

Description

This project will provide resources for projects in neighborhoods that are identified in the City Consolidated Plan as Strategic Investment Areas and Neighborhood Revitalization Strategy Areas. Projects will include development and predevelopment activities, as well as gap financing and public improvements. Funds will be further targeted to viable, market-driven and mixed-use development that can create a catalytic impact to stabilize and revitalize neighborhoods.

Purpose

The purpose of this project is to target viable, market-driven economic and mixed use development in neighborhoods that are designated Neighborhood Revitalization Strategy Areas or Community Development Focus Districts. The project will help stabilize those neighborhoods by making funding available for projects that would normally not be eligible for Community Development Block Grant (CDBG) funds.

Phases	Prior Year	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2016-2021 Total
Other	0	340,000	200,000	200,000	300,000	200,000	100,000	1,340,000
General Capital Total	0	340,000	200,000	200,000	300,000	200,000	100,000	1,340,000
Estimated Personnel Cost	0	34,000	20,000	20,000	30,000	20,000	10,000	134,000



Citirama

Dept. Priority: 11

Description

This project will provide resources for new market rate homes. Resources will be used for site and public improvements incidental to new housing construction at future Citirama development sites. Citirama is a joint development partnership between the City and the Homebuilders Association of Greater Cincinnati.

Purpose

The purpose of this project is to demonstrate the viability and desirability of developing housing in the City. The project will also increase the level of homeownership in the City and expand the City's real estate and income tax.

Phases	Prior Year	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2016-2021
								Total
Construction	0	650,000	0	0	0	0	0	650,000
Engineering	0	50,000	0	0	0	0	0	50,000
Other	0	100,000	0	0	0	0	0	100,000
General Capital Total	0	800,000	0	0	0	0	0	800,000
Estimated Personnel Cost	0	25,000	0	0	0	0	0	25,000

Downtown Housing Development

Dept. Priority: 12

Description

This project will provide resources to support housing development in the downtown area.

Purpose

The purpose of this project is to increase the number of residential units in the downtown area to provide a greater number of housing choices within the City. The project will also improve the physical environment of the downtown area by rehabilitating and developing vacant and underutilized buildings/sites. New downtown residents would grow the market base for retail/commercial activities in downtown Cincinnati, which would ultimately increase the City's income tax revenue.

Phases	Prior Year	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2016-2021
								Total
Construction	0	0	109,200	65,000	228,000	65,000	65,000	532,200
Other	0	69,300	350,000	335,000	375,000	335,000	335,000	1,799,300
General Capital Total	0	69,300	459,200	400,000	603,000	400,000	400,000	2,331,500
Estimated Personnel Cost	0	0	5,000	5,000	20,000	5,000	5,000	40,000

Neighborhood Business Property Holding

Dept. Priority: 13

Description

This project will provide resources for the rehabilitation and maintenance of City-owned properties by providing for necessary upkeep. The intent of owning such property is to position strategically important parcels for commercial redevelopment through proactive land assembly, which often requires the City to



temporarily own the property in order to perform pre-development activities such as demolition, site infrastructure improvements, and marketing.

Purpose

The purpose of this project is to keep City owned property in good condition in order to keep up the standards in the neighborhood where the property is located and to avoid property code violations.

Phases	Prior Year	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2016-2021 Total
Land	25,000	10,000	21,000	16,000	25,000	21,000	18,000	111,000
General Capital Total	25,000	10,000	21,000	16,000	25,000	21,000	18,000	111,000
Estimated Personnel Cost	0	0	0	0	0	0	0	0

Viable Small Business Development

Dept. Priority: 14

Description

This project will provide resources for the City to support small business ventures while encouraging the companies to remain and grow in their environment.

Purpose

The purpose of this project is to support small business enterprises located in the City.

Phases	Prior Year	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2016-2021 Total
Other	0	0	100,000	75,000	155,000	75,000	100,000	505,000
General Capital Total	0	0	100,000	75,000	155,000	75,000	100,000	505,000
Estimated Personnel Cost	0	0	0	0	0	0	0	0

Mercy Health Infrastructure Improvements

Dept. Priority: 15

Description

This project will provide resources for the construction of public infrastructure including roadway/traffic improvements and related site preparation, public parking, and/or public utilities in the vicinity of Reading Road, Showcase Drive, and the future Mercy Health headquarters property.

Purpose

The purpose of this project is to provide infrastructure improvements in connection with the construction of the Mercy Health headquarters facility.

Phases	Prior Year	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2016-2021 Total
Other	0	1,000,000	0	0	0	0	0	1,000,000
General Capital Total	0	1,000,000	0	0	0	0	0	1,000,000
Estimated Personnel Cost	0	0	0	0	0	0	0	0



4th and Race Garage

Dept. Priority: 16

Description

This project will provide resources for investment in the 4th & Race Garage to repair or replace the current 1,100 space parking structure.

Purpose

The purpose of this project is to provide substantial improvements (or replacement) of the current parking structure that is in a key location within downtown, especially, for the areas of the 4th Street financial corridor and the Race Street retail corridor.

Phases	Prior Year	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2016-2021
								Total
Other	0	2,165,000	1,000,000	0	0	0	0	3,165,000
General Capital Total	0	2,165,000	1,000,000	0	0	0	0	3,165,000
<hr/>								
Estimated Personnel Cost	0	0	0	0	0	0	0	0

Walnut Hills Development Gap, Focus 52

Dept. Priority: 17

Description

This project will provide resources for a program to fund transformative neighborhood economic and community development projects. The program uses two sources to borrow funds for projects that will grow the City tax base by creating jobs or increasing the population of the City.

Purpose

The purpose of this project is to provide funds for projects in any neighborhood that is ready to meet the goals of the program.

Phases	Prior Year	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2016-2021
								Total
Other	0	2,000,000	0	0	0	0	0	2,000,000
General Capital Total	0	2,000,000	0	0	0	0	0	2,000,000
<hr/>								
Estimated Personnel Cost	0	0	0	0	0	0	0	0



College Hill Development Gap, Focus 52

Dept. Priority: 18

Description

This project will provide resources for transformative neighborhood economic and community development projects. The program uses two sources to borrow funds for projects that will grow the City tax base by creating jobs or increasing the population of the City.

Purpose

The purpose of this project is to provide funds for projects in any neighborhood that is ready to meet the goals of the program.

Phases	Prior Year	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2016-2021
								Total
Other	0	1,000,000	0	0	0	0	0	1,000,000
General Capital Total	0	1,000,000	0	0	0	0	0	1,000,000
<hr/>								
Estimated Personnel Cost	0	0	0	0	0	0	0	0

BLOC Ministries

Dept. Priority: 20

Description

This project will provide resources for the renovation of vacant buildings, which will be used to house the BLOC Ministries job training initiative.

Purpose

The purpose of this project is to implement the strategic plan of BLOC Ministries, which includes job creation, training and job placement initiatives for Lower Price Hill and surrounding communities.

Phases	Prior Year	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2016-2021
								Total
Other	250,000	250,000	0	0	0	0	0	250,000
General Capital Total	250,000	250,000	0	0	0	0	0	250,000
<hr/>								
Estimated Personnel Cost	0	0	0	0	0	0	0	0



Price Hill Neighborhood Improvements

Dept. Priority: 21

Description

This project will provide resources for targeted investments in housing and commercial projects in the neighborhoods of West Price Hill, East Price Hill, and Lower Price Hill. This program will work in tandem with Price Hill Will.

Purpose

The purpose of this project is to provide targeted investment with Price Hill Will to revitalize the neighborhoods of West Price Hill, East Price Hill, and Lower Price Hill.

Phases	Prior Year	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2016-2021
								Total
Other	0	500,000	0	0	0	0	0	500,000
General Capital Total	0	500,000	0	0	0	0	0	500,000
<hr/>								
Estimated Personnel Cost	0	0	0	0	0	0	0	0

Westwood Town Hall Area Improvements

Dept. Priority: 22

Description

This project will provide funding for the design and construction of streetscape improvements, parking improvements, and other infrastructure/capital investments intended to stabilize, sustain, and revitalize the Westwood Town Hall Area.

Purpose

The purpose of this project is to enhance the economic viability of the Westwood Town Hall Area.

Phases	Prior Year	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2016-2021
								Total
Construction	0	210,000	0	0	0	0	0	210,000
Engineering	0	10,000	0	0	0	0	0	10,000
Other	0	30,000	0	0	0	0	0	30,000
General Capital Total	0	250,000	0	0	0	0	0	250,000
<hr/>								
Estimated Personnel Cost	0	25,000	0	0	0	0	0	25,000



CCAT Bed Expansion

Dept. Priority: 24

Description

This project will provide resources for the Center for Addiction Treatment (CCAT) to support building and program expansion, which could include design, new facility construction, medical equipment, exam room and lab retrofitting, room furnishings, technology, and other related expenses.

Purpose

The purpose of this project is to further the Center for Chemical Addictions Treatment (CCAT) mission to save lives and rebuild families by providing tools for lifelong sobriety and recovery thereby reducing costs to our community caused by untreated chemical addictions.

Phases	Prior Year	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2016-2021
								Total
Other	0	125,000	0	0	0	0	0	125,000
General Capital Total	0	125,000	0	0	0	0	0	125,000
<hr/>								
Estimated Personnel Cost	0	0	0	0	0	0	0	0

Ensemble Theatre

Dept. Priority: 25

Description

This project will provide resources for improvements to the Ensemble Theatre located in Over-the-Rhine. Improvements could include building and production expansion, such as design, new facility construction, technology, and other related expenses.

Purpose

The purpose of this project is to enhance the Ensemble Theatre, one of Cincinnati's premiere theatre destinations, to continue its dedication to bringing socially conscious works to local audiences.

Phases	Prior Year	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2016-2021
								Total
Other	0	200,000	0	0	0	0	0	200,000
General Capital Total	0	200,000	0	0	0	0	0	200,000
<hr/>								
Estimated Personnel Cost	0	0	0	0	0	0	0	0



Shakespeare Theater

Dept. Priority: 26

Description

This project will provide resources for building a new theater in Over-the-Rhine for the Shakespeare Theater. Improvements could include building and production expansion, such as design, new facility construction, technology, and other related expenses.

Purpose

The purpose of this project is to improve the Shakespeare Theater, a resident ensemble theatre company, for the enjoyment of audiences of all ages.

Phases	Prior Year	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2016-2021
								Total
Other	0	200,000	0	0	0	0	0	200,000
General Capital Total	0	200,000	0	0	0	0	0	200,000
<hr/>								
Estimated Personnel Cost	0	0	0	0	0	0	0	0

Greater Cincinnati African American Chamber

Dept. Priority: 27

Description

This project will provide resources to the Greater Cincinnati African American Chamber for efforts to accelerate economic growth for established and emerging African-American businesses.

Purpose

The purpose of this project is to help further the Greater Cincinnati African American Chamber's mission to establish, cultivate, and strengthen consumer and business relationships; provide access to major corporate markets for their members to help increase business opportunities; and assist in developing strategic partnerships and alliances for the purpose of strengthening and growing the business community.

Phases	Prior Year	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2016-2021
								Total
Other	0	250,000	0	0	0	0	0	250,000
General Capital Total	0	250,000	0	0	0	0	0	250,000
<hr/>								
Estimated Personnel Cost	0	0	0	0	0	0	0	0



Department of Enterprise Services

Priority	Project Title	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2016-2021 Total
Parking System Facilities Fund								
4	Structural Maintenance & Repair	100,000	100,000	100,000	100,000	100,000	100,000	600,000
	Parking System Facilities Total	100,000	100,000	100,000	100,000	100,000	100,000	600,000
Convention Center Fund								
1	Building Equipment	160,000	104,200	104,200	104,200	104,200	104,200	681,000
2	Furniture, Fixtures, and Equipment	0	82,800	82,800	82,800	82,800	82,800	414,000
3	Capital Maintenance	70,000	43,000	43,000	43,000	43,000	43,000	285,000
	Convention Center Total	230,000	230,000	230,000	230,000	230,000	230,000	1,380,000
	Department of Enterprise Services Total	330,000	330,000	330,000	330,000	330,000	330,000	1,980,000



Parking System Facilities Fund

Structural Maintenance & Repair

Dept. Priority: 4

Description

This project will provide resources for the labor and materials needed to design and construct improvements to City Parking assets. This project will also provide resources to maintain and repair City Parking assets.

Purpose

The purpose of this project is to maintain, repair, and improve City Parking assets.

Phases	Prior Year	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2016-2021 Total
Construction	100,000	100,000	100,000	100,000	100,000	100,000	100,000	600,000
Parking System Facilities	100,000	100,000	100,000	100,000	100,000	100,000	100,000	600,000
Total								
Estimated Personnel Cost	0	0	0	0	0	0	0	0

Convention Center Fund

Building Equipment

Dept. Priority: 1

Description

This project will provide resources for the replacement or repair of major equipment at the convention center including, but not limited to, replacement/repair of freight elevator doors, HVAC repairs, sound system repair and maintenance, addition of hang points to Hall A, installation of a high performance overhead door, lighting upgrades, and a lockdown restroom system.

Purpose

The purpose of this project is to repair or replace equipment at the convention center to maintain the current standard of excellence in providing a top rated convention facility.

Phases	Prior Year	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2016-2021 Total
Equipment	155,000	160,000	104,200	104,200	104,200	104,200	104,200	681,000
Convention Center Total	155,000	160,000	104,200	104,200	104,200	104,200	104,200	681,000
Estimated Personnel Cost	0	0	0	0	0	0	0	0

Furniture, Fixtures, and Equipment

Dept. Priority: 2

Description

This project will provide resources for the purchase of additional and replacement furniture, fixtures, and equipment necessary to provide an appealing venue for conventions and visitors coming to the convention center. Furniture, fixtures, and equipment would include, but not be limited to, security cameras/DVR sys-



tem, replace Grand Ballroom carpet, Meeting Room chair replacement, Meeting Room carpet replacement, Meeting Room improvements, Employee Breakroom renovations, and purchase of spandex partitions.

Purpose

The purpose of this project is to purchase furniture, fixtures, and equipment necessary to maintain a first class convention center.

Phases	Prior Year	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2016-2021
								Total
Equipment	50,000	0	82,800	82,800	82,800	82,800	82,800	414,000
Convention Center Total	50,000	0	82,800	82,800	82,800	82,800	82,800	414,000
<hr/>								
Estimated Personnel Cost	0	0	0	0	0	0	0	0

Capital Maintenance

Dept. Priority: 3

Description

This project will provide resources for capital improvements at the convention center including, but not limited to, interior and exterior leak repair, tuck pointing and grout repair, expansion joint replacement in ballroom and pre-function area, water heater replacement, sidewalk repairs, meeting room painting and door hardware replacement.

Purpose

The purpose of this project is to provide for the capital maintenance of the newly expanded convention center facility.

Phases	Prior Year	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2016-2021
								Total
Other	25,000	70,000	43,000	43,000	43,000	43,000	43,000	285,000
Convention Center Total	25,000	70,000	43,000	43,000	43,000	43,000	43,000	285,000
<hr/>								
Estimated Personnel Cost	0	0	0	0	0	0	0	0





Department of Enterprise Technology Solutions

Priority	Project Title	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2016-2021
								Total
Telecommunications Services Fund								
12	Radio Communications Equipment	30,000	30,000	30,000	30,000	30,000	30,000	180,000
	Telecommunications Services	30,000	30,000	30,000	30,000	30,000	30,000	180,000
	Total							
General Capital Fund								
1	Disaster Recovery Infrastructure	100,000	200,000	0	0	0	0	300,000
2	Information Tech. Efficiency Initiatives	973,700	400,000	200,000	400,000	344,800	0	2,318,500
4	Enterprise Networks and Security Enhancements	62,000	52,200	0	0	0	0	114,200
5	Data Center Infrastructure Replacement	30,000	272,000	678,000	175,000	0	0	1,155,000
6	Electronic Gov't (eGov) Web Enhancement	100,000	30,000	0	0	0	0	130,000
7	Cincinnati Financial System Upgrades	0	100,000	100,000	100,000	100,000	0	400,000
8	Office 365 Full Deployment	0	0	0	404,200	472,000	0	876,200
9	Mobile Expense Management	0	15,000	0	0	0	0	15,000
10	IT Service Desk	0	63,000	0	0	0	0	63,000
13	800 MHz Radios	0	1,300,000	1,300,000	1,300,000	1,300,000	1,300,000	6,500,000
14	CAGIS Infrastructure	87,300	116,000	87,300	59,400	0	0	350,000
	General Capital Total	1,353,000	2,548,200	2,365,300	2,438,600	2,216,800	1,300,000	12,221,900
	Department of Enterprise Technology Solutions Total	1,383,000	2,578,200	2,395,300	2,468,600	2,246,800	1,330,000	12,401,900



Telecommunications Services Fund

Radio Communications Equipment

Dept. Priority: 12

Description

This project will provide resources for replacement of equipment used by the Radio Services Section to maintain radio communications equipment and the outdoor warning siren network.

Purpose

The purpose of this project is to provide equipment so that the City's investment in the Citywide Communications System and the outdoor warning siren network can be maintained.

Phases	Prior Year	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2016-2021 Total
Equipment	30,000	30,000	30,000	30,000	30,000	30,000	30,000	180,000
Telecommunications Services Total	30,000	30,000	30,000	30,000	30,000	30,000	30,000	180,000
<hr/>								
Estimated Personnel Cost	0	0	0	0	0	0	0	0

General Capital Fund

Disaster Recovery Infrastructure

Dept. Priority: 1

Description

This project will provide resources for identification of the necessary components for purchase and setup of the required logistics, software, and hardware for the recovery strategy to anticipate the loss of the enterprise information technology infrastructure. This project would involved functional city agencies such as Law, Purchasing, Budget and Finance in developing the requirements.

Purpose

The purpose of this project is to provide the necessary logistics to replicate enterprise data at the City's secondary site storage facility and so that in event of a disaster, data can be accessed in a timely manner and defined city operations can be restored.

Phases	Prior Year	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2016-2021 Total
Equipment	0	100,000	200,000	0	0	0	0	300,000
General Capital Total	0	100,000	200,000	0	0	0	0	300,000
<hr/>								
Estimated Personnel Cost	0	0	0	0	0	0	0	0



Information Tech. Efficiency Initiatives

Dept. Priority: 2

Description

This project will provide resources for individual Department-requested IT projects to be considered by the Governance Board and to be approved by the City Manager.

Purpose

The purpose of this project is to support information technology capital projects that promote efficiency for City departments. This project complies with the City Council directive to scale up technology applications that will increase productivity and reduce costs (Doc. #200900970).

Phases	Prior Year	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2016-2021 Total
Equipment	0	973,700	400,000	200,000	400,000	344,800	0	2,318,500
General Capital Total	0	973,700	400,000	200,000	400,000	344,800	0	2,318,500
Estimated Personnel Cost	0	150,000	75,000	150,000	150,000	150,000	150,000	825,000

Enterprise Networks and Security Enhancements

Dept. Priority: 4

Description

This project will provide resources for funding to update and implement a multi-year strategy for upgrading the City's communications network including, but not limited to, updating the Communications Master Plan, replacing obsolete and unsupported hardware, and upgrading the fiber network facilities to support voice, data, and video. This project would also provide for the upkeep and improvement of the City's information security infrastructure.

Purpose

The purpose of this project is to continue to address the current issues with the City's Metropolitan Area Network (MAN). The current issues include the following: 1) impending technological obsolescence; 2) known and predicted service bottlenecks; and 3) the lack of capacity for future growth.

Phases	Prior Year	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2016-2021 Total
Equipment	0	62,000	52,200	0	0	0	0	114,200
General Capital Total	0	62,000	52,200	0	0	0	0	114,200
Estimated Personnel Cost	0	0	0	0	0	0	0	0



Data Center Infrastructure Replacement

Dept. Priority: 5

Description

This project will provide resources for the replacement of aging infrastructure equipment in the enterprise data center. This equipment was purchased during 2008-2010. There are pieces of equipment that we are no longer able to afford maintenance due to its age.

Purpose

The purpose of this project is to provide optimized server, storage, recovery and facility assets to maximize capacity and availability that is flexible enough to support changing business needs.

Phases	Prior Year	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2016-2021
								Total
Equipment	0	30,000	272,000	678,000	175,000	0	0	1,155,000
General Capital Total	0	30,000	272,000	678,000	175,000	0	0	1,155,000
<hr/>								
Estimated Personnel Cost	0	0	0	0	0	0	0	0

Electronic Gov't (eGov) Web Enhancement

Dept. Priority: 6

Description

This project will provide resources for the use of information technology to support government operations, engage citizens, and provide government services online. Provide for new web development and execution of a strategy to deliver a first class service based upon web best practices across other cities. Deliverables include: an paperless agenda/document solution with workflow integration, intrusion detection and continued Open Data initiatives.

Purpose

This purpose of this project is to: (1) Identify potential solutions that could provide an enterprise paperless agenda solution that will improve the City's retrieval of information such as: council items, documents associated with council items, fyi memos, etc. (2) In addition, this project will improve our ability to monitor the City's web servers for malicious activities and/or policy violations. (3) Lastly, this project will allow the City to continue to meet the demands of our external customers with continued engagement through the City's Open Data portal and web data analysis tools.

Phases	Prior Year	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2016-2021
								Total
Equipment	0	10,000	5,000	0	0	0	0	15,000
Other	0	90,000	25,000	0	0	0	0	115,000
General Capital Total	0	100,000	30,000	0	0	0	0	130,000
<hr/>								
Estimated Personnel Cost	0	0	0	0	0	0	0	0



Cincinnati Financial System Upgrades

Dept. Priority: 7

Description

This project will provide resources for the continued development of the Cincinnati Financial System (CFS). Project funding could include server replacement and could be used to address audit findings associated with disaster recovery and system backup. This would also include adding and updating Virtual VMware servers and updating the Webfocus reporting environment.

Purpose

The purpose of this project is to provide funding for the maintenance of CFS and Executive Information System (EIS) to expand capacity to allow for public access to the systems. Trends in the development of e-government applications for the City require maintenance of the current systems coupled with the ability to expand capacity to handle public access to the systems.

Phases	Prior Year	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2016-2021
								Total
Equipment	0	0	50,000	50,000	50,000	50,000	0	200,000
Other	0	0	50,000	50,000	50,000	50,000	0	200,000
General Capital Total	0	0	100,000	100,000	100,000	100,000	0	400,000
Estimated Personnel Cost	0	0	0	0	0	0	0	0

Office 365 Full Deployment

Dept. Priority: 8

Description

This project will provide resources for the continuation of Council Motion #20100175, dated 12/30/2010, to move all City desktop applications to Office 365 for Business. This is a cloud-based solution that would standardize desktop software to the latest version of Microsoft Office and enable unlimited file storage, access, and collaboration of documents and other files. Accessibility to applications and files would be available from a user's desktop top within or outside of the City's network as well as from tablets and mobile devices. This capital request is to engage professional services to assist in the planning and execution to deploy Office 365 to all departmental desktops. Included are the necessary changes to the City's directory services to ensure reliable access and the migration of files to the cloud (Microsoft OneDrive personal storage).

Purpose

The purpose of this project is to: 1) Secure a certified Microsoft professional services partner to assist in planning and execution; 2) Develop and test the process for deploying Microsoft Office for Business to each City desktop; 3) Upgrade the Active Directory Federation Services infrastructure and data network to provide a redundant authentication method to the Microsoft cloud; 4) Move user files from on premise storage to the Microsoft cloud; 5) Develop a plan for training/educating employees and administrators on the use of the new technology.

Phases	Prior Year	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2016-2021
								Total
Other	0	0	0	0	404,200	472,000	0	876,200
General Capital Total	0	0	0	0	404,200	472,000	0	876,200
Estimated Personnel Cost	0	0	0	0	0	0	0	0



Mobile Expense Management

Dept. Priority: 9

Description

This project will provide resources for the implementation of mobile expense management subscription software, designed to simplify analysis, distribution, and review of mobile billing. There will be a per month, per line expense in addition to the initial investment.

Purpose

The purpose of this project is to enable City departments to utilize mobile expense management, as suggested in 2013 the City wide internal audit of mobile services.

Phases	Prior Year	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2016-2021
								Total
Other	0	0	15,000	0	0	0	0	15,000
General Capital Total	0	0	15,000	0	0	0	0	15,000
<hr/>								
Estimated Personnel Cost	0	0	0	0	0	0	0	0

IT Service Desk

Dept. Priority: 10

Description

This project will provide resources for the implementation of an IT service desk system with improved automation, order tracking, and performance management capability. The proposed system will replace a simple, custom built system, which lacks these capabilities.

Purpose

The purpose of this project is improve ETS IT service desk capability to serve customers and track performance.

Phases	Prior Year	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2016-2021
								Total
Other	0	0	63,000	0	0	0	0	63,000
General Capital Total	0	0	63,000	0	0	0	0	63,000
<hr/>								
Estimated Personnel Cost	0	0	0	0	0	0	0	0

800 MHz Radios

Dept. Priority: 13

Description

This project would fund the first phase of a manufacturer-required upgrade to the radio system used by several City Departments including Police and Fire. The system, placed in service in 2005, will be going out of full manufacturer support in 2015. The manufacturer has quoted a total cost of approximately \$12 million to bring the system into full support beyond that date.

Purpose

The purpose of this project is to allow the City to migrate off of an outdated radio system platform that will no longer be supported by Motorola and other third party vendors after 2015 and would therefore lose the



existing 99.999% reliability guarantee. Even with such guarantee, the system could be unavailable for over 8.5 hours per year and still be in compliance.

Phases	Prior Year	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2016-2021 Total
Equipment	0	0	1,300,000	1,300,000	1,300,000	1,300,000	1,300,000	6,500,000
General Capital Total	0	0	1,300,000	1,300,000	1,300,000	1,300,000	1,300,000	6,500,000
Estimated Personnel Cost	0	0	0	0	0	0	0	0

CAGIS Infrastructure

Dept. Priority: 14

Description

This project will provide resources to support and maintain the City's digital database map. The CAGIS Infrastructure Project is a joint effort between the City, Duke Energy, and Hamilton County to provide a common real time Geographical Information System (GIS) that enables efficiencies in GIS data collection, analysis, sharing, and management across the three major enterprises.

Purpose

The purpose of this project is to maintain the City's investment in the CAGIS system and to enhance the database by including the scanning of enterprise-wide easement and right-of-way drawings with links to related parcels. This project also continues the implementation of more productive database technologies. This will provide the ability to perform new online analyses of support business processes. Departments will have the ability to perform time sequence environmental and economic analyses on GIS datasets, as well as gain the ability to view easement and right-of-way features on database parcels.

Phases	Prior Year	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2016-2021 Total
Equipment	23,000	23,000	23,000	23,000	23,000	0	0	92,000
Other	36,450	64,300	93,000	64,300	36,400	0	0	258,000
General Capital Total	59,450	87,300	116,000	87,300	59,400	0	0	350,000
Estimated Personnel Cost	0	0	0	0	0	0	0	0





Department of Fire

Priority	Project Title	FY 2016-2021						Total
		FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	
General Capital Fund								
1	Firefighter PPE	201,700	262,800	275,300	263,500	279,000	292,600	1,574,900
2	Appliances for Existing Firehouses	26,500	26,500	26,500	26,500	26,500	26,500	159,000
	General Capital Total	228,200	289,300	301,800	290,000	305,500	319,100	1,733,900
	Department of Fire Total	228,200	289,300	301,800	290,000	305,500	319,100	1,733,900



General Capital Fund

Firefighter PPE

Dept. Priority: 1

Description

This project will provide resources for the replacement of firefighter turnout gear. The unit cost of each firefighter turnout gear is around \$2,200.00. CFD presently owns approximately 1,600 sets of fire turnout gear with 2 sets assigned to each firefighter according to the National Fire Protection Association standards. Note: Some PPE is damaged with the useful life ending prematurely due to atypical fireground, technical rescue, and/or emergency medical hazards that occur over the course of a year for the CFD. The systematic replacement goal (200 sets replaced yearly) keeps standard-compliant turnout gear in service for CFD firefighter/medics, and also helps to ensure an adequate cache of reserve gear for gear damaged beyond repair and/or in case an unexpected larger need arises.

Purpose

The purpose of this project is to remain compliant with the National Fire Protection Association. The Cincinnati Fire Department (CFD) must systematically replace 200 sets of turnout gear a year. The systematic replacement of 200 sets per year keeps the standard-compliant turnout gear in service for CFD firefighter/medics, and also helps to ensure an adequate cache of reserve gear damaged beyond repair and/or in case an unexpected larger need arises due to atypical fireground, technical rescue and/or emergency medical hazards that occur over the course of a year for the CFD.

Phases	Prior Year	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2016-2021
								Total
Equipment	115,000	201,700	262,800	275,300	263,500	279,000	292,600	1,574,900
General Capital Total	115,000	201,700	262,800	275,300	263,500	279,000	292,600	1,574,900
Estimated Personnel Cost	0	0	0	0	0	0	0	0

Appliances for Existing Firehouses

Dept. Priority: 2

Description

This project will provide resources for the replacement of aging appliances in the City's firehouses and will establish a replacement cycle. The project would also include the installation of additional cooking hoods with fire suppression systems in those firehouses that do not meet current building codes.

Purpose

The purpose of this project is to reduce the Cincinnati Fire Department's appliance repair costs, reduce the department's energy consumption by installing more efficient appliances, and upgrade the living conditions



of the firefighters. By installing appliances that are properly sized, the department plans to reduce the number of appliances operated at each location.

Phases	Prior Year	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2016-2021 Total
Equipment	31,100	26,500	26,500	26,500	26,500	26,500	26,500	159,000
General Capital Total	31,100	26,500	26,500	26,500	26,500	26,500	26,500	159,000
Estimated Personnel Cost	0	0	0	0	0	0	0	0





Department of Health

Priority	Project Title	FY 2016-2021						Total
		FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	
General Capital Fund								
1	Facilities Renovation and Repairs	151,000	191,900	200,200	192,300	202,600	211,600	1,149,600
General Capital Total		151,000	191,900	200,200	192,300	202,600	211,600	1,149,600
Department of Health Total		151,000	191,900	200,200	192,300	202,600	211,600	1,149,600



General Capital Fund

Facilities Renovation and Repairs

Dept. Priority: 1

Description

This project will provide resources for major repairs and renovations at Health Department facilities. The projects considered for 2016 include: 1) replacing additional heat pumps at the Elm St. Center and replacing HVAC units at various Health Department locations; and 2) replacing the boiler at the Health Department Administration Building at Burnet and Martin Luther King. The projects considered for 2017 include: 1) converting the Elm St. Center to a Health and Wellness Center, and; 2) expanding the Muhlberg facility by 3,500 square feet to hold the entire environmental work group.

Purpose

The purpose of this project is to protect and extend the life of the respective Primary Health Care Clinic sites and various Health Department facilities. The needed renovations will maintain compliance with clinic facility accreditation standards, as well as present a more visually appealing facility for customers.

Phases	Prior Year	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2016-2021
								Total
Construction	251,700	151,000	191,900	200,200	192,300	202,600	211,600	1,149,600
General Capital Total	251,700	151,000	191,900	200,200	192,300	202,600	211,600	1,149,600
Estimated Personnel Cost	0	0	0	0	0	0	0	0



Department of Parks

Priority	Project Title	FY 2016-2021						Total
		FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	
General Capital Fund								
1	Park Infrastructure Rehabilitation	2,300,000	1,748,700	1,824,300	1,753,100	1,846,600	1,928,800	11,401,500
General Capital Total		2,300,000	1,748,700	1,824,300	1,753,100	1,846,600	1,928,800	11,401,500
Department of Parks Total		2,300,000	1,748,700	1,824,300	1,753,100	1,846,600	1,928,800	11,401,500



General Capital Fund

Park Infrastructure Rehabilitation

Dept. Priority: 1

Description

This project will provide resources for general upgrades (electrical, HVAC, lighting, and plumbing) at Park facilities, as well as infrastructure improvements to roadways, walks, retaining walls, and other structures. Renovation of deteriorated or out-of-code structures would also be included.

Purpose

The purpose of this project is to provide for the renovation of basic infrastructures in the city's parks. The project also provides resources to upgrade facilities to remain in compliance with codes and regulations. Projects are designed to complete American Disability Act compliance projects, and to retrofit utilities to improve efficiency to provide a clean, safe, reliable, green, and beautiful park system.

Phases	Prior Year	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2016-2021
								Total
Engineering	500,000	500,000	349,740	364,860	350,620	369,320	385,760	2,320,300
Construction	1,500,000	1,800,000	1,398,960	1,459,440	1,402,480	1,477,280	1,543,040	9,081,200
General Capital Total	2,000,000	2,300,000	1,748,700	1,824,300	1,753,100	1,846,600	1,928,800	11,401,500
Estimated Personnel Cost	1,000,000	1,200,000	1,200,000	1,200,000	1,200,000	1,200,000	1,200,000	7,200,000



Department of Police

Priority	Project Title	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2016-2021 Total
General Capital Fund								
1	Taser Replacement	725,000	0	0	0	0	0	725,000
2	Police Mobile Digital Video (In-Car Camera) Storage 2015	335,000	310,000	310,000	125,300	310,000	310,000	1,700,300
3	Police Body Cameras	700,000	0	0	0	0	0	700,000
General Capital Total		1,760,000	310,000	310,000	125,300	310,000	310,000	3,125,300
Department of Police Total		1,760,000	310,000	310,000	125,300	310,000	310,000	3,125,300



General Capital Fund

Taser Replacement

Dept. Priority: 1

Description

This project will provide resources for the purchase of 1015 new All-Digital TASER X26P Smart Weapons for all sworn law enforcement officers in Cincinnati to replace the aging and unserviceable Department tasers currently in service.

Purpose

The purpose of this project is to maintain the department's ability to use tasers as a less than lethal force option. CPD and other major cities using this non-lethal force alternative technology have documented evidence of sustained reductions in officer injuries, arrestee injuries, and physical hands-on use-of-force incidents since this technology has been introduced to law enforcement.

Phases	Prior Year	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2016-2021
								Total
Equipment	475,000	725,000	0	0	0	0	0	725,000
General Capital Total	475,000	725,000	0	0	0	0	0	725,000
Estimated Personnel Cost	0	0	0	0	0	0	0	0

Police Mobile Digital Video (In-Car Camera) Storage 2015

Dept. Priority: 2

Description

This project will provide resources for a wireless mobile digital video (in-car camera) and storage system.

Purpose

The purpose of this project is to replace the current system which is not industry standard, past its system life, and no longer supported by the vendor. In-car cameras and video storage are a condition of the Federal Court Memorandum of Understanding (MOU).

Phases	Prior Year	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2016-2021
								Total
Equipment	474,000	335,000	310,000	310,000	125,300	310,000	310,000	1,700,300
General Capital Total	474,000	335,000	310,000	310,000	125,300	310,000	310,000	1,700,300
Estimated Personnel Cost	0	0	0	0	0	0	0	0



Police Body Cameras

Dept. Priority: 3

Description

This project will provide resources for the purchase of body-worn camera systems for sworn law enforcement officers in Cincinnati as well as the information technology infrastructure needed for the storage and distribution of video.

Purpose

The purpose of this project is to implement a body-worn camera program for sworn officers in the department. This project would equip the department with the tools needed to enhance transparency, promote accountability, and advance public safety for law enforcement officers and the community by improving police / citizen relationships.

Phases	Prior Year	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2016-2021
								Total
Equipment	0	700,000	0	0	0	0	0	700,000
General Capital Total	0	700,000	0	0	0	0	0	700,000
Estimated Personnel Cost	0	0	0	0	0	0	0	0





Department of Public Services

Priority	Project Title	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2016-2021 Total
General Capital Fund								
1	Fleet Replacements	4,893,100	5,980,800	6,101,000	5,987,800	6,136,500	6,267,100	35,366,300
2	City Facility Renovation and Repairs	2,232,000	2,295,300	2,938,500	2,803,700	2,930,800	3,136,300	16,336,600
3	Sign Replacement	330,000	330,000	330,000	330,000	330,000	330,000	1,980,000
4	Trash Receptacles	154,100	186,500	186,500	186,500	186,500	186,500	1,086,600
5	KRONOS Time Keeping System Upgrade	50,000	0	0	0	50,000	0	100,000
6	Music Hall Renovations	0	4,000,000	2,000,000	2,000,000	2,000,000	0	10,000,000
7	Community Facility Improvements	600,000	400,000	400,000	400,000	400,000	400,000	2,600,000
14	Fleet Lease Purchase - Capital Acceleration	6,500,000	4,500,000	4,500,000	4,500,000	4,500,000	4,000,000	28,500,000
15	Fleet Lease Purchase Payments - Capital Acceleration	0	1,400,000	2,400,000	3,400,000	4,400,000	5,300,000	16,900,000
General Capital Total		14,759,200	19,092,600	18,856,000	19,608,000	20,933,800	19,619,900	112,869,500
Department of Public Services Total		14,759,200	19,092,600	18,856,000	19,608,000	20,933,800	19,619,900	112,869,500



General Capital Fund

Fleet Replacements

Dept. Priority: 1

Description

This project will provide resources for the purchase of replacement automotive and motorized equipment for City agencies supported by the General Fund. This funding will be used to replace vehicles and equipment in any of the following major classes: Garbage Packers, Fire Pumpers and ladders, Ambulances, Dump Trucks, Police Beat Cars, Administrative Cars, Pickup Trucks, Vans, Horticultural equipment, and large and small specialized equipment.

Purpose

The purpose of this project is to provide the City's General Fund agencies with motorized equipment and an efficient automotive fleet that performs at the lowest possible operating and maintenance costs. The purpose is also to replace equipment at the prescribed lifecycle. New equipment will help achieve the goal of a cleaner and more efficient fleet and departments are able to improve operations when fewer vehicles are down for repairs.

Phases	Prior Year	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2016-2021 Total
Equipment	3,586,430	4,893,100	5,980,800	6,101,000	5,987,800	6,136,500	6,267,100	35,366,300
General Capital Total	3,586,430	4,893,100	5,980,800	6,101,000	5,987,800	6,136,500	6,267,100	35,366,300
Estimated Personnel Cost	0	0	0	0	0	0	0	0

City Facility Renovation and Repairs

Dept. Priority: 2

Description

This project will provide resources for the continuation of ongoing repairs, alterations and upgrades to General Fund City facilities such as those used by Police, Fire and Public Services. Funding is also used for upgrades to City Hall and Fountain Square. Funding for this project also includes Findlay Market Improvements, which has been previously funded in a separate project.

Purpose

The purpose of this project is to continue renovations, system replacements, repairs and upgrades in the 2,000,000 square feet of General Fund City facilities. The Division of City Facility Management maintains and upgrades nearly 80 facilities for Police, Fire, Public Services, City Hall, Fountain Square and tries to keep equipment current with future operations considered. A running list of improvements is used to maintain services directly and indirectly supported by these facilities. Renovations will modernize facilities to extend their useful lives for the next 20 years, replacements deal with system out of lifecycle and repairs



deal with daily wear and tear on the buildings. This continual yearly work needs to occur until a building is operationally obsolete and a replacement facility can be designed and built.

Phases	Prior Year	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2016-2021 Total
Engineering	579,990	290,000	280,000	295,000	280,000	295,000	315,000	1,755,000
Construction	2,642,160	1,942,000	2,015,300	2,643,500	2,523,700	2,635,800	2,821,300	14,581,600
General Capital Total	3,222,150	2,232,000	2,295,300	2,938,500	2,803,700	2,930,800	3,136,300	16,336,600
Estimated Personnel Cost	283,790	225,000	280,000	295,000	280,000	295,000	315,000	1,690,000

Sign Replacement

Dept. Priority: 3

Description

This project will provide resources for the installation or replacement of traffic signs. The number of signs replaced or installed will vary based upon the type of sign and the corresponding price, which can range from \$20 to \$80 per sign. These estimated costs are subject to change and dependent on the cost of materials. This will also fund the acquisition of a software program for tracking the sign inventory and placement of signs. This software will also provide the means to barcode each sign which, when used with a smart phone, can translate the sign verbiage into other languages.

Purpose

The purpose of this project is to maintain the reflective integrity of all traffic control signs, and replace signs on a scheduled basis. The project will take advantage of newer and longer lasting reflective materials, improve the condition of signs citywide, and reduce the City's liability associated with accidents caused by worn and faded signs.

Phases	Prior Year	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2016-2021 Total
Engineering	115,500	115,500	115,500	115,500	115,500	115,500	115,500	693,000
Construction	214,500	214,500	214,500	214,500	214,500	214,500	214,500	1,287,000
General Capital Total	330,000	330,000	330,000	330,000	330,000	330,000	330,000	1,980,000
Estimated Personnel Cost	150,000	150,000	150,000	150,000	150,000	150,000	150,000	900,000

Trash Receptacles

Dept. Priority: 4

Description

This project will provide resources for the purchase of new trash receptacles.

Purpose

The purpose of this project is to continue the replacement of worn and damaged receptacles as well as accommodate as-needed requests by communities. The new trash receptacles would minimize or prevent litter accumulation in areas of high visibility near the Central Business District and near Neighborhood Business Districts. The new trash receptacles would replace the old trash receptacles that have met their

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expected life cycle that are unattractive, and require ongoing maintenance. The cost of one new trash receptacle is approximately \$630.

Phases	Prior Year	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2016-2021 Total
Equipment	0	154,100	186,500	186,500	186,500	186,500	186,500	1,086,600
General Capital Total	0	154,100	186,500	186,500	186,500	186,500	186,500	1,086,600
Estimated Personnel Cost	0	0	0	0	0	0	0	0

KRONOS Time Keeping System Upgrade

Dept. Priority: 5

Description

This project will provide resources for upgrading the existing time keeping system to a version that is more current. Both the Department of Water & Sewers and the Department of Public Services will be responsible for a portion of the cost of the upgrade based on the service level agreement between the departments. The project will include implementation, conversion/load of data, configuration, conversion of customizations, and training.

Purpose

The purpose of the time keeping project is to upgrade the existing KRONOS electronic time keeping system to bring the system to a more current supported version of the application because it is nearing end of life for vendor support.

Phases	Prior Year	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2016-2021 Total
Equipment	0	50,000	0	0	0	50,000	0	100,000
General Capital Total	0	50,000	0	0	0	50,000	0	100,000
Estimated Personnel Cost	0	0	0	0	0	0	0	0

Music Hall Renovations

Dept. Priority: 6

Description

This project will provide resources for the Music Hall Revitalization Co.'s renovation and repair project of Music Hall. The funding will support upgrades and maintenance of Music Hall.

Purpose

The purpose of this project is to participate in the critical Music Hall Renovation and Repair project and to provide resources for upgrades, maintenance, and enhancements to Music Hall. Music Hall is owned by the



City of Cincinnati and operated by a non-profit agency. The City assists with the continual improvement of this historic facility to ensure its use for future generations.

Phases	Prior Year	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2016-2021 Total
Construction	0	0	4,000,000	2,000,000	2,000,000	2,000,000	0	10,000,000
General Capital Total	0	0	4,000,000	2,000,000	2,000,000	2,000,000	0	10,000,000
Estimated Personnel Cost	0	0	400,000	200,000	200,000	200,000	0	1,000,000

Community Facility Improvements

Dept. Priority: 7

Description

This project will provide resources for HVAC work, exterior shell improvements and repair, waterproofing, ADA barrier removal, and security upgrades for the Cincinnati Art Museum and Music Hall.

Purpose

The purpose of this project is to provide resources for upgrades and enhancements at the Cincinnati Art Museum and Music Hall. These facilities are owned by the City of Cincinnati and operated by non-profit associations. The City assists in the continual improvement of these historic facilities to ensure their use for future generations.

Phases	Prior Year	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2016-2021 Total
Construction	400,000	600,000	400,000	400,000	400,000	400,000	400,000	2,600,000
General Capital Total	400,000	600,000	400,000	400,000	400,000	400,000	400,000	2,600,000
Estimated Personnel Cost	20,000	60,000	40,000	40,000	40,000	40,000	40,000	260,000

Fleet Lease Purchase - Capital Acceleration

Dept. Priority: 14

Description

This project will provide resources for the lease purchase of automotive and motorized equipment for City agencies supported by the General Fund. This funding will be used to lease purchase vehicles and equipment in any of the following major classes: garbage packers, fire pumpers and ladders, ambulances, dump trucks, police beat cars, sedan cars, pickup trucks, vans, horticultural equipment, and large and small specialized equipment.

Purpose

The purpose of this project is to provide additional leasing or purchasing capability to accelerate the acquisition of new vehicles and equipment for the City's General Fund agencies resulting in a more efficient fleet. This additional funding allows for a long term sustainable plan to keep the city's fleet and equipment within lifecycle. New equipment will help achieve the goal of a cleaner and more efficient fleet and departments

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are able to improve operations when fewer vehicles are down for repairs. This project is included within the Capital Acceleration Plan.

Phases	Prior Year	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2016-2021 Total
Equipment	0	6,500,000	4,500,000	4,500,000	4,500,000	4,500,000	4,000,000	28,500,000
General Capital Total	0	6,500,000	4,500,000	4,500,000	4,500,000	4,500,000	4,000,000	28,500,000
Estimated Personnel Cost	0	0	0	0	0	0	0	0

Fleet Lease Purchase Payments - Capital Acceleration

Dept. Priority: 15

Description

This project will provide resources for the lease purchase payments for automotive and motorized equipment for City agencies supported by the General Fund.

Purpose

The purpose of this project is to provide resources for additional leasing or purchasing capability to accelerate the acquisition of new vehicles and equipment for the City's General Fund agencies resulting in a more efficient fleet. This additional funding allows for a long term sustainable plan to keep the city's fleet and equipment within lifecycle. This project is included within the Capital Acceleration Plan.

Phases	Prior Year	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2016-2021 Total
Other	0	0	1,400,000	2,400,000	3,400,000	4,400,000	5,300,000	16,900,000
General Capital Total	0	0	1,400,000	2,400,000	3,400,000	4,400,000	5,300,000	16,900,000
Estimated Personnel Cost	0	0	0	0	0	0	0	0



Department of Recreation

Priority	Project Title	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2016-2021 Total
General Capital Fund								
1	Recreation Facilities Renovation	312,000	2,065,400	595,370	822,110	1,145,180	1,197,590	6,137,650
2	Aquatics Facilities Renovation	1,678,000	396,100	1,742,230	1,675,750	1,767,800	1,848,720	9,108,600
3	Athletics Facilities Renovation	287,500	498,000	244,240	286,160	171,050	178,880	1,665,830
4	Outdoor Facilities Renovation	205,000	215,000	734,360	398,780	273,970	286,510	2,113,620
5	Compliance with ADA	100,000	100,000	100,000	100,000	100,000	100,000	600,000
6	Oakley Aquatic Facility Additional	422,900	0	0	0	0	0	422,900
General Capital Total		3,005,400	3,274,500	3,416,200	3,282,800	3,458,000	3,611,700	20,048,600
Department of Recreation Total		3,005,400	3,274,500	3,416,200	3,282,800	3,458,000	3,611,700	20,048,600



General Capital Fund

Recreation Facilities Renovation

Dept. Priority: 1

Description

This project will provide resources for continued renovations of the Recreation Department's facilities throughout the City. Renovations would include roof replacements; installation of new heating, ventilating, and air conditioning (HVAC) systems; improvements/renovations to the exterior of facilities; replacement of doors and windows; mechanical system improvements; upgrade of fire protection and security systems; and renovations of exterior softscapes and hardscapes.

Purpose

The purpose of this project is to upgrade Recreation Department facilities across the City in order to extend the useful life of the department's physical assets.

Phases	Prior Year	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2016-2021
								Total
Other	35,000	15,600	103,270	29,760	41,100	57,260	59,880	306,870
Engineering	70,000	31,200	206,540	59,540	82,210	114,510	119,760	613,760
Equipment	70,000	31,200	206,540	59,540	82,210	114,510	119,760	613,760
Construction	1,773,500	234,000	1,549,050	446,530	616,590	858,900	898,190	4,603,260
General Capital Total	1,948,500	312,000	2,065,400	595,370	822,110	1,145,180	1,197,590	6,137,650
Estimated Personnel Cost	147,000	147,000	232,000	190,000	190,000	190,000	190,000	1,139,000

Aquatics Facilities Renovation

Dept. Priority: 2

Description

This project will provide resources for the continued renovation of the Recreation Department's aquatic facilities, including renovations and replacements of existing pools. This project will include system renovations, upgrades to pool mechanical systems, adding new structures, and updating pool buildings. This project will also include pool consolidation based on the Cincinnati Recreation Commission's aquatics plan.

Purpose

The purpose of this project is to upgrade aquatics facilities that must be renovated to remain functional and compliant with City and State regulations.

Phases	Prior Year	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2016-2021
								Total
Other	95,450	83,900	19,800	87,110	83,790	88,390	92,440	455,430
Engineering	190,900	167,800	39,610	174,220	167,570	176,780	184,870	910,850
Equipment	190,900	167,800	39,610	174,220	167,570	176,780	184,870	910,850
Construction	1,431,750	1,258,500	297,080	1,306,680	1,256,820	1,325,850	1,386,540	6,831,470
General Capital Total	1,909,000	1,678,000	396,100	1,742,230	1,675,750	1,767,800	1,848,720	9,108,600
Estimated Personnel Cost	204,500	204,500	236,000	220,000	220,000	220,000	220,000	1,320,500



Athletics Facilities Renovation

Dept. Priority: 3

Description

This project will provide resources for the continued renovation of tennis courts, ball fields, soccer fields, football fields, hard surface play areas, bike trails, and outdoor basketball facilities. Work will include, but not be limited to, resurfacing, regrading, infield renovation, turf renovations, the clear-coating of gym floors, fencing installations or renovations, drainage improvements, and site amenities. Community requests/partnerships and emergency projects are also included.

Purpose

The purpose of this project is to renovate and upgrade recreation athletic facilities to keep them safe and usable and to improve the appearance of these facilities.

Phases	Prior Year	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2016-2021
								Total
Other	36,550	14,370	24,900	12,210	14,300	8,550	8,940	83,270
Engineering	73,100	28,750	49,800	24,420	28,620	17,100	17,890	166,580
Equipment	73,100	28,750	49,800	24,420	28,620	17,100	17,890	166,580
Construction	548,250	215,630	373,500	183,190	214,620	128,300	134,160	1,249,400
General Capital Total	731,000	287,500	498,000	244,240	286,160	171,050	178,880	1,665,830
Estimated Personnel Cost	150,500	150,500	113,000	130,000	130,000	130,000	130,000	783,500

Outdoor Facilities Renovation

Dept. Priority: 4

Description

This project will provide resources for the continued renovation of the Recreation Department's outdoor facilities, including playgrounds, play equipment, play surfaces, shelters, roadways, parking lots, and hike/bike trails. This project will include renovating various playgrounds and parking lots throughout the City. Community requests/partnerships and emergency projects will also be included.

Purpose

The purpose of this project is to upgrade outdoor recreational facilities that must be renovated to remain functional and compliant with City and State regulations.

Phases	Prior Year	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2016-2021
								Total
Other	24,750	10,250	10,750	36,710	19,930	13,690	14,330	105,660
Engineering	49,500	20,500	21,500	73,440	39,880	27,400	28,650	211,370
Equipment	49,500	20,500	21,500	73,440	39,880	27,400	28,650	211,370
Construction	596,250	153,750	161,250	550,770	299,090	205,480	214,880	1,585,220
General Capital Total	720,000	205,000	215,000	734,360	398,780	273,970	286,510	2,113,620
Estimated Personnel Cost	128,000	128,000	62,500	90,000	90,000	90,000	90,000	550,500

Capital Improvement Plan

Recreation



Compliance with ADA

Dept. Priority: 5

Description

This project will provide resources to improve accessibility to all recreation facilities including buildings, playgrounds, and sports fields. Improvements will be made to elevators, ramps, exterior and interior doors, accessible routes, restroom facilities, drinking fountains, telephones, and parking area renovations including passenger loading zones.

Purpose

The purpose of this project is to remain in compliance with the provisions of the Americans with Disabilities Act in order to improve the usability of Recreation facilities for persons with disabilities.

Phases	Prior Year	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2016-2021
								Total
Other	5,000	5,000	5,000	5,000	5,000	5,000	5,000	30,000
Engineering	10,000	10,000	10,000	10,000	10,000	10,000	10,000	60,000
Equipment	10,000	10,000	10,000	10,000	10,000	10,000	10,000	60,000
Construction	75,000	75,000	75,000	75,000	75,000	75,000	75,000	450,000
General Capital Total	100,000	100,000	100,000	100,000	100,000	100,000	100,000	600,000
Estimated Personnel Cost	0	0	0	0	0	0	0	0

Oakley Aquatic Facility Additional

Dept. Priority: 6

Description

This project will provide additional resources for the renovation of the Oakley Aquatic Facility. Renovations include design and renovation of the building as well as upgrades to equipment.

Purpose

The purpose of this project is to upgrade aquatics facilities that must be renovated to remain functional and compliant with City and State regulations.

Phases	Prior Year	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2016-2021
								Total
Construction	0	422,900	0	0	0	0	0	422,900
General Capital Total	0	422,900	0	0	0	0	0	422,900
Estimated Personnel Cost	0	0	0	0	0	0	0	0



Department of Sewers

Priority	Project Title	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2016-2021 Total
MSD Capital Improvements Fund								
10	Muddy Creek Basin Storage and Conveyance Sewer	0	0	0	0	761,600	0	761,600
11	Muddy Creek Interceptor Rehabilitation	0	0	0	0	300,000	0	300,000
12	River Road Near Muddy Creek WWTP Conveyance Sewer	0	0	0	0	780,600	0	780,600
13	Werk and Westbourne Enhanced High Rate Treatment Facility	59,141,670	0	0	0	0	0	59,141,670
14	East Branch Muddy Creek Interceptor Extension	0	0	0	0	1,000,000	0	1,000,000
15	West Branch Muddy Creek Interceptor	0	0	0	0	2,843,400	0	2,843,400
16	Muddy Creek WWTP Add New Belt Filter Press	5,190,000	0	0	0	0	0	5,190,000
17	Glenview Pump Station Upgrade	812,300	0	0	0	0	0	812,300
18	SSO 1048 Conveyance Sewer	0	0	0	0	450,870	0	450,870
19	SSO 587 Conveyance Sewer	0	0	0	0	275,640	0	275,640
20	SSO 700 Integrated Watershed Action Plan Implementation	0	0	0	0	10,200,180	0	10,200,180
21	Pleasant Run Interceptor Replacement	0	0	0	0	310,720	0	310,720
22	Ludlow and Lafayette Parallel Sewer	0	3,161,000	0	0	0	0	3,161,000
23	CSO 507 Improvements	0	0	0	0	83,210	0	83,210
24	CSO 509 Improvements	0	0	0	0	83,210	0	83,210
25	CSO 510 Improvements	0	0	0	0	83,210	0	83,210
26	CSO 508 Sewer Separation	0	0	0	0	284,670	0	284,670
27	CSO 513 Sewer Separation	0	0	0	0	378,040	0	378,040
28	CSO 514 Sewer Separation	0	0	0	0	193,700	0	193,700
29	CSO 179 Sewer Separation	1,553,300	0	0	0	0	0	1,553,300
30	SSO 1000 Elimination	0	0	465,900	0	0	0	465,900
31	SSO 228 Elimination	0	1,416,900	0	0	0	0	1,416,900
32	Little Miami WWTP Electrical Feeders	588,800	0	0	0	0	0	588,800
33	Little Miami WWTP Solids Handling Improvements	1,523,100	0	19,576,300	0	0	0	21,099,400
34	Little Miami WWTP Electrical and Disinfection Improvements	0	1,575,900	0	0	16,744,700	0	18,320,600
35	Little Miami WWTP Preliminary Treatment Improvements	0	0	0	0	2,631,500	0	2,631,500
36	CSO 135 Improvements	0	0	0	0	63,000	0	63,000
37	CSO 43 Improvements	0	0	0	0	59,850	0	59,850
38	CSO 54 Improvements	0	208,700	0	0	0	0	208,700
39	CSO 214 Storage Facility	0	0	0	0	869,000	0	869,000
40	CSO 551 Sewer Separation	0	0	1,292,800	0	0	0	1,292,800
41	CSO 552 Improvements	0	0	0	0	742,000	0	742,000

Capital Improvement Plan

Sewers



Priority	Project Title	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2016-2021 Total
42	CSO 553 Sewer Separation	0	0	0	0	56,000	0	56,000
43	Sewer Relining Trenchless Technology Program 2015	5,200,000	0	0	0	0	0	5,200,000
44	Sewer Relining Trenchless Technology Program 2016	0	5,200,000	0	0	0	0	5,200,000
45	Sewer Relining Trenchless Technology Program 2017	0	0	5,200,000	0	0	0	5,200,000
46	Sewer Relining Trenchless Technology Program 2018	0	0	0	5,200,000	0	0	5,200,000
47	Sewer Relining Trenchless Technology Program 2019	0	0	0	0	5,200,000	0	5,200,000
48	Manhole Rehabilitation Trenchless Technology Program 2015	1,000,000	0	0	0	0	0	1,000,000
49	Manhole Rehabilitation Trenchless Technology Program 2016	0	1,000,000	0	0	0	0	1,000,000
50	Manhole Rehabilitation Trenchless Technology Program 2017	0	0	1,000,000	0	0	0	1,000,000
51	Manhole Rehabilitation Trenchless Technology Program 2018	0	0	0	1,000,000	0	0	1,000,000
52	Manhole Rehabilitation Trenchless Technology Program 2019	0	0	0	0	1,000,000	0	1,000,000
53	Home Sewer Treatment System Extensions 2015	200,000	0	0	0	0	0	200,000
54	Home Sewer Treatment System Extensions 2016	0	200,000	0	0	0	0	200,000
55	Home Sewer Treatment System Extensions 2017	0	0	200,000	0	0	0	200,000
56	Home Sewer Treatment System Extensions 2018	0	0	0	200,000	0	0	200,000
57	Home Sewer Treatment System Extensions 2019	0	0	0	0	200,000	0	200,000
58	Wet Weather Program Management and Support Services 2015	5,300,000	0	0	0	0	0	5,300,000
59	Wet Weather Program Management and Support Services 2016	0	5,300,000	0	0	0	0	5,300,000
60	Wet Weather Program Management and Support Services 2017	0	0	5,300,000	0	0	0	5,300,000
61	Wet Weather Program Management and Support Services 2018	0	0	0	5,300,000	0	0	5,300,000
62	Wet Weather Program Management and Support Services 2019	0	0	0	0	5,400,000	0	5,400,000
63	Hamilton County Utility Oversight and Coordination 2015	2,700,000	0	0	0	0	0	2,700,000
64	Hamilton County Utility Oversight and Coordination 2016	0	2,700,000	0	0	0	0	2,700,000
65	Hamilton County Utility Oversight and Coordination 2017	0	0	2,700,000	0	0	0	2,700,000
66	Hamilton County Utility Oversight and Coordination 2018	0	0	0	2,700,000	0	0	2,700,000



Capital Improvement Plan

Sewers

Priority	Project Title	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2016-2021 Total
67	Hamilton County Utility Oversight and Coordination 2019	0	0	0	0	2,700,000	0	2,700,000
68	North Fairmount Bioswale Project	0	0	381,000	0	0	0	381,000
69	Lower Muddy Creek Sustainable Watershed Evaluation Plan	0	300,000	0	0	0	0	300,000
70	East Branch Upper South Mill Creek Sustainable Watershed Eva	0	149,000	0	0	0	0	149,000
71	W Branch Winton Woods Sustainable Watershed Evaluation Plan	0	618,000	0	0	0	0	618,000
72	CSO 488/490 Interstate 75 Reconstruction Coordination	0	0	0	1,613,000	0	0	1,613,000
73	CSO 21 Interstate 75 Reconstruction Coordination	0	0	2,999,000	0	0	0	2,999,000
74	East Duck Creek Watershed Plan	411,000	0	0	0	0	0	411,000
75	Lick Run Valley Conveyance System	102,964,600	0	0	0	0	0	102,964,600
76	Lick Run Property Demolitions	2,488,600	0	0	0	0	0	2,488,600
77	CSO 181 Real Time Control	0	3,498,600	0	0	0	0	3,498,600
78	Wyoming and Minion Avenues Sewer Separation	0	2,824,000	0	0	0	0	2,824,000
79	Quebec Road Sewer Separation	0	6,733,600	0	0	0	0	6,733,600
80	Queen City Avenue Sewer Separation Phase 2	10,262,000	0	0	0	0	0	10,262,000
81	Queen City and Cora Avenues Right-of-Way Sewer Separation	0	2,582,500	0	0	0	0	2,582,500
82	Quebec Heights Sewer Separation	3,122,600	0	0	0	0	0	3,122,600
83	CSO 12 Sewer Separation Phase A.3 West Martin Luther King Dr	0	499,350	0	0	0	0	499,350
84	CSO 12 Sewer Separation Phase A.4b	0	0	7,085,100	0	0	0	7,085,100
85	CSO 217/483 Source Control Phase A	3,772,400	0	0	0	0	0	3,772,400
86	CSO 217/483 Source Control Phase B	0	13,902,400	0	0	0	0	13,902,400
87	CSO 217/483 Source Control Phase A2	0	5,557,700	0	0	0	0	5,557,700
88	Upper Muddy Creek Interceptor Replacement	0	0	0	0	14,306,800	0	14,306,800
89	Upper Muddy Creek Interceptor Replacement Contract A	0	939,000	0	0	0	0	939,000
90	Mt. Airy Receiving Sewer Upgrade	0	0	517,900	0	2,633,200	0	3,151,100
91	Ledgewood Avenue Sewer Replacement	0	0	0	75,000	0	0	75,000
92	McHenry Avenue Sewer Replacement	0	0	0	0	250,000	0	250,000
93	911 McPherson Avenue Sewer Replacement	0	0	0	330,000	0	0	330,000
94	Davey Avenue Sewer Replacement	0	0	0	225,000	0	0	225,000
95	Congress Run Stream Restoration/ Bank Stabilization	0	0	0	0	60,000	0	60,000

Capital Improvement Plan

Sewers



Priority	Project Title	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2016-2021 Total
96	Mandarin Court Sewer Replacement	0	0	0	270,000	0	0	270,000
97	Harvey Avenue - MLK Drive to 400 NW Sewer Evaluation	0	0	0	0	6,000	0	6,000
98	Hickman Avenue Sewer Evaluation	0	0	0	0	24,000	0	24,000
99	Depot Street Sewer Evaluation	0	0	0	0	300,000	0	300,000
100	Banning Alley Sewer Replacement	0	0	0	0	45,000	0	45,000
101	High Point Pump Station Evaluation	0	0	0	0	500,000	0	500,000
102	5053 Ridge Avenue Sewer Replacement	0	0	0	0	45,000	0	45,000
103	Mayland Dr, Woodlark Dr, and Lusanne Terrace Sewer Study	0	225,000	0	0	0	0	225,000
104	Programmatic Contingency	11,500,000	10,000,000	10,000,000	10,000,000	10,000,000	0	51,500,000
105	Bridgetown Road Local Sewer (HNs 8477-8647)	0	0	501,100	0	0	0	501,100
106	West Fork Road Local Sewer (HNs 5311-5472)	475,000	0	0	0	0	0	475,000
107	Parrakeet Drive Local Sewer (HNs 6002-6068)	0	266,100	0	0	0	0	266,100
108	Ramblingridge Drive and Twinwillow Lane Local Sewer	0	0	3,243,000	0	0	0	3,243,000
109	Kern Drive and Springdale Road Local Sewer	0	457,400	0	0	0	0	457,400
110	Mapleknoll Drive Local Sewer (HNs 9420-9562)	0	304,200	0	0	0	0	304,200
111	Reemelin Road Local Sewer (HNs 3489-3860)	0	1,265,700	0	0	0	0	1,265,700
112	Crestnoll Lane Local Sewer (HNs 3491-3609)	0	919,700	0	0	0	0	919,700
113	Old Blue Rock Road Local Sewer (HNs 5240-5327)	238,100	0	0	0	0	0	238,100
114	Russell Heights Drive Local Sewer	0	0	792,800	0	0	0	792,800
115	Brierly Creek Road Local Sewer (HNs 6040-6100)	0	181,900	0	0	0	0	181,900
116	Werk Road Local Sewer (HNs 5544- 5686)	751,300	0	0	0	0	0	751,300
117	Upper Road Local Sewer (HNs 6340- 6434)	0	171,000	0	0	0	0	171,000
118	Carpol Avenue, Honeywell Avenue & E. Kemper Road Local Sewer	0	0	1,044,700	0	0	0	1,044,700
119	North Bend Road Local Sewer (HNs 504-565)	355,500	0	0	0	0	0	355,500
120	Coldstream Drive and Asbury Road Local Sewer	0	3,639,800	0	0	0	0	3,639,800
121	State Road Local Sewer (HNs 7737- 7849)	459,800	0	0	0	0	0	459,800
122	Mt. Carmel Road Vicbarb Lane Apple Blossom Lane Local Sewer	1,491,000	0	0	0	0	0	1,491,000
123	Boomer Road Sewer Lateral Assessment	32,100	0	0	0	0	0	32,100



Capital Improvement Plan

Sewers

Priority	Project Title	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2016-2021 Total
124	Foley Road Sewer Laterals (HNs 5579, 5583-5599, 5602)	58,400	31,400	0	0	0	0	89,800
125	Werk Road Sewer Lateral Assessment (HN 6052)	42,300	0	0	0	0	0	42,300
126	E. Galbraith Road Sewer Lateral Assessment (HN 4454)	47,400	0	0	0	0	0	47,400
127	Pottinger Road Sewer Lateral Assessment (HN 10444)	42,300	0	0	0	0	0	42,300
128	Enyart Road Sewer Lateral Assessments (HNs 11258 and 11262)	23,300	0	0	0	0	0	23,300
129	Enyart Road Sewer Lateral Assessment	42,300	0	0	0	0	0	42,300
130	E. Kemper Road Sewer Lateral Assessment (HN 269)	27,000	0	0	0	0	0	27,000
131	E. Kemper Road Sewer Lateral Assessment	52,500	0	0	0	0	0	52,500
132	Drake Road Sewer Lateral Assessment (HN 7315)	37,200	0	0	0	0	0	37,200
133	Woodruff Road Sewer Lateral Assessment (HNs 8145, 8167,8237)	0	75,000	0	0	0	0	75,000
134	Great Miami WWTP	5,000,000	0	0	55,000,000	0	0	60,000,000
135	Bruestle Avenue Pump Station Elimination	0	989,100	0	0	0	0	989,100
136	Rackacres Drive and Crestnoll Lane Area Sewer	0	1,237,500	0	0	0	0	1,237,500
137	Whitewater Township Regional Sewer District Phase III SR 128	0	6,142,500	0	0	0	0	6,142,500
138	CSOs 404, 405, 410, 411 Outfall Reconstruction	0	656,800	0	0	0	0	656,800
139	Westport Village Pump Station Elimination	0	1,236,150	0	0	0	0	1,236,150
140	Barrington Hills, Barrington Hills BLK. F, Gil Volz, and Kir	0	0	0	7,396,900	0	0	7,396,900
141	Lower Muddy Creek Interceptor SSO Remediation	0	6,101,600	0	0	0	0	6,101,600
142	Addyston Extraneous Stormwater Removal	0	0	0	0	748,800	0	748,800
143	Addyston Creek and Sewer Rehabilitation	0	517,100	0	0	0	0	517,100
144	CSO 125 Stream Separation	0	9,591,500	0	0	0	0	9,591,500
145	CSO 217/483 Source Control Phase C	0	4,782,800	0	0	0	0	4,782,800
146	Cora Avenue Sewer Replacement	647,100	0	0	0	0	0	647,100
147	German Cemetery Sewer Replacement	695,000	0	0	0	0	0	695,000
148	Millbrook #2 Pump Station Upgrade	870,200	0	0	0	0	0	870,200
149	Mt. Airy Forest Sewer Replacement	5,183,700	0	0	0	0	0	5,183,700

Capital Improvement Plan

Sewers



Priority	Project Title	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2016-2021 Total
150	3934 Winding Way Sewer Replacement	0	216,500	0	0	0	0	216,500
151	Lower Mill Creek HW/DW Protection	0	0	0	3,820,000	0	0	3,820,000
152	SSO 603 and 704 Improvements	0	1,338,100	0	0	0	0	1,338,100
153	MCWWTP Solids Handling Improvements Phase 1	12,159,200	0	0	0	0	0	12,159,200
154	Wilder Avenue Sewer Replacement	342,900	0	0	0	0	0	342,900
155	Glen Landing Pump Station Improvements	0	0	0	182,200	0	0	182,200
156	Otte Avenue Sewer Replacement	0	0	485,700	0	0	0	485,700
157	3568 Bogart Avenue Sewer Replacement	140,500	0	0	0	0	0	140,500
158	McKeone Avenue Sewer Replacement	0	103,000	0	0	0	0	103,000
159	Timbers Pump Station Elimination	0	0	922,800	0	0	0	922,800
160	Quebec Road Sewer Replacement	0	427,400	0	0	0	0	427,400
161	Rose Hill Avenue Sewer Relocation	0	522,300	0	0	0	0	522,300
162	Carpenters Run Pump Station Upgrade	0	631,400	0	0	0	0	631,400
163	CSO 005 Water Connection	71,000	0	0	0	0	0	71,000
164	CSO 5 (Lick Run RTC) Improvements	0	200,000	0	0	0	0	200,000
165	Ponderosa Woods Pump Station Elimination	0	0	299,900	0	0	0	299,900
166	Sharp Alley Sewer Replacement	502,700	0	0	0	0	0	502,700
167	Freeland Avenue Area Sewer Replacement	0	0	0	0	99,500	0	99,500
168	Berkley Avenue Sewer Replacement	583,300	0	0	0	0	0	583,300
169	Pleasant Run Central Force Main Repairs	1,068,000	0	0	0	0	0	1,068,000
170	Colton Lane Sewer Replacement	0	0	0	0	88,100	0	88,100
171	Vinton Street - Beekman Street to Liddell Street Sewer	0	0	204,200	0	0	0	204,200
172	Spring Grove Avenue Sewer Replacement and Rehabilitation	0	540,900	0	0	0	0	540,900
173	Fairbanks Avenue Sewer Replacement	282,500	0	0	459,500	0	0	742,000
174	Hosea Street Sewer Replacement	0	397,900	2,197,200	0	0	0	2,595,100
175	Bahama Gardens Pump Station Upgrade and Force Main Replace	0	785,400	0	0	0	0	785,400
176	Foraker Avenue Sewer Replacement-Alms Place to E. Terminus	0	0	83,900	0	0	0	83,900
177	Wahl Terrace Sewer Replacement	0	577,800	0	0	783,500	0	1,361,300
178	Yoast Avenue Sewer Improvements	0	135,500	0	0	0	0	135,500
179	Mt. Pleasant Avenue Sewer Replacement	0	344,600	0	0	0	0	344,600
180	Mayhew and Leath Avenues Sewer Replacement	0	0	247,100	0	0	0	247,100



Capital Improvement Plan

Sewers

Priority	Project Title	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2016-2021 Total
181	Freeman Avenue - Klotter to McMicken Sewer Replacement	0	89,900	0	0	0	0	89,900
182	Victory Parkway Sewer Rehabilitation	0	0	0	0	106,400	0	106,400
183	Cypress Street - Ashland Avenue Sewer Replacement	0	0	147,300	0	0	0	147,300
184	Faehr Street Sewer Replacement	0	134,900	0	0	0	0	134,900
185	Spring Grove Avenue - Township Street Sewer Improvement	0	695,200	0	0	0	0	695,200
186	Central Parkway Sewer Replacement (HN 2402)	129,200	0	0	0	0	0	129,200
187	Pardee Alley Sewer Replacement - Oswald Alley to 200' North	0	0	154,600	0	0	0	154,600
188	Kemper Mill Village Pump Station Upgrade	0	0	552,000	0	0	0	552,000
189	Schulte Drive Sewer Replacement	145,100	0	409,100	0	0	0	554,200
190	Overflow Parking Lot for MSD Engineering and Administration	480,000	0	0	0	0	0	480,000
191	MCWWTP Enhanced Incinerator Emission Controls	9,440,100	0	0	0	0	0	9,440,100
192	MCWWTP Two-Bay Solids Receiving Facility	0	1,008,100	0	11,799,000	0	0	12,807,100
193	MCWWTP Main Substation Improvements	496,700	0	2,492,000	0	0	0	2,988,700
194	MCWWTP Power Building Medium Voltage Switchgear	517,400	0	0	0	0	0	517,400
195	MCWWTP Electrical Arc Flash Protection	0	238,000	0	0	0	0	238,000
196	MCWWTP Secondary Treatment Capacity Enhancements	0	0	414,000	1,941,000	0	0	2,355,000
197	MCWWTP Primary Sludge Pumping Improvements	0	0	1,053,000	0	0	0	1,053,000
198	MCWWTP Primary Treatment Odor Control Improvements	0	0	1,103,800	0	0	0	1,103,800
199	MCWWTP Biological Nutrient Removal Facilities	0	0	0	3,629,100	0	0	3,629,100
200	MCWWTP Standby Power Distribution System Improvements	0	0	0	537,100	2,790,000	0	3,327,100
201	MCWWTP South Raw Sewage Pump Station Pump Replacement	0	0	0	556,100	2,911,000	0	3,467,100
202	MCWWTP North Pump Station Odor Control System Replacement	0	0	0	363,400	1,530,000	0	1,893,400
203	MCWWTP Biosolids Dewatering Facility Addition	0	0	0	0	4,297,100	0	4,297,100
204	Wastewater Collection Maintenance Shop Improvements	144,850	1,018,490	0	0	0	0	1,163,340
205	Hackberry Street Sewer Replacement	0	280,900	0	0	0	0	280,900
206	Montana Avenue Sewer - Ferncroft Drive to Mustang Drive	0	3,073,300	0	0	0	0	3,073,300
207	SSO 700 Facility Improvements	8,509,500	0	0	0	0	0	8,509,500

Capital Improvement Plan

Sewers



Priority	Project Title	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2016-2021 Total
208	Polk Run WWTP Reliability and Service Upgrades	0	0	6,964,100	0	0	0	6,964,100
209	Huntington Pump Station Elimination	0	212,000	0	0	0	0	212,000
210	Polk Run Ultraviolet System/Post Aeration Improvements	225,000	1,510,000	0	0	0	0	1,735,000
211	Polk Run Non-Potable Water Upgrades	102,000	255,000	0	0	0	0	357,000
212	South Clippinger Force Main Replacement/Pump Station Upgrade	0	0	0	500,000	0	0	500,000
213	Dry Run Area Sewers Phase 2 Contract Round Bottom Road	7,181,100	0	0	0	0	0	7,181,100
214	Dry Run Sewers - Contract Eight Mile Road	0	5,331,500	0	0	0	0	5,331,500
215	Dry Run Sewers Contract Broadwell Road	0	2,794,000	0	0	0	0	2,794,000
216	Camargo Canyon Pump Station Elimination	0	620,100	0	0	0	0	620,100
217	Little Miami WWTP Scum Removal and Handling	0	0	788,000	0	0	0	788,000
218	Catholic Calvary Cemetery Sewer Replacement	168,700	0	0	0	0	0	168,700
219	Portsmouth Avenue Sewer Replacement	0	365,600	0	0	0	0	365,600
220	Wasson Ravine Sewer Replacement	0	0	0	0	1,147,600	0	1,147,600
221	Airport and Robb Avenue Sewer Replacement	0	312,200	0	0	0	0	312,200
222	Grove Avenue Sewer Replacement	211,000	0	0	0	0	0	211,000
223	Columbia Parkway at Delta Avenue Sewer Replacement	299,000	0	0	0	0	0	299,000
224	3981 Watterson Road Sewer Replacement	0	0	184,400	0	0	0	184,400
225	Paxton Avenue Sewer Rehabilitation	332,600	0	0	0	0	0	332,600
226	Delta and Griest Avenues Sewer Replacement	0	0	0	0	297,700	0	297,700
227	CSO 83 and 472 Dynamic Underflow Control	404,000	0	0	2,435,810	0	0	2,839,810
228	East Hill Avenue Sewer Replacement	279,700	0	1,465,500	0	0	0	1,745,200
229	Capital Improvement Program (CIP) Project Planning	1,750,000	2,500,000	2,500,000	2,500,000	2,500,000	0	11,750,000
230	WWT System Asset Renewal 2015	2,000,000	0	0	0	0	0	2,000,000
231	WWT System Asset Renewal 2016	0	3,000,000	0	0	0	0	3,000,000
232	WWT System Asset Renewal 2017	0	0	3,000,000	0	0	0	3,000,000
233	WWT System Asset Renewal 2018	0	0	0	3,000,000	0	0	3,000,000
234	WWT System Asset Renewal 2019	0	0	0	0	3,000,000	0	3,000,000
235	Hydraulic Modeling 2015	1,000,000	0	0	0	0	0	1,000,000
236	Hydraulic Modeling 2016	0	1,000,000	0	0	0	0	1,000,000
237	Hydraulic Modeling 2017	0	0	1,000,000	0	0	0	1,000,000
238	Hydraulic Modeling 2018	0	0	0	1,000,000	0	0	1,000,000



Capital Improvement Plan

Sewers

Priority	Project Title	FY 2016-2021						Total
		FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	
239	Hydraulic Modeling 2019	0	0	0	0	1,000,000	0	1,000,000
240	Emergency Sewer Repairs 2015	8,000,000	0	0	0	0	0	8,000,000
241	Emergency Sewer Repairs 2016	0	8,000,000	0	0	0	0	8,000,000
242	Emergency Sewer Repairs 2017	0	0	7,500,000	0	0	0	7,500,000
243	Emergency Sewer Repairs 2018	0	0	0	7,500,000	0	0	7,500,000
244	Emergency Sewer Repairs 2019	0	0	0	0	7,500,000	0	7,500,000
245	System-Wide Sensor Installation	750,000	0	0	0	0	0	750,000
246	High Risk Asset Renewal 2015	4,000,000	0	0	0	0	0	4,000,000
247	High Risk Asset Renewal 2016	0	4,000,000	0	0	0	0	4,000,000
248	High Risk Asset Renewal 2017	0	0	3,500,000	0	0	0	3,500,000
249	High Risk Asset Renewal 2018	0	0	0	3,500,000	0	0	3,500,000
250	High Risk Asset Renewal 2019	0	0	0	0	3,000,000	0	3,000,000
251	Water Quality Modeling 2015	500,000	0	0	0	0	0	500,000
252	Water Quality Modeling 2016	0	500,000	0	0	0	0	500,000
253	Water Quality Modeling 2017	0	0	500,000	0	0	0	500,000
254	Water Quality Modeling 2018	0	0	0	500,000	0	0	500,000
255	Water Quality Modeling 2019	0	0	0	0	500,000	0	500,000
256	SSO 1048 Conveyance Sewer Phase 2	0	0	0	0	375,350	0	375,350
257	Stonebridge Apartments Sewer Study	0	300,000	0	0	700,000	0	1,000,000
258	Stanley Avenue Lateral Relocations	148,700	0	0	0	0	0	148,700
259	SSO 700 Integrated Watershed Action Plan	750,000	1,500,000	0	0	0	0	2,250,000
260	Rockdale Avenue and Windham Avenue Sewer Evaluation	0	0	0	0	30,000	0	30,000
261	Reading Road - 12th Street to E. Liberty Street	0	0	0	0	60,000	0	60,000
262	Phase 2 Wet Weather Improvement Plan Design Allocation	0	0	0	0	20,000,000	0	20,000,000
263	Old Ludlow Ave Right-of-Way Sewer Replacement	0	0	0	0	90,000	0	90,000
264	Morrison Avenue Sewer Replacement	0	0	0	75,000	0	0	75,000
265	MCWWTP Service Water (NPW) Reliability and Service Upgrade	0	0	4,592,300	0	0	0	4,592,300
MSD Capital Improvements Total		297,416,620	152,118,890	105,060,500	133,608,110	135,420,150	0	823,624,270
Department of Sewers Total		297,416,620	152,118,890	105,060,500	133,608,110	135,420,150	0	823,624,270



MSD Capital Improvements Fund

Muddy Creek Basin Storage and Conveyance Sewer

Dept. Priority: 10

Description

This project will provide resources for constructing a 7,830 linear feet, 8.5 foot diameter storage and conveyance tunnel. The tunnel will be designed to store wet weather flows from the Upper Muddy Creek Interceptor and the Bender Road Express Sewer. This project is located on Hillside Avenue in Delhi Township and in the Sayler Park neighborhood of the City of Cincinnati.

Purpose

The purpose of this project is to construct a storage and conveyance tunnel to handle the wet weather flow in the Muddy Creek Drainage Basin. This project will eliminate Sanitary Sewer Overflows (SSOs) 692 and 697. This project will store significant volumes of wet weather flow to prevent their overflow into Muddy Creek and associated tributaries. This project is included in the West Branch Muddy Bundle.

Phases	Prior Year	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2016-2021
								Total
Land	0	0	0	0	0	761,600	0	761,600
MSD Capital Improvements	0	0	0	0	0	761,600	0	761,600
Total								
Estimated Personnel Cost	0	0	0	0	0	38,080	0	38,080

Muddy Creek Interceptor Rehabilitation

Dept. Priority: 11

Description

This project will provide resources for the cleaning of approximately 5,000 feet of the Muddy Creek Interceptor. This portion of the Muddy Creek Interceptor consists of 36-inch and 48-inch diameter pipes and was installed in 1983 and 1996. This project is located along Cleves-Warsaw Road between Muddy Creek Road and Hillside Avenue in Delhi Township and Green Township, Hamilton County, Ohio.

Purpose

The purpose of this project is to enable restoration of the existing interceptor to maximum capacity by cleaning and assessing its condition for potential rehabilitation. Also, the project will enable more accurate flow monitoring to properly calibrate and validate the hydraulic model. The estimated cost of construction has been adjusted to better represent the cost to address 5,000 linear feet of interceptor.

Phases	Prior Year	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2016-2021
								Total
Engineering	0	0	0	0	0	300,000	0	300,000
MSD Capital Improvements	0	0	0	0	0	300,000	0	300,000
Total								
Estimated Personnel Cost	0	0	0	0	0	15,000	0	15,000



River Road Near Muddy Creek WWTP Conveyance Sewer

Dept. Priority: 12

Description

This project will provide resources for installing approximately 1,700 linear feet of 48-inch pipe to direct flows from the West Branch Muddy Creek Interceptor, the East Branch Muddy Creek Interceptor, and the Bender Road Express Sewer, that are in excess of the treatment plant capacity, to the proposed Muddy Creek Basin Storage and Conveyance Sewer. This project is located in the Saylor Park neighborhood of the City of Cincinnati.

Purpose

The purpose of this project is to allow flows from the existing Bender Road Express Sewer, West Branch Muddy Creek Interceptor, and East Branch Muddy Creek Interceptor that are in excess of the treatment plant capacity to flow by gravity directly to the proposed Muddy Creek Basin Conveyance Sewer. This project is included in the West Branch Muddy Bundle.

Phases	Prior Year	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2016-2021 Total
Engineering	0	0	0	0	0	780,600	0	780,600
MSD Capital Improvements	0	0	0	0	0	780,600	0	780,600
Total								
Estimated Personnel Cost	0	0	0	0	0	39,030	0	39,030

Werk and Westbourne Enhanced High Rate Treatment Facility

Dept. Priority: 13

Description

This project will provide resources for the construction of a 106 million gallon per day (MGD) chemically enhanced high rate treatment facility (EHRT) to provide storage, settling, and screening of combined sewage discharges from Combined Sewer Overflow (CSO) 522 located at the intersection of Werk Road and Westbourne Drive in the Muddy Creek basin in Green Township, Hamilton County, Ohio.

Purpose

The purpose of this project is to meet the requirements of the Global Consent Decree. This project will remediate frequent health, odor, and aesthetic problems in the neighboring area caused by wet weather discharges from Combined Sewer Overflow (CSO) 522. The project will greatly improve the quality of water being discharged to Muddy Creek during wet weather events. The Werk & Westbourne Enhanced High Rate Treatment (EHRT) facility will serve as a demonstration to assess the effectiveness of EHRT technology for this specific application.

Phases	Prior Year	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2016-2021 Total
Construction	34,000,000	59,141,670	0	0	0	0	0	59,141,670
MSD Capital Improvements	34,000,000	59,141,670	0	0	0	0	0	59,141,670
Total								
Estimated Personnel Cost	1,700,000	2,957,080	0	0	0	0	0	2,957,080

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East Branch Muddy Creek Interceptor Extension

Dept. Priority: 14

Description

This project will provide resources for the planning phase of addressing the W-105 East Branch Muddy Creek Interceptor Extension as part of Phase 2 of the Wet Weather Improvement Plan (WWIP).

Purpose

The purpose of this project is to address the W-105 East Branch Muddy Creek Interceptor Extension.

Phases	Prior Year	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2016-2021 Total
Engineering	0	0	0	0	0	1,000,000	0	1,000,000
MSD Capital Improvements Total	0	0	0	0	0	1,000,000	0	1,000,000
<hr/>								
Estimated Personnel Cost	0	0	0	0	0	50,000	0	50,000

West Branch Muddy Creek Interceptor

Dept. Priority: 15

Description

This project will provide resources for installing 10,000 linear feet of 48-inch sewer to convey the flows from the Muddy Creek Pump Station and 85% of the wet weather flows from Combined Sewer Overflows (CSO) 402, 403, 404, 405, and 406. This project is located in the Saylor Park neighborhood of the City of Cincinnati.

Purpose

The purpose of this project is to transport sewage from Combined Sewer Overflows (CSO) 402, 403, 404, 405, and 406 to convey 85% of the wet weather flow to the Muddy Creek Wastewater Treatment Plant. The project is projected to include the installation of approximately 10,000 feet of 48 inch sewer. This modification is required by Global Consent Decree. This project is included in the West Branch Muddy Bundle.

Phases	Prior Year	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2016-2021 Total
Engineering	0	0	0	0	0	2,843,400	0	2,843,400
MSD Capital Improvements Total	0	0	0	0	0	2,843,400	0	2,843,400
<hr/>								
Estimated Personnel Cost	0	0	0	0	0	142,170	0	142,170

Muddy Creek WWTP Add New Belt Filter Press

Dept. Priority: 16

Description

This project will provide resources for increasing the dewatering process capacity through construction of a new belt filter press and/or other means. The project will assure capacity to reliably process sludge pro-



duced by the expanded Wastewater Treatment Plant treating up to 35 million gallons/day. This project is in the Saylor Park neighborhood of the City of Cincinnati.

Purpose

The purpose of this project is to address capacity limitations at the treatment plant. The Wastewater Treatment Plant currently has one belt filter press. The overall District solids disposal strategy relies on fluidized bed incineration. Belt filter press technology does not produce a sludge cake of sufficient dryness for auto-thermal incineration. This project will provide two centrifuge units to increase the firm solids dewatering capacity.

Phases	Prior Year	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2016-2021 Total
Construction	5,190,000	5,190,000	0	0	0	0	0	5,190,000
MSD Capital Improvements	5,190,000	5,190,000	0	0	0	0	0	5,190,000
Total								
Estimated Personnel Cost	259,500	259,500	0	0	0	0	0	259,500

Glenview Pump Station Upgrade

Dept. Priority: 17

Description

This project will provide resources for the installation of a new 570 gallons per minute (GPM) pump station northeast of the current Glenview Pump Station. Work includes demolition of the existing pump station, installation of approximately 16 linear feet of a new 18-inch gravity sewer from the existing wet well to the new wet well and 21 linear feet of new 6-inch force main from the new valve vault to the existing force main. This project is located in Green Township, Hamilton County, Ohio.

Purpose

The purpose of this project is to upgrade the existing Glenview pump station which has deteriorated beyond its useful life and is not capable of handling wet weather flows. This project has the ability to reduce or possibly eliminate an existing sanitary sewer overflow.

Phases	Prior Year	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2016-2021 Total
Construction	0	812,300	0	0	0	0	0	812,300
MSD Capital Improvements	0	812,300	0	0	0	0	0	812,300
Total								
Estimated Personnel Cost	0	40,620	0	0	0	0	0	40,620

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SSO 1048 Conveyance Sewer

Dept. Priority: 18

Description

This project will provide resources for the replacement of approximately 4,115 linear feet of 18-27-inch sewer and tunnel 275 feet of 18-24-inch sewer. This project is located in the City of Springdale, Hamilton County, Ohio.

Purpose

The purpose of this project is to eliminate Sanitary Sewer Overflow (SSO) 1048. This project is in the June 2009 Wet Weather Improvement Plan (WWIP).

Phases	Prior Year	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2016-2021
								Total
Engineering	0	0	0	0	0	450,870	0	450,870
MSD Capital Improvements	0	0	0	0	0	450,870	0	450,870
Total								
<hr/>								
Estimated Personnel Cost	0	0	0	0	0	22,540	0	22,540

SSO 587 Conveyance Sewer

Dept. Priority: 19

Description

This project will provide resources for the replacement of approximately 4,235 linear feet of 15-24 inch sewer to eliminate Sanitary Sewer Overflow (SSO) 587. This project is located in the City of Springdale, Hamilton County, Ohio.

Purpose

The purpose of this project is to eliminate Sanitary Sewer Overflow (SSO) 587. This project is in the June 2009 Wet Weather Improvement Plan (WWIP).

Phases	Prior Year	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2016-2021
								Total
Engineering	0	0	0	0	0	275,640	0	275,640
MSD Capital Improvements	0	0	0	0	0	275,640	0	275,640
Total								
<hr/>								
Estimated Personnel Cost	0	0	0	0	0	13,780	0	13,780



SSO 700 Integrated Watershed Action Plan Implementation

Dept. Priority: 20

Description

This project will provide resources for the installation of approximately 24,929 feet of 30 to 66-inch sewer and tunnel an additional 6,250 feet of 30 to 78-inch sewer. This will convey all flow from upstream Sanitary Sewer Overflows (SSO) 1048 and 587 to the Sanitary Sewer Overflow (SSO) 700 treatment facility.

Purpose

The purpose of this project is to upsize the existing trunk line sewers to convey upstream flows from Sanitary Sewer Overflow (SSO) 1048 and Sanitary Sewer Overflow (SSO) 587 to the Sanitary Sewer Overflow (SSO) 700 Treatment Facility.

Phases	Prior Year	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2016-2021 Total
Engineering	0	0	0	0	0	10,200,180	0	10,200,180
MSD Capital Improvements Total	0	0	0	0	0	10,200,180	0	10,200,180
<hr/>								
Estimated Personnel Cost	0	0	0	0	0	510,010	0	510,010

Pleasant Run Interceptor Replacement

Dept. Priority: 21

Description

This project will provide resources for the replacement of approximately 4,246 feet of 21 to 24-inch sewer from Kemper Road to John Gray Road.

Purpose

The purpose of this project is to replace a portion of the Pleasant Run Interceptor to alleviate water in basement complaints.

Phases	Prior Year	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2016-2021 Total
Engineering	0	0	0	0	0	310,720	0	310,720
MSD Capital Improvements Total	0	0	0	0	0	310,720	0	310,720
<hr/>								
Estimated Personnel Cost	0	0	0	0	0	15,540	0	15,540

Ludlow and Lafayette Parallel Sewer

Dept. Priority: 22

Description

This project will provide resources for the elimination of surcharges of Sanitary Sewer Overflows (SSOs) 645 and 225A for a two year storm design by installation of approximately 1,900 feet of a 24-inch parallel sewer. Although the June 2009 submittal's project description calls for the construction of a new parallel sewer to follow original alignment (1,700 feet of 15-inch sewer), it has been determined that a 24-inch parallel sewer

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was necessary to achieve the desired level of control. This project is in the Clifton neighborhood of the City of Cincinnati.

Purpose

The purpose of this project is to meet the requirements of the Global Consent Decree to eliminate surcharges of Sanitary Sewer Overflows (SSOs) 645 & 225A for a two year storm design. By bypassing the downstream bottleneck, the parallel sewer will eliminate the overflows for SSOs 645 & 225A for the two year storm. Coordination will occur with the Greater Cincinnati Water Works (GCWW) to minimize local disturbance and construction cost.

Phases	Prior Year	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2016-2021 Total
Construction	3,161,000	0	3,161,000	0	0	0	0	3,161,000
MSD Capital Improvements Total	3,161,000	0	3,161,000	0	0	0	0	3,161,000
Estimated Personnel Cost	158,050	0	158,050	0	0	0	0	158,050

CSO 507 Improvements

Dept. Priority: 23

Description

This project will provide resources for improvements to Combined Sewer Overflow (CSO) 507. The Project Description/Design, submitted in June 2009, calls for regulator improvements. This, along with other alternatives, will be examined to address this problem. This project is located in the City of Reading, Hamilton County, Ohio.

Purpose

The purpose of this project is to make improvements to Combined Sewer Overflow (CSO) 507. The June 2009 submittal Project Description / Design calls for regulator improvements.

Phases	Prior Year	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2016-2021 Total
Engineering	0	0	0	0	0	83,210	0	83,210
MSD Capital Improvements Total	0	0	0	0	0	83,210	0	83,210
Estimated Personnel Cost	0	0	0	0	0	4,160	0	4,160

CSO 509 Improvements

Dept. Priority: 24

Description

This project will provide resources for improvements to Combined Sewer Overflow (CSO) 509. The Project Description/Design, submitted in June 2009, calls for regulator improvements. This, along with other alter-



natives, will be examined to address this problem. This project is located in the City of Reading, Hamilton County, Ohio.

Purpose

The purpose of this project is to make improvements to Combined Sewer Overflow (CSO) 509. The June 2009 submittal Project Description / Design calls for regulator improvements.

Phases	Prior Year	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2016-2021
								Total
Engineering	0	0	0	0	0	83,210	0	83,210
MSD Capital Improvements	0	0	0	0	0	83,210	0	83,210
Total								
<hr/>								
Estimated Personnel Cost	0	0	0	0	0	4,160	0	4,160

CSO 510 Improvements

Dept. Priority: 25

Description

This project will provide resources for improvements to Combined Sewer Overflow (CSO) 510. The Project Description/Design, submitted in June 2009, calls for regulator improvements. This, along with other alternatives, will be examined to address this problem. This project is located in the City of Reading, Hamilton County, Ohio.

Purpose

The purpose of this project is to make improvements to Combined Sewer Overflow (CSO) 510. The June 2009 submittal Project Description/Design calls for regulator improvements.

Phases	Prior Year	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2016-2021
								Total
Engineering	0	0	0	0	0	83,210	0	83,210
MSD Capital Improvements	0	0	0	0	0	83,210	0	83,210
Total								
<hr/>								
Estimated Personnel Cost	0	0	0	0	0	4,160	0	4,160

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CSO 508 Sewer Separation

Dept. Priority: 26

Description

This project will provide resources for the separation of sewers to reduce overflows at Combined Sewer Overflow (CSO) 508 as mandated by the approved Wet Weather Improvement Plan (WWIP).

Purpose

The purpose of this project is to separate storm and sanitary flows upstream of Combined Sewer Overflow (CSO) 508. The June 2009 submittal Project Description/Design calls for regulator improvements.

Phases	Prior Year	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2016-2021
								Total
Engineering	0	0	0	0	0	284,670	0	284,670
MSD Capital Improvements	0	0	0	0	0	284,670	0	284,670
Total								
Estimated Personnel Cost	0	0	0	0	0	0	0	0

CSO 513 Sewer Separation

Dept. Priority: 27

Description

This project will provide resources for the reduction of overflows from Combined Sewer Overflow (CSO) 513 by removing stormwater from the upstream combined sewers that are tributaries to Combined Sewer Overflow (CSO) 513.

Purpose

The purpose of this project is to separate sewers to reduce overflows at Combined Sewer Overflow (CSO) 513 as mandated by the approved Wet Weather Improvement Plan (WWIP).

Phases	Prior Year	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2016-2021
								Total
Engineering	0	0	0	0	0	378,040	0	378,040
MSD Capital Improvements	0	0	0	0	0	378,040	0	378,040
Total								
Estimated Personnel Cost	0	0	0	0	0	0	0	0



CSO 514 Sewer Separation

Dept. Priority: 28

Description

This project will provide resources for the removal of storm flow from the combined sewers that are tributaries to Combined Sewer Overflow (CSO) 514 to reduce overflows.

Purpose

The purpose of this project is to separate sewers to reduce overflows at Combined Sewer Overflow (CSO) 514 as mandated by the approved Wet Weather Improvement Plan (WWIP).

Phases	Prior Year	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2016-2021
								Total
Engineering	0	0	0	0	0	193,700	0	193,700
MSD Capital Improvements	0	0	0	0	0	193,700	0	193,700
Total								
Estimated Personnel Cost	0	0	0	0	0	9,690	0	9,690

CSO 179 Sewer Separation

Dept. Priority: 29

Description

This project will provide resources for a partial sewer separation to address the overflows at Combined Sewer Overflow (CSO) 179. This project will install 1,440 linear feet of 12-inch sewer around the Canal Ridge Dump. This project is in the Clifton neighborhood of the City of Cincinnati.

Purpose

The purpose of this project is to address combined sewer overflows at Combined Sewer Overflow (CSO) 179. This project is part of the Upper Northside Bundle and in the Wet Weather Improvement Plan.

Phases	Prior Year	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2016-2021
								Total
Construction	0	1,553,300	0	0	0	0	0	1,553,300
MSD Capital Improvements	0	1,553,300	0	0	0	0	0	1,553,300
Total								
Estimated Personnel Cost	0	77,670	0	0	0	0	0	77,670

SSO 1000 Elimination

Dept. Priority: 30

Description

This project will provide resources for the elimination of Sanitary Sewer Overflow (SSO) 1000. The Project Description/Design, submitted in June 2009, calls for the replacement of approximately 4,400 linear feet of

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the existing main line public sewer. This, along with other alternatives, will be examined to address this problem. This project is in the Pleasant Ridge neighborhood of the City of Cincinnati.

Purpose

The purpose of this project is to eliminate Sanitary Sewer Overflow (SSO) 1000. This Phase 1 Wet Weather Improvement Plan (WWIP) project is part of the Upper Duck Bundle and was included in the June 2009 submittal.

Phases	Prior Year	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2016-2021
								Total
Construction	0	0	0	465,900	0	0	0	465,900
MSD Capital Improvements	0	0	0	465,900	0	0	0	465,900
Total								
Estimated Personnel Cost	0	0	0	23,300	0	0	0	23,300

SSO 228 Elimination

Dept. Priority: 31

Description

This project will provide resources for the elimination of Sanitary Sewer Overflow (SSO) 228. The Project Description/Design, submitted in June 2009, calls for the replacement of approximately 3,100 linear feet of the existing main line public sewer. This, along with other alternatives, will be examined to address this problem. This project is located in the Kennedy Heights neighborhood of the City of Cincinnati.

Purpose

The purpose of this project is to eliminate Sanitary Sewer Overflow (SSO) 228. This Phase 1 Wet Weather Improvement Plan (WWIP) project is part of the Upper Duck Bundle and was included in the June 2009 submittal.

Phases	Prior Year	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2016-2021
								Total
Construction	0	0	1,416,900	0	0	0	0	1,416,900
MSD Capital Improvements	0	0	1,416,900	0	0	0	0	1,416,900
Total								
Estimated Personnel Cost	0	0	70,850	0	0	0	0	70,850



Little Miami WWTP Electrical Feeders

Dept. Priority: 32

Description

This project will provide resources for work to be performed by Duke Energy to upgrade the two independent electrical feeders that originate at the Linwood Substation and feed the Little Miami Wastewater Treatment Plant (LMWWTP). The LMWWTP is located in the East End neighborhood of the City of Cincinnati.

Purpose

The purpose of this project is to upgrade the two electrical feeders from the Linwood Substation that serve the Little Miami Wastewater Treatment Plant (LMWWTP) to increase their capacity to accommodate the proposed additional loads from the other LMWWTP Bundle projects.

Phases	Prior Year	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2016-2021
								Total
Engineering	0	588,800	0	0	0	0	0	588,800
MSD Capital Improvements	0	588,800	0	0	0	0	0	588,800
Total								
<hr/>								
Estimated Personnel Cost	0	29,440	0	0	0	0	0	29,440

Little Miami WWTP Solids Handling Improvements

Dept. Priority: 33

Description

This project will provide resources for the upgrading of the dewatering process from belt filter presses to centrifuges, upgrading the centralized odor control system shared by the solid stream processes, and construct a new sludge dewatering/load out facility with storage silos. This project also includes the construction of an electrical room to house the new main plant primary and secondary switchgear, replacement of the influent aeration flow meters, and an upgrade to the existing sodium hypochlorite and sodium bisulfite storage and feed systems. The Little Miami Wastewater Treatment Plant (LMWWTP) is located in the East End neighborhood of the City of Cincinnati.

Purpose

The purpose of this project is to upgrade the Little Miami Wastewater Treatment Plant (LMWWTP) Bundle which would treat 100 million gallons daily through the entire Wastewater Treatment Plant during wet weather events. The upgrade to the dewatering process is necessary for the additional sludge that will be produced. The new electrical room is necessary because the existing electrical room doesn't have room to expand the existing primary and secondary switchgear to accommodate the additional loads. The replacement of the aeration influent flow meters is due to the aeration tank modifications in Little Miami WWTP Primary / Secondary Treatment Improvement project. The improvements to the chemical storage and feed

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systems is in anticipation of the chlorine contact tank construction in the Little Miami WWTP Electrical and Disinfection Improvements project.

Phases	Prior Year	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2016-2021 Total
Construction	0	0	0	19,576,300	0	0	0	19,576,300
Engineering	0	1,523,100	0	0	0	0	0	1,523,100
MSD Capital Improvements Total	0	1,523,100	0	19,576,300	0	0	0	21,099,400
Estimated Personnel Cost	0	76,160	0	978,820	0	0	0	1,054,980

Little Miami WWTP Electrical and Disinfection Improvements

Dept. Priority: 34

Description

This project will provide resources for the replacement of existing medium-voltage electrical equipment at the Secondary Treatment Building, Four Mile Pump Station, and Little Miami Pump Station as well as the main plant primary and secondary switchgear. This project also includes the construction of additional disinfection chemical storage tanks and an additional chlorine contact tank. The Little Miami Waste Water Treatment Plant is located in the East End neighborhood of the City of Cincinnati.

Purpose

The purpose of this project is to replace the existing medium-voltage electrical equipment which has exceeded its useful life. Replacement of this electrical equipment will also establish an electrical backbone for the implementation of the subsequent projects that come out of the Little Miami Wastewater Treatment Plant Bundle. The disinfection system improvements are necessary to increase contact time for disinfection, to increase the disinfection capacity to 100 million gallons daily, and to provide redundant chlorine contact tanks to facilitate maintenance and cleaning.

Phases	Prior Year	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2016-2021 Total
Construction	0	0	1,575,900	0	0	16,744,700	0	18,320,600
MSD Capital Improvements Total	0	0	1,575,900	0	0	16,744,700	0	18,320,600
Estimated Personnel Cost	0	0	78,800	0	0	837,240	0	916,040

Little Miami WWTP Preliminary Treatment Improvements

Dept. Priority: 35

Description

This project will provide resources for improvements to the coarse screens upstream of the influent pumps, medium screens downstream of the influent pumps, and replacement of the grit tanks with tray type grit removal facilities, replacement of the Little Miami Pump Station influent pumps and drives, and the con-



struction of a Headbox with Parshall flumes to receive all influent flows. The Little Miami Waste Water Treatment Plant is located in the East End neighborhood of the City of Cincinnati.

Purpose

The purpose of this project is to replace screens to reduce operations and maintenance associated with blinding issues. The grit tanks need to be replaced due to antiquated technology and difficulty in obtaining parts. The Little Miami Pump Station's pumps/drives need to be replaced to ensure they have sufficient head and flow capacity to discharge through the Headbox and out the auxiliary outfall. The Headbox will eliminate the reliance on separate dry weather and excess flow pumps to split the influent flow between the Wastewater Treatment Plant and auxiliary outfall. The dry weather and excess flow pumps will be able to operate together as influent pumps and will be better able to maintain stable wet well levels. This will also improve the operation of the real time control.

Phases	Prior Year	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2016-2021
								Total
Engineering	0	0	0	0	0	2,631,500	0	2,631,500
MSD Capital Improvements	0	0	0	0	0	2,631,500	0	2,631,500
Total								
Estimated Personnel Cost	0	0	0	0	0	131,580	0	131,580

CSO 135 Improvements

Dept. Priority: 36

Description

This project will provide resources for improvements to Combined Sewer Overflow (CSO) 135. The Project Description/Design submitted in June 2009 calls for regulator improvements. This, along with other alternatives, will be examined to address this problem. This project is located in Columbia Township, Hamilton County, Ohio.

Purpose

The purpose of this project is to make regulator improvements to Combined Sewer Overflow (CSO) 135. This Phase 1 Wet Weather Improvement Plan (WWIP) project is part of the Upper Duck Bundle and was included in the June 2009 submittal.

Phases	Prior Year	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2016-2021
								Total
Engineering	0	0	0	0	0	57,000	0	57,000
Land	0	0	0	0	0	6,000	0	6,000
MSD Capital Improvements	0	0	0	0	0	63,000	0	63,000
Total								
Estimated Personnel Cost	0	0	0	0	0	3,150	0	3,150

CSO 43 Improvements

Dept. Priority: 37

Description

This project will provide resources for improvements to Combined Sewer Overflow (CSO) 43. The Project Description/Design, submitted in June 2009, calls for regulator improvements. This, along with other alter-

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natives, will be examined to address this problem. This project is located on Charloe Street just east of Saguin Street in the Madisonville neighborhood of the City of Cincinnati.

Purpose

The purpose of this project is to make improvements to Combined Sewer Overflow (CSO) 43. This Phase 1 Wet Weather Improvement Plan (WWIP) project is part of the Upper Duck Bundle and was included in the June 2009 submittal.

Phases	Prior Year	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2016-2021
								Total
Engineering	0	0	0	0	0	59,850	0	59,850
MSD Capital Improvements	0	0	0	0	0	59,850	0	59,850
Total								
Estimated Personnel Cost	0	0	0	0	0	0	0	0

CSO 54 Improvements

Dept. Priority: 38

Description

This project will provide resources for improvements to Combined Sewer Overflow (CSO) 54. The Project Description/Design, submitted in June 2009, calls for regulator improvements. This, along with other alternatives, will be examined to address this problem. This project is located in the Pleasant Ridge neighborhood of the City of Cincinnati.

Purpose

The purpose of this project is to make improvements to Combined Sewer Overflow (CSO) 54. This Phase 1 Wet Weather Improvement Plan (WWIP) project is part of the Upper Duck Bundle and was included in the June 2009 submittal.

Phases	Prior Year	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2016-2021
								Total
Construction	0	0	208,700	0	0	0	0	208,700
MSD Capital Improvements	0	0	208,700	0	0	0	0	208,700
Total								
Estimated Personnel Cost	0	0	10,440	0	0	0	0	10,440

CSO 214 Storage Facility

Dept. Priority: 39

Description

This project will provide resources for increasing the storage in the collection system at Combined Sewer Overflow (CSO) 214. The Project Description/Design submitted in June 2009 calls for the construction of a



storage facility. This, along with other alternatives, will be examined to address this problem. This project is located in Columbia Township, Hamilton County, Ohio.

Purpose

The purpose of this project is to increase storage in the collection system at Combined Sewer Overflow (CSO) 214. This Phase 1 Wet Weather Improvement Plan (WWIP) project is part of the Upper Duck Bundle and was included in the June 2009 submittal.

Phases	Prior Year	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2016-2021
								Total
Engineering	0	0	0	0	0	369,000	0	369,000
Land	0	0	0	0	0	500,000	0	500,000
MSD Capital Improvements Total	0	0	0	0	0	869,000	0	869,000
Estimated Personnel Cost	0	0	0	0	0	43,450	0	43,450

CSO 551 Sewer Separation

Dept. Priority: 40

Description

This project will provide resources for the reduction of overflows at Combined Sewer Overflow (CSO) 551. The Project Description/Design, submitted in June 2009, calls for sewer separation. This, along with other alternatives, will be examined to address this problem. This project is located in the Oakley neighborhood of the City of Cincinnati.

Purpose

The purpose of this project is to separate sewers to reduce overflows at Combined Sewer Overflow (CSO) 551. This Phase 1 Wet Weather Improvement Plan (WWIP) project is part of the Upper Duck Bundle and was included in the June 2009 submittal.

Phases	Prior Year	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2016-2021
								Total
Construction	0	0	0	1,292,800	0	0	0	1,292,800
MSD Capital Improvements Total	0	0	0	1,292,800	0	0	0	1,292,800
Estimated Personnel Cost	0	0	0	64,640	0	0	0	64,640

CSO 552 Improvements

Dept. Priority: 41

Description

This project will provide resources for improvements to Combined Sewer Overflow (CSO) 552. The Project Description/Design, submitted in June 2009, calls for regulator improvements. This, along with other alter-

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natives, will be examined to address this problem. This project is located in the Oakley neighborhood of the City of Cincinnati.

Purpose

The purpose of this project is to make improvements to Combined Sewer Overflow (CSO) 552. This Phase 1 Wet Weather Improvement Plan (WWIP) project is part of the Upper Duck Bundle and was included in the June 2009 submittal.

Phases	Prior Year	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2016-2021
								Total
Engineering	0	0	0	0	0	458,000	0	458,000
Land	0	0	0	0	0	284,000	0	284,000
MSD Capital Improvements Total	0	0	0	0	0	742,000	0	742,000
Estimated Personnel Cost	0	0	0	0	0	37,100	0	37,100

CSO 553 Sewer Separation

Dept. Priority: 42

Description

This project will provide resources for the reduction of overflows at Combined Sewer Overflow (CSO) 553. The Project Description/Design, submitted in June 2009, calls for sewer separation. This, along with other alternatives, will be examined to address this problem. This project is located in the Oakley neighborhood of the City of Cincinnati.

Purpose

The purpose of this project is to separate sewers to reduce overflows at Combined Sewer Overflow (CSO) 553. This Phase 1 Wet Weather Improvement Plan (WWIP) project is part of the Upper Duck Bundle and was included in the June 2009 submittal.

Phases	Prior Year	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2016-2021
								Total
Engineering	0	0	0	0	0	56,000	0	56,000
MSD Capital Improvements Total	0	0	0	0	0	56,000	0	56,000
Estimated Personnel Cost	0	0	0	0	0	2,800	0	2,800

Sewer Relining Trenchless Technology Program 2015

Dept. Priority: 43

Description

This project will provide resources for conducting internal lining of sewers and external lining of aerial sewers throughout the system as a cost effective method of rehabilitating structurally deteriorated sewers. This program will include, but not limit itself to, spiral wound pipe, pipe bursting, carbon filament wrapping, directional drilling, and jack-and-boring. These projects are identified through investigations of the sewer



lines and are prioritized based on a standardized condition assessment procedure. This program is expected to require funding beyond the present five-year Capital Improvement Plan (CIP) window of 2015-2019.

Purpose

The purpose of this project is to provide lining which provides a cost-effective method of rehabilitating deteriorated sewers while improving the hydraulic performance of the sewer. This work may also increase development credits.

Phases	Prior Year	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2016-2021
								Total
Construction	0	5,200,000	0	0	0	0	0	5,200,000
MSD Capital Improvements	0	5,200,000	0	0	0	0	0	5,200,000
Total								
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Estimated Personnel Cost	0	260,000	0	0	0	0	0	260,000

Sewer Relining Trenchless Technology Program 2016

Dept. Priority: 44

Description

This project will provide resources for conducting internal lining of sewers and external lining of aerial sewers throughout the system as a cost effective method of rehabilitating structurally deteriorated sewers. This program will include, but not limit itself to, spiral wound pipe, pipe bursting, carbon filament wrapping, directional drilling, and jack-and-boring. These projects are identified through investigations of the sewer lines and are prioritized based on a standardized condition assessment procedure. This program is expected to require funding beyond the present five-year Capital Improvement Plan (CIP) window of 2015-2019.

Purpose

The purpose of this project is to provide lining which provides a cost-effective method of rehabilitating deteriorated sewers while improving the hydraulic performance of the sewer. This work may also increase development credits.

Phases	Prior Year	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2016-2021
								Total
Construction	0	0	5,200,000	0	0	0	0	5,200,000
MSD Capital Improvements	0	0	5,200,000	0	0	0	0	5,200,000
Total								
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Estimated Personnel Cost	0	0	260,000	0	0	0	0	260,000

Sewer Relining Trenchless Technology Program 2017

Dept. Priority: 45

Description

This project will provide resources for conducting internal lining of sewers and external lining of aerial sewers throughout the system as a cost effective method of rehabilitating structurally deteriorated sewers. This program will include, but not limit itself to, spiral wound pipe, pipe bursting, carbon filament wrapping, directional drilling, and jack-and-boring. These projects are identified through investigations of the sewer

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lines and are prioritized based on a standardized condition assessment procedure. This program is expected to require funding beyond the present five-year Capital Improvement Plan (CIP) window of 2015-2019.

Purpose

The purpose of this project is to provide lining which provides a cost-effective method of rehabilitating deteriorated sewers while improving the hydraulic performance of the sewer. This work may also increase development credits.

Phases	Prior Year	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2016-2021
								Total
Construction	0	0	0	5,200,000	0	0	0	5,200,000
MSD Capital Improvements	0	0	0	5,200,000	0	0	0	5,200,000
Total								
Estimated Personnel Cost	0	0	0	260,000	0	0	0	260,000

Sewer Relining Trenchless Technology Program 2018

Dept. Priority: 46

Description

This project will provide resources for conducting internal lining of sewers and external lining of aerial sewers throughout the system as a cost effective method of rehabilitating structurally deteriorated sewers. This program will include, but not limit itself to, spiral wound pipe, pipe bursting, carbon filament wrapping, directional drilling, and jack-and-boring. These projects are identified through investigations of the sewer lines and are prioritized based on a standardized condition assessment procedure. This program is expected to require funding beyond the present five-year Capital Improvement Plan (CIP) window of 2015-2019.

Purpose

The purpose of this project is to provide lining which provides a cost-effective method of rehabilitating deteriorated sewers while improving the hydraulic performance of the sewer. This work may also increase development credits.

Phases	Prior Year	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2016-2021
								Total
Construction	0	0	0	0	5,200,000	0	0	5,200,000
MSD Capital Improvements	0	0	0	0	5,200,000	0	0	5,200,000
Total								
Estimated Personnel Cost	0	0	0	0	260,000	0	0	260,000

Sewer Relining Trenchless Technology Program 2019

Dept. Priority: 47

Description

This project will provide resources for conducting internal lining of sewers and external lining of aerial sewers throughout the system as a cost effective method of rehabilitating structurally deteriorated sewers. This program will include, but not limit itself to, spiral wound pipe, pipe bursting, carbon filament wrapping, directional drilling, and jack-and-boring. These projects are identified through investigations of the sewer



lines and are prioritized based on a standardized condition assessment procedure. This program is expected to require funding beyond the present five-year Capital Improvement Plan (CIP) window of 2015-2019.

Purpose

The purpose of this project is to provide lining which provides a cost-effective method of rehabilitating deteriorated sewers while improving the hydraulic performance of the sewer. This work may also increase development credits.

Phases	Prior Year	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2016-2021
								Total
Construction	0	0	0	0	0	5,200,000	0	5,200,000
MSD Capital Improvements	0	0	0	0	0	5,200,000	0	5,200,000
Total								
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Estimated Personnel Cost	0	0	0	0	0	260,000	0	260,000

Manhole Rehabilitation Trenchless Technology Program 2015

Dept. Priority: 48

Description

This project will provide resources for a cost effective method of rehabilitating structurally deteriorated manholes throughout the system. Manhole rehabilitation projects are identified through investigations and are prioritized based on a standardized condition assessment procedure. Although a minimum of 150 manholes are required to be rehabilitated annually, the goal is 450. This program is expected to require future funding beyond the present five-year Capital Improvement Plan (CIP) window of 2015-2019.

Purpose

The purpose of this project is to meet the requirements of the Global Consent Decree which requires the rehabilitation of 150 manholes each year to reduce infiltration and inflow upstream of Sanitary Sewer Overflows (SSO) to reduce overflows. This project creates development credits upstream of a SSO.

Phases	Prior Year	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2016-2021
								Total
Construction	0	1,000,000	0	0	0	0	0	1,000,000
MSD Capital Improvements	0	1,000,000	0	0	0	0	0	1,000,000
Total								
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Estimated Personnel Cost	0	50,000	0	0	0	0	0	50,000

Manhole Rehabilitation Trenchless Technology Program 2016

Dept. Priority: 49

Description

This project will provide resources for a cost effective method of rehabilitating structurally deteriorated manholes throughout the system. Manhole rehabilitation projects are identified through investigations and are prioritized based on a standardized condition assessment procedure. Although a minimum of 150 man-

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holes are required to be rehabilitated annually, the goal is 450. This program is expected to require future funding beyond the present five-year Capital Improvement Plan (CIP) window of 2015-2019.

Purpose

The purpose of this project is to meet the requirements of the Global Consent Decree which requires the rehabilitation of 150 manholes each year to reduce infiltration and inflow upstream of Sanitary Sewer Overflows (SSO) to reduce overflows. This project creates development credits upstream of a SSO.

Phases	Prior Year	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2016-2021
								Total
Construction	0	0	1,000,000	0	0	0	0	1,000,000
MSD Capital Improvements	0	0	1,000,000	0	0	0	0	1,000,000
Total								
Estimated Personnel Cost	0	0	50,000	0	0	0	0	50,000

Manhole Rehabilitation Trenchless Technology Program 2017

Dept. Priority: 50

Description

This project will provide resources for a cost effective method of rehabilitating structurally deteriorated manholes throughout the system. Manhole rehabilitation projects are identified through investigations and are prioritized based on a standardized condition assessment procedure. Although a minimum of 150 manholes are required to be rehabilitated annually, the goal is 450. This program is expected to require future funding beyond the present five-year Capital Improvement Plan (CIP) window of 2015-2019.

Purpose

The purpose of this project is to meet the requirements of the Global Consent Decree which requires the rehabilitation of 150 manholes each year to reduce infiltration and inflow upstream of Sanitary Sewer Overflows (SSO) to reduce overflows. This project creates development credits upstream of a SSO.

Phases	Prior Year	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2016-2021
								Total
Construction	0	0	0	1,000,000	0	0	0	1,000,000
MSD Capital Improvements	0	0	0	1,000,000	0	0	0	1,000,000
Total								
Estimated Personnel Cost	0	0	0	50,000	0	0	0	50,000

Manhole Rehabilitation Trenchless Technology Program 2018

Dept. Priority: 51

Description

This project will provide resources for a cost effective method of rehabilitating structurally deteriorated manholes throughout the system. Manhole rehabilitation projects are identified through investigations and are prioritized based on a standardized condition assessment procedure. Although a minimum of 150 man-



holes are required to be rehabilitated annually, the goal is 450. This program is expected to require future funding beyond the present five-year Capital Improvement Plan (CIP) window of 2015-2019.

Purpose

The purpose of this project is to meet the requirements of the Global Consent Decree which requires the rehabilitation of 150 manholes each year to reduce infiltration and inflow upstream of Sanitary Sewer Overflows (SSO) to reduce overflows. This project creates development credits upstream of a SSO.

Phases	Prior Year	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2016-2021
								Total
Construction	0	0	0	0	1,000,000	0	0	1,000,000
MSD Capital Improvements	0	0	0	0	1,000,000	0	0	1,000,000
Total								
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Estimated Personnel Cost	0	0	0	0	50,000	0	0	50,000

Manhole Rehabilitation Trenchless Technology Program 2019

Dept. Priority: 52

Description

This project will provide resources for a cost effective method of rehabilitating structurally deteriorated manholes throughout the system. Manhole rehabilitation projects are identified through investigations and are prioritized based on a standardized condition assessment procedure. Although a minimum of 150 manholes are required to be rehabilitated annually, the goal is 450. This program is expected to require future funding beyond the present five-year Capital Improvement Plan (CIP) window of 2015-2019.

Purpose

The purpose of this project is to meet the requirements of the Global Consent Decree which requires the rehabilitation of 150 manholes each year to reduce infiltration and inflow upstream of Sanitary Sewer Overflows (SSO) to reduce overflows. This project creates development credits upstream of a SSO.

Phases	Prior Year	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2016-2021
								Total
Construction	0	0	0	0	0	1,000,000	0	1,000,000
MSD Capital Improvements	0	0	0	0	0	1,000,000	0	1,000,000
Total								
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Estimated Personnel Cost	0	0	0	0	0	50,000	0	50,000

Home Sewer Treatment System Extensions 2015

Dept. Priority: 53

Description

This project will provide resources for the overall Home Sewer Treatment System (HSTS) Elimination program by funding planning and petition services for various local sewer projects and sewer lateral projects in all watersheds.

Purpose

The purpose of this project is to provide public funding for planning and petition services in support of various local sewer projects and sewer lateral projects. The local sewer projects and sewer lateral projects will

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convert Home Sewer Treatment Systems (HSTS) to sewer service thereby reducing the discharge of pollutants to Wet Weather Improvement Plan (WWIP) watersheds. Failing or improperly functioning HSTS are a source of pollutants that have been linked to dry weather bacterial exceedances. This program is identified in the Global Consent Decree.

Phases	Prior Year	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2016-2021
								Total
Engineering	0	200,000	0	0	0	0	0	200,000
MSD Capital Improvements	0	200,000	0	0	0	0	0	200,000
Total								
Estimated Personnel Cost	0	10,000	0	0	0	0	0	10,000

Home Sewer Treatment System Extensions 2016

Dept. Priority: 54

Description

This project will provide resources for the overall Home Sewer Treatment System (HSTS) Elimination program by funding planning and petition services for various local sewer projects and sewer lateral projects in all watersheds.

Purpose

The purpose of this project is to provide public funding for planning and petition services in support of various local sewer projects and sewer lateral projects. The local sewer projects and sewer lateral projects will convert Home Sewer Treatment Systems (HSTS) to sewer service thereby reducing the discharge of pollutants to Wet Weather Improvement Plan (WWIP) watersheds. Failing or improperly functioning HSTS are a source of pollutants that have been linked to dry weather bacterial exceedances. This program is identified in the Global Consent Decree.

Phases	Prior Year	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2016-2021
								Total
Engineering	0	0	200,000	0	0	0	0	200,000
MSD Capital Improvements	0	0	200,000	0	0	0	0	200,000
Total								
Estimated Personnel Cost	0	0	10,000	0	0	0	0	10,000

Home Sewer Treatment System Extensions 2017

Dept. Priority: 55

Description

This project will provide resources for the overall Home Sewer Treatment System (HSTS) Elimination program by funding planning and petition services for various local sewer projects and sewer lateral projects in all watersheds.

Purpose

The purpose of this project is to provide public funding for planning and petition services in support of various local sewer projects and sewer lateral projects. The local sewer projects and sewer lateral projects will convert Home Sewer Treatment Systems (HSTS) to sewer service thereby reducing the discharge of pollutants to Wet Weather Improvement Plan (WWIP) watersheds. Failing or improperly functioning HSTS are a



source of pollutants that have been linked to dry weather bacterial exceedances. This program is identified in the Global Consent Decree.

Phases	Prior Year	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2016-2021 Total
Engineering	0	0	0	200,000	0	0	0	200,000
MSD Capital Improvements	0	0	0	200,000	0	0	0	200,000
Total								
Estimated Personnel Cost	0	0	0	10,000	0	0	0	10,000

Home Sewer Treatment System Extensions 2018

Dept. Priority: 56

Description

This project will provide resources for the overall Home Sewer Treatment System (HSTS) Elimination program by funding planning and petition services for various local sewer projects and sewer lateral projects in all watersheds.

Purpose

The purpose of this project is to provide public funding for planning and petition services in support of various local sewer projects and sewer lateral projects. The local sewer projects and sewer lateral projects will convert Home Sewer Treatment Systems (HSTS) to sewer service thereby reducing the discharge of pollutants to Wet Weather Improvement Plan (WWIP) watersheds. Failing or improperly functioning HSTS are a source of pollutants that have been linked to dry weather bacterial exceedances. This program is identified in the Global Consent Decree.

Phases	Prior Year	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2016-2021 Total
Engineering	0	0	0	0	200,000	0	0	200,000
MSD Capital Improvements	0	0	0	0	200,000	0	0	200,000
Total								
Estimated Personnel Cost	0	0	0	0	10,000	0	0	10,000

Home Sewer Treatment System Extensions 2019

Dept. Priority: 57

Description

This project will provide resources for the overall Home Sewer Treatment System (HSTS) Elimination program by funding planning and petition services for various local sewer projects and sewer lateral projects in all watersheds.

Purpose

The purpose of this project is to provide public funding for planning and petition services in support of various local sewer projects and sewer lateral projects. The local sewer projects and sewer lateral projects will convert Home Sewer Treatment Systems (HSTS) to sewer service thereby reducing the discharge of pollutants to Wet Weather Improvement Plan (WWIP) watersheds. Failing or improperly functioning HSTS are a

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source of pollutants that have been linked to dry weather bacterial exceedances. This program is identified in the Global Consent Decree.

Phases	Prior Year	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2016-2021 Total
Engineering	0	0	0	0	0	200,000	0	200,000
MSD Capital Improvements	0	0	0	0	0	200,000	0	200,000
Total								
Estimated Personnel Cost	0	0	0	0	0	10,000	0	10,000

Wet Weather Program Management and Support Services 2015

Dept. Priority: 58

Description

This project will provide resources for the continued use of Program Management Services which is crucial for maintaining the current momentum required to complete Phase 1 of the Wet Weather Improvement Program (WWIP), streamline the Asset Management Program, and develop an optimized and affordable schedule for Phase 2 (and future phases) of the WWIP. This project funds the Enterprise Management and Program Controls services necessary to carry out the Capital Program. Activities performed include regulatory coordination, compliance reporting, project and program scheduling, estimating, controls, risk management, and communications.

Purpose

The purpose of this project is to ensure all final Wet Weather Improvement Program (WWIP) milestones are fully satisfied. The Metropolitan Sewer District (MSD) uses a mix of employee staff and supplemental outside professional consultants to manage and report on the multiple projects in planning, design, and construction phases. MSD continues to integrate some of the supplemental staff positions with MSD personnel. Due to the size and complexity of the capital program, supplemental staffing provided by external consultants will continue to be utilized over the next several years.

Phases	Prior Year	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2016-2021 Total
Engineering	0	5,300,000	0	0	0	0	0	5,300,000
MSD Capital Improvements	0	5,300,000	0	0	0	0	0	5,300,000
Total								
Estimated Personnel Cost	0	265,000	0	0	0	0	0	265,000

Wet Weather Program Management and Support Services 2016

Dept. Priority: 59

Description

This project will provide resources for the continued use of Program Management Services which is crucial for maintaining the current momentum required to complete Phase 1 of the Wet Weather Improvement Program (WWIP), streamline the Asset Management Program, and develop an optimized and affordable schedule for Phase 2 (and future phases) of the WWIP. This project funds the Enterprise Management and Program Controls services necessary to carry out the Capital Program. Activities performed include regula-



tory coordination, compliance reporting, project and program scheduling, estimating, controls, risk management, and communications.

Purpose

The purpose of this project is to support the internal efforts, supplemental staff and professional services necessary to carry out the Wet Weather Program. The activities will include project and program scheduling, project estimating, project controls, risk management efforts, program communications and outreach services.

Phases	Prior Year	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2016-2021 Total
Engineering	0	0	5,300,000	0	0	0	0	5,300,000
MSD Capital Improvements	0	0	5,300,000	0	0	0	0	5,300,000
Total								
Estimated Personnel Cost	0	0	265,000	0	0	0	0	265,000

Wet Weather Program Management and Support Services 2017

Dept. Priority: 60

Description

This project will provide resources for the continued use of Program Management Services which is crucial for maintaining the current momentum required to complete Phase 1 of the Wet Weather Improvement Program (WWIP), streamline the Asset Management Program, and develop an optimized and affordable schedule for Phase 2 (and future phases) of the WWIP. This project funds the Enterprise Management and Program Controls services necessary to carry out the Capital Program. Activities performed include regulatory coordination, compliance reporting, project and program scheduling, estimating, controls, risk management, and communications.

Purpose

The purpose of this project is to support the internal efforts, supplemental staff and professional services necessary to carry out the Wet Weather Program. The activities will include project and program scheduling, project estimating, project controls, risk management efforts, program communications and outreach services.

Phases	Prior Year	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2016-2021 Total
Engineering	0	0	0	5,300,000	0	0	0	5,300,000
MSD Capital Improvements	0	0	0	5,300,000	0	0	0	5,300,000
Total								
Estimated Personnel Cost	0	0	0	265,000	0	0	0	265,000

Wet Weather Program Management and Support Services 2018

Dept. Priority: 61

Description

This project will provide resources for the continued use of Program Management Services which is crucial for maintaining the current momentum required to complete Phase 1 of the Wet Weather Improvement Program (WWIP), streamline the Asset Management Program, and develop an optimized and affordable sched-

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ule for Phase 2 (and future phases) of the WWIP. This project funds the Enterprise Management and Program Controls services necessary to carry out the Capital Program. Activities performed include regulatory coordination, compliance reporting, project and program scheduling, estimating, controls, risk management, and communications.

Purpose

The purpose of this project is to support the internal efforts, supplemental staff and professional services necessary to carry out the Wet Weather Program. The activities will include project and program scheduling, project estimating, project controls, risk management efforts, program communications and outreach services.

Phases	Prior Year	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2016-2021 Total
Engineering	0	0	0	0	5,300,000	0	0	5,300,000
MSD Capital Improvements	0	0	0	0	5,300,000	0	0	5,300,000
Total								
Estimated Personnel Cost	0	0	0	0	265,000	0	0	265,000

Wet Weather Program Management and Support Services 2019

Dept. Priority: 62

Description

This project will provide resources for the continued use of Program Management Services which is crucial for maintaining the current momentum required to complete Phase 1 of the Wet Weather Improvement Program (WWIP), streamline the Asset Management Program, and develop an optimized and affordable schedule for Phase 2 (and future phases) of the WWIP. This project funds the Enterprise Management and Program Controls services necessary to carry out the Capital Program. Activities performed include regulatory coordination, compliance reporting, project and program scheduling, estimating, controls, risk management, and communications.

Purpose

The purpose of this project is to support the internal efforts, supplemental staff and professional services necessary to carry out the Wet Weather Program. The activities will include project and program scheduling, project estimating, project controls, risk management efforts, program communications and outreach services.

Phases	Prior Year	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2016-2021 Total
Engineering	0	0	0	0	0	5,400,000	0	5,400,000
MSD Capital Improvements	0	0	0	0	0	5,400,000	0	5,400,000
Total								
Estimated Personnel Cost	0	0	0	0	0	270,000	0	270,000



Hamilton County Utility Oversight and Coordination 2015

Dept. Priority: 63

Description

This project will provide resources for a Monitor Team that will work closely with Metropolitan Sewer District (MSD) employees and supplemental staff to ensure that projects are built on time and on budget to minimize risk to the County and to rate payers as an oversight function. Hamilton County's continued use of County staff and outside consultants and attorneys is critical to ensure that rate payers are funding only those projects that are necessary and cost effective to adhere to the terms of Phase 1 of the Wet Weather Improvement Program (WWIP) as well as ongoing Asset Management projects and allowances.

Purpose

The purpose of this project is to execute the Wet Weather Improvement Program (WWIP) as defined in the Global Consent Decree. To ensure that projects being built adhere to the WWIP and are cost effective and on schedule, a Monitor Team has been created to help oversee the capital program. The Monitor Team consists of County staff, consultants, and attorneys.

Phases	Prior Year	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2016-2021 Total
Engineering	0	2,700,000	0	0	0	0	0	2,700,000
MSD Capital Improvements	0	2,700,000	0	0	0	0	0	2,700,000
Total								
Estimated Personnel Cost	0	135,000	0	0	0	0	0	135,000

Hamilton County Utility Oversight and Coordination 2016

Dept. Priority: 64

Description

This project will provide resources for a Monitor Team that will work closely with Metropolitan Sewer District (MSD) employees and supplemental staff to ensure that projects are built on time and on budget to minimize risk to the County and to rate payers as an oversight function. Hamilton County's continued use of County staff and outside consultants and attorneys is critical to ensure that rate payers are funding only those projects that are necessary and cost effective to adhere to the terms of Phase 1 of the Wet Weather Improvement Program (WWIP) as well as ongoing Asset Management projects and allowances.

Purpose

The purpose of this project is to execute the Wet Weather Improvement Program (WWIP) as defined in the Global Consent Decree. To ensure that projects being built adhere to the WWIP and are cost effective and on schedule, a Monitor Team has been created to help oversee the capital program. The Monitor Team consists of County staff, consultants, and attorneys.

Phases	Prior Year	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2016-2021 Total
Engineering	0	0	2,700,000	0	0	0	0	2,700,000
MSD Capital Improvements	0	0	2,700,000	0	0	0	0	2,700,000
Total								
Estimated Personnel Cost	0	0	135,000	0	0	0	0	135,000

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Hamilton County Utility Oversight and Coordination 2017

Dept. Priority: 65

Description

This project will provide resources for a Monitor Team that will work closely with Metropolitan Sewer District (MSD) employees and supplemental staff to ensure that projects are built on time and on budget to minimize risk to the County and to rate payers as an oversight function. Hamilton County's continued use of County staff and outside consultants and attorneys is critical to ensure that rate payers are funding only those projects that are necessary and cost effective to adhere to the terms of Phase 1 of the Wet Weather Improvement Program (WWIP) as well as ongoing Asset Management projects and allowances.

Purpose

The purpose of this project is to execute the Wet Weather Improvement Program (WWIP) as defined in the Global Consent Decree. To ensure that projects being built adhere to the WWIP and are cost effective and on schedule, a Monitor Team has been created to help oversee the capital program. The Monitor Team consists of County staff, consultants, and attorneys.

Phases	Prior Year	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2016-2021 Total
Engineering	0	0	0	2,700,000	0	0	0	2,700,000
MSD Capital Improvements	0	0	0	2,700,000	0	0	0	2,700,000
Total								
Estimated Personnel Cost	0	0	0	135,000	0	0	0	135,000

Hamilton County Utility Oversight and Coordination 2018

Dept. Priority: 66

Description

This project will provide resources for a Monitor Team that will work closely with Metropolitan Sewer District (MSD) employees and supplemental staff to ensure that projects are built on time and on budget to minimize risk to the County and to rate payers as an oversight function. Hamilton County's continued use of County staff and outside consultants and attorneys is critical to ensure that rate payers are funding only those projects that are necessary and cost effective to adhere to the terms of Phase 1 of the Wet Weather Improvement Program (WWIP) as well as ongoing Asset Management projects and allowances.

Purpose

The purpose of this project is to execute the Wet Weather Improvement Program (WWIP) as defined in the Global Consent Decree. To ensure that projects being built adhere to the WWIP and are cost effective and on schedule, a Monitor Team has been created to help oversee the capital program. The Monitor Team consists of County staff, consultants, and attorneys.

Phases	Prior Year	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2016-2021 Total
Engineering	0	0	0	0	2,700,000	0	0	2,700,000
MSD Capital Improvements	0	0	0	0	2,700,000	0	0	2,700,000
Total								
Estimated Personnel Cost	0	0	0	0	135,000	0	0	135,000



Hamilton County Utility Oversight and Coordination 2019

Dept. Priority: 67

Description

This project will provide resources for a Monitor Team that will work closely with Metropolitan Sewer District (MSD) employees and supplemental staff to ensure that projects are built on time and on budget to minimize risk to the County and to rate payers as an oversight function. Hamilton County's continued use of County staff and outside consultants and attorneys is critical to ensure that rate payers are funding only those projects that are necessary and cost effective to adhere to the terms of Phase 1 of the Wet Weather Improvement Program (WWIP) as well as ongoing Asset Management projects and allowances.

Purpose

The purpose of this project is to execute the Wet Weather Improvement Program (WWIP) as defined in the Global Consent Decree. To ensure that projects being built adhere to the WWIP and are cost effective and on schedule, a Monitor Team has been created to help oversee the capital program. The Monitor Team consists of County staff, consultants, and attorneys.

Phases	Prior Year	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2016-2021
								Total
Engineering	0	0	0	0	0	2,700,000	0	2,700,000
MSD Capital Improvements	0	0	0	0	0	2,700,000	0	2,700,000
Total								
<hr/>								
Estimated Personnel Cost	0	0	0	0	0	135,000	0	135,000

North Fairmount Bioswale Project

Dept. Priority: 68

Description

This project will provide resources for a bioretention system that will receive stormwater diverted from street storm inlets. Any overflow of the bioretention system will discharge to the 9 foot diameter combined sewer in Holliday Street. This project is located between Beekman Street and Linden Street along Denham Street in the North Fairmount neighborhood of the City of Cincinnati.

Purpose

The purpose of this project is to implement part of the overall watershed-based strategy for Combined Sewer Overflow (CSO) 10 to manage wet weather and improve the water quality of receiving streams in the Greater Cincinnati area. The project will manage stormwater through green infrastructure and serve as a gateway feature and community asset to North Fairmount and the surrounding areas. It complements a stormwater control strategy currently under design and will include the remainder of the street block. As part of the watershed strategy, this project site will be part of the long-term vision for sewer separation.

Phases	Prior Year	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2016-2021
								Total
Construction	0	0	0	381,000	0	0	0	381,000
MSD Capital Improvements	0	0	0	381,000	0	0	0	381,000
Total								
<hr/>								
Estimated Personnel Cost	0	0	0	19,050	0	0	0	19,050



Lower Muddy Creek Sustainable Watershed Evaluation Plan

Dept. Priority: 69

Description

This project will provide resources for the evaluation of watersheds to facilitate opportunities to reduce Combined Sewer Overflows (CSO) and make system improvements for future development. This project will help address future wet weather, asset management, and coordination efforts in a systematic and proactive manner. The Lower Muddy Creek Sustainable Watershed Evaluation Plan will address the Lower Muddy Creek watershed. This project is located in the Muddy Creek sewershed within Hamilton County, Ohio.

Purpose

The purpose of this project is to continue the Sustainable Watershed Evaluation Plans anticipated in the Global Consent Decree under the Sustainable Program to allow for a systematic review and planning for the service area. Planning will result in reduced Combined Sewer Overflows (CSO), perform asset management, improve water quality, coordinate with communities, and position the service area for future growth. These evaluations are being coordinated with state and local transportation departments, City Departments, and neighborhood stakeholders. The preliminary watershed master plans developed in this process will provide the basis for future projects in the Wet Weather Improvement Plan (WWIP).

Phases	Prior Year	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2016-2021
								Total
Engineering	0	0	300,000	0	0	0	0	300,000
MSD Capital Improvements	0	0	300,000	0	0	0	0	300,000
Total								
Estimated Personnel Cost	0	0	15,000	0	0	0	0	15,000

East Branch Upper South Mill Creek Sustainable Watershed Eva

Dept. Priority: 70

Description

This project will provide resources for the evaluation of watersheds to facilitate opportunities to reduce Combined Sewer Overflows (CSO) and make system improvements for future development. This project will help address future wet weather, asset management, and coordination efforts in a systematic and proactive manner. The East Branch Upper South Mill Creek Sustainable Watershed Evaluation Plan will address the East Branch Upper South Mill Creek watershed. This project is located in the Mill Creek sewershed within Hamilton County, Ohio.

Purpose

The purpose of this project is to update the Sustainable Watershed Evaluation Plans which were anticipated in the Global Consent Decree under the Sustainable Program to allow for a systematic review and planning for the service area. Planning will result in reduced Combined Sewer Overflows (CSO), perform asset management, improve water quality, coordinate with communities, and position the service area for future growth. These evaluations are being coordinated with state and local transportation departments, City



Departments, and neighborhood stakeholders. The preliminary watershed master plans developed in this process will provide the basis for future projects in the Wet Weather Improvement Plan (WWIP).

Phases	Prior Year	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2016-2021 Total
Engineering	0	0	149,000	0	0	0	0	149,000
MSD Capital Improvements	0	0	149,000	0	0	0	0	149,000
Total								
Estimated Personnel Cost	0	0	7,450	0	0	0	0	7,450

W Branch Winton Woods Sustainable Watershed Evaluation Plan

Dept. Priority: 71

Description

This project will provide resources for the evaluation of watersheds to facilitate opportunities to reduce Combined Sewer Overflows (CSO) and make system improvements for future development. This project will enable MSD to address future wet weather, asset management, and coordination efforts in a systematic and proactive manner. The West Branch Winton Woods Sustainable Watershed Evaluation Plan will address the West Branch Winton Woods watershed. This project is located in the Mill Creek sewershed within Hamilton County, Ohio.

Purpose

The purpose of this project is to update the Sustainable Watershed Evaluation Plans which were anticipated in the Global Consent Decree under the Sustainable Program to allow for a systematic review and planning for the service area. Planning will result in reduced Combined Sewer Overflows (CSO), perform asset management, improve water quality, coordinate with communities, and position the service area for future growth. These evaluations are being coordinated with state and local transportation departments, City Departments, and neighborhood stakeholders. The preliminary watershed master plans developed in this process will provide the basis for future projects in the Wet Weather Improvement Plan (WWIP).

Phases	Prior Year	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2016-2021 Total
Engineering	0	0	618,000	0	0	0	0	618,000
MSD Capital Improvements	0	0	618,000	0	0	0	0	618,000
Total								
Estimated Personnel Cost	0	0	30,900	0	0	0	0	30,900

CSO 488/490 Interstate 75 Reconstruction Coordination

Dept. Priority: 72

Description

This project will provide resources for the coordination of highway separations, stormwater crossings of Interstate 75, water quality improvements, and asset management improvements critical to the Combined

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Sewer Overflow (CSO) 488 sewershed with the Ohio Department of Transportation's (ODOT) Interstate 75 reconstruction. The project is located in the Carthage neighborhood of the City of Cincinnati.

Purpose

The purpose of this project is to reduce Combined Sewer Overflows, perform asset management, improve water quality, and position the service area for future growth in the Interstate 75 corridor through collaboration with the Ohio Department of Transportation (ODOT). These improvements are being coordinated not only with ODOT, but with the Department of Transportation and Engineering (DOTE), Public Services, City Planning, and other City departments and neighborhood stakeholders. Numerous agreements are complete or in development, with some projects in construction, in the context of goals stated in the Revive Cincinnati report.

Phases	Prior Year	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2016-2021
								Total
Construction	0	0	0	0	1,613,000	0	0	1,613,000
MSD Capital Improvements	0	0	0	0	1,613,000	0	0	1,613,000
Total								
Estimated Personnel Cost	0	0	0	0	80,650	0	0	80,650

CSO 21 Interstate 75 Reconstruction Coordination

Dept. Priority: 73

Description

This project will provide resources for new storm sewers to be constructed to coordinate infrastructure needs with Ohio Department of Transportation (ODOT) drainage needs for the Interstate 75 corridor. The improvements will be located along the Interstate 75 corridor in the vicinity of the Interstate 74 interchange. This project is located in the Northside neighborhood of the City of Cincinnati.

Purpose

The purpose of this project is to allow the Ohio Department of Transportation (ODOT) to construct a new outfall at Mill Creek and a new storm sewer crossing under Interstate 75 immediately north of the Interstate 75/Interstate 74 interchange. This project will provide a higher level of strategic separation and off-loading of the existing combined sewer. This project represents a continuation of on-going collaborative planning of stormwater management infrastructure with ODOT. The specific details of this project will be determined during the planning phase. Upon completion of planning activities, a preliminary agreement with ODOT will be presented to the Hamilton County Board of County Commissioners for consideration.

Phases	Prior Year	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2016-2021
								Total
Construction	0	0	0	2,999,000	0	0	0	2,999,000
MSD Capital Improvements	0	0	0	2,999,000	0	0	0	2,999,000
Total								
Estimated Personnel Cost	0	0	0	149,950	0	0	0	149,950



East Duck Creek Watershed Plan

Dept. Priority: 74

Description

This project will provide resources for an evaluation of opportunities to reduce Combined Sewer Overflows (CSO), improve local water quality, and coordinate infrastructure and planning efforts with multiple jurisdictions. This project's study area is the East Duck Creek Watershed located in the Little Miami Sewershed within Hamilton County, Ohio. The Phase 2 Final Wet Weather Improvement Program (WWIP) includes 15 projects for regulator improvements, sewer separations, and storage facilities totaling nearly \$45 million for the East Duck Creek Watershed.

Purpose

The purpose of this project is to identify measures to meet the Sanitary Sewer Overflow (SSO) and Combined Sewer Overflow (CSO) volume reduction requirements of the Final Wet Weather Improvement Program (WWIP), as part of Hamilton County's and the City of Cincinnati's Global Consent Decree, through an Integrated Planning approach, while selecting holistic projects that will also provide the best water quality improvements possible and maximize the benefits of the investment for the rate payers.

Phases	Prior Year	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2016-2021
								Total
Engineering	0	411,000	0	0	0	0	0	411,000
MSD Capital Improvements	0	411,000	0	0	0	0	0	411,000
Total								
Estimated Personnel Cost	0	20,550	0	0	0	0	0	20,550

Lick Run Valley Conveyance System

Dept. Priority: 75

Description

This project will provide resources for a valley conveyance system, which is an approximately 8,000-foot hybrid stormwater conveyance system of open channel and subsurface box conduit, to convey natural drainage and stormwater removed from the combined sewer system. The installation includes a low-flow, above-ground bioengineered conveyance system paired with a closed box conduit to convey the 100 year flood flows to the Mill Creek safely. The project is located between Queen City Avenue and Westwood Avenue and between White Street and Mill Creek, in the South Fairmount neighborhood of the City of Cincinnati.

Purpose

The purpose of this project is to create a Valley Conveyance System which will collect stormwater separated by various hillside systems and convey it to Mill Creek. It will be an innovative asset for community revitalization through the use of best management practices such as green streets, porous pavement treatments, and water quality enhancements. A daylighting feature will be located where the historic Lick Run stream once flowed and will include floodplain amenities for open space and access to an enhanced natural system,

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engineered to serve multiple community needs and benefits and potential for infill of neighboring sites. Planning for this project in the amount of \$3,600,000 has been allocated under Project #10180900.

Phases	Prior Year	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2016-2021 Total
Construction	0	98,793,900	0	0	0	0	0	98,793,900
Engineering	21,366,200	4,170,700	0	0	0	0	0	4,170,700
MSD Capital Improvements Total	21,366,200	102,964,600	0	0	0	0	0	102,964,600
Estimated Personnel Cost	1,068,310	5,148,230	0	0	0	0	0	5,148,230

Lick Run Property Demolitions

Dept. Priority: 76

Description

This project will provide resources for the deconstruction and demolition of 73 vacant structures located on properties to be acquired for the Lick Run source control program. The project is being bid in phases to minimize property management costs and number of vacant buildings. The demolitions may be located on the following streets where new stormwater infrastructure is slated for construction: Harrison Avenue, Queen City Avenue, Denham Street, Carll Street, Beekman Street, State Avenue, Westwood Avenue, Grand Avenue, Quebec Road, White Street, Cora Avenue, Wyoming Avenue, Minion Avenue, Sunset Avenue, and Selim Avenue, in the West Price Hill, North Fairmount, and South Fairmount neighborhoods of the City of Cincinnati.

Purpose

The purpose of this project is to acquire properties within the 12 individual sewer separation projects as part of the Lick Run source control program. This request allocates funding for the demolition of structures located on acquired properties. Empty structures throughout the Lick Run Basin have presented a vandalism problem, and there were several complaints received regarding vacant structures on previously acquired properties.

Phases	Prior Year	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2016-2021 Total
Engineering	0	12,000	0	0	0	0	0	12,000
Construction	3,158,000	2,476,600	0	0	0	0	0	2,476,600
MSD Capital Improvements Total	3,158,000	2,488,600	0	0	0	0	0	2,488,600
Estimated Personnel Cost	157,900	124,430	0	0	0	0	0	124,430

CSO 181 Real Time Control

Dept. Priority: 77

Description

This project will provide resources for a new real time control (RTC) facility coupled with regulator improvements at Combined Sewer Overflow (CSO) 181 to use in-system storage within the existing 10 foot



by 15 foot combined trunk sewer. This project is located in the Village of Elmwood Place, Hamilton County, Ohio.

Purpose

The purpose of this project is to implement a Bloody Run source control solution to remove stormwater from the combined system to reduce the volume and frequency of Combined Sewer Overflows (CSO) and to re-establish flows to the Bloody Run open channel and Mill Creek. Ultimately this project will capture and separate stormwater from approximately 1,200 acres, utilize the existing system for storage, and utilize existing opportunities for detention and water quality enhancements. During this first phase of the source control solution, an estimated 75 million gallons of overflows will be eliminated via construction of a real time control facility. \$62,500 has been committed for planning and right-of-way acquisition from funds appropriated under Project #10180900.

Phases	Prior Year	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2016-2021
								Total
Construction	0	0	3,498,600	0	0	0	0	3,498,600
MSD Capital Improvements	0	0	3,498,600	0	0	0	0	3,498,600
Total								
Estimated Personnel Cost	0	0	174,930	0	0	0	0	174,930

Wyoming and Minion Avenues Sewer Separation

Dept. Priority: 78

Description

This project will provide resources for approximately 3,900 feet of proposed storm sewer (12-inch to 42-inch), and 300 feet of sanitary sewer. The proposed improvements are located in the street right-of-way of Queen City Avenue, Wyoming Avenue, Westmont Avenue, Latham Avenue, and Minion Avenue, as well as private properties that will need utility easements. This project is in the South Fairmount and West Price Hill neighborhoods of the City of Cincinnati.

Purpose

The purpose of this project is, as part of the Lick Run source control project, to create sewer separations and conveyance systems. The strategic sewer separation element is comprised of 14 individual separation projects totalling approximately 90,000 feet of new conveyance in both closed and open channel designs. Together these 14 projects will manage stormwater entering the combined sewer system tributary to Combined Sewer Overflow (CSO) 5 and reduce CSO volume by 730 million gallons. The Wyoming Avenue and Minion Avenue project is one of the 14 individual projects that will capture stormwater from approximately 62 drainage acres. Pre-construction activities totalling \$635,100 were allocated under Project #10180900.

Phases	Prior Year	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2016-2021
								Total
Engineering	0	0	45,000	0	0	0	0	45,000
Construction	2,616,700	0	2,779,000	0	0	0	0	2,779,000
MSD Capital Improvements	2,616,700	0	2,824,000	0	0	0	0	2,824,000
Total								
Estimated Personnel Cost	130,840	0	141,200	0	0	0	0	141,200



Quebec Road Sewer Separation

Dept. Priority: 79

Description

This project will provide resources for approximately 8,500 feet of storm sewer (12-inch to 60-inch), a structural separator (Vortech unit), and 400 feet of water main relocation. The proposed improvements are located in the street right-of-way of Quebec Road, Thinnes Street, Forbus Street, Lierman Street, Jonte Avenue, Graebe Street, Lorna Lane, Margaret Street, and Schoedinger Avenue, as well as private properties that will need utility easements in the South Fairmount neighborhood of the City of Cincinnati.

Purpose

The purpose of this project is, as part of the Lick Run source control project, to create sewer separations and conveyance systems. The strategic sewer separation element is comprised of 14 individual separation projects totaling approximately 90,000 feet of new conveyance in both closed and open channel designs. Together these 14 projects will manage stormwater entering the combined sewer system tributary to Combined Sewer Overflow (CSO) 5 and reduce CSO volume by 730 million gallons. The Quebec Road Sewer Separation project is one of the 14 individual projects that will capture stormwater from approximately 197 drainage acres.

Phases	Prior Year	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2016-2021
								Total
Construction	0	0	6,733,600	0	0	0	0	6,733,600
Engineering	1,318,800	0	0	0	0	0	0	0
MSD Capital Improvements Total	1,318,800	0	6,733,600	0	0	0	0	6,733,600
Estimated Personnel Cost	65,940	0	336,680	0	0	0	0	336,680

Queen City Avenue Sewer Separation Phase 2

Dept. Priority: 80

Description

This project will provide resources for approximately 8,300 feet of storm sewer (12-inch to 96-inch and a 4-foot x 14-foot Reinforced Concrete Box Culvert (RCBC)), with no sanitary sewer, and 50 feet of water main relocation. The proposed improvements are located in the street right-of-way of Queen City Avenue, Queen City Bypass, Tillie Avenue, and Champlain Street, as well as private properties that will need utility easements. This project is located in the Westwood neighborhood of the City of Cincinnati.

Purpose

The purpose of this project is, as part of the Lick Run source control project, to create sewer separations and conveyance systems. The strategic sewer separation element is comprised of 14 individual separation projects totaling approximately 90,000 feet of new conveyance in both closed and open channel designs. Together these 14 projects will manage stormwater entering the combined sewer system tributary to Combined Sewer Overflow (CSO) 5 and reduce CSO volume by 730 million gallons. The Queen City Avenue



Phase 2 project is one of the 14 individual projects that will capture storm water from approximately 228 drainage acres. Planning in the amount of \$165,000 was allocated under Project #10180900.

Phases	Prior Year	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2016-2021 Total
Engineering	0	703,400	0	0	0	0	0	703,400
Construction	8,215,700	9,558,600	0	0	0	0	0	9,558,600
MSD Capital Improvements Total	8,215,700	10,262,000	0	0	0	0	0	10,262,000
Estimated Personnel Cost	410,790	513,100	0	0	0	0	0	513,100

Queen City and Cora Avenues Right-of-Way Sewer Separation

Dept. Priority: 81

Description

This project will provide resources for approximately 2,600 feet of storm sewer (12-inch to 42-inch), 2,800 feet of natural conveyance system, and three detention basins, with no sanitary sewer or water main relocations. The proposed improvements are located in the street right-of way of Cora Avenue and Fenton Avenue, as well as private properties that will need utility easements, in the Westwood neighborhood of the City of Cincinnati.

Purpose

The purpose of this project is, as part of the Lick Run source control project, to create sewer separations and conveyance systems. The strategic sewer separation element is comprised of 14 individual separation projects totaling approximately 90,000 feet of new conveyance in both closed and open channel designs. Together these 14 projects will manage stormwater entering the combined sewer system tributary to Combined Sewer Overflow (CSO) 5 and reduce CSO volume by 730 million gallons. The Queen City Avenue and Cora Avenue Sewer Separation project is one of the 14 individual projects that will capture storm water from approximately 146 drainage acres. Pre-Construction activities totalling \$862,000 were allocated under Project #10180900.

Phases	Prior Year	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2016-2021 Total
Construction	2,763,200	0	2,582,500	0	0	0	0	2,582,500
MSD Capital Improvements Total	2,763,200	0	2,582,500	0	0	0	0	2,582,500
Estimated Personnel Cost	138,160	0	129,130	0	0	0	0	129,130

Quebec Heights Sewer Separation

Dept. Priority: 82

Description

This project will provide resources for the installation of approximately 2,750 feet of separate storm sewers, 5,600 feet of natural conveyance (daylighted) through Glenway Woods Park and an extended wetland

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detention feature. This project is located in the East Price Hill and South Fairmount neighborhoods of the City of Cincinnati.

Purpose

The purpose of this project is, as part of the Quebec Heights Sewer Separation project, one of 13 Lick Run source control projects that together manage stormwater entering the combined sewer and reduce overflow volume by 730 million gallons. This project will capture stormwater from approximately 72 drainage acres. The project will separate stormwater from a combined sewer that runs through a channel in the Glenway Woods Park as well as provide new storm sewers on Ridlen Avenue, Wessels Avenue, Wessels Lane, Carson Avenue, Drott Avenue, Wells Street, and Glenway Avenue to remove storm flow from the existing combined sewers on those streets.

Phases	Prior Year	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2016-2021
								Total
Construction	3,211,100	3,122,600	0	0	0	0	0	3,122,600
MSD Capital Improvements	3,211,100	3,122,600	0	0	0	0	0	3,122,600
Total								
Estimated Personnel Cost	160,560	156,130	0	0	0	0	0	156,130

CSO 12 Sewer Separation Phase A.3 West Martin Luther King Dr

Dept. Priority: 83

Description

This project will provide resources for the extension of the new storm sewer network along the Martin Luther King Drive corridor. This project includes approximately 2,100 feet of new storm sewers ranging in diameter from 36-inch to 54-inch and 32 planter boxes to serve as stormwater biofiltration features. This project is located in the Clifton and University Heights/Fairview neighborhoods of the City of Cincinnati.

Purpose

The purpose of this project is to extend the separate storm sewer constructed by the Ohio Department of Transportation (ODOT) in the Hopple Street interchange and those constructed by the Metropolitan Sewer District (MSD) at the Martin Luther King Drive corridor to Dixmyth Avenue. In addition to separating the Martin Luther King Drive corridor, the project will facilitate future strategic separation of the hillsides and neighborhoods south of Martin Luther King Drive contributing to Combined Sewer Overflow (CSO) 12. This is a collaborative effort with the Department of Transportation and Engineering (DOTE) to coordinate this project with the Ohio Department of Transportation's (ODOT) Interstate 75 Mill Creek Expressway Reconstruction Project.

Phases	Prior Year	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2016-2021
								Total
Construction	603,400	0	499,350	0	0	0	0	499,350
MSD Capital Improvements	603,400	0	499,350	0	0	0	0	499,350
Total								
Estimated Personnel Cost	30,170	0	24,970	0	0	0	0	24,970



CSO 12 Sewer Separation Phase A.4b

Dept. Priority: 84

Description

This project will provide resources for the construction of approximately 950 feet of a proposed 10x12 foot box culvert and a detention basin critical to the overall Combined Sewer Overflow (CSO) 12 Sewer Separation project stretching from the University of Cincinnati campus to the Camp Washington area. The project is located in the Camp Washington neighborhood of the City of Cincinnati.

Purpose

The purpose of this project is to extend the Combined Sewer Overflow (CSO) 12 strategic separation effort from Phase A.4.a which terminates at Colerain Avenue to Spring Grove Avenue. The project will provide critical capacity and conveyance of Interstate 75 runoff to Mill Creek when all project phases have been completed in accordance with the agreement with the Ohio Department of Transportation (ODOT) at the Hopple Street interchange. This portion of the project will address runoff from both Interstate 75 and the Department of Transportation and Engineering (DOTE)'s reconstructed Martin Luther King Jr. Drive.

Phases	Prior Year	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2016-2021 Total
Construction	0	0	0	7,085,100	0	0	0	7,085,100
Engineering	2,193,800	0	0	0	0	0	0	0
MSD Capital Improvements Total	2,193,800	0	0	7,085,100	0	0	0	7,085,100
Estimated Personnel Cost	109,690	0	0	354,260	0	0	0	354,260

CSO 217/483 Source Control Phase A

Dept. Priority: 85

Description

This project will provide resources for the construction of two new stormwater detention basins, the enlargement of two existing basins, new storm sewers, relocated combined sewers, and the redirection of sanitary sewer laterals. This project is located in the Winton Hills neighborhood of the City of Cincinnati, in the Kings Run Basin of the Mill Creek sewershed. This project also affects portions of the College Hill and Winton Place neighborhoods of the City of Cincinnati.

Purpose

The purpose of this project is to eliminate approximately 150 million gallons of Combined Sewer Overflows (CSO), including four detention basins (Phase A), sewer separation via installation of 7,200 linear feet of combined sewers and 5,700 linear feet of storm sewers (Phase A2), and a storage facility (Phase B). Phase A2, scheduled for 2016, had its scope and budget subdivided from Phase A due to the design schedule,

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right-of-way acquisition, and specialized construction of the basins of Phase A. This project is part of the Lower Mill Creek Partial Remedy (LMCPR).

Phases	Prior Year	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2016-2021 Total
Construction	0	3,772,400	0	0	0	0	0	3,772,400
MSD Capital Improvements Total	0	3,772,400	0	0	0	0	0	3,772,400
<hr/>								
Estimated Personnel Cost	0	188,620	0	0	0	0	0	188,620

CSO 217/483 Source Control Phase B

Dept. Priority: 86

Description

This project will provide resources for the construction of a Combined Sewer Overflow (CSO) storage facility at Combined Sewer Overflow (CSO) 217. This project is located in the Winton Hills neighborhood of the City of Cincinnati. This project also affects portions of the College Hill and Winton Place neighborhoods of the City of Cincinnati.

Purpose

The purpose of this project is to provide a source control solution for the Kings Run Watershed which includes Combined Sewer Overflows (CSO) 217 and 483, covering a drainage area of 1,076 acres. The source control solution includes five detention basins to reduce the peak volume entering the combined system, conversion of portions of the combined system to a storm sewer, and strategic separation via installation of 7,200 linear feet of combined sewers and 5,700 linear feet of storm sewers. Additional control for CSO 217 will be provided via a storage facility. Phase A includes the separation and detention basins. The source control strategy will eliminate approximately 150 million gallons of CSOs.

Phases	Prior Year	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2016-2021 Total
Construction	0	0	13,902,400	0	0	0	0	13,902,400
MSD Capital Improvements Total	0	0	13,902,400	0	0	0	0	13,902,400
<hr/>								
Estimated Personnel Cost	0	0	695,120	0	0	0	0	695,120

CSO 217/483 Source Control Phase A2

Dept. Priority: 87

Description

This project will provide resources for the construction of new storm sewers, the relocation of combined sewers, and the redirection of sanitary sewer laterals. This project is located in the Winton Hills neighborhood of the City of Cincinnati, in the Kings Run Basin of the Mill Creek sewershed. This project also affects portions of the College Hill and Winton Place neighborhoods of the City of Cincinnati.

Purpose

The purpose of this project is to eliminate approximately 150 million gallons of Combined Sewer Overflows (CSO), and includes four detention basins (Phase A), sewer separation via installation of 7,200 linear feet of combined sewers and 5,700 linear feet of storm sewers (Phase A2), and a storage facility (Phase B). Phase



A2, the sewer separation scheduled for 2016, had its scope and budget subdivided from Phase A due to the design schedule, right-of-way acquisition, and specialized construction of the basins in Phase A. This project is part of the Lower Mill Creek Partial Remedy (LMCPR).

Phases	Prior Year	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2016-2021 Total
Construction	0	0	5,557,700	0	0	0	0	5,557,700
MSD Capital Improvements	0	0	5,557,700	0	0	0	0	5,557,700
Total								
Estimated Personnel Cost	0	0	277,890	0	0	0	0	277,890

Upper Muddy Creek Interceptor Replacement

Dept. Priority: 88

Description

This project will provide resources for installing approximately 3,300 linear feet of 30-inch sewer from Combined Sewer Overflow (CSO) 522 (Werk Road and Westbourne Drive) to the intersection of Muddy Creek Road and Westbourne Drive and approximately 9,000 linear feet of 36-inch sewer from the intersection of Westbourne Drive and Muddy Creek Road to the oxbow in Muddy Creek. This project includes dynamic underflow control at Combined Sewer Overflows (CSO) 522, 198, and 518 and the elimination of Sanitary Sewer Overflow (SSO) 1061. This project is located in Green Township, Hamilton County, Ohio.

Purpose

The purpose of this project is to replace the upper portion of the Muddy Creek Interceptor that was originally installed from 1929 to 1935. The existing sewer is aging and deteriorating and needs to be relocated. The project will also increase the capacity of the sewer to transport underflow from Combined Sewer Overflows (CSO) 522, 198, and 518 to mitigate overflows presently caused by surcharging from entering the creek.

Phases	Prior Year	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2016-2021 Total
Construction	0	0	0	0	0	14,306,800	0	14,306,800
MSD Capital Improvements	0	0	0	0	0	14,306,800	0	14,306,800
Total								
Estimated Personnel Cost	0	0	0	0	0	715,340	0	715,340

Upper Muddy Creek Interceptor Replacement Contract A

Dept. Priority: 89

Description

This project will provide resources for the replacement of the most upstream segment of the Upper Muddy Creek Interceptor. The proposed segment consists of replacing the existing interceptor segment with approximately 1,200 linear feet of 30-inch diameter pipe, appurtenances, and flow controls. The project begins near 2896 Westbourne Drive and proceeds north to a location on Werk Road just north of Westbourne Drive across the street from the Hamilton County property designated for the proposed Werk and West-

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bourne Enhanced High Rate Treatment (WWEHRT) facility. This project is located in the Muddy Creek sewershed of the West Basin in Green Township, Hamilton County, Ohio.

Purpose

The purpose of this project is to replace the upper portion of the Upper Muddy Creek Interceptor that was originally installed around 1929 to 1935. The existing sewer is aging and deteriorating and experiences overflows directly into Muddy Creek. There is a risk of collapse in as few as five years for many segments. The project will also increase the capacity of the sewer to transport underflow from Combined Sewer Overflows (CSO) 522, 198, and 518 to the future Muddy Creek Basin Storage and Conveyance Sewer.

Phases	Prior Year	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2016-2021 Total
Construction	0	0	939,000	0	0	0	0	939,000
MSD Capital Improvements Total	0	0	939,000	0	0	0	0	939,000
Estimated Personnel Cost	0	0	46,950	0	0	0	0	46,950

Mt. Airy Receiving Sewer Upgrade

Dept. Priority: 90

Description

This project will provide resources for upsizing 3,100 linear feet of existing sewer to 24-inch gravity sanitary sewer. This project is located in the Mill Creek sewershed of the Central Basin in the Westwood neighborhood of the City of Cincinnati.

Purpose

The purpose of this project is to address capacity issues downstream of the Mt. Airy Forest Sewer Upgrade project. This project proposes to replace approximately 1,550 feet of 12-inch sewer which will not have the capacity to handle the upstream flows from the Mt. Airy Sewer project.

Phases	Prior Year	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2016-2021 Total
Construction	0	0	0	0	0	2,633,200	0	2,633,200
Engineering	0	0	0	397,900	0	0	0	397,900
Land	0	0	0	120,000	0	0	0	120,000
MSD Capital Improvements Total	0	0	0	517,900	0	2,633,200	0	3,151,100
Estimated Personnel Cost	0	0	0	25,900	131,660	0	0	157,560



Ledgewood Avenue Sewer Replacement

Dept. Priority: 91

Description

This project will provide resources for the repair or replacement of 1,180 feet of 15-24-inch combined sewer in and around Ledgewood Drive. This project is located in the North Avondale neighborhood of the City of Cincinnati.

Purpose

The purpose of this project is to replace badly deteriorated sewer segments and reduce the risk from potential property damages.

Phases	Prior Year	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2016-2021
								Total
Engineering	0	0	0	0	75,000	0	0	75,000
MSD Capital Improvements	0	0	0	0	75,000	0	0	75,000
Total								
<hr/>								
Estimated Personnel Cost	0	0	0	0	3,750	0	0	3,750

McHenry Avenue Sewer Replacement

Dept. Priority: 92

Description

This project will provide resources for evaluating strategies for 8 consecutive pipe segments (1,750 linear feet of sewer) that are in need of repair. The pipe segments begin near the intersection of McHenry Avenue and Brokaw Avenue, and flow south. The project is within the South Branch Mill Creek drainage basin, and is located in the East Westwood neighborhood of the City of Cincinnati.

Purpose

The purpose of this project is to replace badly deteriorated sewer segments and reduce the risk from potential property damages.

Phases	Prior Year	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2016-2021
								Total
Engineering	0	0	0	0	0	250,000	0	250,000
MSD Capital Improvements	0	0	0	0	0	250,000	0	250,000
Total								
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Estimated Personnel Cost	0	0	0	0	0	12,500	0	12,500

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911 McPherson Avenue Sewer Replacement

Dept. Priority: 93

Description

This project will provide resources for the review of four segments of collector sewer (630 linear feet of 12-inch, 21-inch, and 24-inch) in East Price Hill for replacement or rehabilitation alternatives. All four segments of vitrified clay pipe (VCP) are compromised structurally which may require lining or replacing spans.

Purpose

The purpose of this project is to replace badly deteriorated sewer segments and reduce the risk from potential property damages.

Phases	Prior Year	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2016-2021
								Total
Engineering	0	0	0	0	330,000	0	0	330,000
MSD Capital Improvements	0	0	0	0	330,000	0	0	330,000
Total								
Estimated Personnel Cost	0	0	0	0	16,500	0	0	16,500

Davey Avenue Sewer Replacement

Dept. Priority: 94

Description

This project will provide resources for the replacement of approximately 581 linear feet of 10-inch diameter vitrified clay pipe (VCP), 110 linear feet of 36-inch diameter vitrified clay pipe (VCP) and 617 linear feet of 18-inch diameter vitrified clay pipe (VCP). This project is located in the College Hill neighborhood of the City of Cincinnati.

Purpose

The purpose of this project is to replace badly deteriorated sewer segments and reduce the risk from potential property damages.

Phases	Prior Year	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2016-2021
								Total
Engineering	0	0	0	0	225,000	0	0	225,000
MSD Capital Improvements	0	0	0	0	225,000	0	0	225,000
Total								
Estimated Personnel Cost	0	0	0	0	11,250	0	0	11,250



Congress Run Stream Restoration/Bank Stabilization

Dept. Priority: 95

Description

This project will provide resources for a study to explore options to minimize the impact of proposed employee parking lot improvements on Congress Run and abutting wetlands.

Purpose

The purpose of this project is to replace badly deteriorated sewer segments and reduce the risk from potential property damages.

Phases	Prior Year	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2016-2021 Total
Engineering	0	0	0	0	0	60,000	0	60,000
MSD Capital Improvements	0	0	0	0	0	60,000	0	60,000
Total								
Estimated Personnel Cost	0	0	0	0	0	3,000	0	3,000

Mandarin Court Sewer Replacement

Dept. Priority: 96

Description

This project will provide resources to increase the reliability of the infrastructure on Mandarin Court which suffers from repeated pipe failure and surfacing sewage due to erosion.

Purpose

The purpose of this project is to avoid additional emergency repairs due to erosion and reduce the probability of pipe failure and surfacing sewage that would be caused by a broken pipe or open joint.

Phases	Prior Year	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2016-2021 Total
Engineering	0	0	0	0	270,000	0	0	270,000
MSD Capital Improvements	0	0	0	0	270,000	0	0	270,000
Total								
Estimated Personnel Cost	0	0	0	0	13,500	0	0	13,500

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Harvey Avenue - MLK Drive to 400 NW Sewer Evaluation

Dept. Priority: 97

Description

This project will provide resources for an evaluation of recommendations in the Walnut Hills Basin Study to abandon three segments of sewer.

Purpose

The purpose of this project is to replace badly deteriorated sewer segments and reduce the risk from potential property damages.

Phases	Prior Year	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2016-2021 Total
Engineering	0	0	0	0	0	6,000	0	6,000
MSD Capital Improvements	0	0	0	0	0	6,000	0	6,000
Total								
Estimated Personnel Cost	0	0	0	0	0	300	0	300

Hickman Avenue Sewer Evaluation

Dept. Priority: 98

Description

This project will provide resources for an evaluation of recommendations in the Walnut Hills Basin Study to restore this sewer using trenchless technology.

Purpose

The purpose of this project is to replace badly deteriorated sewer segments and reduce the risk from potential property damages.

Phases	Prior Year	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2016-2021 Total
Engineering	0	0	0	0	0	24,000	0	24,000
MSD Capital Improvements	0	0	0	0	0	24,000	0	24,000
Total								
Estimated Personnel Cost	0	0	0	0	0	1,200	0	1,200



Depot Street Sewer Evaluation

Dept. Priority: 99

Description

This project will provide resources for the review of 8 pipe segments that extend beneath railroad tracks between Depot Street and Summer Street for abandonment and re-alignment.

Purpose

The purpose of this project is to replace badly deteriorated sewer segments and reduce the risk from potential property damages.

Phases	Prior Year	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2016-2021 Total
Engineering	0	0	0	0	0	300,000	0	300,000
MSD Capital Improvements	0	0	0	0	0	300,000	0	300,000
Total								
<hr/>								
Estimated Personnel Cost	0	0	0	0	0	15,000	0	15,000

Banning Alley Sewer Replacement

Dept. Priority: 100

Description

This project will provide resources for the replacement of the sewer in Banning Alley.

Purpose

The purpose of this project is to replace badly deteriorated sewer segments and reduce the risk from potential property damages.

Phases	Prior Year	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2016-2021 Total
Engineering	0	0	0	0	0	45,000	0	45,000
MSD Capital Improvements	0	0	0	0	0	45,000	0	45,000
Total								
<hr/>								
Estimated Personnel Cost	0	0	0	0	0	2,250	0	2,250

High Point Pump Station Evaluation

Dept. Priority: 101

Description

This project will provide resources for making the determination of whether to upgrade the High Point Pump Station, eliminate it via gravity sewer, or maintain the existing pump station.

Purpose

The purpose of this project is to provide the ability to make a determination of whether to upgrade the pump station, eliminate it via gravity sewer, or maintain the existing pump station, giving flexibility to meet

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changing requirements, reduce sewage backups, improve work conditions, eliminate or reduce safety concerns, and improve system flow without having other adverse impacts on customers.

Phases	Prior Year	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2016-2021 Total
Construction	0	0	0	0	0	500,000	0	500,000
MSD Capital Improvements Total	0	0	0	0	0	500,000	0	500,000
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Estimated Personnel Cost	0	0	0	0	0	25,000	0	25,000

5053 Ridge Avenue Sewer Replacement

Dept. Priority: 102

Description

This project will provide resources for the replacement or relining of an 18-inch segment that is immediately upstream of Combined Sewer Overflow (CSO) 671 that surcharges as frequently as a six month storm.

Purpose

The purpose of this project is to provide Wastewater Collection the ability to maintain the asset, reduce the potential of sewage backups, improve the flow of the collection system, as well as, the potential to eliminate Combined Sewer Overflow (CSO) 671.

Phases	Prior Year	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2016-2021 Total
Engineering	0	0	0	0	0	45,000	0	45,000
MSD Capital Improvements Total	0	0	0	0	0	45,000	0	45,000
<hr/>								
Estimated Personnel Cost	0	0	0	0	0	2,250	0	2,250

Mayland Dr, Woodlark Dr, and Lusanne Terrace Sewer Study

Dept. Priority: 103

Description

This project will provide resources for addressing approximately 40 properties with sewage backup complaints on Mayland Drive, Woodlark Drive, and Lusanne Terrace.

Purpose

The purpose of this project is to reduce or eliminate sewer backups in 46 homes. Property owners are anticipating a solution from the Metropolitan Sewer District (MSD) to prevent additional personal property loss, structural damage, and potential health risk from sewer surcharges.

Phases	Prior Year	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2016-2021 Total
Engineering	0	0	225,000	0	0	0	0	225,000
MSD Capital Improvements Total	0	0	225,000	0	0	0	0	225,000
<hr/>								
Estimated Personnel Cost	0	0	12,500	0	0	0	0	12,500



Programmatic Contingency

Dept. Priority: 104

Description

This project will provide resources for the Programmatic Contingency. The annual contingency will be calculated as the sum of seven percent of forecasted construction contract expenditures and twenty percent of all other forecasted expenditures (planning, design, easement, administration, miscellaneous expenses, field engineering, and inspection). The Programmatic Contingency is budgeted to be used for unforeseen or materially different conditions, design shortfalls identified after funding is legislated, or emergencies.

Purpose

The purpose of this project is to implement a Programmatic Contingency. This financial policy will reduce the amount of overall reserve as compared to prior aggregated contingency legislated with the Metropolitan Sewer District's (MSD) capital projects. This approach will provide contingency in a more timely manner and minimize exposed legislated funds.

Phases	Prior Year	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2016-2021 Total
Other	12,000,000	11,500,000	10,000,000	10,000,000	10,000,000	10,000,000	0	51,500,000
MSD Capital Improvements Total	12,000,000	11,500,000	10,000,000	10,000,000	10,000,000	10,000,000	0	51,500,000
<hr/>								
Estimated Personnel Cost	0	0	0	0	0	0	0	0

Bridgetown Road Local Sewer (HNs 8477-8647)

Dept. Priority: 105

Description

This project will provide resources for an outfall to existing Sanitary Sewer No. 4943. The Bridgetown Road Local Sewer (HNs 8477-8647) project involves the construction of 2,200 linear feet of 8-inch diameter sewer, 32 sewer laterals, and other sewer appurtenances. The sewer will be a conventional gravity sanitary sewer. The project is located in Miami Township, Hamilton County, Ohio in the Hooven-Cleves and North Bend drainage basins, in the Indian Creek sewershed of the West Basin.

Purpose

The purpose of this project is to benefit 32 parcels. The benefited parcels include 29 single family homes, 2 residential vacant lots, and 1 residential unplatted lot.

Phases	Prior Year	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2016-2021 Total
Construction	0	0	0	501,100	0	0	0	501,100
MSD Capital Improvements Total	0	0	0	501,100	0	0	0	501,100
<hr/>								
Estimated Personnel Cost	0	0	0	25,060	0	0	0	25,060

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West Fork Road Local Sewer (HNs 5311-5472)

Dept. Priority: 106

Description

This project will provide resources for the West Fork Road Local Sewer (HNs 5311-5472) project which would benefit 9 parcels, which are all single-family homes and eliminate 9 Home Sewer Treatment Systems (HSTS). The plan for this project involves the construction of 850 linear feet of 8-inch diameter gravity sanitary sewer, nine 6-inch diameter sewer laterals, and other sewer appurtenances. This project is located between 5311 and 5472 West Fork Road in the Taylor Creek Sewershed of the West Basin in Green Township, Hamilton County, Ohio.

Purpose

The purpose of this project is to respond to a citizen petition that included nine benefited properties. Property owners representing five properties expressed support for the petition during the polling process. The construction cost has increased because it was originally assumed the sewer alignment would be outside the roadway, but it was located in the street due to utility and structural conflicts. Conditions would also require the extra cost to remove contaminated soil.

Phases	Prior Year	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2016-2021
								Total
Construction	0	475,000	0	0	0	0	0	475,000
MSD Capital Improvements	0	475,000	0	0	0	0	0	475,000
Total								
Estimated Personnel Cost	0	23,750	0	0	0	0	0	23,750

Parrakeet Drive Local Sewer (HNs 6002-6068)

Dept. Priority: 107

Description

This project will provide resources for the construction of approximately 1,000 linear feet of 8-inch diameter gravity sanitary sewer; ten 6-inch diameter sewer laterals, and other sewer appurtenances. The Parrakeet Drive Local Sewer (HNs 6002-6068) project would benefit ten parcels, which include nine single-family homes and one vacant residential property. This project will eliminate nine Home Sewer Treatment Systems (HSTS). This project will outfall to an existing 36-inch diameter sewer, Sanitary Sewer No. 3023. This project was initiated by a citizen petition that included ten benefited properties. Property owners representing seven properties expressed support for the petition during the polling process.

Purpose

The purpose of this project is to eliminate nine Home Sewer Treatment Systems (HSTS). The Parrakeet Drive Local Sewer (HNs 6002-6068) project would benefit ten parcels, which include nine single-family homes and one vacant residential property.

Phases	Prior Year	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2016-2021
								Total
Construction	0	0	266,100	0	0	0	0	266,100
MSD Capital Improvements	0	0	266,100	0	0	0	0	266,100
Total								
Estimated Personnel Cost	0	0	13,310	0	0	0	0	13,310



Ramblingridge Drive and Twinwillow Lane Local Sewer

Dept. Priority: 108

Description

This project will provide resources for the Ramblingridge Drive and Twinwillow Lane Local Sewer project which would include the installation of an 8-inch diameter sanitary sewer main and 73 6-inch diameter sewer laterals to serve 73 properties on Ramblingridge Drive and Twinwillow Lane in Colerain Township, Hamilton County, Ohio. The sanitary sewer main and sewer laterals will be gravity sewers; however, it is possible that the sewer main may not be sufficiently deep to serve all structures with gravity flow. Therefore, some of the structures to be served may be required to employ residential sewage pumps to lift wastewater up to the sewer lateral. This project was initiated by a citizen petition.

Purpose

The purpose of this project is to install the Ramblingridge Drive and Twinwillow Lane Local Sewer and includes the installation of an 8-inch diameter sanitary sewer main and 73 6-inch diameter sewer laterals to serve 73 properties on Ramblingridge Drive and Twinwillow Lane in Colerain Township, Hamilton County, Ohio.

Phases	Prior Year	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2016-2021
								Total
Construction	0	0	0	3,243,000	0	0	0	3,243,000
MSD Capital Improvements	0	0	0	3,243,000	0	0	0	3,243,000
Total								
Estimated Personnel Cost	0	0	0	162,150	0	0	0	162,150

Kern Drive and Springdale Road Local Sewer

Dept. Priority: 109

Description

This project will provide resources for the replacement of 1,918 linear feet of 8-inch sewer to benefit 24 parcels and eliminate 23 Home Sewer Treatment Systems (HSTS).

Purpose

The purpose of this project is to respond to the submittal of a petition, statement, and waiver from the owner of the property to be benefited. The waiver, recorded with the Hamilton County Recorder's Office, satisfies the requirement of the Rules and Regulations for majority endorsement from benefited properties. Per Section 1805 (A)(1)(ii) of the Rules and Regulations and Section 6117.28 of the Ohio Revised Code (ORC), when all of the owners of all the lots and lands to be benefited by and assessed for a local sewer improvement consent to its cost and waive the public hearing notice and objection opportunity afforded under law, the Hamilton County Board of County Commissioners may choose to proceed to construct the improvement without the public hearing.

Phases	Prior Year	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2016-2021
								Total
Construction	0	0	457,400	0	0	0	0	457,400
MSD Capital Improvements	0	0	457,400	0	0	0	0	457,400
Total								
Estimated Personnel Cost	0	0	22,870	0	0	0	0	22,870

Capital Improvement Plan

Sewers



Mapleknoll Drive Local Sewer (HNs 9420-9562)

Dept. Priority: 110

Description

This project will provide resources for the Mapleknoll Drive Local Sewer (HNs 9420-9562) project which will benefit ten parcels, which are all single-family homes. The project will eliminate ten Home Sewer Treatment Systems (HSTS). The project will outfall to an existing 8-inch diameter sewer (Sanitary Sewer No. 4612), and an existing 12-inch diameter sewer (Sanitary Sewer No. 1282). The concept plan for this project involves construction of approximately 900 linear feet of 8-inch diameter gravity sanitary sewer, ten 6-inch diameter sewer laterals, and other sewer appurtenances. This project is the result of a citizen petition that included ten benefited properties. Property owners representing six properties expressed support for the petition during the polling process.

Purpose

The purpose of this project is to eliminate ten Home Sewer Treatment Systems (HSTS). The Mapleknoll Drive Local Sewer (HNs 9420-9562) project will benefit ten parcels, which are all single-family homes.

Phases	Prior Year	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2016-2021
								Total
Construction	0	0	304,200	0	0	0	0	304,200
MSD Capital Improvements	0	0	304,200	0	0	0	0	304,200
Total								
Estimated Personnel Cost	0	0	15,210	0	0	0	0	15,210

Reemelin Road Local Sewer (HNs 3489-3860)

Dept. Priority: 111

Description

This project will provide resources for the Reemelin Road Local Sewer (HNs 3489-3860) project which will benefit thirty parcels which are all single-family homes. This project will eliminate thirty Home Sewer Treatment Systems (HSTS). The project will outfall to an existing 12-inch diameter sewer (Sanitary Sewer No. 4706) and an existing 15-inch diameter sewer (Sanitary Sewer No. 3952). The concept plan for this project involves the construction of approximately 2,500 linear feet of 8-inch diameter gravity sanitary sewer; thirty 6-inch diameter sewer laterals, and other sewer appurtenances. This project was initiated by a citizen petition that included thirty benefited properties. Property owners representing eighteen properties expressed support for the petition during the polling process. This project is located in Green Township in Hamilton County, Ohio.

Purpose

The purpose of this project is to eliminate thirty Home Sewer Treatment Systems (HSTS). The Reemelin Road Local Sewer (HNs 3489-3860) project will benefit thirty parcels, which are all single-family homes.

Phases	Prior Year	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2016-2021
								Total
Construction	0	0	1,265,700	0	0	0	0	1,265,700
MSD Capital Improvements	0	0	1,265,700	0	0	0	0	1,265,700
Total								
Estimated Personnel Cost	0	0	63,290	0	0	0	0	63,290



Crestnoll Lane Local Sewer (HNs 3491-3609)

Dept. Priority: 112

Description

This project will provide resources for 1,698 linear feet of 8-inch sewer to eliminate twenty-five Home Sewer Treatments Systems (HSTS).

Purpose

The purpose of this project is to respond to the submittal of a petition, statement, and waiver from the owner of the property to be benefited. The waiver, recorded with the Hamilton County Recorder's Office, satisfies the requirements of the Rules and Regulations for majority endorsement from benefited properties. Per Section 1805 (A)(1)(ii) of the Rules and Regulations and Section 6117.28 of the Ohio Revised Code (ORC), when all of the owners of all the lots and lands to be benefited by and assessed for a local sewer improvement consent to its cost and waive the public hearing notice and objection opportunity afforded under law, the Hamilton County Board of County Commissioners may choose to proceed to construct the improvement without the public hearing.

Phases	Prior Year	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2016-2021
								Total
Construction	0	0	919,700	0	0	0	0	919,700
MSD Capital Improvements	0	0	919,700	0	0	0	0	919,700
Total								
<hr/>								
Estimated Personnel Cost	0	0	45,990	0	0	0	0	45,990

Old Blue Rock Road Local Sewer (HNs 5240-5327)

Dept. Priority: 113

Description

This project will provide resources for the elimination of seven Home Sewer Treatment Systems (HSTS). The local sewer plan proposes the construction of 840 linear feet of 8-inch diameter gravity sanitary sewer, seven 6-inch diameter sewer laterals, and other sewer appurtenances. This project is located on Old Blue Rock Road from HN 5240 to 5327. The project is located in the Taylor Creek sewershed of the Taylor Creek-Miamitown Basin, in Colerain Township, Hamilton County, Ohio.

Purpose

The purpose of this project is to respond to a citizens' petition that initiated this project. Property owners representing four properties expressed support for the petition during the polling process (57% level of support) thus meeting the Rules and Regulations requirements for majority endorsement from benefited properties. The petition is therefore valid under Hamilton County Board of County Commissioners' policy. The project cost was reduced by moving the sewer to the rear yards during the design process.

Phases	Prior Year	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2016-2021
								Total
Construction	0	238,100	0	0	0	0	0	238,100
MSD Capital Improvements	0	238,100	0	0	0	0	0	238,100
Total								
<hr/>								
Estimated Personnel Cost	0	11,910	0	0	0	0	0	11,910



Russell Heights Drive Local Sewer

Dept. Priority: 114

Description

This project will provide resources for a proposed sanitary sewer located in the Taylor Creek sewershed of the West Basin in Green Township, Hamilton County, Ohio on Russell Heights Drive and Rybolt Road at Russell Heights Drive. The current request is for design funding for this local sewer assessment project. The proposed Russell Heights Drive Local Sewer project would benefit thirteen single-family parcels, eliminating thirteen Home Sewer Treatment Systems (HSTS). This project would construct 1,300 linear feet of 8-inch diameter gravity sanitary sewer, thirteen 6-inch diameter sewer laterals, and other sewer appurtenances.

Purpose

The purpose of this project is to respond to the submittal of a petition, statement, and waiver from the owner of the property to be benefited. The waiver, recorded with the Hamilton County Recorder's Office, satisfies the requirements of the Rules and Regulations for majority endorsement from benefited properties. Per Section 1805 (A)(1)(ii) of the Rules and Regulations and Section 6117.28 of the Ohio Revised Code (ORC), when all of the owners of all the lots and lands to be benefited by and assessed for a local sewer improvement consent to its cost and waive the public hearing notice and objection opportunity afforded under law, the Hamilton County Board of County Commissioners may choose to proceed to construct the improvement without the public hearing.

Phases	Prior Year	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2016-2021
								Total
Construction	0	0	0	792,800	0	0	0	792,800
MSD Capital Improvements	0	0	0	792,800	0	0	0	792,800
Total								
Estimated Personnel Cost	0	0	0	39,640	0	0	0	39,640

Brierly Creek Road Local Sewer (HNs 6040-6100)

Dept. Priority: 115

Description

This project will provide resources for a proposed sanitary sewer in the Taylor Creek sewershed of the West Basin in Green Township, Hamilton County, Ohio between 6040 and 6100 Brierly Creek Road. The proposed Brierly Creek Road Local Sewer (HNs 6040-6100) project will benefit five single-family parcels and eliminate five Home Sewer Treatment Systems (HSTS). This project would construct 530 linear feet of 8-inch diameter gravity sanitary sewer, five 6-inch diameter sewer laterals, and other sewer appurtenances.

Purpose

The purpose of this project is to respond to the submittal of a petition, statement, and waiver from the owner of the property to be benefited. The waiver, recorded with the Hamilton County Recorder's Office, satisfies the requirements of the Rules and Regulations for majority endorsement from benefited properties. Per Section 1805 (A)(1)(ii) of the Rules and Regulations and Section 6117.28 of the Ohio Revised Code (ORC), when all of the owners of all the lots and lands to be benefited by and assessed for a local sewer improvement consent to its cost and waive the public hearing notice and objection opportunity afforded



under law, the Hamilton County Board of County Commissioners may choose to proceed to construct the improvement without the public hearing.

Phases	Prior Year	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2016-2021 Total
Construction	0	0	181,900	0	0	0	0	181,900
MSD Capital Improvements	0	0	181,900	0	0	0	0	181,900
Total								
Estimated Personnel Cost	0	0	9,100	0	0	0	0	9,100

Werk Road Local Sewer (HNs 5544-5686)

Dept. Priority: 116

Description

This project will provide resources for the proposed Werk Road Local Sewer (HNs 5544-5686) project which will benefit fourteen properties and eliminate eleven Home Sewer Treatment Systems (HSTS). This project would construct 1,466 linear feet of 8-inch diameter gravity sanitary sewer, nineteen 6-inch diameter sewer laterals, and other sewer appurtenances. The project is located between 5544 Werk Road and 5686 Werk Road as well as between 3142 Andres Lane and 3162 Andres Lane. This project is located in the Muddy Creek sewershed of the West Basin, Green Township, Hamilton County, Ohio.

Purpose

The purpose of this project is to respond to a citizens' petition that initiated this project. Property owners representing nine (out of sixteen) properties expressed support for the petition during the polling process (56% level of support), thus meeting the Rules and Regulations requirements for majority endorsement from benefited properties. The petition is therefore valid under Board policy.

Phases	Prior Year	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2016-2021 Total
Construction	0	671,300	0	0	0	0	0	671,300
Engineering	0	80,000	0	0	0	0	0	80,000
MSD Capital Improvements	0	751,300	0	0	0	0	0	751,300
Total								
Estimated Personnel Cost	0	37,570	0	0	0	0	0	37,570

Upper Road Local Sewer (HNs 6340-6434)

Dept. Priority: 117

Description

This project will provide resources for the Upper Road Local Sewer (HNs 6340-6434) project which would benefit four parcels which are all single family homes. The project will eliminate four Home Sewer Treatment Systems (HSTS). The project would outfall to Sanitary Sewer (SS) No. 2085 running on the south side of Cleves Warsaw Road. This project involves the construction of 850 linear feet of 8-inch diameter gravity sanitary sewer, four 6-inch diameter sewer laterals, and other sewer appurtenances. This project was initiated by a citizen petition and is located starting at 6340 Upper Road and ending at 6434 Upper Road in the

Capital Improvement Plan



Sewers

Muddy Creek drainage basin, Muddy Creek sewershed of the West Basin, in Delhi Township, Hamilton County, Ohio.

Purpose

The purpose of this project is to eliminate four onsite Home Sewer Treatment Systems (HSTS) according to Hamilton County Public Health.

Phases	Prior Year	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2016-2021 Total
Construction	0	0	171,000	0	0	0	0	171,000
MSD Capital Improvements Total	0	0	171,000	0	0	0	0	171,000
Estimated Personnel Cost	0	0	8,550	0	0	0	0	8,550

Carpol Avenue, Honeywell Avenue & E. Kemper Road Local Sewer

Dept. Priority: 118

Description

This project will provide resources for the Carpol Avenue, Honeywell Avenue & E. Kemper Road Local Sewer project which would include the installation of an 8-inch diameter sanitary sewer main and sixty-two, 6-inch diameter sewer laterals to serve 62 properties on Carpol Avenue, Honeywell Avenue, and E. Kemper Road in the City of Sharonville in Hamilton County, Ohio. The sanitary sewer main and sewer laterals will be gravity sewers; however, it is possible that the sewer main may not be sufficiently deep to serve all structures with gravity flow. Therefore, some of the structures to be served may be required to employ residential sewage pumps to lift wastewater up to the sewer lateral. The residential sewage pumps, if required, are not included in the public sewer improvement and must be purchased and installed by each property owner.

Purpose

The purpose of this project is to fulfill the requirements of a 2009 citizen petition for the referenced neighborhood. The citizen petition was managed in accordance with Metropolitan Sewer District (MSD) Rules and Regulations, Section 1805. The petition area included 62 benefited properties. Polling responses were received for 53 of the 62 properties. Property owners representing 35 properties expressed support for the petition during the polling process. The petition received positive endorsement from a majority of benefited property owners and is therefore valid under Board policy.

Phases	Prior Year	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2016-2021 Total
Construction	0	0	0	1,044,700	0	0	0	1,044,700
MSD Capital Improvements Total	0	0	0	1,044,700	0	0	0	1,044,700
Estimated Personnel Cost	0	0	0	52,240	0	0	0	52,240



North Bend Road Local Sewer (HNs 504-565)

Dept. Priority: 119

Description

This project will provide resources for construction of approximately 1,350 feet of 8-inch sanitary sewer to serve seven residential properties, located in the South Branch Mill Creek drainage basin, Mill Creek sewer-shed of the West Basin in Springfield Township, Hamilton County, Ohio starting on North Bend Road at address 504 and ending at address 565 on North Bend Road.

Purpose

The purpose of this project is to respond to a citizen initiated petition that included 7 benefited properties. Property owners representing 5 properties expressed support for the petition during the polling process. The petition received positive endorsement from a majority of benefited property owners and therefore advanced as a capital project per Board policy, Metropolitan Sewer District Rules and Regulations, Section 1805. Planning was legislated under the Home Sewer Treatment System Allowance Project #10190307.

Phases	Prior Year	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2016-2021 Total
Construction	351,900	355,500	0	0	0	0	0	355,500
MSD Capital Improvements Total	351,900	355,500	0	0	0	0	0	355,500
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Estimated Personnel Cost	17,600	17,780	0	0	0	0	0	17,780

Coldstream Drive and Asbury Road Local Sewer

Dept. Priority: 120

Description

This project will provide resources for the elimination of 33 Home Sewer Treatment Systems (HSTS). The project will outfall to existing 12-inch diameter Sanitary Sewer (SS) No. 1704 located 700 feet east of 5 Mile Road near the Interstate 275 on-ramp. The concept plan for this project involves the construction of 5,200 linear feet of 8-inch diameter gravity sanitary sewer; thirty-five 6-inch diameter sewer laterals, and other sewer appurtenances. This project is located in the Little Miami Sewershed of the 5 Mile Basin in Anderson Township, Hamilton County, Ohio. The project includes Coldstream Drive in its entirety, along Asbury Road between addresses 527 and 669 and along Hopper Road between addresses 7720 and 7770. The project was initiated by a citizen petition.

Purpose

The purpose of this project is to eliminate 33 Home Sewer Treatment Systems (HSTS) and connect them to an existing 12-inch sewer by installing a 8-inch gravity sewer and 6-inch sewer laterals and other sewer appurtenances.

Phases	Prior Year	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2016-2021 Total
Construction	0	0	3,639,800	0	0	0	0	3,639,800
MSD Capital Improvements Total	0	0	3,639,800	0	0	0	0	3,639,800
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Estimated Personnel Cost	0	0	181,990	0	0	0	0	181,990

Capital Improvement Plan

Sewers



State Road Local Sewer (HNs 7737-7849)

Dept. Priority: 121

Description

This project will provide resources for the elimination of 18 Home Sewer Treatment Systems (HSTS). The concept plan for this project involves construction of approximately 1,300 linear feet of 8-inch diameter gravity sanitary sewer, eighteen 6-inch diameter sewer laterals, and other sewer appurtenances. The project is located between 7737 State Road and 7849 State Road. The State Road Local Sewer (HNs 7737-7849) project will benefit 18 parcels, which are all single-family homes. The project is located in the Little Miami sewershed in the Clough Drainage Basin of the East Basin in Anderson Township, Hamilton County, Ohio.

Purpose

The purpose of this project is to respond to a citizen petition that included 18 benefited properties. Property owners representing 10 properties expressed support for the petition during the polling process. The petition received positive endorsement from a majority of benefited property owners and is therefore valid under Board policy, Rules and Regulations, Section 1805. The project costs have decreased since the original project estimate due to more precise information through the design process.

Phases	Prior Year	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2016-2021
								Total
Construction	0	459,800	0	0	0	0	0	459,800
MSD Capital Improvements	0	459,800	0	0	0	0	0	459,800
Total								
Estimated Personnel Cost	0	22,990	0	0	0	0	0	22,990

Mt. Carmel Road Vicbarb Lane Apple Blossom Lane Local Sewer

Dept. Priority: 122

Description

This project will provide resources for the construction of 3,509 linear feet of 8-inch diameter gravity sanitary sewer, forty-nine 6-inch diameter sewer laterals, and other sewer appurtenances. The Mt. Carmel Road, Vicbarb Lane, and Apple Blossom Lane Local Sewer project will benefit 44 single-family parcels, 3 residential vacant properties, 1 church, and 1 other commercial structure, and eliminate 46 Home Sewer Treatment Systems (HSTS). The project is located on Mt. Carmel Road between Apple Blossom Lane and 3266 Mt. Carmel Road. This project is located in the Little Miami sewershed of the East Basin in Anderson Township, Hamilton County, Ohio.

Purpose

The purpose of this project is to meet the requirements of the Resolution of Intent passed on August 24, 2011, recognizing that no petition or declaration of a health nuisance by Hamilton County Public Health exists in the project area and directing the advancement of progress on this local assessment sewer. The construction cost increased because it was originally assumed that the sewer alignment would be outside the



roadway in the grass area, but it was located in the street due to utility and structural conflicts. Conditions would also require an extra cost to remove contaminated soil.

Phases	Prior Year	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2016-2021 Total
Construction	0	1,491,000	0	0	0	0	0	1,491,000
MSD Capital Improvements	0	1,491,000	0	0	0	0	0	1,491,000
Total								
Estimated Personnel Cost	0	74,550	0	0	0	0	0	74,550

Boomer Road Sewer Lateral Assessment

Dept. Priority: 123

Description

This project will provide resources for a proposed sewer lateral assessment project in the Taylor Creek sewershed of the West Basin in Green Township, Hamilton County, Ohio at 4230 Boomer Road. The proposed Boomer Road Sewer Lateral Assessment (HN 4230) will benefit one single-family parcel by extending a sewer lateral to the boundary of the public right-of-way in front of the benefited property, and eliminating one Home Sewer Treatment System (HSTS). This project would construct one 22 foot long sewer lateral that will connect to a low pressure force main.

Purpose

The purpose of this project is to respond to the submittal of a petition, statement, and waiver from the owner of the property to be benefited. The waiver, recorded with the Hamilton County Recorder's Office, satisfies the requirements of the Rules and Regulations for majority endorsement from benefited properties. Per Section 1805 (A)(1)(ii) of the Rules and Regulations and Section 6117.28 of the Ohio Revised Code (ORC), when all of the owners of all the lots and lands to be benefited by and assessed for a local sewer improvement consent to its cost and waive the public hearing notice and objection opportunity afforded under law, the Hamilton County Board of County Commissioners may choose to proceed to construct the improvement without the public hearing.

Phases	Prior Year	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2016-2021 Total
Construction	0	30,100	0	0	0	0	0	30,100
Engineering	0	2,000	0	0	0	0	0	2,000
MSD Capital Improvements	0	32,100	0	0	0	0	0	32,100
Total								
Estimated Personnel Cost	0	1,610	0	0	0	0	0	1,610

Foley Road Sewer Laterals (HNs 5579, 5583-5599, 5602)

Dept. Priority: 124

Description

This project will provide resources for a proposed sewer lateral assessment project located in the Muddy Creek sewershed of the West Basin in Delhi Township, Hamilton County, Ohio at 5579 Foley Road. The proposed Foley Road Sewer Lateral Assessment (HNs 5579, 5583-5599, 5602) project will benefit seven single-family parcels by extending a sewer lateral to the boundary of the public right of way in front of the bene-

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Sewers

fited property, and eliminating seven Home Sewer Treatment Systems (HSTS). This project would construct seven 6-inch diameter sewer laterals 40 feet long that will connect to a gravity sewer.

Purpose

The purpose of this project is to respond to the submittal of a petition, statement, and waiver from the owner of the property to be benefited. The waiver, recorded with the Hamilton County Recorder's Office, satisfies the requirement of the Rules and Regulations for majority endorsement from benefited properties. Per Section 1805 (A)(1)(ii) of the Rules and Regulations and Section 6117.28 of the Ohio Revised Code (ORC), when all of the owners of all the lots and lands to be benefited by and assessed for a local sewer improvement consent to its cost and waive the public hearing notice and objection opportunity afforded under law, the County Commissioners may choose to proceed to construct the improvement without the public hearing.

Phases	Prior Year	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2016-2021
								Total
Construction	0	0	31,400	0	0	0	0	31,400
Engineering	0	25,700	0	0	0	0	0	25,700
Land	0	32,700	0	0	0	0	0	32,700
MSD Capital Improvements Total	0	58,400	31,400	0	0	0	0	89,800
Estimated Personnel Cost	0	2,920	1,570	0	0	0	0	4,490

Werk Road Sewer Lateral Assessment (HN 6052)

Dept. Priority: 125

Description

This project will provide resources for a proposed sewer lateral assessment at 6052 Werk Road. The proposed Werk Road Sewer Lateral Assessment (HN 6052) project will benefit one single-family parcel by extending a sewer lateral to the boundary of the public right of way in front of the benefited property and eliminating one Home Sewer Treatment System (HSTS). This project would construct one 6-inch diameter sewer lateral 51 feet long that will connect to a gravity sewer. This project is located in the Muddy Creek sewershed of the West Basin in Green Township, Hamilton County, Ohio.

Purpose

The purpose of this project is to respond to the submittal of a petition, statement, and waiver from the owner of the property to be benefited. The waiver, recorded with the Hamilton County Recorder's Office, satisfies the requirements of the Rules and Regulations for majority endorsement from benefited properties. Per Section 1805 (A)(1)(ii) of the the Rules and Regulations and Section 6117.28 of the Ohio Revised Code (ORC), when all the owners of all the lots and lands to be benefited by and assessed for a local sewer improvement consent to its cost and waive the public hearing notice and objection opportunity afforded



under law, the Hamilton County Board of County Commissioners may choose to proceed to construct the improvement without the public hearing.

Phases	Prior Year	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2016-2021 Total
Construction	0	40,300	0	0	0	0	0	40,300
Engineering	0	2,000	0	0	0	0	0	2,000
MSD Capital Improvements Total	0	42,300	0	0	0	0	0	42,300
Estimated Personnel Cost	0	2,120	0	0	0	0	0	2,120

E. Galbraith Road Sewer Lateral Assessment (HN 4454)

Dept. Priority: 126

Description

This project will provide resources for a proposed sewer lateral assessment project located in the Mill Creek sewershed of the Central Basin in Sycamore Township, Hamilton County, Ohio at 4454 E. Galbraith Road. The proposed E. Galbraith Road Sewer Lateral Assessment (HN 4454) project will benefit one single-family parcel by extending a sewer lateral to the boundary of the public right-of-way in front of the benefited property, and eliminating one Home Sewer Treatment System (HSTS). This project would construct one 6-inch diameter sewer lateral 47 feet long that will connect to a gravity sewer.

Purpose

The purpose of this project is to respond to the submittal of a petition, statement, and waiver from the owner of the property to be benefited. The waiver, recorded with the Hamilton County Recorder's Office, satisfies the requirements of the Rules and Regulations for majority endorsement from benefited properties. Per Section 1805 (A)(1)(ii) of the Rules and Regulations and Section 6117.28 of the Ohio Revised Code (ORC), when all of the owners of all the lots and lands to be benefited by and assessed for a local sewer improvement consent to its cost and waive the public hearing notice and objection opportunity afforded under law, the Hamilton County Board of County Commissioners may choose to proceed to construct the improvement without the public hearing.

Phases	Prior Year	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2016-2021 Total
Construction	0	45,400	0	0	0	0	0	45,400
Engineering	0	2,000	0	0	0	0	0	2,000
MSD Capital Improvements Total	0	47,400	0	0	0	0	0	47,400
Estimated Personnel Cost	0	2,370	0	0	0	0	0	2,370

Pottinger Road Sewer Lateral Assessment (HN 10444)

Dept. Priority: 127

Description

This project will provide resources for the Pottinger Road Sewer Lateral Assessment (HN 10444) project which will benefit one single-family parcel by extending a sewer lateral to the boundary of the public right of way in front of the benefited property, eliminating one Home Sewer Treatment System (HSTS). This project would construct one 6-inch diameter sewer lateral 67 feet long that will connect to a gravity sewer. This

Capital Improvement Plan

Sewers



project is located at 10444 Pottinger Road in the Mill Creek sewershed of the Central Basin in Colerain Township, Hamilton County, Ohio.

Purpose

The purpose of this project is to respond to the submittal of a petition, statement, and waiver from the owner of the property to be benefited. The waiver, recorded with the Hamilton County Recorder's Office, satisfies the requirements of the Rules and Regulations for majority endorsement from benefited properties. Per Section 1805 (A)(1)(ii) of the Rules and Regulations and Section 6117.28 of the Ohio Revised Code (ORC), when all of the owners of all the lots and lands to be benefited by and assessed for a local sewer improvement consent to its cost and waive the public hearing notice and objection opportunity afforded under law, the Hamilton County Board of County Commissioners may choose to proceed to construct the improvement without the public hearing.

Phases	Prior Year	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2016-2021
								Total
Construction	0	40,300	0	0	0	0	0	40,300
Engineering	0	2,000	0	0	0	0	0	2,000
MSD Capital Improvements Total	0	42,300	0	0	0	0	0	42,300
Estimated Personnel Cost	0	2,120	0	0	0	0	0	2,120

Enyart Road Sewer Lateral Assessments (HNs 11258 and 11262)

Dept. Priority: 128

Description

This project will provide resources for the proposed Enyart Road Sewer Lateral Assessments (HNs 11258 & 11262) project which will benefit two single-family parcels by extending one sewer lateral for each benefited property to the boundary of the public right of way in front of each property, eliminating two Home Sewer Treatment Systems (HSTS). The proposed sanitary sewer laterals will outfall to Sanitary Sewer (SS) No. 2282. This project would construct two 6-inch diameter sewer laterals having a combined length of 72 feet. The project is located in the Polk Run sewershed of the East Basin in Symmes Township, Hamilton County, Ohio at 11258 and 11262 Enyart Road.

Purpose

The purpose of this project is to respond to the submittal of a petition, statement, and waiver from the owner of each property to be benefited. Hamilton County Public Health has issued orders to remedy the health situation for the properties at 11258 and 11262 Enyart Road.

Phases	Prior Year	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2016-2021
								Total
Construction	0	22,800	0	0	0	0	0	22,800
Engineering	0	500	0	0	0	0	0	500
MSD Capital Improvements Total	0	23,300	0	0	0	0	0	23,300
Estimated Personnel Cost	0	1,170	0	0	0	0	0	1,170



Enyart Road Sewer Lateral Assessment

Dept. Priority: 129

Description

This project will provide resources for a proposed sewer lateral assessment project located in the Polk Run sewershed of the East Basin in Symmes Township, Hamilton County, Ohio at 11328 Enyart Road. The proposed Enyart Road Sewer Lateral Assessment (HN 11328) project will benefit one single-family parcel by extending a sewer lateral to the boundary of the public right of way in front of the benefited property, eliminating one Home Sewer Treatment System (HSTS). This project would construct one 6-inch diameter sewer lateral 55 feet long that will connect to a gravity sewer.

Purpose

The purpose of this project is to respond to the submittal of a petition, statement, and waiver from the owner of the property to be benefited. The waiver, recorded with the Hamilton County Recorder's Office, satisfies the requirements of the Rules and Regulations for majority endorsement from benefited properties. Per Section 1805 (A)(1)(ii) of the Rules and Regulations and Section 6117.28 of the Ohio Revised Code (ORC), when all of the owners of all the lots and lands to be benefited by and assessed for a local sewer improvement consent to its cost and waive the public hearing notice and objection opportunity afforded under law, the Hamilton County Board of County Commissioners may choose to proceed to construct the improvement without the public hearing.

Phases	Prior Year	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2016-2021
								Total
Construction	0	40,300	0	0	0	0	0	40,300
Engineering	0	2,000	0	0	0	0	0	2,000
MSD Capital Improvements Total	0	42,300	0	0	0	0	0	42,300
Estimated Personnel Cost	0	2,120	0	0	0	0	0	2,120

E. Kemper Road Sewer Lateral Assessment (HN 269)

Dept. Priority: 130

Description

This project will provide resources for a proposed sewer lateral assessment project located in the Polk Run sewershed of the East Basin in Symmes Township, Hamilton County, Ohio at 269 E. Kemper Road. The proposed E. Kemper Road Sewer Lateral Assessment (HN 269) project will benefit one single-family parcel by extending a sewer lateral to the boundary of the public right of way in front of the benefited property, and eliminating one Home Sewer Treatment System (HSTS). This project would construct one 6-inch diameter sewer lateral 19 feet long that will connect to a gravity sewer.

Purpose

The purpose of this project is to respond to the submittal of a petition, statement, and waiver from the owner of the property to be benefited. The waiver, recorded with the Hamilton County Recorder's Office, satisfies the requirements of the Rules and Regulations for majority endorsement from benefited properties. Per Section 1805 (A)(1)(ii) of the the Rules and Regulations and Section 6117.28 of the Ohio Revised Code (ORC), when all of the owners of all the lots and lands to be benefited by and assessed for a local sewer improvement consent to its cost and waive the public hearing notice and objection opportunity afforded

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under law, the Hamilton County Board of County Commissioners may choose to proceed to construct the improvement without the public hearing.

Phases	Prior Year	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2016-2021 Total
Construction	0	25,000	0	0	0	0	0	25,000
Engineering	0	2,000	0	0	0	0	0	2,000
MSD Capital Improvements Total	0	27,000	0	0	0	0	0	27,000
Estimated Personnel Cost	0	1,350	0	0	0	0	0	1,350

E. Kemper Road Sewer Lateral Assessment

Dept. Priority: 131

Description

This project will provide resources for a proposed sewer lateral assessment project located in the Polk Run sewershed of the East Basin in Symmes Township, Hamilton County, Ohio at 9433 E. Kemper Road. The proposed E. Kemper Road Sewer Lateral Assessment (HN 9433) project will benefit one single-family parcel by extending a sewer lateral to the boundary of the public right of way in front of the benefited property, and eliminating one Home Sewer Treatment System (HSTS). This project would construct one 6-inch diameter sewer lateral 64 feet long that will connect to a gravity sewer.

Purpose

The purpose of this project is to respond to the submittal of a petition, statement, and waiver from the owner of the property to be benefited. The waiver, recorded with the Hamilton County Recorder's Office, satisfies the requirements of the Rules and Regulations for majority endorsement from benefited properties. Per Section 1805 (A)(1)(ii) of the Rules and Regulations and Section 6117.28 of the Ohio Revised Code (ORC), when all of the owners of all the lots and lands to be benefited by and assessed for a local sewer improvement consent to its cost and waive the public hearing notice and objection opportunity afforded under law, the Hamilton County Board of County Commissioners may choose to proceed to construct the improvement without the public hearing.

Phases	Prior Year	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2016-2021 Total
Construction	0	50,500	0	0	0	0	0	50,500
Engineering	0	2,000	0	0	0	0	0	2,000
MSD Capital Improvements Total	0	52,500	0	0	0	0	0	52,500
Estimated Personnel Cost	0	2,630	0	0	0	0	0	2,630

Drake Road Sewer Lateral Assessment (HN 7315)

Dept. Priority: 132

Description

This project will provide resources for a proposed sewer lateral assessment project located in the Sycamore Creek sewershed of the East Basin in the Village of Indian Hill, Hamilton County, Ohio at 7315 Drake Road. The proposed Drake Road Sewer Lateral Assessment (HN 7315) project will benefit one single-family parcel by extending a sewer lateral to the boundary of the public right-of-way in front of the benefited property,



eliminating one Home Sewer Treatment System (HSTS). This project would construct one 6-inch diameter sewer lateral 43 feet long that will connect to a gravity sewer.

Purpose

The purpose of this project is to respond to the submittal of a petition, statement, and waiver from the owner of the property to be benefited. The waiver, recorded with the Hamilton County Recorder's Office, satisfies the requirements of the Rules and Regulations for majority endorsement from benefited properties. Per Section 1805 (A)(1)(ii) of the Rules and Regulations and Section 6117.28 of the Ohio Revised Code (ORC), when all of the owners of all the lots and lands to be benefited by and assessed for a local sewer improvement consent to its cost and waive the public hearing notice and objection opportunity afforded under law, the Hamilton County Board of County Commissioners may choose to proceed to construct the improvement without the public hearing.

Phases	Prior Year	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2016-2021
								Total
Construction	0	35,200	0	0	0	0	0	35,200
Engineering	0	2,000	0	0	0	0	0	2,000
MSD Capital Improvements	0	37,200	0	0	0	0	0	37,200
Total								
Estimated Personnel Cost	0	1,860	0	0	0	0	0	1,860

Woodruff Road Sewer Lateral Assessment (HNs 8145, 8167,8237)

Dept. Priority: 133

Description

This project will provide resources for a proposed sewer lateral assessment project at 8145, 8167, and 8237 Woodruff Road. The current request is for design funding. The proposed Woodruff Road Sewer Lateral Assessment (HNs 8145, 8167, 8237) project will benefit three single-family parcels by extending a sewer lateral to the boundary of the public right-of-way in front of each benefited property and eliminating three Home Sewer Treatment Systems (HSTS). This project would construct three 6-inch diameter sewer laterals having a combined length of 162 feet. Each lateral will connect to a gravity sewer. This project is located in the Little Miami sewershed of the East Basin in Anderson Township, Hamilton County, Ohio.

Purpose

The purpose of this project is to respond to the submittal of a petition, statement, and waiver from the owner of the property to be benefited. The waiver, recorded with the Hamilton County Recorder's Office, satisfies the requirement of the Rules and Regulations for majority endorsement from benefited properties. Per Section 1805 (A)(1)(ii) of the Rules and Regulations and Section 6117.28 of the Ohio Revised Code (ORC), when all the owners of all the lots and lands to be benefited by and assessed for a local sewer improvement consent to its cost and waive the public hearing notice and objection opportunity afforded

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under law, the Hamilton County Board of County Commissioners may choose to proceed to construct the improvement without the public hearing.

Phases	Prior Year	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2016-2021 Total
Construction	0	0	75,000	0	0	0	0	75,000
MSD Capital Improvements	0	0	75,000	0	0	0	0	75,000
Total								
Estimated Personnel Cost	0	0	3,750	0	0	0	0	3,750

Great Miami WWTP

Dept. Priority: 134

Description

This project will provide resources for preliminary engineering and development of Design-Build procurement documents. This project is located along East Miami River Road, southwest of the interchange with US Route 27, in Colerain Township, Hamilton County, Ohio.

Purpose

The purpose of this project is to provide an opportunity for shared resources for construction, management, operation, and maintenance of a regional wastewater treatment facility. The final Wet Weather Improvement Program (WWIP) identifies a new Wastewater Treatment Plant for northwestern Hamilton County and southwestern Butler County. In 2009, the County purchased property for this future facility and authorized planning. This project will also mitigate the risk of a Pleasant Run force main failure.

Phases	Prior Year	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2016-2021 Total
Construction	0	0	0	0	55,000,000	0	0	55,000,000
Engineering	0	5,000,000	0	0	0	0	0	5,000,000
MSD Capital Improvements	0	5,000,000	0	0	55,000,000	0	0	60,000,000
Total								
Estimated Personnel Cost	0	250,000	0	0	2,750,000	0	0	3,000,000

Bruestle Avenue Pump Station Elimination

Dept. Priority: 135

Description

This project will provide resources for an approximately 2,350 foot long gravity sewer which will allow for the elimination of the existing Bruestle Avenue pump station. The project starts near 3957 Reemelin Road and extends southeast to the proposed Bruestle Subdivision, located in the City of Cheviot and Green Township in Hamilton County, Ohio.

Purpose

The purpose of this project is to replace the Bruestle Avenue pump station which was built in 1968, and is near the end of its useful life and does not meet current pump station standards. Completion of this project will result in an annual operations and maintenance savings of over \$21,000 as compared to maintaining the existing pump station. The 100-year net present value for eliminating the pump station is \$2.82 million



lower than the net present value for maintaining the current pump station. In addition to the savings, the gravity sewer will bring sewer service to existing homes on Robinhill Drive and Harvest Ridge Drive.

Phases	Prior Year	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2016-2021 Total
Construction	0	0	989,100	0	0	0	0	989,100
MSD Capital Improvements	0	0	989,100	0	0	0	0	989,100
Total								
Estimated Personnel Cost	0	0	49,460	0	0	0	0	49,460

Rackacres Drive and Crestnoll Lane Area Sewer

Dept. Priority: 136

Description

This project will provide resources for the construction of 2,375 linear feet of 12-inch gravity sewer west of Crestnoll and Rackacres from Reemelin Road to South of Edgewood Road in Green Township in Hamilton County, Ohio.

Purpose

The purpose of this project is to construct a new gravity sewer to allow for the elimination of Home Sewer Treatment Systems (HSTS) in the Rackacres and Crestnoll neighborhoods. The Business Case Evaluation shows that construction of the gravity sewer is the least costly alternative when considering all costs to the Metropolitan Sewer District, including operation and maintenance costs of the existing force main.

Phases	Prior Year	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2016-2021 Total
Construction	1,237,500	0	1,237,500	0	0	0	0	1,237,500
MSD Capital Improvements	1,237,500	0	1,237,500	0	0	0	0	1,237,500
Total								
Estimated Personnel Cost	61,880	0	61,880	0	0	0	0	61,880

Whitewater Township Regional Sewer District Phase III SR 128

Dept. Priority: 137

Description

This project will provide resources for the installation of a force main and gravity sewer along State Route 128 from the intersection of State Route 128 and Furlong Drive to a point 3,400 feet east of the intersection of Morgan Road and State Route 128. This project is in Whitewater Township, Hamilton County, Ohio.

Purpose

The purpose of this project is to build a trunk sewer and provide service to the residents along SR 128 and the adjoining area. It will eliminate two small package plants. This project was proposed by the Whitewater

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Township Regional Sewer District (WTRSD). According to Section IV of the Interdistrict agreement, WTRSD can propose projects to be funded by the Metropolitan Sewer District (MSD).

Phases	Prior Year	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2016-2021 Total
Construction	0	0	6,142,500	0	0	0	0	6,142,500
MSD Capital Improvements	0	0	6,142,500	0	0	0	0	6,142,500
Total								
Estimated Personnel Cost	0	0	307,130	0	0	0	0	307,130

CSOs 404, 405, 410, 411 Outfall Reconstruction

Dept. Priority: 138

Description

This project will provide resources for the removal of the existing outfall headwalls and portions of sewer pipe, as well as the construction of new headwalls with flap gates and establishment of permanent erosion control. This project is located in the Sayler Park and Riverside neighborhoods of the City of Cincinnati.

Purpose

The purpose of this project is to provide backflow protection for outfall structures to the Ohio River for Combined Sewer Overflows (CSOs) 404, 405, 410, and 411. At higher river stages, this allows river water to backflow into the sewer system and inundate the Muddy Creek Interceptor Sewer. The current measures used to prevent this inundation cause untreated sanitary sewage to bypass directly into the Ohio River. Reconstruction of these outfalls to the Ohio River to incorporate backflow prevention will protect the Muddy Creek Interceptor Sewer from inundation and prevent the bypass of untreated sewage during higher river stages.

Phases	Prior Year	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2016-2021 Total
Construction	661,800	0	656,800	0	0	0	0	656,800
MSD Capital Improvements	661,800	0	656,800	0	0	0	0	656,800
Total								
Estimated Personnel Cost	33,090	0	32,840	0	0	0	0	32,840

Westport Village Pump Station Elimination

Dept. Priority: 139

Description

This project will provide resources for the elimination of the existing Westport Village pump station by installing approximately 425 linear feet of new 12-inch diameter gravity sewer and replacing approximately 675 linear feet of existing 12-inch diameter gravity sewer at a deeper depth. The replacement of the existing sewer will provide more adequate flushing velocity in order to minimize potential Water in Basement (WIB) complaints. The proposed Westport Village pump station elimination project is located between Charity Drive and Sharlene Court in Green Township, Hamilton County, Ohio.

Purpose

The purpose of this project is to eliminate the existing Westport Village pump station. The existing pump station was replaced in 1985 and is nearing the end of its design life (based on the analysis manual of a thirty



year lifespan of a pump station). The force main was constructed in 1968 and is also nearing the end of its design life (based on a financial analysis manual of a fifty year lifespan of a force main). Elimination of the existing pump station will redirect flows from Sanitary Sewer Overflow (SSO) 1012 to Sanitary Sewer Overflow (SSO) 697. Credits are available at Sanitary Sewer Overflow (SSO) 697 for the project. Elimination of the pump station would generate 22.53 credits at Sanitary Sewer Overflow (SSO) 1012.

Phases	Prior Year	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2016-2021
								Total
Construction	0	0	1,236,150	0	0	0	0	1,236,150
MSD Capital Improvements	0	0	1,236,150	0	0	0	0	1,236,150
Total								
Estimated Personnel Cost	0	0	61,810	0	0	0	0	61,810

Barrington Hills, Barrington Hills BLK. F, Gil Volz, and Kir

Dept. Priority: 140

Description

This project will provide resources for the construction of 9,600 feet of 8-inch to 15-inch diameter sewer and the elimination of five pump stations. The project is located between Leibel Road and 1st Street in Green Township in Hamilton County, Ohio.

Purpose

The purpose of this project is to eliminate five existing pump stations through construction of a new sanitary sewer. During design, it was determined the new gravity sewer will connect to the existing sanitary system near Fiddler's Green. Given the topography and existing structures and infrastructure, the new gravity line will be constructed using trenchless technology to minimize the impact to area residents and businesses. This project will provide service to unsewered areas and reduce annual operations and maintenance costs resulting from the pump stations. This project is being coordinated with other active projects planned for the Muddy Creek sewershed.

Phases	Prior Year	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2016-2021
								Total
Construction	0	0	0	0	7,396,900	0	0	7,396,900
MSD Capital Improvements	0	0	0	0	7,396,900	0	0	7,396,900
Total								
Estimated Personnel Cost	0	0	0	0	369,850	0	0	369,850

Lower Muddy Creek Interceptor SSO Remediation

Dept. Priority: 141

Description

This project will provide resources for the construction of pressurized structures to mitigate intrusion of Ohio River water in the existing combined sewer system. The project is located in portions of the Village of Addyston, the Saylor Park neighborhood of the City of Cincinnati, Miami Township, and Delhi Township.

Purpose

The purpose of the project is to consolidate multiple overflow location tributaries to the Lower Muddy Creek Interceptor to three locations in the system. Overflows currently occur along the interceptor on pri-

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vate property, including a marina, ball fields, driving range, and a horse pasture. The project will replace existing manholes with pressure capable manhole structures to direct overflow into the Ohio River during high river conditions. The new manhole structures will also help address chronic high water dry weather overflow problems in the sanitary sewer system caused by river intrusion during high river conditions.

Phases	Prior Year	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2016-2021
								Total
Construction	0	0	6,101,600	0	0	0	0	6,101,600
Engineering	1,360,100	0	0	0	0	0	0	0
MSD Capital Improvements Total	1,360,100	0	6,101,600	0	0	0	0	6,101,600
Estimated Personnel Cost	68,010	0	305,080	0	0	0	0	305,080

Addyston Extraneous Stormwater Removal

Dept. Priority: 142

Description

This project will provide resources for the West Branch Muddy Creek Bundle planning effort by reducing tributary flows to the Muddy Creek Pump Station.

Purpose

The purpose of this project is to reduce tributary flows to the Muddy Creek Pump Station.

Phases	Prior Year	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2016-2021
								Total
Engineering	0	0	0	0	0	693,800	0	693,800
Land	0	0	0	0	0	55,000	0	55,000
MSD Capital Improvements Total	0	0	0	0	0	748,800	0	748,800
Estimated Personnel Cost	0	0	0	0	0	37,440	0	37,440

Addyston Creek and Sewer Rehabilitation

Dept. Priority: 143

Description

This project will provide resources for sewer rehabilitation located along the West Fork Muddy Creek between Church Street and 1st Street, in the Village of Addyston, in the Muddy Creek Basin. The project will construct a new 21-inch diameter sewer on the east side of the West Fork Muddy Creek, fill, seal, and abandon the existing 8-inch and 18-inch diameter sewer and replace the fallen retaining wall on the West side of the West Fork Muddy Creek.

Purpose

The purpose of this project is to stabilize the West Fork Muddy Creek which has shifted causing damage to the 12-inch diameter sewer from manhole 11801005 to manhole 11801001 and manhole 11810112. Pipe segment 11801003-11801002 fell away from the hillside due to erosion in August 2011. Manhole 11801002 col-



lapsed in July 2010 and was repaired. The sewer segments further south of this segment are protected by a vertical retaining wall that has fallen away and needs to be repaired.

Phases	Prior Year	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2016-2021 Total
Construction	0	0	517,100	0	0	0	0	517,100
Engineering	190,340	0	0	0	0	0	0	0
MSD Capital Improvements Total	190,340	0	517,100	0	0	0	0	517,100
Estimated Personnel Cost	9,520	0	25,860	0	0	0	0	25,860

CSO 125 Stream Separation

Dept. Priority: 144

Description

This project will provide resources for approximately 7,600 linear feet of storm sewers and two detention basins, and a 1.5 million gallon Combined Sewer Overflow (CSO) storage tank. The tank will work in conjunction with the existing Badgeley Run Real Time Control (RTC) facility that is included in the West Fork Interceptor and Storage Tank Project. This project is located in the Northside neighborhood of the City of Cincinnati.

Purpose

The purpose of this project is to reduce Combined Sewer Overflows (CSO) for fifteen CSOs in the West Fork Basin. These CSOs are consolidated in an existing interceptor originally constructed beneath the West Fork channel in 1929. This interceptor is connected to the channel through 18 grated openings. These grates allow stream flow to enter directly into the interceptor. The West Fork source control project will reduce annual CSOs by 270 million gallons. The solution includes an 84-inch diameter interceptor, two CSO storage tanks, partial separations at eight CSO locations, and two detention basins providing approximately 23 acre-feet of storage for water quality and quantity improvement.

Phases	Prior Year	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2016-2021 Total
Construction	0	0	9,591,500	0	0	0	0	9,591,500
MSD Capital Improvements Total	0	0	9,591,500	0	0	0	0	9,591,500
Estimated Personnel Cost	0	0	479,580	0	0	0	0	479,580

CSO 217/483 Source Control Phase C

Dept. Priority: 145

Description

This project will provide resources for approximately 2,200 linear feet of sanitary sewer along Winton Road to complete a portion of the separation of combined sewers in the Combined Sewer Overflow (CSO) 483 drainage area. This project will begin near the Wynbrook Apartments and reconnect to the existing com-

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lined sewer upstream of Combined Sewer Overflow (CSO) 217. This project is located in the Kings Run sewershed in the Winton Hills neighborhood of the City of Cincinnati.

Purpose

The purpose of this project is to provide a source control solution including a combination of sewer separations, detention basins, and a Combined Sewer Overflow (CSO) storage facility for the Kings Run Watershed. The source control strategy will eliminate approximately 150 million gallons of CSO. This project represents a portion of the overall sustainable solution for this area. Construction coordination is required to be expedited work associated with the Winton Road Rehabilitation Project under design by the Department of Transportation and Engineering (DOTE).

Phases	Prior Year	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2016-2021
								Total
Construction	0	0	4,782,800	0	0	0	0	4,782,800
MSD Capital Improvements	0	0	4,782,800	0	0	0	0	4,782,800
Total								
Estimated Personnel Cost	0	0	239,140	0	0	0	0	239,140

Cora Avenue Sewer Replacement

Dept. Priority: 146

Description

This project will provide resources for replacing approximately 1,138 feet of 8-inch mainline sewer composed of polyvinyl chloride (PVC), vitrified clay, and cast iron between Cora Avenue and Fenton Avenue, south of Harrison Avenue. This project is located in the Westwood neighborhood of the City of Cincinnati.

Purpose

The purpose of this project is to replace an 8-inch sanitary sewer installed in 1924 that is aging and deteriorating. Portions of the pipe are deformed and broken and others have partially collapsed. The sewer is also damaged at the point of connection for many of the service laterals.

Phases	Prior Year	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2016-2021
								Total
Construction	0	647,100	0	0	0	0	0	647,100
Engineering	180,600	0	0	0	0	0	0	0
MSD Capital Improvements	180,600	647,100	0	0	0	0	0	647,100
Total								
Estimated Personnel Cost	9,030	32,360	0	0	0	0	0	32,360

German Cemetery Sewer Replacement

Dept. Priority: 147

Description

This project will provide resources for the rehabilitation of 1,100 feet of failing 12, 18, 22, and 24-inch combined sewer beginning at the north terminus of Mentor Street and continuing northeast towards Gilbert



Avenue. This work will involve replacement of some sewer sections and lining of other segments. This project is in the Walnut Hills neighborhood of the City of Cincinnati.

Purpose

The purpose of this project is to rehabilitate a failing combined sewer and prevent further deterioration in other sections. This project is needed to prevent total failure of the sewer which would result in sewage backups in homes, a cemetery, or the public right of way.

Phases	Prior Year	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2016-2021
								Total
Construction	598,300	695,000	0	0	0	0	0	695,000
MSD Capital Improvements Total	598,300	695,000	0	0	0	0	0	695,000
Estimated Personnel Cost	29,920	34,750	0	0	0	0	0	34,750

Millbrook #2 Pump Station Upgrade

Dept. Priority: 148

Description

This project will provide resources for replacing and upgrading the existing Millbrook #2 Pump Station, and upsizing and relocating a new force main. This project is located on Woodfield Drive in Springfield Township, Hamilton County, Ohio.

Purpose

The purpose of this project is to replace the deteriorated, aging, and undersized Millbrook #2 Pump Station. This project will also provide secondary power for the pump station.

Phases	Prior Year	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2016-2021
								Total
Construction	0	870,200	0	0	0	0	0	870,200
MSD Capital Improvements Total	0	870,200	0	0	0	0	0	870,200
Estimated Personnel Cost	0	43,510	0	0	0	0	0	43,510



Mt. Airy Forest Sewer Replacement

Dept. Priority: 149

Description

This project will provide resources for the replacement and upsizing of approximately 10,000 linear feet of 8-inch and 12-inch existing sewer with 15-inch and 24-inch sewer. This project is located in Mt. Airy Forest and the Westwood neighborhood of the City of Cincinnati.

Purpose

The purpose of this project is to replace numerous segments of sanitary interceptor sewer within Mt. Airy Forest Park. These segments are undersized and in need of continued maintenance and are not candidates for lining. Failure to address this failing sewer could result in collapse and sewage discharges in the park.

Phases	Prior Year	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2016-2021
								Total
Construction	5,183,700	5,183,700	0	0	0	0	0	5,183,700
MSD Capital Improvements Total	5,183,700	5,183,700	0	0	0	0	0	5,183,700
Estimated Personnel Cost	0	259,190	0	0	0	0	0	259,190

3934 Winding Way Sewer Replacement

Dept. Priority: 150

Description

This project will provide resources for the abandonment of 652 feet of deteriorated 12-inch and 18-inch combined sewer and the relocation of the lateral serving 3934 Winding Way to the Winding Way combined sewer.

Purpose

The purpose of this project is to abandon a severely deteriorated sewer and redirect one house connection. The abandoned sewer will be filled and sealed.

Phases	Prior Year	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2016-2021
								Total
Construction	0	0	201,500	0	0	0	0	201,500
Engineering	0	0	15,000	0	0	0	0	15,000
MSD Capital Improvements Total	0	0	216,500	0	0	0	0	216,500
Estimated Personnel Cost	0	0	10,830	0	0	0	0	10,830

Lower Mill Creek HW/DW Protection

Dept. Priority: 151

Description

This project will provide resources for a planning effort that will result in the identification of maintenance tasks, operational strategies, and projects that will greatly reduce or eliminate Ohio River and Mill Creek



water inflow into the Lower Mill Creek system. The study area includes multiple City of Cincinnati neighborhoods along the Ohio River and the Lower Mill Creek Valley.

Purpose

The purpose of this project is to begin a planning effort which will result in the identification of maintenance tasks, operational strategies, and projects that will greatly reduce or eliminate Ohio River and Mill Creek water inflow into the Lower Mill Creek system. The study area includes multiple City of Cincinnati neighborhoods along the Ohio River and the Lower Mill Creek Valley.

Phases	Prior Year	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2016-2021 Total
Construction	0	0	0	0	3,820,000	0	0	3,820,000
MSD Capital Improvements	0	0	0	0	3,820,000	0	0	3,820,000
Total								
Estimated Personnel Cost	0	0	0	0	191,000	0	0	191,000

SSO 603 and 704 Improvements

Dept. Priority: 152

Description

This project will provide resources for the replacement of 6,000 feet of 15-inch and 18-inch sewer with 21-36-inch sewer in order to increase capacity and eliminate Sanitary Sewer Overflows (SSO) 603 and 704. This project is located near a stream south of Trebor Drive in Sycamore Township, Hamilton County, Ohio.

Purpose

The purpose of this project is to improve two Sanitary Sewer Overflows (SSO). SSO 603 is active about 9 times per year, and SSO 704 is active about 8 times per year.

Phases	Prior Year	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2016-2021 Total
Construction	0	0	1,308,100	0	0	0	0	1,308,100
Engineering	0	0	30,000	0	0	0	0	30,000
MSD Capital Improvements	0	0	1,338,100	0	0	0	0	1,338,100
Total								
Estimated Personnel Cost	0	0	66,910	0	0	0	0	66,910

MCWWTP Solids Handling Improvements Phase 1

Dept. Priority: 153

Description

This project will provide resources for converting the basement area formerly occupied by Multiple Hearth Incinerators 5 and 6 into a new dewatering sludge feedwell. This project will replace the dewatering centrifugal feed pumps, grinders, associated piping and valves, and construct a dewatering feedwell odor control system. The scope also includes upgrades of sludge feed pipes and pumps at the two southern most digest-

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ers (A1 and A2). This project is located at the Mill Creek Wastewater Treatment Plant facility in the Lower Price Hill neighborhood of the City of Cincinnati.

Purpose

The purpose of this project is to improve solids handling facilities at the Mill Creek Wastewater Treatment Plant. In particular it is important to ensure solids processing capacity over the useful life of the incinerators is maintained. The Metropolitan Sewer District (MSD) proposes a phased approach for the improvements so the most immediate upstream solids handling needs can be addressed first. The first phase of this project will include the following improvements: construction of larger sludge feed wells, upgrade of sludge feed piping and pumps, and upgrade of support structures and equipment.

Phases	Prior Year	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2016-2021
								Total
Construction	0	12,159,200	0	0	0	0	0	12,159,200
MSD Capital Improvements	0	12,159,200	0	0	0	0	0	12,159,200
Total								
Estimated Personnel Cost	0	607,960	0	0	0	0	0	607,960

Wilder Avenue Sewer Replacement

Dept. Priority: 154

Description

This project will provide resources for the rehabilitation of 549 feet of existing stone combined sewer. This project is located on private property in the Lower Price Hill neighborhood of the City of Cincinnati. The project crosses Wilder Avenue and ends in State Avenue.

Purpose

The purpose of this project is to extend the service life of an existing sewer and reduce maintenance costs.

Phases	Prior Year	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2016-2021
								Total
Construction	409,200	342,900	0	0	0	0	0	342,900
MSD Capital Improvements	409,200	342,900	0	0	0	0	0	342,900
Total								
Estimated Personnel Cost	20,460	17,150	0	0	0	0	0	17,150

Glen Landing Pump Station Improvements

Dept. Priority: 155

Description

This project will provide resources for the replacement of components of the existing Glen Landing Pump Station and constructing a new entrance. The project is located at 25 Merchant Street alongside Route 747 south of Kemper Road in the City of Springdale, Hamilton County, Ohio.

Purpose

The purpose of this project is to replace components of the pump station that are near the end of their useful life. Two gravity sewer alternatives were studied to determine if the pump station could be eliminated and neither alignment could be justified. The pump station currently serves the Glen Landing development



which consists of three multi-story office buildings along Route 747 in the City of Springdale, Hamilton County, Ohio.

Phases	Prior Year	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2016-2021 Total
Construction	0	0	0	0	182,200	0	0	182,200
MSD Capital Improvements	0	0	0	0	182,200	0	0	182,200
Total								
Estimated Personnel Cost	0	0	0	0	9,110	0	0	9,110

Otte Avenue Sewer Replacement

Dept. Priority: 156

Description

This project will provide resources for the construction of 160 feet of new 15-inch combined sewer, 328 feet of new 48-inch combined sewer, and redirection of 4 sanitary connections from the existing sewer to the new sewer. The alignment will follow the public right-of way along Robinson Circle, Hamilton Avenue, and Otte Avenue. The existing sewer that runs under or near 4 homes will be filled, sealed, and abandoned. This project is in the Northside neighborhood of the City of Cincinnati.

Purpose

The purpose of this project is to replace the Otte Avenue sewer and 300 feet of the Hamilton Avenue / Bruce Avenue sewer. The sewer is vitrified clay pipe installed in 1911 and is partially collapsed, deformed, and broken and is in need of repair.

Phases	Prior Year	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2016-2021 Total
Construction	0	0	0	485,700	0	0	0	485,700
MSD Capital Improvements	0	0	0	485,700	0	0	0	485,700
Total								
Estimated Personnel Cost	0	0	0	24,290	0	0	0	24,290

3568 Bogart Avenue Sewer Replacement

Dept. Priority: 157

Description

This project will provide resources for the construction of 100 linear feet of 12-inch diameter sanitary sewer and abandonment of 196 linear feet of existing 12-inch diameter sanitary sewer. The project is located in the Avondale neighborhood of the City of Cincinnati.

Purpose

The purpose of this project is to fill, seal, and abandon 196 linear feet of 12-inch existing sanitary sewer and construct approximately 100 linear feet of new 12-inch conduit along Bogart Avenue. The existing sanitary

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sewer is located underneath 3568 Bogart Avenue and has extensive fracturing. The abandonment of the existing sewer will eliminate the risk of total failure of the sewer causing sewage backup in the home.

Phases	Prior Year	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2016-2021 Total
Construction	160,100	140,500	0	0	0	0	0	140,500
MSD Capital Improvements Total	160,100	140,500	0	0	0	0	0	140,500
<hr/>								
Estimated Personnel Cost	8,010	7,030	0	0	0	0	0	7,030

McKeone Avenue Sewer Replacement

Dept. Priority: 158

Description

This project will provide resources for the construction of 147 linear feet of 18-inch diameter sanitary sewer and abandonment of 122 linear feet of 15-inch existing sanitary sewer. The project is located in the West Price Hill neighborhood of the City of Cincinnati.

Purpose

The purpose of this project is to replace 122 linear feet of 15-inch existing sewer with 147 linear feet of 18-inch conduit in a new alignment. The existing 15-inch sewer, installed in 1929, has significant deformation and is not a candidate for pipe lining. The new alignment and larger size will eliminate both the water main interference which was constructed over top the sanitary sewer and upstream water-in-basement (WIB) issues on McKeone Avenue.

Phases	Prior Year	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2016-2021 Total
Construction	105,000	0	103,000	0	0	0	0	103,000
MSD Capital Improvements Total	105,000	0	103,000	0	0	0	0	103,000
<hr/>								
Estimated Personnel Cost	5,250	0	5,150	0	0	0	0	5,150

Timbers Pump Station Elimination

Dept. Priority: 159

Description

This project will provide resources for the construction of approximately 1,800 feet of 8-inch diameter gravity sewer via a jack-and-bore alignment through the Winton Woods Park. The pump station is located in the City of Forest Park, Hamilton County, Ohio.

Purpose

The purpose of this project is to eliminate the Timbers Pump Station that was installed in 1980 to serve 37 homes. The functionality of the pump station is insufficient in terms of handling wet weather flow. Structurally, this station is not sound because of the metal wet well that has been in the ground for more than 30 years. The size of the well is small. This metal wet well has the risk of having continuous flow into it, which



will cause continuous pumping, weakening the soil around it, that will likely cause structural failure. After the gravity sewer is constructed, the pump station will be decommissioned and parts salvaged.

Phases	Prior Year	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2016-2021 Total
Construction	0	0	0	922,800	0	0	0	922,800
MSD Capital Improvements	0	0	0	922,800	0	0	0	922,800
Total								
Estimated Personnel Cost	0	0	0	46,140	0	0	0	46,140

Quebec Road Sewer Replacement

Dept. Priority: 160

Description

This project will provide resources for approximately 275 feet of 12-inch diameter sanitary sewer and 470 feet of 15-inch storm sewer along Quebec Road in the West Price Hill neighborhood of the City of Cincinnati.

Purpose

The purpose of this project is to replace failing segments of a sewer along Quebec Road. The segments in question are cracking, being pulled apart by root intrusion, and in generally poor shape. Replacement is required to reduce the likelihood of collapse and failure of the pipe and to reduce the frequency of sewage backups and emergency repairs. This project will be coordinated with the downstream Quebec Road Sewer Separation Project #11240110. This will ensure that phasing and construction coordination of the work minimizes construction congestion on Quebec Road and reduces the need to construct temporary structures.

Phases	Prior Year	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2016-2021 Total
Construction	0	0	427,400	0	0	0	0	427,400
MSD Capital Improvements	0	0	427,400	0	0	0	0	427,400
Total								
Estimated Personnel Cost	0	0	21,370	0	0	0	0	21,370

Rose Hill Avenue Sewer Relocation

Dept. Priority: 161

Description

This project will provide resources for the construction of 572 feet of 18-inch sanitary sewer, relocation of one 6-inch lateral and installation of a short section of 12-inch storm sewer to replace a failing sewer that is located under a garage and is beyond its useful life. This project is located in the North Avondale neighborhood of the City of Cincinnati, Hamilton County, Ohio.

Purpose

The purpose of this project is to remove portions of a storm sewer and sanitary sewer that are currently located beneath an existing structure. The storm pipe rerouting will be a minimal effort to connect the existing storm manhole to the existing combined sewer manhole. This recommended alternative reduces the risk

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of collapse, provides for easier maintenance, and eliminates the need to remove the storm sewer from underneath the existing garage in the future.

Phases	Prior Year	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2016-2021 Total
Construction	525,600	0	522,300	0	0	0	0	522,300
MSD Capital Improvements Total	525,600	0	522,300	0	0	0	0	522,300
<hr/>								
Estimated Personnel Cost	26,280	0	26,120	0	0	0	0	26,120

Carpenters Run Pump Station Upgrade

Dept. Priority: 162

Description

This project will provide resources for the construction of upgrades to the existing Carpenters Run Pump Station to extend the facility's useful life. The pump station is located along Trailbridge Court in the City of Blue Ash in Hamilton County, Ohio.

Purpose

The purpose of this project is to upgrade the Carpenters Run Pump Station. The station was constructed in 1980 and has reached the end of its useful life. With the exception of minor maintenance issues, a condition assessment revealed the pump station functions as designed. The pump station will be upgraded to meet current standards. This project includes replacing the generator with an above ground generator, replacing the wet well, valve chamber and force main.

Phases	Prior Year	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2016-2021 Total
Construction	0	0	631,400	0	0	0	0	631,400
MSD Capital Improvements Total	0	0	631,400	0	0	0	0	631,400
<hr/>								
Estimated Personnel Cost	0	0	31,570	0	0	0	0	31,570

CSO 005 Water Connection

Dept. Priority: 163

Description

This project will provide resources for the construction of a permanent water service connection from the 8-inch water main on Queen City Avenue, 350 linear feet of 4-inch ductile iron pipe water service, one railroad crossing, a water cannon, a yard hydrant with a 2.5-inch diameter house connection hose and other appurtenances. During design it was determined that any connection to the 36-inch water main on site would be temporary because the water main is to be relocated as part of the Lick Run Valley Conveyance System; therefore the service lateral was extended to the nearest active main. This project is located in the South Fairmount neighborhood of the City of Cincinnati.

Purpose

The purpose of this project is to provide a safe and effective means for cleaning and removal of sediment at the Combined Sewer Overflow (CSO) facility, which is necessary in order to stay in compliance with the Combined Sewer Overflow (CSO) National Pollutant Discharge Elimination System (NPDES) permit. This



CSO facility allows combined sewage to overflow into the Mill Creek at times when the capacity of the 24-inch underflow pipe has been exceeded. The facility was recently upgraded with Real Time Control in order to take advantage of storage capacity in the existing Lick Run Trunk Sewer. Using the CSO chamber for storage results in a substantial buildup of sediment.

Phases	Prior Year	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2016-2021
								Total
Construction	0	71,000	0	0	0	0	0	71,000
MSD Capital Improvements	0	71,000	0	0	0	0	0	71,000
Total								
Estimated Personnel Cost	0	3,550	0	0	0	0	0	3,550

CSO 5 (Lick Run RTC) Improvements

Dept. Priority: 164

Description

This project will provide resources for the completion and implementation of a Reliability Centered Maintenance (RCM) study that is being used to develop and improve maintenance strategy, targeting high availability, maintainability, and reliability with recommended improvements coming from efforts resulting in upgrades or modifications to the local control system or sensors.

Purpose

The purpose of this project is to complete and implement a Reliability Centered Maintenance (RCM) study that is being used to develop an improved maintenance strategy targeting high availability, maintainability, and reliability with recommended improvements coming from efforts resulting in upgrades or modifications to the local control system or sensors.

Phases	Prior Year	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2016-2021
								Total
Construction	0	0	175,000	0	0	0	0	175,000
Engineering	0	0	25,000	0	0	0	0	25,000
MSD Capital Improvements	0	0	200,000	0	0	0	0	200,000
Total								
Estimated Personnel Cost	0	0	10,000	0	0	0	0	10,000

Ponderosa Woods Pump Station Elimination

Dept. Priority: 165

Description

This project will provide resources for the construction of 400 feet of 12-inch diameter sanitary sewer and the elimination of the Ponderosa Woods Pump Station. The project is located between the cul-de-sac of Westonridge Drive and 5344 Edger Drive in the Mill Creek sewershed of the Central basin in the Mt. Airy neighborhood of the City of Cincinnati, Hamilton County, Ohio.

Purpose

The purpose of this project is to eliminate an aging pump station by installing a gravity sewer from the south terminus of Westonridge Drive and 5346 Edger Drive. The pump station requires more reliable

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pumps and back-up power. The pump station has numerous operational and maintenance issues, including water-in-basement complaints, clogging and overflows, all needing attention.

Phases	Prior Year	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2016-2021 Total
Construction	0	0	0	299,900	0	0	0	299,900
Engineering	187,200	0	0	0	0	0	0	0
MSD Capital Improvements Total	187,200	0	0	299,900	0	0	0	299,900
Estimated Personnel Cost	9,360	0	0	15,000	0	0	0	15,000

Sharp Alley Sewer Replacement

Dept. Priority: 166

Description

This project will provide resources for the replacement of approximately 235 linear feet of existing 24-inch diameter stone sewer between existing manhole 33005088 and manhole 3305076 which will be lined. Additionally approximately 35 linear feet within the same alignment will be replaced. Existing manhole 33005075 that connects the three collapsed segments will be replaced with a new manhole. Project costs have increased due to the need to replace three segments instead of two as initially estimated. The project is located in the Over-the-Rhine neighborhood of the City of Cincinnati, Hamilton County, Ohio.

Purpose

The purpose of this project is to replace three collapsed sewer segments, repair fractured segments and replace one existing manhole within an existing 24-inch stone sewer. The existing 24-inch stone sewer, installed in 1817, has extensive fracturing along with collapsed segments that prevent maintenance.

Phases	Prior Year	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2016-2021 Total
Construction	508,000	502,700	0	0	0	0	0	502,700
MSD Capital Improvements Total	508,000	502,700	0	0	0	0	0	502,700
Estimated Personnel Cost	25,400	25,140	0	0	0	0	0	25,140

Freeland Avenue Area Sewer Replacement

Dept. Priority: 167

Description

This project will provide resources for the installation of a manhole in the rear of 2025 Freeland Avenue and install 160 linear feet of 8-inch sewer for laterals. This project will also fill, seal, and abandon the existing sewer under 2028 Breen Street. This project is located near Madison Road and Grandin Road in the Hyde Park neighborhood of the City of Cincinnati.

Purpose

The purpose of this project is to replace an existing 21-inch sewer segment, installed in approximately 1900, which shows extensive cracking, fracturing, joint separation, and shape loss. Approximately 36-feet of the



segment is located under the structure at 2028 Breen Street. This project will install approximately 160 linear feet of 8-inch sewer, manholes, and cleanouts, and will fill, seal, and abandon the sewer under the structure.

Phases	Prior Year	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2016-2021
								Total
Engineering	0	0	0	0	0	55,100	0	55,100
Land	0	0	0	0	0	44,400	0	44,400
MSD Capital Improvements	0	0	0	0	0	99,500	0	99,500
Total								
Estimated Personnel Cost	0	0	0	0	0	4,980	0	4,980

Berkley Avenue Sewer Replacement

Dept. Priority: 168

Description

This project will provide resources for the lining of existing 10-inch, 30-inch, and 36-inch combined sewers, the coating of deteriorated reinforcing bars within a 48-inch sewer, the replacement of an 18-inch sewer with a 24-inch segment, and the abandonment of an existing 8-inch sewer segment. The project is located along Berkley, Catalina, and Lane Avenues in the Mill Creek sewershed in the Bond Hill neighborhood of the City of Cincinnati, Hamilton County, Ohio.

Purpose

The purpose of this project is to rehabilitate four combined sewer segments, abandon one segment, and replace one segment of a deteriorated combined sewer originally constructed in 1926 and 1938. A condition assessment of the existing combined sewer segments found some of the pipes to have shape loss, longitudinal cracks at the crown of the sewer, and broken tiles.

Phases	Prior Year	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2016-2021
								Total
Construction	589,600	583,300	0	0	0	0	0	583,300
MSD Capital Improvements	589,600	583,300	0	0	0	0	0	583,300
Total								
Estimated Personnel Cost	29,480	29,170	0	0	0	0	0	29,170

Pleasant Run Central Force Main Repairs

Dept. Priority: 169

Description

This project will provide resources for the repair of the force main which was installed in 1973. This project will repair two deteriorated sections of the Pleasant Run Central Force Main, extending the useful life of the asset. This project will construct 750 linear feet of 24-inch diameter force main and associated temporary facilities. This project is located in Springfield Township and the City of Forest Park, Hamilton County, Ohio.

Purpose

The purpose of this project is to extend the useful life of the force main. The remaining useful life of the deteriorated sections of the force main is estimated by the condition assessment report to be 3.5 years. Because of the short remaining useful life of the two deteriorated sections, this project has been designated as a high

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priority project that requires expedited delivery. After repairs are completed, these sections will have an estimated life of 80 years. The remaining sections of this force main have an expected life of 24 to 43 years according to the condition assessment report. The increased costs are associated with by-pass pumping necessary to keep the pump station in service during construction.

Phases	Prior Year	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2016-2021
								Total
Construction	0	1,068,000	0	0	0	0	0	1,068,000
MSD Capital Improvements	0	1,068,000	0	0	0	0	0	1,068,000
Total								
Estimated Personnel Cost	0	53,400	0	0	0	0	0	53,400

Colton Lane Sewer Replacement

Dept. Priority: 170

Description

This project will provide resources for the replacement of approximately 240 feet of 12-inch to 15-inch diameter reinforced concrete sewer. The project is located in the City of Deer Park, Ohio.

Purpose

The purpose of this project is to install 240 feet of 12-inch and 15-inch diameter sewer to replace an existing deteriorated sewer beneath a residence between manholes 44907021 and 44906016 at 7801 Colton Avenue.

Phases	Prior Year	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2016-2021
								Total
Engineering	0	0	0	0	0	88,100	0	88,100
MSD Capital Improvements	0	0	0	0	0	88,100	0	88,100
Total								
Estimated Personnel Cost	0	0	0	0	0	4,410	0	4,410

Vinton Street - Beekman Street to Liddell Street Sewer

Dept. Priority: 171

Description

This project will provide resources for the replacement and rehabilitation of four segments of deteriorated sewer (299 feet of 21-inch and 271 feet of 24-inch pipe) in Beekman Street and intersecting streets in the North Fairmount neighborhood of the City of Cincinnati, Hamilton County, Ohio.

Purpose

The purpose of this project is to address four sewer segments based on defects discovered during inspection and modeled loading. The scope will replace one segment and rehabilitate three segments. Removal of stormwater from the combined sewer system will reduce loading on the combined sewer system, reducing



the risk of water-in-basement events near the intersection of Vinton Street and Beekman Street, as well as downstream of the project area.

Phases	Prior Year	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2016-2021 Total
Construction	0	0	0	204,200	0	0	0	204,200
Engineering	78,300	0	0	0	0	0	0	0
MSD Capital Improvements Total	78,300	0	0	204,200	0	0	0	204,200
Estimated Personnel Cost	3,920	0	0	10,210	0	0	0	10,210

Spring Grove Avenue Sewer Replacement and Rehabilitation

Dept. Priority: 172

Description

This project will provide resources for the replacement of approximately 830 linear feet of 12-inch to 17-inch combined sewer and appurtenances, and 150 feet of cured-in-place pipe (CIPP) lining. The project is located along the west side of Spring Grove Avenue between Brashears Street and Arlington Street in the Camp Washington neighborhood of the City of Cincinnati.

Purpose

The purpose of this project is to eliminate overflows in the combined sewer during two year storms. The sewer itself was installed around 1900, in poor condition, and has reached the end of its useful life. This project will replace this combined sewer in order to mitigate the overflows and prevent total collapse of the sewer.

Phases	Prior Year	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2016-2021 Total
Construction	0	0	540,900	0	0	0	0	540,900
Engineering	127,700	0	0	0	0	0	0	0
MSD Capital Improvements Total	127,700	0	540,900	0	0	0	0	540,900
Estimated Personnel Cost	6,390	0	27,050	0	0	0	0	27,050

Fairbanks Avenue Sewer Replacement

Dept. Priority: 173

Description

This project will provide resources for the replacement, repair, or rehabilitation of approximately 1,400 linear feet of 15-inch to 20-inch combined sewer installed in 1928 that have exceeded their anticipated useful life. This project is located in the East Price Hill neighborhood of the City of Cincinnati.

Purpose

The purpose of this project is to address critical sewer segments that are in poor structural condition. Three of the seven pipe segments are deformed to the point that they cannot be lined. The sewers are also under

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capacity, surcharging for storms with as little as a five month frequency. Construction costs have been escalated to an anticipated construction start in 2019. This sewer was constructed in 1928.

Phases	Prior Year	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2016-2021 Total
Construction	0	0	0	0	459,500	0	0	459,500
Engineering	0	150,100	0	0	0	0	0	150,100
Land	0	132,400	0	0	0	0	0	132,400
MSD Capital Improvements Total	0	282,500	0	0	459,500	0	0	742,000
Estimated Personnel Cost	0	14,130	0	0	22,980	0	0	37,110

Hosea Street Sewer Replacement

Dept. Priority: 174

Description

This project will provide resources for the replacement and realignment of up to 1,100 linear feet of 8-inch and 12-inch sanitary sewer in and near Hosea Street. This project is located in the Village of Lockland and the City of Wyoming in Hamilton County, Ohio.

Purpose

The purpose of this project is to fix the flat sewer segment along Hosea Street. The segment currently requires excessive repairs and maintenance. In order to change the segment slope, several sewer segments will be required to be replaced resulting in the elimination of Sanitary Sewer Overflow (SSO) 1010 and SSO 1045. This sewer was constructed between 1907 and 1915.

Phases	Prior Year	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2016-2021 Total
Construction	0	0	0	2,197,200	0	0	0	2,197,200
Engineering	0	0	397,900	0	0	0	0	397,900
MSD Capital Improvements Total	0	0	397,900	2,197,200	0	0	0	2,595,100
Estimated Personnel Cost	0	0	19,900	109,860	0	0	0	129,760

Bahama Gardens Pump Station Upgrade and Force Main Replace

Dept. Priority: 175

Description

This project will provide resources for the construction of a 6-inch diameter force main in the same horizontal and vertical alignment as the original force main. This project is located in Bahama Terrace, off Colerain Avenue, in the Mt. Airy neighborhood of the City of Cincinnati.

Purpose

The purpose of this project is to replace the existing force main which was constructed in 1964 as part of the Bahama Gardens development. The pump station pumps sewage via force main about 1,000 feet to an existing gravity sewer. The cast iron sewer has deteriorated and has a history of breaks. It was repaired on an



emergency basis in 2010 and 2011, which resulted in sewage surfacing in the street and reported to the Ohio Environmental Protection Agency (OEPA).

Phases	Prior Year	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2016-2021 Total
Construction	176,500	0	785,400	0	0	0	0	785,400
MSD Capital Improvements	176,500	0	785,400	0	0	0	0	785,400
Total								
Estimated Personnel Cost	8,830	0	39,270	0	0	0	0	39,270

Foraker Avenue Sewer Replacement-Alms Place to E. Terminus

Dept. Priority: 176

Description

This project will provide resources for the replacement of 25 feet of 12-inch diameter failing sewer. A spiral-wound liner will be installed along approximately 570 feet of existing 12-inch diameter sewer. This project is located along Foraker Avenue from Alms Place to Lincoln Avenue in the Walnut Hills neighborhood of the City of Cincinnati.

Purpose

The purpose of this project is to restore a combined sewer that was constructed in 1891. The sewer is in poor condition with multiple fractures, deformations, and has a shape loss greater than ten percent. The structural integrity of portions of the sewer can be restored via lining. Segments severely deteriorated require replacement.

Phases	Prior Year	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2016-2021 Total
Construction	0	0	0	83,900	0	0	0	83,900
Engineering	71,500	0	0	0	0	0	0	0
MSD Capital Improvements	71,500	0	0	83,900	0	0	0	83,900
Total								
Estimated Personnel Cost	3,580	0	0	4,200	0	0	0	4,200

Wahl Terrace Sewer Replacement

Dept. Priority: 177

Description

This project will provide resources for the replacement and potential upgrade of 2,300 linear feet of 8 to 18-inch combined sewers. Storm inlets in this area will also be disconnected from the combined system and conveyed in a new storm sewer that ties directly into the Lick Run Valley Conveyance System. The subdivision is located south of Harrison Avenue and just north of the Lick Run Valley Conveyance project. This project is located in the Westwood and South Fairmount neighborhoods of the City of Cincinnati.

Purpose

The purpose of this project is to replace deteriorated sewer segments constructed in 1916 and 1917. The existing sewers are buckling and collapsing and are not candidates for lining or rehabilitation. Due to the

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current structural condition of the sewers, there is a risk of ultimate collapse and the inability to appropriately maintain the sewers that can lead to sewer discharges to the environment and sewer backups (SBU).

Phases	Prior Year	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2016-2021 Total
Construction	0	0	0	0	0	783,500	0	783,500
Engineering	0	0	254,800	0	0	0	0	254,800
Land	0	0	323,000	0	0	0	0	323,000
MSD Capital Improvements Total	0	0	577,800	0	0	783,500	0	1,361,300
Estimated Personnel Cost	0	0	28,890	0	0	39,180	0	68,070

Yoast Avenue Sewer Improvements

Dept. Priority: 178

Description

This project will provide resources for the replacement of 185 feet of 24-inch diameter sewer northwest of the intersection of Yoast and Randall Avenues, between manhole 28516002 and manhole 28516005. The project also includes lining 145 feet of 22-inch diameter and 187 feet of 24-inch diameter sewer. This project is located in the North Fairmont neighborhood of the City of Cincinnati in the South Branch Mill Creek Watershed.

Purpose

The purpose of this project is to address the structural condition of the existing gravity sewer pipes. Continued deterioration will eventually lead to collapse. Field investigations have determined two of the three sections are candidates for lining. The third sewer segment has shape loss exceeding 20% and is not a candidate for lining.

Phases	Prior Year	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2016-2021 Total
Construction	0	0	135,500	0	0	0	0	135,500
Engineering	112,600	0	0	0	0	0	0	0
MSD Capital Improvements Total	112,600	0	135,500	0	0	0	0	135,500
Estimated Personnel Cost	5,630	0	6,780	0	0	0	0	6,780



Mt. Pleasant Avenue Sewer Replacement

Dept. Priority: 179

Description

This project will provide resources for the replacement of 335 feet of 15-inch sewer in the same alignment on Mt. Pleasant Avenue. This project is located in the City of Wyoming, Hamilton County, Ohio.

Purpose

The purpose of this project is to replace an existing sewer installed in 1938. This sewer has deteriorated and experienced severe shape loss. The sewer is not a candidate for lining. The sewer will be replaced, capacity will be increased, and Sanitary Sewer Overflow (SSO) 1029 will be eliminated.

Phases	Prior Year	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2016-2021
								Total
Construction	0	0	344,600	0	0	0	0	344,600
Engineering	113,600	0	0	0	0	0	0	0
MSD Capital Improvements Total	113,600	0	344,600	0	0	0	0	344,600
Estimated Personnel Cost	5,680	0	17,230	0	0	0	0	17,230

Mayhew and Leath Avenues Sewer Replacement

Dept. Priority: 180

Description

This project will provide resources for the realignment and replacement of the existing sewer from manhole 24312016 to manhole 24312017. This moves the sewer away from the residence at 420 Leath Avenue. The project results in an alignment that extends from manhole 24312016 to the south along the right-of-way of Leath Avenue to Mayhew Avenue. The proposed alignment turns to the east along the right-of-way of Mayhew Avenue to the existing alignment and follows the existing alignment to manhole 24312017. The project will abandon approximately 128 feet of sewer and the removal of 3 manholes and a special chamber. The project is in Delhi Township, just west of Joseph Bruening Park, in Hamilton County, Ohio.

Purpose

The purpose of this project is to address pipe segments from manhole 24313025 to manhole 24312024 that are reported to be in poor condition, and have several material changes in a few of the pipe segments.

Phases	Prior Year	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2016-2021
								Total
Construction	0	0	0	247,100	0	0	0	247,100
Engineering	107,500	0	0	0	0	0	0	0
MSD Capital Improvements Total	107,500	0	0	247,100	0	0	0	247,100
Estimated Personnel Cost	5,380	0	0	12,360	0	0	0	12,360

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Freeman Avenue - Klotter to McMicken Sewer Replacement

Dept. Priority: 181

Description

This project will provide resources for the replacement of 115 linear feet of 18-inch diameter sewer and installation of three new manholes. The project is located east of Interstate 75 and south of the Harrison Avenue Viaduct, in the City of Cincinnati.

Purpose

The purpose of this project is to address two pipe segments that extend from Klotter Avenue to McMicken Avenue. The downstream manhole in McMicken Avenue is a blind manhole. The two manholes identified along the pipe segment manhole 32901022 to manhole 32901021 are locations where the pipe segment changes grade. The pipe segments would be candidates for lining except the change in grade prohibits effective installation of a liner. The upper and lower segments are suffering from deformation and cracking.

Phases	Prior Year	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2016-2021
								Total
Construction	0	0	89,900	0	0	0	0	89,900
Engineering	58,000	0	0	0	0	0	0	0
MSD Capital Improvements Total	58,000	0	89,900	0	0	0	0	89,900
Estimated Personnel Cost	2,900	0	4,500	0	0	0	0	4,500

Victory Parkway Sewer Rehabilitation

Dept. Priority: 182

Description

This project will provide resources for extending the sewer from manhole 37002032 to manhole 37002025 and consists of cleaning and lining approximately 450 linear feet of existing 36-inch stone sewers. The project is located in the Walnut Hills neighborhood, approximately 400 feet south of McMillan Road to approximately 825 feet south of McMillan Road, of the City of Cincinnati.

Purpose

The purpose of this project is to replace the pipe segment from manhole 27002032 to manhole 270020252, which generally follows the alignment of Victory Parkway, which is a stone 36-inch sewer that was constructed prior to 1912. The stone sewer is experiencing some deformation in the crown area primarily due to slippage of the crown stones. In addition, there are several areas where the stones have come loose and are missing. As a result of the deterioration of the mortar, there are several locations where there is infiltration into the pipe.

Phases	Prior Year	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2016-2021
								Total
Engineering	0	0	0	0	0	106,400	0	106,400
MSD Capital Improvements Total	0	0	0	0	0	106,400	0	106,400
Estimated Personnel Cost	0	0	0	0	0	5,320	0	5,320



Cypress Street - Ashland Avenue Sewer Replacement

Dept. Priority: 183

Description

This project will provide resources for the replacement of 250 feet of 15-inch diameter sewer with the same size pipe along the same horizontal and vertical alignments. The pipe segments are located approximately 290 feet east of the intersection of Cypress Street and Victory Parkway and extends for approximately 250 feet to the East. The project is located in the Walnut Hills neighborhood of the City of Cincinnati.

Purpose

The purpose of this project is to replace pipe segment from manhole 37114013 to manhole 37115042 which is experiencing deformation that has reached or exceeded 10% deformation and is considered to be at the point where lining the pipe segment may not be possible. There is a blind manhole at approximately the mid-point of the pipe segment.

Phases	Prior Year	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2016-2021
								Total
Construction	0	0	0	147,300	0	0	0	147,300
Engineering	67,000	0	0	0	0	0	0	0
MSD Capital Improvements Total	67,000	0	0	147,300	0	0	0	147,300
Estimated Personnel Cost	3,350	0	0	7,370	0	0	0	7,370

Faehr Street Sewer Replacement

Dept. Priority: 184

Description

This project will provide resources for the replacement of 250 feet of deteriorated 12-inch diameter combined sewer upstream of the Quebec Road Sewer Separation project. This project is located entirely within Faehr Street, from Quebec Road to its western terminus. This project is downhill from the Elder High School Panther Sports Complex and in the West Price Hill and South Fairmount neighborhoods of the City of Cincinnati.

Purpose

The purpose of this project is to replace a segment of 12-inch sewer beneath Faehr Street which is failing. The entire length of sewer contains three manholes and runs 250 linear feet. The sewer has numerous cracks, breaks, and voids in the length and is not a candidate for lining. The sewer is entirely within the right-of-way of Faehr Street and the intersection with Quebec Road. The Department of Transportation and Engineering (DOTE) has tentatively scheduled the entire length of Faehr Street for repaving in 2015 and the sewer needs replaced before repaving begins.

Phases	Prior Year	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2016-2021
								Total
Construction	0	0	134,900	0	0	0	0	134,900
Engineering	68,100	0	0	0	0	0	0	0
MSD Capital Improvements Total	68,100	0	134,900	0	0	0	0	134,900
Estimated Personnel Cost	3,410	0	6,750	0	0	0	0	6,750



Spring Grove Avenue - Township Street Sewer Improvement

Dept. Priority: 185

Description

This project will provide resources for the replacement of 135 feet of 21-inch combined sewer between manhole 29413003 and manhole 29413004 and 15 feet of 21-inch pipe upstream of manhole 29413003 at the intersection of Spring Grove Avenue and Straight Street. Manholes 29413006 to 29414003 will be lined. Manholes 29504025 to 29504026 will be filled, sealed, and abandoned. For the segments near Spring Grove Avenue and Township Avenue, the project is to replace the 15-inch sewer and manholes at manholes 29503015 to 29503016, and line the following manholes with cured-in-place pipe (CIPP): 29503012 to 29503013, 29503014 to 29503015, and 20503018 to 29413019. Also, this project will clean and line manholes 29413048 to 29413018. The project is located in the Camp Washington area on the west side of Interstate 75.

Purpose

The purpose of this project is to replace the combined sewer segments at the intersection of Spring Grove Avenue and Straight Street; on the west side of Spring Grove Avenue the pipe segments are experiencing significant deformation, and there is concern that the pipe segments may fail. Additionally, most of the sewer is identified as being under capacity for between a six month and a two year storm. For the segments near Spring Grove Avenue and Township Avenue the pipe segments are experiencing significant deformation and there is concern that the pipe segments may fail. Additionally, most of the sewer is identified as being under capacity for as little as a five month storm. This project combines the planning efforts for projects 12240245 and 12240255.

Phases	Prior Year	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2016-2021
								Total
Construction	0	0	695,200	0	0	0	0	695,200
Engineering	233,000	0	0	0	0	0	0	0
MSD Capital Improvements Total	233,000	0	695,200	0	0	0	0	695,200
Estimated Personnel Cost	11,650	0	34,760	0	0	0	0	34,760

Central Parkway Sewer Replacement (HN 2402)

Dept. Priority: 186

Description

This project will provide resources for the replacement of two segments of 15-inch diameter sewer running northward from manhole 29405056. This project is located in the vicinity of 2402 Central Parkway, just north of the Western Hills Viaduct, in the City of Cincinnati.

Purpose

The purpose of this project is to replace existing pipe segments that were installed in 1903 and 1907 and are near the end of their useful life. The existing pipe segments are combined sewers, and show fracturing at



multiple locations, and have areas of substantial shape loss with some sections of the pipe having fallen in to the sewer.

Phases	Prior Year	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2016-2021 Total
Engineering	0	116,300	0	0	0	0	0	116,300
Land	0	12,900	0	0	0	0	0	12,900
MSD Capital Improvements Total	0	129,200	0	0	0	0	0	129,200
Estimated Personnel Cost	0	6,460	0	0	0	0	0	6,460

Pardee Alley Sewer Replacement - Oswald Alley to 200' North

Dept. Priority: 187

Description

The project will provide resources for the construction of approximately 185 feet of 12-inch diameter sewer, connect a lateral, a trench drain, and a roof drain to the sewer and re-direct two laterals to an existing sewer. The project includes abandonment of 730 feet of 18-inch, 24-inch, and 36-inch sewer. The project is located in the Lower East Price Hill neighborhood, in the Mill Creek Valley, of the City of Cincinnati.

Purpose

The purpose of this project is to construct and connect several pipe segments near Hatmaker Street and the downstream collection system to the north that are in poor condition. Portions of the downstream sewer are stone sewers that were built around the turn of the century. Currently, one of the pipe segments has experienced a collapse, and it is likely more collapses will occur. The project is to re-align the service connections for the three locations served by the subject sewer to the sewer in West Eighth Street. The plumbing in the Health Clinic basement will need to be re-aligned.

Phases	Prior Year	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2016-2021 Total
Construction	0	0	0	154,600	0	0	0	154,600
Engineering	130,100	0	0	0	0	0	0	0
MSD Capital Improvements Total	130,100	0	0	154,600	0	0	0	154,600
Estimated Personnel Cost	6,510	0	0	7,730	0	0	0	7,730

Kemper Mill Village Pump Station Upgrade

Dept. Priority: 188

Description

This project will provide resources for construction of approximately 100 feet of 4-inch force main, a below grade diesel generator, and new dry pit centrifugal pumps installed in parallel alignment with the existing force main. The Kemper Mill Village Pump Station is located at 1683 John Gray Road in the Mill Creek Basin.

Purpose

The purpose of this project is to extend the useful life of the Kemper Mill Village Pump Station, originally installed in 1972, which is located in a residential neighborhood in close proximity to houses. The existing 4-

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inch force main was constructed in 1967. The pump station consists of 2 dry pit centrifugal pumps with a total pumping capacity of 100 gallons per minute and is nearing the end of its 30 year expected life.

Phases	Prior Year	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2016-2021 Total
Construction	0	0	0	552,000	0	0	0	552,000
Engineering	305,500	0	0	0	0	0	0	0
MSD Capital Improvements Total	305,500	0	0	552,000	0	0	0	552,000
Estimated Personnel Cost	15,280	0	0	27,600	0	0	0	27,600

Schulte Drive Sewer Replacement

Dept. Priority: 189

Description

This project will provide resources for the filling, sealing, and abandoning of three failing sewer segments and installation of 318 linear feet of 30-inch diameter sewer and 53 feet of 12-inch diameter sewer. The new sewer mains will require re-plumbing of three residential services and reconnection of four other services into the new 30-inch main. The sewers are located west of Schulte Drive and north of Cappel Drive in the South Branch Mill Creek in the West Price Hill neighborhood of the City of Cincinnati.

Purpose

The purpose of this project is to remove the sewer from under buildings that have been temporarily repaired due to cave-in complaints. Two homes were found to have large voids between the basement floor and the sewer. These segments pose a risk to the Metropolitan Sewer District (MSD) in their current location and condition. This sewer was constructed in 1921.

Phases	Prior Year	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2016-2021 Total
Construction	0	0	0	409,100	0	0	0	409,100
Engineering	0	115,600	0	0	0	0	0	115,600
Land	0	29,500	0	0	0	0	0	29,500
MSD Capital Improvements Total	0	145,100	0	409,100	0	0	0	554,200
Estimated Personnel Cost	0	7,260	0	20,460	0	0	0	27,720

Overflow Parking Lot for MSD Engineering and Administration

Dept. Priority: 190

Description

This project will provide resources for the construction of a supplemental and overflow parking lot serving Metropolitan Sewer District (MSD) visitors and workforce at the Gest Street campus of the Mill Creek Wastewater Treatment Plant. A parking lot design for a vacant and blighted property owned by Hamilton County has been commissioned. The parking lot will serve as a supplemental and overflow lot to the main parking lots for the MSD Wastewater Engineering and Education Center (WEEC) at 1035 Woodrow Street



and the Administration headquarter building at 1081 Woodrow Street at the Mill Creek Wastewater Treatment Plant facility in the Lower Price Hill neighborhood of the City of Cincinnati.

Purpose

The purpose of this project is to construct a parking lot to accommodate 115 spaces for Metropolitan Sewer District (MSD) staff and visitors. The design maximizes parking stalls, while minimizing cost per total stalls; includes sustainable light emitting diode (LED) lighting and reduces the operating maintenance and operating costs of the system; and includes green infrastructure elements to achieve the required post-construction stormwater peak flow reduction, therefore reducing stormwater discharge to the existing combined sewer system. Currently, 70% of MSD staff and visitors are using the Kroger parking lot, located south of the Wastewater Engineering and Education Center (WEEC) building, or securing public on-street parking. This action will result in MSD abandoning the current Kroger-owned parking lot.

Phases	Prior Year	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2016-2021
								Total
Construction	0	475,000	0	0	0	0	0	475,000
Engineering	0	5,000	0	0	0	0	0	5,000
MSD Capital Improvements	0	480,000	0	0	0	0	0	480,000
Total								
Estimated Personnel Cost	0	24,000	0	0	0	0	0	24,000

MCWWTP Enhanced Incinerator Emission Controls

Dept. Priority: 191

Description

This project will provide resources for the addition of enhanced emission controls at the three Mill Creek Wastewater Treatment Plant facility incinerators. Without the addition of enhanced emissions controls by March 2016, this facility would not be legally permitted to incinerate sludge. This loss of its permit would likely result in directing 40+ trucks of dewatered sludge cake each day to a landfill. This option has been deemed costly (approximately \$20,000/day) and unsustainable, and an unmanageable operational risk. This project is located at the Mill Creek Wastewater Treatment Plant facility in the Lower Price Hill neighborhood of the City of Cincinnati.

Purpose

The purpose of this project is to meet new regulations which require all Sewage Sludge Incinerator (SSI) emissions to be in compliance with the US Environmental Protection Agency (USEPA) Maximum Achievable Control Technology (MACT) emissions standards by March 21, 2016. These standards are much stricter than the current emission standards for SSIs. Additional emissions controls will be required for each of the three Mill Creek Wastewater Treatment Plant (MCWWTP) SSIs in order to consistently bring them into compliance with the new regulations, more specifically with mercury emission limits.

Phases	Prior Year	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2016-2021
								Total
Construction	0	9,440,100	0	0	0	0	0	9,440,100
MSD Capital Improvements	0	9,440,100	0	0	0	0	0	9,440,100
Total								
Estimated Personnel Cost	0	472,010	0	0	0	0	0	472,010

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MCWWTP Two-Bay Solids Receiving Facility

Dept. Priority: 192

Description

This project will provide resources for a new biosolids receiving facility at the Mill Creek Wastewater Treatment Plant and includes building, receiving silos, cake sludge pumping, pipelines, odor control, and other necessary appurtenances. This project is located at the Mill Creek Wastewater Treatment Plant facility in the Lower Price Hill neighborhood of the City of Cincinnati.

Purpose

The purpose of this project is to ensure adequate facilities are available to receive all solids at the Mill Creek Wastewater Treatment Plant. A 20-year outlook of estimated solids processing capacity and costs at the Mill Creek and Little Miami Wastewater Treatment Plants for supporting the handling and disposal of solids generated within, and potentially outside of, shows a potential yearly cost savings of between \$0.5 and \$1 million dollars over the 20 year period for the decommissioning of the Little Miami Wastewater Treatment Plant incinerator and directing all Metropolitan Sewer District (MSD) and non-MSD regional solids to Mill Creek incinerators.

Phases	Prior Year	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2016-2021
								Total
Construction	0	0	0	0	11,799,000	0	0	11,799,000
Engineering	0	0	1,008,100	0	0	0	0	1,008,100
MSD Capital Improvements Total	0	0	1,008,100	0	11,799,000	0	0	12,807,100
Estimated Personnel Cost	0	0	50,410	0	589,950	0	0	640,360

MCWWTP Main Substation Improvements

Dept. Priority: 193

Description

This project will provide resources for improvements to the main substation transformers and power bus and switches. This project is located at the Mill Creek Wastewater Treatment Plant facility in the Lower Price Hill neighborhood of the City of Cincinnati.

Purpose

The purpose of this project is to ensure long term reliability of high and medium voltage electrical assets. The assets were assessed and evaluated. Needed upgrades to the high and medium voltage electrical distribution system at Mill Creek Wastewater Treatment Plant were identified and prioritized. This equipment was identified as the first priority level based on the Maximo criticality rating for the main distribution transformers of 5700, which is the highest criticality value within the rating system.

Phases	Prior Year	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2016-2021
								Total
Construction	0	0	0	2,492,000	0	0	0	2,492,000
Engineering	0	496,700	0	0	0	0	0	496,700
MSD Capital Improvements Total	0	496,700	0	2,492,000	0	0	0	2,988,700
Estimated Personnel Cost	0	24,840	0	124,600	0	0	0	149,440



MCWWTP Power Building Medium Voltage Switchgear

Dept. Priority: 194

Description

This project will provide resources for the replacement and relocation of the switchgear facility near the intersection of Tunnel T6 and T7 just north of the new dewatering sludge feedwell building. This project is located at the Mill Creek Wastewater Treatment Plant facility in the Lower Price Hill neighborhood of the City of Cincinnati.

Purpose

The purpose of this project is to ensure long term reliability of high and medium voltage electrical assets. The assets were assessed and evaluated. Needed upgrades to the high and medium voltage electrical distribution system at MCWWTP were identified and prioritized. This equipment was identified as the second priority.

Phases	Prior Year	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2016-2021
								Total
Construction	0	369,000	0	0	0	0	0	369,000
Engineering	0	148,400	0	0	0	0	0	148,400
MSD Capital Improvements Total	0	517,400	0	0	0	0	0	517,400
Estimated Personnel Cost	0	25,870	0	0	0	0	0	25,870

MCWWTP Electrical Arc Flash Protection

Dept. Priority: 195

Description

This project will provide resources for performing a plant-wide electrical coordination study and conducting plant-wide arc flash analysis. This project is located at the Mill Creek Wastewater Treatment Plant facility in the Lower Price Hill neighborhood of the City of Cincinnati.

Purpose

The purpose of this project is to include significant field investigations / verification of relay setting, update of the SKM Systems Analysis, Incorporated model created as part of the ongoing Mill Creek Wastewater Treatment Plant (MCWWTP) Electric Power Renovations project, analysis of model results, and a formalized report for the coordination and arc flash studies.

Phases	Prior Year	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2016-2021
								Total
Construction	0	0	149,000	0	0	0	0	149,000
Engineering	0	0	89,000	0	0	0	0	89,000
MSD Capital Improvements Total	0	0	238,000	0	0	0	0	238,000
Estimated Personnel Cost	0	0	11,900	0	0	0	0	11,900

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MCWWTP Secondary Treatment Capacity Enhancements

Dept. Priority: 196

Description

This project will provide resources to improve the secondary treatment capacity. This project is located at the Mill Creek Wastewater Treatment Plant facility in the Lower Price Hill neighborhood of the City of Cincinnati.

Purpose

The purpose of this project is to promote overall secondary treatment process stability and add up to 60 million gallons daily of wet weather biological treatment capacity above the current design capacity of 240 million gallons/day. Enhancements are to include: clarifier influent and intermediate baffles, instrumentation for real time monitoring and automation, and disinfection of Return Activated Sludge (RAS).

Phases	Prior Year	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2016-2021
								Total
Construction	0	0	0	0	1,941,000	0	0	1,941,000
Engineering	0	0	0	414,000	0	0	0	414,000
MSD Capital Improvements Total	0	0	0	414,000	1,941,000	0	0	2,355,000
Estimated Personnel Cost	0	0	0	20,700	97,050	0	0	117,750

MCWWTP Primary Sludge Pumping Improvements

Dept. Priority: 197

Description

This project will provide resources to improve pumping capabilities. This project is located at the Mill Creek Wastewater Treatment Plant facility in the Lower Price Hill neighborhood of the City of Cincinnati.

Purpose

The purpose of this project is to rebuild existing pumps and replace existing pump bases, foundations, and valves.

Phases	Prior Year	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2016-2021
								Total
Construction	0	0	0	893,000	0	0	0	893,000
Engineering	0	0	0	160,000	0	0	0	160,000
MSD Capital Improvements Total	0	0	0	1,053,000	0	0	0	1,053,000
Estimated Personnel Cost	0	0	0	52,650	0	0	0	52,650



MCWWTP Primary Treatment Odor Control Improvements

Dept. Priority: 198

Description

This project will provide resources to improve odor control. This project is located at the Mill Creek Wastewater Treatment Plant facility in the Lower Price Hill neighborhood of the City of Cincinnati.

Purpose

The purpose of this project is to evaluate the capacity of the existing odor control system and replace accordingly to improve odor control for primary treatment.

Phases	Prior Year	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2016-2021
								Total
Construction	0	0	0	934,000	0	0	0	934,000
Engineering	0	0	0	169,800	0	0	0	169,800
MSD Capital Improvements Total	0	0	0	1,103,800	0	0	0	1,103,800
Estimated Personnel Cost	0	0	0	55,190	0	0	0	55,190

MCWWTP Biological Nutrient Removal Facilities

Dept. Priority: 199

Description

This project will provide resources for biological nitrogen and phosphorous removal in the treatment process. This project is located at the Mill Creek Wastewater Treatment Plant facility in the Lower Price Hill neighborhood of the City of Cincinnati.

Purpose

The purpose of this project is to modify secondary treatment facilities to provide biological nitrogen and phosphorous removal. The estimate was developed parametrically through the consideration of a cost estimate developed for Dayton, Ohio for installation of facilities, excluding backup chemical phosphorous removal and fermentation.

Phases	Prior Year	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2016-2021
								Total
Engineering	0	0	0	0	3,629,100	0	0	3,629,100
MSD Capital Improvements Total	0	0	0	0	3,629,100	0	0	3,629,100
Estimated Personnel Cost	0	0	0	0	181,460	0	0	181,460

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MCWWTP Standby Power Distribution System Improvements

Dept. Priority: 200

Description

This project will provide resources for replacing the standby power distribution system. This project is located at the Mill Creek Wastewater Treatment Plant facility in the Lower Price Hill neighborhood of the City of Cincinnati.

Purpose

The purpose of this project is to replace the standby power distribution system and relocate it to a central plant location.

Phases	Prior Year	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2016-2021
								Total
Construction	0	0	0	0	0	2,790,000	0	2,790,000
Engineering	0	0	0	0	537,100	0	0	537,100
MSD Capital Improvements Total	0	0	0	0	537,100	2,790,000	0	3,327,100
Estimated Personnel Cost	0	0	0	0	26,860	139,500	0	166,360

MCWWTP South Raw Sewage Pump Station Pump Replacement

Dept. Priority: 201

Description

This project will provide resources for replacing raw sewage pumps. This project is located at the Mill Creek Wastewater Treatment Plant facility in the Lower Price Hill neighborhood of the City of Cincinnati.

Purpose

The purpose of this project is to replace the South Raw Sewage Pump Station pumps No. 10, 11, and 12.

Phases	Prior Year	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2016-2021
								Total
Construction	0	0	0	0	0	2,911,000	0	2,911,000
Engineering	0	0	0	0	556,100	0	0	556,100
MSD Capital Improvements Total	0	0	0	0	556,100	2,911,000	0	3,467,100
Estimated Personnel Cost	0	0	0	0	27,810	145,550	0	173,360



MCWWTP North Pump Station Odor Control System Replacement

Dept. Priority: 202

Description

This project will provide resources for the replacement of an odor control scrubber. This project is located at the Mill Creek Wastewater Treatment Plant facility in the Lower Price Hill neighborhood of the City of Cincinnati.

Purpose

The purpose of this project is to replace the north pump station odor control scrubber to maintain efficiency of odor control at the pump station.

Phases	Prior Year	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2016-2021
								Total
Construction	0	0	0	0	0	1,530,000	0	1,530,000
Engineering	0	0	0	0	363,400	0	0	363,400
MSD Capital Improvements Total	0	0	0	0	363,400	1,530,000	0	1,893,400
Estimated Personnel Cost	0	0	0	0	18,170	76,500	0	94,670

MCWWTP Biosolids Dewatering Facility Addition

Dept. Priority: 203

Description

This project will provide resources for the replacement of the current dewatering facility located at the Mill Creek Wastewater Treatment Plant facility in the Lower Price Hill neighborhood of the City of Cincinnati.

Purpose

The purpose of this project is to replace the current dewatering facility with new dewatering building superstructure to house new dewatering centrifuges, dewatered cake collection silos, and cake transfer pumps.

Phases	Prior Year	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2016-2021
								Total
Engineering	0	0	0	0	0	4,297,100	0	4,297,100
MSD Capital Improvements Total	0	0	0	0	0	4,297,100	0	4,297,100
Estimated Personnel Cost	0	0	0	0	0	214,860	0	214,860

Wastewater Collection Maintenance Shop Improvements

Dept. Priority: 204

Description

This project will provide resources for Maintenance Shop improvements including additional office and shop space for current and future staffing levels. This added space will also provide an area for maintenance

Capital Improvement Plan



Sewers

personnel to access a computerized maintenance management system for improved asset management. This project is located in the Hartwell neighborhood of the City of Cincinnati.

Purpose

The purpose of this project is to fix the Maintenance Shop roof which is leaking in several places and is in urgent need of a long term solution. An air conditioning unit would be ideal to achieve a more stable and humid free environment for materials and personnel during hot weather conditions.

Phases	Prior Year	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2016-2021
								Total
Construction	0	0	1,018,490	0	0	0	0	1,018,490
Engineering	0	144,850	0	0	0	0	0	144,850
MSD Capital Improvements Total	0	144,850	1,018,490	0	0	0	0	1,163,340
Estimated Personnel Cost	0	7,240	50,930	0	0	0	0	58,170

Hackberry Street Sewer Replacement

Dept. Priority: 205

Description

This project will provide resources for sewer improvements that would elevate the hydraulic grade line of area sewers because the conveyance system in this section of the City is inadequate. An area-wide upgrade of the combined sewer system will be investigated to address capacity issues of the system. The project is located in the Evanston neighborhood of the City of Cincinnati.

Purpose

The purpose of this project is to perform an area-wide upgrade of the combined sewer system which will be investigated to address capacity issues of the system. Wastewater Collection had previously identified a probable combined sewer overflow that discharges from an existing combined sewer to an older stone sewer situated under and/or near several residences on Kinney Avenue, east of Hackberry Street. The stated purpose of the proposed project was to eliminate the unofficial combined sewer overflow without adversely affecting the area residences. Engineering planning efforts revealed that sewer improvements would elevate the hydraulic grade line of area sewers, and that the conveyance system was inadequate.

Phases	Prior Year	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2016-2021
								Total
Engineering	0	0	66,000	0	0	0	0	66,000
Land	0	0	214,900	0	0	0	0	214,900
MSD Capital Improvements Total	0	0	280,900	0	0	0	0	280,900
Estimated Personnel Cost	0	0	14,050	0	0	0	0	14,050



Montana Avenue Sewer - Ferncroft Drive to Mustang Drive

Dept. Priority: 206

Description

This project will provide resources for the replacement of approximately 3,300 linear feet of deteriorated sewer along Montana Avenue with a new 24-inch sewer in the same alignment. This project is located in the Westwood neighborhood of the City of Cincinnati.

Purpose

The purpose of this project is to replace a failing sewer that is beyond its useful life. The combined sewer segments on Montana Avenue between Ferncroft Drive and Mustang Drive are in poor condition as they are partially collapsed or deformed and broken. Several segments were found to have a high degree of shape loss and cannot be lined.

Phases	Prior Year	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2016-2021
								Total
Construction	0	0	3,073,300	0	0	0	0	3,073,300
MSD Capital Improvements	0	0	3,073,300	0	0	0	0	3,073,300
Total								
Estimated Personnel Cost	0	0	153,670	0	0	0	0	153,670

SSO 700 Facility Improvements

Dept. Priority: 207

Description

This project will provide resources for the installation of sluice gates, a bulk storage tank, a sludge storage tank with force main piping and other yard piping upgrades, an influent valve and drain valve vault, a control panel room in the ultraviolet area, heating, ventilation, and air-conditioning upgrades to the existing Chemically Enhanced High Rate Settling/Ultraviolet (CEHRS/UV) building, a non-potable water break tank, a non-potable water booster station, the addition of non-potable water to various systems, instrument and control system improvements, electrical system improvements, upgrades to the existing flush gate system, and other various system and site upgrades. This project is located at 420 Cavett Drive in the City of Reading, Hamilton County, Ohio.

Purpose

The purpose of this project is to provide improvements for the Sanitary Sewer Overflow (SSO) 700 Storage and Treatment Facility. SSO 700 was commissioned in 2006 to mitigate the impacts of sanitary sewer overflows in the upper reaches of the Mill Creek watershed. This project addresses facility reliability and safety concerns. The project includes construction of an additional storage tank to attenuate peak flows, store solids when the downstream interceptor is full, and protect the existing interceptor from heavy surcharging

Capital Improvement Plan



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upstream of the SSO 700 facility. Safety improvements are needed to address operational issues with the heating, ventilation, and air-conditioning, valves, electrical, and instrumentation and controls systems.

Phases	Prior Year	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2016-2021 Total
Construction	8,509,500	8,509,500	0	0	0	0	0	8,509,500
MSD Capital Improvements Total	8,509,500	8,509,500	0	0	0	0	0	8,509,500
<hr/>								
Estimated Personnel Cost	425,480	425,480	0	0	0	0	0	425,480

Polk Run WWTP Reliability and Service Upgrades

Dept. Priority: 208

Description

This project will provide resources for upgrades and replacement of existing components at the Polk Run Wastewater Treatment Plant which are required to maintain and improve reliability and service. The project scope includes several unit process areas including secondary clarification, return activated sludge pumping, activated sludge basin, waste sludge processing, screening, and odor control. General concrete, a Non-Potable Water (NPW) system, and a tank draining system are also included. This project is located in Symmes Township, Hamilton County, Ohio.

Purpose

The purpose of this project is to provide for facility upgrades that are needed to maintain the reliability of the asset. While various specific upgrades to the facility have occurred over the last few years, the scope of this project seeks to assure the long term performance level. Components such as clarifier drives, return activated sludge pumps, tank drainage, concrete repair, and protection are required periodically in the life of any facility.

Phases	Prior Year	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2016-2021 Total
Construction	0	0	0	6,964,100	0	0	0	6,964,100
MSD Capital Improvements Total	0	0	0	6,964,100	0	0	0	6,964,100
<hr/>								
Estimated Personnel Cost	0	0	0	348,210	0	0	0	348,210

Huntington Pump Station Elimination

Dept. Priority: 209

Description

This project will provide resources for the elimination of the Huntington Pump Station by constructing 525 feet of 8-inch gravity sewer. This project extends from the Huntington Drive cul-de-sac to the south end of Ramsey Court. This project is located in the City of Loveland, Clermont County, Ohio.

Purpose

The purpose of this project is to eliminate the Huntington Pump Station by constructing 525 feet of 8-inch gravity sewer. The project provides cost savings. The 100 year net-present value (NPV) is \$539,000 for the



replacement sewer versus \$4,854,500 for keeping the pump station and upgrading according to the maintenance schedule.

Phases	Prior Year	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2016-2021 Total
Construction	0	0	212,000	0	0	0	0	212,000
MSD Capital Improvements	0	0	212,000	0	0	0	0	212,000
Total								
Estimated Personnel Cost	0	0	10,600	0	0	0	0	10,600

Polk Run Ultraviolet System/Post Aeration Improvements

Dept. Priority: 210

Description

This project will provide resources for the relocation of the existing ultraviolet equipment, the addition of new ultraviolet equipment, two parallel disinfection channels, protective covering, and other appurtenances. This project is located in Symmes Township, Hamilton County, Ohio.

Purpose

The purpose of this project is to maintain compliance with National Pollutant Discharge Elimination System (NPDES) permit requirements. The existing Ultraviolet Disinfection equipment was designed to meet fecal coliform requirements. Greater disinfection energy is required to meet the current more stringent E. coli permit requirements. The existing ultraviolet disinfection process also lacks the redundancy required by the Great Lakes-Upper Mississippi River Board

(GLUMRB) 10 States Standards needed to ensure compliance. When the plant effluent channel backs up due to high receiving stream conditions, the drop over the effluent weir plate is eliminated and Dissolved Oxygen NPDES permit violations occur. Post-aeration is required.

Phases	Prior Year	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2016-2021 Total
Construction	0	0	1,510,000	0	0	0	0	1,510,000
Engineering	0	225,000	0	0	0	0	0	225,000
MSD Capital Improvements	0	225,000	1,510,000	0	0	0	0	1,735,000
Total								
Estimated Personnel Cost	0	11,250	75,500	0	0	0	0	86,750

Polk Run Non-Potable Water Upgrades

Dept. Priority: 211

Description

This project will provide resources for a new Non-Potable Water (NPW) pump station located adjacent to the ultraviolet channels utilizing treated effluent for other than domestic uses. This project is located in Symmes Township, Hamilton County, Ohio.

Purpose

The purpose of this project is to separate the existing Greater Cincinnati Water Works (GCWW) water system for plant use and domestic use to have a system to prevent potential backflow from the wastewater

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treatment processes to the potable water system. The Great Lakes-Upper Mississippi River Board (GLUMRB) 10 States Standards requires that where a potable water supply is to be used for any purpose in a plant other than domestic use (lavatory, sink, shower, drinking fountain, etc.) a break tank, pressure pump, and pressure tank shall be provided.

Phases	Prior Year	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2016-2021
								Total
Construction	0	0	255,000	0	0	0	0	255,000
Engineering	0	102,000	0	0	0	0	0	102,000
MSD Capital Improvements Total	0	102,000	255,000	0	0	0	0	357,000
Estimated Personnel Cost	0	5,100	12,750	0	0	0	0	17,850

South Clippinger Force Main Replacement/Pump Station Upgrade

Dept. Priority: 212

Description

This project will provide resources for the replacement of approximately 835 feet of 6-inch force main sewer for the South Clippinger Pump Station. This project is in the Village of Indian Hill, Hamilton County, Ohio

Purpose

The purpose of this project is to replace the existing force main sewer for the South Clippinger pump station. This force main is deteriorated and beyond its useful life.

Phases	Prior Year	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2016-2021
								Total
Construction	0	0	0	0	500,000	0	0	500,000
MSD Capital Improvements Total	0	0	0	0	500,000	0	0	500,000
Estimated Personnel Cost	0	0	0	0	25,000	0	0	25,000

Dry Run Area Sewers Phase 2 Contract Round Bottom Road

Dept. Priority: 213

Description

This project will provide resources for constructing approximately 5,968 linear feet of 42-inch sanitary sewer, along with manholes and other appurtenances. The project is entirely along Round Bottom Road, starting at a point approximately 1,150 feet northeast of the terminus of Contract A and ending at point approximately 970 feet northeast of the intersection with Broadwell Road. The project is located in Anderson Township, Hamilton County, Ohio.

Purpose

The purpose of this project is to provide trunk sewers to areas in the Village of Newtown, Anderson Township, and other nearby areas that currently do not have sewers. Contract Round Bottom is one of a series of contracts required to complete the Dry Run Area Sewers. Contract A was constructed first and provides connection to the existing interceptor sewer that conveys sewage to the Little Miami Wastewater Treatment



Plant. Contract Round Bottom provides the trunk sewer from the terminus of Contract A to areas north and east.

Phases	Prior Year	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2016-2021 Total
Construction	7,181,100	7,181,100	0	0	0	0	0	7,181,100
MSD Capital Improvements Total	7,181,100	7,181,100	0	0	0	0	0	7,181,100
<hr/>								
Estimated Personnel Cost	359,060	359,060	0	0	0	0	0	359,060

Dry Run Sewers - Contract Eight Mile Road

Dept. Priority: 214

Description

This project will provide resources for the construction of 4,400 linear feet of 15-inch to 30-inch diameter sanitary sewer. The project is located between 3100 Eight Mile Road and 2623 Eight Mile Road. This project is located in Anderson Township, Hamilton County, Ohio.

Purpose

The purpose of this project is to provide sewer service to the Anderson Township Dry Run Area via a trunk sewer. The project will eliminate the Ivy Trails Flush Station and the Dry Run Pump Station, and could eliminate two other pump stations by subsequent construction of local sewers.

Phases	Prior Year	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2016-2021 Total
Construction	0	0	5,331,500	0	0	0	0	5,331,500
MSD Capital Improvements Total	0	0	5,331,500	0	0	0	0	5,331,500
<hr/>								
Estimated Personnel Cost	0	0	266,580	0	0	0	0	266,580

Capital Improvement Plan

Sewers



Dry Run Sewers Contract Broadwell Road

Dept. Priority: 215

Description

This project will provide resources for construction of 4,800 feet of 18-inch to 24-inch diameter sanitary sewer. The project is located between the intersection of Round Bottom and Broadwell Roads and 8450 Broadwell Road. This project is located in the Village of Newtown in Hamilton County, Ohio.

Purpose

The purpose of this project is to provide sewer service to the Anderson Township Dry Run Area via a trunk sewer. This sewer will provide service along Broadwell Road, and in particular to the ANCOR, Incorporated industrial area.

Phases	Prior Year	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2016-2021
								Total
Construction	2,794,000	0	2,794,000	0	0	0	0	2,794,000
MSD Capital Improvements Total	2,794,000	0	2,794,000	0	0	0	0	2,794,000
Estimated Personnel Cost	139,700	0	139,700	0	0	0	0	139,700

Camargo Canyon Pump Station Elimination

Dept. Priority: 216

Description

This project will provide resources for the elimination of a pump station with the construction of 892 feet of new 8-inch diameter gravity sewer to connect a dry line installed with the pump station to an existing sewer on Camargo Road. This project is located in the City of Madeira in Hamilton County, Ohio.

Purpose

The purpose of this project is to eliminate the Camargo Canyon Pump Station installed in 1990. Elimination of the pump station will reduce maintenance costs and has a lower net-present value (NPV) than maintenance of the pump station. Elimination of the pump station also reduces the risk of failure, as pump stations have a higher risk of failure than gravity sewers.

Phases	Prior Year	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2016-2021
								Total
Construction	0	0	620,100	0	0	0	0	620,100
MSD Capital Improvements Total	0	0	620,100	0	0	0	0	620,100
Estimated Personnel Cost	0	0	31,010	0	0	0	0	31,010



Little Miami WWTP Scum Removal and Handling

Dept. Priority: 217

Description

This project will provide resources for the use of the existing grit facility space to install a rotary screen system for scum removal. This project is located in the East End neighborhood of the City of Cincinnati.

Purpose

The purpose of this project is to install a rotary screen to significantly reduce operations and maintenance costs devoted to scum removal and handling. It will eliminate hauling and mixing at the Mill Creek Wastewater Treatment Plant and reduce removal and handling costs at the Little Miami Wastewater Treatment Plant.

Phases	Prior Year	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2016-2021 Total
Construction	0	0	0	788,000	0	0	0	788,000
MSD Capital Improvements Total	0	0	0	788,000	0	0	0	788,000
<hr/>								
Estimated Personnel Cost	0	0	0	39,400	0	0	0	39,400

Catholic Calvary Cemetery Sewer Replacement

Dept. Priority: 218

Description

This project will provide resources for the relining of 642 feet of 24-inch diameter combined sewer. The project starts at 1886 Huron Avenue and ends at 3443 Trimble Avenue, traversing the Catholic Calvary Cemetery. This project is located in the Evanston neighborhood of the City of Cincinnati.

Purpose

The purpose of this project is to rehabilitate a deteriorated sewer which traverses a cemetery. It cannot be replaced using open cut methods because it runs under graves nor relined using pipe bursting due to potential ground heaving. The method chosen will provide a structural rehabilitation with minimal surface disturbance.

Phases	Prior Year	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2016-2021 Total
Construction	169,600	168,700	0	0	0	0	0	168,700
MSD Capital Improvements Total	169,600	168,700	0	0	0	0	0	168,700
<hr/>								
Estimated Personnel Cost	8,480	8,440	0	0	0	0	0	8,440



Portsmouth Avenue Sewer Replacement

Dept. Priority: 219

Description

This project will provide resources for the filling, sealing, and abandoning of 234 linear feet of 18-inch existing sanitary sewer. Approximately 480 linear feet of 24-inch diameter sanitary sewer will be constructed. The project is located in the Hyde Park neighborhood of the City of Cincinnati.

Purpose

The purpose of this project is to fill, seal, and abandon 234 linear feet of existing sanitary sewer which currently runs beneath a home on Portsmouth Avenue. The existing sewer, installed in 1913, is not a candidate for lining due to insufficient flow capacity and significant shape loss. A larger diameter sewer will be constructed along Portsmouth Avenue which will redirect flow to the existing sanitary sewer located on Paxton Avenue.

Phases	Prior Year	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2016-2021
								Total
Construction	0	0	365,600	0	0	0	0	365,600
MSD Capital Improvements	0	0	365,600	0	0	0	0	365,600
Total								
Estimated Personnel Cost	0	0	18,280	0	0	0	0	18,280

Wasson Ravine Sewer Replacement

Dept. Priority: 220

Description

This project will provide resources for the construction of a new 12-inch diameter sewer to serve approximately 7 homes between Drake Avenue and Drakewood Drive. The remaining structures connected to the existing sewer will be plumbed to connect to the sewers on Drake Avenue, Drakewood Drive, Wasson Road, Isabella Avenue, and Mt. Vernon Avenue. This project addresses a severely deteriorating sewer located under homes and will abandon this sewer as part of this project. This project is located in the Oakley neighborhood of the City of Cincinnati.

Purpose

The purpose of this project is to replace the combined sewer segments between Wasson Road and Mt. Vernon Avenue, in the Oakley area. Approximately 1,450 linear feet of sewer are in poor condition and are partially collapsed or deformed and broken. Some segments have shape loss greater than 20% and cannot be lined. The segments pose a risk in their current condition. These segments run under 12 existing structures and are in danger of collapse. The collapse of the pipes could represent a liability.

Phases	Prior Year	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2016-2021
								Total
Construction	0	0	0	0	0	1,147,600	0	1,147,600
MSD Capital Improvements	0	0	0	0	0	1,147,600	0	1,147,600
Total								
Estimated Personnel Cost	0	0	0	0	0	57,380	0	57,380



Airport and Robb Avenue Sewer Replacement

Dept. Priority: 221

Description

This project will provide resources for the installation of approximately 270 feet of 12-inch diameter sewer and 200 feet of 24-inch diameter sewer. This project is located in the Little Miami Wastewater Treatment Plant sewershed. The project is located near the intersection of Airport Road and Robb Avenue in the East End neighborhood of the City of Cincinnati.

Purpose

The purpose of this project is to replace three segments of sewer in the vicinity of Airport Road and Robb Avenue. These segments were installed in 1915 and have exceeded their life expectancy. The segment identified as 42108018-42108017 has a risk rating of extreme; the other segments have risk ratings of high. Shape loss is evident in all segments. The segment beneath the railroad has zero percent slope.

Phases	Prior Year	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2016-2021
								Total
Construction	0	0	312,200	0	0	0	0	312,200
Engineering	101,300	0	0	0	0	0	0	0
MSD Capital Improvements	101,300	0	312,200	0	0	0	0	312,200
Total								
Estimated Personnel Cost	5,070	0	15,610	0	0	0	0	15,610

Grove Avenue Sewer Replacement

Dept. Priority: 222

Description

This project will provide resources for the removal and installation of 315 linear feet of 8-inch diameter sanitary sewer. Thirteen homes will be reconnected to the new 8-inch sewer main. The project is located in the Little Miami sewershed in the Duck Creek drainage basin in the City of Norwood, Hamilton County, Ohio.

Purpose

The purpose of this project is to replace approximately 315 linear feet of a deteriorated sanitary sewer segment with new 8-inch diameter conduit. The existing sewer segment is in poor condition and is not a candidate for lining. Current conditions of the sewer segment have resulted in cave-ins. The pipe is believed to have been installed in the early 1900's and is beyond its useful life.

Phases	Prior Year	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2016-2021
								Total
Construction	0	211,000	0	0	0	0	0	211,000
MSD Capital Improvements	0	211,000	0	0	0	0	0	211,000
Total								
Estimated Personnel Cost	0	10,550	0	0	0	0	0	10,550

Capital Improvement Plan

Sewers



Columbia Parkway at Delta Avenue Sewer Replacement

Dept. Priority: 223

Description

This project will provide resources for the replacement of 342 feet of existing 12-inch and 140 feet of existing 15-inch sewer between manholes 40906039-40905036 with 24-inch sewer, in the existing approximate alignment. This project is located in Columbia Tusculum at the intersection of Columbia Parkway and Delta Avenue, in the City of Cincinnati.

Purpose

The purpose of this project is to replace existing pipe which was installed approximately 100 years ago and is currently experiencing various levels of deformation and four quarter cracking; the sewer segments have been identified as surcharging as frequently as for a 6 month storm. Modeling of the area indicated that overflows occur for as little as a 2 year storm.

Phases	Prior Year	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2016-2021
								Total
Engineering	96,500	0	0	0	0	0	0	0
Construction	304,000	299,000	0	0	0	0	0	299,000
MSD Capital Improvements Total	400,500	299,000	0	0	0	0	0	299,000
Estimated Personnel Cost	20,030	14,950	0	0	0	0	0	14,950

3981 Watterson Road Sewer Replacement

Dept. Priority: 224

Description

This project will provide resources for the connection of the sewer on Watterson Road to the newer 36-inch sewer on Bancroft Street by lining 575 linear feet of the 20-inch sewer between Simpson Avenue and Watterson Road, and filling, sealing, and abandoning the existing sewer between Watterson Road and S. Whetsel Avenue.

Purpose

The purpose of this project is to connect the sewer on Watterson Road to the newer 36-inch sewer on Bancroft Street, line the 20-inch sewer between Simpson Avenue and Watterson Road, and fill, seal, and abandon the existing sewer to eliminate the 20-inch sewer that runs through backyards and under existing structures.

Phases	Prior Year	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2016-2021
								Total
Construction	0	0	0	184,400	0	0	0	184,400
MSD Capital Improvements Total	0	0	0	184,400	0	0	0	184,400
Estimated Personnel Cost	0	0	0	9,220	0	0	0	9,220



Paxton Avenue Sewer Rehabilitation

Dept. Priority: 225

Description

This project will provide resources for the rehabilitation of 374 feet of existing 84-inch diameter arch pipe and 18 feet of existing 84-inch x 108-inch rectangular pipe (4 segments from manhole 42506011 downstream to manhole 42511050) with a spiral wound liner. This project is located in the Oakley neighborhood, in the Duck Creek watershed in the City of Cincinnati.

Purpose

The purpose of this project is to replace the existing conduit from manhole 42506011 to manhole 42511049 which was installed in the 1930s. A length of 336 linear feet of mostly 84-inch diameter reinforced concrete pipe has extensive deterioration throughout. The pavement directly above the deteriorated conduit is used for vehicle parking. Vehicle loading will lead to failure sooner than would otherwise be expected. Failure of the conduit may damage the foundations of adjacent homes.

Phases	Prior Year	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2016-2021
								Total
Engineering	0	312,600	0	0	0	0	0	312,600
Land	0	20,000	0	0	0	0	0	20,000
MSD Capital Improvements	0	332,600	0	0	0	0	0	332,600
Total								
Estimated Personnel Cost	0	16,630	0	0	0	0	0	16,630

Delta and Griest Avenues Sewer Replacement

Dept. Priority: 226

Description

This project will provide resources for the replacement of 1,297 linear feet of pipe in the area of Delta Avenue and Griest Avenue. The project is located in the Duck Creek watershed in the Mount Lookout neighborhood of the City of Cincinnati.

Purpose

The purpose of this project is to replace pipe segments installed between 1895 and 1928, having served their useful life. The segments have fracturing and longitudinal cracking. The structural risk factors vary from medium to extreme and are not candidates for lining due to their structural condition and/or capacity issues.

Phases	Prior Year	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2016-2021
								Total
Engineering	0	0	0	0	0	254,000	0	254,000
Land	0	0	0	0	0	43,700	0	43,700
MSD Capital Improvements	0	0	0	0	0	297,700	0	297,700
Total								
Estimated Personnel Cost	0	0	0	0	0	14,890	0	14,890



CSO 83 and 472 Dynamic Underflow Control

Dept. Priority: 227

Description

This project will provide resources for modifications to Combined Sewer Overflow (CSO) 83 and Combined Sewer Overflow (CSO) 472 that will provide for an automated control of flow into the interceptor sewer. The proposed improvements consist of replacement of the underflow pipe, replacement of the regulator, addition of level sensors, and telemetry equipment. This project is located in the Little Miami basin in the Linwood and Madisonville neighborhoods of the City of Cincinnati.

Purpose

The purpose of this project is to provide a cost effective strategy to reduce combined sewer overflows through operational controls. Additionally, this project will provide information to be used to support the Metropolitan Sewer District's (MSD) needs to collect data to comply with the Federal Consent Decree, a desire to demonstrate water quality management at the lowest cost to taxpayers, and a goal to be on the forefront of water management practices.

Phases	Prior Year	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2016-2021 Total
Construction	0	0	0	0	2,435,810	0	0	2,435,810
Engineering	0	404,000	0	0	0	0	0	404,000
MSD Capital Improvements Total	0	404,000	0	0	2,435,810	0	0	2,839,810
Estimated Personnel Cost	0	20,200	0	0	121,790	0	0	141,990

East Hill Avenue Sewer Replacement

Dept. Priority: 228

Description

This project will provide resources for the installation of approximately 340 linear feet of new 30-inch sewer and approximately 110 feet of new 18-inch sewer to replace and relocate a badly deteriorated 24-inch sewer that cannot be lined and is beyond its useful life. The new sewer will be placed in the public right of way and the existing sewer running underneath the three residences will be abandoned. This project is located in the Hyde Park neighborhood of the City of Cincinnati.

Purpose

The purpose of this project is to replace a badly deteriorated sewer segment and correct a serious hydraulic issue for the sewer on East Hill Avenue. The sewer was installed around 1915 based on age of other sewers in the area. A secondary benefit to this project, but not the driving force of the project, is that it removes a



sewer from under three residences and replaces this sewer in the public right of way, allowing for much easier maintenance in the future and reducing the risk from potential property damages.

Phases	Prior Year	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2016-2021 Total
Construction	0	0	0	1,465,500	0	0	0	1,465,500
Engineering	0	263,100	0	0	0	0	0	263,100
Land	0	16,600	0	0	0	0	0	16,600
MSD Capital Improvements Total	0	279,700	0	1,465,500	0	0	0	1,745,200
<hr/>								
Estimated Personnel Cost	0	13,990	0	73,280	0	0	0	87,270

Capital Improvement Program (CIP) Project Planning

Dept. Priority: 229

Description

This project will provide resources for the planning of capital projects for advancement to the design phase.

Purpose

The purpose of this project is to provide capital funding to support planning Capital Improvement Program (CIP) projects.

Phases	Prior Year	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2016-2021 Total
Engineering	1,000,000	1,750,000	2,500,000	2,500,000	2,500,000	2,500,000	0	11,750,000
MSD Capital Improvements Total	1,000,000	1,750,000	2,500,000	2,500,000	2,500,000	2,500,000	0	11,750,000
<hr/>								
Estimated Personnel Cost	100,000	175,000	250,000	250,000	250,000	250,000	0	1,175,000

WWT System Asset Renewal 2015

Dept. Priority: 230

Description

This project will provide resources for the replacement/improvement of wastewater treatment facility assets using standardized condition assessment and reliability tools and methodologies. Defective assets, or

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portions of assets, will be discovered throughout the year either through preventive maintenance or the above mentioned condition assessment activities or after a failure.

Purpose

The purpose of this project is to replace entire assets or portions of assets within the treatment facilities that are currently unable, or anticipated to be unable to meet their defined levels of service. This project is necessary to cost-effectively extend asset life while protecting and preserving public health and the environment.

Phases	Prior Year	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2016-2021
								Total
Construction	0	2,000,000	0	0	0	0	0	2,000,000
MSD Capital Improvements	0	2,000,000	0	0	0	0	0	2,000,000
Total								
Estimated Personnel Cost	0	100,000	0	0	0	0	0	100,000

WWT System Asset Renewal 2016

Dept. Priority: 231

Description

This project will provide resources for the replacement/improvement of wastewater treatment facility assets using standardized condition assessment and reliability tools and methodologies. Defective assets, or portions of assets, will be discovered throughout the year either through preventive maintenance or the above mentioned condition assessment activities or after a failure.

Purpose

The purpose of this project is to replace entire assets or portions of assets within the treatment facilities that are currently unable, or anticipated to be unable to meet their defined levels of service. This project is necessary to cost-effectively extend asset life while protecting and preserving public health and the environment.

Phases	Prior Year	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2016-2021
								Total
Construction	0	0	3,000,000	0	0	0	0	3,000,000
MSD Capital Improvements	0	0	3,000,000	0	0	0	0	3,000,000
Total								
Estimated Personnel Cost	0	0	150,000	0	0	0	0	150,000

WWT System Asset Renewal 2017

Dept. Priority: 232

Description

This project will provide resources for the replacement/improvement of wastewater treatment facility assets using standardized condition assessment and reliability tools and methodologies. Defective assets, or



portions of assets, will be discovered throughout the year either through preventive maintenance or the above mentioned condition assessment activities or after a failure.

Purpose

The purpose of this project is to replace entire assets or portions of assets within the treatment facilities that are currently unable, or anticipated to be unable to meet their defined levels of service. This project is necessary to cost-effectively extend asset life while protecting and preserving public health and the environment.

Phases	Prior Year	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2016-2021
								Total
Construction	0	0	0	3,000,000	0	0	0	3,000,000
MSD Capital Improvements	0	0	0	3,000,000	0	0	0	3,000,000
Total								
Estimated Personnel Cost	0	0	0	150,000	0	0	0	150,000

WWT System Asset Renewal 2018

Dept. Priority: 233

Description

This project will provide resources for the replacement/improvement of wastewater treatment facility assets using standardized condition assessment and reliability tools and methodologies. Defective assets, or portions of assets, will be discovered throughout the year either through preventive maintenance or the above mentioned condition assessment activities or after a failure.

Purpose

The purpose of this project is to replace entire assets or portions of assets within the treatment facilities that are currently unable, or anticipated to be unable to meet their defined levels of service. This project is necessary to cost-effectively extend asset life while protecting and preserving public health and the environment.

Phases	Prior Year	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2016-2021
								Total
Construction	0	0	0	0	3,000,000	0	0	3,000,000
MSD Capital Improvements	0	0	0	0	3,000,000	0	0	3,000,000
Total								
Estimated Personnel Cost	0	0	0	0	150,000	0	0	150,000

WWT System Asset Renewal 2019

Dept. Priority: 234

Description

This project will provide resources for the replacement/improvement of wastewater treatment facility assets using standardized condition assessment and reliability tools and methodologies. Defective assets, or

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portions of assets, will be discovered throughout the year either through preventive maintenance or the above mentioned condition assessment activities or after a failure.

Purpose

The purpose of this project is to replace entire assets or portions of assets within the treatment facilities that are currently unable, or anticipated to be unable to meet their defined levels of service. This project is necessary to cost-effectively extend asset life while protecting and preserving public health and the environment.

Phases	Prior Year	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2016-2021
								Total
Construction	0	0	0	0	0	3,000,000	0	3,000,000
MSD Capital Improvements	0	0	0	0	0	3,000,000	0	3,000,000
Total								
Estimated Personnel Cost	0	0	0	0	0	150,000	0	150,000

Hydraulic Modeling 2015

Dept. Priority: 235

Description

This project will provide resources for sewer modeling to assist in the project planning and design process and is required as part of the Global Consent Decree and the Combined Sewer Overflow (CSO) National Pollutant Discharge Elimination System (NPDES) permit. The Metropolitan Sewer District (MSD) is committed to ensuring its system-wide model meets the latest standards and provides the best available tool for assessing, planning, and designing MSD's infrastructure. This allowance will be used to incorporate project specific model changes into the System-Wide Model for each of MSD's seven sewersheds.

Purpose

The purpose of this project is to provide hydraulic, hydrologic, and treatment process modeling services to be used to support the Metropolitan Sewer District (MSD)'s long-range planning needs, and to meet MSD's Sanitary Sewer Overflow (SSO) and Combined Sewer Overflow (CSO) monitoring requirements.

Phases	Prior Year	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2016-2021
								Total
Engineering	0	1,000,000	0	0	0	0	0	1,000,000
MSD Capital Improvements	0	1,000,000	0	0	0	0	0	1,000,000
Total								
Estimated Personnel Cost	0	50,000	0	0	0	0	0	50,000

Hydraulic Modeling 2016

Dept. Priority: 236

Description

This project will provide resources for sewer modeling to assist in the project planning and design process and is required as part of the Global Consent Decree and the Combined Sewer Overflow (CSO) National Pollutant Discharge Elimination System (NPDES) permit. The Metropolitan Sewer District (MSD) is committed to ensuring its system-wide model meets the latest standards and provides the best available tool for



assessing, planning, and designing MSD's infrastructure. This allowance will be used to incorporate project specific model changes into the System-Wide Model for each of MSD's seven sewersheds.

Purpose

The purpose of this project is to provide hydraulic, hydrologic, and treatment process modeling services to be used to support the Metropolitan Sewer District (MSD)'s long-range planning needs, and to meet MSD's Sanitary Sewer Overflow (SSO) and Combined Sewer Overflow (CSO) monitoring requirements.

Phases	Prior Year	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2016-2021
								Total
Engineering	0	0	1,000,000	0	0	0	0	1,000,000
MSD Capital Improvements	0	0	1,000,000	0	0	0	0	1,000,000
Total								
<hr/>								
Estimated Personnel Cost	0	0	50,000	0	0	0	0	50,000

Hydraulic Modeling 2017

Dept. Priority: 237

Description

This project will provide resources for sewer modeling to assist in the project planning and design process and is required as part of the Global Consent Decree and the Combined Sewer Overflow (CSO) National Pollutant Discharge Elimination System (NPDES) permit. The Metropolitan Sewer District (MSD) is committed to ensuring its system-wide model meets the latest standards and provides the best available tool for assessing, planning, and designing MSD's infrastructure. This allowance will be used to incorporate project specific model changes into the System-Wide Model for each of MSD's seven sewersheds.

Purpose

The purpose of this project is to provide hydraulic, hydrologic, and treatment process modeling services to be used to support the Metropolitan Sewer District (MSD)'s long-range planning needs, and to meet MSD's Sanitary Sewer Overflow (SSO) and Combined Sewer Overflow (CSO) monitoring requirements.

Phases	Prior Year	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2016-2021
								Total
Engineering	0	0	0	1,000,000	0	0	0	1,000,000
MSD Capital Improvements	0	0	0	1,000,000	0	0	0	1,000,000
Total								
<hr/>								
Estimated Personnel Cost	0	0	0	50,000	0	0	0	50,000

Hydraulic Modeling 2018

Dept. Priority: 238

Description

This project will provide resources for sewer modeling to assist in the project planning and design process and is required as part of the Global Consent Decree and the Combined Sewer Overflow (CSO) National Pollutant Discharge Elimination System (NPDES) permit. The Metropolitan Sewer District (MSD) is committed to ensuring its system-wide model meets the latest standards and provides the best available tool for

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assessing, planning, and designing MSD's infrastructure. This allowance will be used to incorporate project specific model changes into the System-Wide Model for each of MSD's seven sewersheds.

Purpose

The purpose of this project is to provide hydraulic, hydrologic, and treatment process modeling services to be used to support the Metropolitan Sewer District (MSD)'s long-range planning needs, and to meet MSD's Sanitary Sewer Overflow (SSO) and Combined Sewer Overflow (CSO) monitoring requirements.

Phases	Prior Year	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2016-2021
								Total
Engineering	0	0	0	0	1,000,000	0	0	1,000,000
MSD Capital Improvements	0	0	0	0	1,000,000	0	0	1,000,000
Total								
Estimated Personnel Cost	0	0	0	0	50,000	0	0	50,000

Hydraulic Modeling 2019

Dept. Priority: 239

Description

This project will provide resources for sewer modeling to assist in the project planning and design process and is required as part of the Global Consent Decree and the Combined Sewer Overflow (CSO) National Pollutant Discharge Elimination System (NPDES) permit. The Metropolitan Sewer District (MSD) is committed to ensuring its system-wide model meets the latest standards and provides the best available tool for assessing, planning, and designing MSD's infrastructure. This allowance will be used to incorporate project specific model changes into the System-Wide Model for each of MSD's seven sewersheds.

Purpose

The purpose of this project is to provide hydraulic, hydrologic, and treatment process modeling services to be used to support the Metropolitan Sewer District (MSD)'s long-range planning needs, and to meet MSD's Sanitary Sewer Overflow (SSO) and Combined Sewer Overflow (CSO) monitoring requirements.

Phases	Prior Year	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2016-2021
								Total
Engineering	0	0	0	0	0	1,000,000	0	1,000,000
MSD Capital Improvements	0	0	0	0	0	1,000,000	0	1,000,000
Total								
Estimated Personnel Cost	0	0	0	0	0	50,000	0	50,000

Emergency Sewer Repairs 2015

Dept. Priority: 240

Description

This project will provide resources for emergency sewer system repairs which are completed throughout the entire District using competitively bid as-needed sewer repair contracts. This project allows quick and effi-



cient restoration and maintenance for interrupted service while mitigating the risk of additional damages or loss.

Purpose

The purpose of this project is to allow the Metropolitan Sewer District (MSD) to quickly respond to sudden, unexpected sewer system failures which may threaten the public health, welfare, or safety. Conditions that warrant emergency sewer repairs include cave-ins, structurally failed sewers, manholes or building sewers, sewer backups into private property, sewer overflows that may violate permits and regulations, and imminent danger to structures or real property.

Phases	Prior Year	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2016-2021 Total
Construction	0	8,000,000	0	0	0	0	0	8,000,000
MSD Capital Improvements	0	8,000,000	0	0	0	0	0	8,000,000
Total								
Estimated Personnel Cost	0	400,000	0	0	0	0	0	400,000

Emergency Sewer Repairs 2016

Dept. Priority: 241

Description

This project will provide resources for emergency sewer system repairs which are completed throughout the entire District using competitively bid as-needed sewer repair contracts. This project allows quick and efficient restoration and maintenance for interrupted service while mitigating the risk of additional damages or loss.

Purpose

The purpose of this project is to allow the Metropolitan Sewer District (MSD) to quickly respond to sudden, unexpected sewer system failures which may threaten the public health, welfare, or safety. Conditions that warrant emergency sewer repairs include cave-ins, structurally failed sewers, manholes or building sewers, sewer backups into private property, sewer overflows that may violate permits and regulations, and imminent danger to structures or real property.

Phases	Prior Year	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2016-2021 Total
Construction	0	0	8,000,000	0	0	0	0	8,000,000
MSD Capital Improvements	0	0	8,000,000	0	0	0	0	8,000,000
Total								
Estimated Personnel Cost	0	0	400,000	0	0	0	0	400,000

Emergency Sewer Repairs 2017

Dept. Priority: 242

Description

This project will provide resources for emergency sewer system repairs which are completed throughout the entire District using competitively bid as-needed sewer repair contracts. This project allows quick and effi-

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cient restoration and maintenance for interrupted service while mitigating the risk of additional damages or loss.

Purpose

The purpose of this project is to allow the Metropolitan Sewer District (MSD) to quickly respond to sudden, unexpected sewer system failures which may threaten the public health, welfare, or safety. Conditions that warrant emergency sewer repairs include cave-ins, structurally failed sewers, manholes or building sewers, sewer backups into private property, sewer overflows that may violate permits and regulations, and imminent danger to structures or real property.

Phases	Prior Year	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2016-2021 Total
Construction	0	0	0	7,500,000	0	0	0	7,500,000
MSD Capital Improvements Total	0	0	0	7,500,000	0	0	0	7,500,000
Estimated Personnel Cost	0	0	0	375,000	0	0	0	375,000

Emergency Sewer Repairs 2018

Dept. Priority: 243

Description

This project will provide resources for emergency sewer system repairs which are completed throughout the entire District using competitively bid as-needed sewer repair contracts. This project allows quick and efficient restoration and maintenance for interrupted service while mitigating the risk of additional damages or loss.

Purpose

The purpose of this project is to allow the Metropolitan Sewer District (MSD) to quickly respond to sudden, unexpected sewer system failures which may threaten the public health, welfare, or safety. Conditions that warrant emergency sewer repairs include cave-ins, structurally failed sewers, manholes or building sewers, sewer backups into private property, sewer overflows that may violate permits and regulations, and imminent danger to structures or real property.

Phases	Prior Year	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2016-2021 Total
Construction	0	0	0	0	7,500,000	0	0	7,500,000
MSD Capital Improvements Total	0	0	0	0	7,500,000	0	0	7,500,000
Estimated Personnel Cost	0	0	0	0	375,000	0	0	375,000

Emergency Sewer Repairs 2019

Dept. Priority: 244

Description

This project will provide resources for emergency sewer system repairs which are completed throughout the entire District using competitively bid as-needed sewer repair contracts. This project allows quick and effi-



cient restoration and maintenance for interrupted service while mitigating the risk of additional damages or loss.

Purpose

The purpose of this project is to allow the Metropolitan Sewer District (MSD) to quickly respond to sudden, unexpected sewer system failures which may threaten the public health, welfare, or safety. Conditions that warrant emergency sewer repairs include cave-ins, structurally failed sewers, manholes or building sewers, sewer backups into private property, sewer overflows that may violate permits and regulations, and imminent danger to structures or real property.

Phases	Prior Year	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2016-2021 Total
Construction	0	0	0	0	0	7,500,000	0	7,500,000
MSD Capital Improvements	0	0	0	0	0	7,500,000	0	7,500,000
Total								
Estimated Personnel Cost	0	0	0	0	0	375,000	0	375,000

System-Wide Sensor Installation

Dept. Priority: 245

Description

This project will provide resources for a system-wide sensor installation. System-wide information provides the capability to operate multiple control structures in unison and with a comprehensive control strategy, rather than individually. Because of the high variability of rainfall which creates infinite variations in collection system performance, the combined operation of multiple control structures can at times produce optimal results.

Purpose

The purpose of this project is to advance the use of control structures throughout the wastewater system in order to maximize the storage and conveyance capacity of the collection system. This is dependent on the availability of real-time level data from many locations throughout the system. This enables a series of optimal control strategies to be used depending on how the system is responding to known upstream and downstream conditions that change during wet weather events.

Phases	Prior Year	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2016-2021 Total
Construction	0	750,000	0	0	0	0	0	750,000
MSD Capital Improvements	0	750,000	0	0	0	0	0	750,000
Total								
Estimated Personnel Cost	0	37,500	0	0	0	0	0	37,500

High Risk Asset Renewal 2015

Dept. Priority: 246

Description

This project will provide resources for utilizing the output of a risk rubric to prioritize non-emergency replacements of critical sewer lines. Assets are evaluated using standardized condition assessment tools and methodologies. Defective assets, or defective portions of assets that may impair the system's ability to meet

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defined levels of service are identified, prioritized based upon comprehensive risk, and renewed using the most cost effective methodology to extend the asset's useful life.

Purpose

The purpose of this project is to allow the Metropolitan Sewer District (MSD) to replace entire high risk assets or portions of system assets that are currently unable, or anticipated to be unable to meet their defined level of service. This project is necessary to cost effectively extend asset life while protecting and preserving public health and the environment.

Phases	Prior Year	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2016-2021
								Total
Construction	0	4,000,000	0	0	0	0	0	4,000,000
MSD Capital Improvements	0	4,000,000	0	0	0	0	0	4,000,000
Total								
Estimated Personnel Cost	0	200,000	0	0	0	0	0	200,000

High Risk Asset Renewal 2016

Dept. Priority: 247

Description

This project will provide resources for utilizing the output of a risk rubric to prioritize non-emergency replacements of critical sewer lines. Assets are evaluated using standardized condition assessment tools and methodologies. Defective assets, or defective portions of assets that may impair the system's ability to meet defined levels of service are identified, prioritized based upon comprehensive risk, and renewed using the most cost effective methodology to extend the asset's useful life.

Purpose

The purpose of this project is to allow the Metropolitan Sewer District (MSD) to replace entire high risk assets or portions of system assets that are currently unable, or anticipated to be unable to meet their defined level of service. This project is necessary to cost effectively extend asset life while protecting and preserving public health and the environment.

Phases	Prior Year	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2016-2021
								Total
Construction	0	0	4,000,000	0	0	0	0	4,000,000
MSD Capital Improvements	0	0	4,000,000	0	0	0	0	4,000,000
Total								
Estimated Personnel Cost	0	0	200,000	0	0	0	0	200,000

High Risk Asset Renewal 2017

Dept. Priority: 248

Description

This project will provide resources for utilizing the output of a risk rubric to prioritize non-emergency replacements of critical sewer lines. Assets are evaluated using standardized condition assessment tools and methodologies. Defective assets, or defective portions of assets that may impair the system's ability to meet



defined levels of service are identified, prioritized based upon comprehensive risk, and renewed using the most cost effective methodology to extend the asset's useful life.

Purpose

The purpose of this project is to allow the Metropolitan Sewer District (MSD) to replace entire high risk assets or portions of system assets that are currently unable, or anticipated to be unable to meet their defined level of service. This project is necessary to cost effectively extend asset life while protecting and preserving public health and the environment.

Phases	Prior Year	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2016-2021 Total
Construction	0	0	0	3,500,000	0	0	0	3,500,000
MSD Capital Improvements Total	0	0	0	3,500,000	0	0	0	3,500,000
<hr/>								
Estimated Personnel Cost	0	0	0	175,000	0	0	0	175,000

High Risk Asset Renewal 2018

Dept. Priority: 249

Description

This project will provide resources for utilizing the output of a risk rubric to prioritize non-emergency replacements of critical sewer lines. Assets are evaluated using standardized condition assessment tools and methodologies. Defective assets, or defective portions of assets that may impair the system's ability to meet defined levels of service are identified, prioritized based upon comprehensive risk, and renewed using the most cost effective methodology to extend the asset's useful life.

Purpose

The purpose of this project is to allow the Metropolitan Sewer District (MSD) to replace entire high risk assets or portions of system assets that are currently unable, or anticipated to be unable to meet their defined level of service. This project is necessary to cost effectively extend asset life while protecting and preserving public health and the environment.

Phases	Prior Year	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2016-2021 Total
Construction	0	0	0	0	3,500,000	0	0	3,500,000
MSD Capital Improvements Total	0	0	0	0	3,500,000	0	0	3,500,000
<hr/>								
Estimated Personnel Cost	0	0	0	0	175,000	0	0	175,000

High Risk Asset Renewal 2019

Dept. Priority: 250

Description

This project will provide resources for utilizing the output of a risk rubric to prioritize non-emergency replacements of critical sewer lines. Assets are evaluated using standardized condition assessment tools and methodologies. Defective assets, or defective portions of assets that may impair the system's ability to meet

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defined levels of service are identified, prioritized based upon comprehensive risk, and renewed using the most cost effective methodology to extend the asset's useful life.

Purpose

The purpose of this project is to allow the Metropolitan Sewer District (MSD) to replace entire high risk assets or portions of system assets that are currently unable, or anticipated to be unable to meet their defined level of service. This project is necessary to cost effectively extend asset life while protecting and preserving public health and the environment.

Phases	Prior Year	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2016-2021
								Total
Construction	0	0	0	0	0	3,000,000	0	3,000,000
MSD Capital Improvements	0	0	0	0	0	3,000,000	0	3,000,000
Total								
Estimated Personnel Cost	0	0	0	0	0	150,000	0	150,000

Water Quality Modeling 2015

Dept. Priority: 251

Description

This project will provide resources for the collection of pertinent data and local field conditions for use in development of a comprehensive water quality model application that can be calibrated and verified to facilitate simulation of various alternatives for capital improvement projects. Activities performed under this allowance will determine the current water quality conditions in streams, creeks, and rivers; identify potential sources for pollutants of concern; identify how pollutants are transported to water bodies; and continue refining the assumptions used for design of stormwater best management practices.

Purpose

The purpose of this project is to facilitate development of a comprehensive water quality program.

Phases	Prior Year	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2016-2021
								Total
Engineering	0	500,000	0	0	0	0	0	500,000
MSD Capital Improvements	0	500,000	0	0	0	0	0	500,000
Total								
Estimated Personnel Cost	0	25,000	0	0	0	0	0	25,000

Water Quality Modeling 2016

Dept. Priority: 252

Description

This project will provide resources for the collection of pertinent data and local field conditions for use in development of a comprehensive water quality model application that can be calibrated and verified to facilitate simulation of various alternatives for capital improvement projects. Activities performed under this allowance will determine the current water quality conditions in streams, creeks, and rivers; identify



potential sources for pollutants of concern; identify how pollutants are transported to water bodies; and continue refining the assumptions used for design of stormwater best management practices.

Purpose

The purpose of this project is to facilitate development of a comprehensive water quality program.

Phases	Prior Year	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2016-2021
								Total
Engineering	0	0	500,000	0	0	0	0	500,000
MSD Capital Improvements Total	0	0	500,000	0	0	0	0	500,000
<hr/>								
Estimated Personnel Cost	0	0	25,000	0	0	0	0	25,000

Water Quality Modeling 2017

Dept. Priority: 253

Description

This project will provide resources for the collection of pertinent data and local field conditions for use in development of a comprehensive water quality model application that can be calibrated and verified to facilitate simulation of various alternatives for capital improvement projects. Activities performed under this allowance will determine the current water quality conditions in streams, creeks, and rivers; identify potential sources for pollutants of concern; identify how pollutants are transported to water bodies; and continue refining the assumptions used for design of stormwater best management practices.

Purpose

The purpose of this project is to facilitate development of a comprehensive water quality program.

Phases	Prior Year	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2016-2021
								Total
Engineering	0	0	0	500,000	0	0	0	500,000
MSD Capital Improvements Total	0	0	0	500,000	0	0	0	500,000
<hr/>								
Estimated Personnel Cost	0	0	0	25,000	0	0	0	25,000

Water Quality Modeling 2018

Dept. Priority: 254

Description

This project will provide resources for the collection of pertinent data and local field conditions for use in development of a comprehensive water quality model application that can be calibrated and verified to facilitate simulation of various alternatives for capital improvement projects. Activities performed under this allowance will determine the current water quality conditions in streams, creeks, and rivers; identify

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potential sources for pollutants of concern; identify how pollutants are transported to water bodies; and continue refining the assumptions used for design of stormwater best management practices.

Purpose

The purpose of this project is to facilitate development of a comprehensive water quality program.

Phases	Prior Year	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2016-2021
								Total
Engineering	0	0	0	0	500,000	0	0	500,000
MSD Capital Improvements	0	0	0	0	500,000	0	0	500,000
Total								
Estimated Personnel Cost	0	0	0	0	25,000	0	0	25,000

Water Quality Modeling 2019

Dept. Priority: 255

Description

This project will provide resources for the collection of pertinent data and local field conditions for use in development of a comprehensive water quality model application that can be calibrated and verified to facilitate simulation of various alternatives for capital improvement projects. Activities performed under this allowance will determine the current water quality conditions in streams, creeks, and rivers; identify potential sources for pollutants of concern; identify how pollutants are transported to water bodies; and continue refining the assumptions used for design of stormwater best management practices.

Purpose

The purpose of this project is to facilitate development of a comprehensive water quality program.

Phases	Prior Year	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2016-2021
								Total
Engineering	0	0	0	0	0	500,000	0	500,000
MSD Capital Improvements	0	0	0	0	0	500,000	0	500,000
Total								
Estimated Personnel Cost	0	0	0	0	0	25,000	0	25,000



SSO 1048 Conveyance Sewer Phase 2

Dept. Priority: 256

Description

This project will provide resources for the replacement of approximately 4,256 feet of 30-36-inch sewer to eliminate Sanitary Sewer Overflow (SSO) 1048. This project is located in the City of Springdale, Hamilton County, Ohio.

Purpose

The purpose of this project is to eliminate Sanitary Sewer Overflow (SSO) 1048. This project is in the June 2009 Wet Weather Improvement Plan (WWIP).

Phases	Prior Year	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2016-2021
								Total
Engineering	0	0	0	0	0	375,350	0	375,350
MSD Capital Improvements	0	0	0	0	0	375,350	0	375,350
Total								
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Estimated Personnel Cost	0	0	0	0	0	18,770	0	18,770

Stonebridge Apartments Sewer Study

Dept. Priority: 257

Description

This project will provide resources to rehabilitate sewers in the area of the Stonebridge Apartments.

Purpose

The purpose of this project is to increase the reliability of the sewer infrastructure.

Phases	Prior Year	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2016-2021
								Total
Construction	0	0	0	0	0	700,000	0	700,000
Engineering	0	0	300,000	0	0	0	0	300,000
MSD Capital Improvements	0	0	300,000	0	0	700,000	0	1,000,000
Total								
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Estimated Personnel Cost	0	0	15,000	0	0	30,000	0	45,000

Capital Improvement Plan

Sewers



Stanley Avenue Lateral Relocations

Dept. Priority: 258

Description

The project will provide resources for relocating sewer laterals on Stanley Avenue.

Purpose

The purpose of this project is to relocate sewer laterals.

Phases	Prior Year	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2016-2021
								Total
Construction	0	148,700	0	0	0	0	0	148,700
MSD Capital Improvements	0	148,700	0	0	0	0	0	148,700
Total								
Estimated Personnel Cost	0	7,440	0	0	0	0	0	7,440

SSO 700 Integrated Watershed Action Plan

Dept. Priority: 259

Description

This project will provide resources for watershed planning in the area of the Sanitary Sewer Overflow (SSO) 700 treatment facility.

Purpose

The purpose of this project is to complete watershed planning in the area of the Sanitary Sewer Overflow (SSO) 700 treatment facility.

Phases	Prior Year	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2016-2021
								Total
Engineering	0	750,000	1,500,000	0	0	0	0	2,250,000
MSD Capital Improvements	0	750,000	1,500,000	0	0	0	0	2,250,000
Total								
Estimated Personnel Cost	0	37,500	75,000	0	0	0	0	112,500



Rockdale Avenue and Windham Avenue Sewer Evaluation

Dept. Priority: 260

Description

This project will provide resources for the replacement of sewer segments at Rockdale Avenue and Windham Avenue.

Purpose

The purpose of this project is to increase the reliability of the sewer infrastructure.

Phases	Prior Year	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2016-2021
								Total
Engineering	0	0	0	0	0	30,000	0	30,000
MSD Capital Improvements	0	0	0	0	0	30,000	0	30,000
Total								
Estimated Personnel Cost	0	0	0	0	0	1,500	0	1,500

Reading Road - 12th Street to E. Liberty Street

Dept. Priority: 261

Description

This project will provide resources for replacing the sewer main on Reading Road from 12th Street to E. Liberty Street.

Purpose

The purpose of this project is to increase the reliability of the infrastructure on Reading Road.

Phases	Prior Year	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2016-2021
								Total
Engineering	0	0	0	0	0	60,000	0	60,000
MSD Capital Improvements	0	0	0	0	0	60,000	0	60,000
Total								
Estimated Personnel Cost	0	0	0	0	0	3,000	0	3,000

Capital Improvement Plan

Sewers



Phase 2 Wet Weather Improvement Plan Design Allocation

Dept. Priority: 262

Description

This project will provide resources to design Phase 2 of the mandated Wet Weather Improvement Plan (WWIP).

Purpose

The purpose of this project is to remain in compliance with the Federal Global Consent Decree.

Phases	Prior Year	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2016-2021 Total
Engineering	0	0	0	0	0	20,000,000	0	20,000,000
MSD Capital Improvements	0	0	0	0	0	20,000,000	0	20,000,000
Total								
Estimated Personnel Cost	0	0	0	0	0	1,000,000	0	1,000,000

Old Ludlow Ave Right-of-Way Sewer Replacement

Dept. Priority: 263

Description

This project will provide resources for replacing sewer segments on Ludlow Avenue.

Purpose

The purpose of this project is to increase the reliability of the sewer on Ludlow Avenue.

Phases	Prior Year	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2016-2021 Total
Engineering	0	0	0	0	0	90,000	0	90,000
MSD Capital Improvements	0	0	0	0	0	90,000	0	90,000
Total								
Estimated Personnel Cost	0	0	0	0	0	4,500	0	4,500



Morrison Avenue Sewer Replacement

Dept. Priority: 264

Description

This project will provide resources for replacing sewer segments on Morrison Avenue.

Purpose

The purpose of this project is to increase the reliability of the compromised sewer segments.

Phases	Prior Year	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2016-2021
								Total
Engineering	0	0	0	0	75,000	0	0	75,000
MSD Capital Improvements	0	0	0	0	75,000	0	0	75,000
Total								
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Estimated Personnel Cost	0	0	0	0	3,750	0	0	3,750

MCWWTP Service Water (NPW) Reliability and Service Upgrade

Dept. Priority: 265

Description

This project will provide resources to improve the non-potable water system within the Mill Creek Wastewater Treatment Plant (MCWWTP) site.

Purpose

The purpose of this project is to repair, upgrade, and improve the non-potable water system within the facility. This system is used to provide water for the treatment processes.

Phases	Prior Year	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2016-2021
								Total
Construction	4,592,300	0	0	4,592,300	0	0	0	4,592,300
MSD Capital Improvements	4,592,300	0	0	4,592,300	0	0	0	4,592,300
Total								
<hr/>								
Estimated Personnel Cost	229,620	0	0	229,620	0	0	0	229,620





Department of Stormwater Management

Priority	Project Title	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2016-2021 Total
Stormwater Management Fund								
1	Barrier Dam Crane Rehabilitation	200,000	0	0	0	0	0	200,000
2	Barrier Dam Phase II Facility Plan	200,000	0	0	0	0	0	200,000
3	Barrier Dam Radial Gates - Hydraulic Actuators Replacements	300,000	600,000	600,000	300,000	0	0	1,800,000
4	Closed Circuit Television (CCTV) Truck	250,000	0	0	0	0	0	250,000
5	Barrier Dam Concrete Rehabilitation	100,000	100,000	100,000	100,000	100,000	100,000	600,000
6	Grand Avenue Drainage Improvements	175,000	0	0	0	0	0	175,000
7	Rookwood Overpass Drainage Improvements	300,000	0	0	0	0	0	300,000
8	Oakview Pump Station Business Case Evaluation	50,000	0	0	0	0	0	50,000
9	Water Street Storm Sewer Rehabilitation	150,000	0	0	0	0	0	150,000
Stormwater Management Total		1,725,000	700,000	700,000	400,000	100,000	100,000	3,725,000
Department of Stormwater Management Total		1,725,000	700,000	700,000	400,000	100,000	100,000	3,725,000



Stormwater Management Fund

Barrier Dam Crane Rehabilitation

Dept. Priority: 1

Description

This project will provide resources for rehabilitating the primary crane at the Barrier Dam. The current condition of the crane poses great risk to the proper operation of the Dam. This was identified as a high priority in the draft Phase I Facility Plan.

Purpose

The purpose of this project is to upgrade the existing crane which is beyond its useful life and is at risk of failure.

Phases	Prior Year	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2016-2021
								Total
Equipment	0	200,000	0	0	0	0	0	200,000
Stormwater Management	0	200,000	0	0	0	0	0	200,000
Total								
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Estimated Personnel Cost	0	0	0	0	0	0	0	0

Barrier Dam Phase II Facility Plan

Dept. Priority: 2

Description

This project will provide resources for performing the second phase of the Barrier Dam's Facility Plan which involves a detailed condition assessment of high risk assets including pumps and controls.

Purpose

The purpose of this project is to develop and communicate the capital needs of the flood protection system known as the Barrier Dam. It will serve as a guide for prioritizing facility improvements and capital investments.

Phases	Prior Year	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2016-2021
								Total
Engineering	0	200,000	0	0	0	0	0	200,000
Stormwater Management	0	200,000	0	0	0	0	0	200,000
Total								
<hr/>								
Estimated Personnel Cost	0	0	0	0	0	0	0	0



Barrier Dam Radial Gates - Hydraulic Actuators Replacements

Dept. Priority: 3

Description

This project will provide resources for the repair of the Barrier Dam Facility and associated equipment. Recent inspections by the United States Army Corps of Engineers and issues encountered during operations revealed items that require replacement or restoration.

Purpose

The purpose of this project is to replace the two hydraulic actuators on each radial gate. This is a key asset in the function of the Barrier Dam. Two hydraulic actuators will be replaced per year over the course of four years.

Phases	Prior Year	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2016-2021 Total
Construction	400,000	300,000	600,000	600,000	300,000	0	0	1,800,000
Stormwater Management	400,000	300,000	600,000	600,000	300,000	0	0	1,800,000
Total								
Estimated Personnel Cost	0	0	0	0	0	0	0	0

Closed Circuit Television (CCTV) Truck

Dept. Priority: 4

Description

This project will provide resources for the purchase of a closed circuit television (CCTV) truck and associated TV equipment. This will greatly assist the Stormwater Management Utility (SMU) in its goal to be more proactive in the inspection of its assets and reduce risk to the utility and flooding in the community.

Purpose

The purpose of this project is for Stormwater Management Utility (SMU) staff to have the ability to perform inspections to determine structural conditions of storm sewers. The closed circuit television (CCTV) truck will be used to determine structural defects, specific location of defects, locate obstructions, and many other critical issues.

Phases	Prior Year	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2016-2021 Total
Equipment	0	250,000	0	0	0	0	0	250,000
Stormwater Management	0	250,000	0	0	0	0	0	250,000
Total								
Estimated Personnel Cost	0	0	0	0	0	0	0	0



Barrier Dam Concrete Rehabilitation

Dept. Priority: 5

Description

This project will provide resources for the rehabilitation of several sections of concrete at the Barrier Dam. Recent inspections by the United States Army Corps of Engineers and the draft Phase I Facility Plan identified this work as a high priority.

Purpose

The purpose of this project is to correct the deficiency that resulted in the assessed deteriorated condition.

Phases	Prior Year	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2016-2021
								Total
Construction	0	100,000	100,000	100,000	100,000	100,000	100,000	600,000
Stormwater Management	0	100,000	100,000	100,000	100,000	100,000	100,000	600,000
Total								
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Estimated Personnel Cost	0	0	0	0	0	0	0	0

Grand Avenue Drainage Improvements

Dept. Priority: 6

Description

This project will provide resources for relieving flooding that has occurred on this street. This is a Community Priority Request.

Purpose

The purpose of this project is to relieve chronic street flooding on a major roadway.

Phases	Prior Year	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2016-2021
								Total
Construction	0	175,000	0	0	0	0	0	175,000
Stormwater Management	0	175,000	0	0	0	0	0	175,000
Total								
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Estimated Personnel Cost	0	0	0	0	0	0	0	0



Rookwood Overpass Drainage Improvements

Dept. Priority: 7

Description

This project will provide resources for relieving chronic flooding that has occurred at this location for several years by building new storm inlets and drains.

Purpose

The purpose of this project is to protect the health and welfare of the public.

Phases	Prior Year	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2016-2021
								Total
Construction	0	300,000	0	0	0	0	0	300,000
Stormwater Management	0	300,000	0	0	0	0	0	300,000
Total								
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Estimated Personnel Cost	0	0	0	0	0	0	0	0

Oakview Pump Station Business Case Evaluation

Dept. Priority: 8

Description

This project will provide resources for performing a business case evaluation (BCE) of the Oakview Pump Station. The results of the BCE will indicate if the pump station should a) remain in its current state, b) undergo rehabilitation/upgrades, or c) be eliminated.

Purpose

The purpose of this project is to utilize Stormwater Management Utility resources most effectively.

Phases	Prior Year	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2016-2021
								Total
Engineering	0	50,000	0	0	0	0	0	50,000
Stormwater Management	0	50,000	0	0	0	0	0	50,000
Total								
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Estimated Personnel Cost	0	0	0	0	0	0	0	0



Water Street Storm Sewer Rehabilitation

Dept. Priority: 9

Description

This project will provide resources for the rehabilitation of a large deteriorated storm sewer that serves businesses and the local community near downtown.

Purpose

The purpose of this project is to provide reliable storm sewer drainage for local industry.

Phases	Prior Year	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2016-2021
								Total
Construction	0	114,000	0	0	0	0	0	114,000
Engineering	0	36,000	0	0	0	0	0	36,000
Stormwater Management	0	150,000	0	0	0	0	0	150,000
Total								
Estimated Personnel Cost	0	0	0	0	0	0	0	0



Department of Transportation & Engineering

Priority	Project Title	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2016-2021 Total
General Aviation Fund								
29	Airport Infrastructure Improvements	140,000	140,000	140,000	140,000	140,000	140,000	840,000
30	FAA/ODOT Local Match	200,000	200,000	200,000	200,000	200,000	200,000	1,200,000
31	Facility Improvements	302,300	316,400	338,000	359,600	375,700	390,700	2,082,700
General Aviation Total		642,300	656,400	678,000	699,600	715,700	730,700	4,122,700
Income Tax Transit Fund								
32	Transit/Rail Corridor Preservation Acq.	100,000	100,000	100,000	100,000	100,000	100,000	600,000
Income Tax Transit Total		100,000	100,000	100,000	100,000	100,000	100,000	600,000
General Capital Fund								
1	Information Systems Acquisition	139,500	139,500	150,000	150,000	150,000	150,000	879,000
2	SCIP Loan Repayment	341,120	306,140	287,200	287,200	287,200	287,200	1,796,060
3	MLK/I-71 Interchange SIB Loan	727,500	697,500	667,500	637,500	607,500	577,500	3,915,000
4	Bridge Rehabilitation Program	550,000	950,000	1,000,000	1,000,000	1,000,000	1,000,000	5,500,000
5	Traffic Signal Installation & Renovation	300,000	1,200,000	1,250,000	1,250,000	1,250,000	1,250,000	6,500,000
6	Street Rehabilitation	15,376,100	15,636,400	17,332,800	17,552,800	18,388,300	18,940,000	103,226,400
7	Street Improvements	597,380	811,060	816,100	839,500	816,100	900,000	4,780,140
8	Neighborhood Transportation Strategies	700,000	600,000	600,000	600,000	600,000	600,000	3,700,000
9	OKI Corridor Studies	200,000	210,000	210,000	210,000	210,000	210,000	1,250,000
10	Computerized Traffic Signal System	172,000	0	425,000	400,000	425,000	450,000	1,872,000
11	Wall Stab. & Landslide Correction	550,000	850,000	850,000	850,000	850,000	895,300	4,845,300
12	LED Traffic and Pedestrian Signals	250,000	110,000	110,000	110,000	110,000	110,000	800,000
13	Neighborhood Gateways/Greenways Imprvmt	115,000	210,000	210,000	210,000	210,000	210,000	1,165,000
14	Sidewalk Repair Program	200,000	400,000	400,000	400,000	400,000	425,000	2,225,000
15	Curb Ramps - Street Rehab	390,000	400,000	400,000	400,000	500,000	500,000	2,590,000
16	Safety Improvements	50,000	100,000	100,000	100,000	100,000	100,000	550,000
17	Traffic Signal Controllers & Detectors	100,000	300,000	300,000	300,000	325,000	350,000	1,675,000
18	Bicycle Transportation Program	300,000	485,000	425,000	425,000	425,000	450,000	2,510,000
19	Spot Infrastructure Replacement	250,000	550,000	550,000	550,000	550,000	600,000	3,050,000
20	Street Light Replacement Project	80,000	160,000	160,000	160,000	160,000	200,000	920,000
21	Pavement Management	240,000	250,000	260,000	260,000	260,000	260,000	1,530,000
22	Ohio River Trail	140,000	0	0	0	0	0	140,000
23	Downtown Infrast. Coord. & Implemtn	200,000	210,000	210,000	210,000	210,000	250,000	1,290,000
24	Uptown Access Imprmts West MLK Dr.	900,000	0	0	0	0	0	900,000
25	Colerain Corr. Imp. I-74 to Spring Grv	93,000	0	0	0	0	0	93,000
26	Traffic Control Device Installation & Renovation	50,000	100,000	100,000	100,000	124,400	125,000	599,400
27	Duke Street Light Installation and Renovation	150,000	275,000	350,000	350,000	350,000	350,000	1,825,000
28	ROW Ordinance Implementation	50,000	25,000	0	0	0	0	75,000

Capital Improvement Plan

Transportation & Engineering



Priority	Project Title	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2016-2021 Total
33	Downtown Streetlight Maintenance/ Repair	25,000	60,000	60,000	60,000	60,000	100,000	365,000
34	ORT Kellogg Ave - Salem to Sutton	120,000	100,000	0	0	0	0	220,000
35	Hillside Stairway Rehabilitation Program	50,000	100,000	100,000	100,000	100,000	100,000	550,000
39	Elmore to Central Parkway Connector	300,000	0	0	0	0	0	300,000
40	Convention Center Expansion	250,000	0	0	0	0	0	250,000
41	Duck Creek Connector	1,000,000	0	0	0	0	0	1,000,000
42	Street Rehabilitation - Capital Acceleration	14,600,000	14,400,000	11,400,000	11,100,000	9,000,000	8,500,000	69,000,000
43	Street Rehabilitation Debt - Capital Acceleration	0	100,000	600,000	0	1,000,000	1,200,000	2,900,000
44	Glenway Avenue Gateway Wall	270,000	0	0	0	0	0	270,000
45	Mill Creek Greenway Trail	250,000	0	0	0	0	0	250,000
46	Brewery Heritage Trail	300,000	0	0	0	0	0	300,000
General Capital Total		40,376,600	39,735,600	39,323,600	38,612,000	38,468,500	39,090,000	235,606,300
Department of Transportation & Engineering Total		41,118,900	40,492,000	40,101,600	39,411,600	39,284,200	39,920,700	240,329,000



General Aviation Fund

Airport Infrastructure Improvements

Dept. Priority: 29

Description

This project will provide resources for improvements to Lunken Airport that are not typically funded by the Federal Aviation Administration (FAA) or Ohio Department of Transportation (ODOT). Improvements will include, but are not limited to, rubber removal, striping, airfield and way-finding signage, security improvements, vehicular parking lot improvements/expansion, Airport Road improvements, flood control improvements/repairs, and various airfield pavement/drainage repairs.

Purpose

The purpose of this project is to make improvements (airfield and non-airfield) to the airport's infrastructure to ensure an operationally efficient and aesthetically pleasing public airport. This project would also allow the City to meet its commitment to the FAA to maintain a safe and secure facility.

Phases	Prior Year	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2016-2021
								Total
Other	140,000	140,000	140,000	140,000	140,000	140,000	140,000	840,000
General Aviation Total	140,000	140,000	140,000	140,000	140,000	140,000	140,000	840,000
Estimated Personnel Cost	25,000	25,000	25,000	25,000	25,000	25,000	25,000	150,000

FAA/ODOT Local Match

Dept. Priority: 30

Description

This project will provide resources for an annual capital reserve in the General Aviation Fund to provide the matching funds for capital projects which involve Federal Aviation Administration (FAA) and Ohio Department of Transportation (ODOT) grant funding. This capital project would cover expenditures such as equipment, engineering, and construction items.

Purpose

The purpose of this project is to meet the local match funding requirements for FAA/ODOT approved projects and to fund expenditures associated with preparation of ODOT/FAA grant applications and funding request documents (Annual FAA Airport Capital Improvement Program).

Phases	Prior Year	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2016-2021
								Total
Other	200,000	200,000	200,000	200,000	200,000	200,000	200,000	1,200,000
General Aviation Total	200,000	200,000	200,000	200,000	200,000	200,000	200,000	1,200,000
Estimated Personnel Cost	0	0	0	0	0	0	0	0



Facility Improvements

Dept. Priority: 31

Description

This project will provide resources for improvements to airport-owned facilities at Lunken Airport that will include, but are not limited to, the following: roofing, plumbing, electrical, ADA wheelchair access, building code upgrades, heating, ventilation and air conditioning (HVAC) improvements, as well as window replacements. The facilities include the Airport Administration Building, City-owned hangars, and the Air Traffic Control Tower and Maintenance Shop. This capital project would cover expenditures such as equipment, engineering and construction items.

Purpose

The purpose of this project is to make improvements to the airport's facilities, not funded by the Federal Aviation Administration (FAA). These improvements would serve to preserve the facilities and reduce the operation expenses associated with deteriorated/inefficient facilities. The project would also ensure that the facilities are brought up to current code standards.

Phases	Prior Year	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2016-2021
								Total
Other	289,100	302,300	316,400	338,000	359,600	375,700	390,700	2,082,700
General Aviation Total	289,100	302,300	316,400	338,000	359,600	375,700	390,700	2,082,700
Estimated Personnel Cost	20,000	20,000	20,000	20,000	20,000	25,000	25,000	130,000

Income Tax Transit Fund

Transit/Rail Corridor Preservation Acq.

Dept. Priority: 32

Description

This project will provide resources for the acquisition of real property and/or property rights and related planning, environmental, consultant services, construction, and administrative costs in connection with the preservation and reuse of existing railroad corridors. The project includes support of mass transit study related expenses, excluding expenses related to the streetcar project.

Purpose

The purpose of this project is to assist the City and the region in meeting regulatory compliance related to federal air quality standards, enhance the City's transportation system, and assist with the acquisition and study of rail corridors for transportation purposes, excluding streetcar project purposes.

Phases	Prior Year	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2016-2021
								Total
Other	100,000	100,000	100,000	100,000	100,000	100,000	100,000	600,000
Income Tax Transit Total	100,000	100,000	100,000	100,000	100,000	100,000	100,000	600,000
Estimated Personnel Cost	0	0	0	0	0	0	0	0



General Capital Fund

Information Systems Acquisition

Dept. Priority: 1

Description

This project will provide resources for the design and acquisition of hardware and software needed to capture, store, integrate, analyze, manage, and report information needed for project management in the Department of Transportation and Engineering. This includes, but is not limited to, construction management, design, permitting, mapping, project management, transportation planning, airport management, traffic control and regulation, and asset management.

Purpose

The purpose of this project is to improve both intra- and inter-departmental communications, to provide valuable and timely information needed to effectively operate the department, and to manage transportation assets valued in excess of \$3 billion. These systems complement and extend the capabilities of enterprise systems to serve the specific needs of this department.

Phases	Prior Year	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2016-2021 Total
Equipment	0	139,500	139,500	150,000	150,000	150,000	150,000	879,000
General Capital Total	0	139,500	139,500	150,000	150,000	150,000	150,000	879,000
Estimated Personnel Cost	0	0	0	0	0	0	0	0

SCIP Loan Repayment

Dept. Priority: 2

Description

This project will provide resources for the repayment of zero-interest loans from the Ohio Public Works Commission used to rehabilitate streets in various City neighborhoods.

Purpose

The purpose of this project is to improve quality of life and reduce street pavement repair costs by: 1) repairing more streets than capital funding allows; 2) repairing these streets sooner, before repairs become more extensive and costly; 3) advancing these repairs so they are performed at lower construction prices; and 4) taking advantage of the time value of money using zero interest loans.

Phases	Prior Year	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2016-2021 Total
Other	365,000	341,120	306,140	287,200	287,200	287,200	287,200	1,796,060
General Capital Total	365,000	341,120	306,140	287,200	287,200	287,200	287,200	1,796,060
Estimated Personnel Cost	0	0	0	0	0	0	0	0

MLK/I-71 Interchange SIB Loan

Dept. Priority: 3

Description

This project will provide resources to pay the interest payments and other fees on an Ohio State Infrastructure Bank (SIB) loan of \$25 million for the construction of the Martin Luther King, Jr./I-71 Interchange as

Capital Improvement Plan

Transportation & Engineering



approved by the City Council (Ord. No. 377-2013). The Martin Luther King Jr./I-71 Interchange will improve access from I-71 to the Uptown area and neighboring communities.

Purpose

The purpose of this project is to reduce congestion and travel times in the area, improving way finding, increase safety, and promote economic vitality in the Uptown area of Cincinnati.

Phases	Prior Year	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2016-2021
								Total
Other	0	727,500	697,500	667,500	637,500	607,500	577,500	3,915,000
General Capital Total	0	727,500	697,500	667,500	637,500	607,500	577,500	3,915,000
Estimated Personnel Cost	0	0	0	0	0	0	0	0

Bridge Rehabilitation Program

Dept. Priority: 4

Description

This project will provide resources for labor, materials, tools, technologies, and training needed to inspect, prioritize, plan, design, repair, rehabilitate, remove, and/or replace bridges within the City of Cincinnati.

Purpose

The purpose of this project is to meet federal and state laws and to keep bridges safe for and open to vehicular, pedestrian, and bicycle traffic, allowing safe passage across rivers, creeks, railroads, roadways, and other barriers. The City, DOTE maintains a combined deck area of over 1.3 million square feet having an estimated replacement value of \$300 million.

Phases	Prior Year	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2016-2021
								Total
Equipment	0	10,000	10,000	10,000	10,000	10,000	10,000	60,000
Land	50,000	10,000	10,000	10,000	10,000	10,000	10,000	60,000
Engineering	155,400	370,000	370,000	370,000	370,000	370,000	370,000	2,220,000
Construction	539,820	160,000	560,000	610,000	610,000	610,000	610,000	3,160,000
General Capital Total	745,220	550,000	950,000	1,000,000	1,000,000	1,000,000	1,000,000	5,500,000
Estimated Personnel Cost	200,000	400,000	400,000	400,000	400,000	400,000	400,000	2,400,000

Traffic Signal Installation & Renovation

Dept. Priority: 5

Description

This project will provide resources to install traffic signals, audible pedestrian signals, crosswalk signs, and other traffic control devices and remove equipment no longer needed. The project will carry out needed rehabilitation of existing traffic signals, illuminated signs, school flashers, audible pedestrian signals, and other electric and/or electronic traffic controls including roadway lighting and incidental curb or island



modifications. This project funds labor, materials, and technologies needed to plan, design, build, and inspect this construction.

Purpose

The purpose of this project is to replace obsolete or worn out traffic signal and/or roadway lighting equipment before it deteriorates to the point that it can no longer be maintained. The average traffic signal has a life of 25 years, and the City currently has 758 traffic signals valued at over \$50 million. It is therefore necessary to reconstruct about 30 traffic signals each year to keep them replaced within their useful life cycle.

Phases	Prior Year	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2016-2021 Total
Equipment	0	50,000	375,000	375,000	375,000	375,000	375,000	1,925,000
Engineering	110,000	50,000	125,000	125,000	125,000	125,000	125,000	675,000
Construction	560,830	200,000	700,000	750,000	750,000	750,000	750,000	3,900,000
General Capital Total	670,830	300,000	1,200,000	1,250,000	1,250,000	1,250,000	1,250,000	6,500,000
Estimated Personnel Cost	110,000	120,000	120,000	120,000	120,000	120,000	120,000	720,000

Street Rehabilitation

Dept. Priority: 6

Description

This project will provide resources for the systematic repair and resurfacing of streets throughout the City under the Street Rehabilitation Program. This project supports repairs to curbs, pavements, and resurfacing the roadway. Project funds are also used to match funding from other sources including the Ohio Public Works Commission and the Ohio Department of Transportation. These leveraged funds are used to rehabilitate additional streets. This project supports the labor, materials, and technologies needed to plan, design, build, and inspect this construction.

Purpose

The purpose of this project is to improve safety for motorists and quality of life in neighborhoods by preserving and upgrading street pavement and curbs on over 985 miles of streets. These streets have an area of approximately 3,050 lane-miles (a lane mile is an area equivalent to a one-mile long by ten-foot wide lane) with a replacement value of \$2.6 billion. Additional outside funding is sought to help meet and exceed this standard (100 lm).

Phases	Prior Year	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2016-2021 Total
Engineering	600,000	500,000	520,000	490,000	500,000	500,000	500,000	3,010,000
Construction	14,501,700	14,876,100	15,116,400	16,842,800	17,052,800	17,888,300	18,440,000	100,216,400
General Capital Total	15,101,700	15,376,100	15,636,400	17,332,800	17,552,800	18,388,300	18,940,000	103,226,400
Estimated Personnel Cost	1,800,000	1,750,000	1,550,000	1,470,000	1,490,000	1,500,000	1,500,000	9,260,000

Street Improvements

Dept. Priority: 7

Description

This project will provide resources for the improvements to the through street system to improve safety and/or capacity and to support new housing and/or economic development. Program funds help leverage

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outside funding for specific projects from sources such as the Ohio Public Works Commission's State Capital Improvement Program (SCIP)/Local Transportation Improvement Program (LTIP), as well as Ohio Department of Transportation (ODOT) and Federal Highway Administration (FHWA) funds. Program funds support labor, materials, tools, and technologies needed to plan, design, build, and inspect these improvements.

Purpose

The purpose of this project is to improve safety and capacity on roadways with documented safety or congestion on existing through streets. Upgrades or improvements are also performed in conjunction with new housing and economic development. These funds are successfully used to advance design as needed to leverage outside funds.

Phases	Prior Year	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2016-2021
								Total
Land	75,000	0	75,000	75,000	75,000	75,000	75,000	375,000
Engineering	100,000	597,380	100,000	100,000	100,000	100,000	100,000	1,097,380
Construction	685,000	0	636,060	641,100	664,500	641,100	725,000	3,307,760
General Capital Total	860,000	597,380	811,060	816,100	839,500	816,100	900,000	4,780,140
Estimated Personnel Cost	150,000	500,000	225,000	225,000	225,000	225,000	225,000	1,625,000

Neighborhood Transportation Strategies

Dept. Priority: 8

Description

This project will provide resources for support of the study, design and construction for transportation improvements to support City transportation strategies. This includes context sensitive design solutions for all transportation modes in connection with changes in land use, new development and neighborhood initiatives. Funds may be used to leverage additional public and/or private funding for infrastructure projects.

Purpose

The purpose of this project is to provide resources to review private and public development plans and to participate in a variety of projects, committees, and studies that affect the City's and region's transportation network including OKI, ODOT, and Federal funding strategies for infrastructure improvements.

Phases	Prior Year	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2016-2021
								Total
Engineering	970,910	700,000	600,000	600,000	600,000	600,000	600,000	3,700,000
General Capital Total	970,910	700,000	600,000	600,000	600,000	600,000	600,000	3,700,000
Estimated Personnel Cost	70,000	125,000	100,000	100,000	100,000	100,000	100,000	625,000

OKI Corridor Studies

Dept. Priority: 9

Description

This project will provide resources for the City's portion of local matching funds to the Ohio-Kentucky-Indiana Regional Council of Governments (OKI), Transportation Improvement District (TID) or the Ohio Department of Transportation (ODOT). It will also provide City staff support activities for a variety of Corridor studies underway or planned in the region. This includes Eastern Corridor, I-75, Uptown at I-71, and



other regionally significant planning, design and construction projects. Funds may be used to leverage additional public and/or private funding for infrastructure projects and construction.

Purpose

The purpose of this project is to provide matching funds and staff participation to support various transportation studies and construction projects designed to improve transportation in the City and the region, typically as part of ongoing OKI type corridor studies.

Phases	Prior Year	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2016-2021
								Total
Other	246,170	200,000	210,000	210,000	210,000	210,000	210,000	1,250,000
General Capital Total	246,170	200,000	210,000	210,000	210,000	210,000	210,000	1,250,000
Estimated Personnel Cost	0	200,000	210,000	210,000	210,000	210,000	210,000	1,250,000

Computerized Traffic Signal System

Dept. Priority: 10

Description

This project will provide resources for the completion of the remaining portions and upgrade existing portions of the computerized traffic signal system as recommended by the Infrastructure Commission. The project will provide responsive control of traffic signals throughout the City. This project will also provide and upgrade computer equipment and software for those tasks directly related to the project including the replacement of the system specific hardware and software.

Purpose

The purpose of this project is to enable the City's traffic signal system to be more functionally responsive to changeable traffic demands by funding the purchase of electronic solid state equipment. The project would also fund the purchase of adaptive traffic control equipment. Approximately 50 controllers would be placed in service each year.



Phases	Prior Year	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2016-2021
								Total
Engineering	0	22,000	0	25,000	25,000	25,000	25,000	122,000
Equipment	0	50,000	0	100,000	75,000	100,000	100,000	425,000
Construction	172,000	100,000	0	300,000	300,000	300,000	325,000	1,325,000
General Capital Total	172,000	172,000	0	425,000	400,000	425,000	450,000	1,872,000
Estimated Personnel Cost	15,000	30,000	0	30,000	30,000	30,000	30,000	150,000

Wall Stab. & Landslide Correction

Dept. Priority: 11

Description

This project will provide resources for the inspection, repair, rehabilitation, and replacement of retaining walls and appurtenances thereto and provides funding to stabilize landslides affecting the right-of-way at various citywide locations. This project funds labor, materials, tools, technology, and training needed to plan, design, acquire right-of-way, build, inspect, and maintain retaining walls and other hillside stabilization systems. The installation and reading of various monitoring devices installed on marginally stable slopes throughout the City is also included.

Purpose

The purpose of this project is to preserve and improve the safety and stability of the City's public transportation system. Landslides and retaining walls are commonplace in the City of Cincinnati because of geology, topography, and former development practices. Timely replacement of deteriorated retaining walls and appurtenances thereto, and the stabilization and or removal of landslides is essential to protect the transportation and utility infrastructure and prevent hazardous conditions within the right-of-way. The City, DOTE maintains 50.6 miles of retaining walls having an estimated replacement value of \$400 million.

Phases	Prior Year	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2016-2021
								Total
Land	20,000	22,000	20,000	20,000	20,000	20,000	20,000	122,000
Engineering	141,580	385,000	350,000	350,000	350,000	350,000	350,000	2,135,000
Construction	380,400	143,000	480,000	480,000	480,000	480,000	525,300	2,588,300
General Capital Total	541,980	550,000	850,000	850,000	850,000	850,000	895,300	4,845,300
Estimated Personnel Cost	141,580	400,000	400,000	400,000	400,000	400,000	400,000	2,400,000

LED Traffic and Pedestrian Signals

Dept. Priority: 12

Description

This project will provide resources for the replacement of incandescent type traffic signals and pedestrian signals with energy efficient and longer life light emitting diode (LED) types. The project includes replacing



entire pedestrian and traffic signal heads where older units exist and retrofitting the optical unit only in newer units. The project also provides for the ongoing repair/replacement of the LED systems.

Purpose

The purpose of this project is to generate operating fund savings through decreased energy costs, wash/relamp costs, and should also result in a reduction in traffic signal outages. Typical incandescent lamps must be replaced once a year. LEDs have a useful life of 7 to 10 years depending on the type and also use 80-90% less energy than incandescent lamps. This project would also accelerate the replacement of the word messages in pedestrian signals with the Hand and Man symbols with countdown that are now required.

Phases	Prior Year	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2016-2021 Total
Engineering	12,900	10,000	10,000	10,000	10,000	10,000	10,000	60,000
Construction	145,900	140,000	50,000	50,000	50,000	50,000	50,000	390,000
Equipment	165,000	100,000	50,000	50,000	50,000	50,000	50,000	350,000
General Capital Total	323,800	250,000	110,000	110,000	110,000	110,000	110,000	800,000
Estimated Personnel Cost	25,000	25,000	25,000	25,000	25,000	25,000	25,000	150,000

Neighborhood Gateways/Greenways Imprvmnt

Dept. Priority: 13

Description

This project will provide resources for the gateway and greenway improvements in the City's neighborhoods in conjunction with streetscape and roadway improvement projects. The project will contribute to the positive image of the City by providing valuable greenspace improvements along pedestrian, bicycle and vehicular corridors and entry points to the neighborhoods. Project funding will be used to leverage outside grant funding by providing local-match funds, and will leverage private participation with maintenance and operating agreements with community organizations and adjacent businesses and property owners.

Purpose

The purpose of this project is to provide funding for the planning, design, engineering, construction, and inspection of new gateways and existing corridors that include safety improvements (bumpouts and median islands) as well as street trees and landscaping.

Phases	Prior Year	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2016-2021 Total
Engineering	100,000	50,000	50,000	50,000	50,000	50,000	50,000	300,000
Construction	170,000	65,000	160,000	160,000	160,000	160,000	160,000	865,000
General Capital Total	270,000	115,000	210,000	210,000	210,000	210,000	210,000	1,165,000
Estimated Personnel Cost	100,000	50,000	50,000	50,000	50,000	50,000	50,000	300,000

Sidewalk Repair Program

Dept. Priority: 14

Description

This project will provide resources for the repair, reconstruction, construction, and removal of walks, drive-ways, curb ramps, bus service walks, street and sidewalk pavers, structural slabs, and curbs that are the

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responsibility of the City of Cincinnati. This project supports the labor, materials, training, and technologies needed to plan, design, build, and inspect the proposed improvements.

Purpose

The purpose of this project is to improve the quality of pedestrian and vehicular access within the City of Cincinnati. The project will provide resources to improve Americans with Disabilities Act (ADA) access through construction of curb ramps and reconstruction of defective sidewalks that are the City's responsibility.

Phases	Prior Year	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2016-2021
								Total
Engineering	25,000	100,000	150,000	150,000	150,000	150,000	150,000	850,000
Construction	175,000	100,000	250,000	250,000	250,000	250,000	275,000	1,375,000
General Capital Total	200,000	200,000	400,000	400,000	400,000	400,000	425,000	2,225,000
Estimated Personnel Cost	25,000	100,000	150,000	150,000	150,000	150,000	150,000	850,000

Curb Ramps - Street Rehab

Dept. Priority: 15

Description

This project will provide resources for the construction, repair, and replacement of curb ramps throughout the City in concert with streets that are being repaired under the Street Rehabilitation Program. These curb ramps, constructed at intersections, improve pedestrian access along City streets for citizens with disabilities. This project supports labor, materials, and technologies needed to plan, design, build, and inspect this construction.

Purpose

The purpose of this project is to meet federal and state laws by improving accessibility for people with disabilities. The Americans with Disabilities Act requires the City to upgrade existing ramps and to install ramps at additional locations. This project allows the City to comply with the requirements of Section 4.29 of Title 28 of the Federal Regulations Part 36A- Americans with Disabilities Act Accessibility Guidelines (ADAAG), which became effective July 26, 2001.

Phases	Prior Year	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2016-2021
								Total
Engineering	90,000	10,000	10,000	10,000	10,000	20,000	20,000	80,000
Construction	410,000	380,000	390,000	390,000	390,000	480,000	480,000	2,510,000
General Capital Total	500,000	390,000	400,000	400,000	400,000	500,000	500,000	2,590,000
Estimated Personnel Cost	90,000	10,000	55,000	50,000	50,000	75,000	75,000	315,000

Safety Improvements

Dept. Priority: 16

Description

This project will provide resources for the upgrade of existing streets that require minor improvements based upon safety and operational recommendations. Included in this project is all work necessary to plan, design, construct, and inspect the proposed improvements, such as islands, bump outs, and other channelization methods. This project also includes aesthetic and other required elements to improve the neighbor-



hood transportation network. Funds may also be used to leverage additional public and/or private funding for infrastructure projects and construction.

Purpose

The purpose of this project is to make minor safety improvements to streets that do not generally qualify for outside funding. This project coordinates efforts with other projects (like the Street Rehabilitation Program) or stands alone to construct safety improvements to maximize funding allocations.

Phases	Prior Year	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2016-2021
								Total
Construction	98,470	50,000	100,000	100,000	100,000	100,000	100,000	550,000
General Capital Total	98,470	50,000	100,000	100,000	100,000	100,000	100,000	550,000
Estimated Personnel Cost	5,000	2,500	5,000	5,000	5,000	5,000	5,000	27,500

Traffic Signal Controllers & Detectors

Dept. Priority: 17

Description

This project will provide resources for the replacement of obsolete and outdated traffic signal controllers and detectors that have exceeded their physical and technological lives. Most traffic signal controllers become technologically obsolete within 10 years and conditionally obsolete within 15 years. Replacing the signal controllers and detectors would reduce maintenance costs and improve reliability. The traffic signal controller is the primary element of a traffic signal, and modern technology has brought about massive improvements in controller flexibility. The traffic signal controllers are replaced on a City-wide basis and the current controller modules in use are compatible with the Computerized Traffic Signal System. This project funds labor, materials, and technologies needed to plan, design, build and inspect these replacements.

Purpose

The purpose of this project is to provide for the timely replacement and installation of traffic controllers and vehicle detectors that would allow for the proper and optimum operation of traffic control devices.

Phases	Prior Year	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2016-2021
								Total
Construction	20,000	20,000	30,000	30,000	30,000	40,000	50,000	200,000
Engineering	20,000	20,000	20,000	20,000	20,000	20,000	20,000	120,000
Equipment	80,000	60,000	250,000	250,000	250,000	265,000	280,000	1,355,000
General Capital Total	120,000	100,000	300,000	300,000	300,000	325,000	350,000	1,675,000
Estimated Personnel Cost	25,000	25,000	25,000	25,000	25,000	25,000	0	125,000

Bicycle Transportation Program

Dept. Priority: 18

Description

This project will provide resources for funding activities that enhance and improve bicycle/pedestrian transportation, safety, and access citywide as part of the larger regional effort. Specific improvement projects may include bicycle safe inlets, bicycle lanes, sharrows, bike racks, parking, signage, railroad crossings traffic improvements, safety projects and multi-use paths/off road trails. This project helps fund labor,

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materials, and technologies needed to plan, design, acquire right-of-way, build, survey, and inspect the proposed improvements; and before moving ahead, specific new bicycle initiatives be the subject of community deliberation and support and explicit council approval, including a vote of Council.

Purpose

The purpose of this project is to develop and advance bicycle/pedestrian projects, from small projects in response to community requests, to large trail projects, and other projects which improve bicycle safety or advocate increased bike/pedestrian usage. This program would also allow coordination with surrounding political jurisdictions to enhance bicycle/pedestrian usage in the region. Program funds may also be used to leverage outside funding from state, federal, and other sources. These funds are used to implement the Cincinnati Bicycle Transportation Plan, adopted on June 23, 2010.

Phases	Prior Year	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2016-2021
								Total
Engineering	102,350	300,000	150,000	150,000	150,000	150,000	150,000	1,050,000
Construction	390,000	0	335,000	275,000	275,000	275,000	300,000	1,460,000
General Capital Total	492,350	300,000	485,000	425,000	425,000	425,000	450,000	2,510,000
Estimated Personnel Cost	102,350	250,000	250,000	250,000	250,000	250,000	250,000	1,500,000

Spot Infrastructure Replacement

Dept. Priority: 19

Description

This project will provide resources for the replacement of deteriorated infrastructure not covered under other capital projects, including curb replacements and major pavement repairs on streets not requiring rehabilitation, and median reconstruction. This project also provides resources for pavement treatments, including pavement rejuvenation, crack sealing, and microsurfacing, needed to supplement and extend the Street Rehabilitation Program. This project supports the labor, materials, and technologies needed to plan, design, acquire right-of-way, build, and inspect the proposed improvements.

Purpose

The purpose of this project is to address citizen concerns about isolated infrastructure deficiencies (namely curb, median, and pavement) that do not fit into other capital programs and to extend the useful life of pavements through use of rejuvenators, slurry seals, and other pavement treatments. This project improves responsiveness to citizen requests for repair and preserves pavement assets.

Phases	Prior Year	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2016-2021
								Total
Engineering	10,000	10,000	10,000	10,000	10,000	10,000	20,000	70,000
Construction	464,230	240,000	540,000	540,000	540,000	540,000	580,000	2,980,000
General Capital Total	474,230	250,000	550,000	550,000	550,000	550,000	600,000	3,050,000
Estimated Personnel Cost	10,000	10,000	10,000	10,000	10,000	10,000	20,000	70,000



Street Light Replacement Project

Dept. Priority: 20

Description

This project will provide resources for the planning, design and construction of major repairs or replacements to existing City-owned and operated street lighting circuits that are nearing the end of their life cycle. These street lighting circuits are not part of the street lighting assessment network. The project can also provide resources for additions to or modifications of existing street lighting circuits.

Purpose

The purpose of this project is to upgrade existing City owned and operated street lighting circuits that are nearing the end of their useful life cycle. The project also covers modifications or additions of lighting circuits as deemed necessary by Traffic Engineering staff.

Phases	Prior Year	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2016-2021 Total
Engineering	0	5,000	10,000	10,000	10,000	10,000	10,000	55,000
Equipment	0	10,000	20,000	20,000	20,000	20,000	20,000	110,000
Construction	82,000	65,000	130,000	130,000	130,000	130,000	170,000	755,000
General Capital Total	82,000	80,000	160,000	160,000	160,000	160,000	200,000	920,000
Estimated Personnel Cost	10,000	10,000	10,000	10,000	10,000	10,000	10,000	60,000

Pavement Management

Dept. Priority: 21

Description

This project will provide resources for a pavement management system and includes a thorough inspection and evaluation of all through streets each year. Residential streets will be inspected every three years. These inspections are used to measure the condition of City streets, to better measure the effectiveness of rehabilitation and maintenance programs, and to guide selection of streets for the Street Rehabilitation Program. This project supports the labor, materials, and technology needed for this project.

Purpose

The purpose of this project is to identify the condition of Cincinnati's streets and guide decisions on the appropriate time for and type of treatment, including reconstruction, rehabilitation, resurfacing, slurry seal, crack seal, and rejuvenation. Additionally, there is a federal standard (GASB 34) that requires that the entire street system be inspected on a three-year cycle to evaluate the conditions of public transportation assets.

Phases	Prior Year	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2016-2021 Total
Engineering	242,430	240,000	250,000	260,000	260,000	260,000	260,000	1,530,000
General Capital Total	242,430	240,000	250,000	260,000	260,000	260,000	260,000	1,530,000
Estimated Personnel Cost	10,000	10,000	10,000	10,000	10,000	10,000	10,000	60,000



Ohio River Trail

Dept. Priority: 22

Description

This project will provide resources for the development of the Ohio River Trail. This project helps fund labor, material, and technologies needed to plan, design, acquire right-of-way, build and inspect the proposed improvements. This programs helps to leverage outside funding.

Purpose

The purpose of this project is to systematically construct the Ohio River Trail.

Phases	Prior Year	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2016-2021
								Total
Engineering	0	140,000	0	0	0	0	0	140,000
Construction	338,740	0	0	0	0	0	0	0
General Capital Total	338,740	140,000	0	0	0	0	0	140,000

Estimated Personnel Cost	20,000	100,000	0	0	0	0	0	100,000
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Downtown Infrast. Coord. & Implemtn

Dept. Priority: 23

Description

This project will provide resources to support downtown and riverfront development by planning and implementing CBD streetscape and infrastructure improvements in coordination with new CBD, OTR, and Riverfront redevelopment activities to improve mobility, safety, and convenience for downtown workers, visitors, and residents. Funds may be used to leverage additional public and/or private funding for infrastructure projects and construction.

Purpose

The purpose of this project is to support the planning, design, engineering, and inspection work related to various downtown development projects that require Department of Transportation and Engineering support, including the development of downtown infrastructure standards to guide future development and improvement. Projects include additional work around the Fountain Square area, the Riverfront and the Banks, the Casino area and other important locations throughout the Central Business District (CBD), Over-the-Rhine (OTR), Pendleton and the Riverfront. Implementation can include pedestrian, bicycle and other transportation improvements including skywalks, wayfinding signs and coordination with local and regional rail initiatives.

Phases	Prior Year	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2016-2021
								Total
Engineering	144,950	100,000	100,000	100,000	100,000	100,000	100,000	600,000
Construction	180,000	100,000	110,000	110,000	110,000	110,000	150,000	690,000
General Capital Total	324,950	200,000	210,000	210,000	210,000	210,000	250,000	1,290,000

Estimated Personnel Cost	144,950	100,000	100,000	100,000	100,000	100,000	100,000	600,000
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Uptown Access Imprmts West MLK Dr.

Dept. Priority: 24

Description

This project will provide resources for improvements to W. Martin Luther King Jr. Drive between McMicken Avenue and Clifton Avenue by improving the S-curve from McMicken Avenue to Dixmyth Avenue, which has a high accident rate. This project will incorporate safe access for pedestrians and bicyclists. The project also includes improvements to the Clifton Avenue and W. Martin Luther King Jr. Drive intersection to improve pedestrian and vehicular safety and congestion and a bike path along W. Martin Luther King Jr. Drive.

Purpose

The purpose of this project is to improve the safety and capacity of W. Martin Luther King Jr. Dr. The project will reduce the high accident rate and reduce congestion at the Clifton Avenue intersection.

Phases	Prior Year	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2016-2021
								Total
Construction	0	900,000	0	0	0	0	0	900,000
Land	872,000	0	0	0	0	0	0	0
General Capital Total	872,000	900,000	0	0	0	0	0	900,000
Estimated Personnel Cost	30,000	90,000	0	0	0	0	0	90,000

Colerain Corr. Imp. I-74 to Spring Grv

Dept. Priority: 25

Description

This project will provide resources to improve intersections on Colerain Avenue from the I-74 Ramp to Spring Grove Avenue, and on Blue Rock Street from Colerain to Spring Grove.

Purpose

The purpose of this project is to improve safety of this portion of the Colerain Corridor.

Phases	Prior Year	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2016-2021
								Total
Construction	84,690	93,000	0	0	0	0	0	93,000
General Capital Total	84,690	93,000	0	0	0	0	0	93,000
Estimated Personnel Cost	9,000	9,000	0	0	0	0	0	9,000

Traffic Control Device Installation & Renovation

Dept. Priority: 26

Description

This project will provide resources for approved traffic control devices including raised pavement markers, reflective raised separators, rumble strips, attenuation devices or hazard markers typically installed in curves and other roadway areas where the visibility or normal painted markings is not sufficient. These

Capital Improvement Plan

Transportation & Engineering



traffic control devices are installed on areas with high crash rates and on streets that are not on the street rehabilitation six-year plan.

Purpose

The purpose of this project is to provide traffic control devices for overall crash prevention program countermeasures. These traffic control devices increase the target value of the pavement markings and are used as an overall crash prevention program. These devices provide guidance to motorists and provide a greater conspicuity in difficult weather conditions.

Phases	Prior Year	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2016-2021
								Total
Construction	0	35,000	65,000	65,000	65,000	89,400	90,000	409,400
Engineering	0	5,000	10,000	10,000	10,000	10,000	10,000	55,000
Equipment	0	10,000	25,000	25,000	25,000	25,000	25,000	135,000
General Capital Total	0	50,000	100,000	100,000	100,000	124,400	125,000	599,400
Estimated Personnel Cost	0	5,000	5,000	5,000	5,000	5,000	5,000	30,000

Duke Street Light Installation and Renovation

Dept. Priority: 27

Description

This project will provide resources for the annual installation and replacement of approximately 20,000 street light fixtures on Duke Energy wood poles at the end of their useful life.

Purpose

The purpose of this project is to ensure that Duke Energy maintained street lights, installed at the request of the City, are replaced within their 30 year useful life. In addition, the project provides resources to install additional street light fixtures on Duke Energy wood poles where the City determines the existing light level can be improved to meet City standards. The project will reduce street light malfunctions and preserve the City standard street lighting investment, as well as provide the most up-to-date technology for energy efficient street lighting offered by Duke Energy.

Phases	Prior Year	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2016-2021
								Total
Engineering	0	10,000	10,000	10,000	10,000	10,000	10,000	60,000
Equipment	0	10,000	15,000	15,000	15,000	15,000	15,000	85,000
Construction	116,000	130,000	250,000	325,000	325,000	325,000	325,000	1,680,000
General Capital Total	116,000	150,000	275,000	350,000	350,000	350,000	350,000	1,825,000
Estimated Personnel Cost	0	5,000	5,000	5,000	5,000	5,000	5,000	30,000



ROW Ordinance Implementation

Dept. Priority: 28

Description

This project will provide resources for the removal and replacement of benches, newsracks, bus stop shelters, and other items as per revised CMC 723. This project funds labor, materials, training, and technologies needed to enforce, plan, design, build, implement, and inspect the appropriate items of CMC 723.

Purpose

The purpose of this project is to improve the quality of life by creating an active, accessible, and aesthetically pleasing urban environment that will benefit the Citizens of Cincinnati by regulating the uses of and placement of structures within and upon the public rights-of-way as per revised CMC 723. This will be used towards resolution of Community Priority Request 2013-14 #8A.

Phases	Prior Year	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2016-2021 Total
Other	0	50,000	25,000	0	0	0	0	75,000
General Capital Total	0	50,000	25,000	0	0	0	0	75,000
Estimated Personnel Cost	0	25,000	15,000	0	0	0	0	40,000

Downtown Streetlight Maintenance/Repair

Dept. Priority: 33

Description

This project will provide resources for the joint troubleshooting and repair of the downtown street light system owned by Duke Energy. The Duke Energy control line and manhole system comprise part of the downtown street light system. Service connections and lighting controls are in the system and the City must cover permit costs to enter their system.

Purpose

The purpose of this project is to ensure that Duke Energy systems can be entered to repair and troubleshoot equipment failures, and replacements. Prior sale of Duke owned streetlights to the City now necessitates entry into their system for maintenance and repairs.

Phases	Prior Year	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2016-2021 Total
Construction	0	25,000	60,000	60,000	60,000	60,000	100,000	365,000
Equipment	24,000	0	0	0	0	0	0	0
General Capital Total	24,000	25,000	60,000	60,000	60,000	60,000	100,000	365,000
Estimated Personnel Cost	0	0	0	0	0	0	0	0



ORT Kellogg Ave - Salem to Sutton

Dept. Priority: 34

Description

This project will provide resources to build the Ohio River Trail (ORT) from Salem to the Anderson Township trail at Sutton. This project also includes retaining walls and new sidewalks.

Purpose

The purpose of this project is to connect the ORT to the Anderson Township trail.

Phases	Prior Year	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2016-2021
								Total
Land	0	0	100,000	0	0	0	0	100,000
Engineering	228,250	120,000	0	0	0	0	0	120,000
General Capital Total	228,250	120,000	100,000	0	0	0	0	220,000
Estimated Personnel Cost	228,250	120,000	0	0	0	0	0	120,000

Hillside Stairway Rehabilitation Program

Dept. Priority: 35

Description

This project will provide resources for inspection, repair, rehabilitation, replacement, and or removal of the City's hillside stairways. This project supports the labor, materials, technology and training needed to inspect, plan, design, acquire right-of-way, and build, these assets, or to remove these assets and sell the right-of-way if requested by the community and directed by council.

Purpose

The purpose of this project is to preserve and enhance pedestrian access to homes, businesses, churches, schools, playgrounds, bus stops, and other facilities or to remove these connections if requested by the community and directed by council. The City maintains 398 sets of hillside stairways having an estimated replacement value of \$12 million.

Phases	Prior Year	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2016-2021
								Total
Construction	0	40,000	80,000	80,000	80,000	80,000	80,000	440,000
Engineering	0	10,000	20,000	20,000	20,000	20,000	20,000	110,000
General Capital Total	0	50,000	100,000	100,000	100,000	100,000	100,000	550,000
Estimated Personnel Cost	0	12,500	25,000	25,000	25,000	25,000	25,000	137,500



Elmore to Central Parkway Connector

Dept. Priority: 39

Description

This project will provide resources for a new roadway/bridge from Elmore Street to Central Parkway, crossing over Mill Creek and IR-74.

Purpose

The purpose of this project is to accommodate part of the changes to the I-74/75 interchange of the Mill Creek Expressway Project, where traffic patterns have changed.

Phases	Prior Year	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2016-2021 Total
Engineering	0	300,000	0	0	0	0	0	300,000
General Capital Total	0	300,000	0	0	0	0	0	300,000
Estimated Personnel Cost	0	0	0	0	0	0	0	0

Convention Center Expansion

Dept. Priority: 40

Description

This project will provide resources for the City's General Capital Budget contribution to the Convention Center Expansion project.

Purpose

The purpose of this project is to maintain a separate distinct project for the payments made for the City's contribution from the General Capital Budget for the expansion of the Convention Center. The City's contribution from the General Capital Budget began with the 2003 allocation. The amount of the City's contribution was amended in FY 2015.

Phases	Prior Year	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2016-2021 Total
Other	1,000,000	250,000	0	0	0	0	0	250,000
General Capital Total	1,000,000	250,000	0	0	0	0	0	250,000
Estimated Personnel Cost	0	0	0	0	0	0	0	0

Duck Creek Connector

Dept. Priority: 41

Description

This project will provide resources for the extension of Duck Creek Road from its existing terminus at the Red Bank expressway to Madison Road and the intersection of Medpace Way in the Madisonville neighborhood.

Purpose

The purpose of this project is to improve the existing public street network to accommodate traffic increases from recent and future development in the Madisonville neighborhood and surrounding areas, as well as to enhance the climate for future economic development. The purpose of project is listed in the Eastern Corri-

Capital Improvement Plan

Transportation & Engineering



dor Red Bank Expressway Component Plan to reduce congestion along Red Bank Expressway and Madison Road by utilizing a local roadway network.

Phases	Prior Year	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2016-2021 Total
Construction	0	668,600	0	0	0	0	0	668,600
Land	0	331,400	0	0	0	0	0	331,400
General Capital Total	0	1,000,000	0	0	0	0	0	1,000,000
Estimated Personnel Cost	0	0	0	0	0	0	0	0

Street Rehabilitation - Capital Acceleration

Dept. Priority: 42

Description

This project will provide additional resources for the systematic repair, resurfacing, and preventative maintenance of streets throughout the City under the Street Rehabilitation Program. This project supports repairs to curbs, pavements, and resurfacing the roadway. This project supports the labor, materials, and technologies needed to plan, design, build, and inspect this construction.

Purpose

The purpose of this project is to accelerate the improvement schedule of city roads to improve safety for motorists and quality of life. City streets have an area of approximately 3,050 lane-miles (a lane mile is an area equivalent to a one-mile long by ten-foot wide lane) with a replacement value of \$2.6 billion. This project is included in the Capital Acceleration Plan to address the aging infrastructure of the City.

Phases	Prior Year	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2016-2021 Total
Construction	0	14,162,000	13,968,000	11,058,000	10,767,000	8,730,000	8,245,000	66,930,000
Engineering	0	438,000	432,000	342,000	333,000	270,000	255,000	2,070,000
General Capital Total	0	14,600,000	14,400,000	11,400,000	11,100,000	9,000,000	8,500,000	69,000,000
Estimated Personnel Cost	0	1,168,000	1,152,000	912,000	888,000	720,000	680,000	5,520,000



Street Rehabilitation Debt - Capital Acceleration

Dept. Priority: 43

Description

This project will provide resources for the City's General Capital Budget debt service payments pertaining to the Street Rehabilitation project within the Capital Acceleration Plan.

Purpose

The purpose of this project is provide for the debt service payments made on the Street Rehabilitation component of the Capital Acceleration Plan. The City's contribution from the General Capital Budget will begin with the FY 2017 allocation.

Phases	Prior Year	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2016-2021
								Total
Other	0	0	100,000	600,000	0	1,000,000	1,200,000	2,900,000
General Capital Total	0	0	100,000	600,000	0	1,000,000	1,200,000	2,900,000
Estimated Personnel Cost	0	0	0	0	0	0	0	0

Glenway Avenue Gateway Wall

Dept. Priority: 44

Description

This project will provide resources for the inspection, repair, rehabilitation, and replacement of the gateway retaining wall and appurtenances thereto in the right-of-way on Glenway Avenue. This project funds labor, materials, tools, technology, and training needed to plan, design, build, inspect, and maintain the gateway retaining wall and other hillside stabilization systems on Glenway Avenue.

Purpose

The purpose of this project is to preserve and improve the safety and stability of the right-of-way on Glenway Avenue. Landslides and retaining walls are commonplace in the City of Cincinnati because of geology, topography, and former development practices. Timely replacement of deteriorated retaining walls and appurtenances thereto, and the stabilization and or removal of landslides is essential to protect the transportation and utility infrastructure and prevent hazardous conditions within the right-of-way.

Phases	Prior Year	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2016-2021
								Total
Construction	0	200,000	0	0	0	0	0	200,000
Engineering	0	70,000	0	0	0	0	0	70,000
General Capital Total	0	270,000	0	0	0	0	0	270,000
Estimated Personnel Cost	0	0	0	0	0	0	0	0



Mill Creek Greenway Trail

Dept. Priority: 45

Description

This project will provide resources for the planning and construction of the Mill Creek Greenway Trail between Roselawn and the Ohio River.

Purpose

The purpose of this project is to increase mobility and connectivity while promoting the benefits of outdoor exercise and recreation in several Mill Creek neighborhoods by providing free, convenient, and accessible opportunities for active transportation.

Phases	Prior Year	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2016-2021
								Total
Construction	0	117,400	0	0	0	0	0	117,400
Engineering	0	55,000	0	0	0	0	0	55,000
Other	0	77,600	0	0	0	0	0	77,600
General Capital Total	0	250,000	0	0	0	0	0	250,000
Estimated Personnel Cost	0	25,000	0	0	0	0	0	25,000

Brewery Heritage Trail

Dept. Priority: 46

Description

This project will provide resources for construction of physical infrastructure in the Brewery Heritage Trail. The Trail will emphasize the unique Cincinnati brewery history in the Over the Rhine neighborhood. Numerous walking loops will highlight the brewery history while allowing visitors to explore Over the Rhine. This infrastructure includes bronze medallions and reflective castings in the sidewalk to help direct visitors to each brewery site, iconic vertical informational signage to inform visitors of each brewery or brewery related site, as well as gateway elements and interactive displays to bring the entire history together.

Purpose

The purpose of this project is to highlight Cincinnati's 19th and 20th century brewery history that impacted Cincinnati, the region, the country and the world. Tourists from all over the world will be able to learn about Cincinnati's brewery history while shopping and staying in the neighborhood.

Phases	Prior Year	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2016-2021
								Total
Other	0	300,000	0	0	0	0	0	300,000
General Capital Total	0	300,000	0	0	0	0	0	300,000
Estimated Personnel Cost	0	15,000	0	0	0	0	0	15,000



Department of Water Works

Priority	Project Title	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2016-2021 Total
Water Works PIF Fund								
1	Replacement Water Mains Allocation Program	18,150,000	19,316,000	19,000,000	20,000,000	20,000,000	20,000,000	116,466,000
2	Street Improvement Allocation Program	5,000,000	5,000,000	5,000,000	5,000,000	5,500,000	5,500,000	31,000,000
3	Castings/Street Improvements	300,000	420,000	430,000	440,000	450,000	450,000	2,490,000
4	Private Development Allocation Program	400,000	420,000	420,000	420,000	440,000	440,000	2,540,000
5	Mt. Airy Exterior Renovation	2,899,000	0	0	0	0	0	2,899,000
6	Bolton High Service Pumps	2,000,000	100,000	0	0	0	0	2,100,000
7	Computers, Servers, and Software	472,000	492,000	500,000	500,000	400,000	400,000	2,764,000
8	Regeneration Furnace Equipment	75,000	75,000	75,000	75,000	75,000	75,000	450,000
9	Electrical Transformers	150,000	150,000	175,000	175,000	200,000	200,000	1,050,000
10	Large Motor Rewind Program (Annual)	125,000	125,000	125,000	125,000	150,000	150,000	800,000
11	Station Valve Equipment	100,000	100,000	100,000	100,000	100,000	100,000	600,000
12	Mobile Computer Replacement	170,000	0	0	0	0	0	170,000
13	Tank Coating	350,000	1,000,000	750,000	0	600,000	750,000	3,450,000
14	Miscellaneous Concrete/Pavement Replacement	377,000	377,000	299,000	300,000	300,000	300,000	1,953,000
15	Roof Replacement	1,000,000	600,000	400,000	400,000	400,000	400,000	3,200,000
16	Valve Replacement Program	100,000	275,000	275,000	275,000	275,000	275,000	1,475,000
17	Billing System Replacement	2,795,000	631,000	631,000	631,000	172,000	0	4,860,000
18	Aluminum Heating and Insulation	65,000	0	0	0	0	0	65,000
19	Miller Plant Filter Rebuild	400,000	413,000	400,000	350,000	350,000	400,000	2,313,000
20	Tank Aeration Irwin Simpson	100,000	0	0	0	0	0	100,000
21	Winton Road Booster Chlorination	60,000	0	0	0	0	0	60,000
22	Motor Control Center Equipment	180,000	180,000	100,000	100,000	100,000	100,000	760,000
24	SCADA Remote Terminal Units	124,000	124,000	124,000	186,000	0	0	558,000
25	Budd Street -Eighth Street - Dalton Avenue to Evans Street	0	0	700,000	2,000,000	2,000,000	0	4,700,000
26	Crane Equipment Improvements	0	50,000	50,000	50,000	50,000	50,000	250,000
27	Backup Power Generator - Western Hills Pump Station	0	885,000	2,210,000	0	0	0	3,095,000
28	Continuous Water Quality Monitors	0	145,000	27,000	0	0	0	172,000
29	Miscellaneous Masonry Replacement	0	150,000	150,000	150,000	150,000	150,000	750,000
30	Miller Plant Sand Filter Valves	0	400,000	400,000	400,000	400,000	400,000	2,000,000
31	Gas Chromatograph-Volatile Organic Compounds Analysis	0	0	0	0	165,000	0	165,000
32	Gas Chromatograph-Synthetic Organic Compound Analysis	0	150,000	0	0	0	0	150,000
33	Document Management Upgrade	0	50,000	0	0	0	0	50,000
34	Master Plan Upgrade	0	500,000	500,000	500,000	0	0	1,500,000
35	Gas Chromatograph Flame Ionization Detector	0	0	0	0	120,000	0	120,000

Capital Improvement Plan

Water Works



Priority	Project Title	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2016-2021 Total
36	Ion Coupled Plasma Mass Spectrophotometer	0	0	0	190,000	0	0	190,000
37	Outlying Pump Station Improvements	0	50,000	0	0	0	0	50,000
38	Vertical Pumps Upgrade	0	60,000	0	0	0	0	60,000
39	Security Cameras and Digital Video Recorder (DVR)	0	50,000	0	50,000	0	50,000	150,000
40	Tennyson Pump Discharge Valve Upgrade	0	150,000	150,000	150,000	0	0	450,000
41	Main Station Backup Generator	0	0	0	450,000	1,500,000	2,250,000	4,200,000
42	Field Application Replacement on Large Pumps	0	60,000	60,000	60,000	60,000	60,000	300,000
43	Bolton Plant Lime Residual Site Work	0	460,000	2,220,000	2,400,000	0	0	5,080,000
44	Chem East Concrete Repair	0	584,000	156,000	0	0	0	740,000
45	Miller Plant Network Upgrade	0	250,000	0	0	0	0	250,000
46	Medium Voltage Stations Backup Breakers	0	84,000	84,000	84,000	84,000	84,000	420,000
47	Control Valve at Riverside Drive	0	0	250,000	0	0	0	250,000
48	Queen City Avenue - Western Hills Viaduct to WH Pump Station	0	0	500,000	1,300,000	2,100,000	0	3,900,000
49	Booster Chlorination in Distribution System	0	0	750,000	0	0	0	750,000
50	Lamella Sludge Collection Upgrade	0	400,000	400,000	400,000	200,000	0	1,400,000
Water Works PIF Total		35,392,000	34,276,000	37,411,000	37,261,000	36,341,000	32,584,000	213,265,000
Department of Water Works Total		35,392,000	34,276,000	37,411,000	37,261,000	36,341,000	32,584,000	213,265,000



Water Works PIF Fund

Replacement Water Mains Allocation Program

Dept. Priority: 1

Description

This project will provide resources for proposed water main replacement for 8-inch, 12-inch, and 16-inch water mains at 1.0% of the total system each year.

Purpose

The purpose of this project is to achieve the department goal of 1.0% annual replacement of water mains. It is adjusted to fit current annual cost analyses for all water mains.

Phases	Prior Year	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2016-2021 Total
Other	18,653,040	18,150,000	19,316,000	19,000,000	20,000,000	20,000,000	20,000,000	116,466,000
Water Works PIF Total	18,653,040	18,150,000	19,316,000	19,000,000	20,000,000	20,000,000	20,000,000	116,466,000
Estimated Personnel Cost	932,650	1,080,000	1,158,960	1,140,000	1,200,000	1,200,000	1,200,000	6,978,960

Street Improvement Allocation Program

Dept. Priority: 2

Description

This project will provide resources for various projected street improvements throughout the year.

Purpose

The purpose of this project is to provide resources for proposed water main participation with other agencies' street projects in a coordinated fashion to save water main replacement dollars and provide better customer service to the public.

Phases	Prior Year	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2016-2021 Total
Other	6,801,500	5,000,000	5,000,000	5,000,000	5,000,000	5,500,000	5,500,000	31,000,000
Water Works PIF Total	6,801,500	5,000,000	5,000,000	5,000,000	5,000,000	5,500,000	5,500,000	31,000,000
Estimated Personnel Cost	340,080	310,000	310,000	310,000	310,000	341,000	341,000	1,922,000

Capital Improvement Plan

Water Works



Castings/Street Improvements

Dept. Priority: 3

Description

This project will provide resources for curb and casting materials and adjustments for repairs to Greater Cincinnati Water Works (GCWW) appurtenances that are needed as a result of City of Cincinnati street paving and rehabilitation projects.

Purpose

The purpose of this project is to meet the necessary requirements of curb and casting materials and adjustment repairs to Greater Cincinnati Water Works (GCWW) appurtenances under City of Cincinnati street paving and rehabilitation projects.

Phases	Prior Year	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2016-2021
								Total
Other	460,000	300,000	420,000	430,000	440,000	450,000	450,000	2,490,000
Water Works PIF Total	460,000	300,000	420,000	430,000	440,000	450,000	450,000	2,490,000
Estimated Personnel Cost	23,000	4,200	5,930	6,070	6,210	6,300	6,300	35,010

Private Development Allocation Program

Dept. Priority: 4

Description

This project will provide resources for the Greater Cincinnati Water Works' (GCWW) participation in water main extensions or upgrades with private developments as permitted under GCWW Rules and Regulations and as defined under the development project application. These participations include pipe, material, and GCWW labor costs.

Purpose

The purpose of this project is to fund private development project participation in supplying pipe, material, plan review and/or inspection fees to development projects as permissible under Greater Cincinnati Water Works (GCWW) Rules and Regulations.

Phases	Prior Year	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2016-2021
								Total
Other	340,000	400,000	420,000	420,000	420,000	440,000	440,000	2,540,000
Water Works PIF Total	340,000	400,000	420,000	420,000	420,000	440,000	440,000	2,540,000
Estimated Personnel Cost	17,000	25,420	26,690	26,690	26,690	27,720	27,720	160,930



Mt. Airy Exterior Renovation

Dept. Priority: 5

Description

This project will provide resources for the renovation of the Mt. Airy water tank.

Purpose

The purpose of this project is to prevent further deterioration of the tower superstructure. The tanks were originally built in 1926 to serve a portion of the Western Hills service area and every freeze and thaw cycle causes a bit more deterioration within the concrete.

Phases	Prior Year	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2016-2021 Total
Other	1,707,960	2,899,000	0	0	0	0	0	2,899,000
Water Works PIF Total	1,707,960	2,899,000	0	0	0	0	0	2,899,000
Estimated Personnel Cost	85,400	144,800	0	0	0	0	0	144,800

Bolton High Service Pumps

Dept. Priority: 6

Description

This project will provide resources for the replacement of the motors and resistor banks for high service pumps #3 and #4 at the Bolton Treatment Plant.

Purpose

The purpose of this project is to maintain service to customers in the northwestern part of the Greater Cincinnati Water Works (GCWW) service area. It will ensure that the pumps used to deliver water maintain adequate pressure during peak demands in the summer months and tank turnover in the winter months.

Phases	Prior Year	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2016-2021 Total
Other	40,000	2,000,000	100,000	0	0	0	0	2,100,000
Water Works PIF Total	40,000	2,000,000	100,000	0	0	0	0	2,100,000
Estimated Personnel Cost	0	169,400	8,470	0	0	0	0	177,870

Capital Improvement Plan

Water Works



Computers, Servers, and Software

Dept. Priority: 7

Description

This project will provide resources for the annual replacement of computers, servers, and software throughout the Greater Cincinnati Water Works (GCWW).

Purpose

The purpose of this project is to provide systematic replacement of computers five years or older, servers seven years or older, and software upgrades. It will also provide employees with the proper equipment to complete their day to day tasks.

Phases	Prior Year	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2016-2021
								Total
Other	464,500	472,000	492,000	500,000	500,000	400,000	400,000	2,764,000
Water Works PIF Total	464,500	472,000	492,000	500,000	500,000	400,000	400,000	2,764,000
Estimated Personnel Cost	0	0	0	0	0	0	0	0

Regeneration Furnace Equipment

Dept. Priority: 8

Description

This project will provide resources for improvements to systems or infrastructure associated with the Granular Activated Carbon Facility's multiple hearth furnaces at the Miller Treatment Plant.

Purpose

The purpose of this project is to replace equipment as needed on the Granular Activated Carbon Facility furnace. Due to the extreme heat, equipment on the furnace needs to be routinely replaced.

Phases	Prior Year	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2016-2021
								Total
Other	115,000	75,000	75,000	75,000	75,000	75,000	75,000	450,000
Water Works PIF Total	115,000	75,000	75,000	75,000	75,000	75,000	75,000	450,000
Estimated Personnel Cost	8,630	6,350	6,350	6,350	6,350	6,350	6,350	38,100



Electrical Transformers

Dept. Priority: 9

Description

This project will provide resources for the upgrade of primary transformers at mission critical facilities. The work includes a rewind, regasketing, cooling fins and fan work, new monitoring, testing, and new oil.

Purpose

The purpose of this project is to upgrade the primary electrical transformers at mission critical facilities. The transformers are more than 50 years old but should remain serviceable and have extended life with these upgrades. Failure of these transformers would render pumping facilities inoperable.

Phases	Prior Year	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2016-2021
								Total
Other	85,000	150,000	150,000	175,000	175,000	200,000	200,000	1,050,000
Water Works PIF Total	85,000	150,000	150,000	175,000	175,000	200,000	200,000	1,050,000
<hr/>								
Estimated Personnel Cost	6,380	12,750	12,750	14,880	14,880	17,000	17,000	89,260

Large Motor Rewind Program (Annual)

Dept. Priority: 10

Description

This project will provide resources for the annual rehabilitation of large motors at the Greater Cincinnati Water Works (GCWW) major treatment plants and pump station facilities.

Purpose

The purpose of this project is to maintain large motors at the Greater Cincinnati Water Works (GCWW) major treatment plants and pump station facilities.

Phases	Prior Year	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2016-2021
								Total
Other	250,000	125,000	125,000	125,000	125,000	150,000	150,000	800,000
Water Works PIF Total	250,000	125,000	125,000	125,000	125,000	150,000	150,000	800,000
<hr/>								
Estimated Personnel Cost	18,750	10,590	10,590	10,590	10,590	12,600	12,600	67,560

Capital Improvement Plan

Water Works



Station Valve Equipment

Dept. Priority: 11

Description

This project will provide resources for smaller capital projects which become necessary each year for new or upgraded valves, actuators, regulators, and backflow preventers.

Purpose

The purpose of this project is to be equipped to replace valves in various pump stations on an emergency basis. Generally these projects are smaller in nature (\$5,000 - \$25,000), and could not be anticipated in previous budget cycles but need to be completed in a timely fashion.

Phases	Prior Year	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2016-2021
								Total
Other	140,000	100,000	100,000	100,000	100,000	100,000	100,000	600,000
Water Works PIF Total	140,000	100,000	100,000	100,000	100,000	100,000	100,000	600,000
Estimated Personnel Cost	10,500	8,470	8,470	8,470	8,470	8,470	8,470	50,820

Mobile Computer Replacement

Dept. Priority: 12

Description

This project will provide resources for the replacement of existing mobile computers in the Distribution Division.

Purpose

The purpose of this project is to provide mobile computers that ensure that Distribution Division field workers can continue to do the mission critical work they do on a 24 hours/day, 7 days/week basis.

Phases	Prior Year	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2016-2021
								Total
Other	1,000,000	170,000	0	0	0	0	0	170,000
Water Works PIF Total	1,000,000	170,000	0	0	0	0	0	170,000
Estimated Personnel Cost	50,000	5,000	0	0	0	0	0	5,000



Tank Coating

Dept. Priority: 13

Description

This project will provide resources for a top coating for various tanks within the distribution system.

Purpose

The purpose of this project is to extend the useful life of the tanks in the distribution system.

Phases	Prior Year	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2016-2021
								Total
Other	0	350,000	1,000,000	750,000	0	600,000	750,000	3,450,000
Water Works PIF Total	0	350,000	1,000,000	750,000	0	600,000	750,000	3,450,000
<hr/>								
Estimated Personnel Cost	0	39,200	112,000	84,000	0	67,200	84,000	386,400

Miscellaneous Concrete/Pavement Replacement

Dept. Priority: 14

Description

This project will provide resources for the replacement of various flat concrete throughout the system.

Purpose

The purpose of this project is to extend the useful life of pavement at various Greater Cincinnati Water Works facilities.

Phases	Prior Year	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2016-2021
								Total
Other	753,000	377,000	377,000	299,000	300,000	300,000	300,000	1,953,000
Water Works PIF Total	753,000	377,000	377,000	299,000	300,000	300,000	300,000	1,953,000
<hr/>								
Estimated Personnel Cost	37,650	42,590	42,590	33,780	33,890	33,890	33,890	220,630

Roof Replacement

Dept. Priority: 15

Description

This project will provide resources for a new roof over a facility to be determined. The project will include the removal of the existing roof and the installation of a new roof.

Purpose

The purpose of this project is to protect the interior contents of buildings.

Phases	Prior Year	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2016-2021
								Total
Other	0	1,000,000	600,000	400,000	400,000	400,000	400,000	3,200,000
Water Works PIF Total	0	1,000,000	600,000	400,000	400,000	400,000	400,000	3,200,000
<hr/>								
Estimated Personnel Cost	0	62,000	37,280	24,800	24,800	24,800	24,800	198,480

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Water Works



Valve Replacement Program

Dept. Priority: 16

Description

This project will provide resources for the replacement of critical valves in the distribution system. This is part of the continuous replacement of valves reaching the end of their useful life.

Purpose

The purpose of this project is to ensure proper transmission of water valves in the distribution system. Some of the valves are 40 to 50 years old. This program addresses critical valves that have been prioritized for their likelihood of failure and the gravity of consequence.

Phases	Prior Year	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2016-2021
								Total
Other	274,500	100,000	275,000	275,000	275,000	275,000	275,000	1,475,000
Water Works PIF Total	274,500	100,000	275,000	275,000	275,000	275,000	275,000	1,475,000
Estimated Personnel Cost	137,250	28,200	77,670	77,670	77,670	77,670	77,670	416,550

Billing System Replacement

Dept. Priority: 17

Description

This project will provide resources for a new billing system for the Greater Cincinnati Water Works (GCWW).

Purpose

The purpose of this project is to expand billing and customer service contract opportunities in order to generate additional revenue from new customers outside of the Greater Cincinnati Water Works (GCWW) core service area.

Phases	Prior Year	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2016-2021
								Total
Other	26,000	2,795,000	631,000	631,000	631,000	172,000	0	4,860,000
Water Works PIF Total	26,000	2,795,000	631,000	631,000	631,000	172,000	0	4,860,000
Estimated Personnel Cost	1,620	175,000	50,000	50,000	50,000	50,000	0	375,000



Aluminum Heating and Insulation

Dept. Priority: 18

Description

This project will provide resources for an improvement to the aluminum sulfate feed system at the Miller Treatment Plant.

Purpose

The purpose of this project is to mitigate feed interruptions caused by aluminum crystallization that can occur during extremely cold temperatures.

Phases	Prior Year	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2016-2021 Total
Other	50,000	65,000	0	0	0	0	0	65,000
Water Works PIF Total	50,000	65,000	0	0	0	0	0	65,000
Estimated Personnel Cost	0	0	0	0	0	0	0	0

Miller Plant Filter Rebuild

Dept. Priority: 19

Description

This project will provide resources for the first year of a multi-year program to replace the sand media in all sand filters at the Miller Treatment Plant.

Purpose

The purpose of this project is to ensure that the Greater Cincinnati Water Works (GCWW) is in compliance with water quality rules concerning the reduction of turbidity and removal of microbial contaminants in drinking water.

Phases	Prior Year	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2016-2021 Total
Other	750,000	400,000	413,000	400,000	350,000	350,000	400,000	2,313,000
Water Works PIF Total	750,000	400,000	413,000	400,000	350,000	350,000	400,000	2,313,000
Estimated Personnel Cost	37,500	4,000	4,130	4,000	3,500	3,500	4,000	23,130

Tank Aeration Irwin Simpson

Dept. Priority: 20

Description

This project will provide resources for reducing disinfection by-products in the distribution system. This project will identify, procure, and install tank aeration systems in the selected distribution storage to reduce disinfection by-products, in particular Total Trihalomethane, in the locations with elevated disinfection by-products.

Purpose

The purpose of this project is to assess and install tank aeration systems to reduce disinfection by-products in the distribution system in order to comply with the Environmental Protection Agency (EPA)'s Stage 2 Disinfection By-Products Rule. Stage 2 of EPA's Disinfection By-Products Rule went into effect in 2012 and

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puts an emphasis on disinfectant by-products concentrations at specific distribution locations, as opposed to the system averages used in the past. Some regulated monitoring locations in the Greater Cincinnati Water Works (GCWW) distribution system have historically reported Total Trihalomethane levels close to the 80 gram/Litre action level. Tank aeration systems in GCWW's distribution system will provide two primary benefits: 1) Reduce the Total Trihalomethane concentrations well below the action level set by the EPA and 2) Create opportunity for GCWW to distribute water further while maintaining acceptable water quality.

Phases	Prior Year	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2016-2021
								Total
Other	170,000	100,000	0	0	0	0	0	100,000
Water Works PIF Total	170,000	100,000	0	0	0	0	0	100,000
Estimated Personnel Cost	0	1,000	0	0	0	0	0	1,000

Winton Road Booster Chlorination

Dept. Priority: 21

Description

This project will provide resources for a booster chlorination system at the Winton Road Reservoir.

Purpose

The purpose of this project is to improve the water quality of the Winton Road Reservoir by maintaining proper levels of chlorine in the distribution system.

Phases	Prior Year	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2016-2021
								Total
Other	100,000	60,000	0	0	0	0	0	60,000
Water Works PIF Total	100,000	60,000	0	0	0	0	0	60,000
Estimated Personnel Cost	0	0	0	0	0	0	0	0

Motor Control Center Equipment

Dept. Priority: 22

Description

This project will provide resources for the upgrade of motor control centers. It will equip the control centers with modern controls and monitors.

Purpose

The purpose of this project is to ensure the reliability of the existing motor control centers. The motor control centers are more than 20 years old and spare parts are difficult to obtain. The project will result in readily available replacement components.

Phases	Prior Year	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2016-2021
								Total
Other	300,000	180,000	180,000	100,000	100,000	100,000	100,000	760,000
Water Works PIF Total	300,000	180,000	180,000	100,000	100,000	100,000	100,000	760,000
Estimated Personnel Cost	22,500	15,250	15,250	8,470	8,470	8,470	8,470	64,380



SCADA Remote Terminal Units

Dept. Priority: 24

Description

This project will provide resources for the replacement of controllers for Supervisory Control and Data Acquisition (SCADA) Remote Terminal Units throughout the Miller Treatment Plant, Bolton Treatment Plant, and most pump stations. The Remote Terminal Upgrade (RTU) project is a controlled programmatic upgrading of older in-plant remote terminal units.

Purpose

The purpose of this project is to maintain the reliability of the remote terminal units. The existing outlying stations' remote terminal units are approaching 10-15 years in age. The Remote Terminal Upgrade (RTU) project is part of the overall 10 year replacement plan for the existing remote terminal units (RTUs). The implementation of new RTUs will provide a more powerful RTU with the ability to better support enhanced automatic control efforts.

Phases	Prior Year	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2016-2021 Total
Other	186,000	124,000	124,000	124,000	186,000	0	0	558,000
Water Works PIF Total	186,000	124,000	124,000	124,000	186,000	0	0	558,000
Estimated Personnel Cost	13,950	10,510	10,060	10,510	14,880	0	0	45,960

Budd Street -Eighth Street - Dalton Avenue to Evans Street

Dept. Priority: 25

Description

This project will provide resources for a 42-inch water main to supply Northern Kentucky and Western Hills.

Purpose

The purpose of this project is to supply sufficient flows and pressures to Northern Kentucky without impacting existing customers. This project will also improve fire supply and better sustaining pressures for both the Constance Pump Station and Central Service.

Phases	Prior Year	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2016-2021 Total
Other	4,200,000	0	0	700,000	2,000,000	2,000,000	0	4,700,000
Water Works PIF Total	4,200,000	0	0	700,000	2,000,000	2,000,000	0	4,700,000
Estimated Personnel Cost	210,000	0	0	35,000	100,000	100,000	0	235,000

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Crane Equipment Improvements

Dept. Priority: 26

Description

This project will provide resources for safety upgrades and improvements to various cranes at mission critical facilities. Upgrades will include the replacement of open collector wiring and control wiring.

Purpose

The purpose of this project is to ensure the reliability and safety of various cranes at mission critical facilities. These cranes were installed between 1940 and 1978.

Phases	Prior Year	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2016-2021 Total
Other	100,000	0	50,000	50,000	50,000	50,000	50,000	250,000
Water Works PIF Total	100,000	0	50,000	50,000	50,000	50,000	50,000	250,000
Estimated Personnel Cost	7,500	0	4,240	4,240	4,240	4,240	4,240	21,200

Backup Power Generator - Western Hills Pump Station

Dept. Priority: 27

Description

This project will provide resources for an onsite standby generator system for the Western Hills Pump Station.

Purpose

The purpose of this project is to ensure Greater Cincinnati Water Works (GCWW) system reliability and service to customers by providing a backup power source which could be used in case of a power outage.

Phases	Prior Year	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2016-2021 Total
Other	300,000	0	885,000	2,210,000	0	0	0	3,095,000
Water Works PIF Total	300,000	0	885,000	2,210,000	0	0	0	3,095,000
Estimated Personnel Cost	15,000	0	44,250	110,500	0	0	0	154,750



Continuous Water Quality Monitors

Dept. Priority: 28

Description

This project will provide resources for the replacement of existing Water Quality monitors at storage facilities in the distribution system.

Purpose

The purpose of this project is to assist with the compliance of regulations and the detection of contaminated drinking water.

Phases	Prior Year	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2016-2021 Total
Other	178,500	0	145,000	27,000	0	0	0	172,000
Water Works PIF Total	178,500	0	145,000	27,000	0	0	0	172,000
Estimated Personnel Cost	5,360	0	4,350	830	0	0	0	5,180

Miscellaneous Masonry Replacement

Dept. Priority: 29

Description

This project will provide resources for the annual rehabilitation of existing masonry structures.

Purpose

The purpose of this project is to extend the useful life of various Greater Cincinnati Water Works (GCWW) facilities by making appropriate masonry repairs.

Phases	Prior Year	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2016-2021 Total
Other	300,000	0	150,000	150,000	150,000	150,000	150,000	750,000
Water Works PIF Total	300,000	0	150,000	150,000	150,000	150,000	150,000	750,000
Estimated Personnel Cost	15,000	0	16,950	16,950	16,950	16,950	16,950	84,750



Miller Plant Sand Filter Valves

Dept. Priority: 30

Description

This project will provide resources for the upgrade of the existing filter valves at the Miller Treatment Plant Filter Building with new valves.

Purpose

The purpose of this project is to provide more reliable filter valves at the Miller Treatment Plant. The existing filter valves have been in service for over forty years and are showing signs of failure.

Phases	Prior Year	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2016-2021
								Total
Other	600,000	0	400,000	400,000	400,000	400,000	400,000	2,000,000
Water Works PIF Total	600,000	0	400,000	400,000	400,000	400,000	400,000	2,000,000
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Estimated Personnel Cost	45,000	0	33,890	33,890	33,890	33,890	33,890	169,450

Gas Chromatograph-Volatile Organic Compounds Analysis

Dept. Priority: 31

Description

This project will provide resources for the replacement of a 10 year old Gas Chromatograph with Mass Spectrometer detector that is used for Volatile Organic Compounds (VOC) and Trihalomethane (THM) monitoring.

Purpose

The purpose of this project is to ensure continued reliable monitoring of the river plant and drinking water for Trihalomethane (THM) and unknown organic contaminants.

Phases	Prior Year	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2016-2021
								Total
Other	0	0	0	0	0	165,000	0	165,000
Water Works PIF Total	0	0	0	0	0	165,000	0	165,000
<hr/>								
Estimated Personnel Cost	0	0	0	0	0	2,330	0	2,330



Gas Chromatograph-Synthetic Organic Compound Analysis

Dept. Priority: 32

Description

This project will provide resources for the replacement of a 10 year-old laboratory instrument gas chromatograph with mass spectrophotometer that is used for monitoring synthetic organic compounds, such as pesticides and Homeland Security related compounds, with the most current and reliable version.

Purpose

The purpose of this project is to ensure reliable monitoring of synthetic organic compounds, such as pesticides, in the water.

Phases	Prior Year	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2016-2021
								Total
Other	0	0	150,000	0	0	0	0	150,000
Water Works PIF Total	0	0	150,000	0	0	0	0	150,000
<hr/>								
Estimated Personnel Cost	0	0	2,120	0	0	0	0	2,120

Document Management Upgrade

Dept. Priority: 33

Description

This project will provide resources for the implementation of an upgrade to the Hyland Software for the current OnBase document management software.

Purpose

The purpose of this project is to upgrade the document management software in order to take advantage of new software releases.

Phases	Prior Year	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2016-2021
								Total
Other	0	0	50,000	0	0	0	0	50,000
Water Works PIF Total	0	0	50,000	0	0	0	0	50,000
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Estimated Personnel Cost	0	0	1,000	0	0	0	0	1,000

Capital Improvement Plan

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Master Plan Upgrade

Dept. Priority: 34

Description

This project will provide resources for an update to the distribution system master plan.

Purpose

The purpose of this project is to update the existing Water Master plan that projects water demands and determines system infrastructure improvements.

Phases	Prior Year	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2016-2021 Total
Other	0	0	500,000	500,000	500,000	0	0	1,500,000
Water Works PIF Total	0	0	500,000	500,000	500,000	0	0	1,500,000
Estimated Personnel Cost	0	0	20,000	20,000	20,000	0	0	60,000

Gas Chromatograph Flame Ionization Detector

Dept. Priority: 35

Description

This project will provide resources for the replacement of the existing Gas Chromatograph Flame Ionization Detector (GCFID).

Purpose

The purpose of this project is to replace the existing Gas Chromatograph Flame Ionization Detector (GCFID). The existing unit is aging and will be at the end of its useful life. This analytical equipment is needed to maintain water quality standards.

Phases	Prior Year	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2016-2021 Total
Other	0	0	0	0	0	120,000	0	120,000
Water Works PIF Total	0	0	0	0	0	120,000	0	120,000
Estimated Personnel Cost	0	0	0	0	0	1,700	0	1,700



Ion Coupled Plasma Mass Spectrophotometer

Dept. Priority: 36

Description

This project will provide resources for the replacement of the existing Ion Coupled Plasma Mass Spectrophotometer (ICPMS) for metals analysis.

Purpose

The purpose of this project is to replace the existing Ion Coupled Plasma Mass Spectrophotometer (ICPMS) for metals analysis. The existing unit is aging and will be at the end of its useful life. This analytical equipment is needed to maintain water quality standards.

Phases	Prior Year	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2016-2021
								Total
Other	0	0	0	0	190,000	0	0	190,000
Water Works PIF Total	0	0	0	0	190,000	0	0	190,000
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Estimated Personnel Cost	0	0	0	0	2,680	0	0	2,680

Outlying Pump Station Improvements

Dept. Priority: 37

Description

This project will provide resources for an upgrade of pumps at small to medium-sized outlying stations, which have reached the end of their useful life, are damaged beyond repair at reasonable cost, or have had design points displaced due to size modifications of water mains and/or system demand variations in the areas they serve.

Purpose

The purpose of this project is to extend the useful life, preserve asset integrity, and optimize performance of the pumps identified from condition assessment at medium-sized outlying stations to allow the Greater Cincinnati Water Works (GCWW) to continue to serve customers reliably in all areas of the distribution system.

Phases	Prior Year	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2016-2021
								Total
Other	300,000	0	50,000	0	0	0	0	50,000
Water Works PIF Total	300,000	0	50,000	0	0	0	0	50,000
<hr/>								
Estimated Personnel Cost	22,500	0	4,240	0	0	0	0	4,240

Capital Improvement Plan

Water Works



Vertical Pumps Upgrade

Dept. Priority: 38

Description

This project will provide resources for an upgrade to the vertical pumps at the treatment plants (e.g., raw water, filtered water, high service) and at the Constance Pump Station, which have reached the end of their useful life or are damaged beyond repair at a reasonable cost.

Purpose

The purpose of this project is to extend the useful life, preserve asset integrity, and optimize performance of the vertical pumps identified from condition assessments at the treatment plants and the Constance Pump Station to allow Greater Cincinnati Water Works (GCWW) to continue to reliably supply water in critical areas of the treatment process and/or distribution system.

Phases	Prior Year	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2016-2021
								Total
Other	100,000	0	60,000	0	0	0	0	60,000
Water Works PIF Total	100,000	0	60,000	0	0	0	0	60,000
Estimated Personnel Cost	7,500	0	5,080	0	0	0	0	5,080

Security Cameras and Digital Video Recorder (DVR)

Dept. Priority: 39

Description

This project will provide resources for the replacement of the existing security system at various Greater Cincinnati Water Works (GCWW) facilities. The current system is at the end of its useful life.

Purpose

The purpose of this project is to ensure that the security cameras, recorders, and motion sensor devices are all properly functioning. These devices are crucial to the security of the water treatment plants and facilities.

Phases	Prior Year	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2016-2021
								Total
Other	0	0	50,000	0	50,000	0	50,000	150,000
Water Works PIF Total	0	0	50,000	0	50,000	0	50,000	150,000
Estimated Personnel Cost	0	0	4,240	0	4,240	0	4,240	12,720



Tennyson Pump Discharge Valve Upgrade

Dept. Priority: 40

Description

This project will provide resources for an upgrade of six hydraulic controlled pump discharge valves to electric valves for three Central Service and three Eastern Hills pumps. One valve will be upgraded every year.

Purpose

The purpose of this project is to ensure the reliability of six pump discharge valves for three Central Service and three Eastern Hills pumps.

Phases	Prior Year	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2016-2021
								Total
Other	300,000	0	150,000	150,000	150,000	0	0	450,000
Water Works PIF Total	300,000	0	150,000	150,000	150,000	0	0	450,000
Estimated Personnel Cost	22,500	0	12,710	12,710	12,710	0	0	38,130

Main Station Backup Generator

Dept. Priority: 41

Description

This project will provide resources for a backup power system at the Main Station.

Purpose

The purpose of this project is to provide emergency power to the Eastern Hills and Central Service pumps in the event of a power outage.

Phases	Prior Year	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2016-2021
								Total
Other	0	0	0	0	450,000	1,500,000	2,250,000	4,200,000
Water Works PIF Total	0	0	0	0	450,000	1,500,000	2,250,000	4,200,000
Estimated Personnel Cost	0	0	0	0	50,840	141,210	141,210	333,260

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Field Application Replacement on Large Pumps

Dept. Priority: 42

Description

This project will provide resources for the replacement of field application circuitry with solid state power factor controls at the Ohio River Plant, Tennyson Pump Station, Main Pump Station, Western Hills Pump Station, and the Bolton Treatment Plant.

Purpose

The purpose of this project is to increase large motor reliability, gain greater motor power factor control, and improve diagnostics using predictive maintenance techniques.

Phases	Prior Year	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2016-2021
								Total
Other	60,000	0	60,000	60,000	60,000	60,000	60,000	300,000
Water Works PIF Total	60,000	0	60,000	60,000	60,000	60,000	60,000	300,000
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Estimated Personnel Cost	4,500	0	5,080	5,080	5,080	5,080	5,080	25,400

Bolton Plant Lime Residual Site Work

Dept. Priority: 43

Description

This project will provide resources for the construction of the holding lagoon adjacent to the existing site for disposing of lime residual from the Bolton Treatment Plant softening process.

Purpose

The purpose of this project is to provide a location for the placement of spent lime residual solids at the Bolton Treatment Plant.

Phases	Prior Year	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2016-2021
								Total
Other	0	0	460,000	2,220,000	2,400,000	0	0	5,080,000
Water Works PIF Total	0	0	460,000	2,220,000	2,400,000	0	0	5,080,000
<hr/>								
Estimated Personnel Cost	0	0	51,520	200,000	211,820	0	0	463,340



Chem East Concrete Repair

Dept. Priority: 44

Description

This project will provide resources for the removal of existing deteriorated concrete and reinforcing steel and its replacement at various locations around the building.

Purpose

The purpose of this project is to extend the life of the building by replacing deteriorated concrete.

Phases	Prior Year	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2016-2021
								Total
Other	0	0	584,000	156,000	0	0	0	740,000
Water Works PIF Total	0	0	584,000	156,000	0	0	0	740,000
<hr/>								
Estimated Personnel Cost	0	0	65,410	17,470	0	0	0	82,880

Miller Plant Network Upgrade

Dept. Priority: 45

Description

This project will provide resources for a network upgrade at the Miller Treatment Plant.

Purpose

The purpose of this project is to provide adequate coverage. The Miller Treatment Plant network hardware warranty expires, and the equipment has reached its end of useful life.

Phases	Prior Year	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2016-2021
								Total
Other	0	0	250,000	0	0	0	0	250,000
Water Works PIF Total	0	0	250,000	0	0	0	0	250,000
<hr/>								
Estimated Personnel Cost	0	0	3,530	0	0	0	0	3,530

Capital Improvement Plan

Water Works



Medium Voltage Stations Backup Breakers

Dept. Priority: 46

Description

This project will provide resources for the purchase and installation of backup breakers for medium voltage stations.

Purpose

The purpose of this project is to ensure pump availability in the event of failure. Backup breakers are needed for six medium voltage stations. Currently there is a limited backup available and a failure could limit pumping capacity.

Phases	Prior Year	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2016-2021
								Total
Other	42,000	0	84,000	84,000	84,000	84,000	84,000	420,000
Water Works PIF Total	42,000	0	84,000	84,000	84,000	84,000	84,000	420,000
Estimated Personnel Cost	3,150	0	7,120	7,120	7,120	7,120	7,120	35,600

Control Valve at Riverside Drive

Dept. Priority: 47

Description

This project will provide resources for the installation of 60 flow control valves at Riverside Drive.

Purpose

The purpose of this project is to adjust flow by bypassing the Eden Park Reservoir.

Phases	Prior Year	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2016-2021
								Total
Other	0	0	0	250,000	0	0	0	250,000
Water Works PIF Total	0	0	0	250,000	0	0	0	250,000
Estimated Personnel Cost	0	0	0	3,530	0	0	0	3,530

Queen City Avenue - Western Hills Viaduct to WH Pump Station

Dept. Priority: 48

Description

This project will provide resources for a water main on Queen City Avenue, from the Western Hills Viaduct to the Western Hills Pump Station.

Purpose

The purpose of this project is to replace aging infrastructure in conjunction with the Metropolitan Sewer District (MSD)'s Lick Run project. The suction line to the Western Hills Pump Station is nearing its end of



life and can be replaced in part with another improvement project. It is identified as CE 1C in the 2010 Master plan.

Phases	Prior Year	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2016-2021 Total
Other	100,000	0	0	500,000	1,300,000	2,100,000	0	3,900,000
Water Works PIF Total	100,000	0	0	500,000	1,300,000	2,100,000	0	3,900,000
Estimated Personnel Cost	5,000	0	0	31,070	113,080	180,600	0	324,750

Booster Chlorination in Distribution System

Dept. Priority: 49

Description

This project will provide resources for a booster chlorination station in the distribution system to increase free chlorine residual in the water serving customers in remote areas where low chlorine residual is frequently observed. The station consists of chemical injection pumps, chemical storage, influent and effluent monitors for flow rate and water quality, including free chlorine, and pipes connected to water mains. The station is remotely monitored and operated through the Supervisory Control and Data Acquisition (SCADA) system.

Purpose

The purpose of this project is to add sodium hypochlorite to boost free chlorine residual in the water serving customers in remote areas.

Phases	Prior Year	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2016-2021 Total
Other	0	0	0	750,000	0	0	0	750,000
Water Works PIF Total	0	0	0	750,000	0	0	0	750,000
Estimated Personnel Cost	0	0	0	10,590	0	0	0	10,590

Lamella Sludge Collection Upgrade

Dept. Priority: 50

Description

This project will provide resources for the replacement of existing sludge collectors in the Miller Treatment Plant.

Purpose

The purpose of this project is to reduce maintenance costs and improve the performance of the collection systems in the pre-sedimentation basins.

Phases	Prior Year	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2016-2021 Total
Other	300,000	0	400,000	400,000	400,000	200,000	0	1,400,000
Water Works PIF Total	300,000	0	400,000	400,000	400,000	200,000	0	1,400,000
Estimated Personnel Cost	0	0	33,880	33,880	33,880	16,940	0	118,580





ALL FUNDS

**FY 2016-2017 CAPITAL INVESTMENT PROGRAM (CIP)
PROJECTS SUPPORTING THE COMPREHENSIVE PLAN**

Plan Cincinnati is the City's Comprehensive Plan that will serve as a long-range plan to guide and manage growth, protect the environment, and influence future development. This report demonstrates the level of consistency of each capital project with the Plan Cincinnati, the City's Comprehensive Plan. The report also illustrates how each project included in the CIP aligns with each of the five initiative areas in the Plan. The level of consistency and initiative area alignment are determined by the Department of City Planning for each project.



Plan Cincinnati Consistency Report

Level of Consistency: Very Consistent

Initiative Area : Collaborate

Community and Economic Development

BLOC Ministries

Greater Cincinnati African American Chamber

Enterprise Technology Solutions

Electronic Gov't (eGov) Web Enhancement

Information Tech. Efficiency Initiatives

Health

Facilities Renovation and Repairs

Stormwater Management

Barrier Dam Concrete Rehabilitation

Barrier Dam Crane Rehabilitation

Barrier Dam Phase II Facility Plan

Barrier Dam Radial Gates - Hydraulic Actuators Replacements

Transportation & Engineering

Elmore to Central Parkway Connector

Neighborhood Transportation Strategies

Street Improvements

Water Works

Budd Street -Eighth Street - Dalton Avenue to Evans Street

Castings/Street Improvements

Continuous Water Quality Monitors

Gas Chromatograph Flame Ionization Detector

Gas Chromatograph-Synthetic Organic Compound Analysis

Gas Chromatograph-Volatile Organic Compounds Analysis

Ion Coupled Plasma Mass Spectrophotometer

Tank Coating

Initiative Area : Compete

City Manager

Regulatory Compliance & Energy Conservation

City Planning

Neighborhood Studies

Community and Economic Development

BLOC Ministries

College Hill Development Gap, Focus 52

Community Development Focus District

Downtown Housing Development

Ensemble Theater

Greater Cincinnati African American Chamber

Neighborhood Business District Improvements

Price Hill Neighborhood Improvements

Retail/Commercial Opportunities



Walnut Hills Development Gap, Focus 52
Westwood Town Hall Area Improvements

Health

Facilities Renovation and Repairs

Public Services

Community Facility Improvements

Music Hall Renovations

Transportation & Engineering

Brewery Heritage Trail

Duck Creek Connector

Initiative Area : Connect

Community and Economic Development

Westwood Town Hall Area Improvements

Transportation & Engineering

Bicycle Transportation Program

Brewery Heritage Trail

Computerized Traffic Signal System

Downtown Infrast. Coord. & Implemtn

Elmore to Central Parkway Connector

Mill Creek Greenway Trail

Neighborhood Gateways/Greenways Imprvmnt

Neighborhood Transportation Strategies

Ohio River Trail

OKI Corridor Studies

ORT Kellogg Ave - Salem to Sutton

Sidewalk Repair Program

Street Improvements

Traffic Signal Installation & Renovation

Transit/Rail Corridor Preservation Acq.

Initiative Area : Live

City Planning

Neighborhood Studies

Community and Economic Development

Downtown Housing Development

Ensemble Theater

Neighborhood Business District Improvements

Price Hill Neighborhood Improvements

Shakespeare Theater

Fire

Appliances for Existing Firehouses

Health

Facilities Renovation and Repairs

Parks

Park Infrastructure Rehabilitation

Public Services

Community Facility Improvements



Music Hall Renovations

Recreation

Aquatics Facilities Renovation

Athletics Facilities Renovation

Compliance with ADA

Oakley Aquatic Facility Additional

Outdoor Facilities Renovation

Recreation Facilities Renovation

Transportation & Engineering

Downtown Infrast. Coord. & Implemtn

Initiative Area : Sustain

City Manager

Emergency Environmental Cleanup/UST

Regulatory Compliance & Energy Conservation

Enterprise Technology Solutions

Electronic Gov't (eGov) Web Enhancement

Information Tech. Efficiency Initiatives

Voice Over IP Implementation

Health

Facilities Renovation and Repairs

Parks

Park Infrastructure Rehabilitation

Public Services

Community Facility Improvements

Music Hall Renovations

Recreation

Aquatics Facilities Renovation

Athletics Facilities Renovation

Oakley Aquatic Facility Additional

Outdoor Facilities Renovation

Recreation Facilities Renovation

Sewers

3568 Bogart Avenue Sewer Replacement

German Cemetery Sewer Replacement

Wilder Avenue Sewer Replacement

Stormwater Management

Barrier Dam Concrete Rehabilitation

Barrier Dam Crane Rehabilitation

Barrier Dam Phase II Facility Plan

Barrier Dam Radial Gates - Hydraulic Actuators Replacements

Grand Avenue Drainage Improvements

Oakview Pump Station Business Case Evaluation

Rookwood Overpass Drainage Improvements

Water Street Storm Sewer Rehabilitation

Transportation & Engineering

Bicycle Transportation Program

Computerized Traffic Signal System



Duck Creek Connector
Mill Creek Greenway Trail
Sidewalk Repair Program
Transit/Rail Corridor Preservation Acq.

Water Works

Budd Street -Eighth Street - Dalton Avenue to Evans Street
Continuous Water Quality Monitors
Gas Chromatograph Flame Ionization Detector
Gas Chromatograph-Synthetic Organic Compound Analysis
Gas Chromatograph-Volatile Organic Compounds Analysis
Ion Coupled Plasma Mass Spectrophotometer
Tank Coating

Level of Consistency: Consistent

Initiative Area: Collaborate

City Manager

Keltron Alarm System

Enterprise Services

Building Equipment
Capital Maintenance
Furniture, Fixtures, and Equipment

Enterprise Technology Solutions

800 MHz Radios
CAGIS Infrastructure
Cincinnati Financial System Upgrades
Data Center Infrastructure Replacement
Disaster Recovery Infrastructure
Enterprise Networks and Security Enhancements
IT Service Desk
Mobile Expense Management
Office 365 Full Deployment
Radio Communications Equipment

Police

Police Body Cameras
Police Mobile Digital Video (In-Car Camera) Storage 2015

Public Services

City Facility Renovation and Repairs
KRONOS Time Keeping System Upgrade

Transportation & Engineering

Airport Infrastructure Improvements
Glenway Avenue Gateway Wall
Information Systems Acquisition
MLK/I-71 Interchange SIB Loan
SCIP Loan Repayment
Spot Infrastructure Replacement
Street Rehabilitation Debt - Capital Acceleration
Uptown Access Imprmts West MLK Dr.



Water Works

Aluminum Heating and Insulation
Backup Power Generator - Western Hills Pump Station
Bolton High Service Pumps
Bolton Plant Lime Residual Site Work
Booster Chlorination in Distribution System
Chem East Concrete Repair
Control Valve at Riverside Drive
Crane Equipment Improvements
Electrical Transformers
Field Application Replacement on Large Pumps
Lamella Sludge Collection Upgrade
Large Motor Rewind Program (Annual)
Main Station Backup Generator
Medium Voltage Stations Backup Breakers
Miller Plant Filter Rebuild
Motor Control Center Equipment
Mt. Airy Exterior Renovation
Outlying Pump Station Improvements
Private Development Allocation Program
Queen City Avenue - Western Hills Viaduct to WH Pump Station
SCADA Remote Terminal Units
Security Cameras and Digital Video Recorder (DVR)
Station Valve Equipment
Street Improvement Allocation Program
Tennyson Pump Discharge Valve Upgrade
Valve Replacement Program
Vertical Pumps Upgrade
Winton Road Booster Chlorination

Initiative Area : Compete

Community and Economic Development

4th and Race Garage
Catholic Health Partners/Mercy Health Additional Parking Imp
Commercial & Industrial Public Improvements
Race Street Revitalization
Tax Incentive/Enterprise Zone
Viable Small Business Development

Enterprise Services

Structural Maintenance & Repair

Public Services

KRONOS Time Keeping System Upgrade

Transportation & Engineering

Convention Center Expansion

Water Works

Billing System Replacement
Master Plan Upgrade
Private Development Allocation Program



Initiative Area : Connect

Public Services

Fleet Lease Purchase - Capital Acceleration
Fleet Replacements
Sign Replacement

Transportation & Engineering

Airport Infrastructure Improvements
Bridge Rehabilitation Program
Curb Ramps - Street Rehab
Downtown Streetlight Maintenance/Repair
Duke Street Light Installation and Renovation
Glenway Avenue Gateway Wall
LED Traffic and Pedestrian Signals
Pavement Management
Safety Improvements
Spot Infrastructure Replacement
Street Light Replacement Project
Street Rehabilitation
Street Rehabilitation - Capital Acceleration
Street Rehabilitation Debt - Capital Acceleration
Traffic Control Device Installation and Renovation
Traffic Signal Controllers & Detectors
Uptown Access Imprmts West MLK Dr.
Wall Stab. & Landslide Correction

Initiative Area : Live

City Manager

Keltron Alarm System

Community and Economic Development

Accela Permits Migration - Mobile Field Software
Citirama
Core 4 Strategic Housing Notice of Funding Availability
Hazard Abatement/Demolition Program
Neighborhood Market Rate Housing

Police

Police Body Cameras
Police Mobile Digital Video (In-Car Camera) Storage 2015
Taser Replacement

Public Services

Trash Receptacles

Transportation & Engineering

Curb Ramps - Street Rehab
Hillside Stairway Rehabilitation Program
LED Traffic and Pedestrian Signals
ROW Ordinance Implementation



Initiative Area : Sustain

City Manager

Center Hill Gas & Leachate

Cincinnati Budget System Upgrades

Enterprise Services

Building Equipment

Capital Maintenance

Furniture, Fixtures, and Equipment

Enterprise Technology Solutions

800 MHz Radios

CAGIS Infrastructure

Cincinnati Financial System Upgrades

Data Center Infrastructure Replacement

Disaster Recovery Infrastructure

Enterprise Networks and Security Enhancements

IT Service Desk

Mobile Expense Management

Office 365 Full Deployment

Radio Communications Equipment

Police

Taser Replacement

Public Services

City Facility Renovation and Repairs

Fleet Lease Purchase - Capital Acceleration

Fleet Replacements

Sign Replacement

Trash Receptacles

Sewers

3934 Winding Way Sewer Replacement

3981 Watterson Road Sewer Replacement

5053 Ridge Avenue Sewer Replacement

911 McPherson Avenue Sewer Replacement

Addyston Creek and Sewer Rehabilitation

Addyston Extraneous Stormwater Removal

Airport and Robb Avenue Sewer Replacement

Bahama Gardens Pump Station Upgrade and Force Main Replace

Banning Alley Sewer Replacement

Barrington Hills, Barrington Hills BLK. F, Gil Volz, and Kir

Berkley Avenue Sewer Replacement

Boomer Road Sewer Lateral Assessment

Bridgetown Road Local Sewer (HNs 8477-8647)

Brierly Creek Road Local Sewer (HNs 6040-6100)

Bruestle Avenue Pump Station Elimination

Camargo Canyon Pump Station Elimination



Capital Improvement Program (CIP) Project Planning
Carpenters Run Pump Station Upgrade
Carpol Avenue, Honeywell Avenue & E. Kemper Road Local Sewer
Catholic Calvary Cemetery Sewer Replacement
Central Parkway Sewer Replacement (HN 2402)
Closed Circuit Television (CCTV) Truck
Coldstream Drive and Asbury Road Local Sewer
Colton Lane Sewer Replacement
Columbia Parkway at Delta Avenue Sewer Replacement
Congress Run Stream Restoration/Bank Stabilization
Cora Avenue Sewer Replacement
Crestnoll Lane Local Sewer (HNs 3491-3609)
CSO 005 Water Connection
CSO 12 Sewer Separation Phase A.3 West Martin Luther King Dr
CSO 12 Sewer Separation Phase A.4b
CSO 125 Stream Separation
CSO 135 Improvements
CSO 179 Sewer Separation
CSO 181 Real Time Control
CSO 21 Interstate 75 Reconstruction Coordination
CSO 214 Storage Facility
CSO 217/483 Source Control Phase A
CSO 217/483 Source Control Phase A2
CSO 217/483 Source Control Phase B
CSO 217/483 Source Control Phase C
CSO 43 Improvements
CSO 488/490 Interstate 75 Reconstruction Coordination
CSO 5 (Lick Run RTC) Improvements
CSO 507 Improvements
CSO 508 Sewer Separation
CSO 509 Improvements
CSO 510 Improvements
CSO 513 Sewer Separation
CSO 514 Sewer Separation
CSO 54 Improvements
CSO 551 Sewer Separation
CSO 552 Improvements
CSO 553 Sewer Separation
CSO 83 and 472 Dynamic Underflow Control
CSOs 404, 405, 410, 411 Outfall Reconstruction
Cypress Street - Ashland Avenue Sewer Replacement
Davey Avenue Sewer Replacement
Delta and Greist Avenues Sewer Replacement
Depot Street Sewer Evaluation
Drake Road Sewer Lateral Assessment (HN 7315)
Dry Run Area Sewers Phase 2 Contract Round Bottom Road
Dry Run Sewers - Contract Eight Mile Road
E. Galbraith Road Sewer Lateral Assessment (HN 4454)



E. Kemper Road Sewer Lateral Assessment
E. Kemper Road Sewer Lateral Assessment (HN 269)
East Branch Muddy Creek Interceptor Extension
East Branch Upper South Mill Creek Sustainable Watershed Eva
East Duck Creek Watershed Plan
East Hill Avenue Sewer Replacement
Emergency Sewer Repairs 2015
Emergency Sewer Repairs 2016
Emergency Sewer Repairs 2017
Emergency Sewer Repairs 2018
Emergency Sewer Repairs 2019
Enyart Road Sewer Lateral Assessment
Enyart Road Sewer Lateral Assessments (HNs 11258 and 11262)
Faehr Street Sewer Replacement
Fairbanks Avenue Sewer Replacement
Foley Road Sewer Laterals (HNs 5579, 5583 - 5599, 5602)
Foraker Avenue Sewer Replacement-Alms Place to E. Terminus
Freeland Avenue Area Sewer Replacement
Freeman Avenue - Klotter to McMicken Sewer Replacement
Glen Landing Pump Station Improvements
Glenview Pump Station Upgrade
Great Miami WWTP
Grove Avenue Sewer Replacement
Hackberry Street Sewer Replacement
Hamilton County Utility Oversight and Coordination 2015
Hamilton County Utility Oversight and Coordination 2016
Hamilton County Utility Oversight and Coordination 2017
Hamilton County Utility Oversight and Coordination 2018
Hamilton County Utility Oversight and Coordination 2019
Harvey Avenue - MLK Drive to 400 NW Sewer Evaluation
Hickman Avenue Sewer Evaluation
High Point Pump Station Evaluation
High Risk Asset Renewal 2015
High Risk Asset Renewal 2016
High Risk Asset Renewal 2017
High Risk Asset Renewal 2018
High Risk Asset Renewal 2019
Home Sewer Treatment System Extensions 2015
Home Sewer Treatment System Extensions 2016
Home Sewer Treatment System Extensions 2017
Home Sewer Treatment System Extensions 2018
Home Sewer Treatment System Extensions 2019
Hosea Street Sewer Replacement
Huntington Pump Station Elimination
Hydraulic Modeling 2015
Hydraulic Modeling 2016
Hydraulic Modeling 2017
Hydraulic Modeling 2018



Hydraulic Modeling 2019
Kemper Mill Village Pump Station Upgrade
Kern Drive and Springdale Road Local Sewer
Ledgewood Avenue Sewer Replacement
Lick Run Property Demolitions
Lick Run Valley Conveyance System
Little Miami WWTP Electrical and Disinfection Improvements
Little Miami WWTP Electrical Feeders
Little Miami WWTP Preliminary Treatment Improvements
Little Miami WWTP Scum Removal and Handling
Little Miami WWTP Solids Handling Improvements
Lower Mill Creek HW/DW Protection
Lower Muddy Creek Interceptor SSO Remediation
Lower Muddy Creek Sustainable Watershed Evaluation Plan
Ludlow and Lafayette Parallel Sewer
Mandarin Court Sewer Replacement
Manhole Rehabilitation Trenchless Technology Program 2015
Manhole Rehabilitation Trenchless Technology Program 2016
Manhole Rehabilitation Trenchless Technology Program 2017
Manhole Rehabilitation Trenchless Technology Program 2018
Manhole Rehabilitation Trenchless Technology Program 2019
Mapleknoll Drive Local Sewer (HNs 9420-9562)
Mayhew and Leath Avenues Sewer Replacement
Mayland Dr, Woodlark Dr, and Lusanne Terrace Sewer Study
McHenry Avenue Sewer Replacement
McKeone Avenue Sewer Replacement
MCWWTP Biological Nutrient Removal Facilities
MCWWTP Biosolids Dewatering Facility Addition
MCWWTP Electrical Arc Flash Protection
MCWWTP Enhanced Incinerator Emission Controls
MCWWTP Main Substation Improvements
MCWWTP North Pump Station Odor Control System Replacement
MCWWTP Power Building Medium Voltage Switchgear
MCWWTP Primary Sludge Pumping Improvements
MCWWTP Primary Treatment Odor Control Improvements
MCWWTP Secondary Treatment Capacity Enhancements
MCWWTP Service Water (NPW) Reliability and Service Upgrade
MCWWTP Solids Handling Improvements Phase 1
MCWWTP South Raw Sewage Pump Station Pump Replacement
MCWWTP Standby Power Distribution System Improvements
MCWWTP Two-Bay Solids Receiving Facility
Millbrook #2 Pump Station Upgrade
Montana Avenue Sewer - Ferncroft Drive to Mustang Drive
Morrison Avenue Sewer Replacement
Mt. Airy Forest Sewer Replacement
Mt. Airy Receiving Sewer Upgrade
Mt. Carmel Road Vicbarb Lane Apple Blossom Lane Local Sewer
Mt. Pleasant Avenue Sewer Replacement



Muddy Creek Basin Storage and Conveyance Sewer
Muddy Creek Interceptor Rehabilitation
Muddy Creek WWTP Add New Belt Filter Press
North Bend Road Local Sewer (HNs 504-565)
North Fairmount Bioswale Project
Old Blue Rock Road Local Sewer (HNs 5240-5327)
Old Ludlow Ave Right-of-Way Sewer Replacement
Otte Avenue Sewer Replacement
Overflow Parking lot for MSD Engineering and Administration
Pardee Alley Sewer Replacement - Oswald Alley to 200' North
Parrakeet Drive Local Sewer (HNs 6002-6068)
Paxton Avenue Sewer Rehabilitation
Phase 2 Wet Weather Improvement Plan Design Allocation
Pleasant Run Central Force Main Repairs
Pleasant Run Interceptor Replacement
Polk Run Non-Potable Water Upgrades
Polk Run Ultraviolet System/Post Aeration Improvements
Polk Run WWTP Reliability and Service Upgrades
Ponderosa Woods Pump Station Elimination
Portsmouth Avenue Sewer Replacement
Pottinger Road Sewer Lateral Assessment (HN 10444)
Programmatic Contingency
Quebec Heights Sewer Separation
Quebec Road Sewer Replacement
Quebec Road Sewer Separation
Queen City and Cora Avenues Right-of-Way Sewer Separation
Queen City Avenue Sewer Separation Phase 2
Rackacres Drive and Crestnoll Lane Area Sewer
Ramblingridge Drive and Twinwillow Lane Local Sewer
Reading Road - 12th Street to E. Liberty Street
Reemelin Road Local Sewer (HNs 3489-3860)
River Road Near Muddy Creek WWTP Conveyance Sewer
Rockdale Avenue and Windham Avenue Sewer Evaluation
Rose Hill Avenue Sewer Relocation
Russell Heights Drive Local Sewer
Schulte Drive Sewer Replacement
Sewer Relining Trenchless Technology Program 2015
Sewer Relining Trenchless Technology Program 2016
Sewer Relining Trenchless Technology Program 2017
Sewer Relining Trenchless Technology Program 2018
Sewer Relining Trenchless Technology Program 2019
Sharp Alley Sewer Replacement
South Clippinger Force Main Replacement/Pump Station Upgrade
Spring Grove Avenue - Township Street Sewer Improvement
Spring Grove Avenue Sewer Replacement and Rehabilitation
SSO 1000 Elimination
SSO 1048 Conveyance Sewer
SSO 1048 Conveyance Sewer Phase 2



SSO 228 Elimination
SSO 587 Conveyance Sewer
SSO 603 and 704 Improvements
SSO 700 Facility Improvements
SSO 700 Integrated Watershed Action Plan
SSO 700 Integrated Watershed Action Plan Implementation
Stanley Avenue Lateral Relocations
State Road Local Sewer (HNs 7737-7849)
Stonebridge Apartments Sewer Study
System-Wide Sensor Installation
Timbers Pump Station Elimination
Upper Muddy Creek Interceptor Replacement
Upper Muddy Creek Interceptor Replacement Contract A
Upper Road Local Sewer (HNs 6340-6434)
Victory Parkway Sewer Rehabilitation
Vinton Street - Beekman Street to Liddell Street Sewer
W Branch Winton Woods Sustainable Watershed Evaluation Plan
Wahl Terrace Sewer Replacement
Wasson Ravine Sewer Replacement
Wastewater Collection Maintenance Shop Improvements
Water Quality Modeling 2015
Water Quality Modeling 2016
Water Quality Modeling 2017
Water Quality Modeling 2018
Water Quality Modeling 2019
Werk and Westbourne Enhanced High Rate Treatment Facility
Werk Road Local Sewer (HNs 5544-5686)
Werk Road Sewer Lateral Assessment (HN 6052)
West Branch Muddy Creek Interceptor
West Fork Road Local Sewer (HNs 5311-5472)
Westport Village Pump Station Elimination
Wet Weather Program Management and Support Services 2015
Wet Weather Program Management and Support Services 2016
Wet Weather Program Management and Support Services 2017
Wet Weather Program Management and Support Services 2018
Wet Weather Program Management and Support Services 2019
Whitewater Township Regional Sewer District Phase III SR 128
Woodruff Road Sewer Lateral Assessment (HNs 8145, 8167,8237)
WWT System Asset Renewal 2015
WWT System Asset Renewal 2016
WWT System Asset Renewal 2017
WWT System Asset Renewal 2018
WWT System Asset Renewal 2019
Wyoming and Minion Avenues Sewer Separation
Yoast Avenue Sewer Improvements
Transportation & Engineering
Bridge Rehabilitation Program
Convention Center Expansion



Downtown Streetlight Maintenance/Repair
Hillside Stairway Rehabilitation Program
Information Systems Acquisition
MLK/I-71 Interchange SIB Loan
Pavement Management
ROW Ordinance Implementation
Safety Improvements
SCIP Loan Repayment
Street Rehabilitation
Street Rehabilitation - Capital Acceleration
Traffic Signal Controllers & Detectors
Wall Stab. & Landslide Correction

Water Works

Aluminum Heating and Insulation
Backup Power Generator - Western Hills Pump Station
Billing System Replacement
Bolton High Service Pumps
Bolton Plant Lime Residual Site Work
Booster Chlorination in Distribution System
Chem East Concrete Repair
Control Valve at Riverside Drive
Crane Equipment Improvements
Electrical Transformers
Field Application Replacement on Large Pumps
Lamella Sludge Collection Upgrade
Large Motor Rewind Program (Annual)
Main Station Backup Generator
Master Plan Upgrade
Medium Voltage Stations Backup Breakers
Miller Plant Filter Rebuild
Miller Plant Sand Filter Valves
Motor Control Center Equipment
Mt. Airy Exterior Renovation
Outlying Pump Station Improvements
Queen City Avenue - Western Hills Viaduct to WH Pump Station
Regeneration Furnace Equipment
Replacement Water Mains Allocation Program
SCADA Remote Terminal Units
Security Cameras and Digital Video Recorder (DVR)
Station Valve Equipment
Street Improvement Allocation Program
Tank Aeration Irwin Simpson
Tennyson Pump Discharge Valve Upgrade
Valve Replacement Program
Vertical Pumps Upgrade
Winton Road Booster Chlorination



Level of Consistency: Somewhat Consistent

Initiative Area: Collaborate

City Manager

CitiCable Playback System Upgrade

Fire

Firefighter PPE

Transportation & Engineering

FAA/ODOT Local Match

Facility Improvements

Water Works

Computers, Servers, and Software

Miller Plant Network Upgrade

Mobile Computer Replacement

Initiative Area: Connect

Transportation & Engineering

Colerain Corr. Imp. I-74 to Spring Grv

Initiative Area: Live

Community and Economic Development

Neighborhood Business Property Holding

Initiative Area: Sustain

Fire

Firefighter PPE

Sewers

Dry Run Sewers Contract Broadwell Road

Water Works

Computers, Servers, and Software

Document Management Upgrade

Miller Plant Network Upgrade

Miscellaneous Concrete/Pavement Replacement

Miscellaneous Masonry Replacement

Mobile Computer Replacement

Roof Replacement