



CAPITAL IMPROVEMENT PLAN

FISCAL YEARS 2023-2027

Capital Asset Summary

CITYWIDE ASSET SUMMARIES

Asset Valuations	2
Capital Replacement and Investment	3
Operations and Maintenance	4
Revenue Summary	5
Funding Gap Analysis	7

ASSET SUMMARIES BY ASSET CLASS

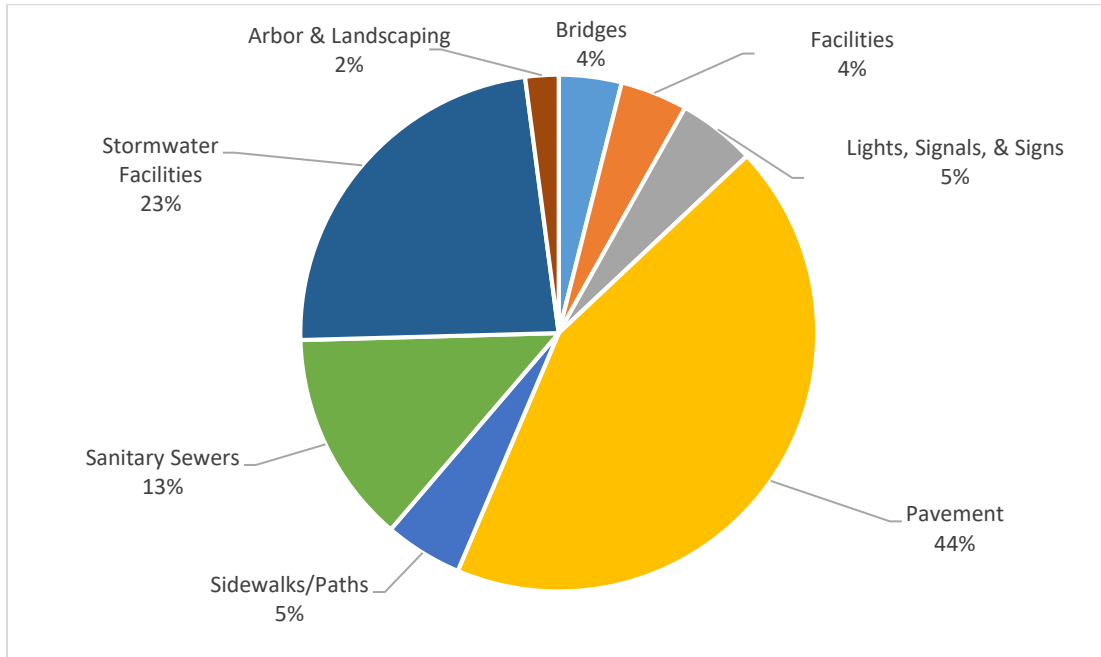
Bridges	9
Public Facilities	10
Lights, Signals, & Signs	11
Road Pavement	12
Sidewalks and Pathways	13
Sanitary Sewers	14
Stormwater Facilities	15
Arbor/Canopy	16

Asset Valuation

Summary

The City of Urbana classifies its capital assets into eight categories. The assets are valued by the total current reconstruction value (CRV). By far, the City's largest asset by valuation is pavement, comprising 44% of the asset value. Together with bridges, lights, signals, and signs, and sidewalks, all transportation-related assets represent 62% of asset value. Sanitary Sewers and Stormwater infrastructure represent 13% and 23% of assets, respectively.

Figure 1. Percentage of Current Reconstruction Value by Asset Class



To get CRV estimates, the assets are valued using rough metrics that rely heavily on assumptions. For example, the CRV for Road Pavement was calculated by taking the square yards of pavement multiplied by regional averages for reconstruction by type of pavement. This is a rudimentary valuation, but provides a workable estimate. In general, CRV provides a straightforward estimate that is easy to calculate. The tradeoff with this method is that it does not reflect all of the nuances that affect depreciation of assets. A more robust method of valuation, such as life cycle assessment requires more time, expertise, cost, and data than currently available. The City is working on a number of asset management plans that will be useful in refining these estimates in the future. Relatedly, given that valuations are for the reconstruction value, infrastructure can also be thought of as a liability for the City, given that they represent future expenses that the City will need to incur.

Figure 2. 2020 Estimates for City-Owned Asset Valuations

ASSET CLASS	ASSET COMPONENT	ESTIMATED AVERAGE UNIT PRICE	AVERAGE ESTIMATED LIFE EXPECTANCY	TOTAL CURRENT RECONSTRUCTION VALUE (CRV)
Bridges	Bridges and Culverts	\$1 - 2 Million per Bridge	75	\$40,300,000
Facilities	Fire Stations, PW & City Buildings	Between \$5- 20 Million	50	\$43,200,000
Lights, Signals, & Signs	Controllers, Mast Arms, Poles, Wire	\$6,000/Light Pole & \$140,000 /Signalized Intersection	40	\$49,800,000
Pavement	Concrete, Asphalt, treated & Brick Streets	\$160-180/square yard	60	\$445,500,000
Sidewalks/Paths	Sidewalks & Bike/Multi-use Paths	\$12/square foot	100	\$50,000,000
Sanitary Sewers	Sewer Pipes	\$250/foot	100	\$136,600,000
Stormwater Facilities	Sewer Pipes & Pumping Station	\$310/foot	100	\$239,600,000
Arbor/Canopy	Parkway Trees	\$2,000/mature tree	60	\$21,400,000
Total Current Reconstruction Value:				\$1,026,400,000

Capital Replacement and Investment

Capital Replacement and Investment (CR&I) Spending Target

By using the asset valuation and average lifecycle, a baseline target for anticipated capital replacement and investment expenditures can be calculated. For the 2022 CIP, the CRV was also adjusted based on the Construction Cost Index, which was 21% in 2021. On the whole, the City of Urbana would need to commit \$17.7M a year on CR&I to replace its infrastructure with in-kind quality replacement in order to maintain current conditions.

Figure 3. Estimated Annual CR&I Cost to Maintain Infrastructure Quality

ASSET CLASS	2020 RECON. VALUE ESTIMATES (CRV)	TOTAL CURRENT RECONSTRUCTION VALUE (CRV) ¹	Annual CR&I Target
Bridges	\$40,300,000	\$50,000,000	\$666,667
Facilities	\$43,200,000	\$50,000,000	\$1,000,000
Lights, Signals, & Signs	\$49,800,000	\$60,000,000	\$1,500,000
Road Pavement	\$445,500,000	\$540,000,000	\$9,000,000
Sidewalks and Pathways	\$50,000,000	\$60,000,000	\$600,000
Sanitary Sewers	\$136,600,000	\$165,000,000	\$1,650,000
Stormwater Facilities	\$239,600,000	\$290,000,000	\$2,900,000
Arbor/Canopy	\$21,400,000	\$25,000,000	\$416,667
Totals	\$1,026,400,000	\$1,240,000,000	\$17,733,333

1. 2020 values were adjusted for inflation using 2021-construction cost index and rounded to reflect lower precision. Detailed calculations for 'City-Owned Assets and Valuations' reviewed on a multiyear cycle.

The \$17.7M figure represents a best-case scenario, where that amount has been accrued annually as a reserve for future replacement. In practice, Urbana has habitually under-committed funds for future capital replacement. To illustrate this point, if the City had been accruing reserves for future facilities projects since the most recent capital investments in these assets, the City would have \$21M in reserved funds to undertake the Facility Master Plan. Instead, the City will need to borrow funds and is only proposing to spend \$12M in Facility capital improvements at this time, suggesting that the average quality of our facility assets will continue to decline over time.

Capital Replacement and Investment in CIP

Urbana will not meet this level of desired investment, since the City only averages \$11.5M in capital investment over the life of the CIP, inclusive of over \$14 million in prospective grants. This will ultimately lead to using assets beyond their life expectancy, deteriorating conditions, and higher operating and maintenance costs.

Figure 4. Capital Replacement Investment Expenditures in CIP

Asset Class	FY23 Budget	FY24 Plan	FY25 Plan	FY26 Plan	FY27 Plan	Average
Bridges	\$707,000	\$280,000	\$0	\$160,000	\$880,000	\$405,400
Facilities	\$8,527,149	\$1,479,816	\$1,479,491	\$1,479,490	\$1,479,791	\$2,889,147
Lights, Signals, & Signs	\$1,270,000	\$1,100,000	\$0	\$250,000	\$0	\$524,000
Road Pavement	\$7,791,966	\$2,010,900	\$13,739,550	\$5,665,000	\$1,335,000	\$6,108,483
Sidewalks and Pathways	\$1,100,000	\$200,000	\$200,000	\$200,000	\$200,000	\$380,000
Sanitary Sewers	\$1,158,250	\$249,018	\$725,763	\$733,193	\$271,317	\$627,508
Stormwater Facilities	\$810,000	\$655,800	\$281,768	\$937,909	\$224,229	\$581,941
Arbor/Canopy	\$0	\$0	\$0	\$0	\$0	\$0
Total CR&I Spending	\$21,364,365	\$5,975,534	\$16,426,572	\$9,425,592	\$4,390,337	\$11,516,480

Operation and Maintenance

Operation and Maintenance (O&M) Spending Target

In addition to replacement at the end of an asset's life-cycle, there are also interim operational and maintenance activities that are required to maintain functional condition and life expectancy of an asset. For example, while a road may not need a total replacement for 60 years, over its life there will be ongoing O&M costs of pot-hole filling, crack sealing, pavement patching, etc. that are still required to achieve the desired life expectancy. Figure 5 below outlines a rudimentary calculation for establishing a baseline O&M spending target. While there is likely more gradation in the maintenance requirements than currently used in the calculations below, the varied type of assets within a class, local nuances, and past deferred maintenance make further refinement more complicated. Further refinement is not expected to provide greater insight since the target figures are representational and would still reflect broad-based averages and assumptions.

Figure 5. Estimated Annual O&M Cost to Maintain Asset Life Expectancy

ASSET CLASS	TOTAL CURRENT RECONSTRUCTION VALUE (CRV) ²	ESTIMATED OPERATION AND MAINTENANCE REQUIREMENT	Annual O&M
Bridges	\$50,000,000	1.0%	\$500,000
Facilities	\$50,000,000	1.0%	\$500,000
Lights, Signals, & Signs	\$60,000,000	1.0%	\$600,000
Road Pavement	\$540,000,000	1.0%	\$5,400,000
Sidewalks and Pathways	\$60,000,000	1.0%	\$600,000
Sanitary Sewers	\$165,000,000	1.0%	\$1,650,000
Stormwater Facilities	\$290,000,000	1.0%	\$2,900,000
Arbor/Canopy	\$25,000,000	1.0%	\$250,000
Totals	\$1,240,000,000	1.0%	\$12,400,000

2. Using inflation adjusted values from Figure 3.

Operation and Maintenance in CIP

Throughout the CIP, the City spending is below the O&M target, but is generally close to the target, spending an average of \$10.1M a year on O&M for the City’s capital assets. While this is close to the hypothetical target, the target does not incorporate past deferred CR&I and maintenance into the funding goal. The result is that the City is not meeting this target on an ongoing basis, which will result in deteriorating conditions and shorter life expectancies.

Figure 6. Operation and Maintenance Expenditures by City

Asset Class	FY23 Budget	FY24 Plan	FY25 Plan	FY26 Plan	FY27 Plan	Average
Bridges	\$128,984	\$109,572	\$135,249	\$116,019	\$141,883	\$126,341
Facilities	\$870,911	\$1,062,093	\$1,092,894	\$1,124,588	\$1,157,201	\$1,061,538
Lights, Signals, & Signs	\$1,517,414	\$1,561,419	\$1,606,700	\$1,653,295	\$1,701,240	\$1,608,014
Road Pavement	\$3,347,346	\$3,587,744	\$3,510,474	\$3,595,602	\$3,683,200	\$3,544,873
Sidewalks and Pathways	\$315,119	\$241,937	\$248,953	\$256,173	\$263,601	\$265,157
Sanitary Sewers	\$1,429,614	\$1,330,057	\$1,366,033	\$1,402,873	\$1,441,145	\$1,393,944
Stormwater Facilities	\$1,785,458	\$1,388,715	\$1,424,473	\$1,516,321	\$1,508,609	\$1,524,715
Arbor/Canopy	\$558,000	\$574,182	\$590,833	\$607,968	\$625,599	\$591,316
Total O &M Spending	\$9,952,845	\$9,855,719	\$9,975,609	\$10,272,839	\$10,522,479	\$10,115,898

Double Jeopardy

Urbana is below the annual targets for both CR&I and O&M investment. For CR&I, the consequence is infrastructure use well beyond our assets’ reasonably functional lives to a point of critical failure. The consequences for deferred O&M is quicker deterioration of our assets ultimately resulting in shorter life expectancies. The combination of underfunding both of these together exponentially increases the potential for catastrophic failures; in these instances, our options become

restricted to abandonment, costly, unplanned emergency expenditures, or acceptance and use of ‘failed’ assets.

Revenue Summary

Revenue

Capital replacement and investment and operation and maintenance have diversified revenue streams. Stormwater Facilities and Sanitary Sewers have their own funds that are supported by dedicated taxes and user fees; these fees fund both CR&I and O&M expenses. Transportation projects are funded by a combination of local motor fuel tax, state motor fuel tax, and state/federal transportation grants. Large transportation capital projects are primarily directed to road pavement but often include other assets in the right-of-way. Motor fuel and transportation grants generally have restrictions on what they can be used for and can have extensive documentation requirements.

The remaining funds for CIP projects come from the City of Urbana General Fund. O&M expenses such as staff time, vehicles, engineering, upkeep, etc. for each asset are typically part of the Public Works Department and are included in the annual budget. The General Fund also transfers money to the CR&I Fund (Fund 200), which can be used on specific capital projects or programs.

Over the long term, the average amount of revenue equals the average amount of expenditures. In the short term, there is variation based on project timing, grants, and fund balance. Each revenue stream has its own respective long term outlook.

Motor Fuel Taxes

Revenue for Local MFT comes from the local gas tax ordinance, last updated July 1, 2011. Funds are used for transportation capital projects and maintenance. State MFT come from three individual sources: state motor fuel tax, the transportation renewal fund, and the Rebuild Illinois capital program. The City will receive of Rebuild Illinois funds of \$453,000 in FY 23, the last year of the program.

In the past few years, the MFT funds have been negatively impacted by the pandemic and the resulting implications. Previous years accrued less revenue compared to pre-pandemic expectations and the long-term impact of a lower Census count is a reduction in revenue of \$115,000 per year. Furthermore, future year revenue estimates are less certain due to the increasing size of the electric vehicle market. In recent years, comparable metropolitan areas, like Danville and Bloomington-Normal have increased their local gas taxes to help close the funding gap for transportation needs; all of their rates are currently 1.6 to 1.8 times Urbana’s current rate of \$0.05/gallon. Similar to the local gas tax increases, in 2019, the State of Illinois implemented a substantial adjustment by doubling its base gas tax rate from \$0.19/gallon to \$0.38/gallon. The City should seriously consider reviewing and adjusting its local gas tax in the coming fiscal year with an overwhelming amount of unfunded transportation improvement needs.

Grants

Grants are highly volatile and unpredictable. The proposed CIP assumes that the City will receive grants for two major projects: Florida Avenue (Wright Street to Hillcrest Street) and Lincoln Avenue (Green Street to Florida Avenue). The projects that may receive grants are high priority projects. If

the City does not receive these grants, the projects are still likely to occur, but on a delayed schedule, reduced in scope, and at the cost of other potential projects.

Bond Issuance

The CIP incorporates \$12M of debt issuance for implementation of Facility Master Plan projects. Currently, the City is nearly debt free; the Windsor Road Reconstruction debt will retire in FY 24. The lack of debt provides the City the fiscal flexibility to issue significant amount of debt to meet its infrastructure needs. Neighboring central Illinois communities have general obligation debts between \$48M and \$166M, or between \$550 and \$1,900 per capita. The proposed \$12M in debt for Urbana would equate to \$313 per capita.

Sewer Benefit Tax

The Sanitary Sewer Fund derives its revenue from the sewer tax, which is reserved for sewer improvements and is stable. Planning and GIS improvements along with an enhanced cleaning, inspection, and review program being implemented in FY 2023 should better identify sanitary sewer needs.

Stormwater Utility Fee

The Stormwater Utility Fund derives its revenue from the stormwater utility fee, which is reserved for storm sewers and stormwater-related improvements and is stable. Completion of the Stormwater Management Plan, other planning and GIS improvements, and an enhanced cleaning, inspection, and review program being implemented in FY 23 will help the City better identify needs.

General Fund

In addition to O&M expenses paid directly out of the General Fund, the CR&I Fund is replenished by transfers from the General Fund. The CR&I Fund supports transportation projects, facilities projects, and other capital projects that may require unrestricted funds. Historically, the amount of transfers has fluctuated. In FY 22 there was a one-time increase of \$2,000,000 to fund Equity and Quality of Life projects. Towards the later years of the 5-Year CIP, the General Fund will need allocate additional funds for capital projects in order to support ongoing debt service payments.

Figure 7. Revenue Sources for Capital Improvements

Asset Class	FY23 Budget	FY24 Plan	FY25 Plan	FY26 Plan	FY27 Plan	Average
General Fund Operations	\$5,939,693	\$6,111,944	\$6,289,190	\$6,471,577	\$6,659,253	\$6,294,331
Unrestricted CR&I ³	\$12,898,722	\$927,059	\$949,536	\$945,766	\$972,760	\$3,338,769
Motor Fuel Taxes	\$3,101,378	\$2,502,321	\$2,580,211	\$2,638,409	\$2,724,782	\$2,709,420
Grants	\$956,800	\$200,000	\$11,200,000	\$4,600,000	\$0	\$3,391,360
Sanitary Sewers	\$1,493,911	\$1,518,979	\$1,562,186	\$1,607,388	\$1,650,401	\$1,566,573
Stormwater Facilities	\$1,906,418	\$1,959,744	\$2,021,085	\$2,084,287	\$2,130,633	\$2,020,433
Total Revenue	\$26,296,921	\$13,220,047	\$24,602,208	\$18,347,427	\$14,137,829	\$19,320,887

3. Includes \$12M in General Obligation Bond Revenue.

Funding Gap Analysis

Funding Gaps

A quick comparison of funding targets and current revenues shows that current revenues are substantially less than the funding targets for CR&I or O&M. In the long term, this will lead to a deterioration of the average asset condition and shortening of life expectancy. Altogether, current revenues are approximately \$13.7M less than the total combined funding target of \$30M.

Figure 8. Funding Gaps

Asset Class	CR&I Target	O&M Target	Total Target	Revenue (<i>Less Debt, Grants Averaged</i>)	Annual Funding Gap	Revenue Source
Major Road	\$9,000,000	\$5,400,000	\$14,400,000	\$8,794,994	(\$5,605,006)	MFT taxes
Other/Unrestricted.	\$4,183,333	\$2,450,000	\$6,633,333	\$4,016,851	(\$2,616,482)	Misc Taxes.
Sanitary Sewer	\$1,650,000	\$1,650,000	\$3,300,000	\$1,566,573	(\$1,733,427)	Benefit Tax
Stormwater	\$2,900,000	\$2,900,000	\$5,800,000	\$2,020,433	(\$3,779,567)	User Fee
Total	\$17,733,333	\$12,400,000	\$30,133,333	\$16,398,851	(\$13,734,482)	

Sustainable Rates

It should be noted again, that the asset valuations and funding targets are developed using benchmark industry standards, which have an inherent degree of imprecision. However, this analysis can be used to begin to identify what new, sustainable tax rates are needed in order for revenue to sufficiently fund the targeted amount of expenditures. For a hypothetical two-car, two-and-a-half person, single-family household, the projected effect would be an increase in taxes and fees of \$410/year. In the upcoming fiscal year, staff plan on exploring this issue in more detail to inform a discussion of sustainable tax rates for the local motor fuel tax, stormwater utility fee, and sewer benefit fee.

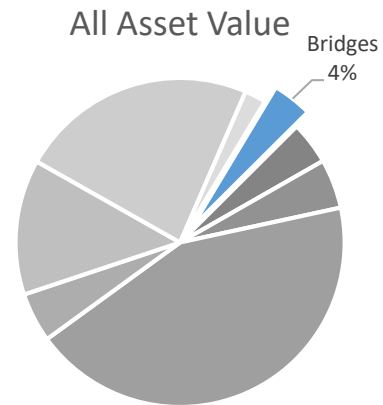
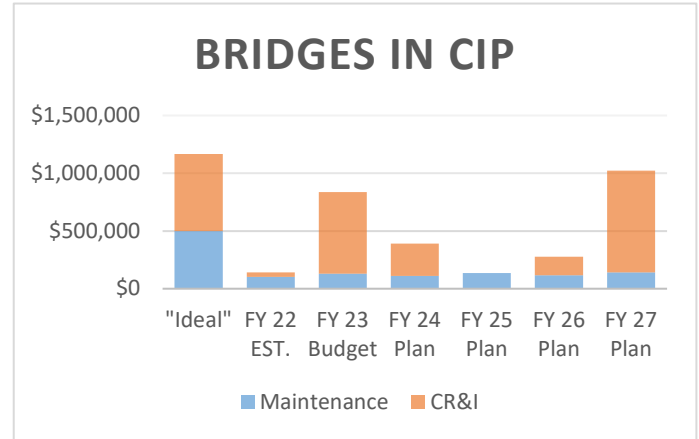
Figure 9. Hypothetical/Illustrative Sustainable Rates

Asset Class	Current Rate	Needed Rate Increase	New Rate	Average Annual New Revenue/User	Calculations Notes
Pavement/Major Road	\$0.05	64%	\$0.09	\$26	Per Driver (650 a year)
Other/Unrestricted.		7%	\$0.00	\$68	Total GF Revenue, Per 2.5 person household
Sanitary Sewer	\$0.15	111%	\$0.32	\$62	Rate per 100, assume 100 per day per household
Stormwater	\$5.60	187%	\$16.08	\$126	Per single-family home (year)
Total				\$410	Per household

Bridges

Description: Bridges and Box Culverts in the City of Urbana used either for pedestrian or vehicular traffic and stormwater conveyance.

Asset Summary Table		
Quantity	25	Bridges
Value	\$40,300,000	Replacement Value (2020)
Life Expectancy	75	Years
Capital Replacement and Investment		
Target CR&I / Year	\$666,667	Straight Line Depreciation
Target CR&I / CIP	\$3,333,333	5-Year CIP
CIP Planned CR&I	\$ 2,063,500	
Deferred CR&I in CIP	(\$1,269,833)	
Operations and Maintenance Cost		
Annual O&M Target	\$500,000	Rudimentary 1%
Current Annual Maintenance Cost	\$128,984	
Annual Deficit	\$371,016	



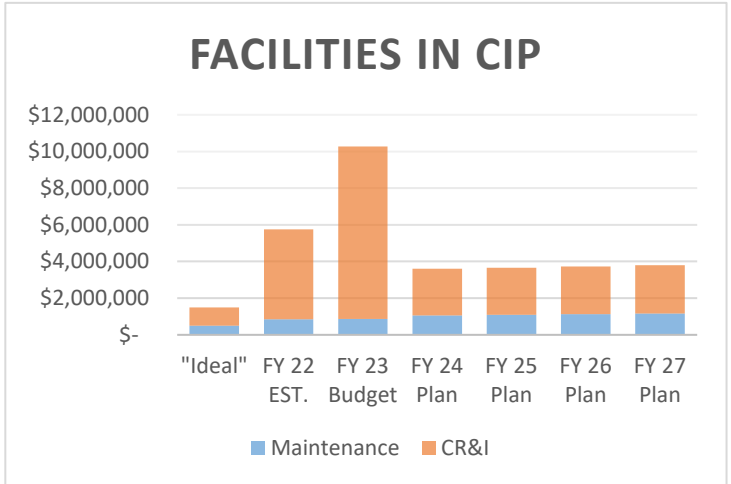
Notes: Washington Street Bridge was load restricted to 12 tons and added in FY 23 as an emergency repair as it is currently causing MTD buses and other heavy vehicles to reroute. Annual bridge inspection and maintenance programs have been added to CIP to better identify and anticipate future bridgework needs.

Asset Plan Documents: [Bridge Survey](#)

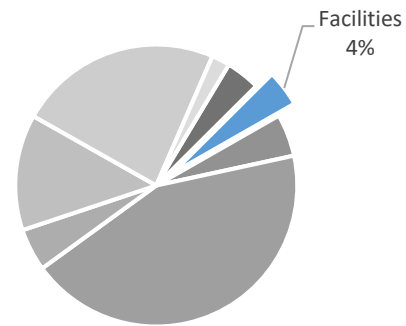
Public Facilities

Description: Public facilities: four fire stations, pump house, LRC, City Building, Civic Center, Public Works buildings, storage shed, and landfill.

Asset Summary Table		
Quantity	12	Major Public Facilities
Value	\$43,200,000	Replacement Value
Life Expectancy	50	Years
Capital Replacement and Investment		
Target CR&I / Year	\$1,000,000	Straight Line Depreciation
Target CR&I /CIP	\$5,000,000	5-Year CIP,
CIP Planned CR&I	\$19,753,425	Debt Payments
Deferred CR&I in CIP	\$14,753,425	Implementing Facilities Plan
Operations and Maintenance Cost		
Annual O&M Target	\$500,000	Rudimentary 1%
Current Annual Maintenance Cost	\$870,911	EST. using operations data
Annual Deficit	\$ (370,911)	O&M costs includes utilities and other incidentals



All Asset Value



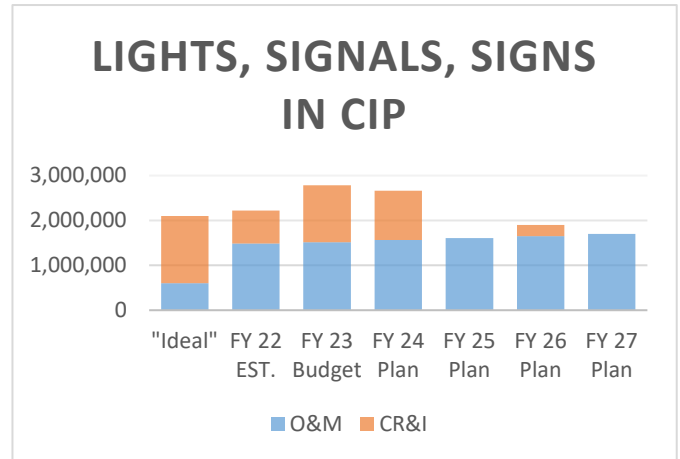
Notes: The City is implementing the vast majority of the Facilities Master Plan. Most of the facility improvements will begin in FY 23 and be funded with debt financing. The surplus capital spending in the CIP reflects years of deferred investment. After the completion of the plan, most facilities would not need major CR&I improvements for several years, with the possible exception of a City Building expansion. Since facilities improvements are occurring in rapid succession, it is important to understand the limitations of the straight line depreciation on replacement value for financial planning. The CR&I expenditures reflect annual debt service payments as they occur.

Asset Plan Documents: [Facilities Master Plan](#)

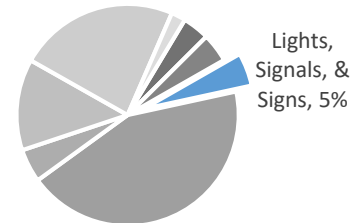
Lights, Signals, Signs

Description: 48 traffic signal controllers, 96 traffic signal mast arms, 96 traffic signal poles, 98 street light controllers, 4,073 street light poles/luminaires, 512,181 feet of conduit and wiring and 4,516 signs.

Asset Summary Table		
Quantity	4,073	Light Poles
Value	\$ 49,810,000	Replacement Value
Life Expectancy	40	Years
Capital Replacement and Investment		
Target CR&I / Year	\$1,500,000	Straight Line Depreciation
Target CR&I /CIP	\$7,500,000	5-Year CIP
CIP Planned CR&I	\$2,620,000	(some work included in Projects)
Deferred CR&I in CIP	(\$4,880,000)	
Operations and Maintenance Cost		
Annual O&M Target	\$600,000	Rudimentary 1%
Current Annual Maintenance Cost	\$1,517,414	EST. using operations budget
Annual Deficit	\$(917,414)	(surplus due to past deferrals)



All Asset Value



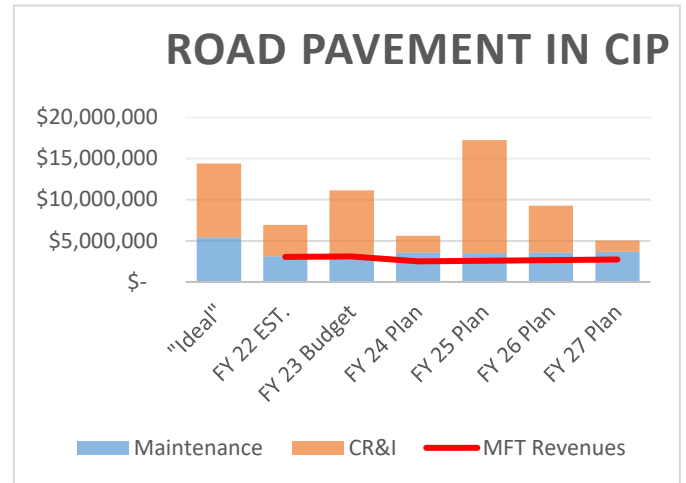
Notes: Goal in this CIP is to develop long-term proactive maintenance and capital investment strategies. FY 22 Budget has funds set aside to develop a plan for signal replacement and maintenance and the FY 23 Budget earmarks funds for street lighting planning.

Asset Plan Documents: No current plan documents.

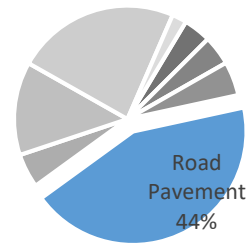
Road Pavement

Description: 2,557,508 square yards of pavement.

Asset Summary Table		
Quantity	2,557,508	Square Yards of Pavement
Value	\$445,500,000	Replacement Value
Life Expectancy	60	Years
Capital Replacement and Investment		
Target CR&I / Year	\$9,000,000	Straight Line Depreciation
Target CR&I /CIP	\$45,000,000	5-Year CIP
CIP Planned CR&I	\$ 30,542,416	
Deferred CR&I in CIP	\$(14,457,584)	
Operations and Maintenance Cost		
Annual O&M Target	\$5,400,000	Rudimentary 1%
Current Annual Maintenance Cost	\$3,347,346	EST. using operations data
Annual Deficit	\$2,052,654	



All Asset Value



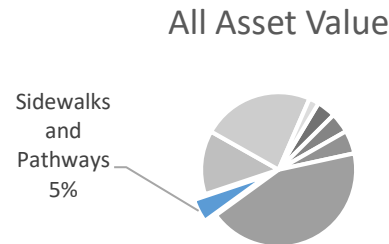
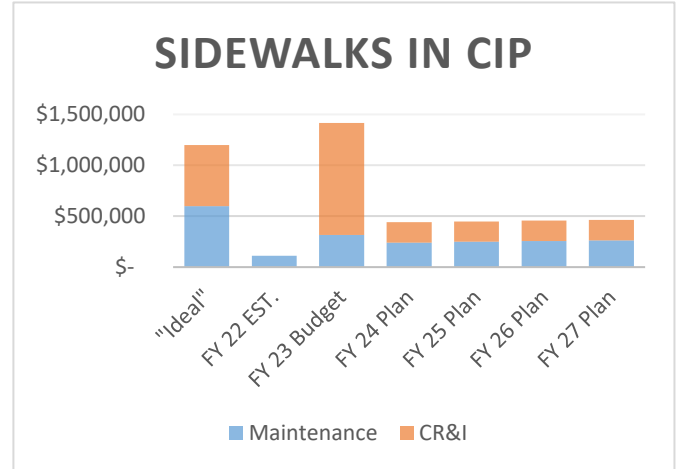
Notes: The City recently completed its pavement condition assessment and is using that to scope and prioritize transportation capital improvement projects. More detail on the transportation prioritization method can be seen in the Transportation Project Book section of the CIP. Regarding life expectancy, 60 years is the estimated best case scenario right now; for reference IDOT benchmarks roads at a 45-year life expectancy. Currently, the construction standards in City code allow for roads that may not last beyond 20 years, a problem the City is currently experiencing with several subdivision build in the early 2000's, including the Savannah Green area, which is slated for rehabilitation in FY 23 in the CIP.

Asset Plan Documents: [Pavement Condition Assessment Study](#)

Sidewalk and Paths

Description: 4.1 million square feet of pavement for sidewalks and pathways in the City rights-of-way.

Asset Summary Table		
Quantity	4,165,040	Square feet
Value	\$50,000,000	Replacement Value
Life Expectancy	100	Years
Capital Replacement and Investment		
Target CR&I / Year	\$600,000	Straight Line Depreciation
Target CR&I /CIP	\$3,000,000	5-Year CIP
CIP Planned CR&I	\$1,900,000	Included in other projects
Deferred CR&I in CIP	(\$1,100,000)	
Operations and Maintenance Cost		
Annual O&M Target	\$600,000	Rudimentary 1%
Current Annual Maintenance Cost	\$120,000	Sidewalk and Paths Project
Annual Deficit	\$480,000	



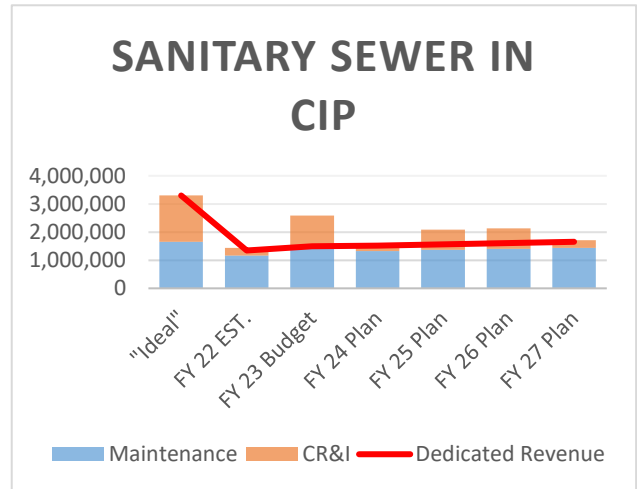
Notes: The Champaign County Regional Planning Commission has a Sidewalk Network Inventory and Assessment. This has not been translated to an annual CR&I implementation plan but staff is working on it. The CIP includes CDBG funds for sidewalk projects. While there are not typically sidewalk specific CR&I projects in the CIP, sidewalks and paths are typically improved in large transportation projects. FY 23 figures include an estimate for the Equity and Quality of Life (EQL) project based off the types of projects submitted; figures may change as EQL funding is allocated.

Asset Plan Documents: [RPC Sidewalk Inventory](#)

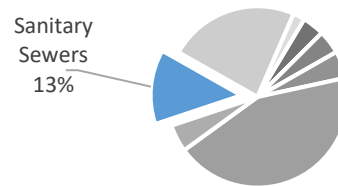
Sanitary Sewers

Description: 542,208 feet of pipe (102 miles) of various diameters as well as 2,315 manholes.

Asset Summary Table		
Quantity	542,208	Feet of Pipe
Value	\$136,600,000	Replacement Value
Life Expectancy	100	Years
Capital Replacement and Investment		
Target CR&I / Year	\$1,650,000	Straight Line Depreciation
Target CR&I /CIP	\$8,250,000	5-Year CIP
CIP Planned CR&I	\$3,137,541	
Deferred CR&I in CIP	(\$5,112,459)	
Operations and Maintenance Cost		
Annual O&M Target	\$1,650,000	Rudimentary 1%
Current Annual Maintenance Cost	\$1,168,146	EST. using operations data
Annual Deficit	\$481,854	



All Asset Value



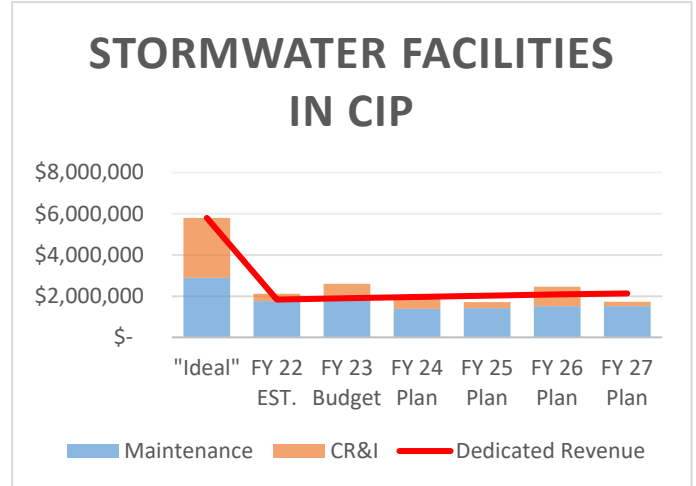
Notes: The City shares ownership of the sanitary sewer system with the Urbana Champaign Sanitary District, which owns their own pipes and the Wastewater Treatment Plant. The Urbana Sewer Use rate is \$0.1540 per 100 gallons.

Asset Plan Documents: https://www.urbanaininois.us/Sanitary_Sewer_System

Stormwater Facilities

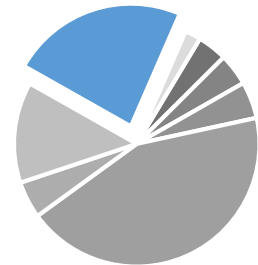
Description: Stormwater facilities include 763,702 feet (144 miles) of stormwater pipes, wet bottom retention basis, dry bottom detention basins, 8,000 manholes, and the Vine Street pump station.

Asset Summary Table		
Quantity	763,702	Feet of Pipe
Value	\$239,600,000	Replacement Value
Life Expectancy	100	Years
Capital Replacement and Investment		
Target CR&I / Year	\$2,900,000	Straight Line Depreciation
Target CR&I /CIP	\$14,500,000	5-Year CIP
CIP Planned CR&I	\$2,909,706	
Deferred CR&I in CIP	(\$11,590,294)	
Operations and Maintenance Costs		
Annual O&M Target	\$2,900,000	Rudimentary 1%
Current Annual Maintenance Cost	\$1,757,260	using operations data
Annual Deficit	\$1,142,740	



All Asset Value

Stormwater Facilities
23%



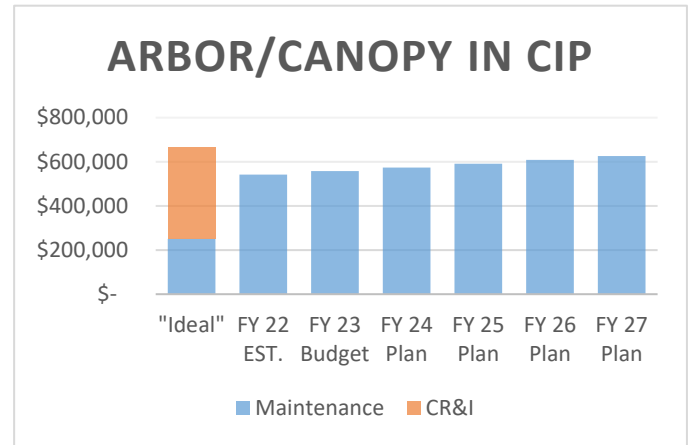
Notes: A Stormwater Management Plan that began in recent years is targeted for completion and implementation in FY 2023. The City implemented a dedicated Stormwater utility fee (\$5.60 per Equivalent Residential Unit (ERU); ERU = 3,100 square feet of impervious area) in 2011 to fund the management of our stormwater facilities and National Pollutant Discharge Elimination System (NPDES MS4) permit compliance.

Asset Plan Documents: Final Stormwater Asset Management Plan forthcoming in FY 2023
https://www.urbanaininois.us/Stormwater_Utility_Fee

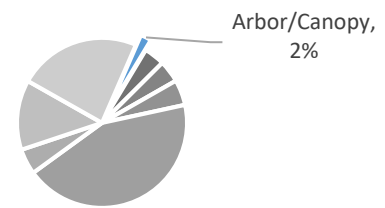
Urban Canopy

Description: Parkway trees, in City owned rights-of-way and City-owned properties.

Asset Summary Table		
Quantity	10,935	City Trees
Value	\$21,400,000	Replacement Value
Life Expectancy	60	Years
Capital Replacement and Investment		
Target CR&I / Year	\$416,667	Straight Line Depreciation
Target CR&I /CIP	\$2,083,333	5-Year CIP
CIP Planned CR&I	0	
Deferred CR&I in CIP	(\$2,083,333)	
Operations and Maintenance Costs		
Annual Maintenance Target	\$250,000	Rudimentary 1%
Current Annual Maintenance Cost	\$542,274	EST. using operations data
Annual Deficit	\$ (292,274)	



All Asset Value



Notes: The City has over 10,000 parkway trees planted. In addition to reactive maintenance from wear and weather, trees are proactively trimmed on a multi-year cycle. Ideally, parkway trees should be trimmed on a 7-year cycle; staff time currently allows for maintaining trees on an 11+ year cycle. The annual CR&I figure is the replacement cost of a mature tree. In practice, a 60-year old tree would not be replaced in kind. This figure does not include the cost of adding new trees to vacant sites. It should be noted that planting new trees would come with a corresponding increase in maintenance requirements; without an increase in staff and equipment, the proactive trimming cycle would lengthen, impacting the health of the trees.

Asset Plan: The City is currently reviewing its long-term plans for managing its Urban Canopy. Past practice has been to replace trees as they die. However, this practice, in conjunction with budget constraints, has led to a geographically unequitable distribution of City trees. The City recently received a \$100,000 donation from a private donor to promote a more equitable allocation of street trees.