



2017 – 2021

Capital Improvement Program

October 18, 2016

Planning Commission Presentation

Sec. 2-89. - General powers and duties of the planning commission.

(a) Recommendations and advisements on planning subjects.

It shall be the duty of the planning commission, after considering the advice of the planning director, to:

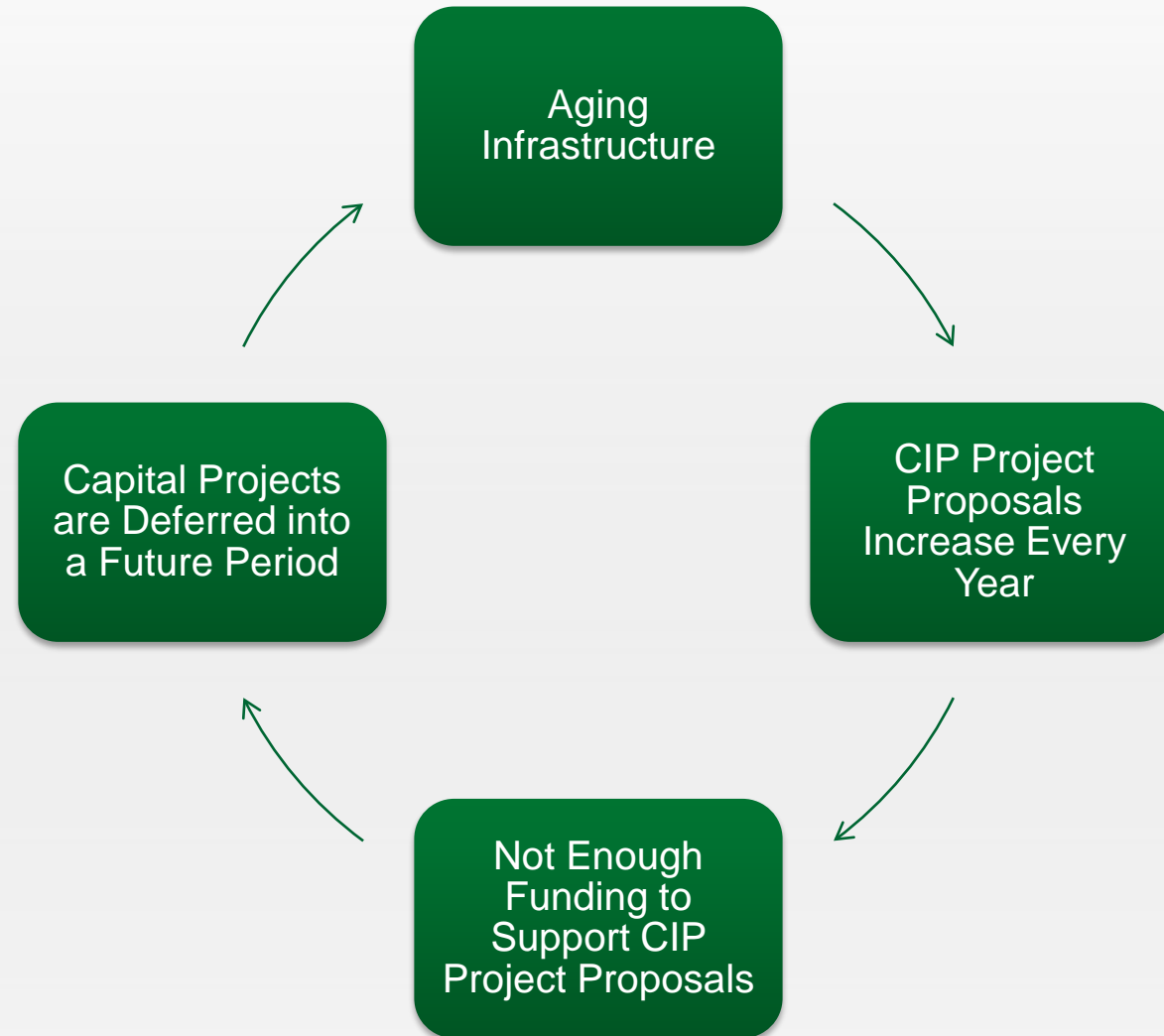
advise the city council on zoning and land subdivision matters as provided in the respective ordinances; on the comprehensive development plan; on the official map of the city; on proposed ordinances concerning land use and land development regulations; on urban renewal; **on expenditures for capital improvements, where such improvements refer to a matter covered by the comprehensive plan or the official map** and on such other planning subjects as are referred to it by the city council or the city manager.

All such recommendations and advisements by the planning commission shall be submitted to the council within a time specified by the council and prior to the public hearing by the council on the proposed ordinance, where applicable.

Goals of the CIP

- Projects will seek to advance Newark's vision elements
 - Healthy & Active Community
 - Sustainable Community
 - Inclusive Community
- Maintain and enhance the City's physical framework
 - Streets and Sidewalks
 - Parks and Parking Facilities
 - Municipal & Police Facilities
 - Utility infrastructure
- Support the provision of services to the City's residents
- Ensure the financial strength of the City via prudent investments and decision making

Rolling CIP



CIP Detail Sheets – Capital Program

806 - - CAPITAL PROGRAM.

806.1 - Submission to Council. The City Manager shall prepare and submit to the council a five-year capital program annually, and not later than forty-five (45) days before the beginning of the fiscal year. **The capital program shall include the following elements and information:**

- (1) A clear general summary of its contents;
- (2) A list of all capital improvements which are proposed to be undertaken during the five (5) fiscal years next ensuing with appropriate supporting information as to the necessity for such improvements;
- (3) Cost estimates, method of financing, and recommended time schedules for each such improvement; and
- (4) The estimated annual cost of operating and maintaining the facilities to be constructed or acquired.

CIP Detail Sheets

CITY OF NEWARK, DELAWARE CAPITAL BUDGET - PROJECT DETAIL			
DEPARTMENT:	Electric	DIVISION:	
PROJECT NO: E1701	PROJECT TITLE: New Lines and Services	PROJECT LOCATION: Various locations in the City	
PROJECT STATUS (CHECK ONE):	<input type="checkbox"/> NEW	<input checked="" type="checkbox"/> IN PRIOR PROGRAM	<input type="checkbox"/> IN PROGRESS
PRIORITY:	1 Highest Priority Level	Project underway and must be completed	
COMPREHENSIVE DEVELOPMENT PLANNING VISION ELEMENT:		Sustainable Community	
<p>Charter § 806.1(2) DESCRIPTION & JUSTIFICATION:</p> <p>Installation of electric distribution lines in new developments. This includes both overhead and underground primary and secondary services lines. This project is required based on the obligation to serve new customers in the City.</p>			

PROJECT PRIORITY LEVELS		
1	Highest	Project underway and must be completed
2	High	Critical need to remediate failing service, prevent failure, or generate savings
3	Medium-High	The City would be taking a calculated risk in the deferral of this item
4	Medium	This project is a NEED and not a WANT, but no significant risk in the deferral of this item
5	Low	This project is a NEED and not a WANT, but it can start in year two of this CIP or later

CIP Detail Sheets

PRIORITY: 1 - Highest Priority Level	Project underway and must be completed
COMPREHENSIVE DEVELOPMENT PLANNING VISION ELEMENT:	Sustainable Community

COMPREHENSIVE DEVELOPMENT PLANNING VISION ELEMENTS

Healthy & Active Community	Bicycle & Ped access to encourage exercise, complete streets, ample parks & open space, compact/mixed development
Sustainable Community	Promote transit/alt transportation to reduce fossil fuels, stream vally/watershed protection, energy conservation , recycling, air & water quality, diverse economic base
Inclusive Community	Access to transit/alt transportation, range of housing choices & affordability, fair housing, access to dining, shopping, entertainment, arts, employment, good schools, parks & open spaces, day care, health care

CIP Detail Sheets

§ 806.1(3) SUMMARY OF PROJECT DATA		PROJECT COST BY CATEGORY					
First Year in Program	ONGOING	CLASSIFICATION	ACCOUNT NUMBERS	AMOUNT			
Est. Completion Date	ONGOING	Labor	5195106.9860	\$	287,500		
Est. Useful Life (in years)	30 YRS.	Materials	5195106.9760	\$	337,500		
Est. Total Cost	625,000	Other Contracts					
Est. Spend @ 12/31 (if underway) ¹	-	Total Project Cost		\$	625,000		
Balance to be funded ¹	625,000	¹ For ongoing projects, we must estimate total spent since inception through current year to derive the balance to be funded thereafter.					
% Complete (if underway)							
PROJECT FINANCING BY PLAN YEAR							
§ 806.1(3) SOURCE OF FUNDS	PRIOR ²	2017	2018	2019	2020	2021	TOTAL
CURRENT RESOURCES		125,000	125,000	125,000	125,000	125,000	625,000
CAPITAL RESERVES							-
EQUIPMENT REPLACEMENT							-
BOND ISSUES							-
GRANTS (Specify)							-
OTHER (Specify)							-
OTHER (Specify)							-
TOTAL	-	125,000	125,000	125,000	125,000	125,000	625,000
² "Prior" refers to that portion of project funding that was authorized in a prior year but which is not expected to be spent through 12/31 of the current year. Accordingly, Council is not required to authorize budget year funding for that portion, but that portion of the project will indeed represent a cash outflow in the budget year and/or "out years."							
§ 806.1(4) ESTIMATED ANNUAL COST OF OPERATING / MAINTAINING PROJECT OR ASSET							
OPERATING IMPACT		2017	2018	2019	2020	2021	TOTAL
INCREMENTAL COSTS (NET SAVINGS)							

CIP Detail Sheets - Enhancement

ALPHA CODE	JUSTIFICATION
A	Return on Investment - Overall Savings
B	Public Safety
C	Community Health
D	Efficiency/Other

<u>PROJECT #/PROJECT NAME/JUSTIFICATION CODE</u>		<u>2016 BUDGET</u>
E1701 New Lines & Services	D	\$125,000
E1702 Reconductor-Main Street	D	0
E1602 Circuit Breaker Replacement	D	0
E1502 Star Campus Underground Distribution	D	0
E1504 LED Streetlight Installation	A	459,759
E1402 12 KV Line Extension	D	42,765
E1403 Conductor Upgrades	D	190,000
E1203 CAD Software	D	0
E1104 Spacer Cable Replacement	D	0
E1105 New Transformers & Circuit Breakers	D	606,000
E0903 12KV Changeover	A	29,895
E0503 SCADA & Automatic Switching	D	501,000
EEQSF Vehicle Replacement Program	D	360,000
Total Electric Fund		<u>\$2,314,419</u>

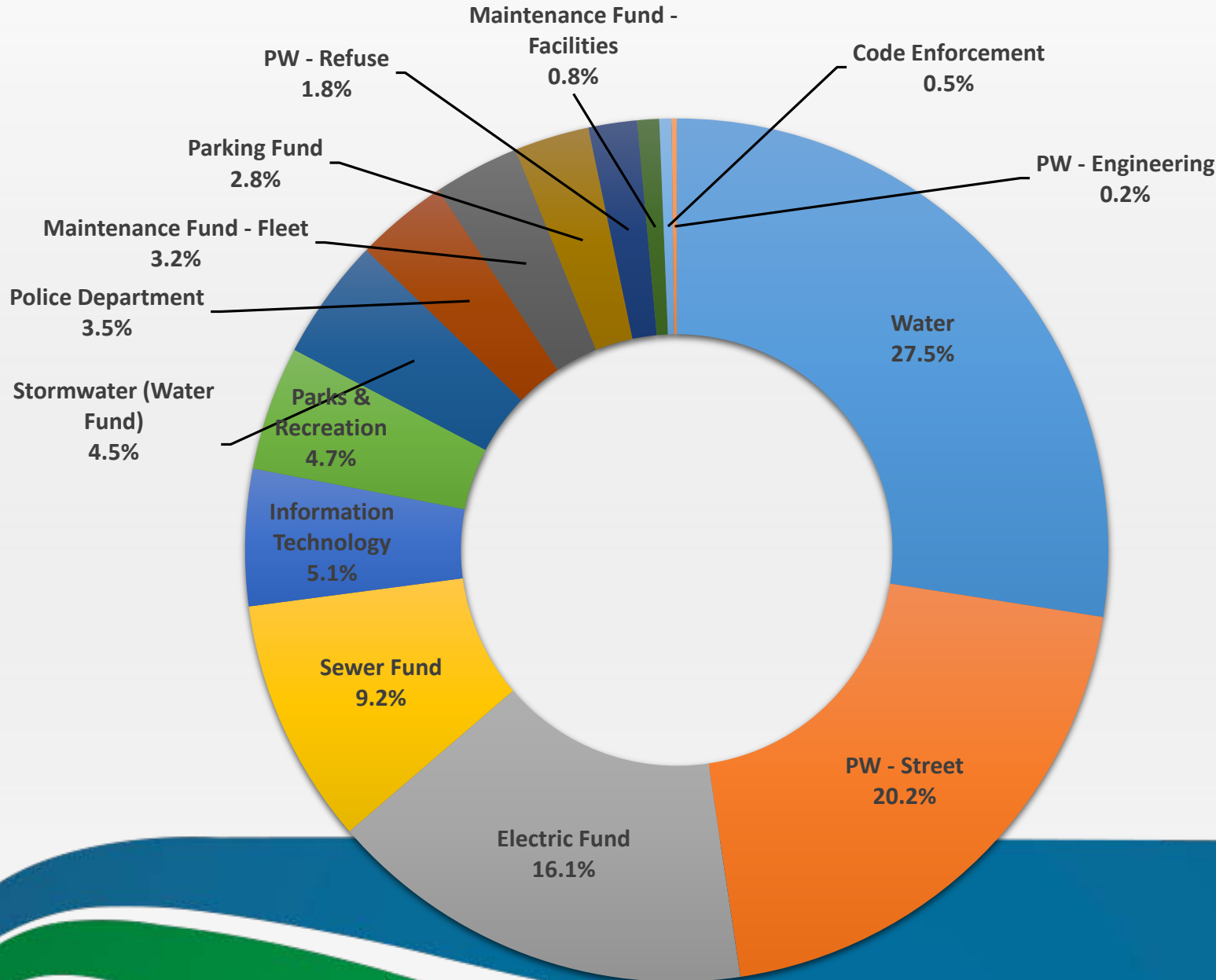
Key Accomplishments - 2016

- ▶ **2016 Annual Street Contract** (underway): \$1,199,500 – 15 Streets
- ▶ **2016 ADA Curb Ramp Contract** (underway): \$182,300.50 – 51 Ramps including ADA Accessibility Upgrades to City Hall
- ▶ **2016 Water Main Contract** (nearing completion): \$1,234,273.50 – 4,863 linear feet of main replacement – 100-year life expectancy.
- ▶ **Vehicle and Equipment Replacement:** New sanitary sewer jet truck and camera system: \$279,393.60
- ▶ Completed **Windy Hills tank painting** and lead abatement: \$529,750
- ▶ **Louviers tank painting** (underway): \$424,000
- ▶ **SCADA: Automated controls at Paper Mill Booster Station**, performed survey of entire water and wastewater system for SCADA master plan, and replaced five controllers, created a single alarm screen, added Unit 92 and upgraded software.
- ▶ **Electric transformer, circuit breaker & conductor upgrade** \$796,000 – almost completed.
- ▶ **New 10mva transformer, 15kv circuit breaker and aerial lines** were installed at the West Main Street substation in order to relieve load on East Main transformer #80. The new transformer #92 will feed Cleveland Avenue to Paper Mill Road and feed North on Paper Mill Road.
- ▶ **The aerial conductors on Nottingham Road were replaced with larger conductors** to allow proper load flow. Nottingham Green and Nottingham Road will be converted from 4.16kv to 12.47kv. The voltage conversion saves energy by reducing losses and also allows the city to avoid replacing 4.16kv power transformers.
- ▶ **The specifications for the 34.5kv fault detection and automatic switching system are almost complete** The system will automatically detect the location of a fault on our sub-transmission system and if possible transfer the substation to another circuit reducing the outage time to minutes on the most heavily loaded circuits.

	PROPOSED BUDGETS					TOTAL
	2017	2018	2019	2020	2021	PROPOSED AMOUNTS
ELECTRIC FUND	\$ 1,765,500	\$ 480,000	\$ 710,500	\$ 1,077,000	\$ 875,000	\$ 4,908,000
WATER FUND	3,522,660	3,175,500	2,924,000	3,747,050	2,321,203	15,690,413
SEWER FUND	1,013,675	700,000	800,000	800,000	800,000	4,113,675
PUBLIC WORKS-GENERAL FUND	2,438,000	2,670,700	2,314,894	1,945,592	2,151,804	11,520,990
PUBLIC WORKS-MAINTENANCE FUND	442,549	450,380	-	-	-	892,929
POLICE DEPARTMENT	381,818	205,908	431,855	64,120	150,850	1,234,551
PARKS & RECREATION DEPARTMENT	511,700	2,165,100	2,305,000	205,000	278,000	5,464,800
PARKING FUND	309,590	514,350	32,600	28,000	105,000	989,540
INFORMATION TECHNOLOGY DIVISION	562,500	365,000	65,000	150,000	-	1,142,500
OTHER DEPARTMENTS	50,000	122,000	25,000	17,000	25,000	239,000
	\$ 10,997,992	\$10,848,938	\$ 9,608,849	\$ 8,033,762	\$6,706,857	\$ 46,196,398
<u>LESS: PLANNED FINANCING SOURCES</u>						
USE OF RESERVES	(4,525,674)	(155,500)	-	-	-	(4,681,174)
VEHICLE & EQUIPMENT REPLACEMENT	(1,172,318)	(1,091,818)	(1,529,318)	(722,818)	(422,818)	(4,939,090)
GRANTS	(945,000)	(895,000)	(545,000)	(545,000)	(545,000)	(3,475,000)
BOND ISSUES	-	-	-	-	-	-
OTHER FINANCING SOURCES	-	-	-	-	-	-
TOTAL FINANCING SOURCES	\$ (6,642,992)	\$ (2,142,318)	\$ (2,074,318)	\$ (1,267,818)	\$ (967,818)	\$ (13,095,264)
NET CAPITAL IMPROVEMENTS	\$ 4,355,000	\$ 8,706,620	\$ 7,534,531	\$ 6,765,944	\$5,739,039	\$ 33,101,134

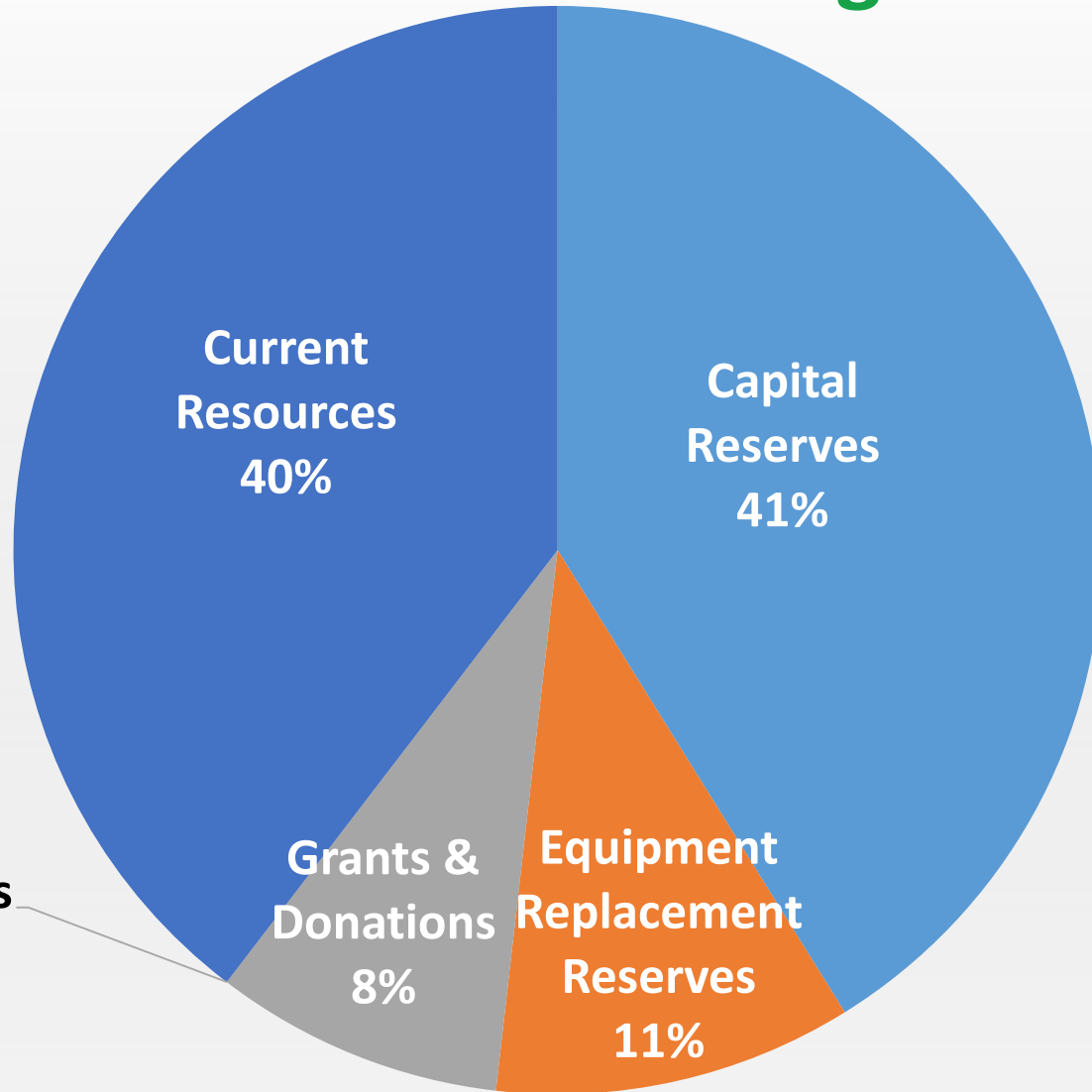
Capital Improvement Program Totals 2017-2021 11

2017 Gross Capital Expenditures by Department



Department/Division	Total	% of Total
Water	\$ 3,022,660	27.5%
PW - Street	2,217,000	20.2%
Electric Fund	1,765,500	16.1%
Sewer Fund	1,013,675	9.2%
Information Technology	562,500	5.1%
Parks & Recreation	511,700	4.7%
Stormwater (Water Fund)	500,000	4.5%
Police Department	381,818	3.5%
Maintenance Fund - Fleet	352,549	3.2%
Parking Fund	309,590	2.8%
PW - Refuse	200,000	1.8%
Maintenance Fund - Facilities	90,000	0.8%
Code Enforcement	50,000	0.5%
PW - Engineering	21,000	0.2%
TOTAL	\$10,997,992	100.0%

2017 Funding Sources for CIP



Funding Source	Amount	%
Capital Reserves	\$ 4,525,674	41.2%
Equipment Replacement Reserves	1,172,318	10.7%
Grants & Donations	945,000	8.6%
Bond Issuances	-	0.0%
Current Resources	4,355,000	39.6%
TOTAL	\$ 10,997,992	100.0%

Funding Source	2016%	2017%
Capital Reserves	41.0%	41.2%
Equipment Replacement Reserves	11.0%	10.7%
Grants & Donations	8.0%	8.6%
Bond Issuances	0.0%	0.0%
Current Resources	40.0%	39.6%
TOTAL	100.0%	100.0%

Capital Projects – Priority Level 1

➤ Equipment Replacement					\$1,153,500
➤ Water and Stormwater	\$250,000	Public Works	\$441,000		
➤ Police	\$312,000	Electric & Others	\$150,500		
➤ Electric SCADA System					\$816,000
➤ Electric Transformers/Circuit Breakers					\$653,000
➤ Sewer System Master Plan					\$500,000
➤ Water Main: Windy Hills to Red Mill					\$429,350
➤ Storm Drainage Improvements					\$400,000
➤ Property Maintenance Software					\$317,500
➤ Salt Shed/Maintenance Yard Plan					\$250,000
➤ Storm System Study (Stormwater utility)					\$250,000
➤ Other Projects					\$1,360,384

Capital Projects - Priority Level 2

➤ Annual Street Program	\$1.5 million
➤ Water Main Renovation	\$1 million
➤ Water Disinfection Equipment	\$643,000
➤ Newark Transportation Plan	\$252,000
➤ Parks Hard Surface Improvements	\$194,000
➤ Water Plant & Reservoir Cameras	\$ 80,000
➤ Municipal Building Improvements	\$ 70,000
➤ Parking Lot Surface Maintenance	\$ 69,740
➤ Reservoir Upgrades	\$ 50,000
➤ Other Projects	\$143,968

Capital Projects - Priority Level 3-4

- Water Storage Reconfiguration \$225,000
- Bicycle/Pedestrian Bridge \$200,000
- Parking Lot Surveillance \$130,000
- Reconductor-Main Street \$ 85,000
- Surveillance Camera Refresh \$ 65,000
- Additional Parking Meters \$ 54,850
- Lot Full Signs \$ 30,000
- Water Tank Maintenance \$ 25,000
- Source Water Protection \$ 20,000
- Fence Repair and Construction \$ 15,700

Significant Projects (out years) 2018 – 2021

➤ Star Campus Underground Distribution	\$1.3 million
➤ Laird Tract Well Field Treatment Plant	\$1.6 million
➤ Air Stripper Replacement	\$1.0 million
➤ Water Main Renovation Program	\$3.0 million
➤ Water Tank Maintenance	\$2.1 million
➤ Storm System Study & Repairs	\$1.8 million
➤ Sanitary Sewer Study & Repairs	\$3.1 million
➤ Annual Street Program	\$7.3 million
➤ Parks Hard Surface Improvements	\$1.2 million
➤ Old Paper Mill Park Improvements	\$1.8 million

Stormwater Accomplishments

- Creek Bend Court Emergency Culvert replacement (Completed in 2014) - **\$80,000**
- Hunt at Louviers Stormwater basin retrofits (Completed in 2014) - **\$91,350 (grants/donation-funded)**
- Timberline Drive Culvert Analysis (Analysis complete, Alternatives to be discussed with Council) - **\$12,500**
- Jenny's Run Culvert Removal (Anticipate final stabilization complete by October 31, 2016) - **\$218,600**
- Corrugated Metal Pipe Inspection (Currently underway, anticipated completion December 31, 2016) - **\$104,388**
- Woods at Louviers Structural Liner installation in deteriorated pond outfall pipe in poor condition. Pilot project to evaluate effectiveness of method. (PO Written, work not commenced as of 10-13-16) – **\$26,300**
- Created Surface Water Master Plan Geographic Information System (GIS) Database for all of the stormwater related infrastructure in Newark. Task included physical survey of pertinent features. – **(\$247,850 - \$100K grant/\$147,850 City)**
- Utilized University of Delaware student interns along with City staff to collect physical features of roughly 20% of buried stormwater infrastructure.
- Repaired or replaced 124 Catch Basins in 2014 and 2015 utilizing city staff. 2016 data not available yet.

Stormwater CIP 2017-2021

BUDGETED/PLANNED (\$2,738,253) 2017-2021

➤ Storm Drainage Improvements	\$400,000	2017
➤ Stormwater Startup	\$250,000	2017
➤ Vehicle Replacement	\$78,000	2017-2018
➤ NPDES Phase II Stormwater Quality	\$200,000	2017-2021
➤ Stormwater Study and Repairs	\$1,810,253	2018-2021

Conclusion / Questions

