

2018 Budget Presentation

Public Works

August 16, 2017



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Mayor Pete Buttigieg

DEPARTMENT OF PUBLIC WORKS

2018 BUDGET PRESENTATION

AUGUST 2017

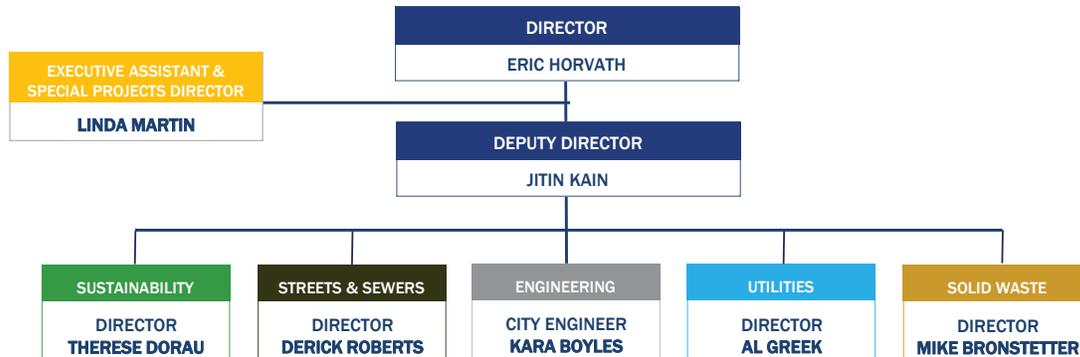
PUBLIC WORKS MISSION

WE BUILD THE FOUNDATION FOR A THRIVING CITY

We accomplish this mission by:

1. Providing essential household services
2. Developing sustainable assets and infrastructure
3. Enhancing the community's quality of life

PUBLIC WORKS ORGANIZATION



Department of Public Works

PUBLIC WORKS FUNDS



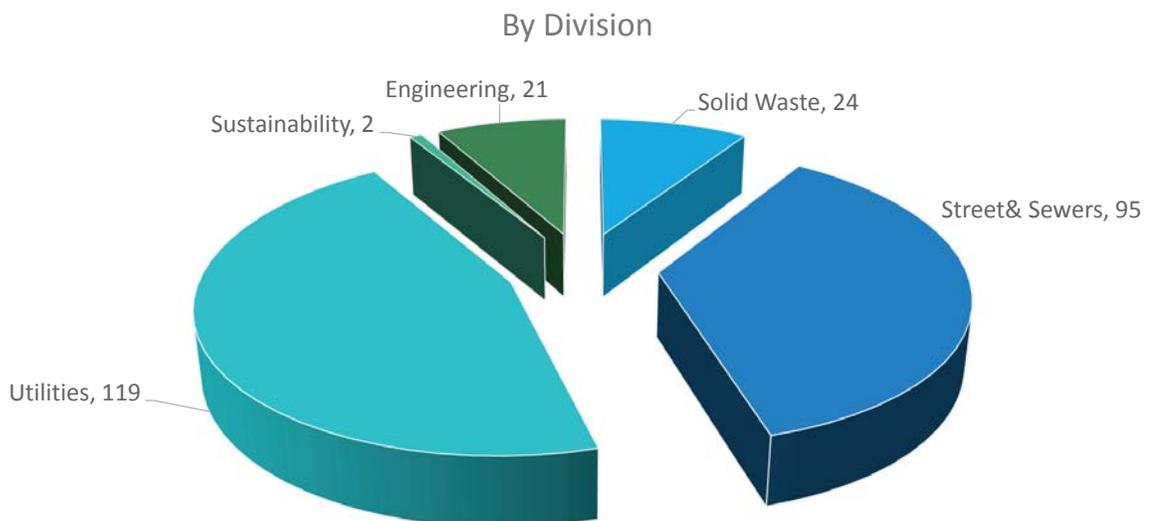
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PUBLIC WORKS STAFFING



Department of Public Works

PUBLIC WORKS FTE



Department of Public Works

ENGINEERING

Manages the development and expansion of our city's infrastructure. Oversees Public Works projects from setting the standards to issuing the permits, administering the contracts, and inspecting construction.

Engineering Projects

ROADWAYS AND TRAFFIC

Pavement Restoration

- Bendix Drive
- Olive Street
- Ironwood Drive
- Ameritech Drive

Intersection Upgrades

- Corby-Rockne-Ironwood
- Jefferson & Twyckenham
- Lincoln Way W. & Charles Martin

Smart Streets

- Downtown Cross-Streets
- Fellows & Dubail Streetscape

NEIGHBORHOODS

Pedestrian Safety

- Monroe and Studebaker SRTS
- LaSalle and Marquette SRTS
- Boland Trail
- Coal Line Trail
- Curb and Sidewalk Program

Lighting Programs

- Light-Up South Bend
- Yard Lamppost Program

Drainage

- Small Drainage Issues

Traffic Calming

- School Zone Flashing Beacons

FACILITIES

Fire Department

- Fire Station #4
- Fire Station #9

Venues, Parks, and Arts

- Charles Black Center
- Howard Park
- Century Center Projects
- Morris PAC Projects
- Seitz Park

WATER MANAGEMENT

South Bend Dam

- 5-Year Capital Plan
- West Race Gate Repairs

Waste Water Treatment Plant

- Secondary Treatment Improvements
- Lift Station Upgrades

Long Term Control Plan

- Leeper Park CSO Tank Design
- LTCP Relook/Reassessment

Drinking Water

- South Well Field Upgrades
- Prairie Ave. Water Main Extension

Engineering



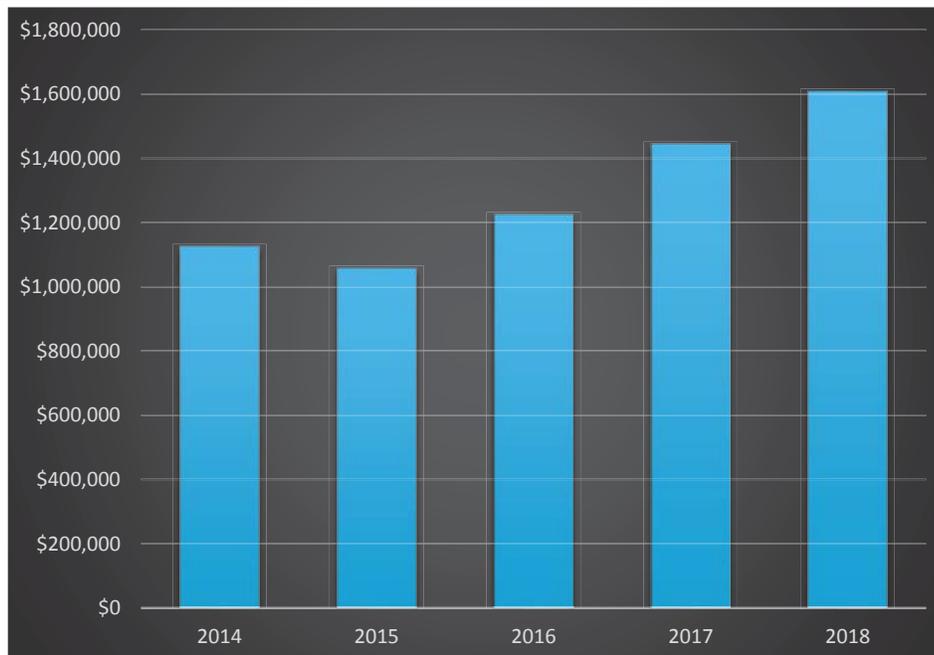
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Smart Streets Downtown Conversion



Department of Public Works

Engineering Expense budget



Department of Public Works

251 LRSA

- Supplies
 - Median Channelization Devices \$120,000
 - Paving Street Material \$550,000
- Professional Services
 - MACOG, Other \$30,000
 - Street Maintenance \$250,000
 - Traffic Signal Maintenance \$450,000
 - Marking Maintenance \$50,000
- Capital Projects
 - Traffic Calming Devices \$100,000
 - Drainage Projects \$500,000
- Total \$2,050,000

Department of Public Works

257 LOIT Special Distribution

- LPA Capital Projects
 - Bendix Drive, Lathrop to ITR \$100,000*
 - Olive Road, Prairie to Tucker \$100,000*
 - SRTS, LaSalle/Marquette \$450,000**

**Estimated Right of Way Engineering and acquisition cost share expenses – budgeted at 100%, with City to be reimbursed 80/20.
**Construction projects are 80/20 funded and this number above represent the city's 20% share of the cost of construction.*

- 2018 Community Crossings Grant
 - Ironwood Road, SR 23 to Corby \$2,300,000

CCG projects are funded 50/50 with the State of Indiana, up to a max of \$1M from the State. This number represents the total construction cost.

Department of Public Works

412 Major Moves

- Capital Projects
 - Ironwood/Corby/Rockne Intersection Modernization \$1,200,000
 - School Zones Flashing Beacons \$100,000
 - Parking Garages \$750,000

Department of Public Works

Bendix Drive Pavement Replacement

Project Number 114-065

- Description:
 - Road reconstruction along Bendix Drive from Lathrop Road to the south end of the bridges over the Indiana Toll Road
- Public Works Duties:
 - Managing Design, Procurement, and Inspection
- Construction Cost Estimate: \$4,816,000 (2019 Letting)
- Funding: LRSA (20% Local)



Department of Public Works

Olive Street Pavement Replacement

Project Number 114-064

- Description:
 - Road Reconstruction from Prairie Avenue (State Road 23) North to Tucker Drive
- Public Works Duties:
 - Managing Design, Procurement, and Inspection
- Cost: Estimated \$3,600,000 (2019 Letting)
- Funding: LRSA (20% Local)



Department of Public Works

Corby and Ironwood Intersection Improvement

Project Number 116-034

- Description:
 - Intersection improvement consisting of reconstruction of the existing signalized intersection
- Public Works Duties:
 - Managing Design, Procurement, and Inspection
- Construction Cost Estimate: \$3,600,000 (2019 Letting)
- Funding: LRSA (20% Local)



Department of Public Works

Coal Line Trail Phase 1 & 2

Project No. 115-063 and 115-064

- Description:
 - INDOT/Federal funded cost sharing 80/20 program to convert an abandoned Coal Line rail line to a multi-purpose trail with lights and recreational facilities between existing East Bank trail on Angela Boulevard and Lincoln Way West.
- Public Works Duties:
 - Managing Design, Procurement, and Inspection
- Cost: TBD (2019 Letting)
- Funding: River West TIF (20% Local)

PROJECT LOCATION



Department of Public Works

LaSalle and Marquette Safe Routes to School

Project Number 116-040

- Description:
 - INDOT/Federal funded cost sharing 80/20 program to improve the sidewalks and curb ramps in the area around and between LaSalle Intermediate and Marquette Primary Schools
- Public Works Duties:
 - Managing Design, and Procurement
- Cost: TBD (2018 Letting)
- Funding: LOIT (20% Local)

PROJECT LOCATION



Department of Public Works

Ameritech Drive Pavement Improvements

Project Number 117-057

- Description:
 - Full depth pavement removal of 900' of asphalt roadway and 3" depth milling and resurfacing of 600' of asphalt roadway on Ameritech Drive south of Cleveland Road.
- Public Works Duties:
 - Managing Design, Procurement, and Inspection
- Cost: \$500,000 (2018 Letting)
- Funding: RWDA TIF

PROJECT LOCATION



Department of Public Works

School Zone Flashing Beacons

Project Number 117-075

- Description:
 - INDOT/Federally funded cost sharing 90/10 program to install speed limit signs with flashing beacons in school zones throughout city limits
- Public Works Duties:
 - Managing Design, Procurement, and Inspection
- Cost: \$100,000 (2018 Letting)
- Funding: Major Moves (10% Local)

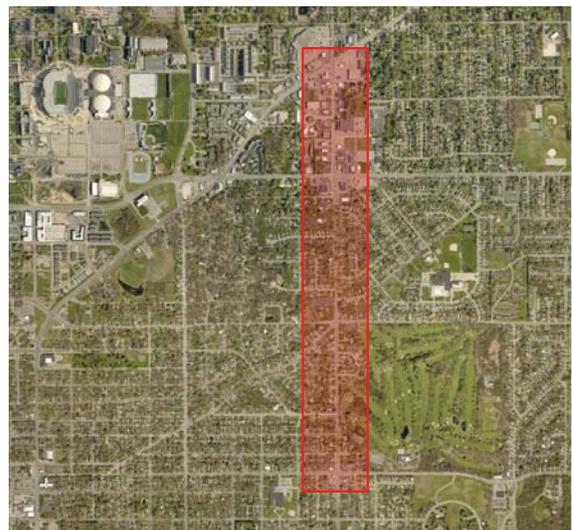


Department of Public Works

2017 Community Crossings – Ironwood Pavement Restoration Project Number 117-071

- Description:
 - Community Crossings Matching Grant project including concrete pavement reconstruction, asphalt milling and resurfacing, and traffic signal modernization
- Public Works Duties:
 - Managing Design, Procurement, and Inspection
- Cost: \$2,300,000 (2018 Letting)
- Funding: Local Road and Bridge Matching Grant Fund - 265 (\$1,300,000)

PROJECT LOCATION



Department of Public Works

Small Drainage Improvements

- Description:
 - Resolving drainage issues at various locations within the City through solutions including retention pond expansion, roadway re-grading, inlet and pipe repairs, and drywell installations
- Public Works Duties:
 - Managing Design, Procurement, and Inspection
- Cost: \$500,000 (2018 Letting)
- Funding: LRSA Capital Projects

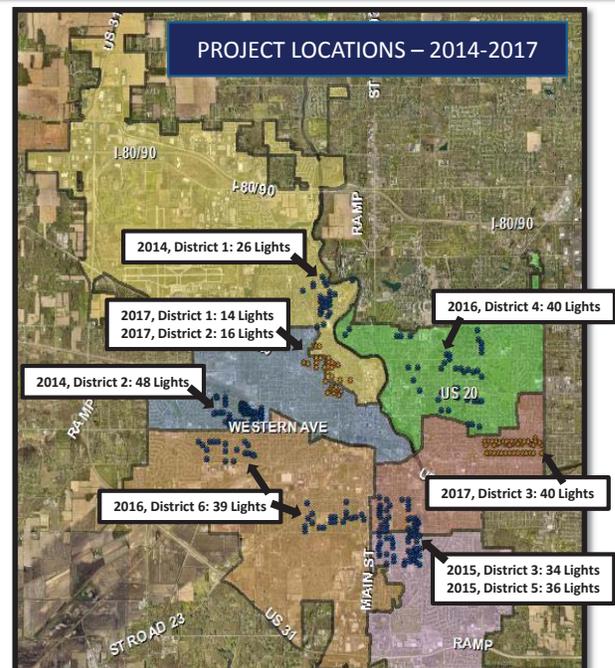
TOP TEN LIST

1. Crescent Oaks Subdivision
2. Lafayette Falls Subdivision
3. Caroline Street Drainage
4. Southfield Subdivision at Miami Rd.
5. Creekwood Estates
6. Villas at Ireland Woods
7. Northshore Dr. from Michigan to Niles
8. Western Avenue at Brookfield St.
9. St. Joseph River Bank Stabilization
10. Miscellaneous Street Drainage

Department of Public Works

2017 Light-Up South Bend Project Number 117-010

- Description:
 - Annual partnering program with I&M Power to install additional street lights in neighborhoods throughout the City
 - Lamppost Program to install residential street lights
- Public Works Duties:
 - Selecting Locations, Coordinating Installation with I&M Power
- Cost: \$200,000
- Funding: COIT

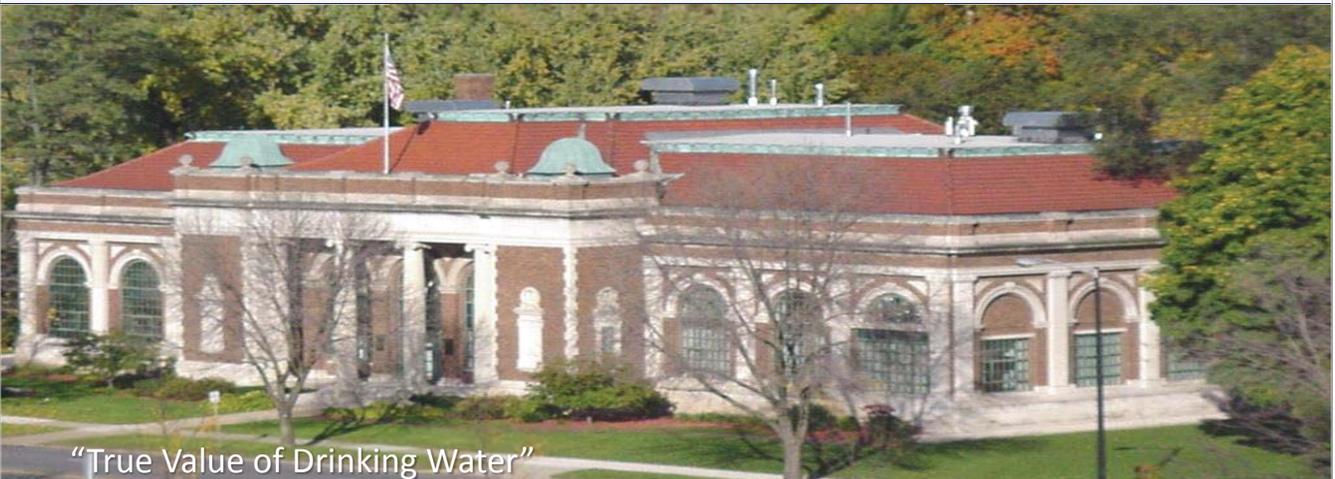


Department of Public Works

UTILITIES

Sustains the wellbeing of residents and businesses through essential water services. Provides drinking water for South Bend's people and places and treats wastewater to protect our residents and waterways.

Water Works

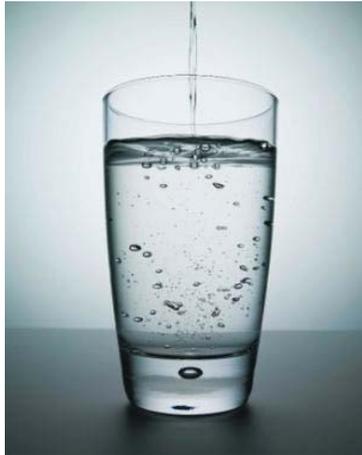


“True Value of Drinking Water”

Water is the only commodity whose value so far exceeds its nominal price and whose price is often so unreflective of the real cost of providing it.

We are dedicated to providing reliable, high quality drinking water at an exceptional value.

UTILITY- Water Works



Booster Stations - 6
Elevated Tower - 1
Treatment Facilities - 5

Reservoirs - 3
Wells - 30

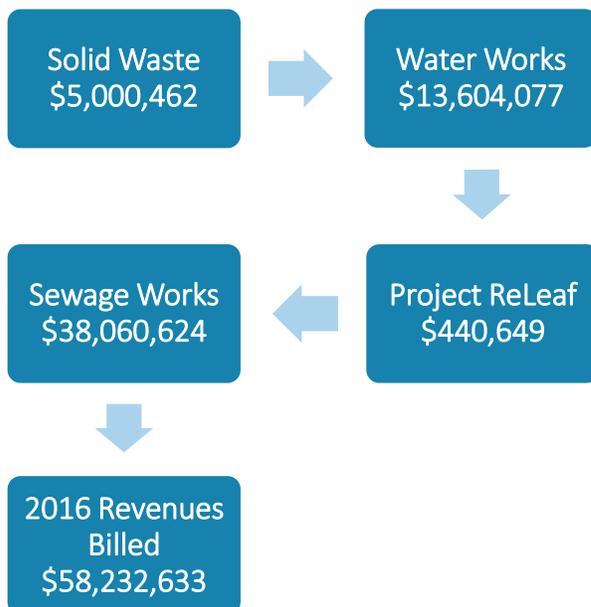
Miles of Water Main - 583
Fire Hydrants - 5,439

Customer Accounts Served - 43,000
Delivered Safe Reliable Water 2016 - 5.343 MG

Department of Public Works

Water Works - Meter Reading

Water Works Provides Meter Reading, Billing, and Collections For City Services

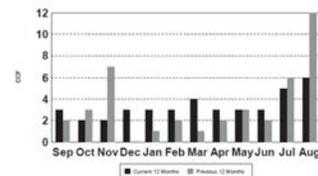


ACCOUNT SUMMARY

Account Number:	257821-8314
Service Address:	3012 EDISON R
Previous Balance:	\$0.00
Last Payment Amount/Date:	07/23/13 \$65.00
Current Charges: (see account detail)	\$237.50
Total Amount Due:	\$237.50

USAGE HISTORY

COMPARE YOUR WATER CONSUMPTION
(in units of water)



1 Unit or CCF (hundred cubic feet) = 748 Gallons

CURRENT CONSUMPTION:	6.0/33
SAME PERIOD LAST YEAR:	12.0/30
METER #:	82516890
PREVIOUS READ:	163
CURRENT READ:	169

Department of Public Works

Water Works - Accomplishments



Chet Waggoner Drive Water Main

Water Works personnel installed 12" main from Dylan Drive to Mayflower Road.

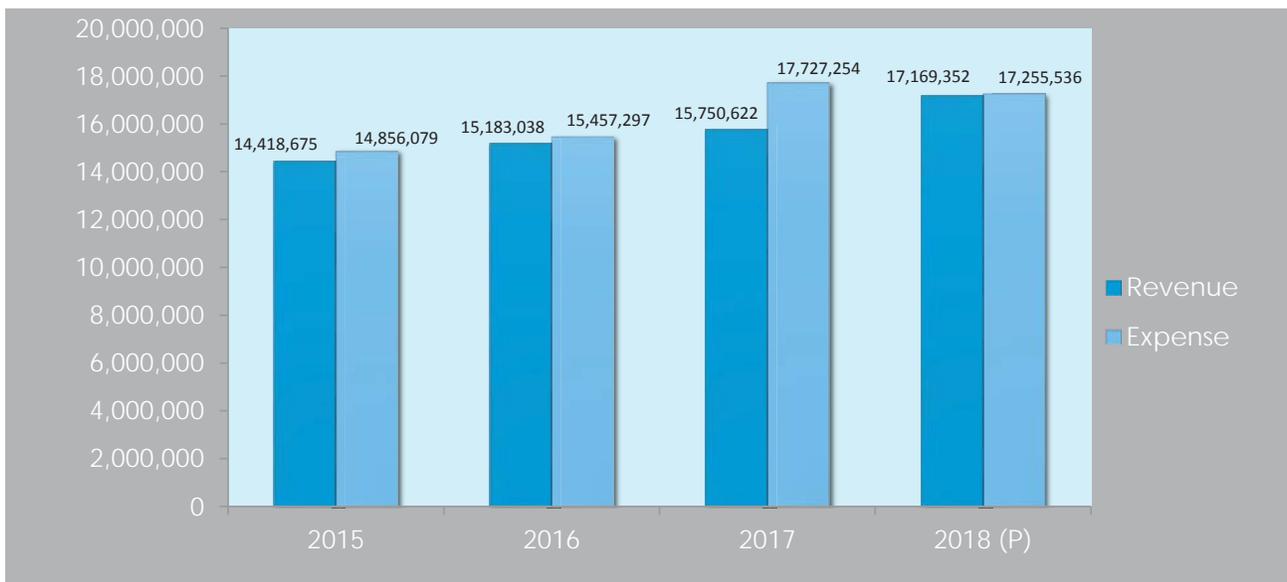
2400 feet of ductile iron with polywrap was installed along the new road.



Department of Public Works

Water Works O&M Fund

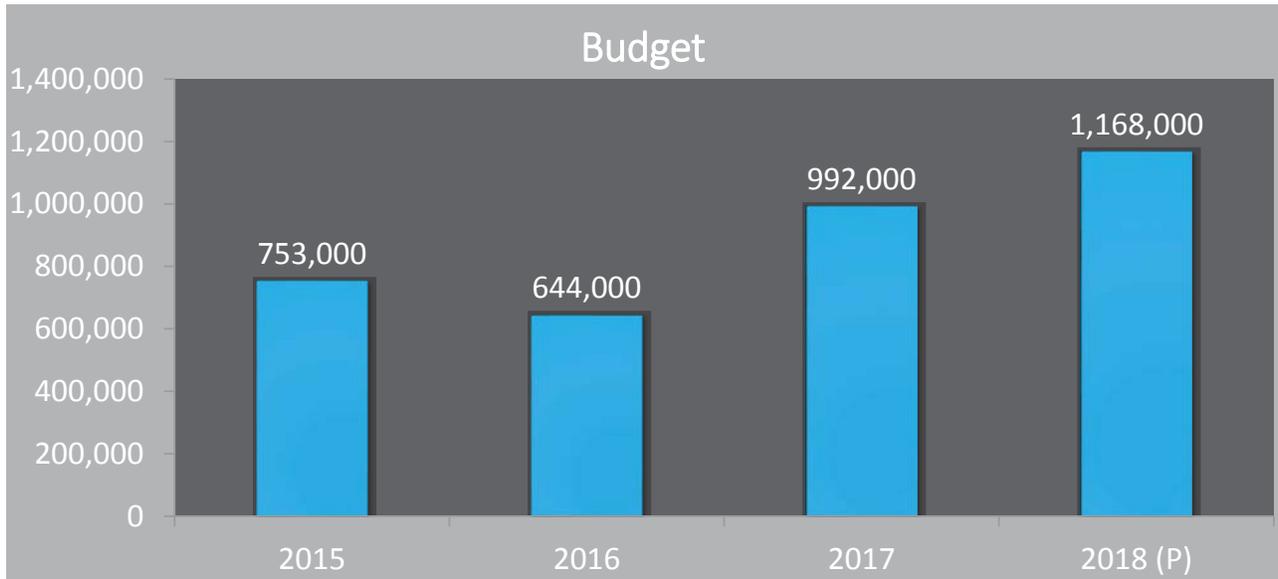
Fund 620



Department of Public Works

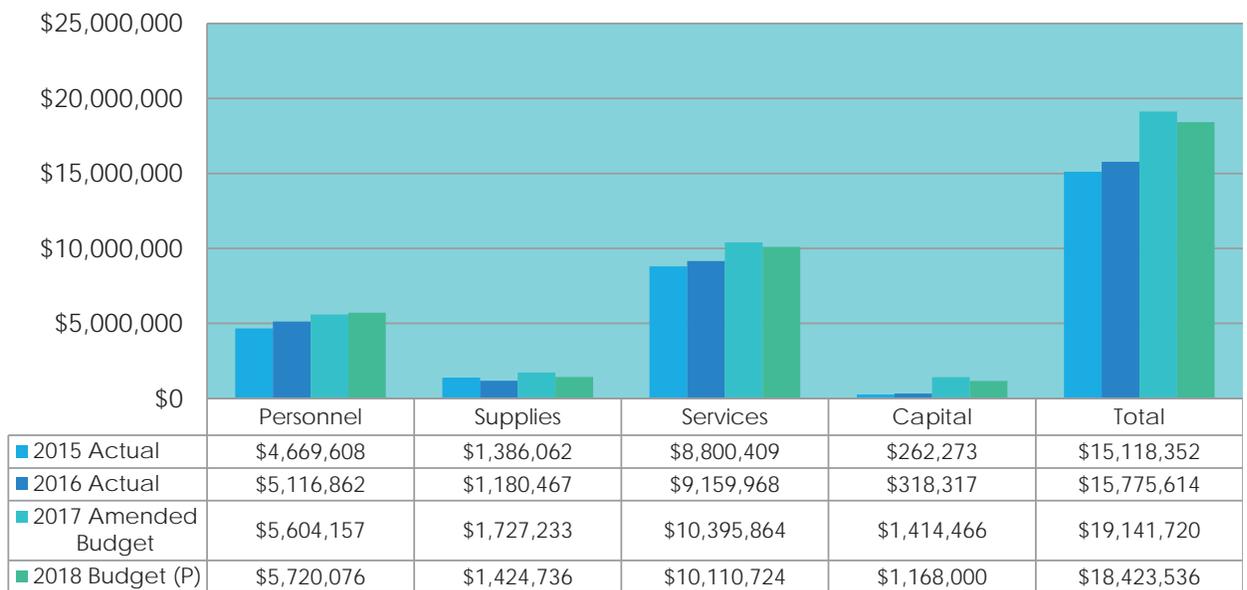
Water Works Capital Budget

Fund 622



Department of Public Works

Water Works Expenses 2015-2018



Department of Public Works

Water Rate Increase

2018 Budget includes a Rate increase

- Last Rate increase was in 2006
- Projected increase is 22% each year for the next two years
- Proposed increase has been submitted to IURC for approval.
- Approval expected sometime in 2018

Department of Public Works

Water Works Budget Impacts

Significant impacts on Waterworks budget for past 12 years

- Reduced staff 16 positions
- Increases in Pilot and Admin fees
- Deferred Maintenance on Capital Equipment
- Pumping capacity has dropped from 70 MGD to around 40 MGD
- Pumping less water (6.4 billion in 2006, 5.3 billion in 2016)

Department of Public Works

TIF Support

2017-2018 Capital Supported by TIF Funds

- \$1,563,000 2017 Upgrade to South GAC Plant to provide redundancy and direct entry to south pressure zone
- \$747,000 in 2018 to complete the South GAC project
- \$786,000 Upgrade to Olive GAC Plant to update onsite disinfection, replace fluoride addition, and reactivate GAC vessels

Department of Public Works

Water Works Budget Highlights

- Service Line Repair is largest cost but supported by user rate
- Water rate increase projected in Q2 of 2018
- \$380,000 for billing, account and service mgmt. software
- Capital spending- vehicle and equipment replacement, meters
 - TIF supporting capital projects

Department of Public Works

Wastewater & Organic Resources



Department of Public Works

Wastewater & Organic Resources

Key Facts

South Bend WWTP is a Class IV 48 MGD Facility with a Peak design flow of 77 MGD

South Bend Collection system has 671 miles of sewers
49 Lift stations

The WWTP Processes 13.1 Billion Gallons per year

WWTP serves 40 square miles and maintains 35 Combined Sewer overflow points

WWTP generates 2700 dry tons of bio-solids for Land application

Department of Public Works

Accomplishments



Primary Clarifier Rehabilitation

Complete in 2015/2016

Final Cost: \$5,150,540

Clarifier Equipment and Motors

Hydrogritter Equipment

Process Piping in Primary Tunnel

Electrical Upgrades at Headworks

Automation with SCADA System

Department of Public Works

Accomplishments



Grit & Screening Improvements

Completed in 2017

Final Cost: \$1,172,917

New Solids Conveyor System

New Compactor Equipment

Two (2) Hydrogritters with Cyclones and Grit Washers

Process Pipe & Automated Valves

Automation with SCADA System

Electrical Upgrades

Department of Public Works

Accomplishments



Secondary Treatment Improvements

Est. Completion November 2017

Current Cost: \$13,983,645

Final Clarifier 6 & 7 Mechanisms

Return Activated Sludge Pump Station

RAS Process Pipe Modifications

Aeration Influent, Aeration Effluent and Final Clarifier Influent Channel Modifications

Scum Pump Station and Force Main

Automated Gates and Actuators

Automation with SCADA System

Department of Public Works

Accomplishments



Calvert Street – Renewable Drive Lift Station

Est. Completion July 2017

Current Cost: \$927,805

New Submersible Lift Station and Valve Vault w/ ability for expansion

Two (2) Submersible Pumps

Flow Meter

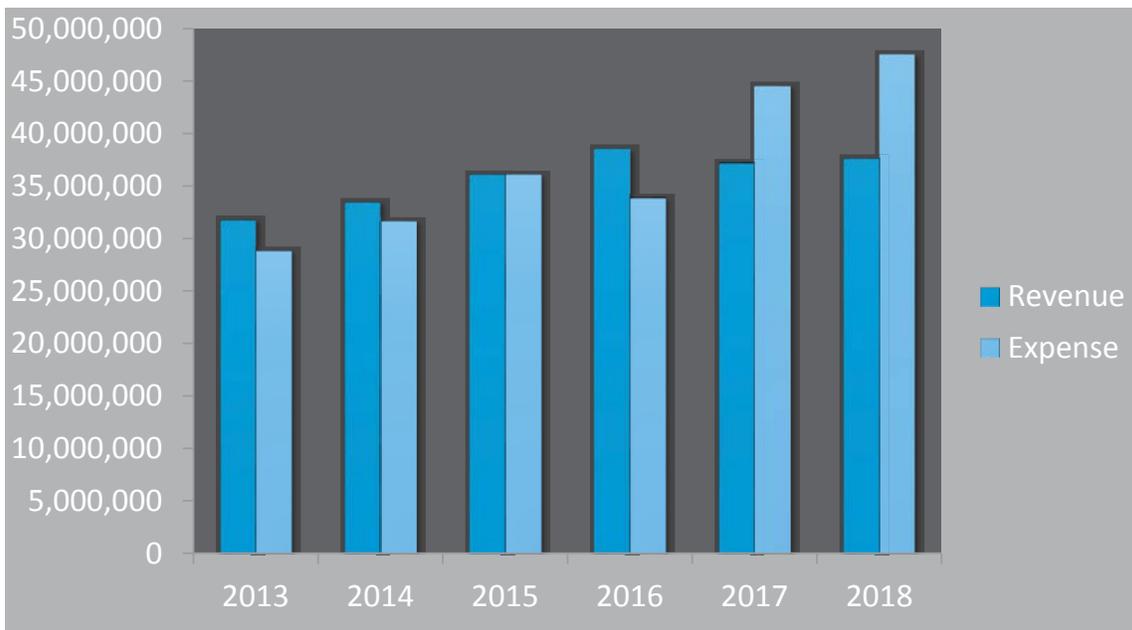
Sanitary Force Main

Gravity Sewer and Structures

Automation with SCADA System

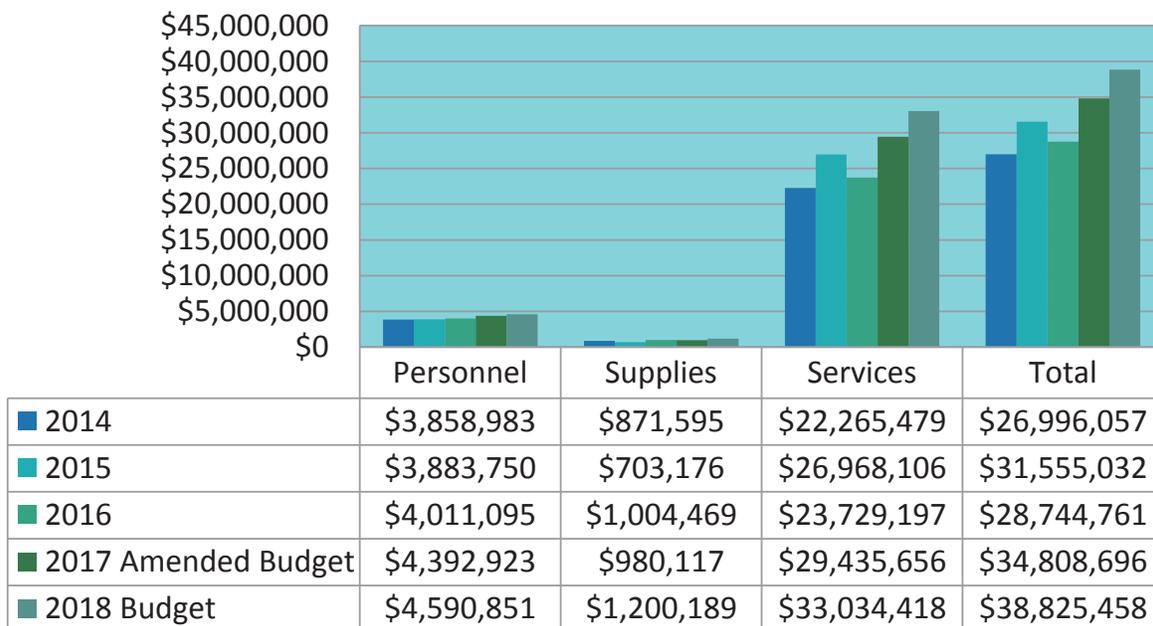
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Wastewater Revenue & Expense Budget



Department of Public Works

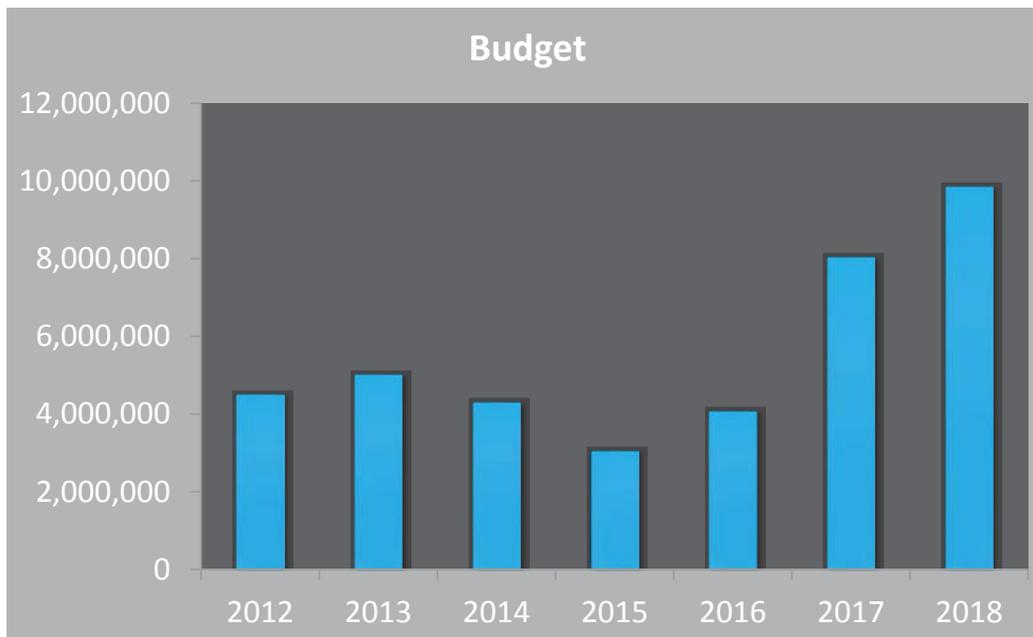
Wastewater & Organic Resources Expenses 2014 - 2018



Department of Public Works

Wastewater Capital Expense Budget

Fund 642



Department of Public Works

Organic Resources



Year to date 2017:

- 20% increase of yards of Kompost sold from 2016
- Renewed certification of Kompost with the USCC
- Kompost production continues to increase with the use of newer equipment
- Quality of Kompost continues to be strong with the ban on plastics



Department of Public Works

Wastewater & OR Budget Highlights

- Majority of programs identified as Quartile 1 and 2 in PBB process.
 - 3 programs in Quartile 3: Administration, safety training & sewer meter reading are essential to operations
 - 1 program is Quartile 4: Lift Station operations and maintenance which was not clearly defined.
 - 8 programs in Organic Resources are Quartile 3 & 4
- Increase in Pilot (88K)
- Increase in Civil City cost allocations (\$73K)
- IT allocation for OR is \$82K; Total OR revenue is estimated at \$80K
- Capital Spending:
 1. Replace Farmington 14B lift station. (\$500K)
 2. WWTP Electrical and Backup generators upgrade projects (\$4.million)
 3. WWTP Raw pump #2 rebuild and upgrade (\$500K)
 4. St Joe River Bank stabilization project (\$93k)
 5. Abandon old dewatering wells at the WWTP site (\$100K)
 6. Purchase new customer service and billing software (\$380K)
 7. Replace Influent and Headworks Sluice Gates (\$1.3 Million)

Department of Public Works

SUSTAINABILITY

Designs and implements projects and programs that bring environmental, social, and economic value to city government and the public.

Sustainability Division



Mission:

We design and implement projects and programs that bring **environmental, social,** and **economic value** to **city government** and the **public**

Department of Public Works

Sustainability Office Goals

- 1 Find efficiencies to reduce municipal operating costs
- 2 Create a culture of sustainability as “business as usual” across all City operations
- 3 Incorporate sustainability into awareness, culture, and common practice of South Bend businesses and residents

Department of Public Works

Utility Costs

- Electricity
 - Level prices expected thru 2018
 - Usage increasing due to new energy-using equipment
 - Upcoming coal scrubber rate case likely to significantly impact pricing 2019 and beyond
- Natural Gas
 - Small increase in prices expected in 2018
 - Usage expected to be flat
 - Long term projections suggest stable low pricing
 - Hedging and active commodity management continue to yield cost savings.

Department of Public Works

Other Projects

- High-efficiency buildings
 - Howard Park & Fire station new construction
 - Solar PV installation
 - Energy saving performance contracts
 - Lighting & HVAC upgrades (including streetlights)
- Clean fleet
 - Cost-benefit-emissions analyses to evaluate new tech
 - Support grant and recognition applications
 - Install electric vehicle charging stations
 - Idle reduction – policies and technologies
- GHG Reduction Strategy Development
- Employee engagement to reduce costs at work
- Support mobility projects (biking, walking, transit)

Department of Public Works

Budget Highlights

- Weatherization support for residents
 - Utilize AmeriCorps volunteers
 - Possible service-learning course w/ ND
- Consultants to accelerate Sustainability projects
 - HVAC and lighting designers
 - Solar and electric vehicle experts
 - Community GHG Inventory
- Building systems inventory (for improved facilities mgmt.)
 - To populate buildings work order mgmt. software

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STREETS & SEWERS

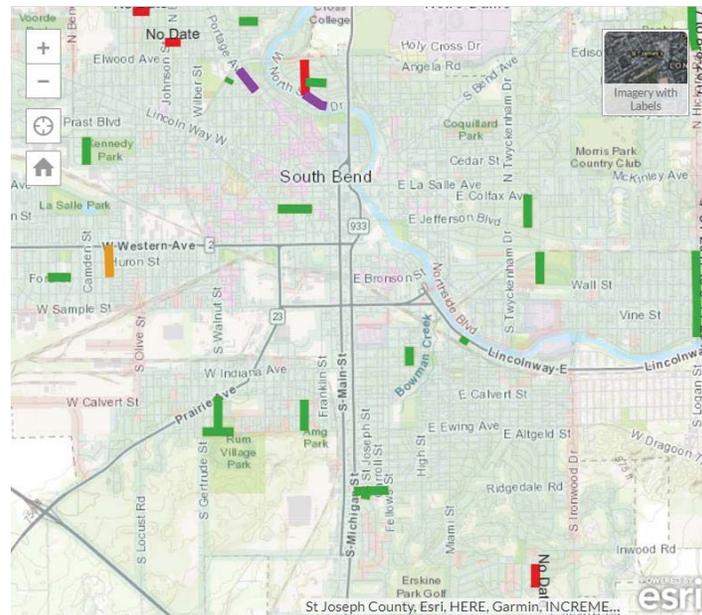
Maintains the streets and sewer infrastructure for the City and provides essential services including snow removal and leaf pickup. Maintains street lights and traffic signals.

Accomplishments

- Paved approx. 12 lane miles of streets in the city
- Sweepers have completed one pass through the city
- Upgraded 59 Street lights to LED
- Supported 73 events YTD

Department of Public Works

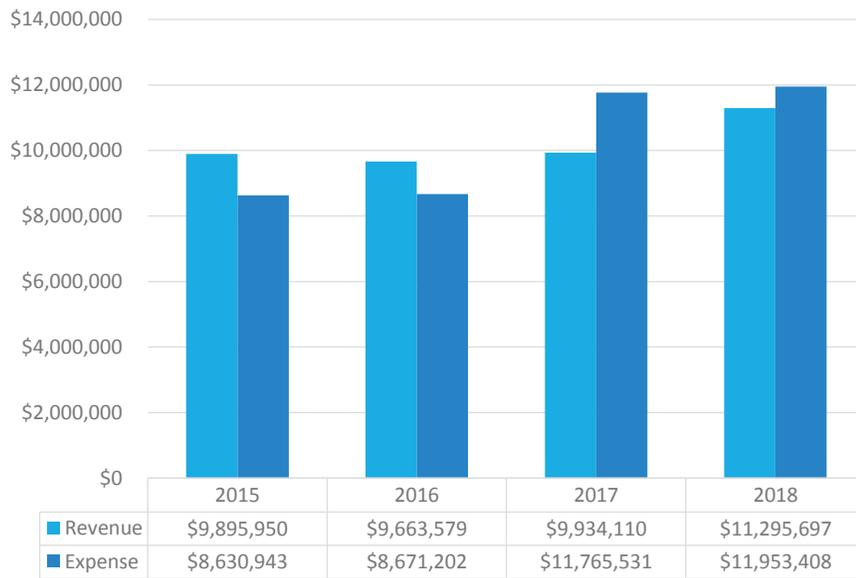
Paving Map



SOUTHBEND.IN.GOV/PROJECTMAP

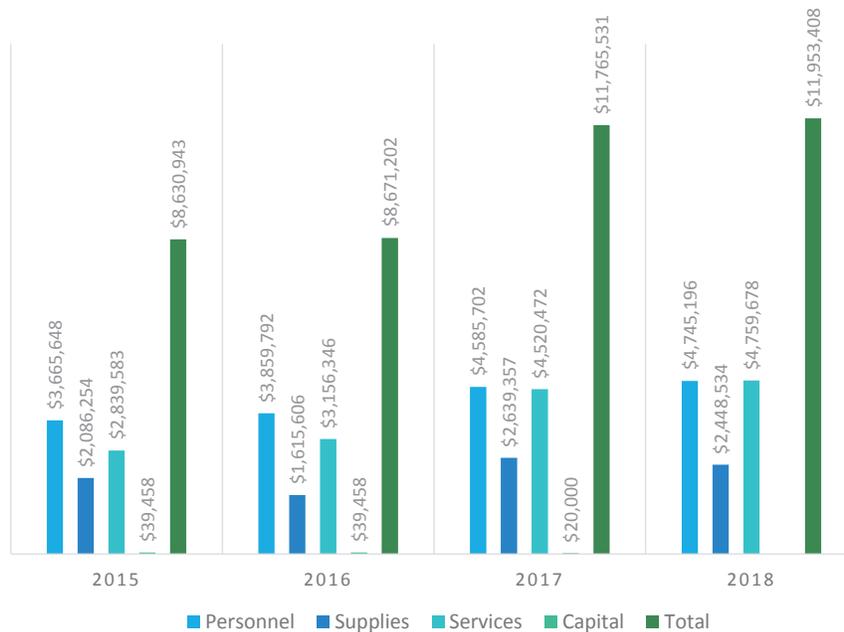
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MVH Revenue & Expense Budget



Department of Public Works

MVH Expenses



Department of Public Works

SOLID WASTE

Delivers collection services for trash, yard waste, and bulky items for all city residents.

Mission: We provide exceptional waste management services

Accomplishments

- 77% of our fleet has been converted to CNG
- 51% of City participates in Yard Waste Program
- Decreased complaints by 45%
- Started the alley to curbside initiative
- Fully implemented ELEMOS system.



Trash Pick-up

- Average of 32,996 , # of customer
- 139 tons daily / 28,909 tons total
- Over 13,000 customer moved from alley collection to curbside as of 7/14/17



Department of Public Works

Yard Waste Pickup

- 51 % participation rate (16,940)
- Picked up 4,720 yard waste extra's
- Took 3878 tons of yard waste to Organic Resources



Department of Public Works

Extra Pickups

- Special Item/ Extra Trash Pickups
 - Completely utilize ELEMOS for routing and picking up of extra's
 - Increased pickup's by 12% - over last year – overall from last year
 - Increased efficiency by 33%
 - Decreased misses by 35%



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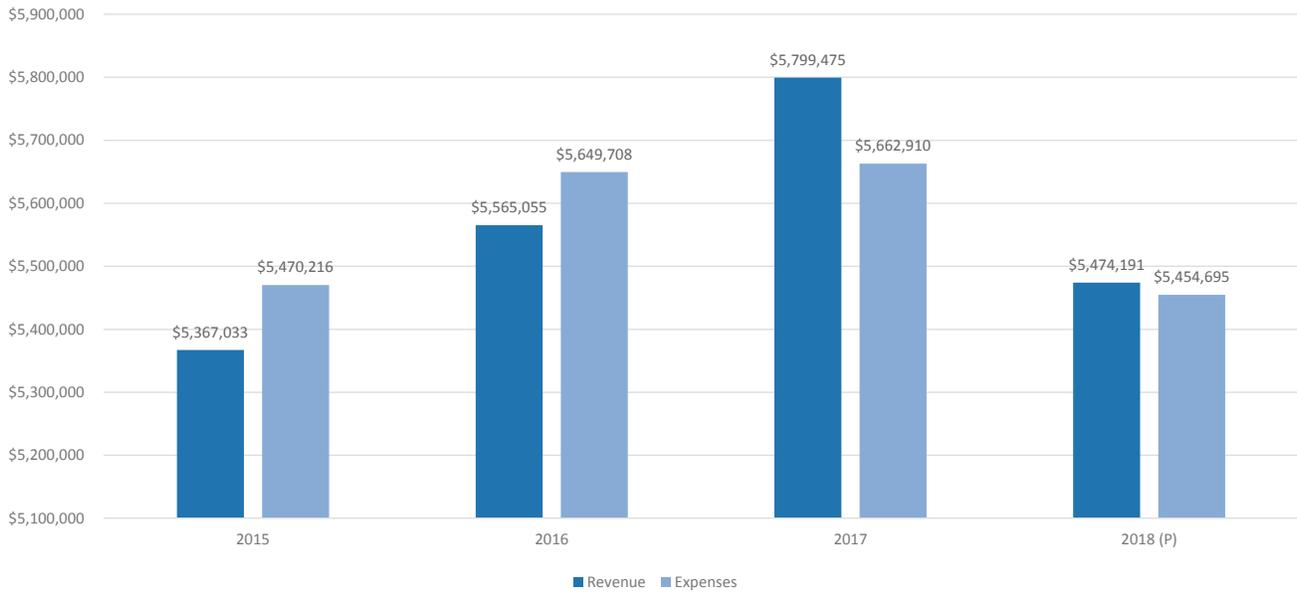
Container Management

- 1,554 trash containers delivered
- 494 containers repaired
- 7,636 yard waste containers delivered



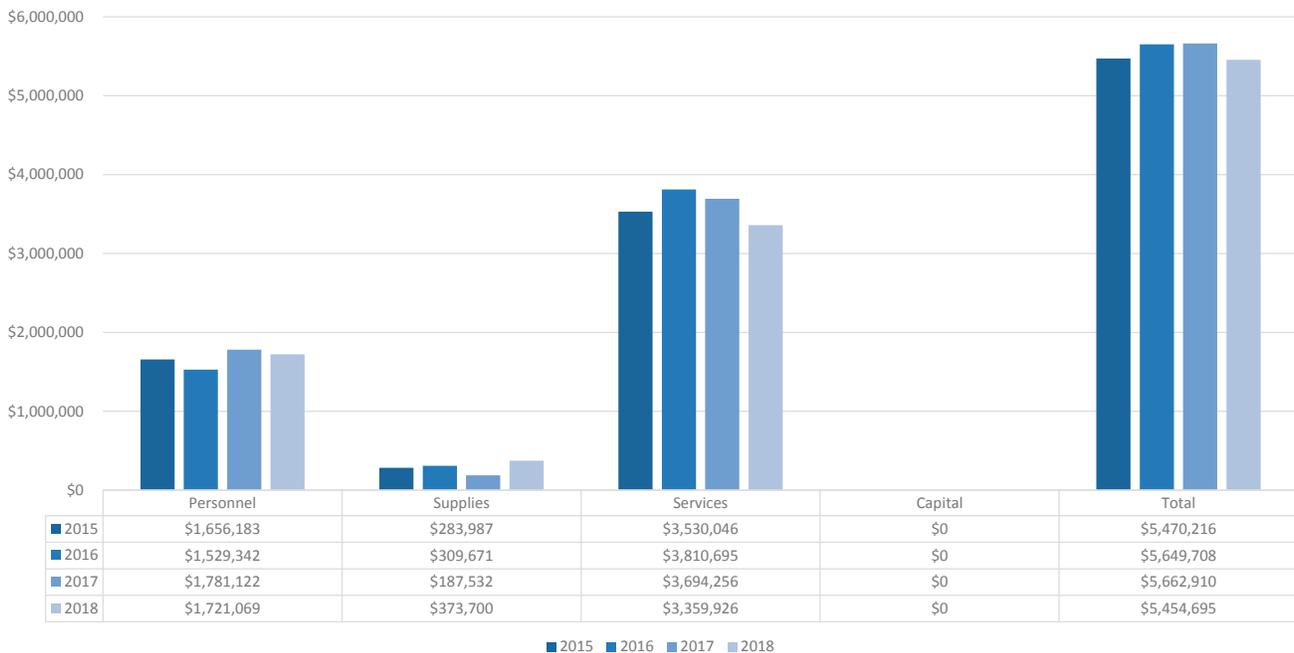
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Solid Waste Revenue & Expenses



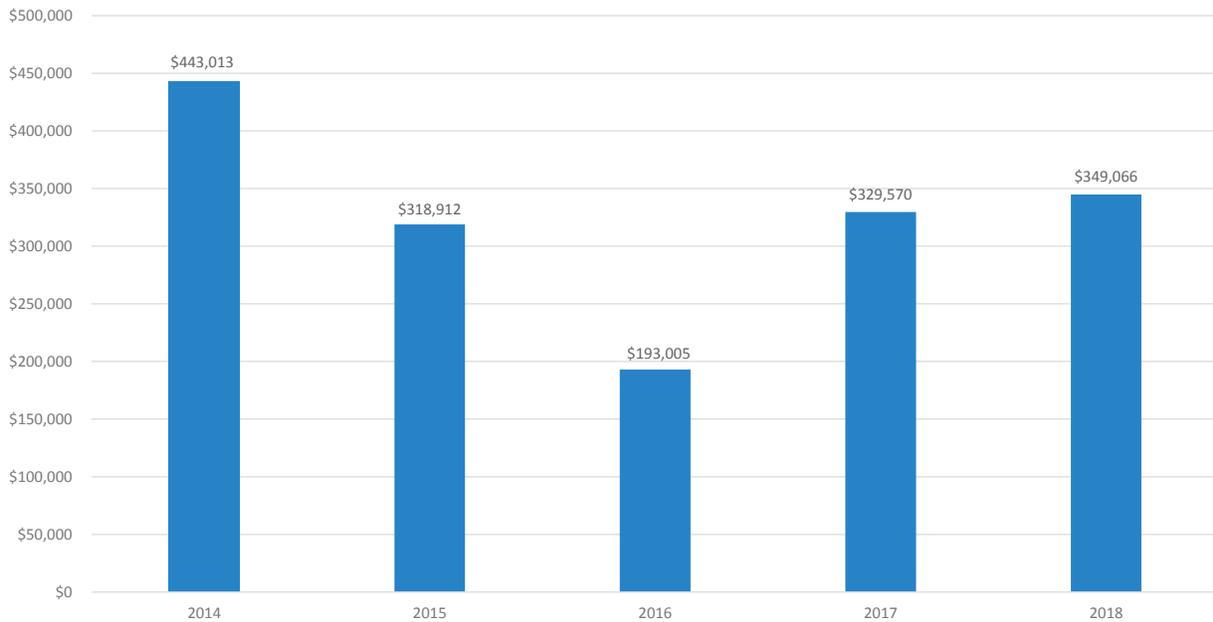
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Solid Waste Expenses: 2014-2018



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Solid Waste Ending Cash Balance



Department of Public Works



ERIC HORVATH, PUBLIC WORKS DIRECTOR
JITIN KAIN, PUBLIC WORKS DEPUTY DIRECTOR

Department of Public Works
1316 County-City Building
South Bend, IN 46601

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