



Public Works & Mobility Department

FY24 Budget Presentation

July 26, 2023

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Logan McInnis, Deputy Director for Utilities

Brian Hensel, Deputy Director for Streets

Aaron Wilson, Transportation Planning Manager

Allison Segal, Business & Finance Manager





Mission

Public Works & Mobility's mission is to deliver the high-quality public infrastructure, transportation networks, utilities, and core services that promote health, safety, and quality of life for Missoula residents and visitors.





City of Missoula Strategic Plan

Strategic Goals



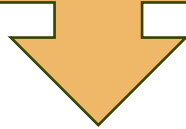
1. Community Safety, Health and Well-Being
2. Community Design and Livability
3. Economic Health
4. Organizational Excellence and Resilience



City of Missoula Strategic Plan

Strategic Goals

**How do we know
we are effective?**

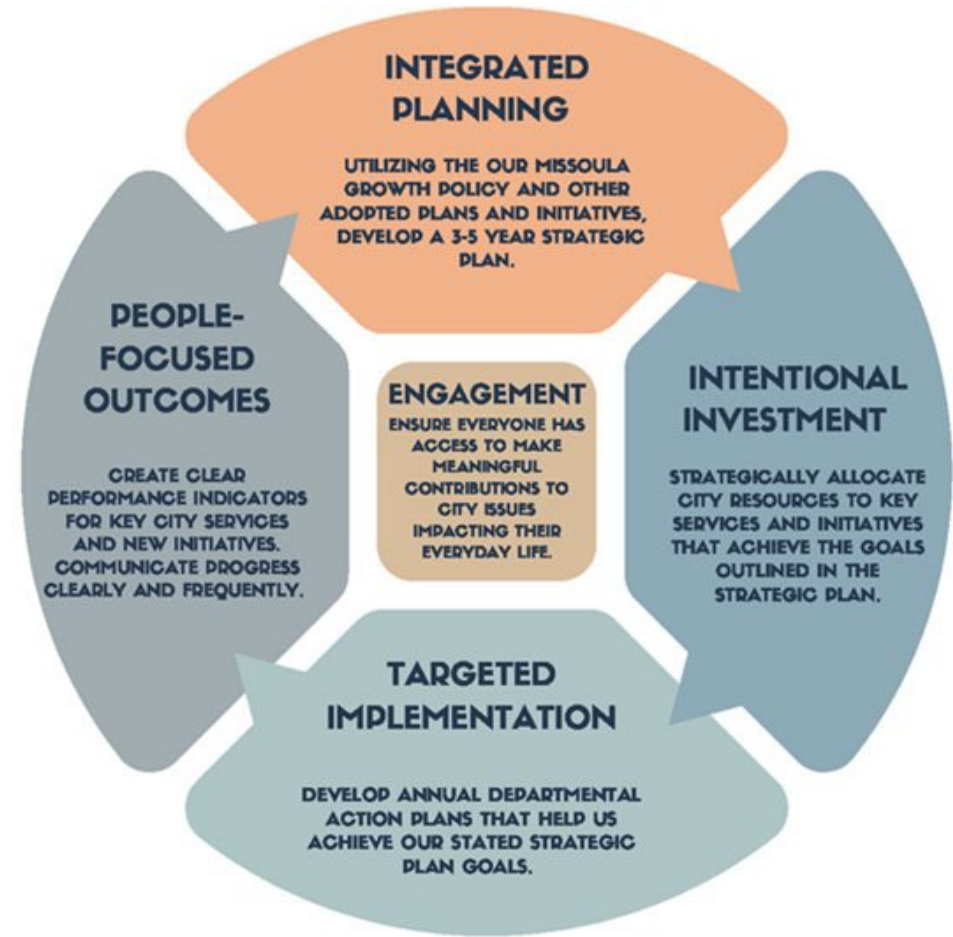


Plan – Identify the problem

Do – Implement solutions

Check – Evaluate the results

Act – Improve the process





Strategic Goals

1. Community Safety, Health and Well-Being

The City of Missoula focuses its efforts in public safety, health and well-being by ensuring that our **core levels of service are maintained**, our programs are innovative and efficient, and outcomes are clear and measurable.

- Clean drinking water
- Wastewater collection & resource recovery
- Water quality & flood protection
- Streets, sidewalks & bikeways
- City Cemetery





Strategic Goals

2. Community Design and Livability

The City of Missoula will create policy and support development that promotes economically and environmentally responsible growth that prioritizes equitable, responsive and adaptive outcomes that prioritize people and place.



- Process & regulations
- City-owned land
- Public infrastructure
- Maintenance & repair
- Grant opportunities
- Sustainability & resiliency



Strategic Goals

3. Economic Health

The City of Missoula fosters an environment that creates partnerships that result in increased economic vitality for the community.

- Collaborative policymaking
- Grant writing and administration capacity
- Strong community partnerships





Strategic Goals

4. Organizational Excellence and Resiliency

The City of Missoula fosters an inclusive, transparent and nimble organization that provides support and training for its employees and works collaboratively to provide high-quality, responsive and innovative services efficiently and effectively.



- Results-oriented management
- Workforce
- Space and technology
- Community engagement
- Employee safety and wellbeing

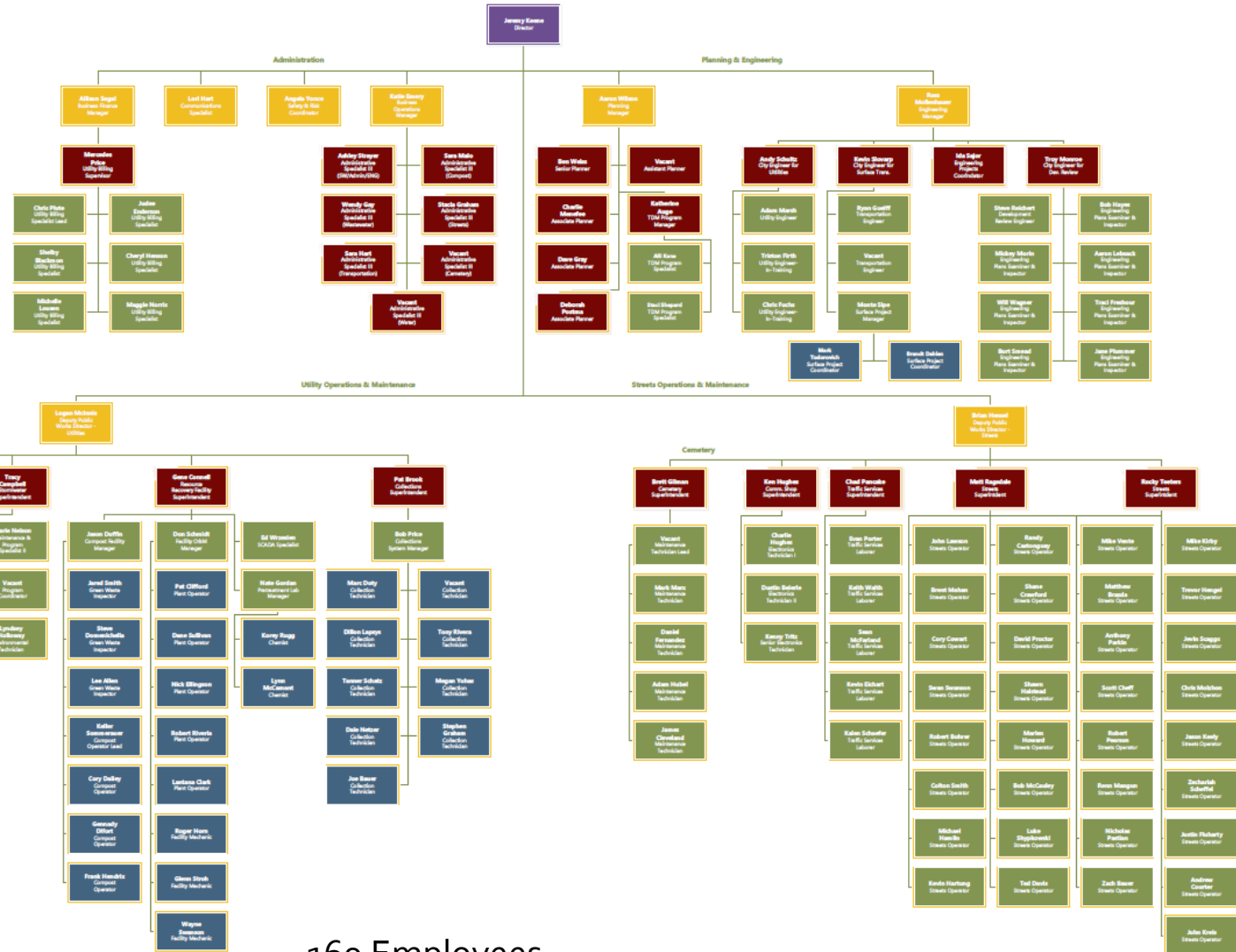


Organization



DEPARTMENT OF
PUBLIC WORKS & MOBILITY

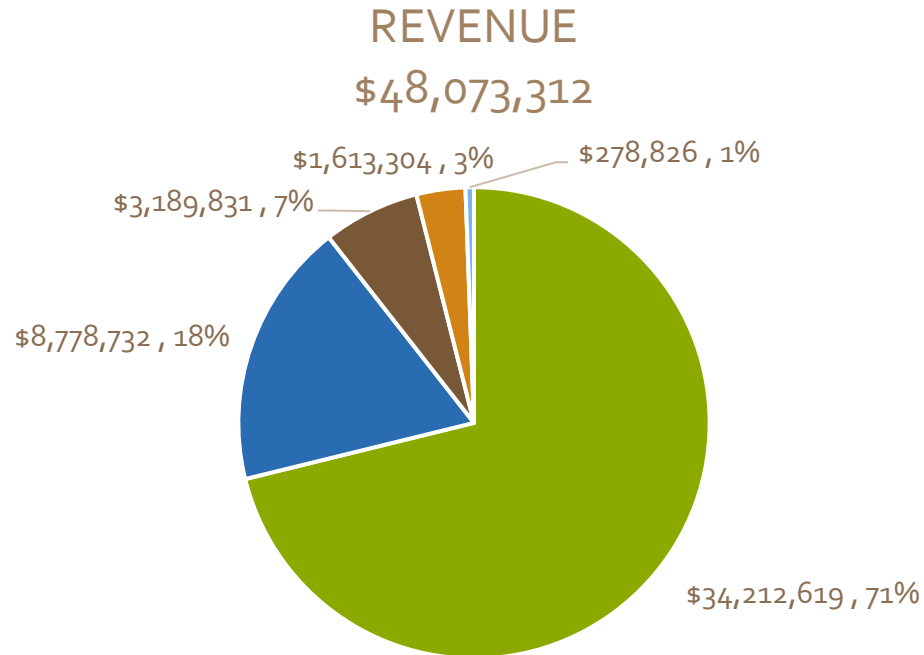
2023



169 Employees



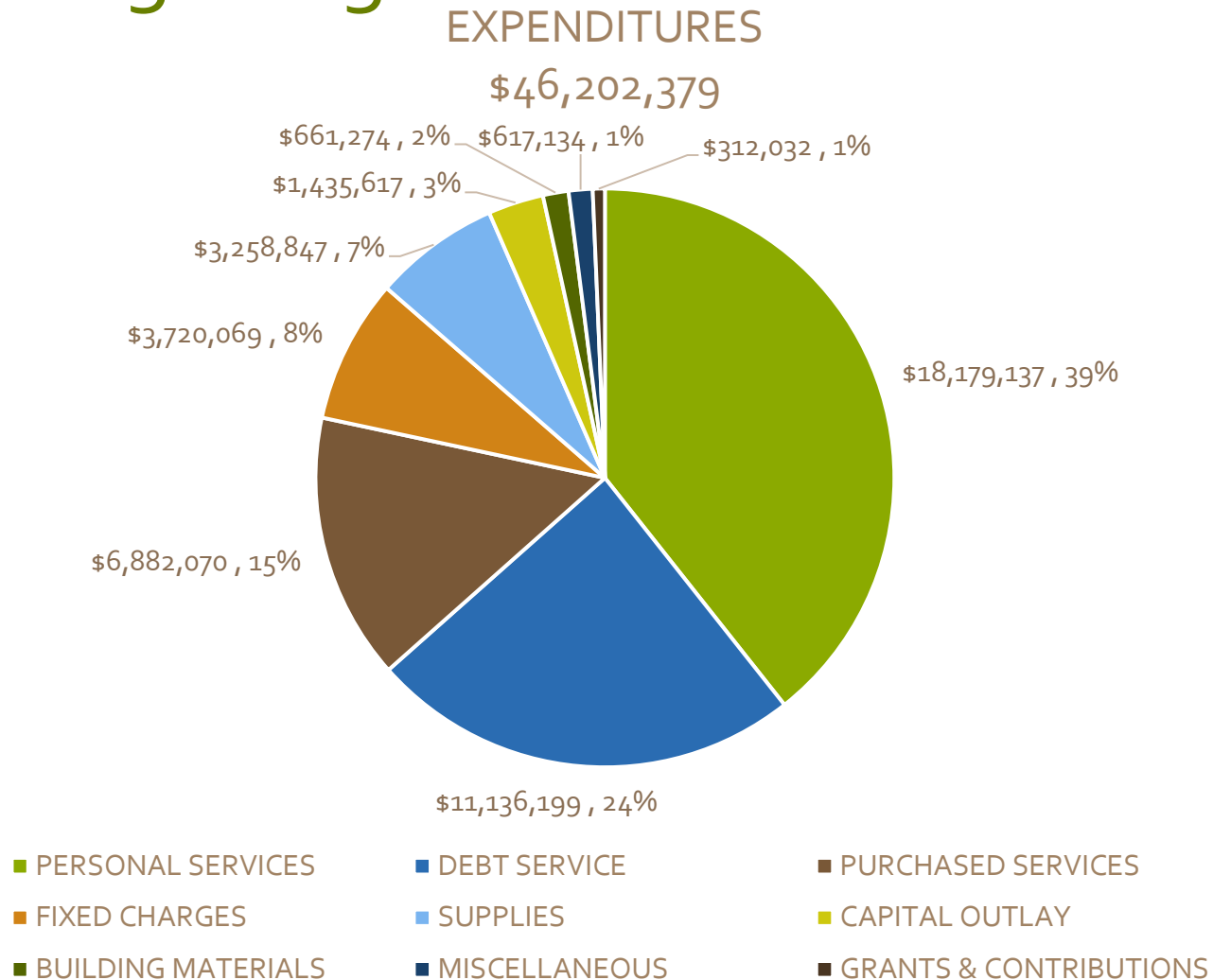
Operating Budget



- CHARGES FOR SERVICES
- MISCELLANEOUS (PROPERTY ASSESSMENTS)
- OTHER FINANCING SOURCES (OPERATING TRANSFERS, GAS TAX, BARSAA)
- INTERGOVERNMENTAL
- LICENSES & PERMITS

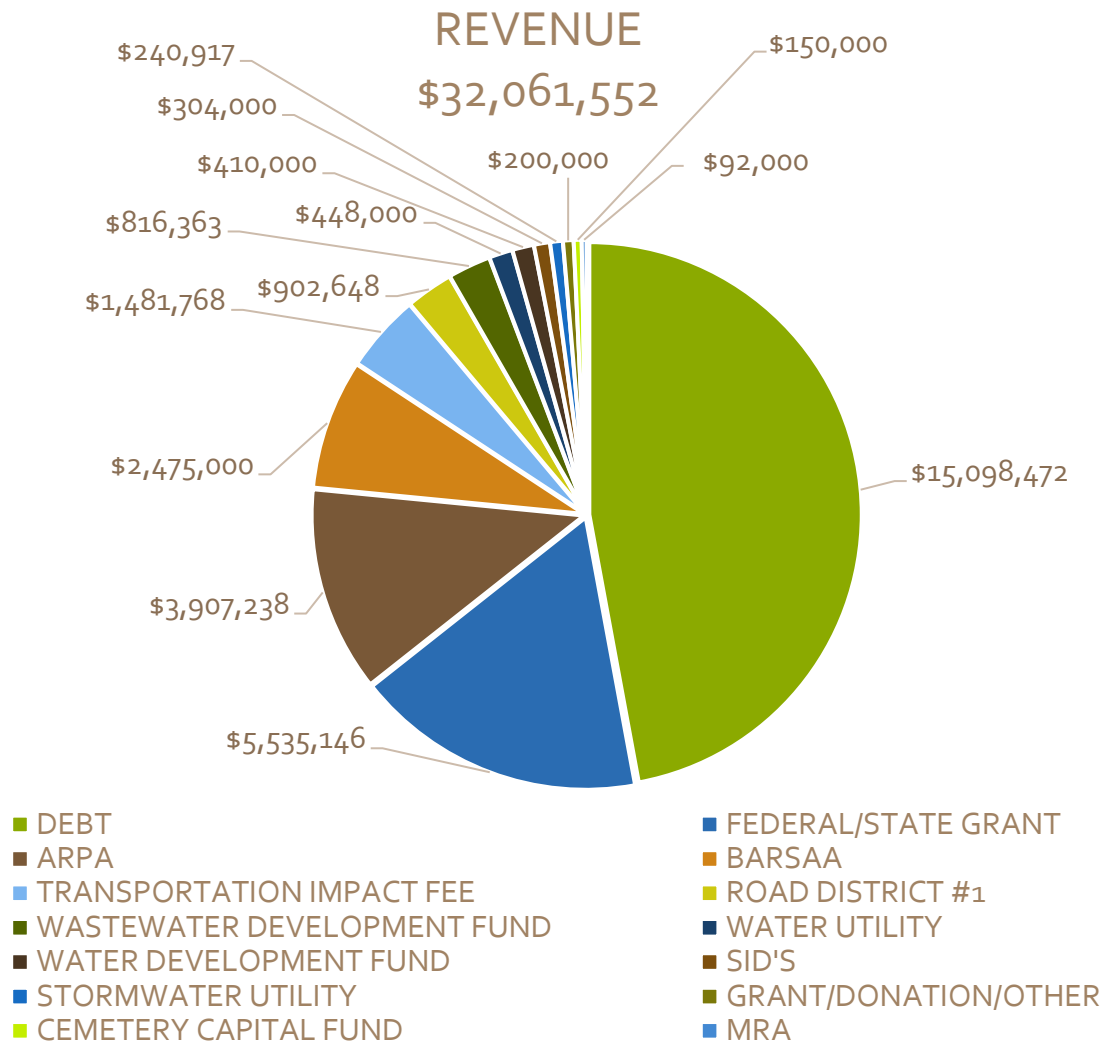


Operating Budget



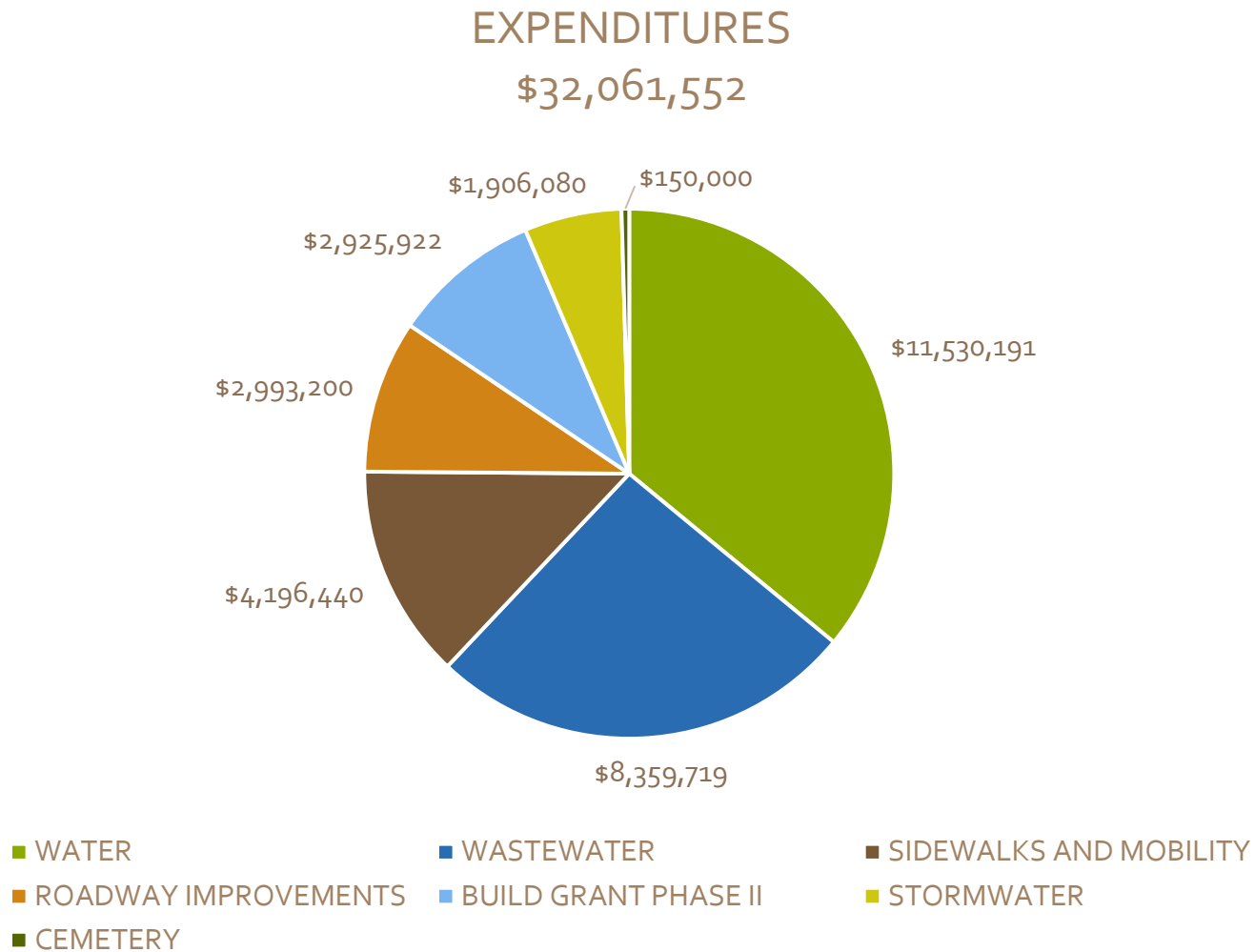


Community Investment Program





Community Investment Program





Divisions





Administration

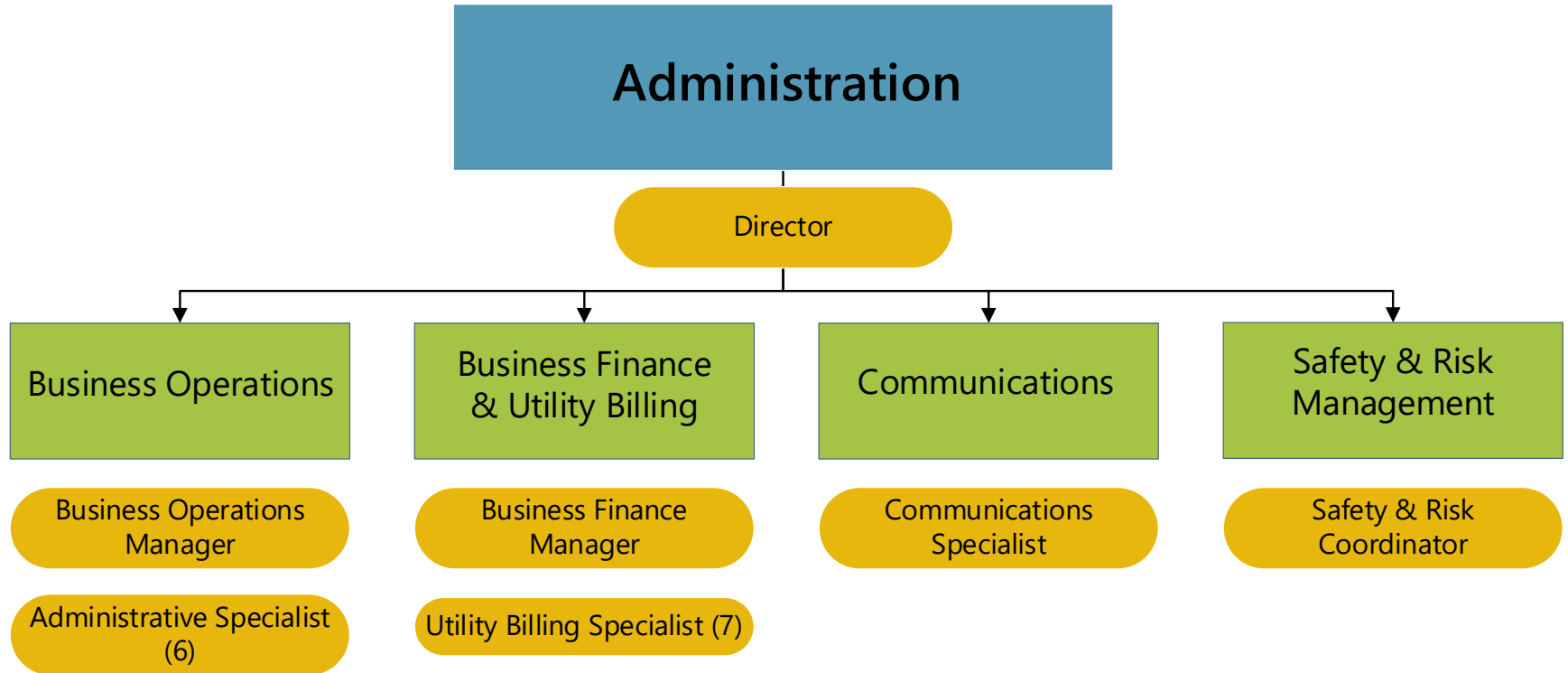
Purpose

- Provide support, business and financial management, communication, safety and risk management services to the Public Works & Mobility Department.
- Ensure our internal and external customers receive high-quality service.





Organization



18 Employees



Administration

Key Facts



18 Staff Members



Supports 5 Divisions, 169 Employees, 5 Office Locations



Provides Customer Service for about 27,000 Utility Customers



Staffs 5 Public Boards and Committees



Administration

FY23 Highlights

- Improved project communication process
- Improved recruitment, retention & transition planning
 - 38 Total Recruitments
 - 20 New Hires
 - 5 Transfers within Dept.
 - 7 Promotions
 - 9 Current Vacancies (5%)
- Implemented career ladders & new employee onboarding
- Improved safety training & procedures



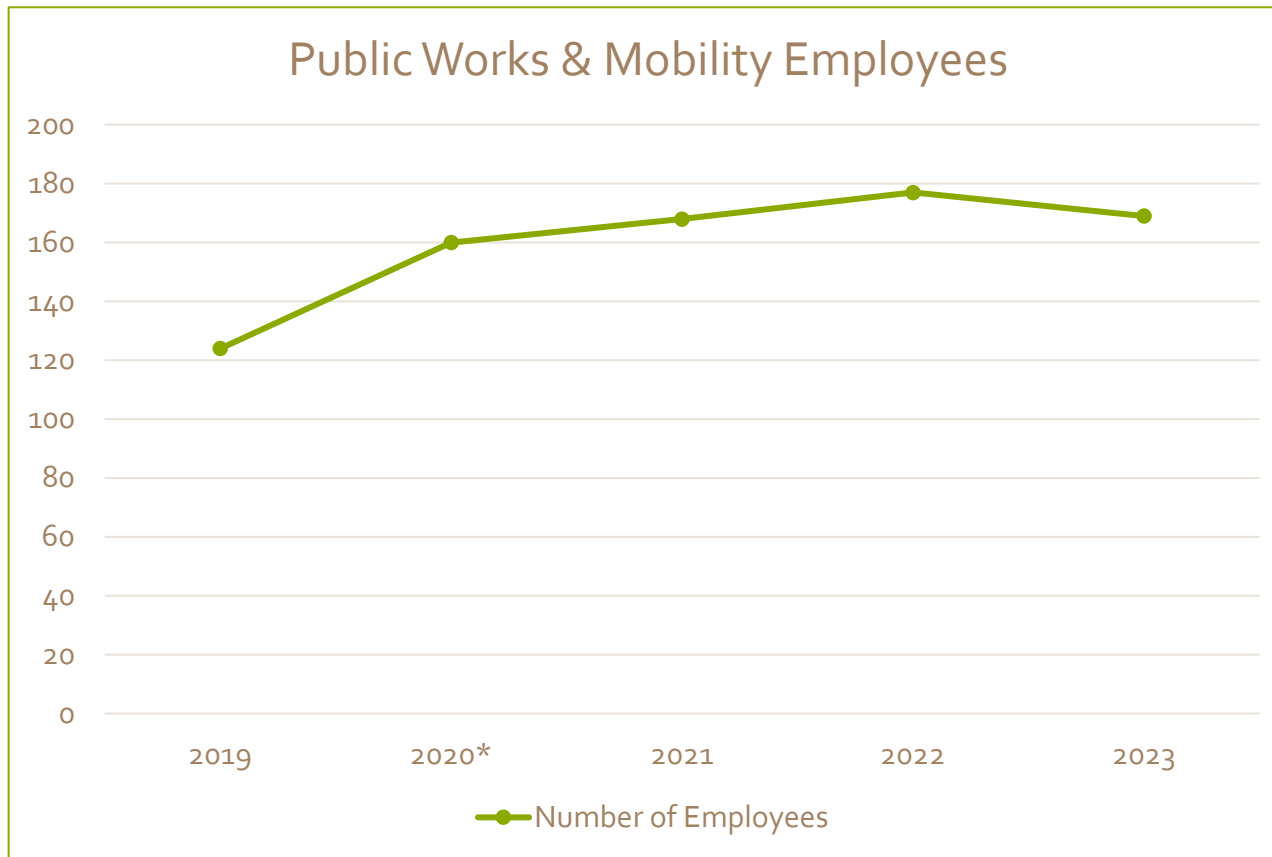
Administration

FY24 Goals

- Address space planning
- Increase engineering capacity (federal funding, grants)
- Implement financial management policies
- Complete emergency response planning



Metrics



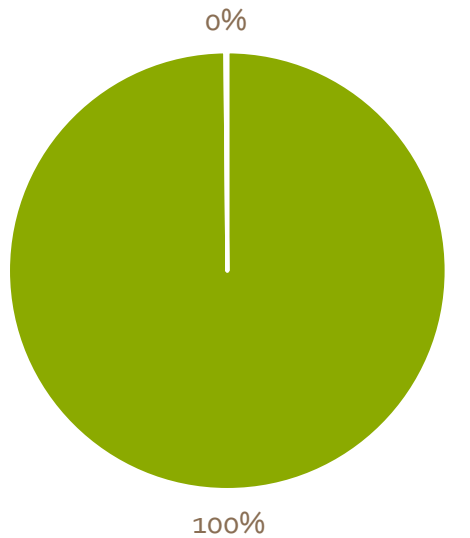
* 2020 Reorganization moved Transportation Planning & Engineering staff moved from Development Services to Public Works & Mobility



Administration – Road District #1

REVENUE

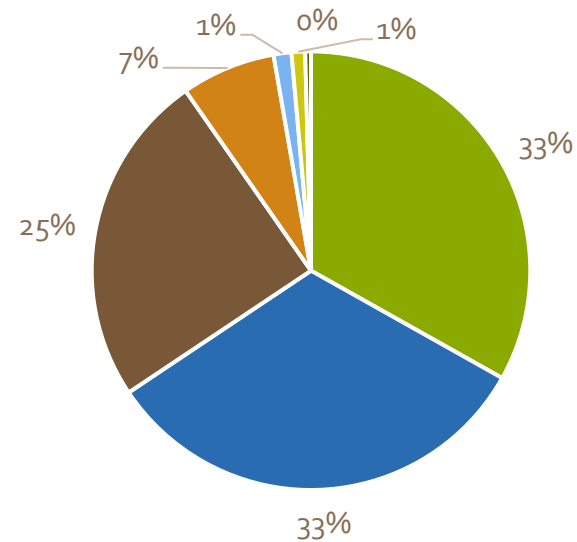
\$2,558,390



- MISCELLANEOUS (PROPERTY ASSESSMENTS)
- INTERGOVERNMENTAL

EXPENDITURES

\$2,558,390



- PERSONAL SERVICES
- DEBT SERVICE
- FIXED CHARGES
- MISCELLANEOUS
- PURCHASED SERVICES
- SUPPLIES
- GRANTS & CONTRIBUTIONS



Questions?





Planning & Engineering

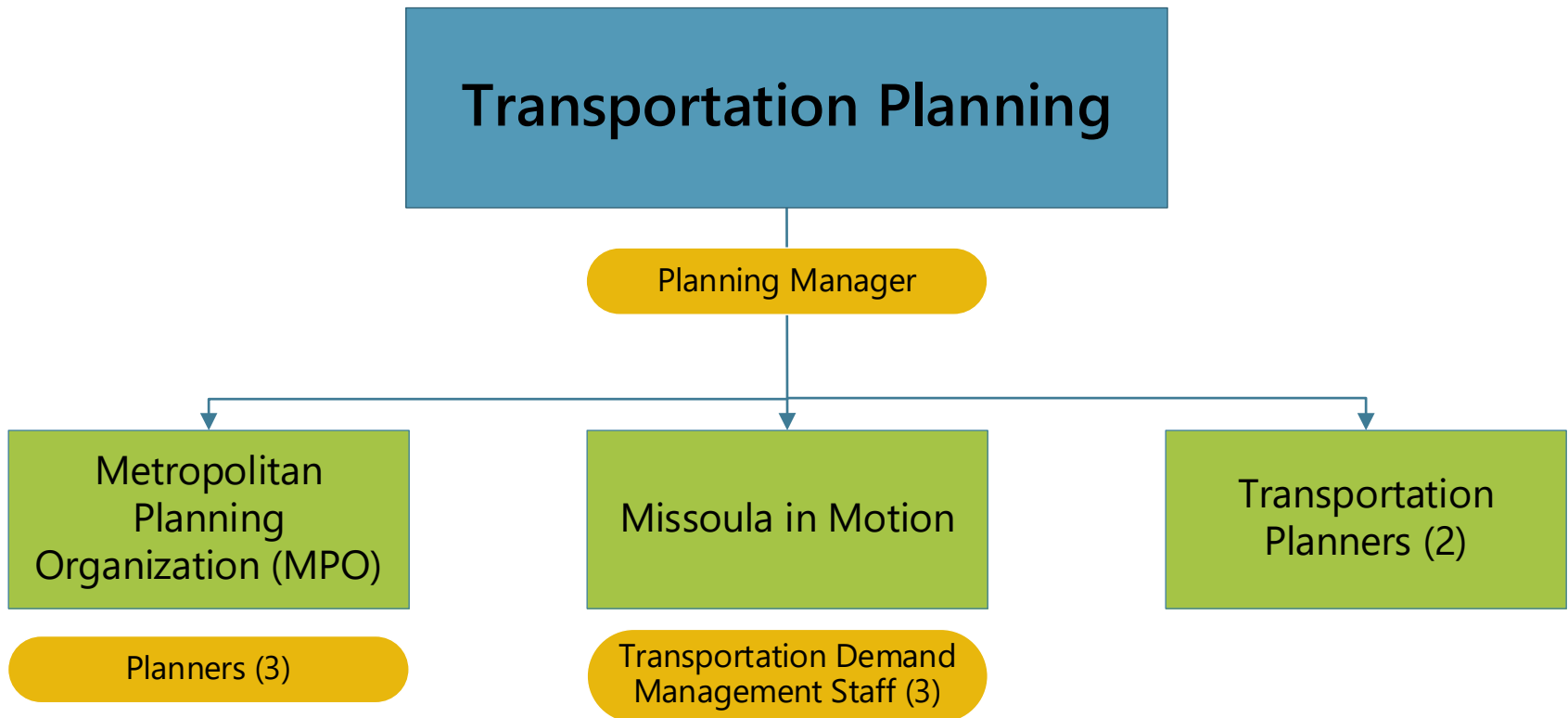
Purpose

Plan, implement, and support public and private infrastructure development that advances City strategic goals.





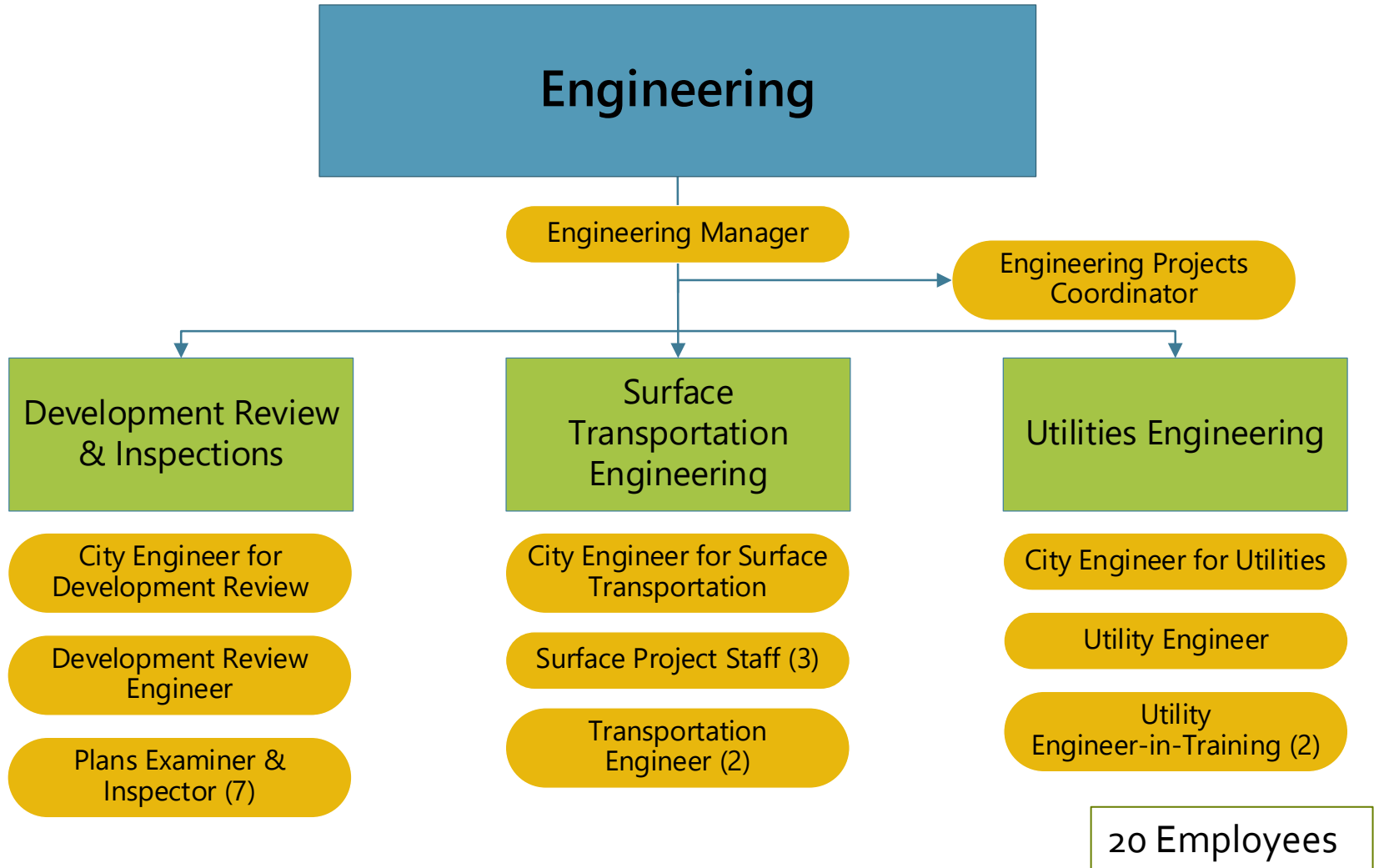
Organization



9 Employees



Organization





Planning & Engineering

Key Facts & Metrics



15 water main projects underway



5% annual increase in bike & ped traffic across the primary commuter network (2019 - 2021)



17% **increase** in serious & fatal injuries (5-year average) from crashes



697 building permits issued and approved in FY23



Constructed 948 solar panels at the Wastewater Resource Recovery Facility at no cost to ratepayers. Planning is underway for Missoula Water solar project in FY24.



Planning & Engineering

FY23 Highlights

- 7 RRFBs/enhanced crossings in FY23
- 4 new miles of bike lanes (centerline) since 2020; average 1.3 miles/year



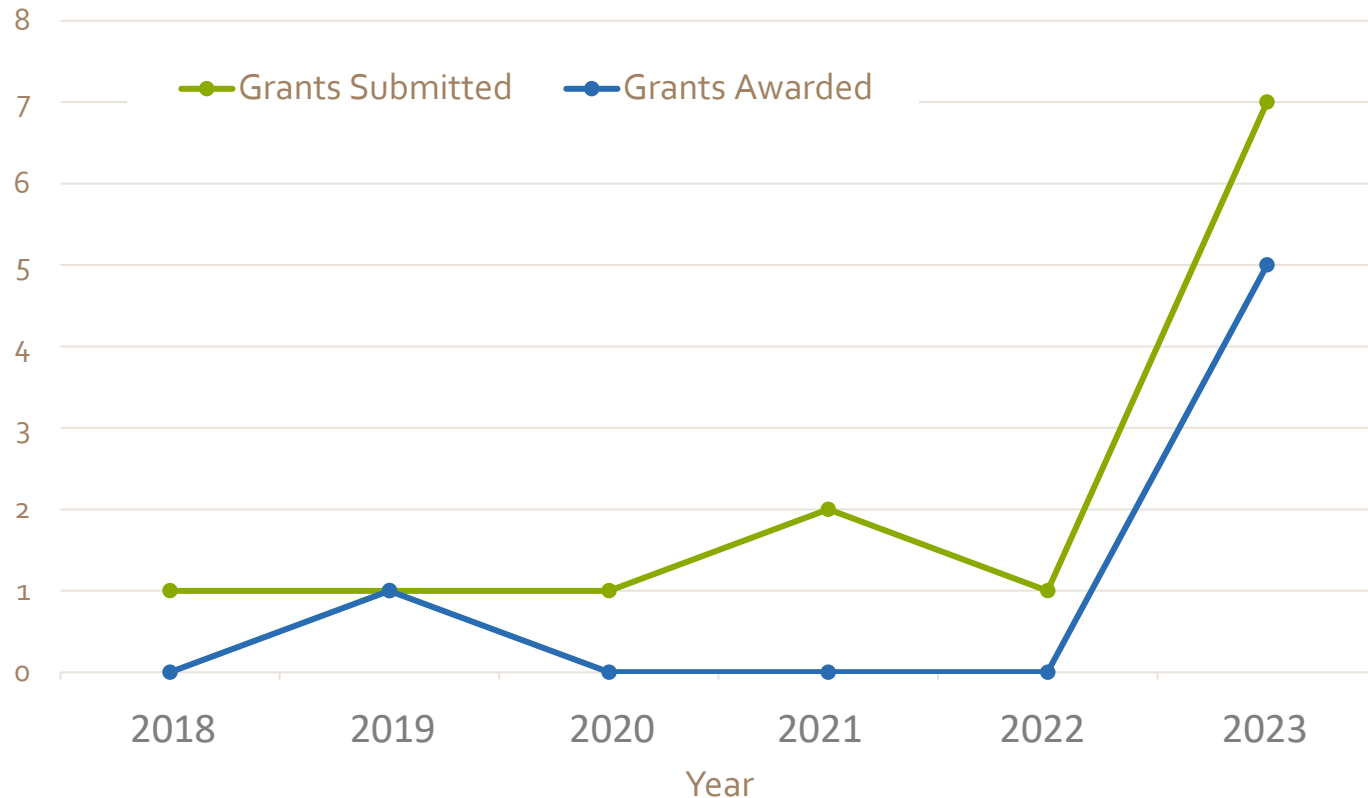


Planning & Engineering

FY23 Highlights

- 7 Grant applications submitted: \$34M Federal, \$6.1M MPO awarded

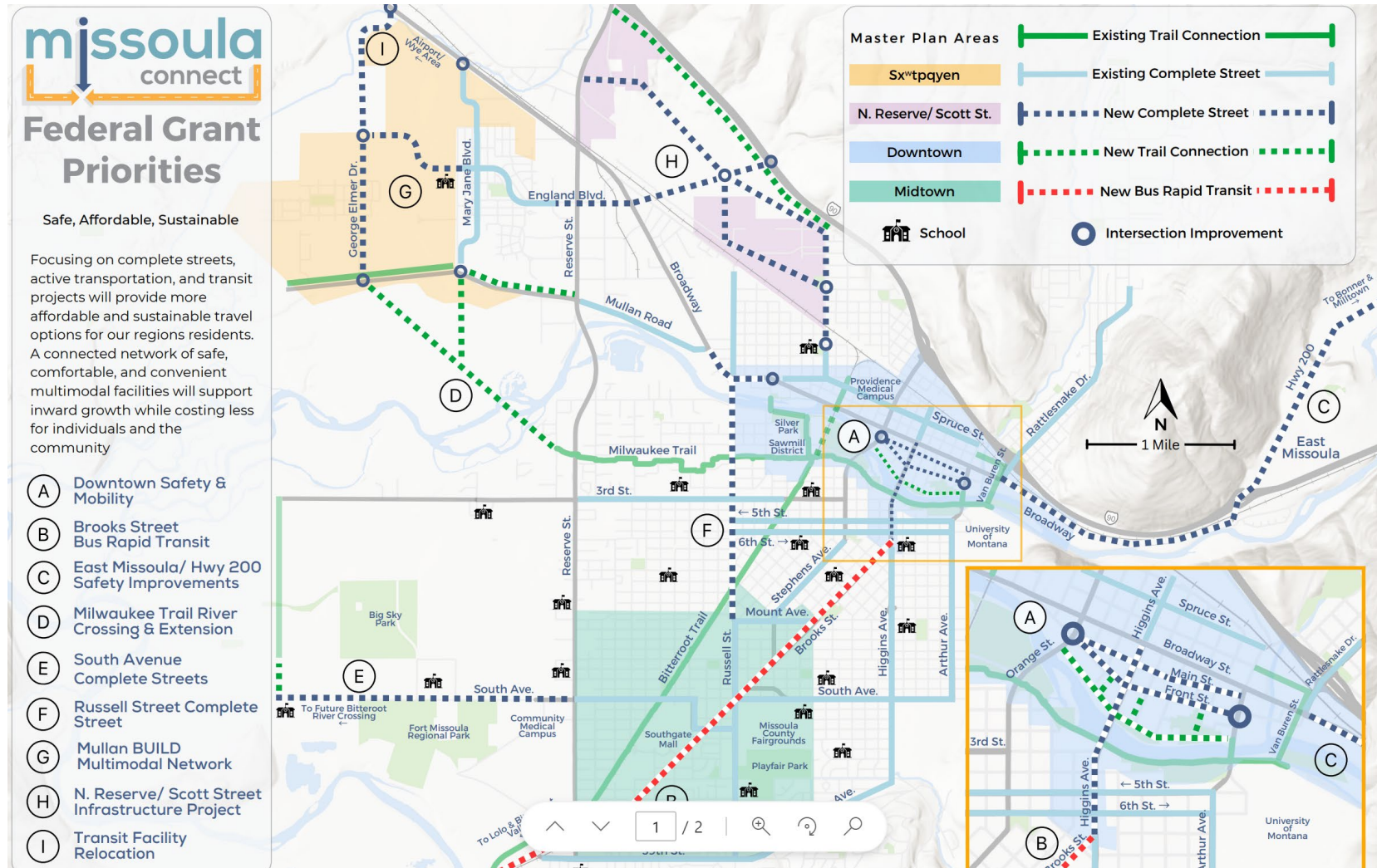
Grant Applications





Planning & Engineering

FY 23 Highlights





Planning & Engineering

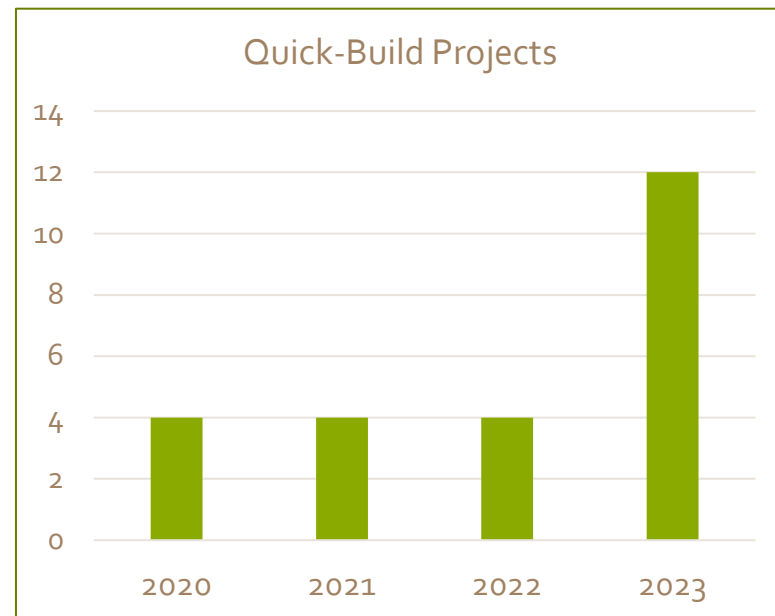
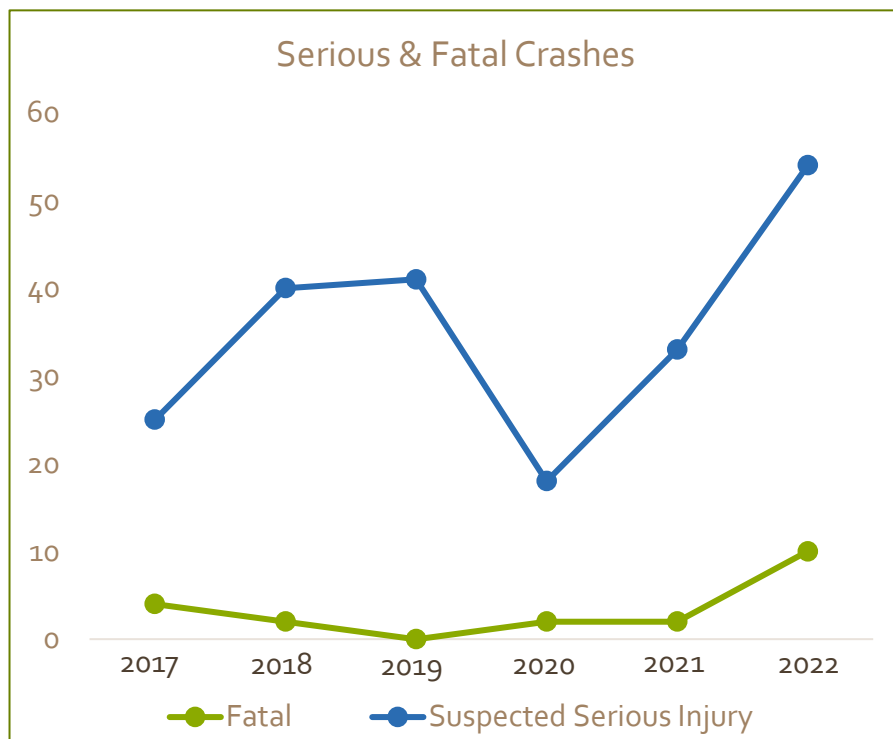
FY24 Goals

- Complete the Street Typologies project
- Start design on federal grant projects. Hire staff to manage these projects.
- Start construction on 4 sidewalk improvement projects.
- Start construction on 7 water distribution & 2 wastewater collection projects (ARPA/SRF)
- Improve project management and City processes
- Initiate utility facility plan updates



Metrics

10 fatal crashes and **54** with serious injuries
(2022)

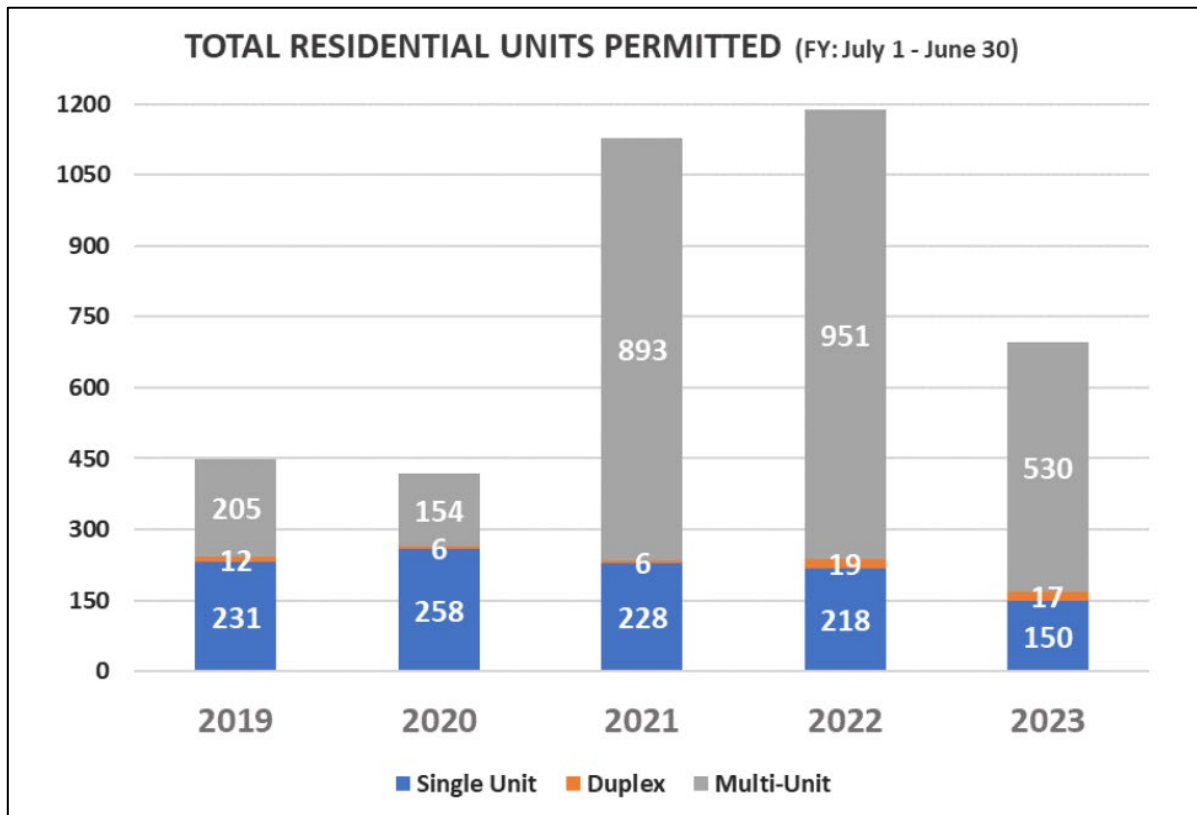


- **24** Quick-build traffic calming/safety projects to date
 - 25 - 60% volume reduction
 - 5 - 30% speed reduction



Metrics

- Engineering review of building permits (697 dwelling units in FY23)

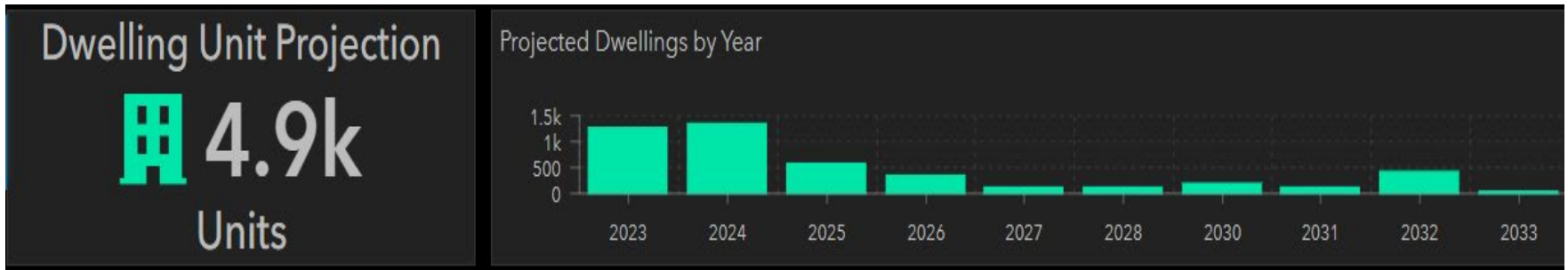


Source: CPDI Budget Presentation, July 19, 2023



Metrics

- Future Development Pipeline (based on entitled lots and developer plans)



Source: City Development Map dashboard



Community Investment Program

Roadway Improvements \$3M

- South Avenue Safe Streets for All
- Broadway/Toole/California Roundabout
- Scott Street: Phillips to Otis
- California Street Reconstruction

Sidewalks and Mobility Improvements \$4.2M

- Turner/Worden
- Kent/Central Greenway: Phase I
- Russell/Fairgrounds Trail Crosswalk
- Ivy/Franklin/Park Greenway: Phase I
- Eaton: Phase II



Community Investment Program

**BUILD Grant:
Phase II
\$2.9M**

- Mullan/Flynn Lane Trail
- George Elmer Drive – McNett Flats
- Mary Jane Boulevard – Hellgate Village



Community Investment Program

Surface Transportation Community Investment Program

Surface Transportation CIP Projects

Collapse all

- 1. Kent/Central Neighborhood Greenway
- 1. Burton Neighborhood Greenway
- 1. Higgins Ave Multimodal Improvements
- 1. California St Complete Street
- 1. Eaton St Sidewalk/Complete Streets Improvements
- 1. Turner St/Worden Ave/N 5th Complete Street
- 1. BUILD Grant
- 1. Ivy/Franklin/Park Greenway
- 1. Cregg Lane Phase III
- 1. South Ave (MRA)
- 1. George Elmer/Cattle

CIP Project Overview

Project Scoring Criteria

Long Project Descriptions

Acronym Definitions

All Projects Ranked

Projects Included in 5 year CIP Plan

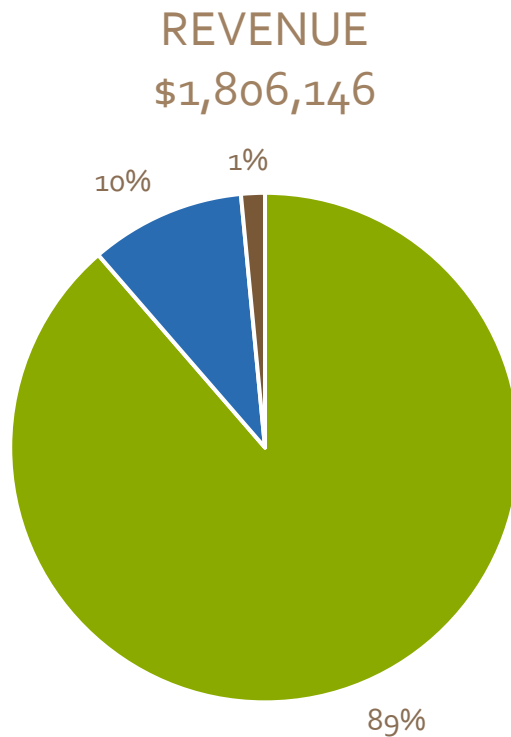
>> Collapse

Montana State Library, Esri, HERE, Garmin, SafeGraph, GeoTechnologies, Inc, METI/NASA, USGS, Bureau of Land Managem... Powered by Esri

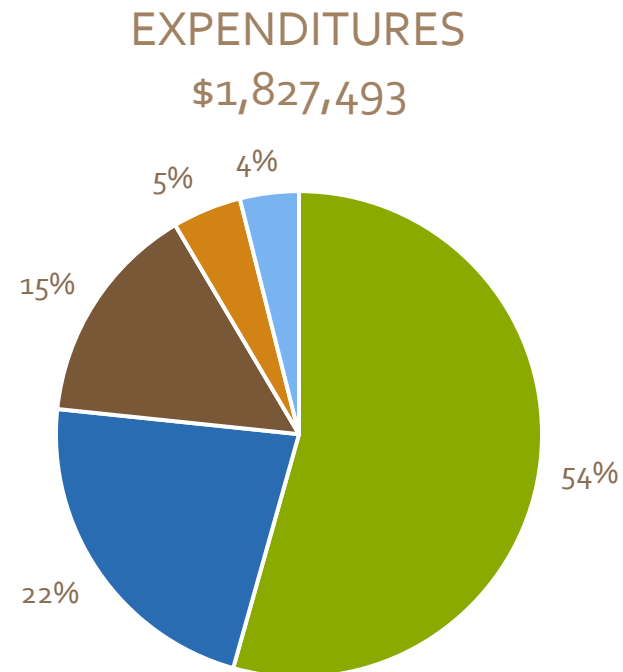
<https://www.engagemissoula.com/transportation-community-investment-projects>



Transportation Planning – Special Revenue Fund



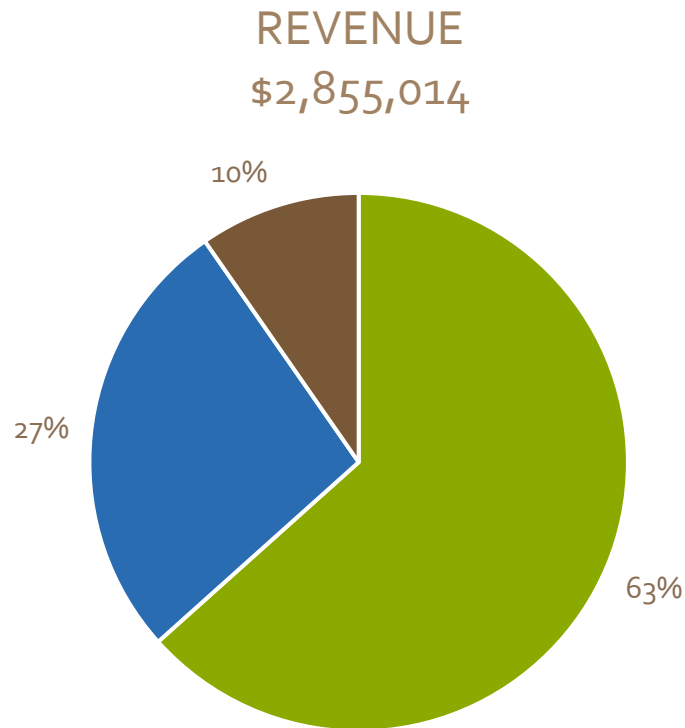
- INTERGOVERNMENTAL
- OTHER FINANCING SOURCES
- MISCELLANEOUS



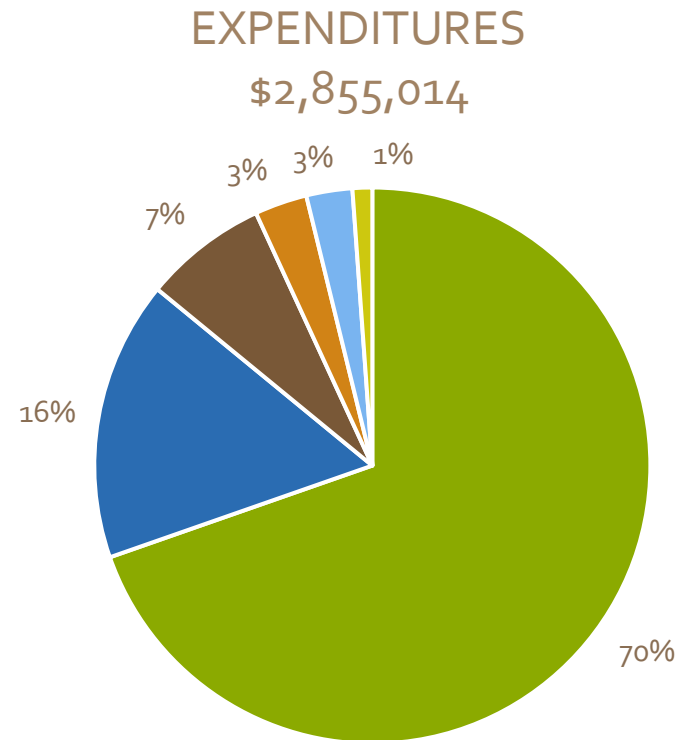
- PERSONAL SERVICES
- PURCHASED SERVICES
- GRANTS & CONTRIBUTIONS
- FIXED CHARGES
- SUPPLIES



Engineering – Road District #1



- MISCELLANEOUS (PROPERTY ASSESSMENTS)
- CHARGES FOR SERVICES
- LICENSES & PERMITS



- PERSONAL SERVICES
- CAPITAL OUTLAY
- PURCHASED SERVICES
- DEBT SERVICE
- MISCELLANEOUS
- SUPPLIES



Questions?



Utility Operations & Maintenance





Water Utility

Purpose

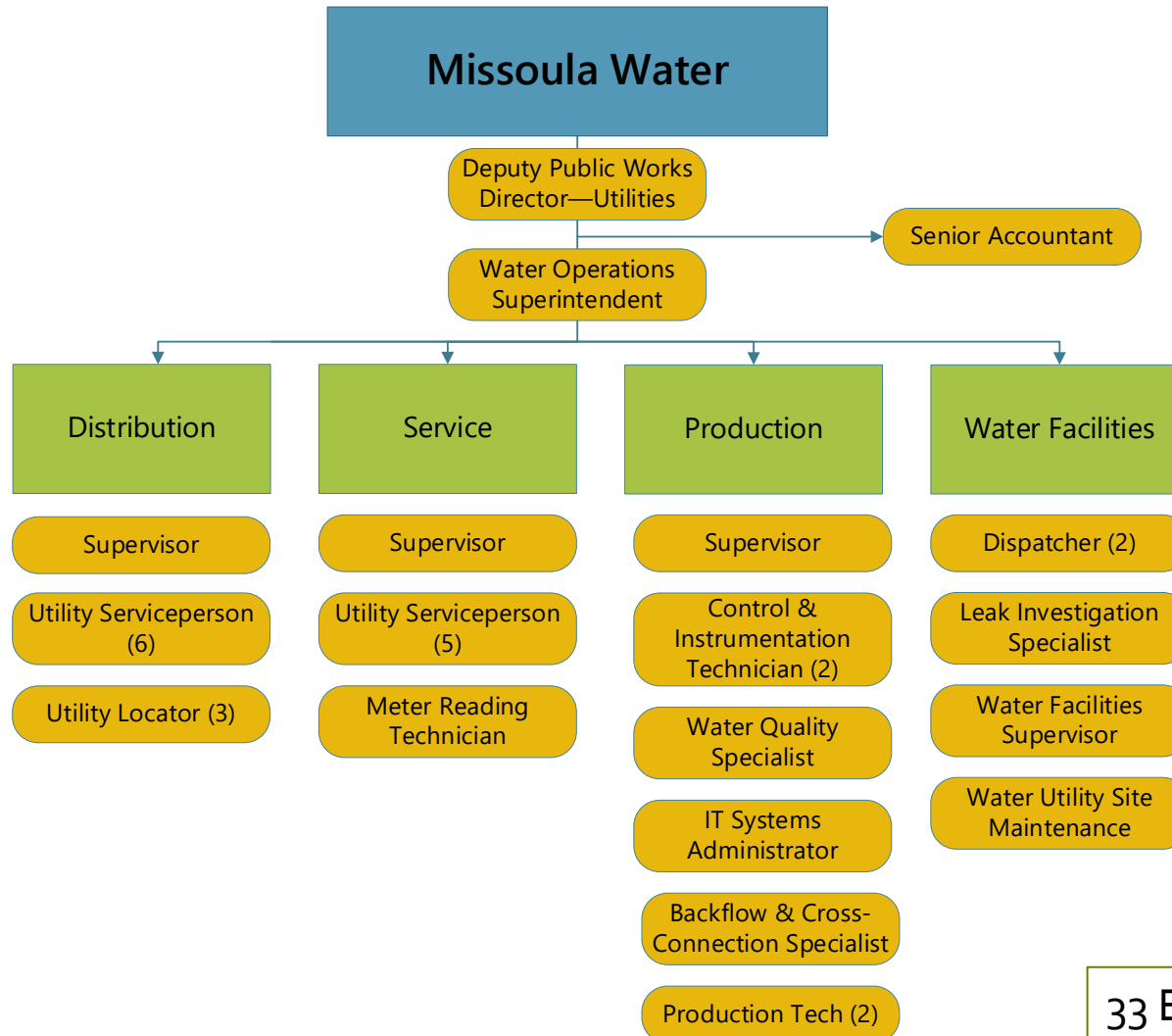
Protect the health and safety of the Missoula community by providing safe, clean drinking water and providing water needed for fire protection and irrigation.



One of three new water tanks that will increase water storage capacity



Organization



33 Employees



Water Utility

Key Facts & Metrics



Maintains 340 miles of mains, 40 wells, 26 storage facilities, 22 booster stations, 36 pressure reducing stations



Produced 9.4 billion gallons of water, meeting all drinking water standards in 2022



Conducted 1,480 hydrant inspections and operated 1,406 valves in FY23



Replaced 2,625 water meters in FY23, bringing the total to 13,700 meters replaced



Collected thousands of water samples to test for bacteria, Lead & Copper, Nitrate, volatile organics, synthetic organics, inorganic chemicals, radionuclides, PFAS and many other parameters



Water Utility

FY23 Highlights

- Completed installation of 3 tanks
- Reduced leakage by over 1,000 gallons per minute (equivalent to a 100-horsepower pump running 24/7)
- Replaced 1.5 miles of water main



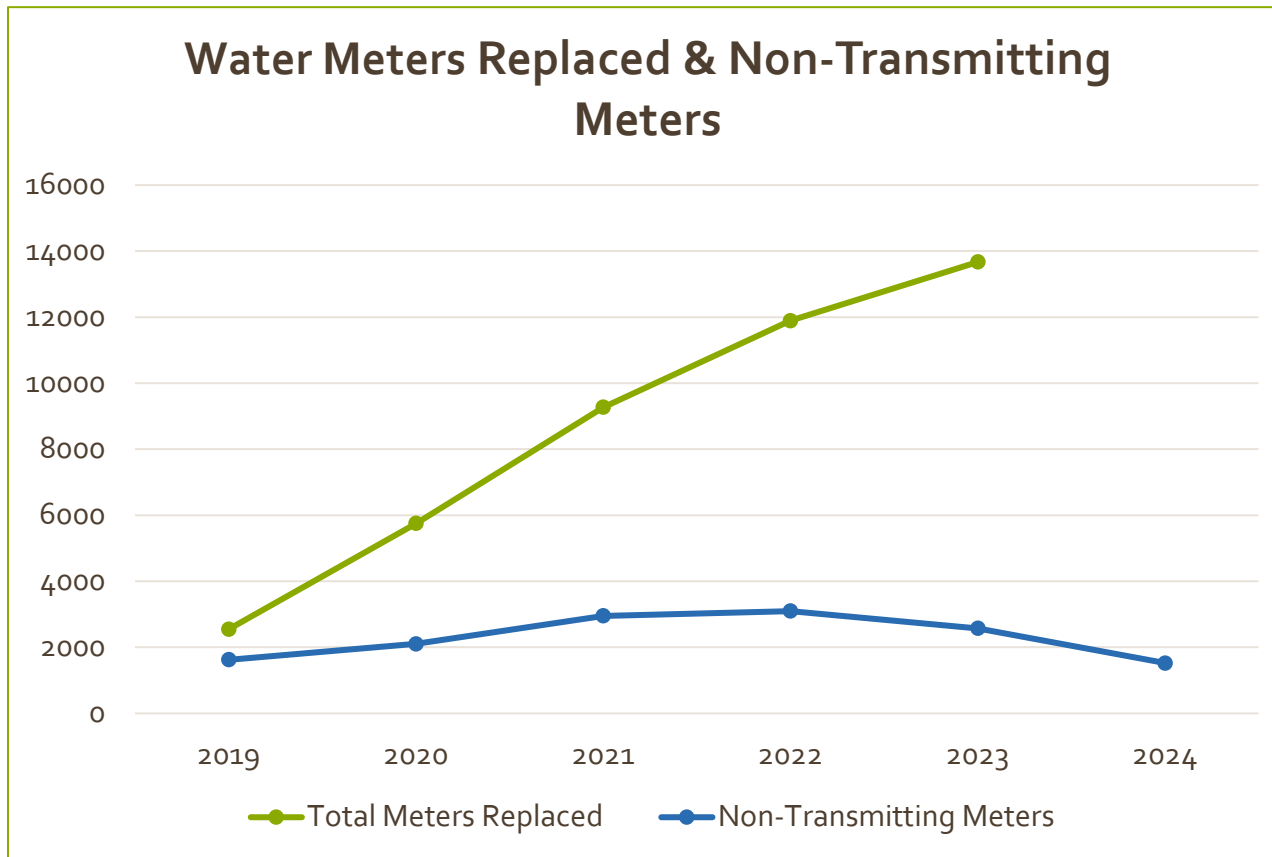
Water Utility

FY24 Goals

- Continue locating and repairing water main and service line leaks
- Upgrade SCADA/telemetry
- Continue water meter replacement project
- Continue water main replacements (7 projects in design, \$8.2 million)
- Install solar at 9-10 well sites to reduce energy usage (targeting 500 KW total generation capacity)
- Complete lead service line inventory

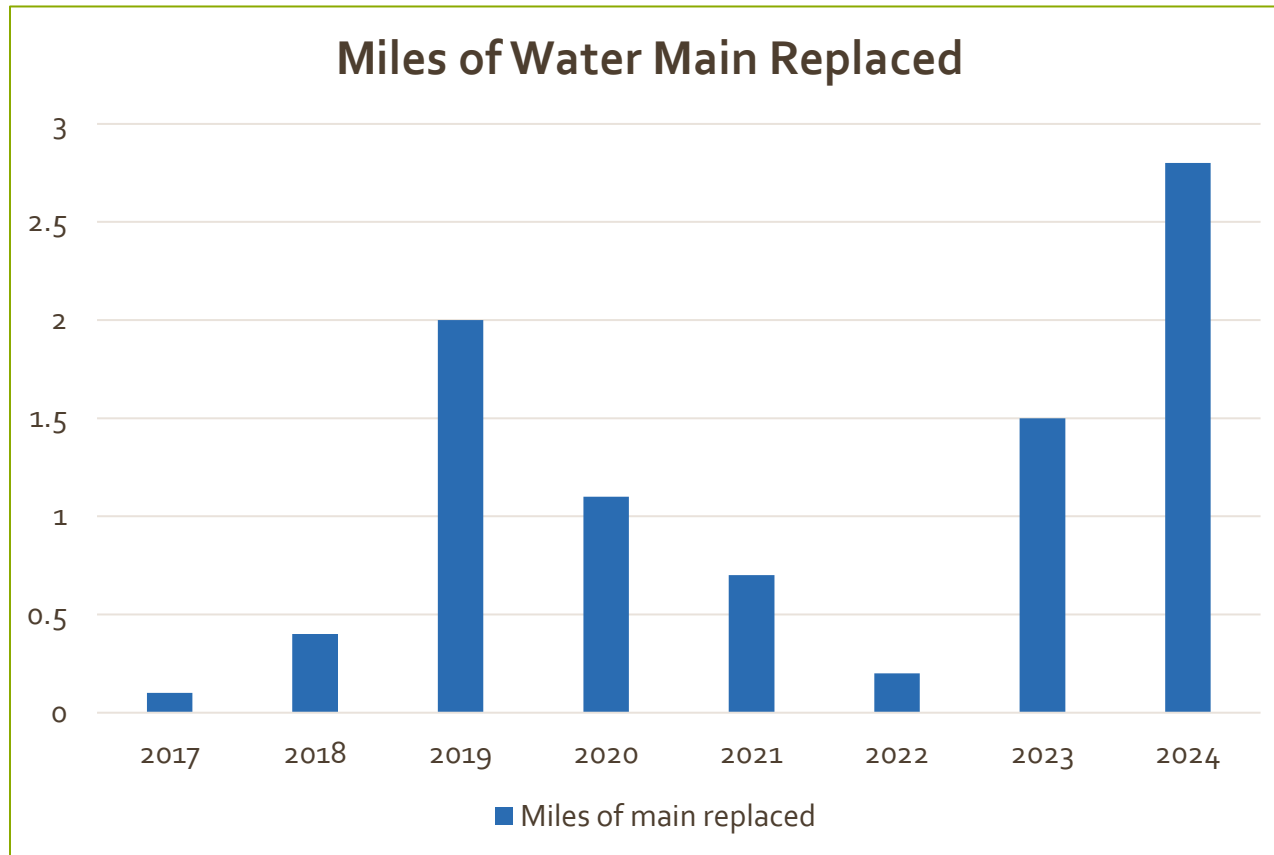


Metrics





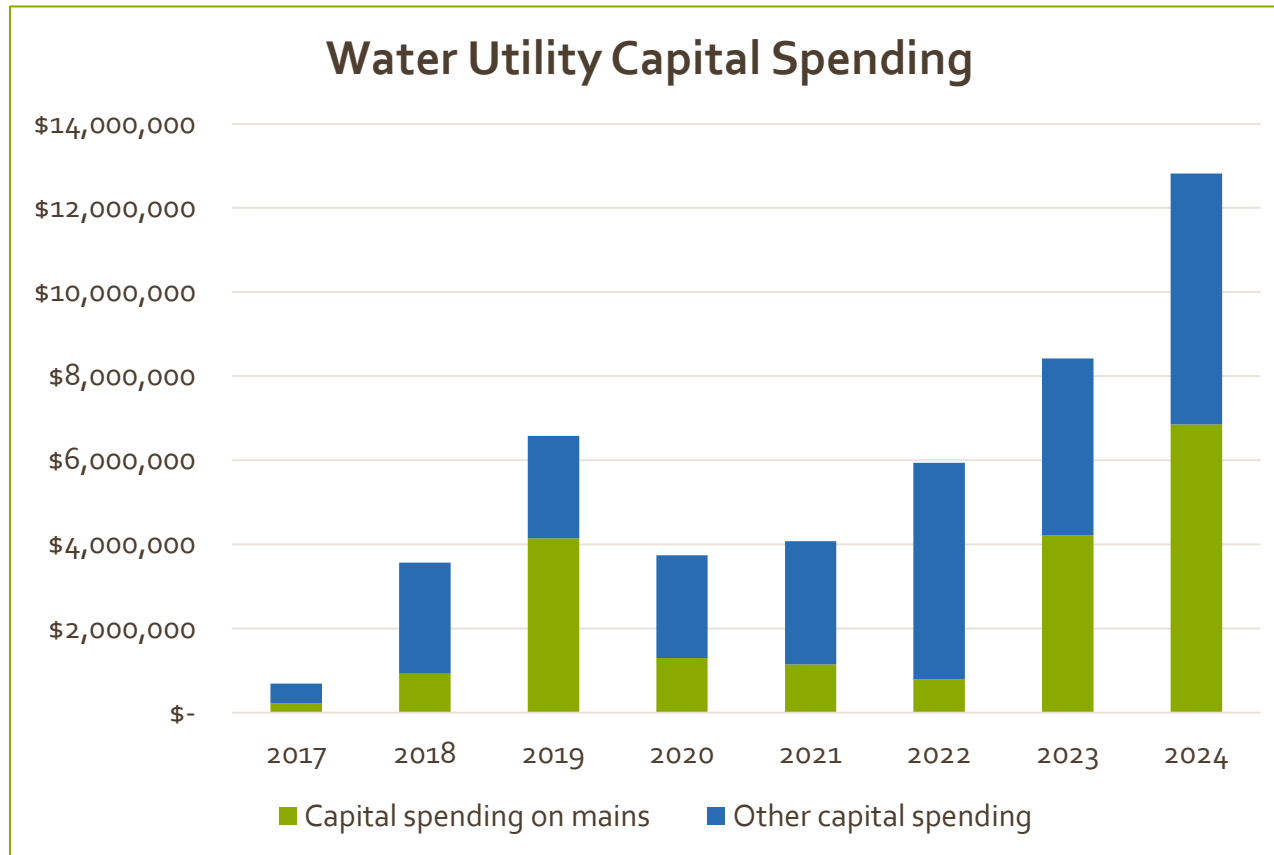
Metrics



Goal: Replace 1% per year (3.4 miles)

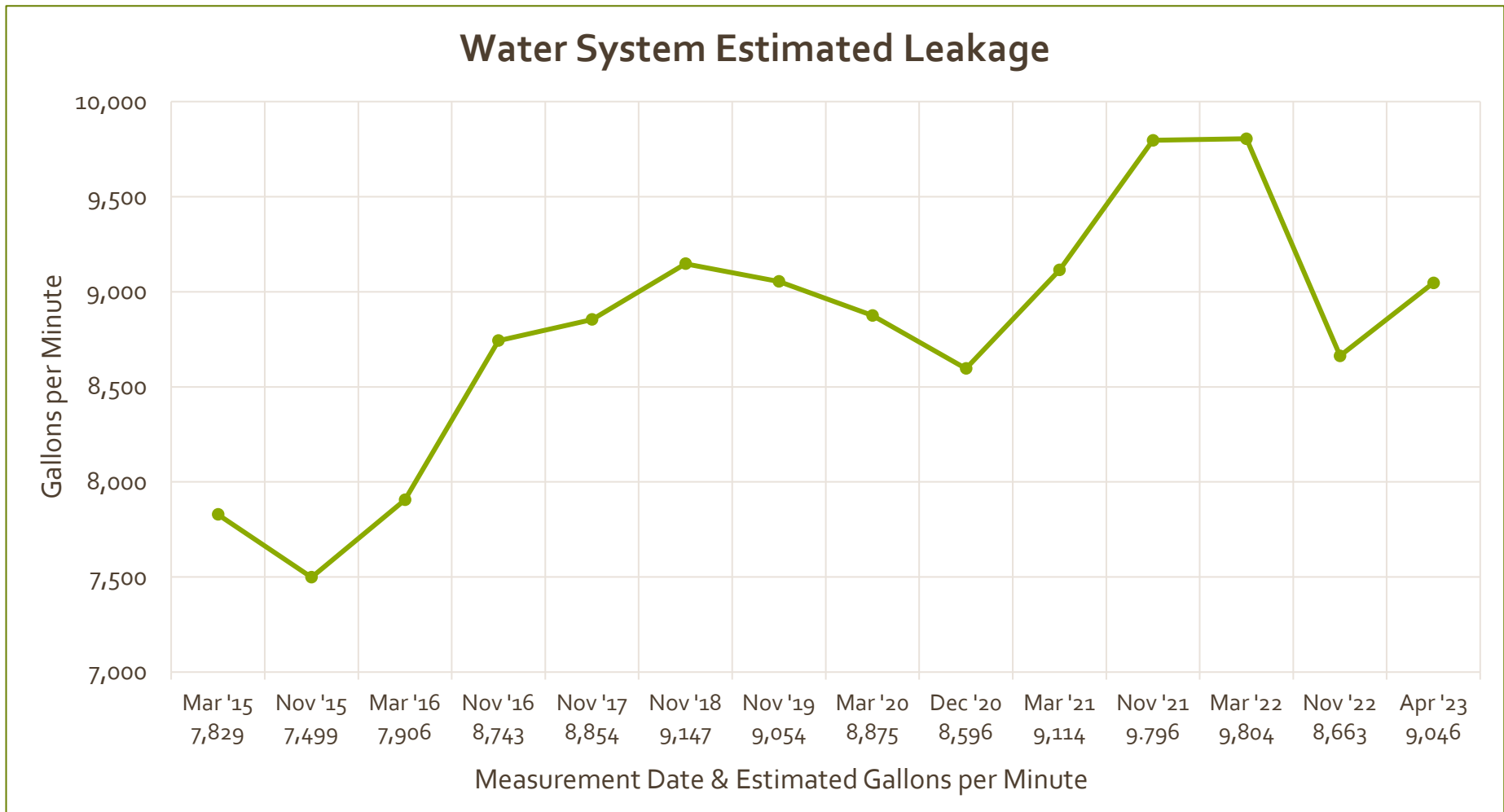


Metrics





Metrics





Water Utility Enterprise Fund

Funded New Requests

CLA VAL and Tank Inspection - \$37,000 — Ongoing

- To ensure water tanks and valves are at industry standards

Water Rights Consulting - \$100,000 — One-Time

- To provide additional water rights that could be utilized by infill developments

New Equipment - \$37,000 — One-Time

- Purchase new truck equipment and leak detection dataloggers



Water Utility Enterprise Fund

Unfunded New Requests

Equipment Replacement - \$53,000 — One-Time

- Purchase truck inserts, a tapping bit, lift bed and confined space tripods

Data Review of Missoula Aquifer Static Water Levels - \$15,000 — One-Time

- To ensure the water system can meet water demands of all customers, existing and future



Community Investment Program

Water System
Improvements
\$8.25M

- South 4th St. – Russell to Orange
- Edith – Mount to Crosby
- Sherwood – McCormick to Sherwood + Phillips
- West Pine – Owen to Woody
- East Beckwith – Higgins to Helen
- Rattlesnake – Monroe/Jackson
- Harlequin Court Tie Main



Community Investment Program

Water
Production
Improvements
\$1.5M

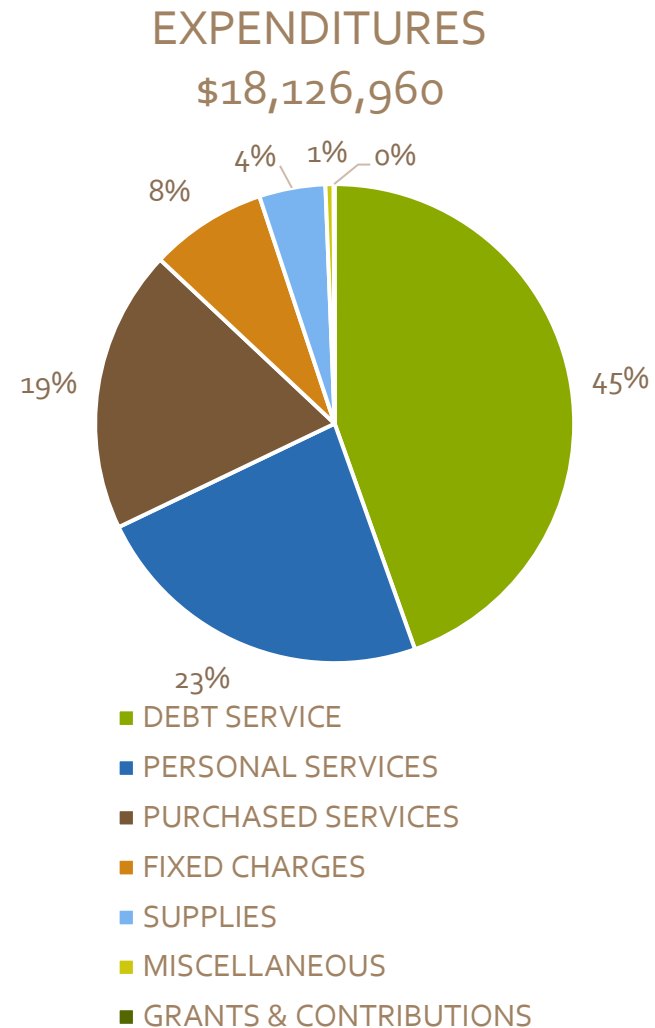
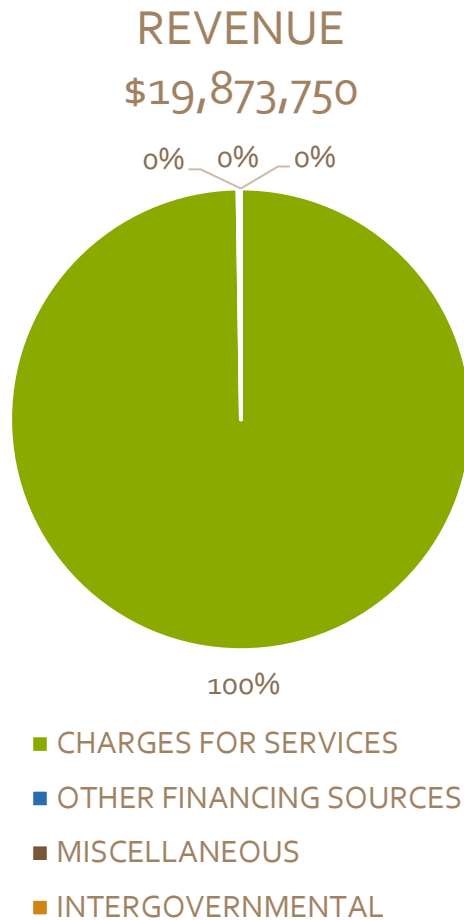
- McKinley Lake Removal
- Airport Well
- Water Pump Replacements
- Pumphouse Repairs/Rebuilds (Mark Ct. St. Thomas PRV, Catlin Well)
- Miscellaneous Pump Improvements

Water
Miscellaneous
Improvements
\$1.8M

- Meters
- Hydrants
- Water Model Update
- Miscellaneous Upsizing Projects



Water Utility — Enterprise Fund





Wastewater Utility

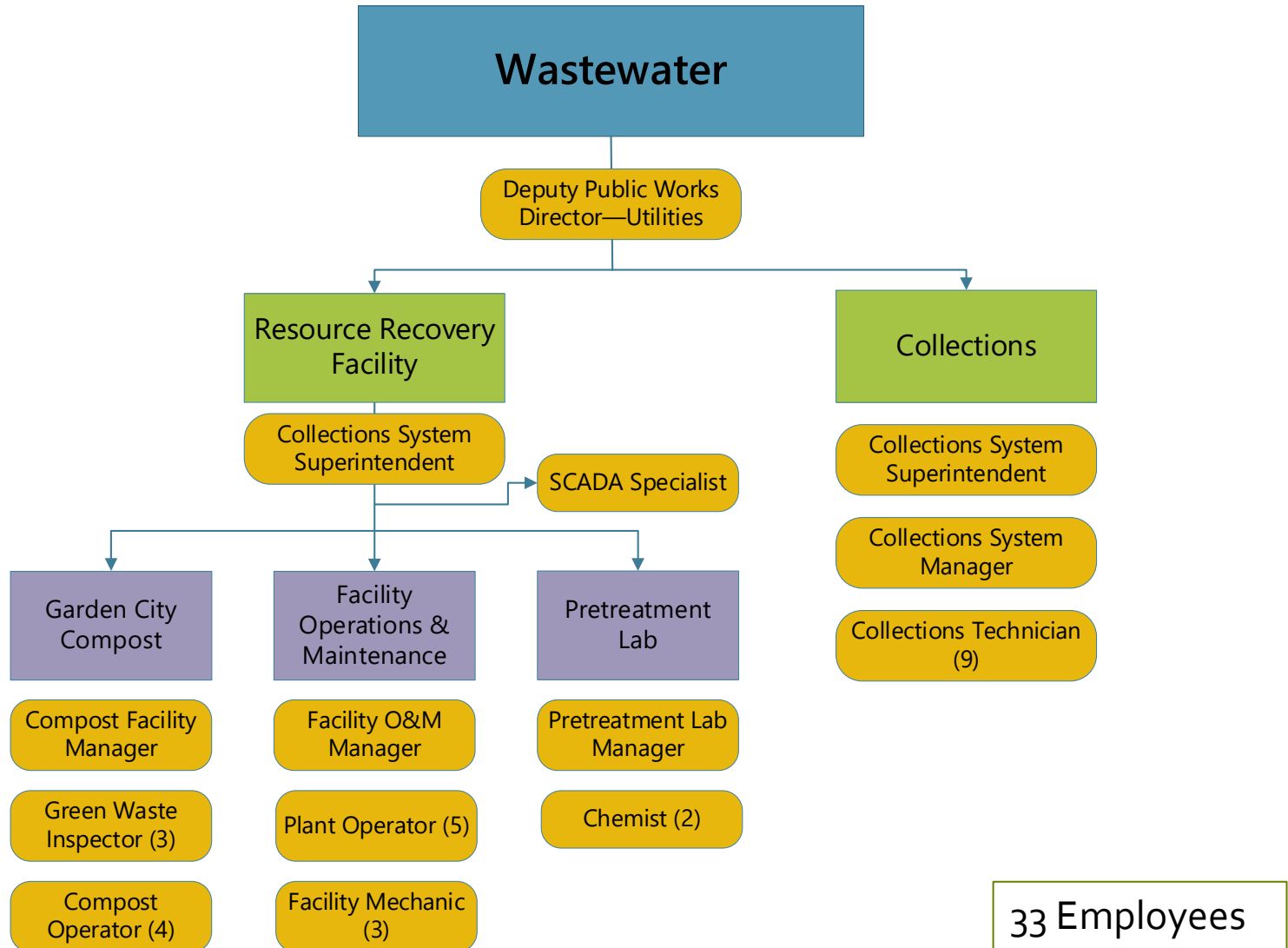
Purpose

Provide safe and environmentally conscientious management and disposal of wastewater at the collections and resource recovery facilities.





Organization





Wastewater Utility

Key Facts & Metrics



Maintains 28 lift stations and 1,700 residential and commercial sewer tank effluent pumping (STEP) systems



Treats 2.8 billion gallons of wastewater annually, removing 78% of nitrogen and 90% of phosphorus



Produces and sells 28,000 cubic yards of Compost.



Generates over 700,000 kWh of electricity per year



Diverts 155 million gallons of treated wastewater from the Clark Fork River to irrigate 36,000 poplar trees



Jets and cuts roots from 170 miles of sewer main per year



Wastewater Utility

FY23 Highlights

- Began using electricity produced by solar farm
- Received recognition with National Association of Clean Water Agencies (NACWA) Peak Performance Award—Silver Level
- Made progress on evaluation of compost expansion alternatives
- Completed or continued numerous Resource Recovery projects



Wastewater Utility

FY24 Goals

- Complete compost facility upgrades (including biofilter for odor control)
- Finalize plan for the future of the poplar farm
- Develop sewer main replacement program
- Continue progress on treatment facility equipment upgrades



Metrics — Solar Farm

Energy balance

Day

Week

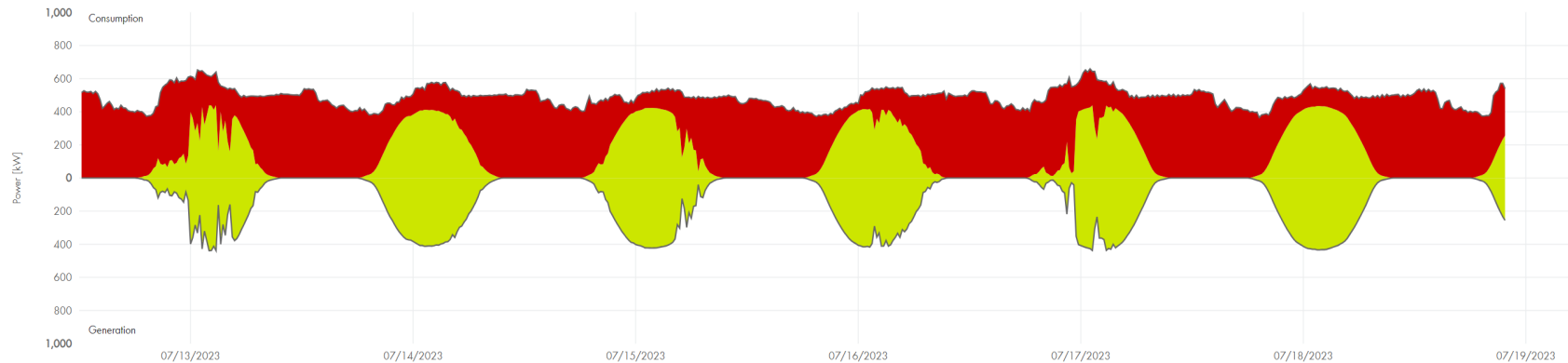
Month

Year


Total

< 07/19/2023  >

Energy flow



Details

Total consumption	74.975 MWh	Total generation	20.435 MWh 
<input checked="" type="checkbox"/> Grid-supplied power	54.540 MWh	<input checked="" type="checkbox"/> Grid feed-in	0 Wh
<input checked="" type="checkbox"/> Direct consumption	20.354 MWh		
Internal power supply	20 MWh	Self-consumption	20 MWh
Self-sufficiency quota	27 %	Self-consumption quota	100 %



Metrics — Compost Facility

- Total Revenue (compost sales + tipping fees) = \$872,000
- Total operating cost (including debt service) = \$1,400,000
- Revenue has increased 33% since FY21
- Diverts more than 15,000 tons of biosolids and green waste from the landfill each year



Wastewater Utility Enterprise Fund

Funded New Request

Replacement and Depreciation - \$150,000 — Ongoing

- Sufficient funds for R&D are necessary to protect our infrastructure, public health and safety

Unfunded New Requests

Collections AI Condition Assessment - \$25,000 — One-Time

- To plan and budget for high priority sewer main replacements

Sewer Loan Program - \$25,000 — Ongoing

- To help low-income customers make necessary sewer repairs



Community Investment Program

Resource
Recovery
Facility
\$3M

- Administration Building Improvements
- Administration Building Roof Replacement
- Land Application Study
- PEL Pump and Well Pump Rebuilds
- Perimeter Fencing for Plant & Compost
- Poplar Farm Conversion
- Primary #1 and #2 Substructure Coating
- Primary Digester Cleaning and Improvements
- SCADA Upgrade
- Side 2 Primary Effluent Lift Pump
- RAS Valve Replacement



Community Investment Program

Garden City
Compost
\$973k

- Garden City Compost: Phase II
- Stacker Conveyor
- Main Compost Building Refurbish
- Mixer Water System
- Automate Air System
- Inspector Office Replacement



Community Investment Program

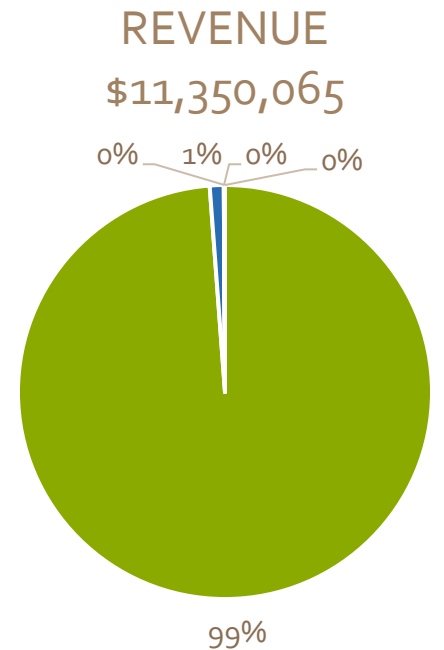
Wastewater Collections

\$4.25M

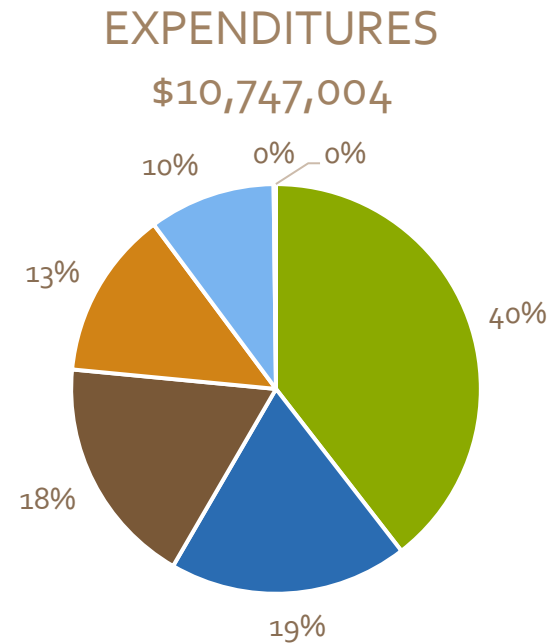
- Miscellaneous System Improvements
- Momont #1 Lift Station Replacement
- Kelly Island Lift Station Replacement
- Sewer main Rehabilitation Program
- Fort Missoula Lift Station Replacement
- South Russell St. Sewer Replacement
- River Front Triangle Main Upsize
- 24th Avenue Gravity Main Upsize
- Miscellaneous Upsizing Projects
- Wastewater Facility Plan Update



Wastewater Utility – Enterprise Fund



- CHARGES FOR SERVICES
- OTHER FINANCING SOURCES
- MISCELLANEOUS
- INTERGOVERNMENTAL
- LICENSES & PERMITS



- PERSONAL SERVICES
- DEBT SERVICE
- PURCHASED SERVICES
- FIXED CHARGES
- SUPPLIES
- GRANTS & CONTRIBUTIONS
- MISCELLANEOUS



Stormwater Utility

Purpose

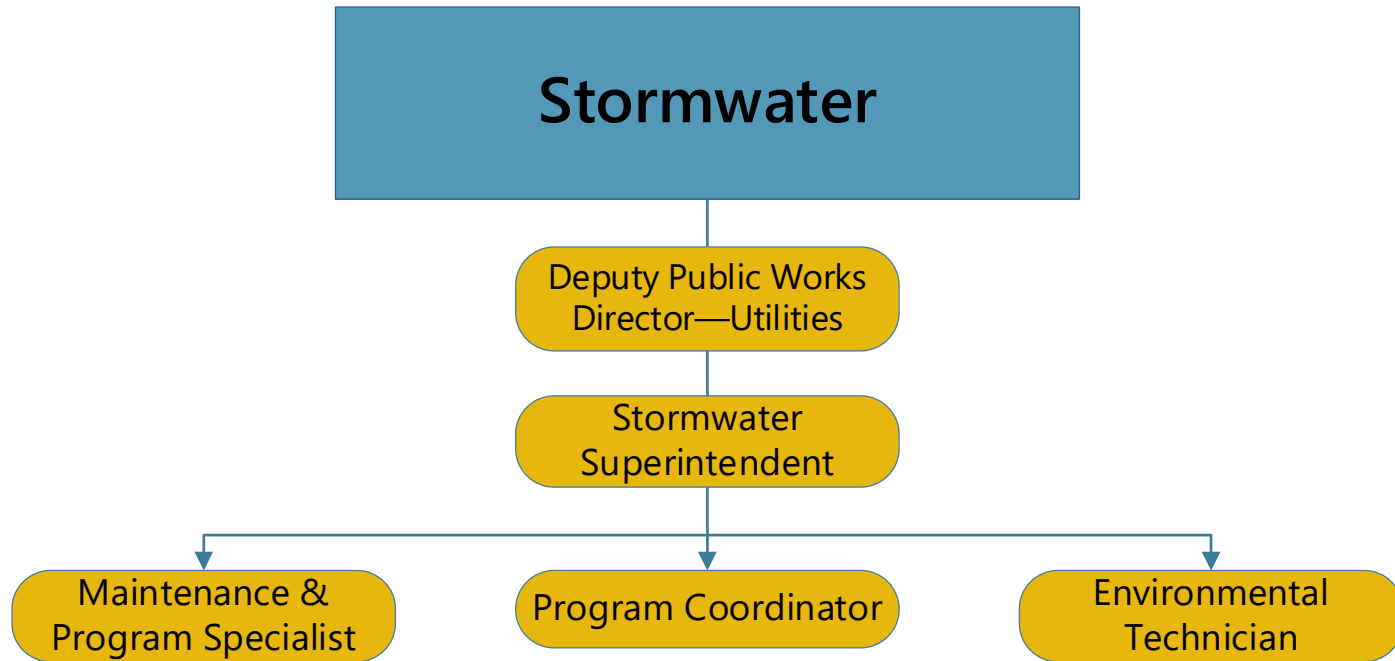
- Provide for and maintain infrastructure for both surface and underground movement of water from rain, snow melt, and other weather events, and
- Ensure compliance with state, federal, and local laws for stormwater management.



Construction project at Cattail Corner to remove accumulated sediment and debris and improve stormwater storage



Organization



4 Employees



Stormwater Utility

Key Facts & Metrics



Cleaned 196 dry wells and 14 stormwater inlets; 188 CY of debris removed



Collected 16 water quality samples



Jetted 1,654 LF of storm drains



Trained 33 contractors/consultants on best management practices & 111 City employees on green infrastructure, spill prevention



222 Stormwater Permits issued, 223 inspections at 61 sites



Stormwater Utility

FY23 Highlights

- Completed levee recertification
- Began construction on South Hill Stormwater Improvements Project utilizing ARPA Grant funds
- Continued levee vegetation management



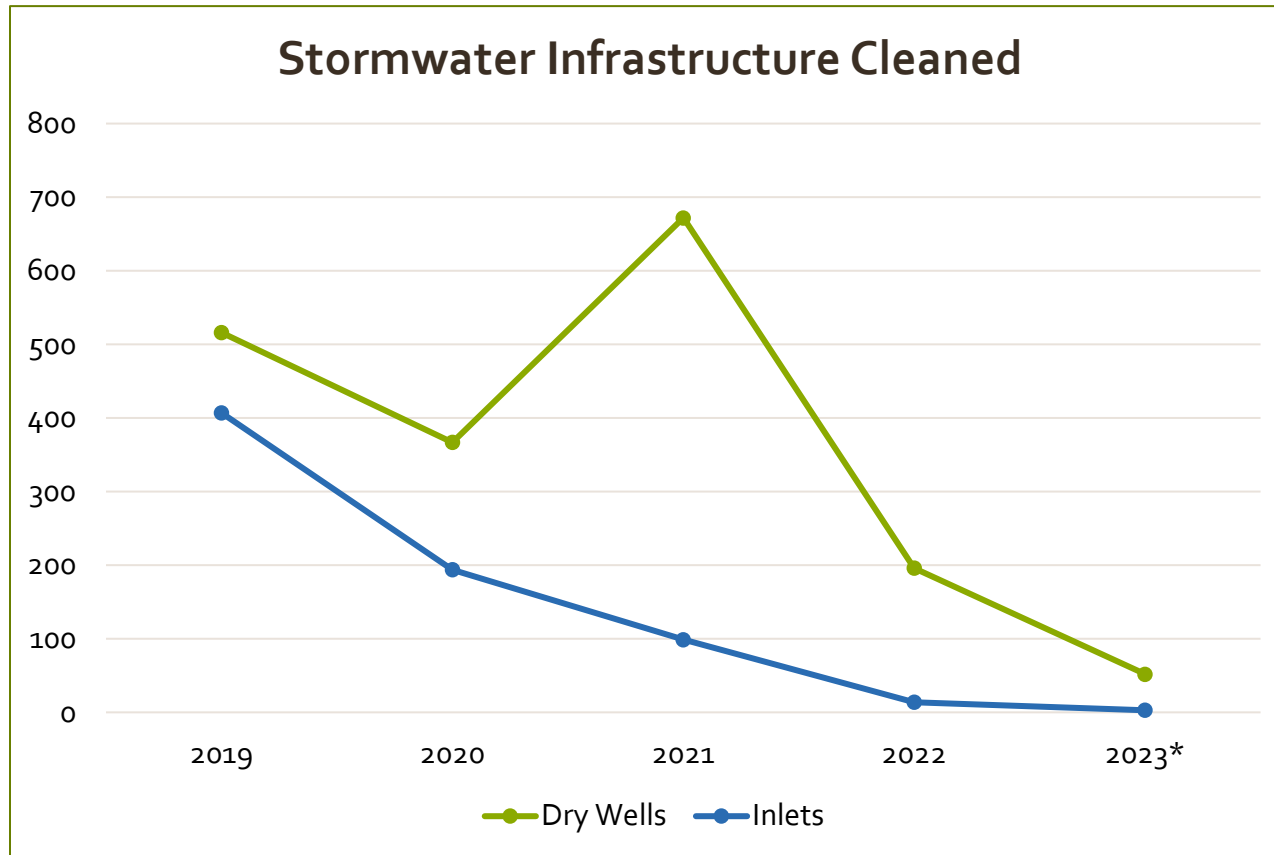
Stormwater Utility

FY24 Goals

- Complete all 3 phases of South Hills Storm Drainage project (Gharrett/55th, Grandview, Cattail Corner)
- Finish design and permitting of Bitterroot Outfall improvements projects
- Develop comprehensive stormwater management plan (Renewable Resource Grant funding)
- Condition assessment of Missoula Development Park stormwater facilities



Metrics



* As of June 30, 2023



Stormwater Utility Enterprise Fund

Funded New Request

Matching Grant Funds - \$50,000 — One-Time

- Match to a \$125,000 Department of Natural Resources and Conservation Renewable Resource Grant to complete a Comprehensive Stormwater Plan

Unfunded New Request

Overtime for Urban Camping Cleanup - \$500 — Ongoing

- Additional staff time to provide the essential support to address human and environmental health challenges in Right of Ways while continuing to maintain baseline services



Community Investment Program

Stormwater
System
Improvements
\$1.9M

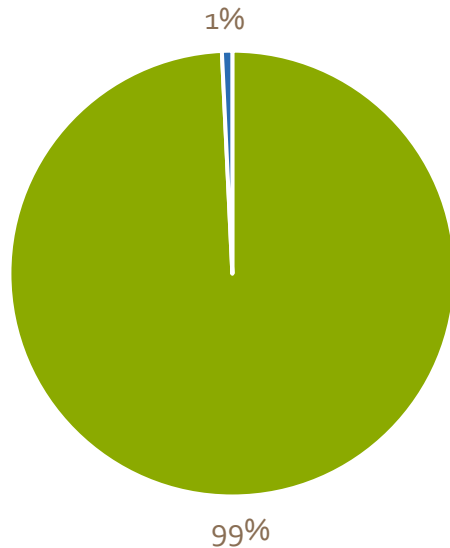
- South Hills Stormwater
- South Hills Stormwater System Outfall and Bitterroot Swale
- City of Missoula Stormwater Facility and Operations Plan – Phase II
- Majestic Storm Drain Improvements



Stormwater Utility – Enterprise Fund

REVENUE

\$1,527,281

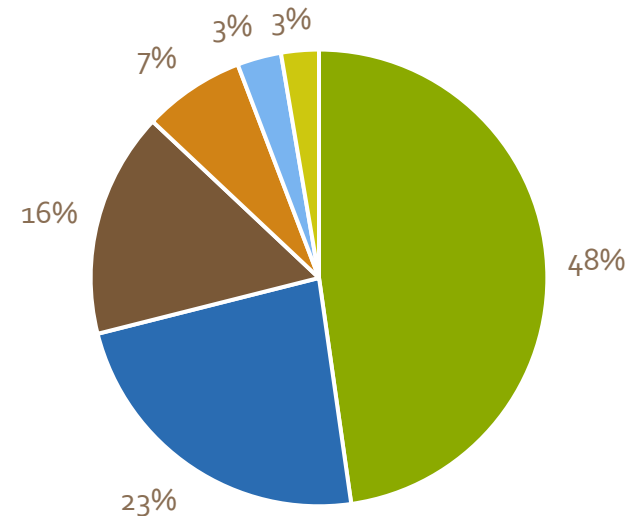


■ CHARGES FOR SERVICES

■ MISCELLANEOUS

EXPENDITURES

\$1,576,967



■ PERSONAL SERVICES

■ SERVICES

■ MISCELLANEOUS

■ DEBT SERVICE

■ FIXED CHARGES

■ SUPPLIES



Questions?



Street Operations & Maintenance

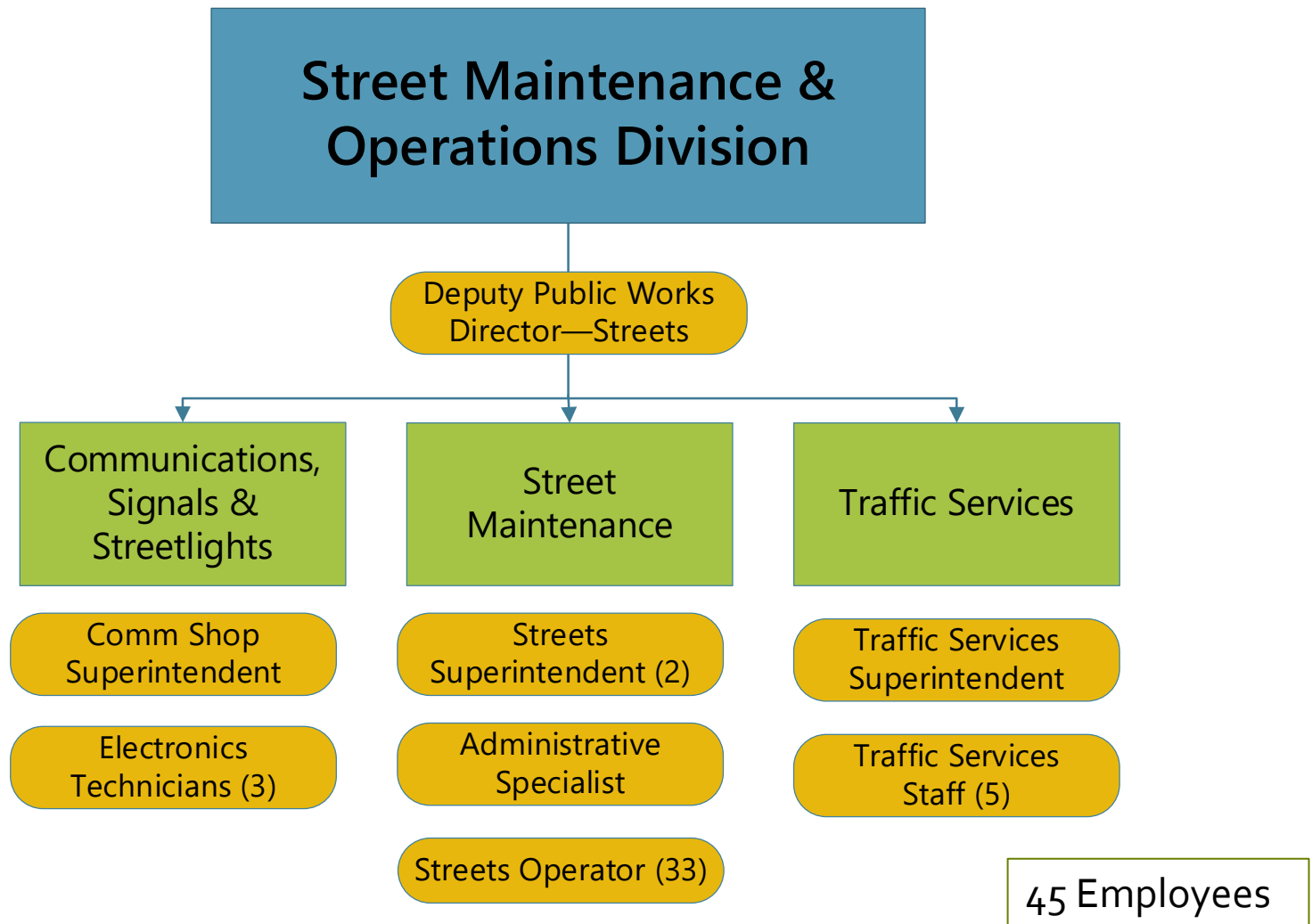
Purpose

- Ensure the City's public streets, alleys, bike lanes, lighting, signals, and signs are well maintained so that they provide safe travel routes for all users.
- Ensure these public assets are managed for maximum longevity.





Organization





Street Operations & Maintenance

Key Facts & Metrics



Milled & paved 4.3 miles, chip sealed 9.3 miles of city streets, and applied 93 miles of street striping in FY23



Performed snowplowing, street sweeping, leaf collection, and street pavement maintenance on 337 miles of streets and 65.2 miles of alleys



Maintained & tested 11 City-owned and 62 MDT-owned traffic signals



12,168 (3,822 more than FY22) potholes patched



Installed electronics & safety equipment on 1 Police vehicle & 41 other City vehicles



Street Operations & Maintenance

FY23 Highlights

- Increased use of recycled materials
- Identified locations for material storage
- Increased special project revenue
- Establish Road District fund reserve





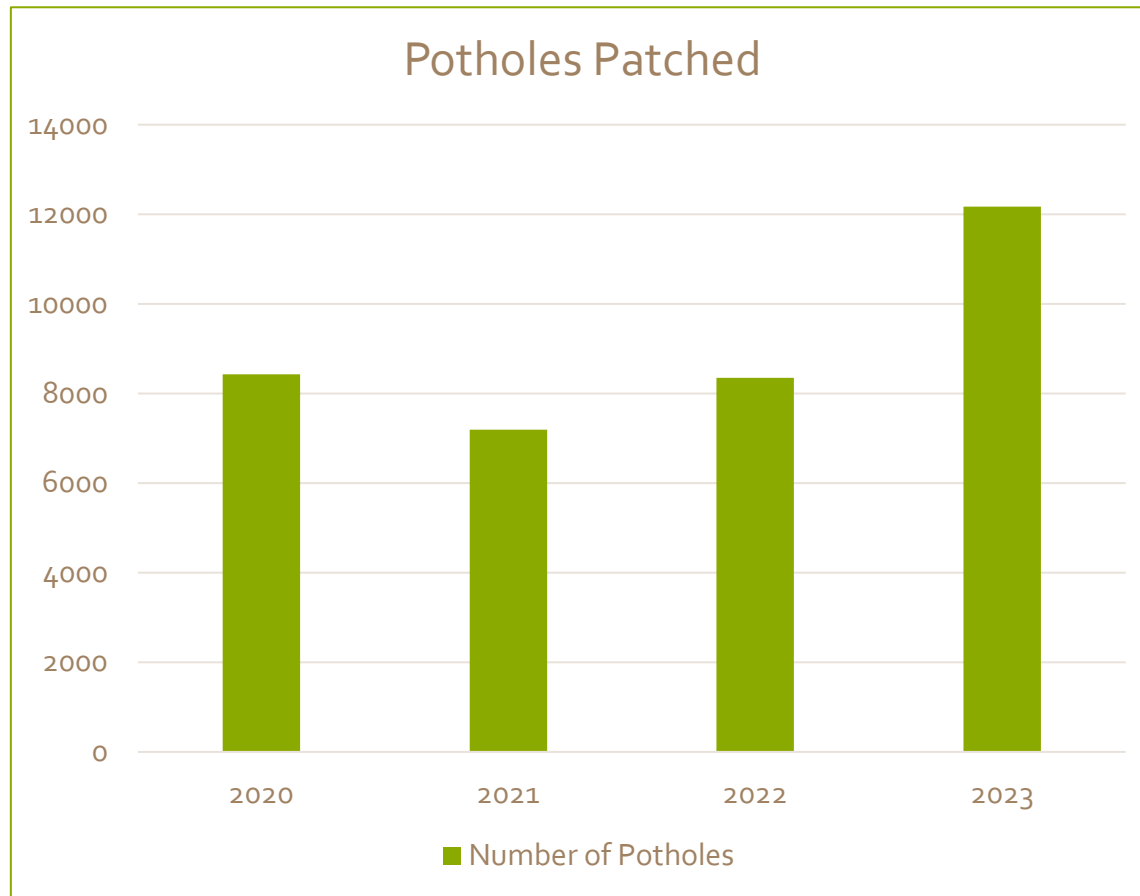
Street Operations & Maintenance

FY24 Goals

- Purchase street sweepers
- Review maintenance priorities, including bridge & culvert inventory, leaf pickup, green infrastructure
- Complete radio upgrade project



Metrics





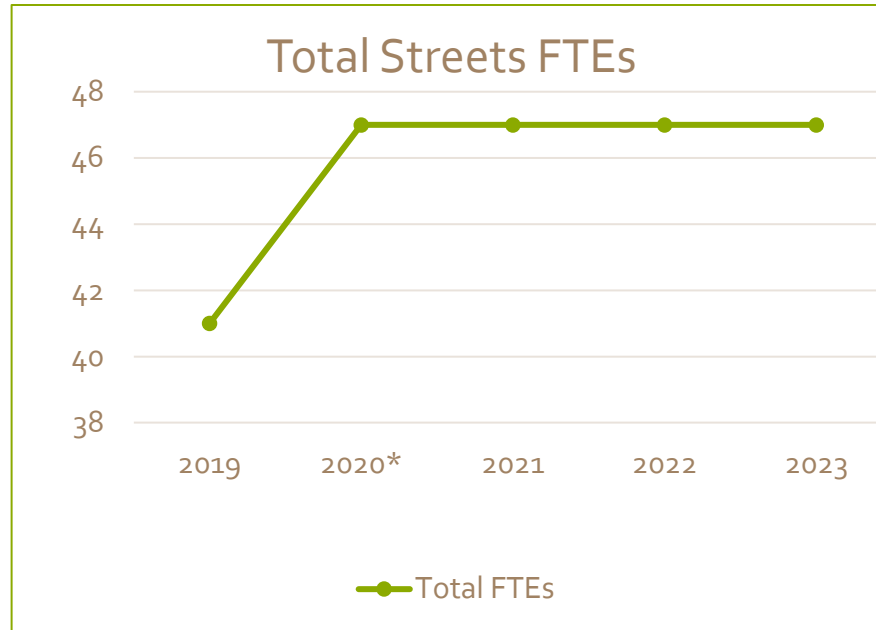
Metrics



Source: 2020 Pavement Management Report

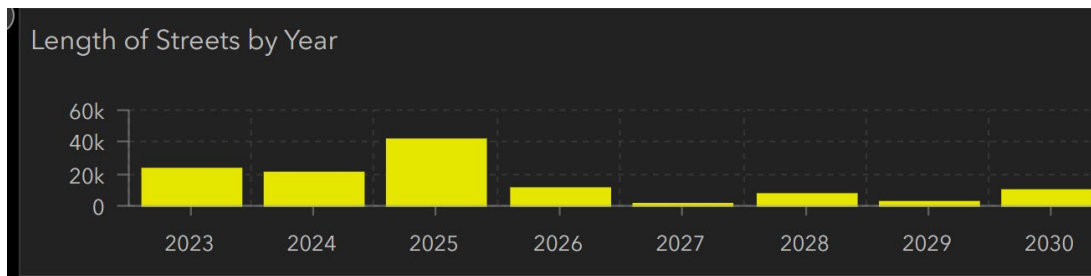


Metrics



*Added 4 residential plow drivers & increased 2 PT staff to FT

Projected increase of 15.98 miles of new streets through 2025:



Source: City Development Map dashboard



Street Operations & Maintenance

Road District #1 — **Unfunded** New Requests

6 New Streets FTEs - \$1,032,906 Ongoing; \$229,500 — One-Time

- Six new FTEs for street sweeping, snowplowing, crack sealing, asphalt maintenance, concrete jobs, and sump projects to help maintain local street asphalt conditions and to keep up with increasing centerline miles
- Three additional snowplows and granular deicers will need to be added to existing fleet trucks to accommodate new staff

2 FTEs Urban Camping Cleanup -\$209,150 — Ongoing

- Two additional FTEs in Street Maintenance to provide the essential support to address human and environmental health challenges in rights of way while continuing to maintain baseline services



Street Operations & Maintenance

Road District #1 — Funded New Requests

Street Sweeper - \$45,117 — One-Time

- Using previously approved funds from lease for required grant match for purchase

Screen Plant - \$160,000 — One-Time

- Replace 1989 equipment used to recycle asphalt millings from City paving/construction projects to provide essential construction materials for alleys, stormwater infrastructure, and streets maintenance

Skid Steer - \$85,000 — One-Time

- Use with existing equipment to reduce prep time, fuel consumption, and eliminate wear on street sweepers

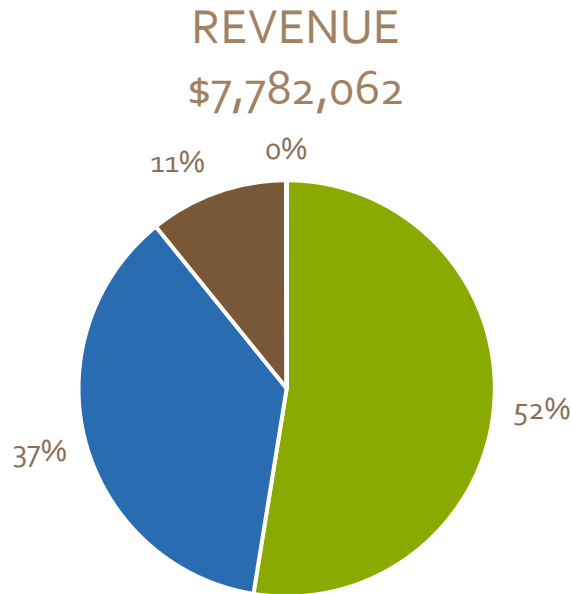
Tink Claw Bucket - \$22,000 — One-Time

- Front end loader attachment to allow for efficient pickup of leaves and loose materials

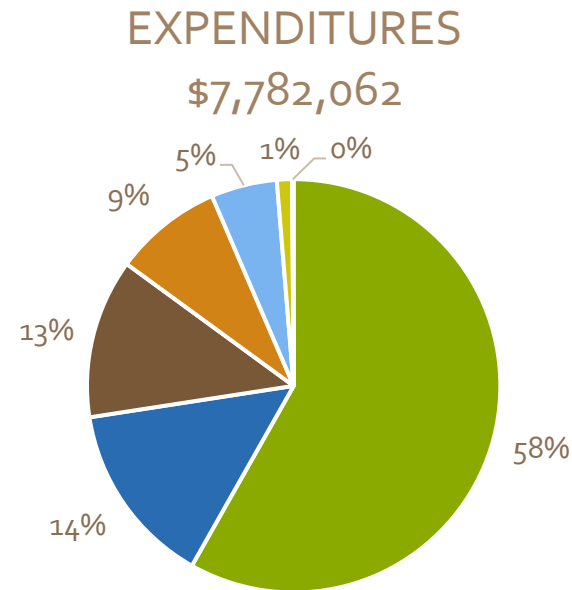


Streets Operations & Maintenance — Road District #1*

*includes Communications Shop, Traffic Services, and Street Maintenance



- MISCELLANEOUS (PROPERTY ASSESSMENTS)
- OTHER FINANCING SOURCES
- CHARGES FOR SERVICES
- INTERGOVERNMENTAL



- PERSONAL SERVICES
- SUPPLIES
- CAPITAL OUTLAY
- BUILDING MATERIALS
- PURCHASED SERVICES
- FIXED CHARGES
- MISCELLANEOUS



Questions?



Missoula City Cemetery

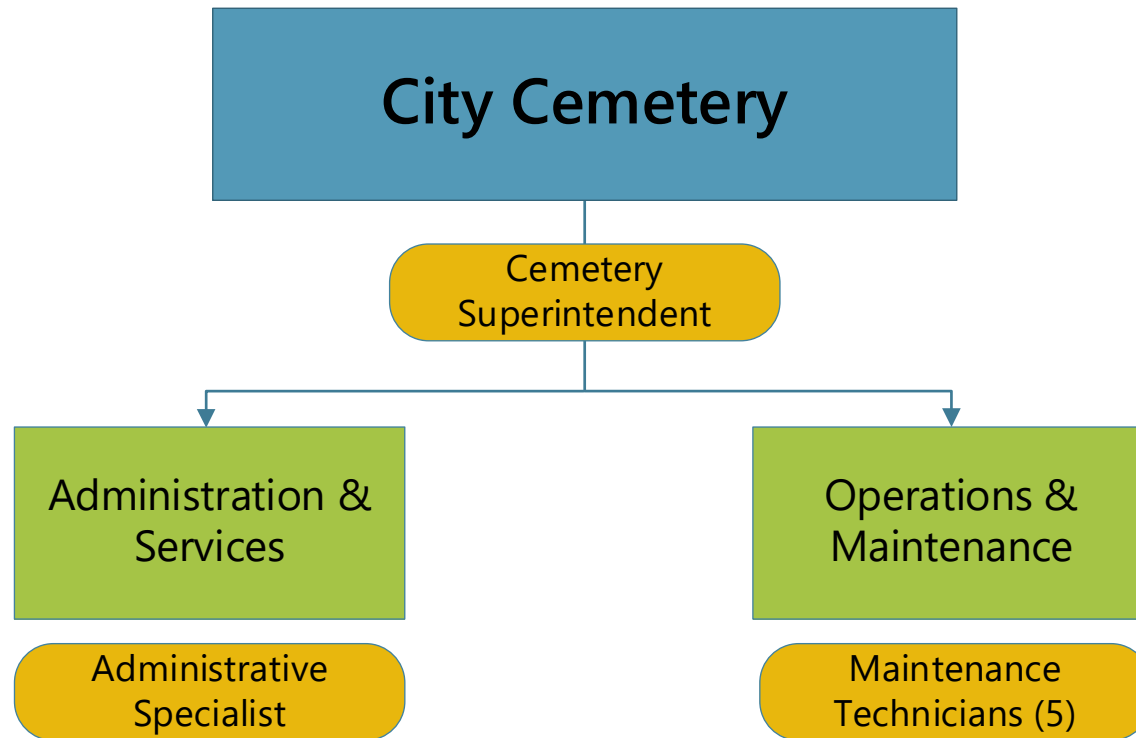
Purpose

Operate and maintain the City Cemetery to provide safe, timely, and respectful internment, and ensure accurate record keeping for historical integrity.





Organization



6 Employees



Cemetery

Key Facts & Metrics



Founded in 1884 and purchased by the City in 1901 for \$1.00. Part of Missoula history for more than 120 years.



50 acres of irrigated and maintained public green space



Currently has more than 21,000 interments with 85 performed in FY23



Most revenue generated in Cemetery history at \$169,981 in FY23



Cemetery

FY23 Highlights

- Planted 10 additional trees
- Hired an architect to design new office building
- Application for historic site designation moved to “in review” stage





Cemetery

FY24 Goals

- Complete historic designation
- Complete GIS map database
- Prepare architectural construction drawings
- Make gate improvements



Community Investment Program

Cemetery
\$150k

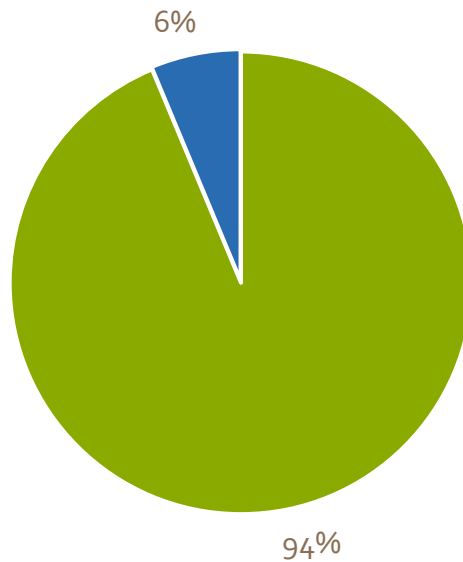
- Administration Building
Architectural Services



Cemetery

REVENUE

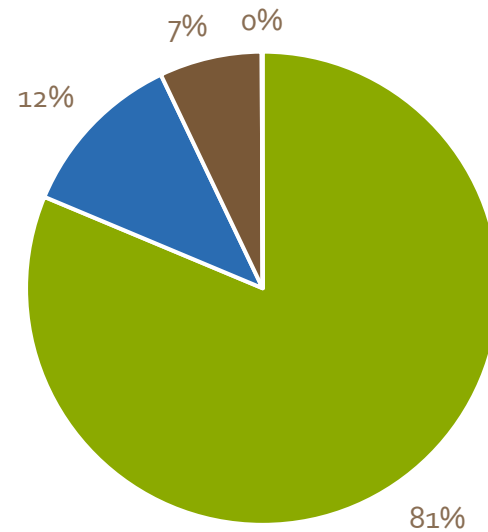
\$728,489



- MISCELLANEOUS (PROPERTY ASSESSMENTS)
- CHARGES FOR SERVICES

EXPENDITURES

\$728,489



- PERSONAL SERVICES
- SUPPLIES
- PURCHASED SERVICES
- FIXED CHARGES



Questions?



City of Missoula

PUBLIC WORKS & MOBILITY



Thank you



For more information, email KeeneJ@ci.missoula.mt.us or SegalA@ci.missoula.mt.us