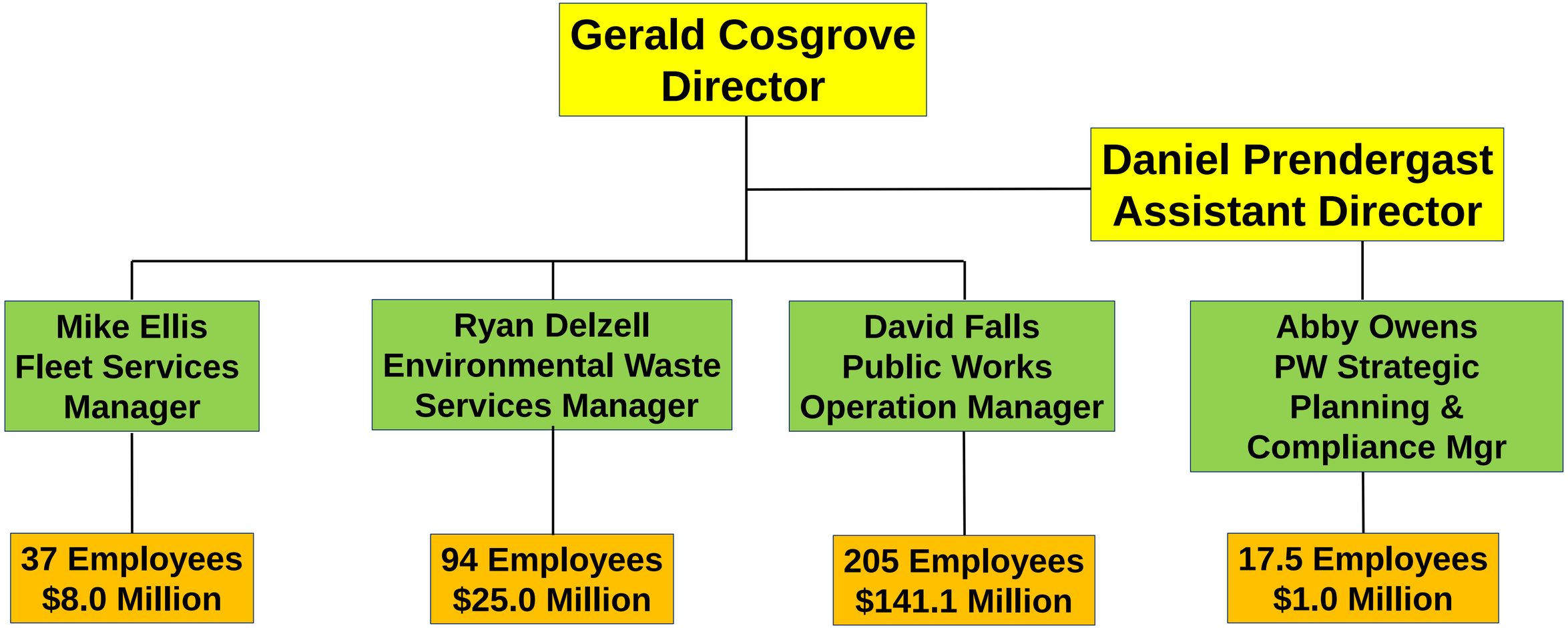
Plano

City of Excellence

Public Works

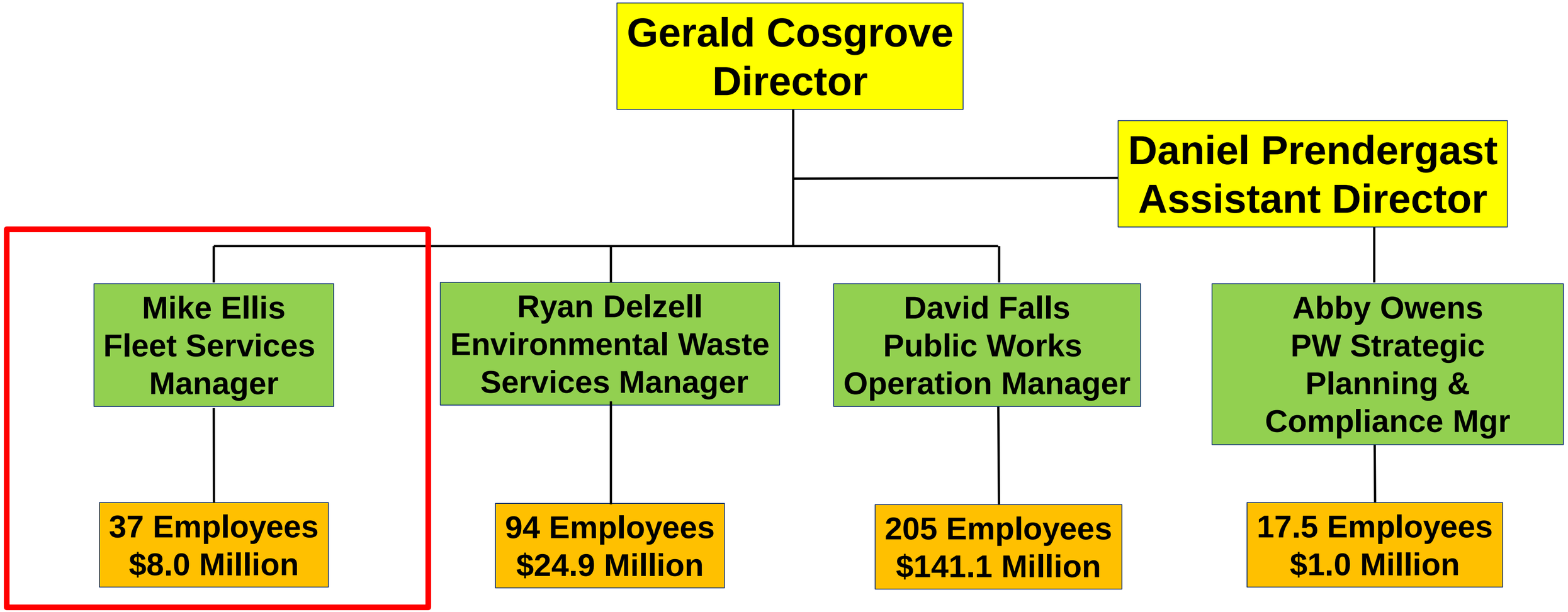


Public Works Organization

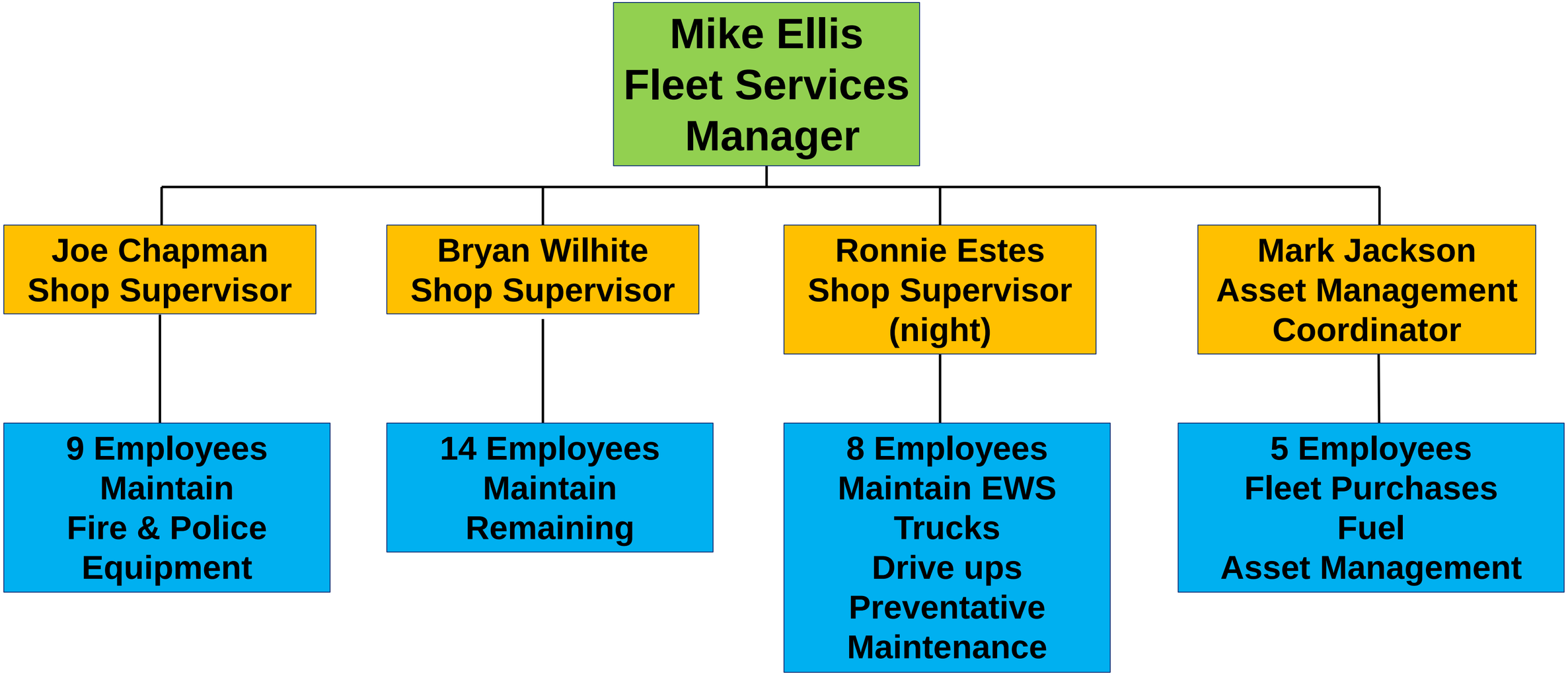


Total 355.5 Employees and Operating Budget of $175.1 Million

Public Works Organization



Fleet Services Organization



Fleet

- Maintain safe, efficient, dependable vehicles and major equipment for all City departments.
- Purchase vehicles and equipment.
- Maintain fuel sites and manage electronic fuel card system.
- 2,449 pieces of equipment valued at $92.3 Million.
- 1.2 million gallons and $2.8 Million in fuel.



Fleet

- New Fuel Tanker
  - Transportation of fuel from other locations to the City in case of fuel shortage
  - Additional fuel storage capacity
  - Mobile fuel source at emergency incidents
  - Ability to rotate fuel supplies throughout the City



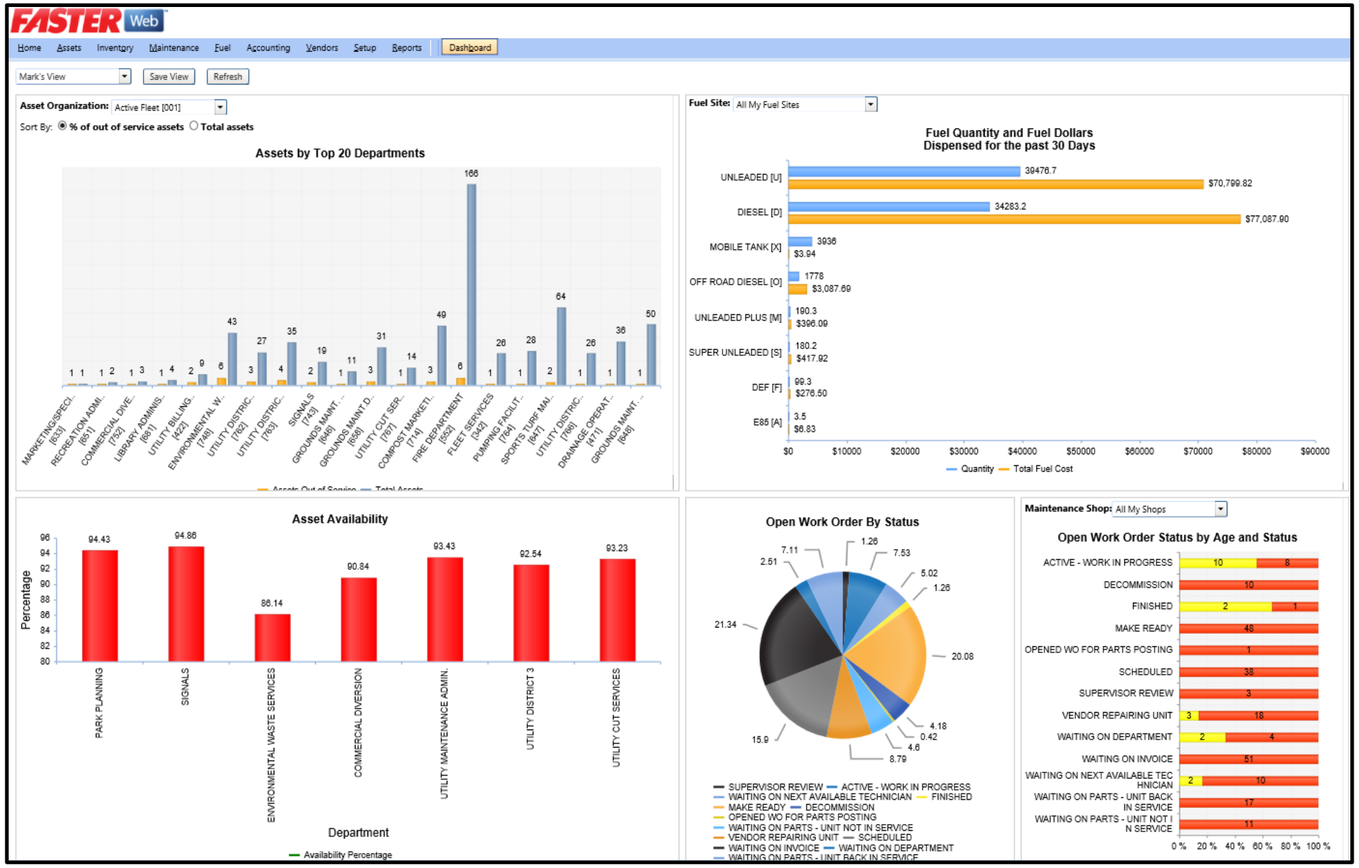
Fleet

- Bond Referendum and Fueling Plan
  - Fuel availability during fuel shortages and emergency incidents
  - Mitigate maintenance issues due to poor fuel quality
  - Fueling station at Parkway Service Center
  - Three new fueling infrastructure sites throughout the City



Fleet

- Implementation of Faster Web
  - Web based fleet management information system
  - Technicians use tablets to access directly at work stations
  - Roll out of direct access to user departments (Risk Management, Accounting)
  - Updated reporting system and increased access to key performance indicators

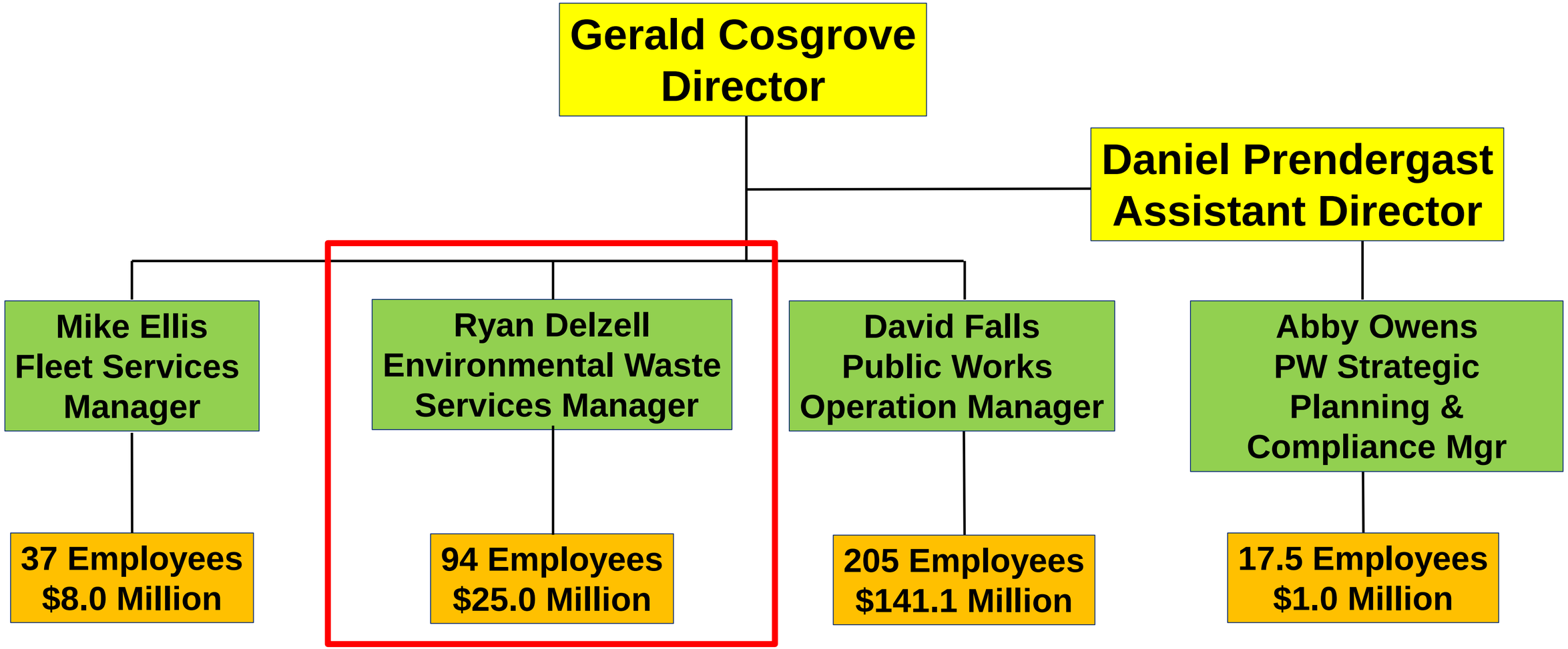


Fleet

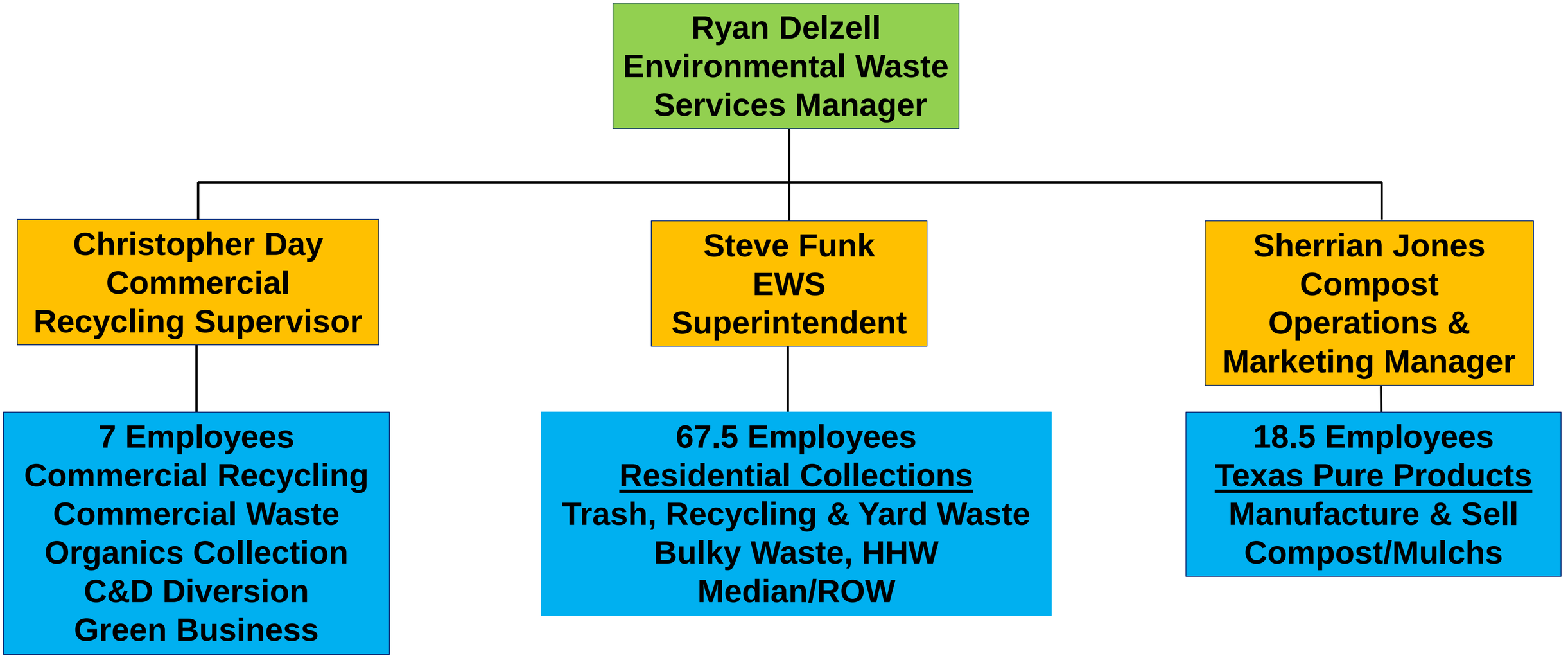
- Partnering with external customers and equipment manufacturers to provide operator training and operator preventative maintenance
  - Decrease operating costs
  - Improve equipment life expectancy
  - Safer work environment



Public Works Organization



Environmental Waste Services Organization



Environmental Waste Services

- Commercial Waste & Recycling
  - Works with commercial customers to facilitate sustainability programs
  - Conducts commercial waste audits
  - Approximately 40% commercial diversion rate
  - Over 50 certified Green Businesses
    - Corporate certification to be launched in FY 19-20



Environmental Waste Services

- Responsibilities of EWS
  - Residential garbage & recycling collection, landscape trimmings, household chemicals and bulky waste collections, compost operations, commercial waste and recycling, Adopt-A-Highway
- 94 employees



Environmental Waste Services

- Residential Operations FY 18-19
  - Over 73,000 customers
  - Over 9M stops collected each year
  - Approximately 60,000 tons of garbage
  - 17,500 tons of recycling
  - 18,000 tons of yard trimmings
  - 26,500 gallons of household hazardous waste
  - Customer satisfaction rating of 98%



Environmental Waste Services

- Compost Operations

  (dba Texas Pure Products)

  - Partnership between the cities of Plano, Allen, Frisco, McKinney, Richardson, and NTMWD
  - 45,000 tons of yard trimmings diverted from the landfill
  - Over $4M in revenues
  - Over 75,000 CY of products sold
  - OMRI Certified
  - 2019 Compost Manufacturer of the Year by US Composting Council

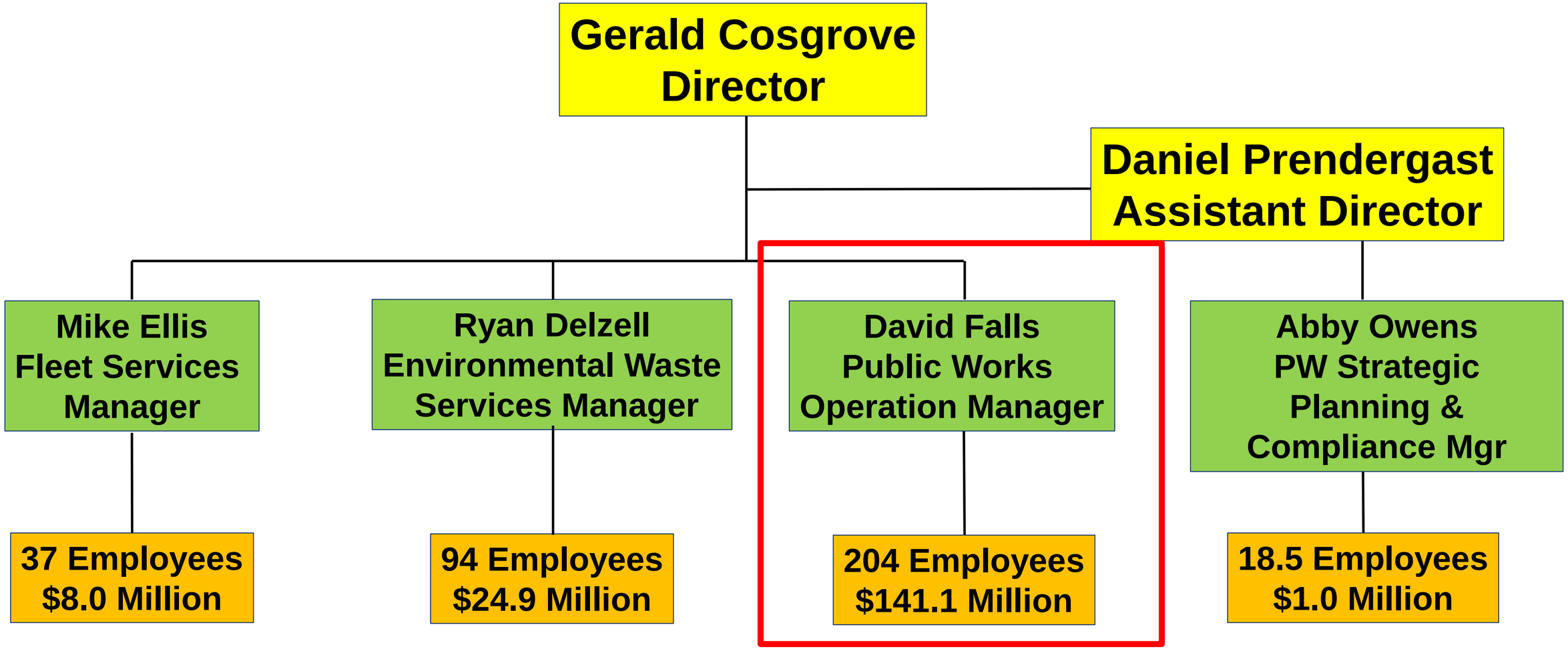


Environmental Waste Services

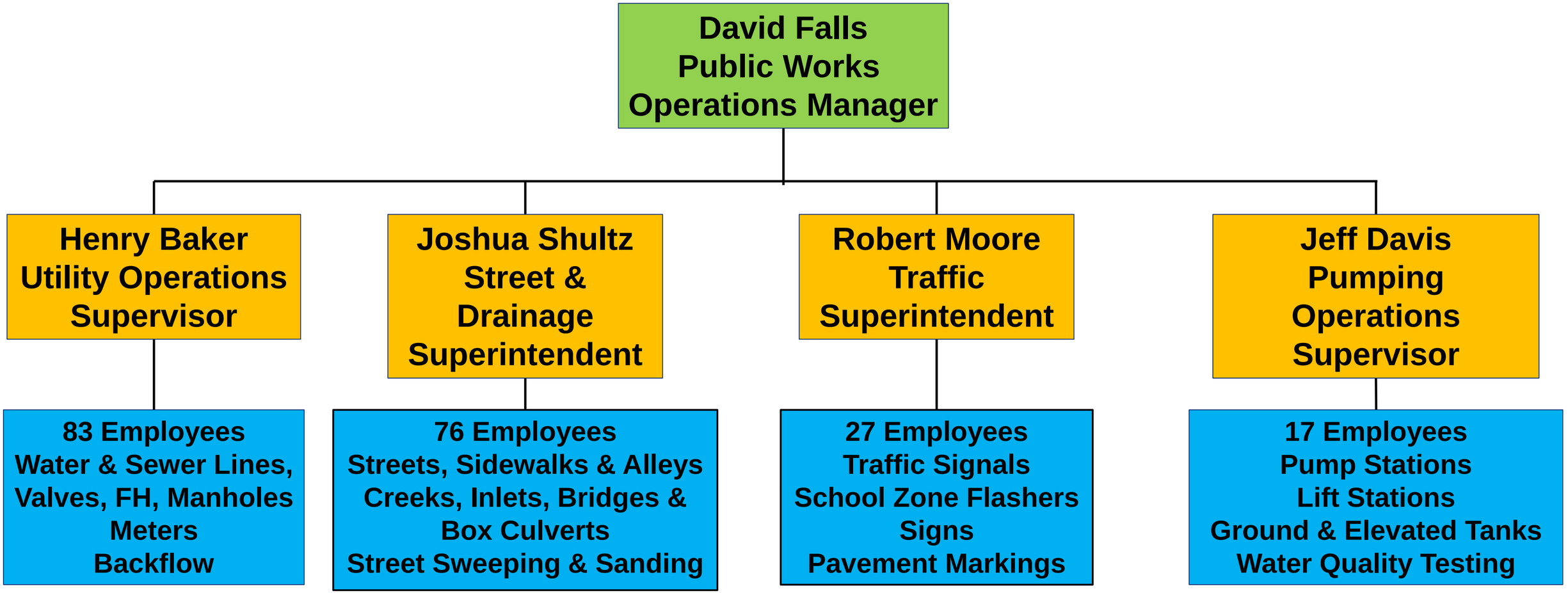
- Challenges
  - Cost of Recycling increasing
  - Recycling Contamination rate
  - Bulky Waste Program Changes
  - Cart Durability Issues
  - Recycling Processing Cost
    - Increasing 40% 11-1-2020
  - Residential rate increase anticipated for FY 20-21



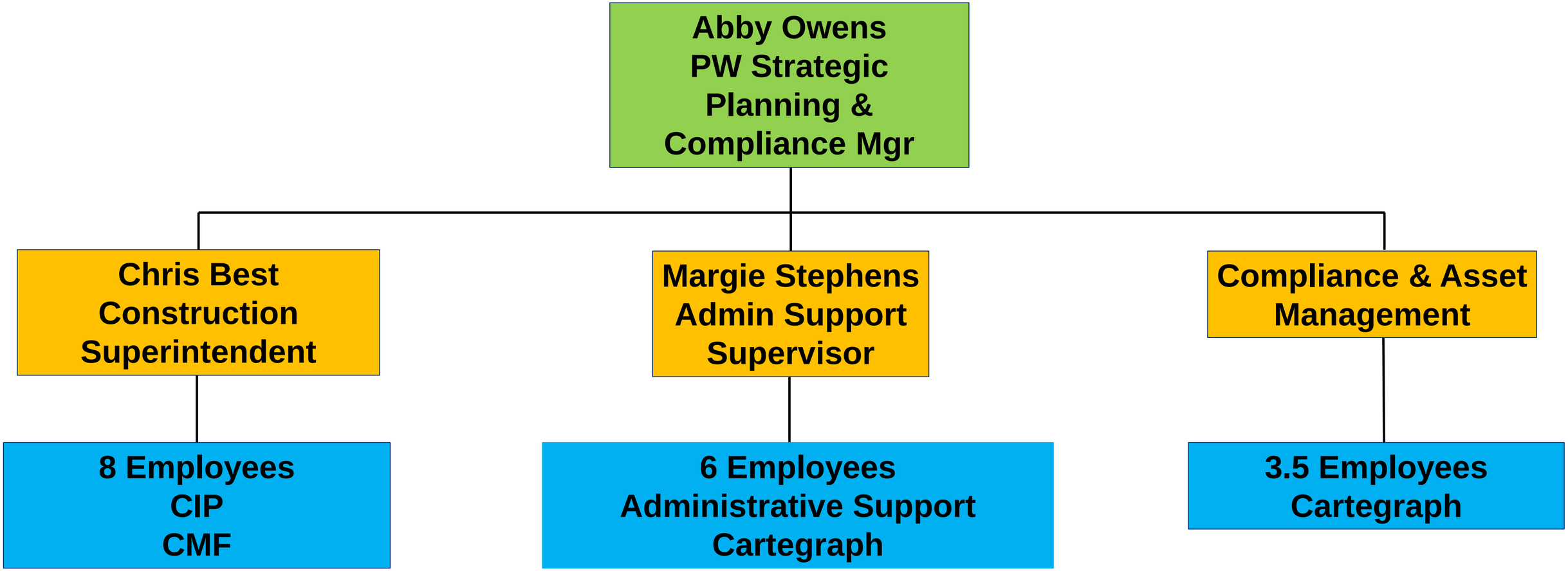
Public Works Organization



Public Works Operations Organization



PW Strategic Planning & Compliance Organization



Public Works Operations

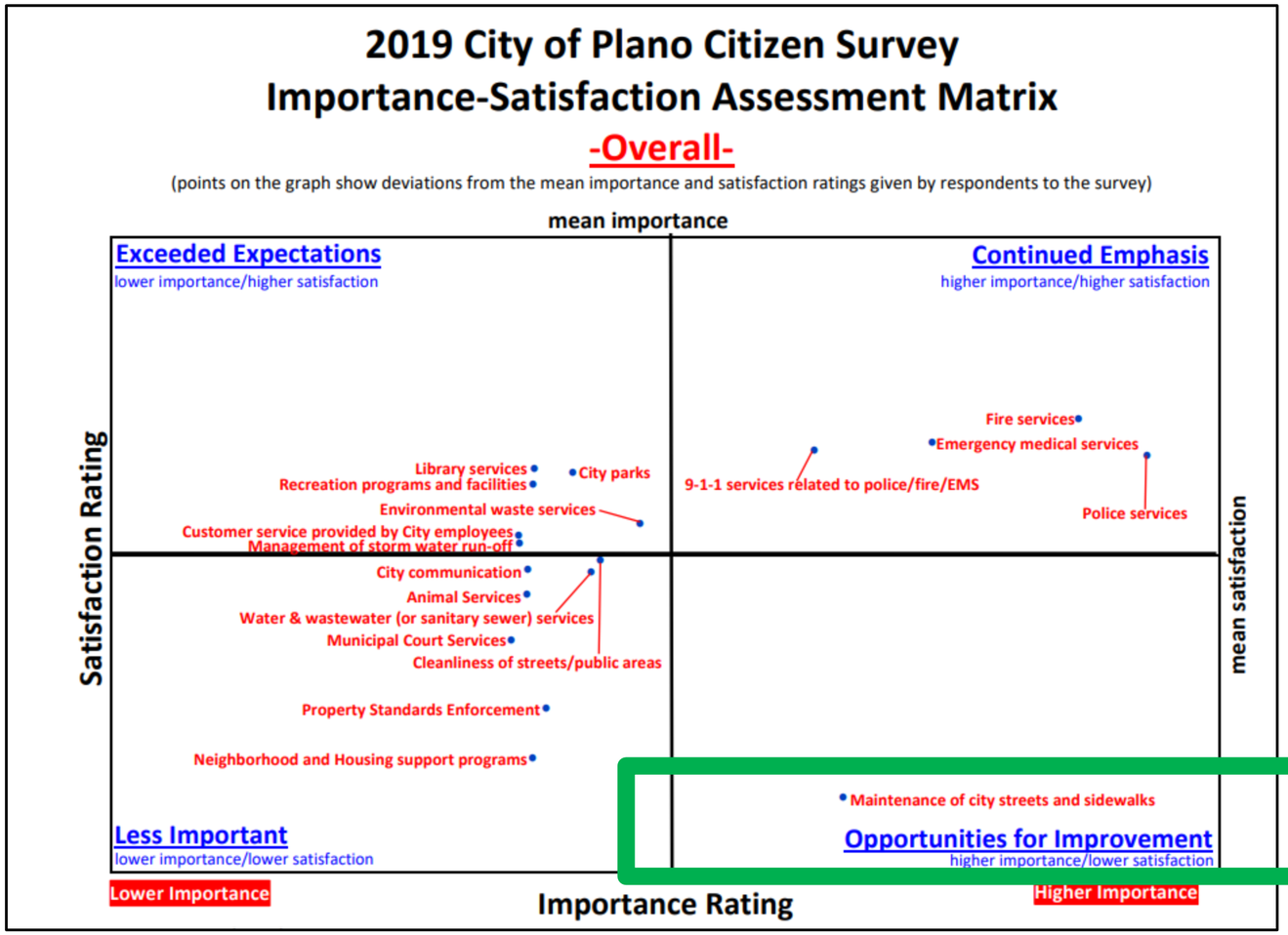
- Maintain water distribution system to provide clean, safe drinking water.
- Maintain wastewater collection system to transport wastewater for treatment.
- Maintain roads, alleys, sidewalks, traffic signals, signs and pavement markings to provide safe travel for vehicles and pedestrians.
- Maintain drainage infrastructure to collect and transport stormwater to reduce flooding.



Public Works Operations - Pavement Focus

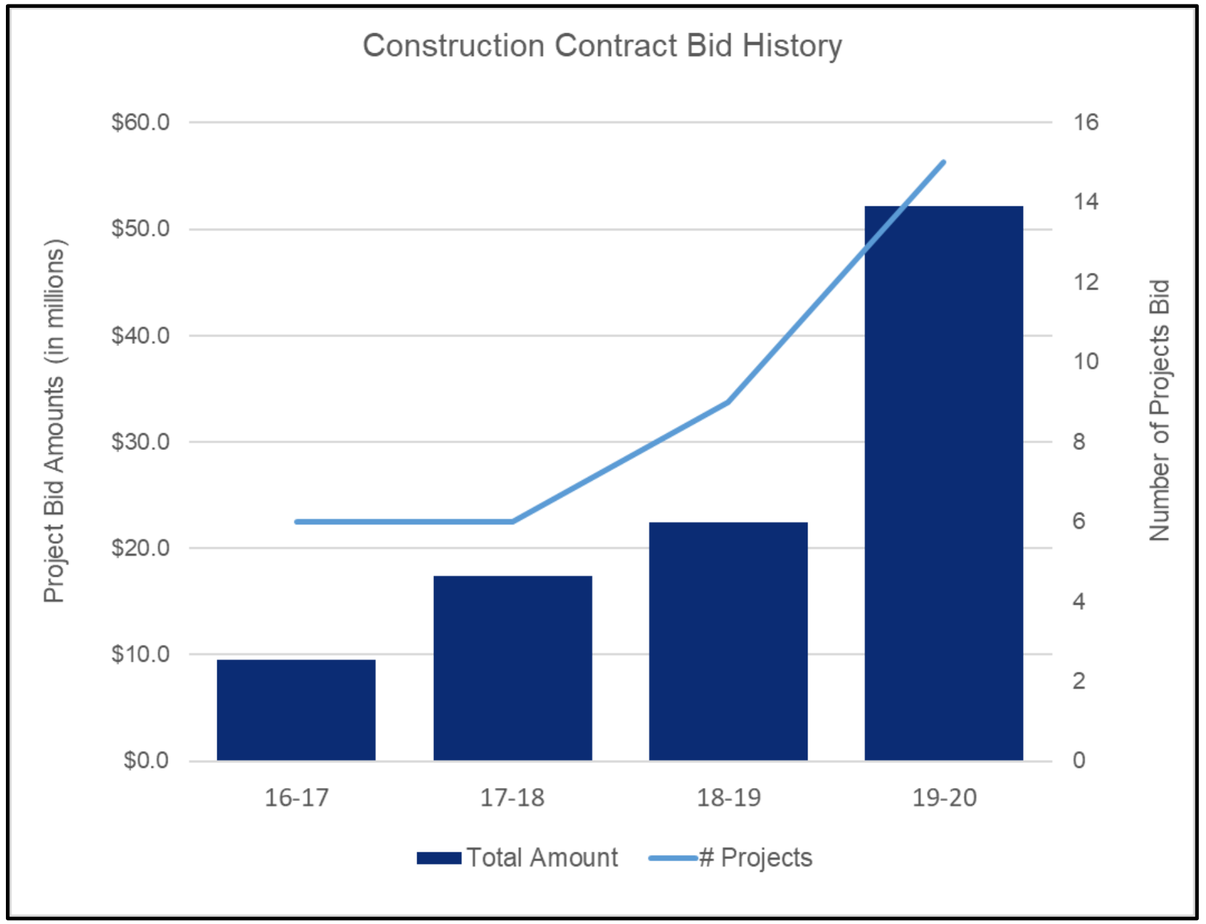
Importance-Satisfaction Rating
City of Plano, Texas
Major Categories of City Services

Category of Service	Most Important %	Most Important Rank	Satisfaction %	Satisfaction Rank	Importance-Satisfaction Rating	I-S Rating Rank
Very High Priority (IS >.20)						
Maintenance of city streets and sidewalks	45%	4	54%	18	0.2066	1
Medium Priority (IS <.10)						
Police services	86%	1	92%	4	0.0683	2
Emergency medical services	57%	3	94%	2	0.0372	3
9-1-1 services related to police/fire/EMS	41%	5	93%	3	0.0302	4
Fire services	77%	2	96%	1	0.0293	5
Environmental waste services	18%	6	85%	8	0.0276	6



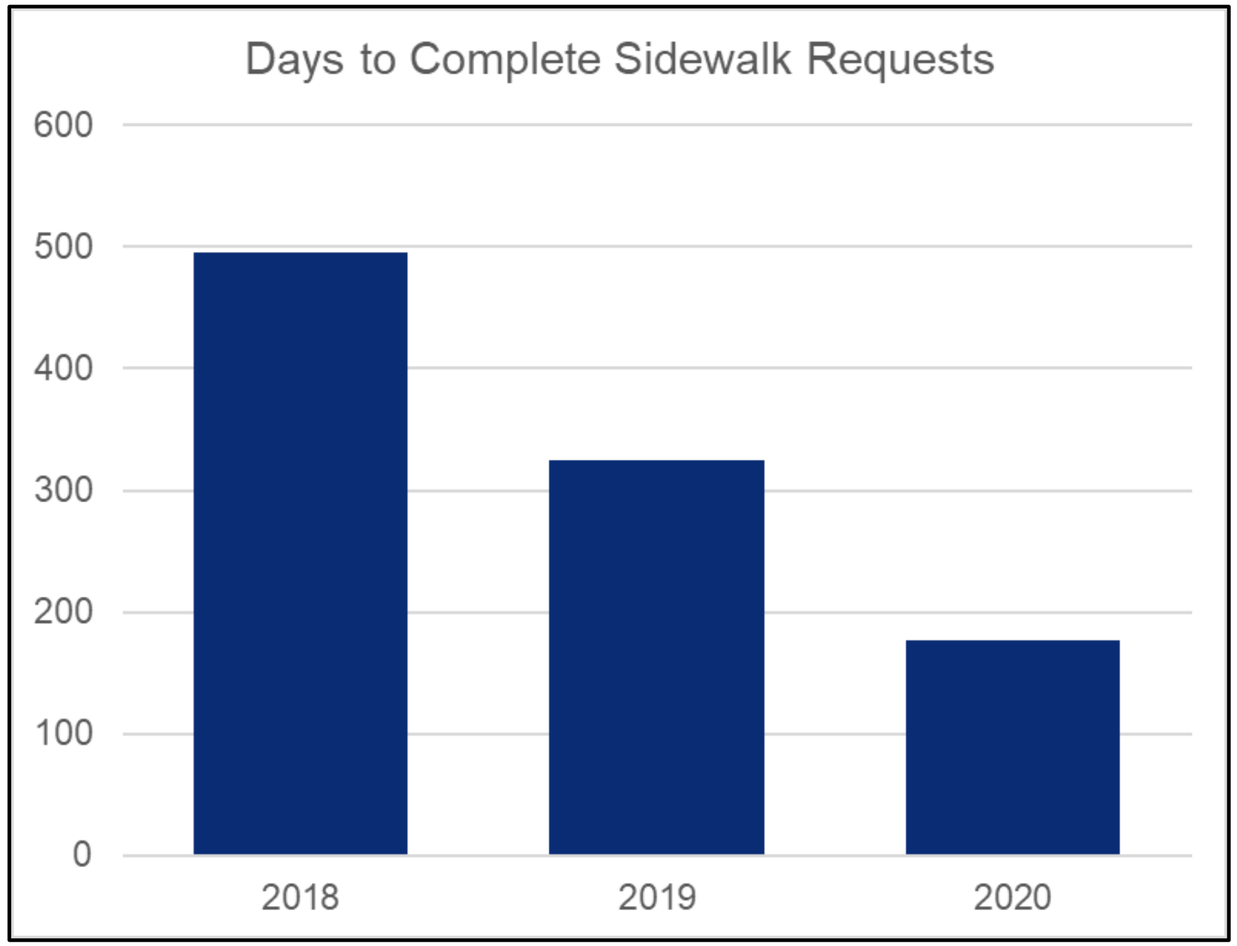
Public Works Operations - Pavement Focus

- Proactively identify and address potholes
- 2019 Survey - over 3,400 potholes
- 2020 Survey - under 1,000 potholes
- Pothole response time:
  - 2019: more than 20 days
  - 2020: less than 2 days



Public Works Operations - Sidewalks

- Better data collection and request management with Cartegraph
- Contractors for sidewalk requests pulled from Cartegraph
- Contractors on neighborhood projects also address requests



Cartegraph – Asset Management

30,900 Requests

315,000 Tasks

140
Users

90
iPads

Water &
Sewer

22,444 sewer mains
15,731 manholes
115,263 water mains
50,258 valves
16,418 fire hydrants
85,515 water meters
10 pump/lift stations
21 water storage tanks
368 water test sites

Signs &
Traffic

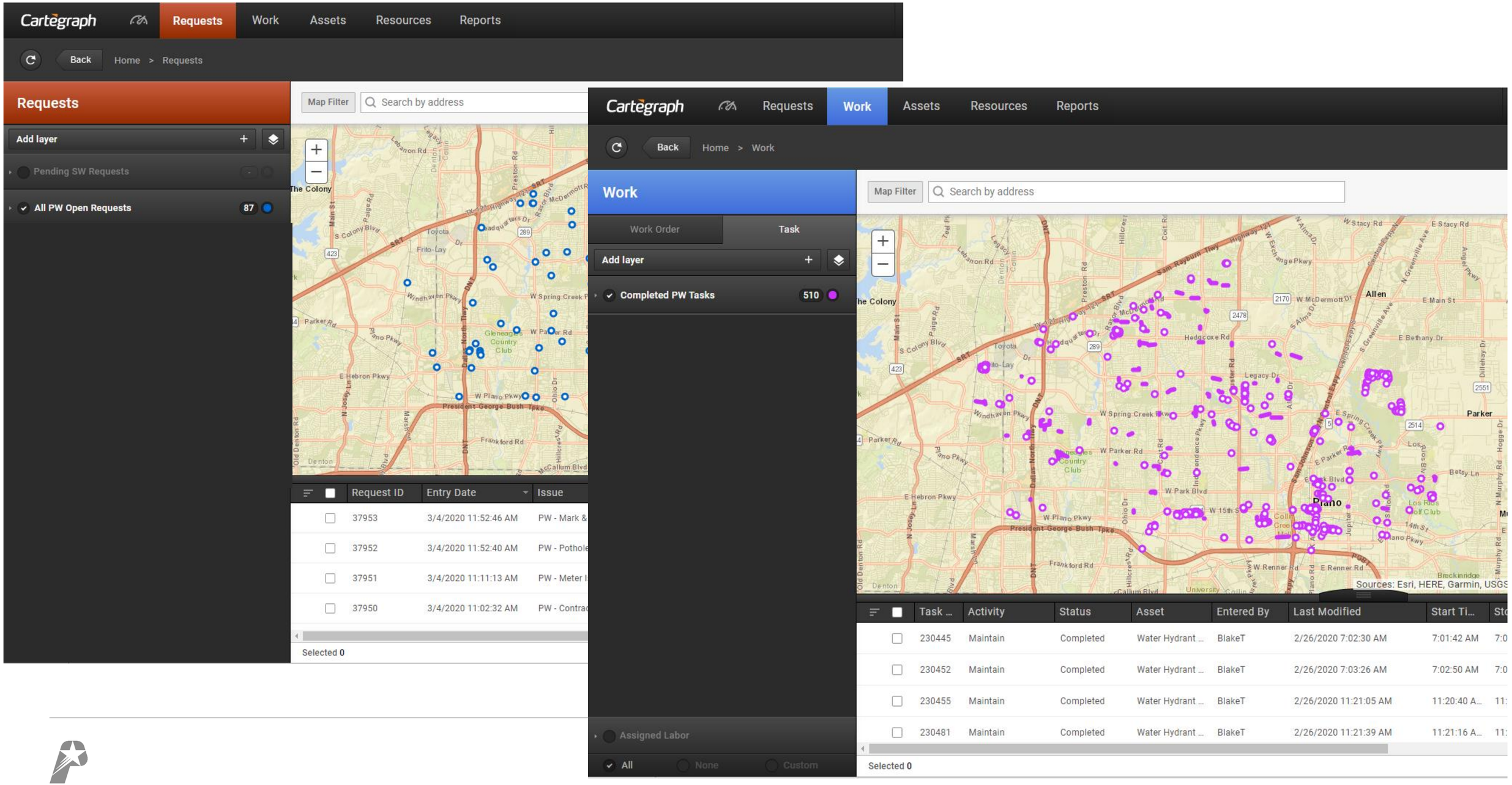
44,192 signs
24,189 supports
5,018 pavement markings
235 signalized intersections
11,131 traffic assets*

550,995
Assets

Streets &
Drainage

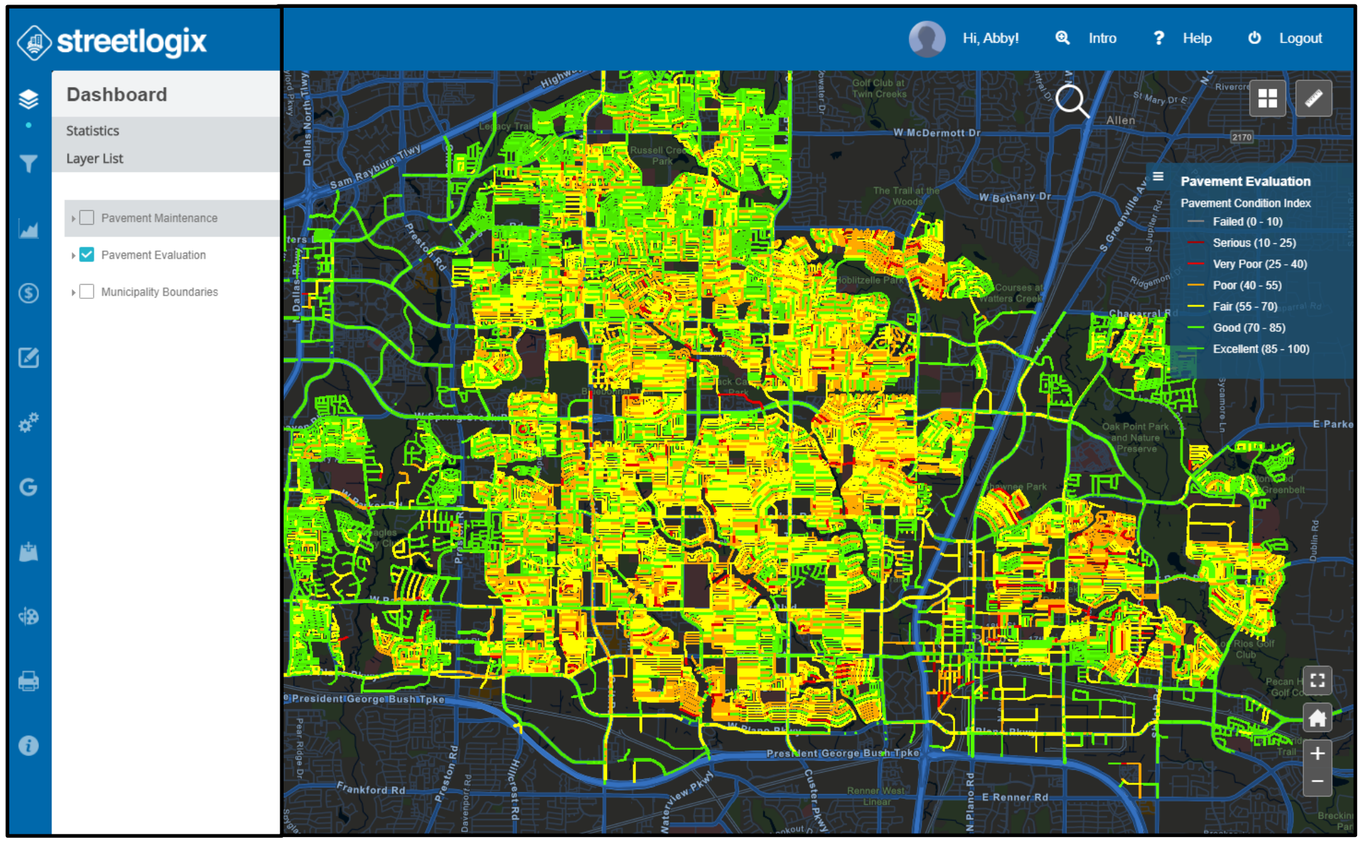
5,087 alleys
19,430 streets
104,380 storm assets
36,980 sidewalks
2,407 screening walls
187 guardrails*
301 bridges

** assets still being collected/inventoried*


Cartegraph
Requests
Work
Assets
Resources
Reports
Back
Home > Requests
Requests
Add layer
Pending SW Requests
All PW Open Requests
87
Map Filter
Search by address
Request ID
Entry Date
Issue
37953
3/4/2020 11:52:46 AM
PW - Mark &
37952
3/4/2020 11:52:40 AM
PW - Pothole
37951
3/4/2020 11:11:13 AM
PW - Meter I
37950
3/4/2020 11:02:32 AM
PW - Contrac
Selected 0
Cartegraph
Requests
Work
Assets
Resources
Reports
Back
Home > Work
Work
Work Order
Task
Add layer
Completed PW Tasks
510
Assigned Labor
All
None
Custom
Map Filter
Search by address
Sources: Esri, HERE, Garmin, USGS
Task ...
Activity
Status
Asset
Entered By
Last Modified
Start Ti...
230445
Maintain
Completed
Water Hydrant ...
BlakeT
2/26/2020 7:02:30 AM
7:01:42 AM
230452
Maintain
Completed
Water Hydrant ...
BlakeT
2/26/2020 7:03:26 AM
7:02:50 AM
230455
Maintain
Completed
Water Hydrant ...
BlakeT
2/26/2020 11:21:05 AM
11:20:40 A...
230481
Maintain
Completed
Water Hydrant ...
BlakeT
2/26/2020 11:21:39 AM
11:21:16 A...
Selected 0

Public Works Operations – New Technologies

- Using new technologies for budgeting and prioritizing pavement maintenance & repair
- Exploring artificial intelligence for water main and pavement assessments
- Cartegraph enhancements for budgeting and prioritizing maintenance and repair of all asset types



Public Works Operations

- Staffing challenges
- Change Culture
- Contracting for maximum impact and value
  - Maintenance, Inspection & Flow Testing Fire Hydrants
  - Cleaning & Inspecting Large Diameter Wastewater Lines
  - Water Valve Assessment and Maintenance

Plano
City of Excellence

Jerry's
Top Ten



Public Works Operations – Wastewater Initiatives

- Wastewater Master Plan
  - 10 year capacity and renewal CIP projects
  - Wireless Flow Monitoring
- Sanitary Sewer Overflow Initiative
- Capacity Management, Operation and Maintenance (CMOM) Plan



APWA Accreditation

Insurance Services Office

Questions