

PUBLIC WORKS: 5 Year Plan



5 DIVISIONS:

Administration

Streets Division

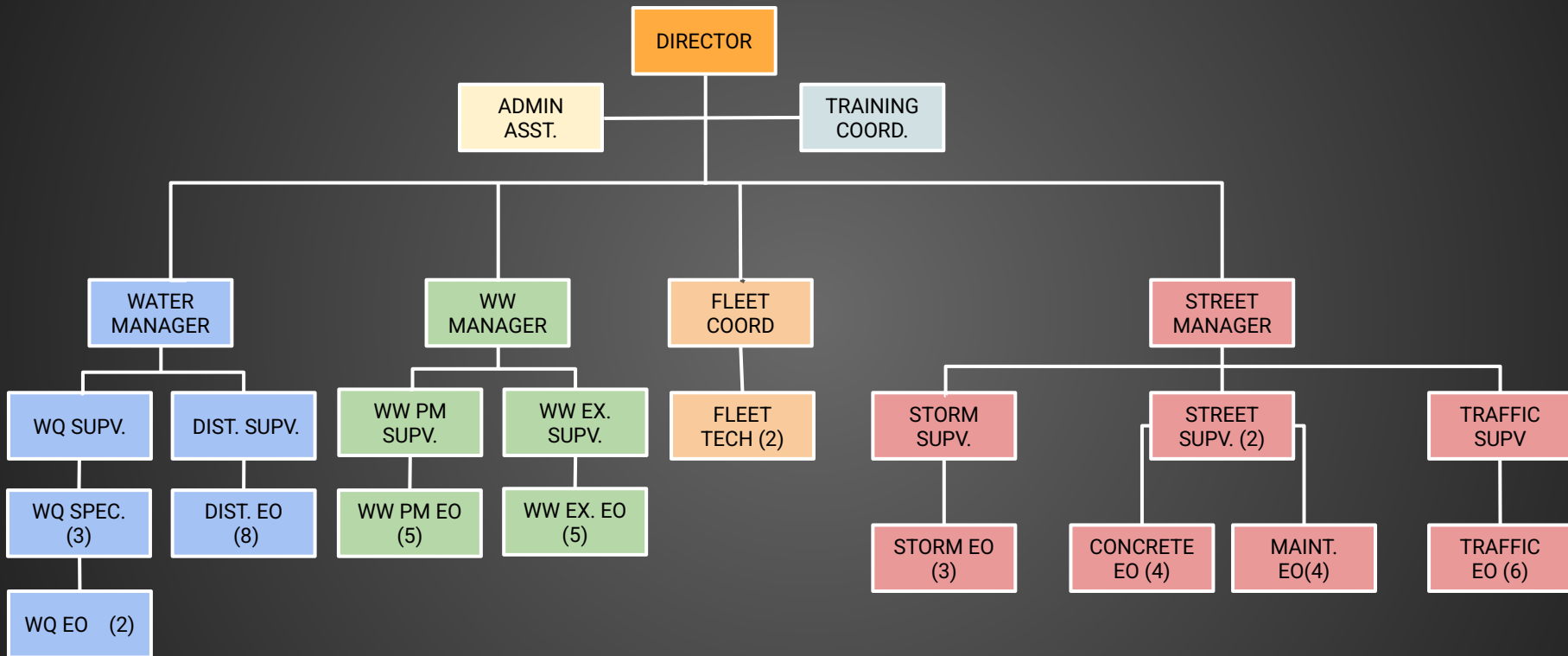
Fleet Services Division

Water Division

Wastewater Division



Public Works Org Chart



BY THE NUMBERS

ADMIN	2023	2024
Resident Calls	1699	1880
Requests	822	578
Registrations	148 / 20	211 / 33

FLEET	2023	2024
Oil Changes	388	376
Tire Replacement	186	134
Tire Repairs	47	39
Brakes	65	42
Service Requests	725/ 229 In-House	791/ 510 In-House

WATER	2023	2024
Water Mains (Miles)	190	191
Fire Hydrants	1,981	2,448
Service Connections	15,992	16,023
Daily Pumping (MGD)	5.7	5.4
Excavations	176	154

WASTEWATER	2023	2024
Sewer Main (Miles)	222	224
Sewer Connections	17,674	18,350
Sewer Lateral Repairs	37	26
Manhole Rehab/Repairs	17	16
Sewer Main Rehab	0	1,748ft

STREETS	2023	2024
Streets	304 mi	325 mi
Alleys	34 mi	34 mi
Storm Pipe	136 mi	141 mi
Open Drainage	65 mi	65 mi
Signals	26	26*
School Zone	90	90*

SIDEWALKS	FY22-23	FY23-24
City of Wylie	1,760 Ft	3,525 Ft
Outside Contractor	8,468 Ft	3,564 Ft

STREET ALLEY	FY22-23	FY23-24
Asphalt	2.93 mi	6.49 mi
Concrete	2.14 mi	2.42 mi

Strategic Focus Areas

- Personnel
 - New Positions
 - Proactive vs Reactive
- Fleet
 - Grading & Lifecycle
 - Replacement Scheduling
- Facilities
 - Utilization & Expansion Planning
- Infrastructure
 - Capital Improvement Projects
 - Stormwater Fee Implementation

Personnel

DIVISION/YEAR	2025-2026	2026-2027	2027-2028	2028-2029
STREETS	EOI	EOI	EOI	
STORMWATER			EOI	EOI/EOII
WATER	FLEET TECH	EOII (2)		

STREETS

- Establish concrete crew
 - 404 sidewalk requests (\$2.3Mil)
 - 168 roadway repairs (\$7.2Mil)

STORMWATER

- Establish Stormwater maintenance crew
 - Street sweeping
 - Drainage/ culvert maintenance

WATER

- Additional Fleet Tech
 - City Fleet continues to grow
 - 150+ vehicles
 - 24 pieces of equipment
 - 17 trailers
- EOII (2)
 - Add leads to crew
 - Valve/ fire hydrant
 - Hydro excavation

Fleet: Replacement Criteria

Age

- 1 point for every year of chronological age

Miles

- 1 point for every 20,000 miles

Hours

- 1 point for every 750 hours

Repair Costs

- 1 point for every \$10K

Overall Condition

- 1-5 scale (5 being the worst)

Reliability

- 1 point for every 5 service requests

Point Range Condition

- Excellent (1-20)
- Good (21-30)
- Qualifies for replacement (31-40)
- Immediate consideration (41 and above)

Equipment Replacements/ New Requests: Utility Fund

Request/Year	2026	2027	2028	2029	2030
(NEW)6YD Dump Truck (Dist)	█				
(NEW)1 Ton Utility Truck (Dist)	█	█			
(REPLACE 357)(2016)(2 Ton Utility)		█			
Mag Meters Pump Station (WQ)	█	█	█		
SCADA Upgrade (W/WW)				█	
(REPLACE 317)(2013)¾ Ton (WW)	█				
(NEW)1 Ton Utility Body (WW)	█	█			
(REPLACE M-914)(2012) Bobcat E50 (WW)	█				
(REPLACE 300)(2013) Isuzu Jet Truck (WW)		█			
(REPLACE 313)(2014) (Tri-Axle) (WW)			█		
(REPLACE M-899)(2014) JD Backhoe (WW)				█	

Equipment Replacements/ New Requests: General Fund

Request/Year	2026	2027	2028	2029	2030
(NEW) Inspection Van (Stormwater)	█				
(NEW)1 Ton Utility Truck (Stormwater)		█			
(NEW)Excavator & Trailer (Stormwater)			█		
(NEW)Vac Truck (Stormwater)				█	
(NEW)Chipper (Stormwater)				█	
(NEW)Street Sweeper (Stormwater)					█
(NEW)Printer Street Signs (Traffic)		█			
(NEW)1 Ton Utility Truck (Traffic)		█			
(NEW)Thermal Striping System (Traffic)			█		
*School Zone Upgrades (Traffic)	█	█	█	█	█
*Signal Upgrades(Opticom) (Traffic)	█	█	█		
Traffic Cabinet Standardization (Traffic)	█	█	█	█	█

Request/Year	2026	2027	2028	2029	2030
(NEW) 1 Ton Mason Dump(Concrete)	█				
*(REPLACE 342)(2015)1/2 Ton (Concrete)	█				
(REPLACE)(2012) Rubber Tire Loader(All)		█			
(NEW)1 Ton Utility Truck (Concrete)		█			█
(REPLACE 345)(2015) Tri-Axle(Concrete)					█
(REPLACE)(3) Equipment Trailer (Maint)	█				
(NEW)6YD Dump Truck (Maint)					█

New Requests: Stormwater

Municipal Separate Storm Sewer System (MS4)

(NEW) Inspection Van (Stormwater)
(NEW) 1 Ton Utility Truck (Stormwater)
(NEW) Excavator & Trailer (Stormwater)
(NEW) Vac Truck (Stormwater)
(NEW) Chipper (Stormwater)
(NEW) Street Sweeper (Stormwater)

- Maintain Regulatory Compliance
 - Governed by Texas Commission on Environmental Quality (TCEQ)
 - Level 3 Small MS4
- Stormwater Management Plan
 - Outlines Best Management Practices
- Public Works Role
 - Manages Stormwater infrastructure and addresses concerns related to stormwater pollution
- Annual Reporting and Monitoring
 - Submit to TCEQ detailing compliance with the permit

New Requests: Traffic Cabinet Standardization

Current Application
TS2



Future Application
ATC



New Requests: Traffic Cabinet Standardization

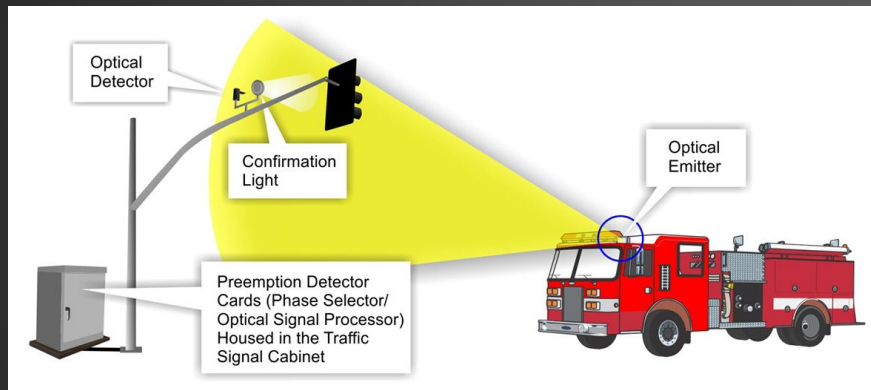
Future Application:
ATC Cabinet



Benefits

- Employee Safety/Time Management
 - Operate at lower internal voltage
 - Built in diagnostics and remote monitoring
- Enhanced Communication & Connectivity
 - Supports advanced traffic management via real-time remote diagnostics
- Increased Flexibility & Efficiency
 - More inputs/outputs to handle more detectors signal phases, and pedestrian functions than the TS2
- Advanced Technology & Future-Proofing
 - Easier to upgrade with new technologies and future standards
 - Ethernet-Based Communication offers more reliable and faster data transmission TS2 (Legacy Serial Communication)

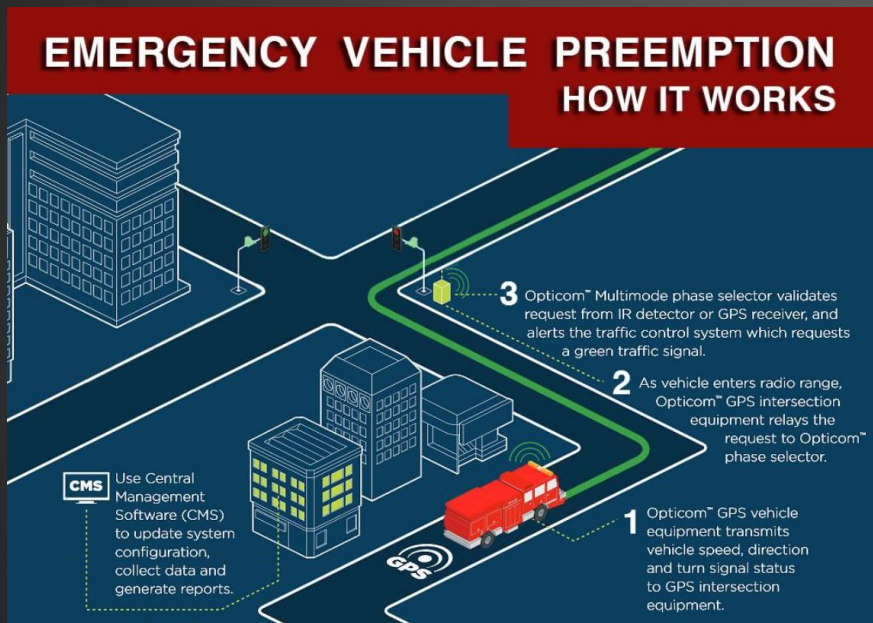
New Requests: Opticom Signal Upgrades



Current Application: Infrared Preemption system

- Line of Sight
 - Vehicles have Infrared Emitters
 - Line of Sight to Detector
- Limited Range
 - 1,500-2,000 feet
- Delayed or Missed Calls
 - Fog, heavy rain, or obstructions

New Requests: Opticom Signal Upgrades



Future Application: GPS Preemption system

- GPS-Based Transmitters
 - Communicate speed, direction, and estimated arrival time

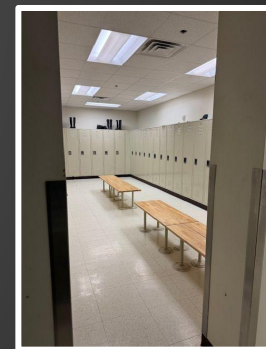
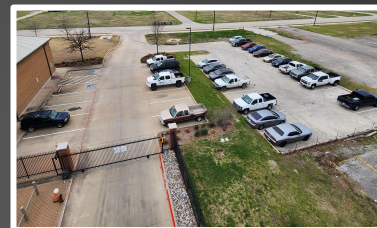
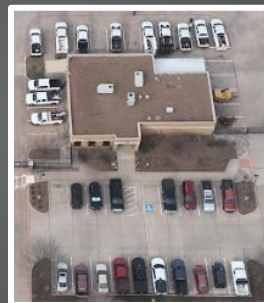
- Coverage Area
 - Much larger (up to a mile)
 - Works around corners

- Reliability
 - Intelligent preemption allowing better timing and control
 - Fewer delayed activations

Facilities: Utilization of Space

Public Works & Parks Complex

- Limited Parking
 - Public Works: 52 spaces for 57 employees
 - Parks: 18 spaces for 22 employees
- Limited Locker/Office Space
 - 40 lockers for 57 employees
 - No women's locker area
 - Lack of capacity for future growth



Facilities: Utilization of Space

Public Works & Parks Complex

- Develop Public Works/Parks Plan
 - FY24-25 Completion
- Add 10 Spaces to employee lot
 - FY25-26
- Building expansion
 - Future funding



Infrastructure: Capital Improvement Projects: Water

FY2025

- Design (\$90,000)
 - Finish Dogwood Dr

FY2026

- Design (Est. \$250,000)
 - Hilltop Ln (Stone to E Butler)
 - Briarwood Dr

FY2027

- Construction (Est. \$3,000,000)
 - Dogwood Dr
 - Hilltop Ln (Stone to E Butler)
 - Briarwood Dr

FY2028

- Design (Est. \$400,000)
 - Pirate Dr (Ballard to Hilltop)
 - Duncan Way
 - 2nd St (Stone to Pirate)
 - Hilltop Ln (Stone to Pirate)
 - Thomas St

FY2029

- Construction (Est. \$4,000,000)
 - Pirate Dr (Ballard to Hilltop)
 - Duncan Way
 - 2nd St (Stone to Pirate)
 - Hilltop Ln (Stone to Pirate)
 - Thomas St

FY2030

- Design (Est. \$650,000)
 - 1st St
 - 3rd St
 - 4th St
 - Spence Dr
 - Liberty Dr
 - Douglas Dr.

Infrastructure: Capital Improvement Projects: Wastewater

FY2026

- Design (Est. \$1,100,000)
 - Rush Creek Lift Station
 - Rush Creek Sewer Line

FY2027

- Construction (Est. \$5,500,00)
 - Rush Creek Lift Station
 - Rush Creek Sewer Line

FY2028

- Construction (Est. \$5,500,00)
 - Rush Creek Lift Station
 - Rush Creek Sewer Line

FY2029

- Design (Est. \$400,000)
 - 1st St
 - 3rd St
 - 4th St
 - 5th St

FY2030

- Construction (Est. \$4,000,000)
 - 1st St
 - 3rd St
 - 4th St
 - 5th St
- Design (Est. \$300,000)
 - Spence Dr
 - Liberty Dr
 - Douglas Dr

Infrastructure: Capital Improvement Projects: Street/ Sidewalks/ Signs/ Pavement Markings

FY2025

- Fugro Inc.
 - Finish Pavement Condition Index of street network
 - Develop scoring 0-100 per segment
 - Create 5-year and 10-year pavement rehabilitation plan

FY2026

- Fugro Inc.
 - Collect sidewalk data
 - Sidewalk/curb condition, drive approach
 - Collect sign data
 - Create inventory of signs

FY2027-FY2030

- Street / Alley
 - Goals
 - Prioritize repairs
 - Data-driven planning
 - Extend pavement life
- Sidewalks/ Curb & Gutter
 - Goals
 - Safety & connectivity
 - Maintenance planning
 - Create GIS sidewalk network
- Street Signs / Pavement Markings
 - Goals
 - Regulatory compliance
 - Asset management
 - Maintenance cycles

Infrastructure: Capital Improvement Projects: Street/ Sidewalks/ Signs/ Pavement Markings

Pavement

- Lane
- Distance
- Distress Type
- Cracks Outside Of Lane
- Road Zones
- Cracks And Distress
- Range
- 3D


> 2024


Cursor Location (ft):
X: , Y:

Pavement Image Size:
Automatic

Pavement Window Length:
 Full
Window Length (ft)
100
Update

Pavement Scroll Event Type:
 Hover
 Mouse Down





Route	Direction	Lane	RSECTION	IDSECTION	BEGINDISTANCESTAMP
E BROWN ST_R	5	1	105510	459	2470.420
E BROWN ST	5	1	105500	458	143.406
E BROWN ST	5	1	105500	458	300.156
E BROWN ST	5	1	105500	458	396.941
E BROWN ST	5	1	105500	458	474.31
E BROWN ST	5	1	105500	458	537.27
E BROWN ST	5	1	105480	457	6.81
E BROWN ST	5	1	105480	457	154.343
E BROWN ST	5	1	105480	457	109.698

COW24_00255903-E BROWN ST-S 2.438 D C [Navigation Icons]

Infrastructure: Stormwater Fee

Purpose:

Dedicated funding mechanism used by cities to maintain and improve stormwater infrastructure. Based on the principle that properties with more impervious surface area contribute more runoff.



Benefits

- **Dedicated & Predictable Funding**
 - Ensures a stable and reliable source for maintenance and improvements
- **Flood Prevention**
 - Supports cleaning and repair of our drainage network
- **Public Safety**
 - Reduces washouts, ponding, infrastructure failures

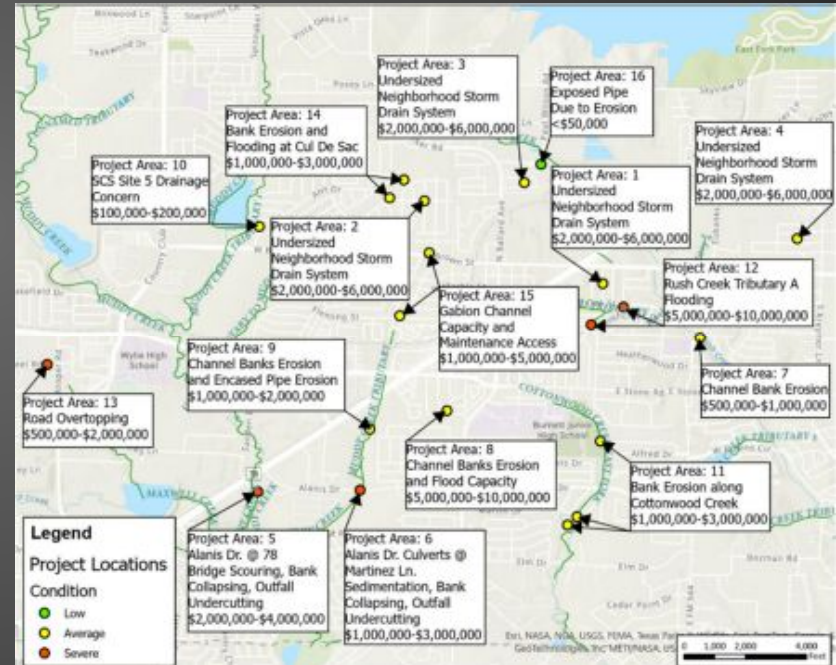


Infrastructure: Stormwater Fee

Conditions

- Identified approximately \$67.5 Mil in projects
 - Cleaning ditches, pipe replacement, culvert reconstruction

- Rates
 - Residential \$4-\$8/month
 - Commercial \$5/ERU (Equivalent Residential Unit)/month
 - Ability to generate \$1.0 Mil annually



Questions?