

Pothole Patching Update

**Streets and Maintenance
Department
City Council
September 13, 2022**



A photograph of construction workers in safety gear (hard hats and high-visibility vests) working on a road surface. They are using tools like shovels and a wheelbarrow. A yellow machine with the number '10003' is visible in the background. The scene is set against a large, textured wall.

Goal 7 ENHANCE AND SUSTAIN EL PASO'S INFRASTRUCTURE NETWORK

7.2 Improve competitiveness through infrastructure improvements impacting the quality of life



Presentation Topics

- **Pavement Maintenance Strategy**
- **How to Report a Pothole**
- **Overview of City Pothole Repair Process**
- **FY22 Monsoon Season Summary to Date**
- **Customer Feedback**



Streets Matter... We Hear You!

FY 22 CHIME IN! SURVEY *Key Takeaways*

- 8,600+ COMMUNITY responses
- Top 3 priorities identified were:
 1. Streets
 2. Public Safety
 3. Community Health

Priorities by Planning Area				
Central	East	Mission Valley	Northeast	West
Streets	Streets	Streets	Streets	Streets
Community Health	Public Safety	Public Safety	Public Safety	Public Safety
Cultural/Educational Programs	Community Health	Parks	Community Health	Community Health

- For the top three priorities selected, 74.1% of respondents would support additional funding for these priorities over the next year.



62

FY 2021 Top Priorities



Top 3 priorities identified were:

1. Streets
2. Public Safety
3. Community Health



Alignment & Integration

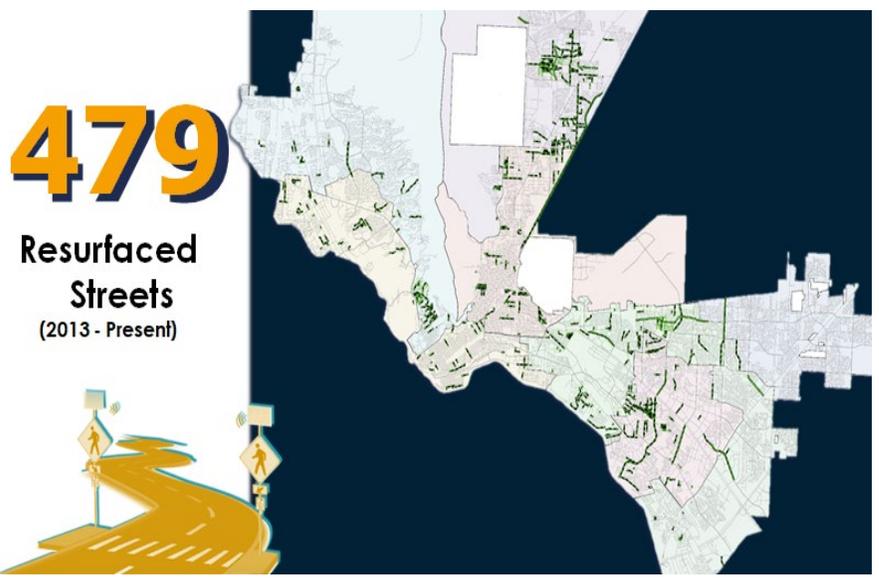


Investment

Impact

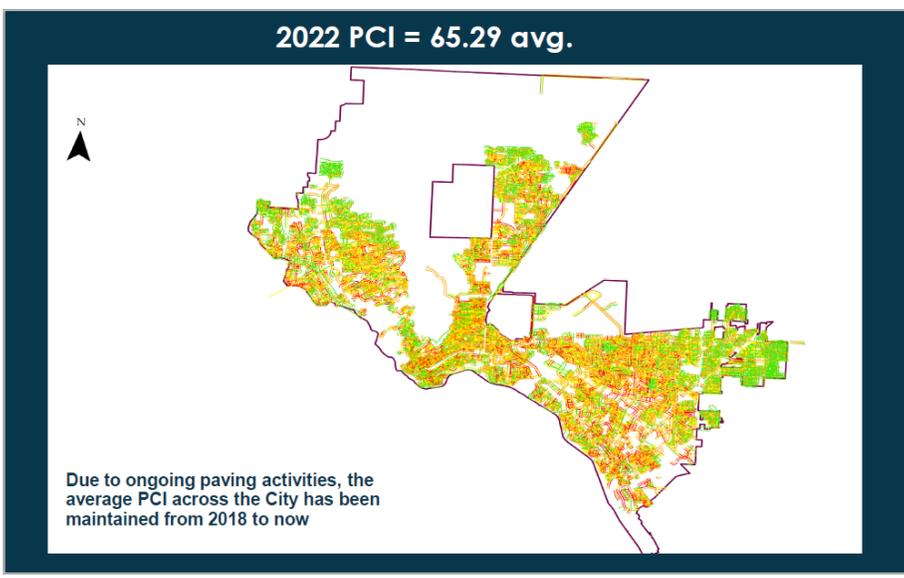
Output

Resurfaced Streets
2013 - Present



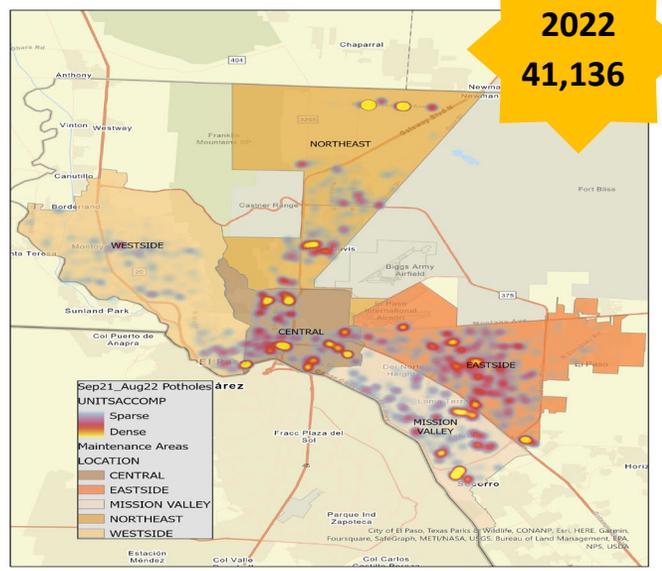
2004 – 2014 = \$10M investment
2015 – 2023 = **\$285M Investment**

2022 Pavement Condition Index
(PCI)



2012 Avg. PCI = 75.54
2018 Avg PCI = 65.42

Pothole Heat
Map
2022



Potholes Patched
2016 – 27,511
2020 – 75,703

5

Diverse Pavement Management Investments

Capital Improvement Program

- Street Resurfacing and Street Reconstruction programs – debt funded
- **2022 Community Progress Bond**

Annual PayGo Resurfacing Program

- \$7 million Residential Streets
- \$3 million Collector/Arterial Streets

Annual Operating Budget

- Street Maintenance Operations - Pavement Repairs
- Contract Management – Resurfacing program

How Can You Help With Potholes?



Hours

Monday-Sunday
7:00 am to 11:00 pm
including holidays.

Important information when reporting:

- Specific Location
 - Address
 - Cross Streets
 - Monuments/Businesses nearby



via Phone, Website and Mobile App





Pothole Patching Process Evolution

Improved Process Through Lean Six Sigma Produced Improved Results

2016

Work was driven by Service request (SRs)

Older SRs were prioritized

Excessive time spent travelling to get from one service request to next

Data tracked manually

Less than 20,000 potholes repaired annually

2022

Now driven by Patching Zones

Concentration of work in smaller areas daily

Less travel time = more time working on potholes

Data tracked electronically

Service Request #s stabilized



Infrastructure Maintenance Division



Salvador Solis
Transportation
Manager

130+ Years
Combined
Experience

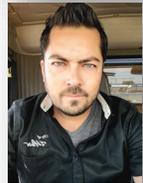
Northwest Corral



Central Corral



Northeast Corral



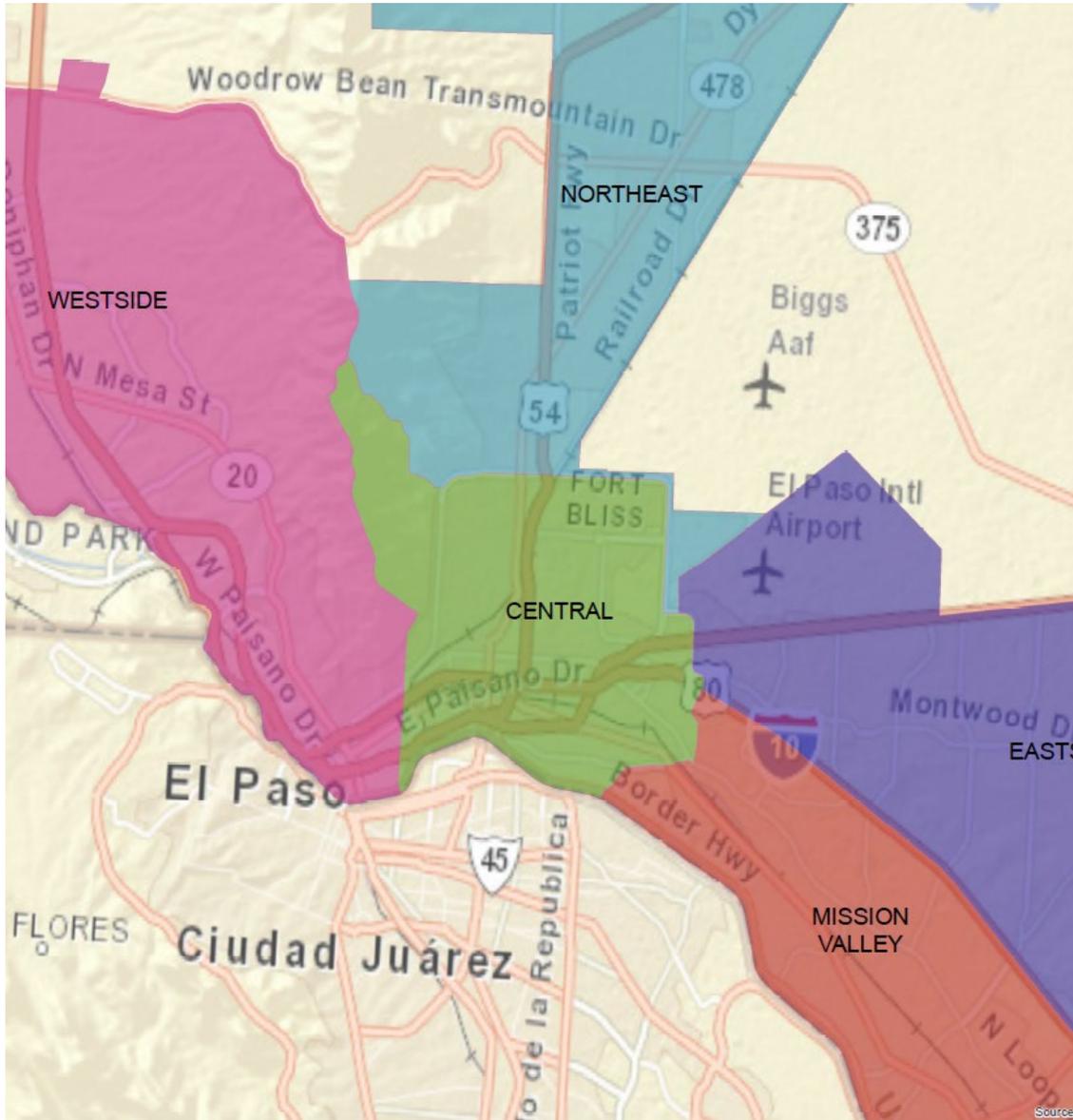
Mission Valley
Corral



Eastside Corral



Overview of the City's Pothole Repair Process



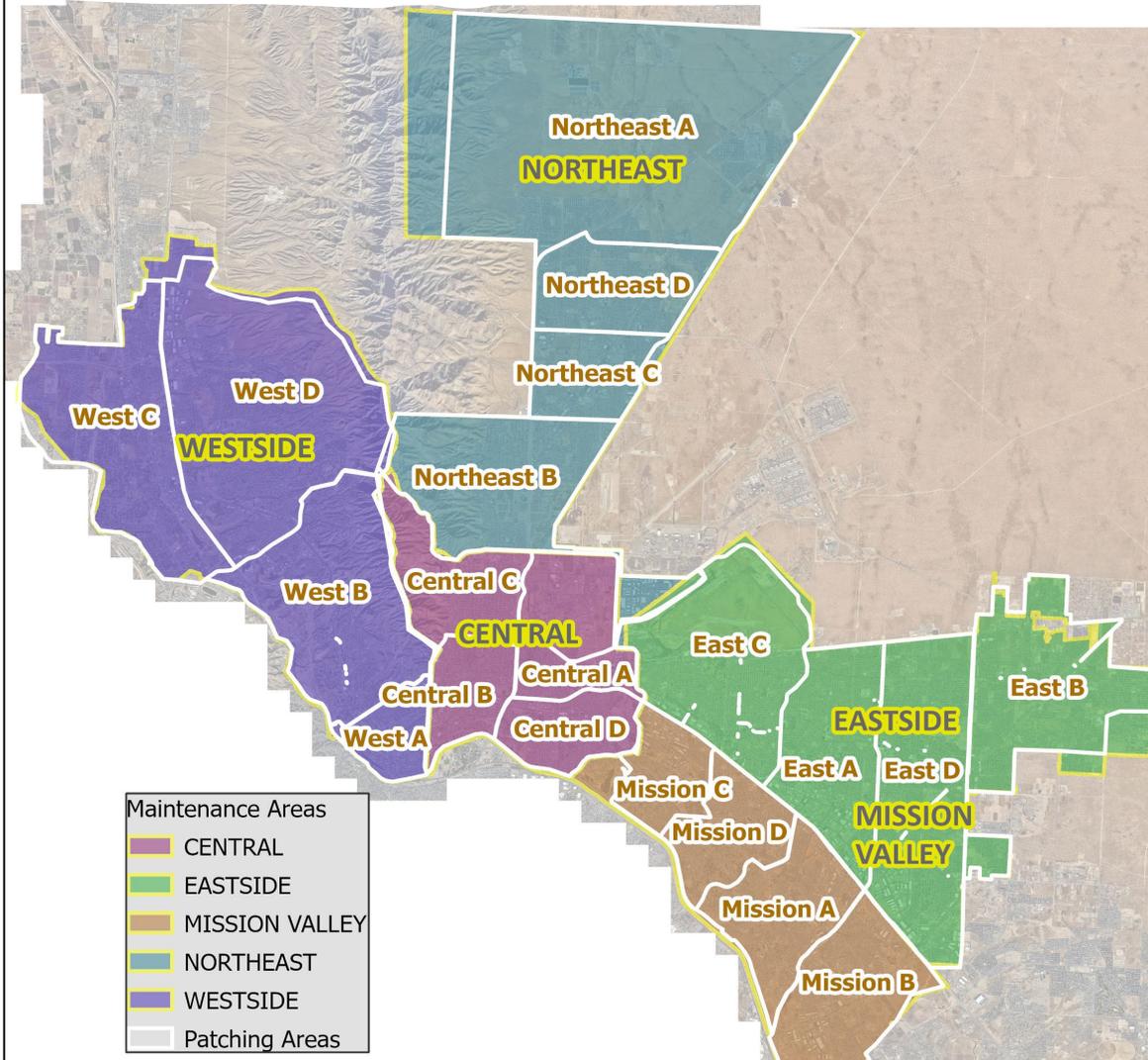
5 Maintenance Corrals

10 Units dispatched citywide daily
(2 per corral)

6 days/week during Monsoon
Season

Patching Zones & Auxiliary
Operation

Patching Zones



Cracking



Base Failure



Sink Hole



Potholes



Pavement Cut



Different Types of Pavement Failures

- **Cracking** - Caused by instability of the base or subgrade layers
- **Pothole** - Perforation on the surface of the street that is formed under the pavement layer
- **Base Failure** - The subgrade of a street underneath the pavement layer has failed and deteriorated
- **Sinkhole** - The road base washes away from underneath the pavement causing a cavity that can be significant in size – usually caused by water flow
- **Pavement cut repair** - The City is the permitting authority for pavement cuts; permit data is critical to ensure proper restoration

*Maintenance Priorities:
Public Safety & Preserving
Infrastructure*

Cold Mix vs. Hot Mix Asphalt Repair

COLD MIX

- Quick & Temporary
- Used to keep the damage from spreading too quickly
- Used during weather events
- Followed up with hot mix after

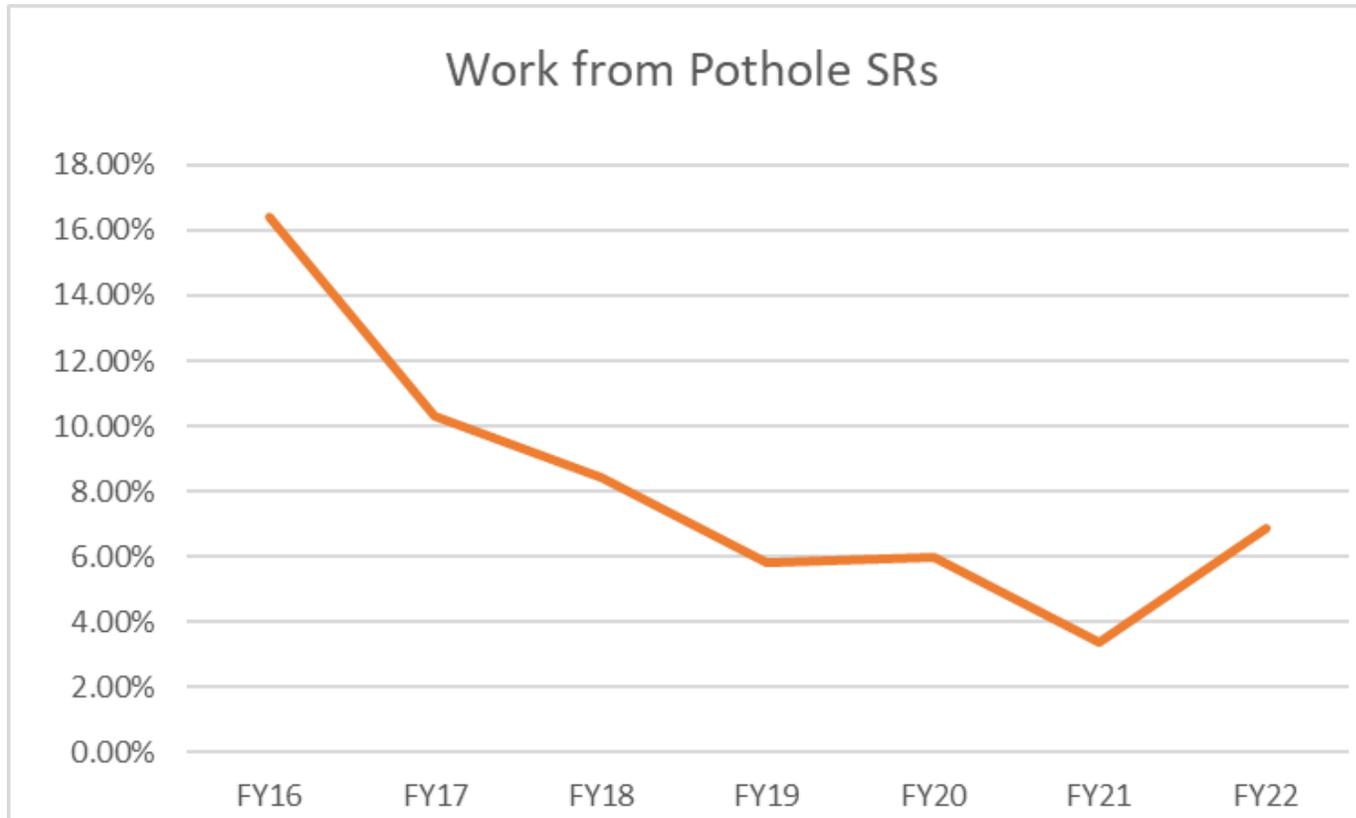
HOT MIX

- Most durable
- Long-term solution
- Impervious and flexible
- Ambient temperature window





Pothole Service Requests



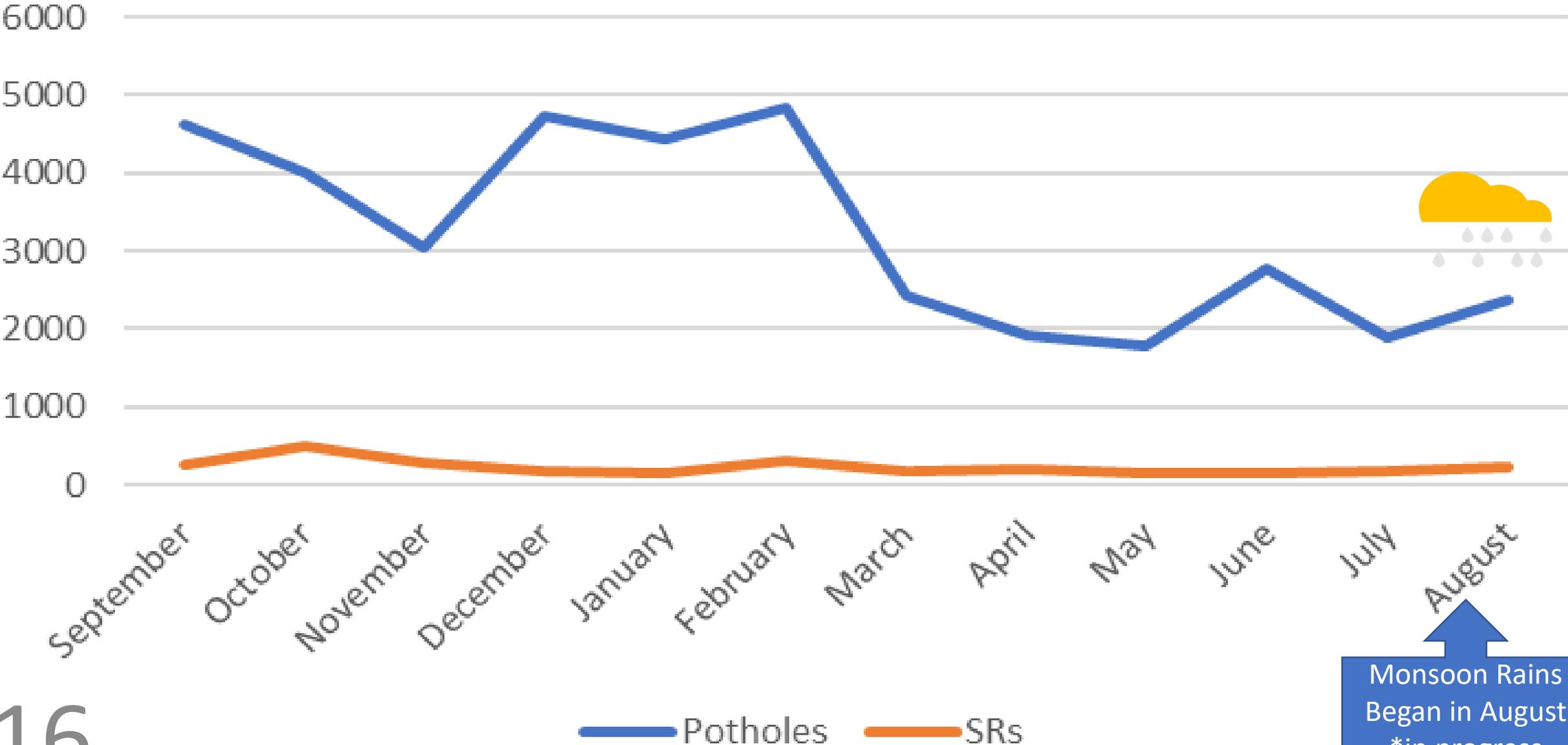
	Work from SRs
FY16	16.40%
FY17	10.30%
FY18	8.40%
FY19	5.82%
FY20	6.00%
FY21	3.39%
FY22	6.88%



90%

Self-initiated work on potholes

Potholes FY22 - YTD



Monsoon Rains
Began in August
*in progress

Quality Control Oversight through Pavement Cut Permits (PCPs)

- FY22 - **6,084** Pavement Cut Permits were issued
- Goal of the permitting cuts – to protect the pavement with a quality restoration
- **Mostly Utility companies cut into streets to access their assets** – such as water and gas lines - because these assets are located inside the street ROW
- Presently there are multiple telecommunications upgrades going on at the same time Citywide
- City Ordinance requires a Pavement Cut Permit when a third party cuts into our pavement
 - Provides record of who did work at what location within our network
 - Pavement cuts require three inspections to close a permit



Pavement Cut Permits (PCPs) Ongoing Coordination

- Monthly Coordination Meetings with Utilities and Telecommunications Companies are held to coordinate permit issues
- Present LSS Project with the City and El Paso Water addressing pavement cuts
- Educating the industry on City Traffic Control and Pavement Cut Ordinances is an ongoing effort



Potholes Risks & Potential Damage

Unsafe Conditions for street users – it affects us all

Claims/Liability for personal & property damage

Unrepaired potholes will continue to deteriorate and develop into larger potholes

Street damages – deteriorating street conditions create the need for paving and reconstruction projects

*Maintenance Priorities:
Public Safety & Preserving
Infrastructure*





2021 Monsoon Road Damage

In 2021 – Nine Streets
required comprehensive
pavement repairs



2022 Monsoon Road Damage



Monsoon efforts to
date in 2022

180+ CUBIC
YARDS IN DEBRIS
REMOVAL

1,500+ CURB
MILES SWEEP

8,000+
POTHLES
PATCHED

Customer Feedback

"Great job! The work was completed this morning and it looks very nice and safe. Thank you so much!" - Kristin (Garnet Dr. & Echo St. potholes)

"Great and quick tar patches in potholes on Stoney Hill Dr. We can count on repairs being done after every heavy rain fall. Mission accomplished! Keep on keepin' on!!" - Ron

"Would like to commend the employees for doing a wonderful job in repairing the road... very satisfied with the work that these individuals have done for her street ." - Selma (Giles Rd. & Rodeo Ave. potholes)

"This morning, a Streets crew came out to the intersection of McKinley and Piedras as part of the after storms clean-up. I want the boss to know that this crew did excellent work, conscientiously cleaning the corner where dirt and rocks had built up and causing a driving hazard for vehicles which turned quickly. I watched this particular crew work, and they did such a careful and thorough job, I wanted to let you know and hope that you pass on to this crew that a citizen appreciated their effort enough to compliment them individually. I thanked them personally on site, but if their boss passes it on, it will mean a lot more to them. Thank you." - Joe





Actions Producing Results



AGGRESSIVE
MAINTENANCE
OPERATION



CONTINUOUS
RESURFACING
PROGRAM



QUALITY CONTROL
THROUGH
PERMITTING



ONGOING CAPITAL
INVESTMENT



PERIODIC
PAVEMENT
ASSESSMENTS
GUIDE DECISIONS



EQUIPMENT
INVESTMENTS



NEW SOURCES
FOR FUNDING &
INVESTMENTS



Mission

Deliver exceptional services to support a high quality of life and place for our community

Values

Integrity, **R**espect, **E**xcellence,
Accountability, **P**eople

Vision

Develop a vibrant regional economy, safe and beautiful neighborhoods and exceptional recreational, cultural and educational opportunities powered by a high performing government