

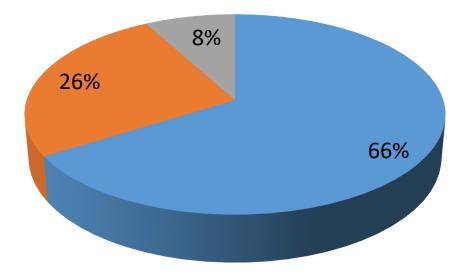
## 6 Year Review of Street Maintenance and Safe Route to School Sales Tax 2023 Update

Robert K. Ott, P.E. Director of Public Works Prepared: May 1, 2023

## Pavement Surface Quantities (City Maintained Streets)

### **Center Line Miles**

■ Local ■ Collector ■ Arterial

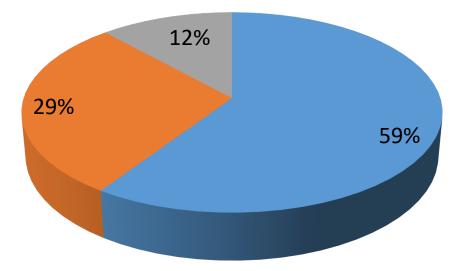


Functional Class	Center Lanes Miles
Local	148.49
Collector	58.25
Arterial	17.96
Total	224.70

## Pavement Surface Quantities (City Maintained Streets)

### **Square Yards**

■ Local ■ Collector ■ Arterial



Functional Class	Square Yards
Local	2,224,102
Collector	1,082,343
Arterial	440,768
Total	3,747,214

## Definitions/Standards

 Pavement Condition Index (PCI): is a numerical index between 0 and 100 used to indicate the general condition of a pavement. This statistical measurement requires manual survey of the pavement to calculate type, severity, and density of deficiencies to determine the value.

## Definitions/Standards cont.

**Distresses that affect PCI:** Low Ride Quality, alligator cracking, bleeding, block cracking, bumps and sags, corrugations, depressions, edge cracking, joint reflections, lane/shoulder drop-off, longitudinal and transverse cracking, patching and utility cut patching, polished aggregate, potholes, rutting, shoving, slippage cracking, swelling, and weathering and raveling.

## Definitions/Standards cont.

- PCI Value verses Road Condition:
  - **100 85** Good
  - 85 70 } Satisfactory
  - 70 55 } Fair
  - 55 40 } Poor
  - 40 25 } Very Poor
  - **25 10** } Serious
  - **10 0** } Failed

## Definitions/Standards cont.

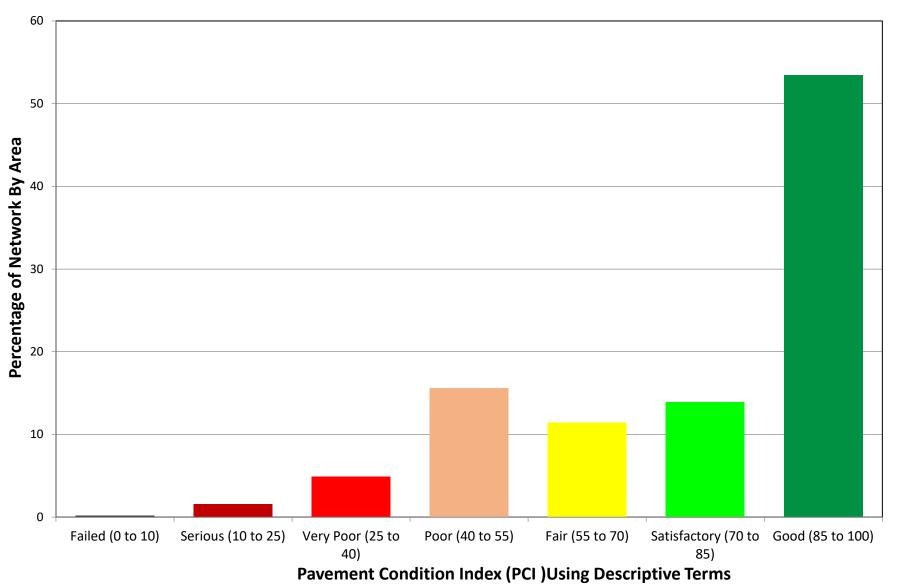
#### Table 1 - City's PCI Categories

Condition Assessment	Typical Pavement Distresses and M&R Needed	PCI Range
Good	Fresh like-new pavement	85-100
	Preventative Maintenance: Crack Sealing	
Satisfactory	Low severity L&T cracking and weathering	70-85
	Preventative Maintenance: Crack Sealing & Surface Treatments	
Fair	Moderate severity L&T cracking	55-70
	Global preventive maintenance & localized repairs: Localized	
	surface, full-depth patching, surface treatments, and thin overlays	
Poor	Severe L&T cracking, low severity alligator cracking	40-55
	Moderate rehabilitation: Localized full-depth patching,	
	mill and overlays	
Very Poor	Moderate alligator cracking	25-40
	Major rehabilitation: Mill and overlays, and reconstruction	
Serious	Severe alligator cracking, rutting	10-25
	Major rehabilitation: Partial and complete reconstruction	
Failed	Severe alligator cracking, rutting and potholes	0-10
	Major rehabilitation: Complete reconstruction	

### Last PCI Assessment

#### Manhattan, KS

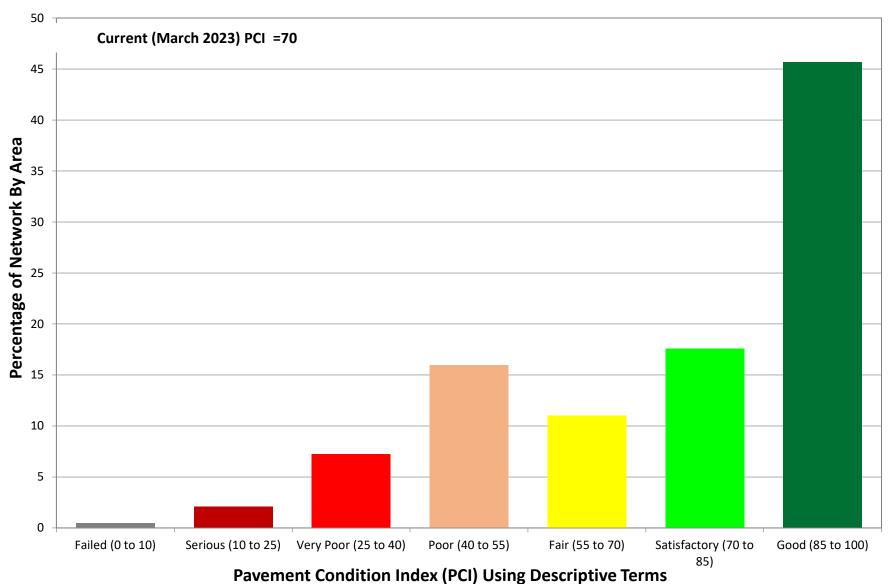
Last Survey Pavement Condition Rating Using Descriptive Terms



### Current PCI Assessment

#### Manhattan, KS

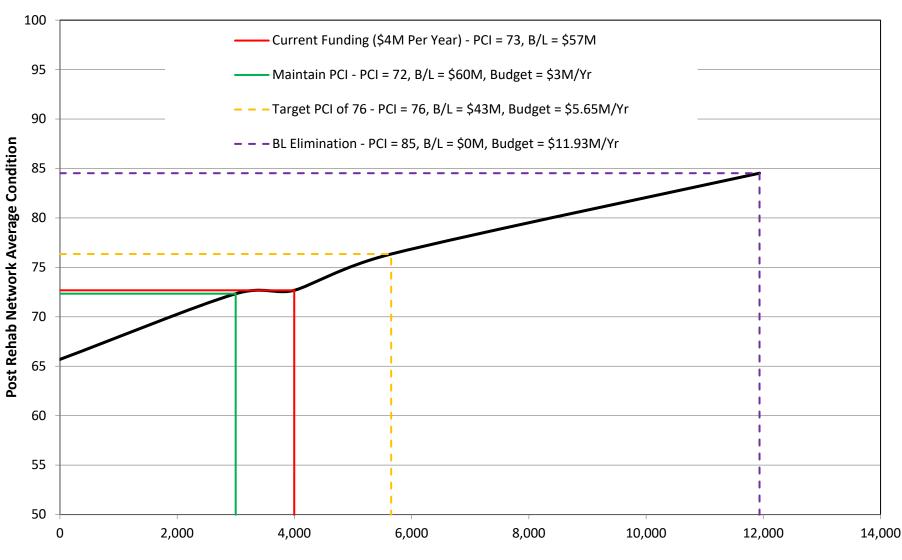
#### **Current Pavement Condition Rating Using Descriptive Terms**



### Manhattan, KS **Annual Condition for Various Budget Levels** 100 → Do Nothing - PCI = 66, B/L = \$83M, Budget = \$0k/Yr ──── Current Funding (\$4M Per Year) - PCI = 73, B/L = \$57M **Network Average Pavement Condition Index** - ◆ - Target PCI of 76 - PCI = 76, B/L = \$43M, Budget = \$5.65M/Yr 90 BL Elimination - PCI = 85, B/L = \$0M, Budget = \$11.93M/Yr 80 70 60 2023 2024 2025 2026 Start 2027

### Manhattan, KS

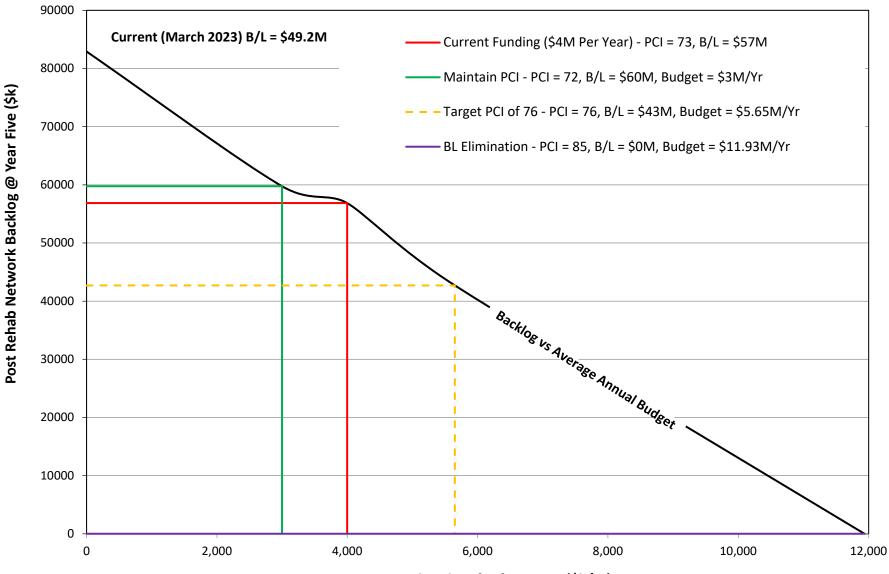
#### Five Year Post Rehab PCI Versus Annual Budget



Average Annual Budget Each Year for Five Years (\$k/Yr)

#### Manhattan, KS

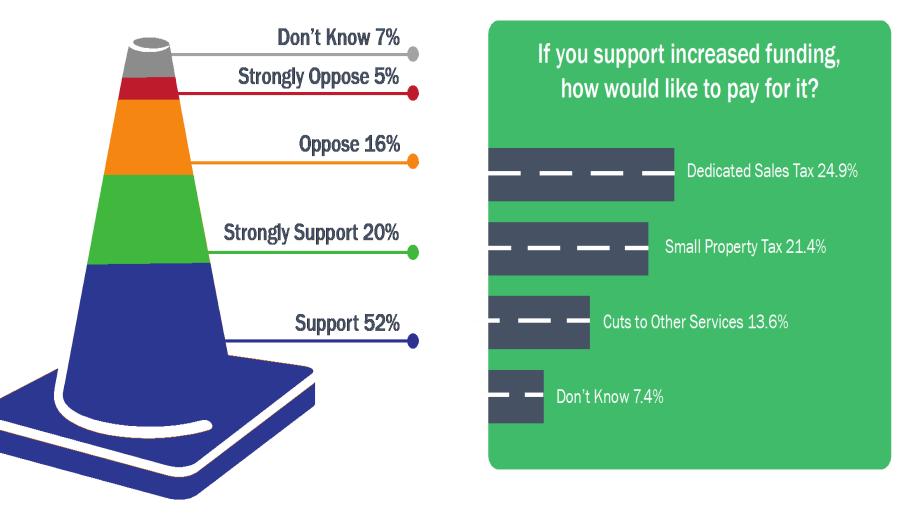
#### Five Year Post Rehab Backlog Versus Annual Budget



Average Annual Budget for five Years (\$k/Yr)

### Level of support for increasing funding for street maintenance\*

\*Street maintenance was named the No. 1 priority for growth-related projects in the 2015 Community Survey



## Funding sources for Manhattan street maintenance

S

IS IN

**GENERAL FUND** 

FUEL TAX

\$1.1M used for contracted street repairs

\$1M used for Street Division street repairs

\$1.9M to be used for contracted street repairs if approved by voters

# **Ballot Language**

"Shall the City of Manhattan Kansas, pursuant to the provisions of K.S.A. 12-187, be authorized to levy an additional two tenths of one percent (0.20%) special purpose citywide retailers' sales tax within the city limits of Manhattan, Kansas; such additional tax, if approved by a majority of the electors voting thereon, to take effect April 1, 2017, or as soon as thereafter as permitted by law and notice requirements allow, and to end ten years thereafter on March 31, 2027; the revenue from the additional tax shall be used for the sole purpose of financing, in whole or in part with any other funds, both of the following programs: I. Street Maintenance Repair Program which shall include the costs of repairing, rebuilding, rehabilitating, upgrading and improving existing streets in the City of Manhattan. Such program may include the repair, reconstruction and rehabilitation of existing street pavement, curb and gutters, sidewalk ramps and such other work as is necessary to maintain, repair, renew, upgrade and improve existing city streets; and, II. Safe Pedestrian Routes to School Program, which shall consist of the use of no more than five percent (5%) of the funds generated by such tax to finance the costs to upgrade existing pedestrian facilities, as well as the construction of new pedestrian facilities, along routes used by children walking to and from schools. The term "pedestrian facilities" shall include all infrastructures necessary to accommodate such pedestrian traffic, including, but not limited to, sidewalks and traffic control devices. With the means and methods to accomplish said purposes to be determined in the sole discretion of the Governing Body of the City."



**I. Street Maintenance Repair Program** which shall include the costs of repairing, rebuilding, rehabilitating, upgrading and improving existing streets in the City of Manhattan. Such program may include the repair, reconstruction and rehabilitation of existing street pavement, curb and gutters, sidewalk ramps and such other work as is necessary to maintain, repair, renew, upgrade and improve existing city streets; and

# **Ballot Language**

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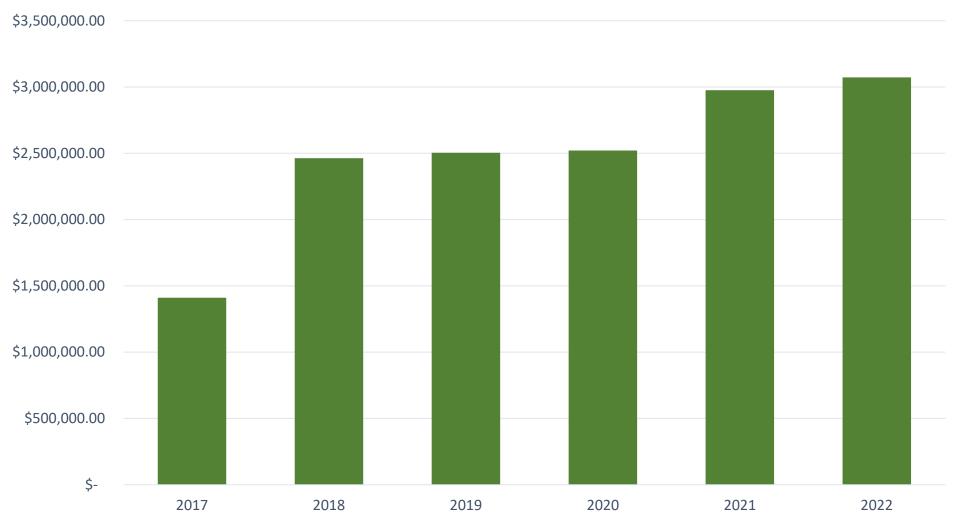
# <u>Objectives/Goals of the New Funding</u> <u>Source (SSMF)(Sales Tax)</u>

- Limit Debt Service on Maintenance Projects
- Avoid Purchase of Equipment & Materials
- Avoid Paying Operational Expenses for City Labor
- Balance the Fund, on Revenues by Amount of Work Bid to Private Contractors
- Spend 5% of Revenues on Safe Routes to School Program or \$100K per year for 10 Years
- Spend \$1.9M for Each Year for 10 Years on Pavement Preservation

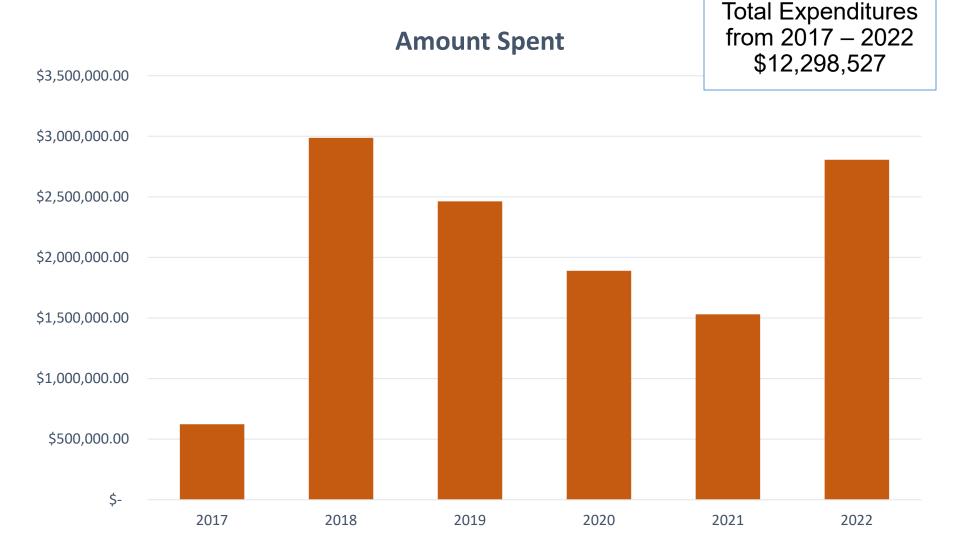
## Total Revenues from Sales Tax (Special Street Maintenance Fund)

Total Revenue Collected from 2017 – 2022 \$14,964,049

### **Total Revenue Received**



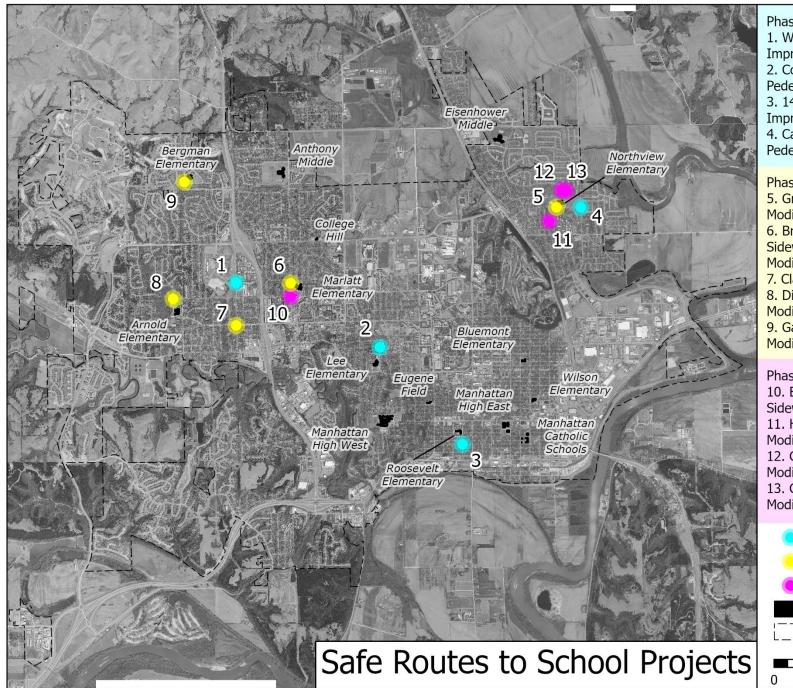
### Contractor Only Maintenance Repairs <u>Expenditures</u> from Special Street Maintenance Fund (SSMF)



<u>Sales Tax for Past Six (6) Years</u>

- Revenues:
- Total Expenditures:
- Funds Spent on SRTS Program:
- Total Ex./SRTS Program:
- Projected Balance JAN 2024:

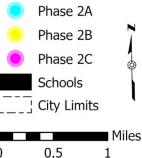
- \$14,964,049 \$12,298,527 \$1,073,758
- 7.18%
- \$2,427,556
- Multiple Obligations with Awarded Projects in 2022, and more projects to be bid yet in 2023 and final price will effect that projected end of year balance for 2023.



Phase 2A 1. Wreath Ave Pedestrian Improvements 2. College Heights Pedestrian Improvements 3. 14th St Pedestrian Improvements 4. Casement Rd Pedestrian Improvements

Phase 2B
5. Griffith Sidewalk
Modifications
6. Browning & Hobbs
Sidewalk and Crosswalk
Modifications
7. Claflin Sidewalks
8. Dickens Crosswalk
Modifications
9. Gary Crosswalk
Modifications

Phase 2C 10. Browning & Dickens Sidewalk Modifications 11. Hanly Sidewalk Modifications 12. Galloway Sidewalk Modifications 13. Charolais Sidewalk Modifications



## Safe Routes to School Update

- Thirteen (13) SRTS Projects Completed
- Completed Projects ~ All projects Listed in Phase 2A and Phase 2B Grouping as Listed on Previous Slide
- Completed Projects ~ Phase 2C in 2022

## 2017-2021 Obligated Safe Routes to School

Project Name	Amount
Phase I	\$41,934
Phase II	\$63,198
Phase IIA	\$178,000
Phase IIB (Design + Easements)	\$132,765
Phase IIB	\$178,178
Phase IIC	\$474,683
SRTS Master Plan	\$5,000
Total Amount	\$1,073,758

<u>Objectives/Goals of the Traditional</u> <u>Funding Source (SSH)(**Gas Tax**)</u>

- Debt Service on Maintenance Projects
- Purchase of Equipment & Materials (Reduce General Fund Costs)
- Operational Expenses for City Labor (Reduce General Fund Costs)
- Balance the Fund, on Revenues by Amount of Work Bid to Private Contractors
- Provide Local Grant Match Funds for State and Federal Projects
- Spend \$1.1M for Each Year for 10 Years on Pavement Preservation

### State Motor Fuel Taxes



cpg)

#### Kansas Gasoline

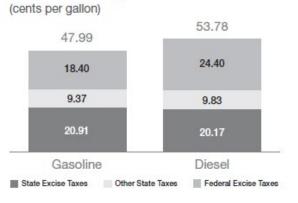
	24.00	State Excise Tax
	0.03	Other State Taxes/Fees
	24.03	Total State Taxes/Fees
	42.43	Total State plus Federal Excise Taxes (@ 18.4

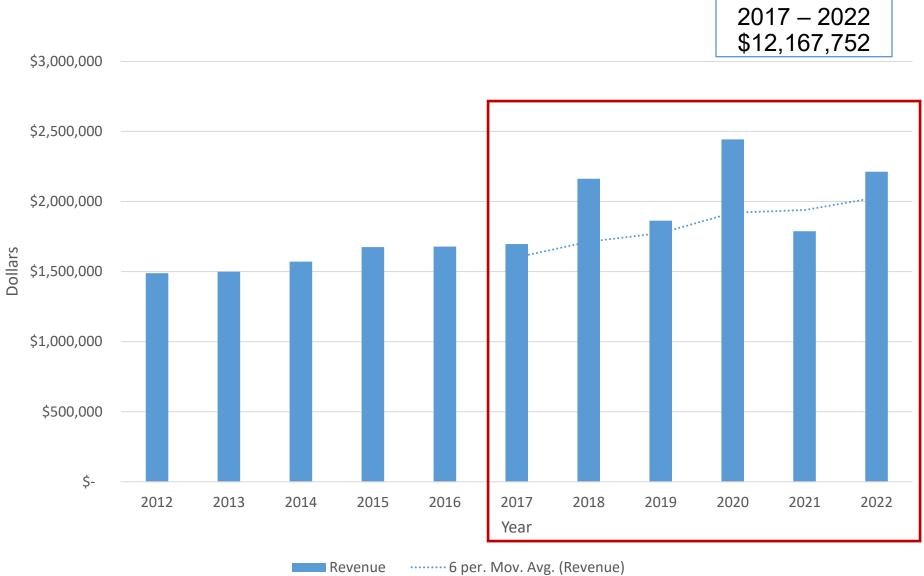
#### **Kansas Diesel**

26.00	State Excise Tax
0.03	Other State Taxes/Fees
26.03	Total State Taxes/Fees

50.43 Total State plus Federal Excise Taxes (@ 24.4 cpg)

#### National Average

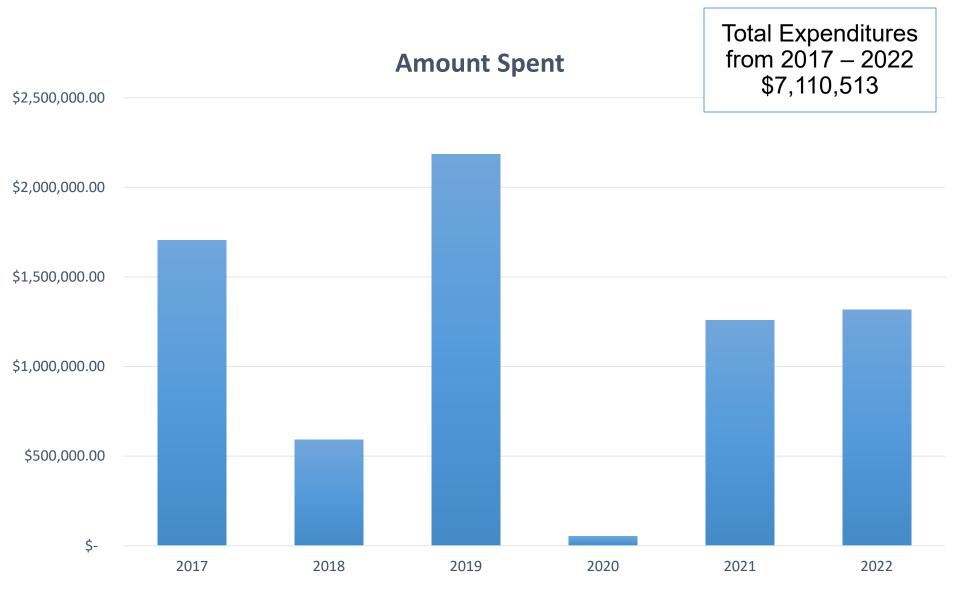




### Motor Fuel Taxes

**Total Revenue** Collected from

### Contractor Only Maintenance Repairs <u>Expenditures</u> from Special Street & Highway Fund (SSH)



<u>Summary of Special Street Maintenance</u> <u>Gas Tax for Past Five (5) Years</u>

\$12,167,752

58.44%

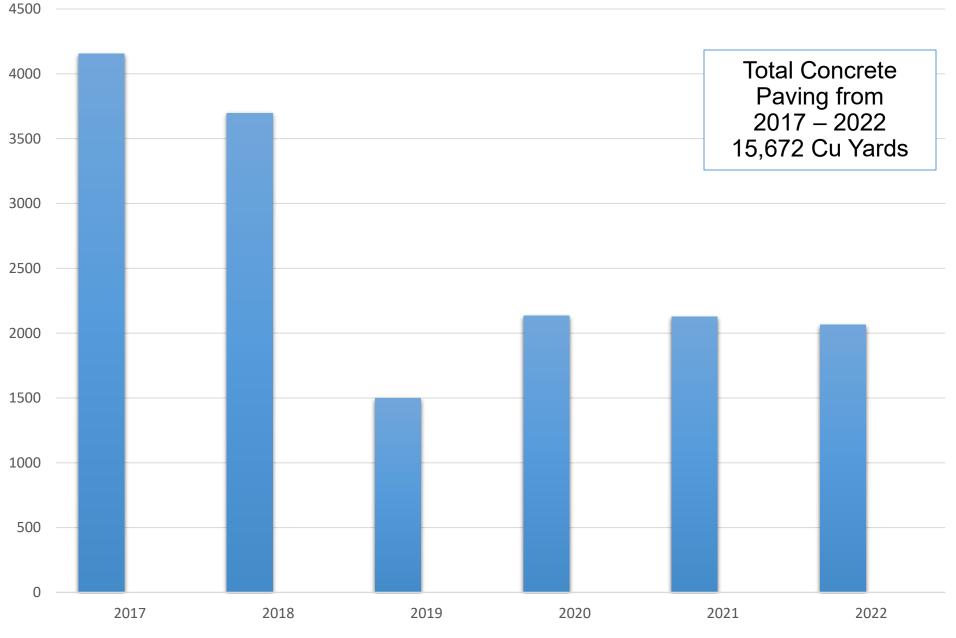
\$7,110,513

- Revenues:
- Total Expenditures:
- Total REV/Contractor Maint:
- Current Balance (JAN 1, 2023): \$3,075,973
- Multiple Obligations with Awarded Projects; (Debt Service) Kimball Ave, Casement Road, FRB CCLIP, Poyntz & Juliette, 600 Block Poyntz then there is (To Be Bid) Anderson Ave waterline project.

# Objectives/Goals of the City Crews (General Fund)

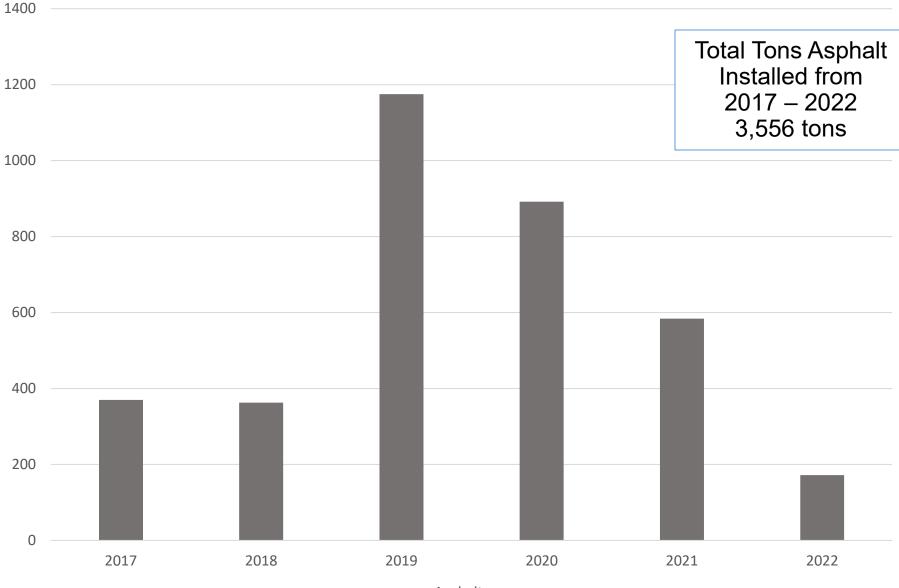
- Purchase of Equipment & Materials
- Operational Expenses for City Labor
- Perform Snow and Ice Operations
- Produce \$1.0M in Value for Each Year for 10 Years on Pavement Preservation
  - 2,688 Cu Yards to 3,400 Cu Yards 6 in Concrete
- Emergency Repairs, Emergency Flood Fight

### Cubic Yards of Concrete Installed by City Crews per Year



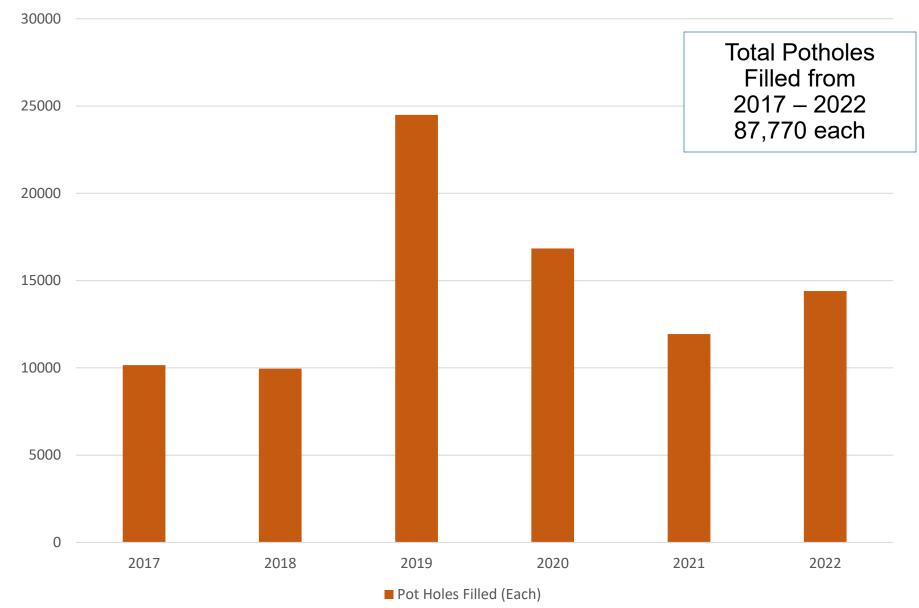
Cu Yds Concrete

Asphalt Tons Installed by City Crews



Asphalt

### Pot Holes Filled (Each)



# Summary of Overall Program

- Meeting Target of Sales Tax (SSMF) for SRTS & \$1.9M Expenditure per Year with Contractors for Preservation
- Meeting Target of Gas Tax (SSH) for Contractor Maintenance \$1.0M
- City Crews Challenges with Work Force and other Emergencies – Difficult to Place Value on Pothole Patching and Small Asphalt Mill & Overlay Projects – Concrete Installation Average Could be Higher, in 2022 crews spent 7 weeks cleaning up after the tornado.

## 2023 Projects

- Asphalt Areas that will need 2-inch Mill & Overlay
  - Casement Road
  - Highland Meadows Subdivision
- Concrete Areas that will need full depth repair
  - Grandview Neighborhood Coordinate with water line project on Anderson Ave for access.
  - Anderson Avenue from Sunset to Connecticut Coordinate with water line project
  - Freemont Street 14<sup>th</sup> St. to 12<sup>th</sup> St. (Coordinated with ATA Project)
  - Kimball and Grandmere Roundabout
  - Browning Ave near Anthony Middle School

# Next Four (4) Years

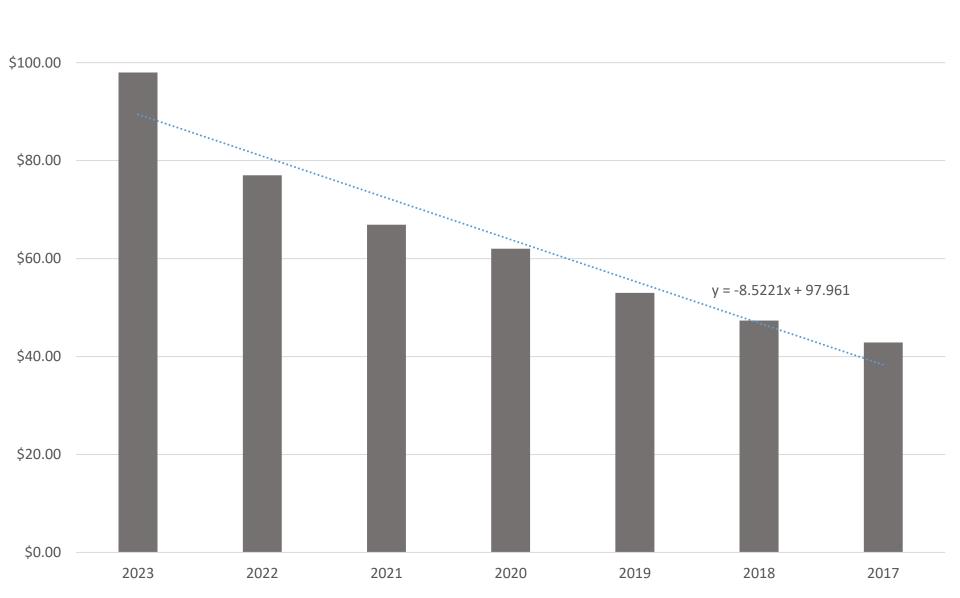
- Asphalt Areas that will need 2-inch mill & overlay
  - North View Area
  - Vanesta Drive
  - Stone Point Area
- Concrete Areas that will need full depth repair
  - Grandview Terrance Area Multiple year phasing
  - Walters Drive near Eisenhower Middle School
  - North Ehlers Road Neighborhood
  - West Wreath Avenue Neighborhood
  - McDowell Avenue
  - Bellehaven Area Phase II Package Coordinate with water line project
- Asphalt Full Depth Repair
  - MLK Jr. Drive from Anderson Avenue to Poyntz Avenue
  - Sunset Avenue (Anderson Avenue to Claflin Road)
  - Kimball Avenue (Candlewood Drive to Hudson Avenue)

# Next Four (4) Years

- Arterial Street that need full depth with new base repairs (Anderson Ave)(K-113 to Wreath)
- Major Collector Street that full depth with new base repairs (MLK Jr. Dr, Sunset Ave, 11<sup>th</sup> St)
- Balance of Work on Major Streets versus Local Streets
- Inflation of Materials and Labor with Flat Revenue Sources from Special Street and Highway Fund, Special Street Maintenance Fund has increase with inflation.

### Remove and Replace 6 inch Concrete (SY) + Add Base Rock

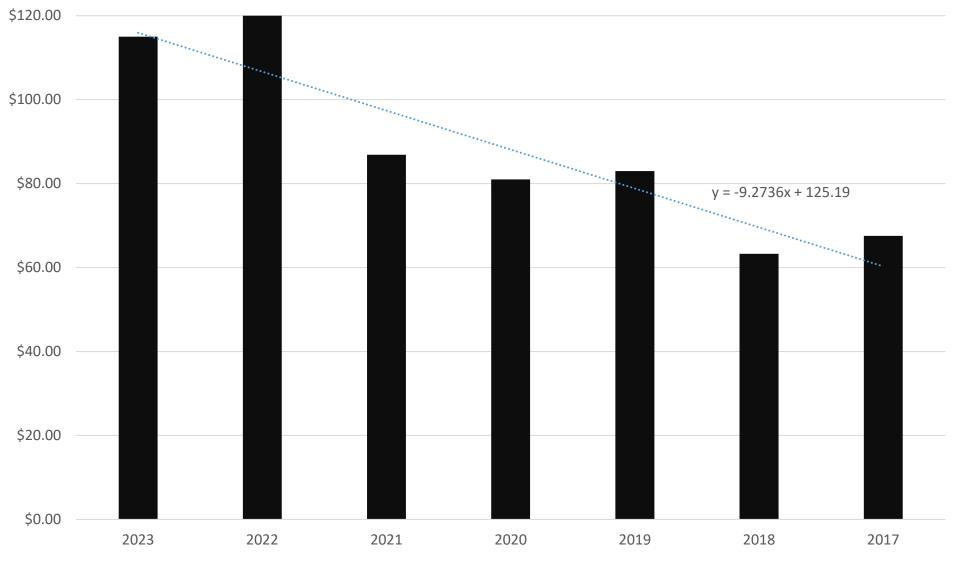
\$120.00



■ 2023 ■ 2022 ■ 2021 ■ 2020 ■ 2019 ■ 2018 ■ 2017

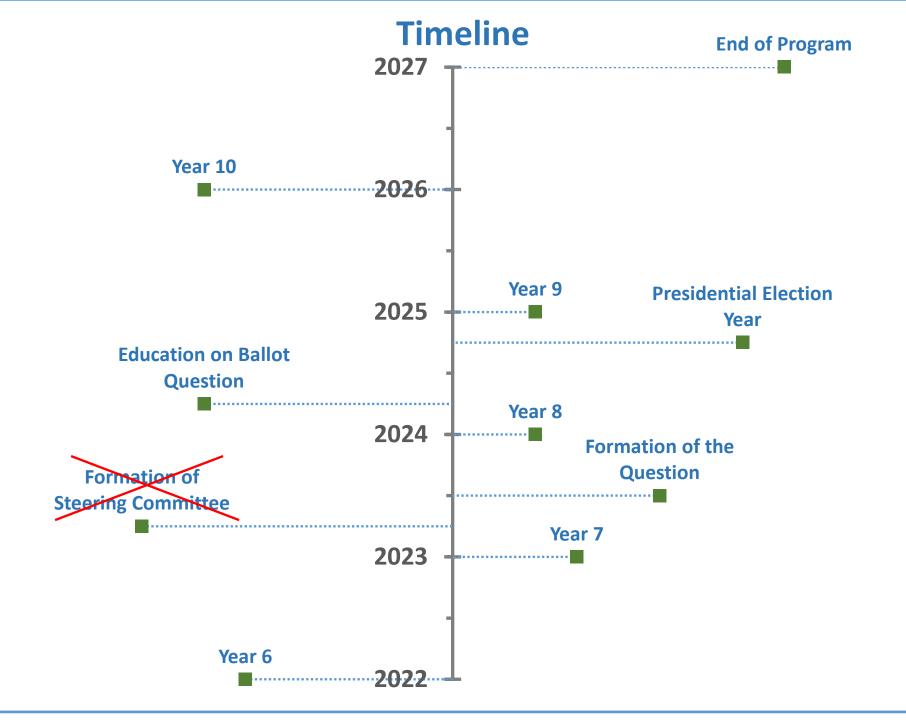
### Asphalt 2inch Overlay (Ton)

\$140.00



Asphalt (2inch Overlay) (Ton) ...... Linear (Aspha

..... Linear (Asphalt (2inch Overlay) (Ton))



# **Timeline Questions**

- Presidential Election Year (2024)? Or Mid-Term Year of 2026?
- Formation of Steering Committee? Or Follow Direction from City Commission? - No
- Safe Routes to School Program? Other Programs to be Added? – Yes keep SRTS program in next ballot question, but do not add any other components.
- Renewal ? Or Increase Revenue? 0.20 or 0.25?

