

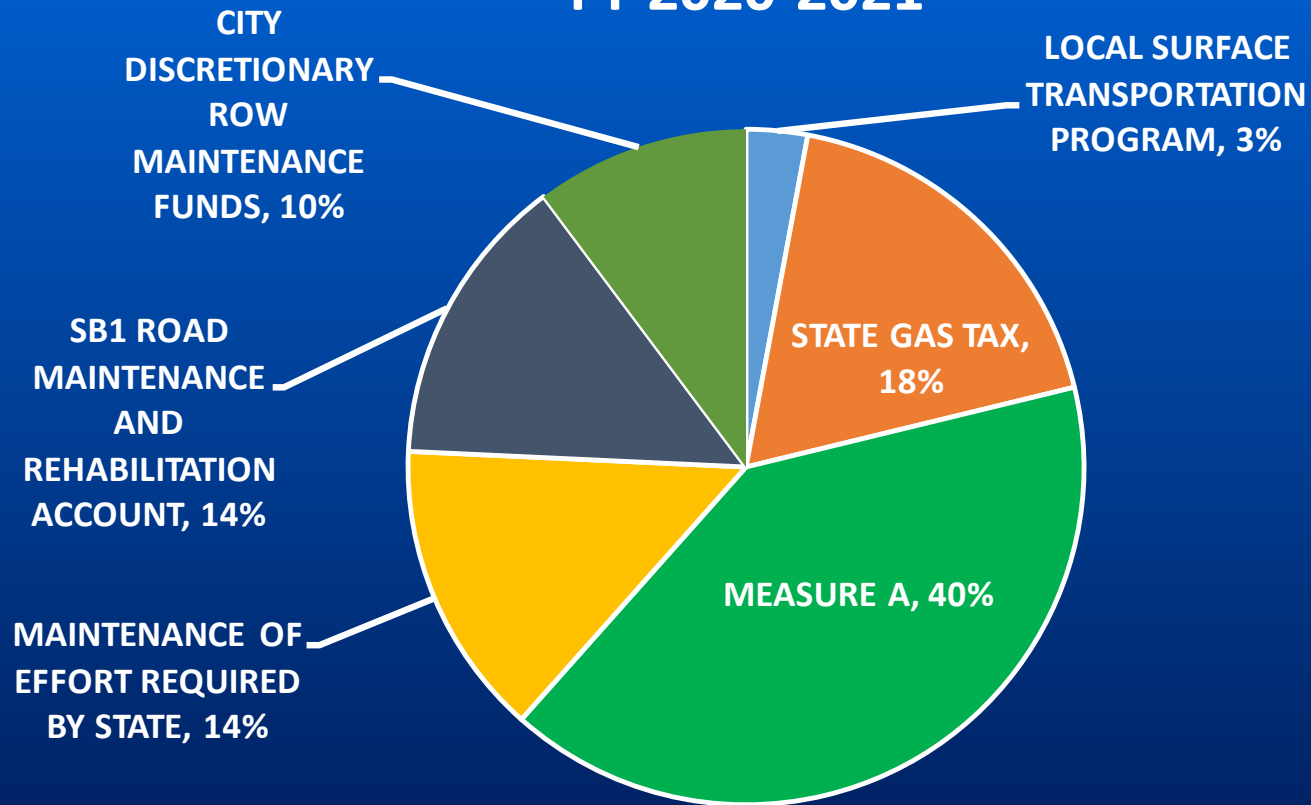
# Measure A Program Update

Lompoc City Council February 18, 2020



Measure A is the City's largest source of road revenue.

### Street Maintenance Revenue FY 2020-2021



# Road funds serve many uses:

## ■ Street, Urban Forestry & Engineering Divisions Citywide Operations (Keeping things working):

- Patching, sealing, & managing street pavement
- Repairing and upgrading sidewalks & concrete
- Maintaining street trees and vegetation
- Maintaining traffic striping, signs, and signals
- Street drainage
- And many other necessary operations

## ■ Capital Projects (Extending useful life):

Pavement rehabilitation, major upgrades, and other transportation needs

Operations – continually working to keep streets safe and useable, but don't always add useful life.

**PUBLIC WORKS**



**FIRST RESPONDER**





Capital projects add useful life, but are limited in timing, location, and contract scope.





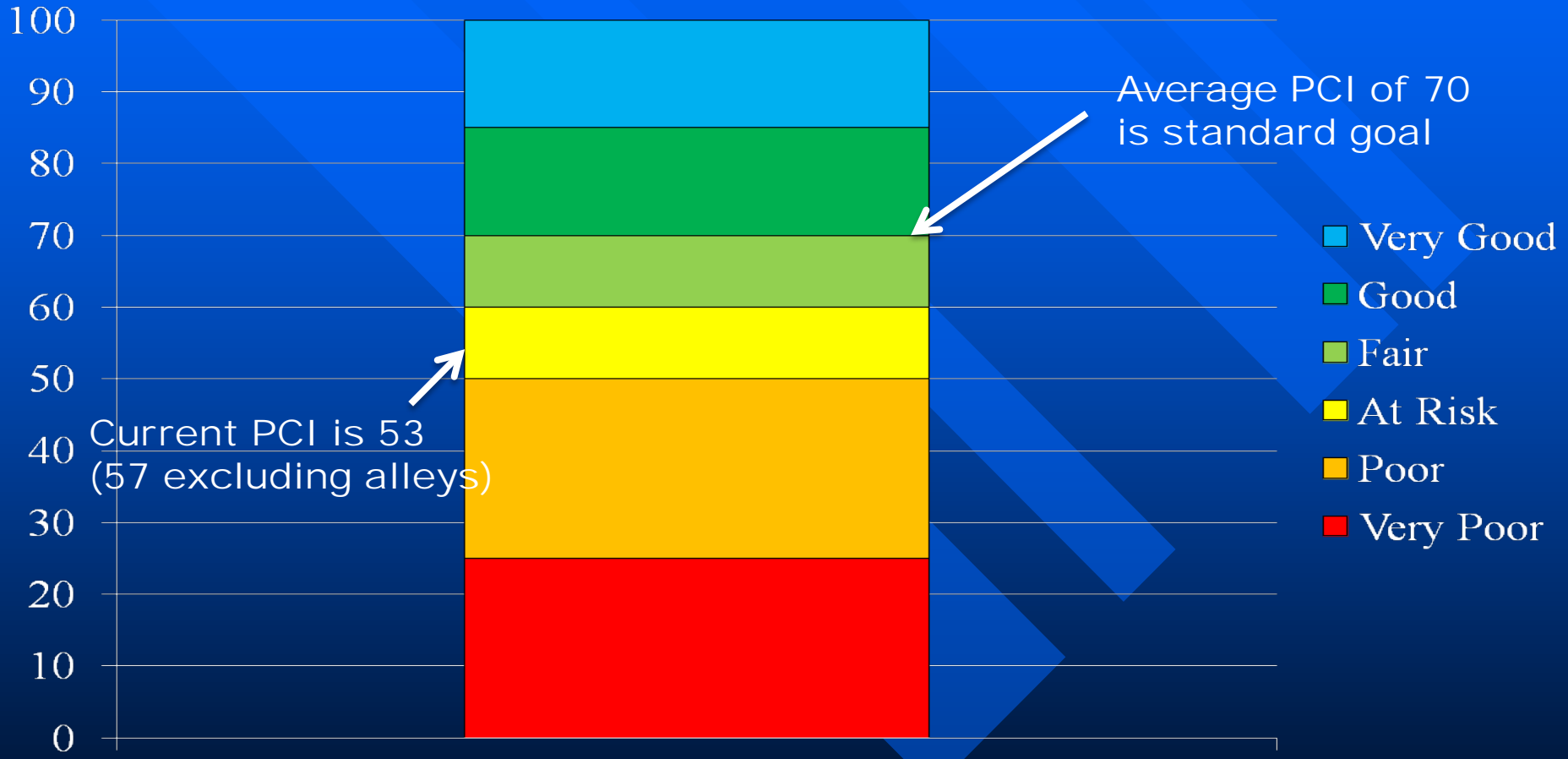
# Operations + Capital Projects = A Complete Street Program



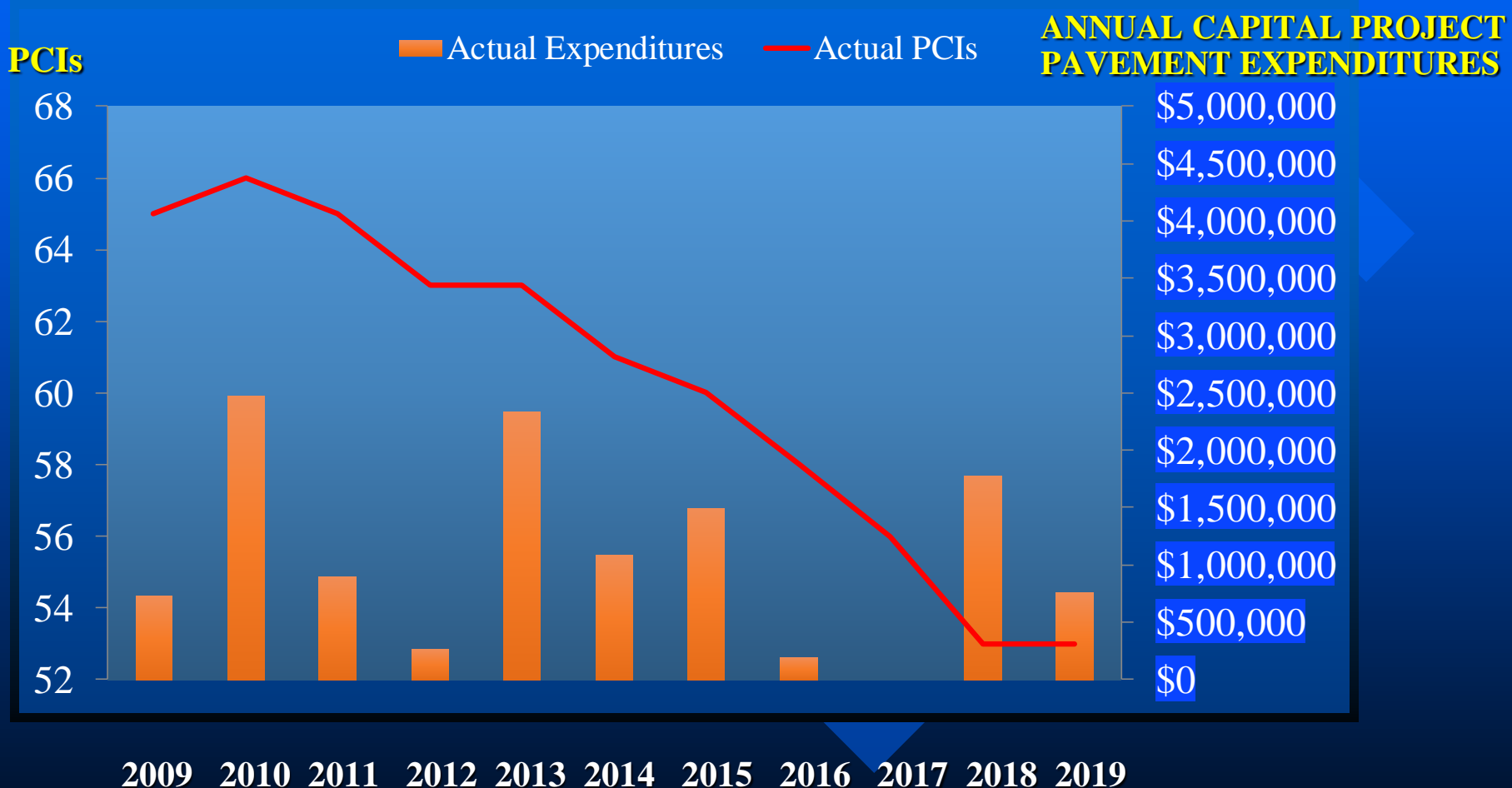
# Road Needs Exceed Revenues

- Because road needs exceed available revenues, the City has already significantly reduced Street Operations and Street Capital Projects.
- Without adequate Operations, the daily and immediate needs cannot be met.
- Without adequate Capital Projects, the condition of street pavement and other street infrastructure declines.

# Pavement Condition Index (PCI)



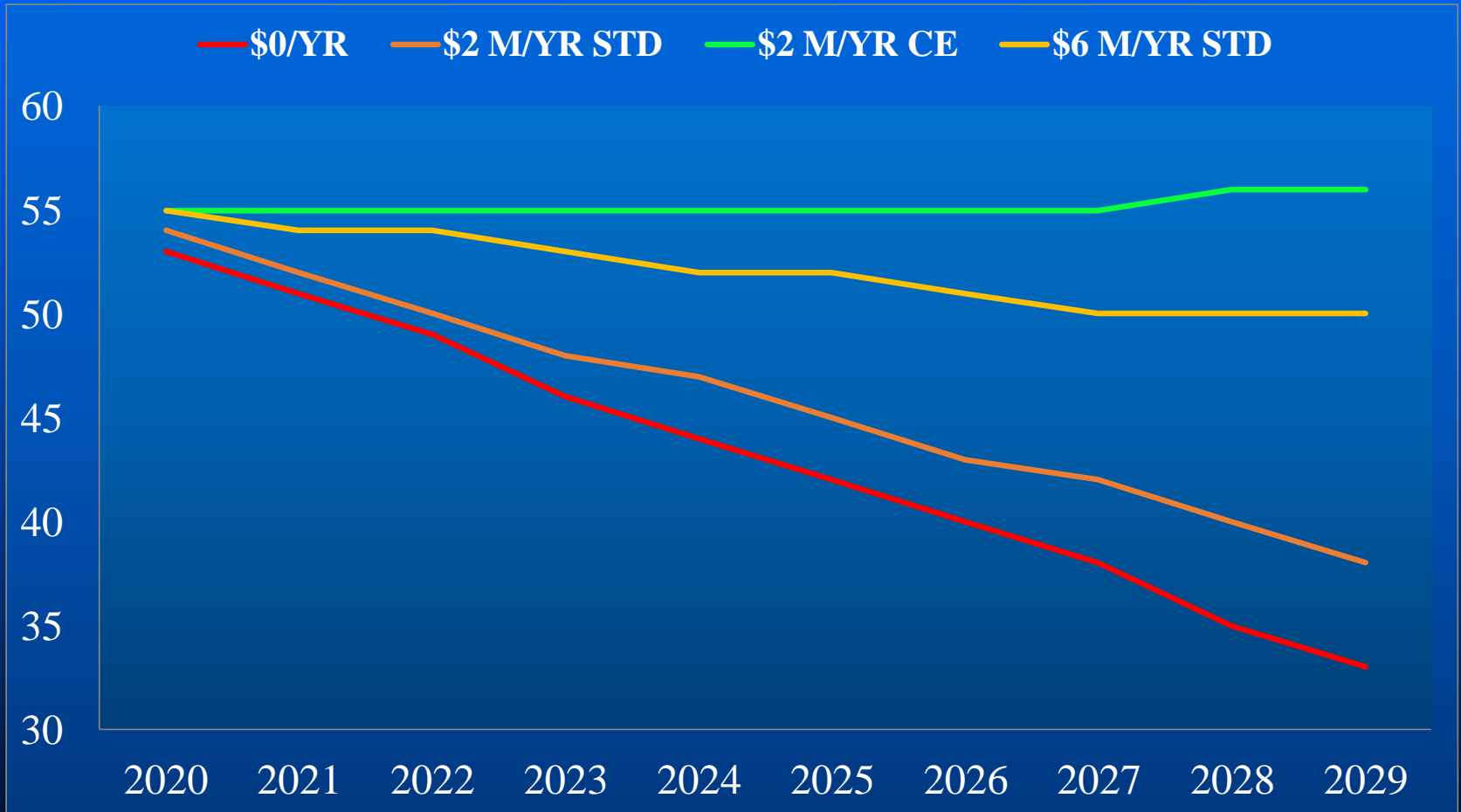
# Past 10 Years, PCI Trend





# Next 10 Years, PCI Trend

## ANNUAL CAPITAL PROJECT PAVEMENT EXPENDITURES



# Why We Calculate PCI

- The pavement condition index (PCI) describes the state of being, or readiness for use, of an individual street segment, or as used in this presentation, of the City's entire street network.
- Condition information is used to:
  - evaluate the current state of the pavement,
  - determine the rate of deterioration,
  - project future condition,
  - gauge maintenance and rehabilitation needs, and
  - estimate costs to repair and maintain the street network.
- The PCI is a tool and is approximate, not exact.

# How PCI is Calculated

- The City records the types, severities, and prevalence of the surface distresses used by its StreetSaver pavement management system for representative samples of approximately 10% of the paved area of each street.
- The distress types are:
  - Alligator Cracking (load-related cracking)
  - Block Cracking (temperature cycle cracking network)
  - Distortions (localized abrupt bumps and sags)
  - Longitudinal & Transverse Cracking (single, non-load)
  - Patching & Utility Cuts
  - Rutting and Depressions (load related, not abrupt)
  - Weathering (loss of fine aggregate from surface)
  - Raveling (loss of coarse aggregate from surface)

# How PCI is Calculated

- For each unit of roadway being evaluated, the surface area of each distress type at each of three severity levels is summed and divided by total area of that unit of roadway. Then the StreetSaver program calculates PCI deductions for each distress recorded and reports the PCI for that roadway unit.
- For example, the PCI=3 photo on the next slide had the following distresses:
  - Alligator Cracking, high severity, over 47.5% of the area
  - Alligator Cracking, medium severity, over 8.9% of the area
  - Distortions, high severity, over 2.4% of the area
  - Patching, low severity, over 5.7% of the area



# PCI reports distress severity and prevalence

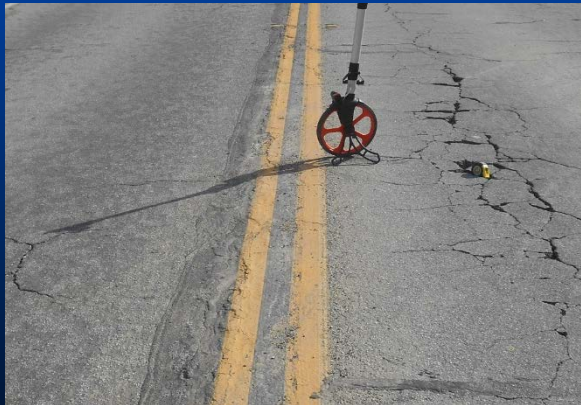
PCI=72



PCI=58



PCI=43



PCI=31



PCI=11



PCI=3



# What PCI Means to Road Users and to the City as the Owner

- For road users, as PCI decreases, safety, ride quality, reliability, and appearance of the roadway decreases.
- For the City as the owner, operator, and maintenance provider, as PCI decreases, urgent and recurring repairs increase, the cost of repairs increases, and customer satisfaction decreases.

# Size and Condition of City Street Network

- The City's paved street network is nearly 130 centerline miles long, comprised of:
  - 10.5 miles of Arterials (highest traffic volume streets)
  - 24.1 miles of Collectors (2nd highest traffic volume streets)
  - 64.9 miles of Residential/Local Streets
  - 29.8 miles of Alleys
- The City's Network Average PCI is calculated by totaling each surface area of a street segment times its corresponding PCI divided by the surface area of all street segments.
- Arterials average PCI = 74, total ~2,870,000 sf
- Collectors average PCI = 62, total ~5,664,000 sf
- Residential/Local avg PCI = 51, total ~13,658,000 sf
- Alleys average PCI = 26, total ~3,213,000 sf

# Needs & Uses of Each Street Category

- Of the City's approximately 25.4 million square feet of street surface:
  - **11.3% is on Arterials**, which have an average PCI of 74, generally have the highest speeds and the highest traffic volumes, are the biggest safety concern, and deteriorate the most rapidly. Arterials have been the highest priority for the limited street maintenance revenue.
  - **22.3% is on Collectors**, which have an average PCI of 62, generally have the next highest traffic volumes, somewhat higher than average speeds, and deteriorate more rapidly than average. Collectors have been the second highest priority for the limited street maintenance revenue.
  - **53.8% is on Residential or Local streets**, which have an average PCI of 51, and generally have low speeds and low traffic volumes.
  - **12.6% is on Alleys**, which have an average PCI of 26, and generally have the lowest speeds and the lowest traffic volumes, although refuse trucks travel them frequently.

# Cost to Maintain the City Street Network

- **Deep Rehabilitation/Reconstruction** such as was historically typical for PCI values below 25 is estimated to cost \$10+ per square foot. The construction cost to reconstruct all the City's alleys is estimated around \$32 Million.
- **Overlays** including limited deep failure repairs cost \$4 to \$6 per square foot. The construction cost to overlay all of the City's Collector and Residential Streets is estimated around \$75 Million.
- **Digouts and Cape Seals** such as was performed on various arterial and collector streets in 2018 resulted in a total construction cost to the City of approximately \$1.50 per square foot. The construction cost to perform the same level of digouts and cape seals to all of the City's Arterial and Collector streets is estimated around \$13 Million.
- **Slurry Seals and Microsurfacing**, such as were performed in 2018 as part of the cape seal process cost approximately \$0.65 per square foot, including all appurtenant contract costs.



# Cost-Effective Strategies & Extending Pavement Life

The City's limited street maintenance revenue requires us to treat as much street area as possible with the finite funding available.

Cost effective measures save material, labor, and transportation costs, and prolong useful life of pavement, but generally are less smooth-riding, less aesthetically appealing, and don't always provide complete repairs as rapidly or within a single operation, as compared to conventional robust pavement rehabilitation.

Repeated heavy vehicle loads are the leading factor in pavement deterioration.



# Measure A & Road Revenues

- The City's pavement management system reports currently an initial expenditure of approximately \$56 Million is necessary to bring the overall PCI rating up to the desired level of 70.
- Additionally, the system reports an annual average expenditure of approximately \$7 Million is necessary to maintain that PCI of 70 over the next 10 years.
- Using all existing revenue sources, the City projects to have up to \$2 Million per year available for the Capital Projects shown in the "Overlays & Rehabilitation" row in the Program of Projects, which extend the useful life of the street pavement.

# Measure A & Road Revenues

- Citywide Street, Urban Forestry, and Engineering Division Operations require most of the City's existing road revenues (See Table 1 in staff report: Measure A, Gas Tax, SB 1, MOE required by State, City ROW Maintenance, and LSTP).
- Due to Senate Bill 1 and other road revenue allocations, and because City staff has reduced street related operational costs by ~30%, the City currently can fund pavement Capital Projects (up to \$2 Million per year), which by using cost-effective methods, should prevent the PCI from substantially declining during the next three years.

# Street Revenue & Needs

<b>FUNDING SOURCE</b>	<b>FY 2019-20</b>	<b>FY 2020-21</b>	<b>FY 2021-22</b>
Local Surface Transportation Program	\$172,000	\$172,000	\$172,000
State Gas Tax	1,085,726	1,072,907	1,083,636
Measure A	2,240,918	2,369,712	2,392,380
Maint. of Effort Required by State	832,019	832,019	832,019
City Discretionary ROW Maintenance Funds	600,000	600,000	600,000
Road Maint. & Rehab. Account from SB1	804,150	824,392	832,636
<b>Total</b>	<b>\$5,734,813</b>	<b>\$5,871,030</b>	<b>\$5,912,671</b>

<b>STREET MAINTENANCE NEEDS</b>	<b>FY 2019-20</b>	<b>FY 2020-21</b>	<b>FY 2021-22</b>
City Street, Urban Forestry & Engineering Div.s	\$3,827,536	\$3,891,648	\$3,991,472
<b>Street Rehabilitation Projects – Funded</b>	<b>\$1,690,000</b>	<b>\$1,650,000</b>	<b>\$1,250,000</b>
<b>Alley Rehabilitation Projects – Funded</b>	<b>\$600,000</b>	<b>\$600,000</b>	<b>\$600,000</b>
Street Rehabilitation Projects – Un-funded	\$4,710,000	\$4,750,000	\$5,550,000
Other Street Related Projects	\$443,500	\$25,000	\$130,000
Contribution to City of Lompoc Transit	\$25,000	\$25,000	\$25,000
<b>Total</b>	<b>\$11,296,036</b>	<b>\$10,941,648</b>	<b>\$11,546,472</b>

# Measure A & Road Revenues

- Though available funding is substantially below the desired level, staff will continue to implement cost-effective strategies to extend the useful life of street infrastructure to the extent possible.



**Prior to Construction in 2013**



**2018, 5 years later.**

- 2013 Cost-effective Capital Project



# Cost Effective Strategies

## ■ Operations:

- Staff continually strives to improve the efficiency of the operations which keep City street infrastructure safe and useable.
- Due to declining revenues, many staff positions have been kept vacant to reduce operational costs by ~30%.

## ■ Capital Projects:

- Staff has utilized, and plans to continue a number of cost-effective pavement maintenance treatments in order to extend the useful life at several times less cost than traditional rehabilitation methods.
- Staff has scheduled different types of cost-effective capital projects sequentially in order to minimize unit costs and accomplish long-lasting pavement rehabilitation.



# Measures A FY 2018/19 Actual Expenditures – City of Lompoc

<b>Local Street &amp; Transportation</b>	<b>Measure A</b>
<b>Project Descriptions</b>	<b>FY 2018/19 Actual Expenditures</b>
Street Maintenance	\$693,088
Engineering	\$133,163
Overlays & Rehabilitation	\$733,598
Urban Forestry	\$483,498
River Bank Stabilization for Riverside Drive & Bike Path	\$98,809
<b>TOTAL</b>	<b>\$2,142,156</b>
<b>Alternative Transportation</b>	<b>Measure A</b>
<b>Project Descriptions</b>	<b>FY 2018/19 Actual Expenditures</b>
Maintenance & Repair of Bike & Ped. Facilities	\$369,886
COLT Operations as necessary to meet fare box ratio	\$0
<b>TOTAL ALTERNATIVE TRANSPORTATION</b>	<b>\$369,886</b>
<b>TOTAL EXPENDITURES</b>	<b>\$2,512,042</b>

# Measures A Program of Projects - City of Lompoc

LSTI	Measure A Revenue					
Project Descriptions	FY 20/21	FY 21/22	FY 22/23	FY 23/24	FY 24/25	TOTAL Measure A
Measure A Carry-Over	\$2,363,557	\$1,464,285	\$2,498,601	\$1,441,374	\$2,302,224	\$2,363,557
Measure A Revenue Estimates from SBCAG	\$2,369,712	\$2,392,380	\$2,392,756	\$2,401,469	\$2,140,614	\$11,696,931
Total Revenue	\$4,733,269	\$3,856,665	\$4,891,357	\$3,842,843	\$4,442,838	\$14,060,488
LSTI	Measure A Expenditures					
Street Maintenance	\$467,026	\$512,457	\$559,335	\$605,560	\$653,268	\$2,797,645
Engineering	\$128,203	\$140,674	\$153,543	\$166,232	\$179,329	\$767,981
Overlays & Rehabilitation	\$2,000,000	\$0	\$2,000,000	\$0	\$1,500,000	\$5,500,000
Urban Forestry	\$320,508	\$351,686	\$383,857	\$415,580	\$448,321	\$1,919,953
Bike & Ped. Facilities	\$328,247	\$328,247	\$328,247	\$328,247	\$328,247	\$1,641,237
COLT Operations	\$25,000	\$25,000	\$25,000	\$25,000	\$25,000	\$125,000
<b>TOTAL EXPENDITURES</b>	<b>\$3,268,984</b>	<b>\$1,358,064</b>	<b>\$3,449,982</b>	<b>\$1,540,619</b>	<b>\$3,134,165</b>	<b>\$12,751,816</b>

- Measure A requires the City of Lompoc spend 15% of its Local Street and Transportation Improvement allocation on Alternative Transportation.

### Alternative Transportation Summary (FYs 2015/16 Through 2019/20)

<b>TOTAL MEASURE A REVENUE ESTIMATE (FYS 2015/16 THROUGH 2019/20)</b>	<b>\$11,907,076</b>
<b>MINIMUM ALTERNATIVE PERCENTAGE PRESCRIBED BY INVESTMENT PLAN TO BE MET BY FY 2019/20 (5-Yr)</b>	<b>15%</b>
<b>TOTAL PROPOSED MEASURE A ALLOCATION TO ALTERNATIVE TRANSPORTATION FYS 2015/16 THROUGH 2019/20</b>	<b>\$1,796,448</b>
<b>PERCENTAGE OF MEASURE A EXPENDITURE AND ALLOCATION TO ALTERNATIVE TRANSPORTATION</b>	<b>15.1%</b>

- Measure A requires the City of Lompoc spend 15% of its Local Street and Transportation Improvement allocation on Alternative Transportation.

<b>Alternative Transportation Summary (FYs 2020/21 Through 2024/25)</b>	
<b>TOTAL MEASURE A REVENUE ESTIMATE (FYS 2020/21 THROUGH 2024/25)</b>	<b>\$11,696,931</b>
<b>MINIMUM ALTERNATIVE PERCENTAGE PRESCRIBED BY INVESTMENT PLAN TO BE MET BY FY 2024/25 (5-Yr)</b>	<b>15%</b>
<b>TOTAL PROPOSED MEASURE A ALLOCATION TO ALTERNATIVE TRANSPORTATION FYS 2020/21 THROUGH 2024/25</b>	<b>\$1,766,237</b>
<b>PERCENTAGE OF MEASURE A EXPENDITURE AND ALLOCATION TO ALTERNATIVE TRANSPORTATION</b>	<b>15.1%</b>



# Need to Adopt a POP

- The City needs to adopt a POP to receive Measure A funds for FY 2020-21, so we can continue critical road Operations and Capital Projects.



# Recommendation:

- Hold a Public Hearing and take public input on the Measure "A" Local Program of Projects for Fiscal Years 2020/21 through 2024/25;
- Adopt Resolution No. 6305(20), adopting the Measure "A" Program of Projects for Fiscal Years 2020/21 through 2024/25; or
- Provide alternate direction.





# PCI Photos



PCI=72

PCI=58





# PCI Photos



PCI=58

PCI=43





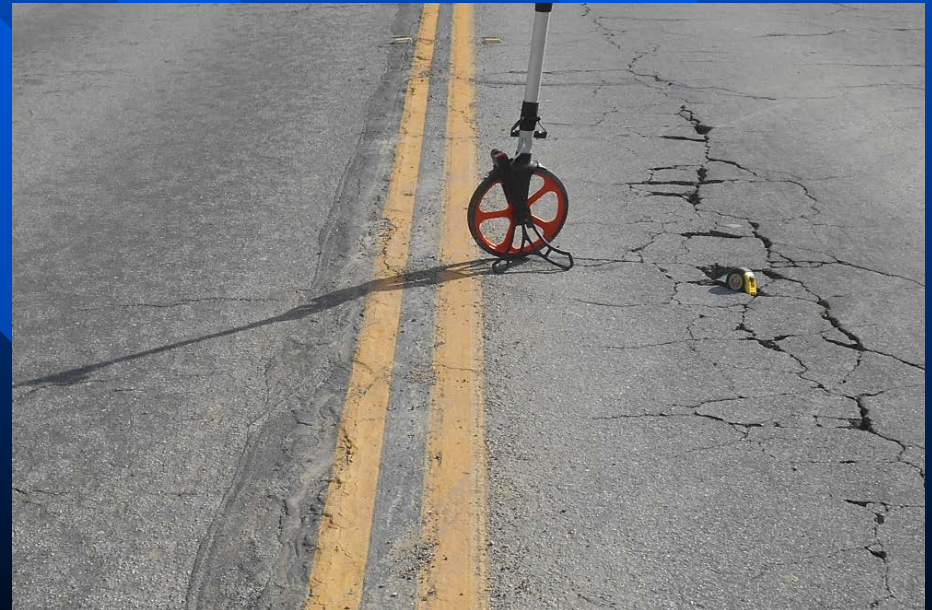
# PCI Photos



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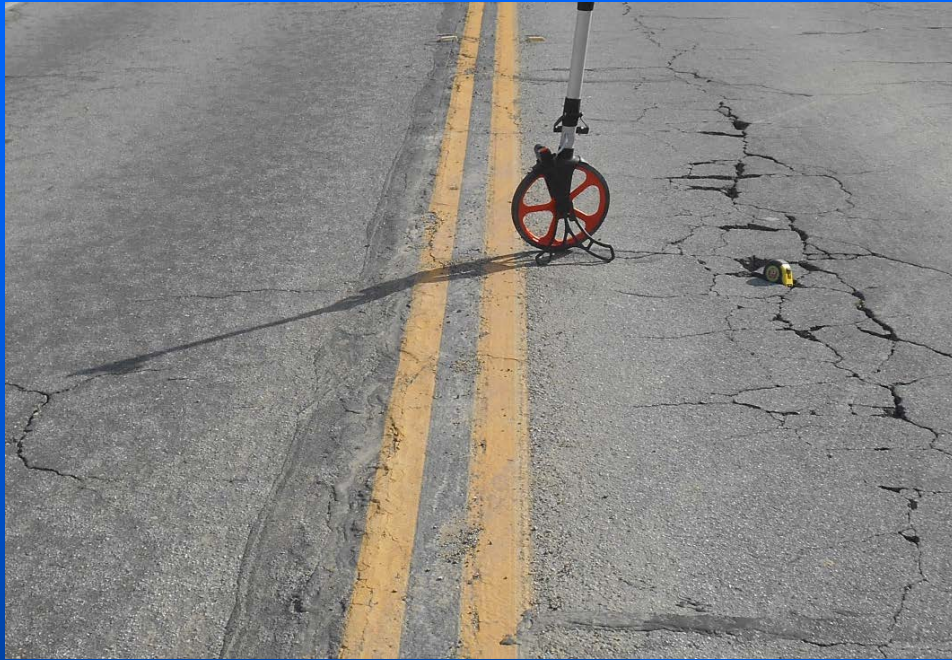


PCI=31





# PCI Photos



PCI=31

PCI=11





# PCI Photos



PCI=11

PCI=3

