



Transportation Systems and Funding Priorities



Transportation Services and Priorities



- **County owns and maintains transportation assets with an estimated structural value of ~\$5B**
- **Transportation support services include right of way mowing, tree trimming, and drainage maintenance**
- **Priorities**
 - **Sidewalks**
 - Safe/ADA compliant, connected
 - **Pavement Management**
 - Sustainability

Transportation Assets



Streetlights: 3,813

ITS Cameras: 152

ITS Dynamic Message Signs: 49

ITS Bluetooth Travel Time Sensors: 102

Traffic Signal Control Cabinets: 587

Warning & School Flashers: 751

Signal Devices / Traffic Signals: 438

Sign Poles : 24,918

Signs: 43,213



Transportation Assets

Bridges: 147

Box Culverts: 152

Guardrails: 726

Handrails: 1,860

Sidewalks: 1,080 miles

ADA Ramps: 11,488

Pavement: 2,641 lane miles

Curb: 1,957 miles

Underdrain: 261 miles

Pavement Markings: 2,604

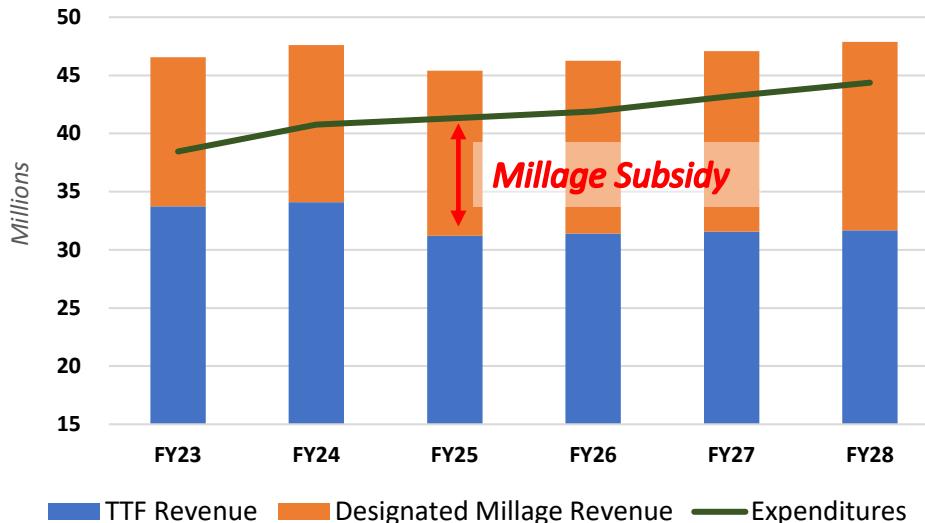


Budget Overview - Operating



- **Transportation Trust Fund is subsidized annually by a designated millage of 0.1279**
(Estimated \$12M in FY22)
 - *Without the millage subsidy the TTF would be operating in a deficit by FY23*
- **Operating costs for existing services increase ~3% annually**
- **Operating costs are expected to increase as inventory increases and assets age**

Projected TTF Expenditures compared to Revenues



Sidewalk Maintenance Improvements



- **FY21 LOS: D**
 - **Annual program cost: \$3.1M**
 - **Backlog: 649 service requests**
 - **Avg response time: 667days**
 - **Replacement rate:**
 - Demand: 8 miles per year
 - Current: 3.5 miles per year
 - **Annual backlog growth 10%**
- **FY22 LOS: B**
 - **100% of service requests completed within 365 days**
 - **Backlog cleared in 2 years**
 - **Backlog growth 0%**
 - **Replacement rate: 6.3 miles**
 - **Cost: \$4.77M**
 - **Reoccurring:**
 - \$4M (FY21 – FY23)
 - \$480K (personnel and equipment)

Programs should be reviewed periodically to ensure LOS can be maintained

Budget Overview - Capital

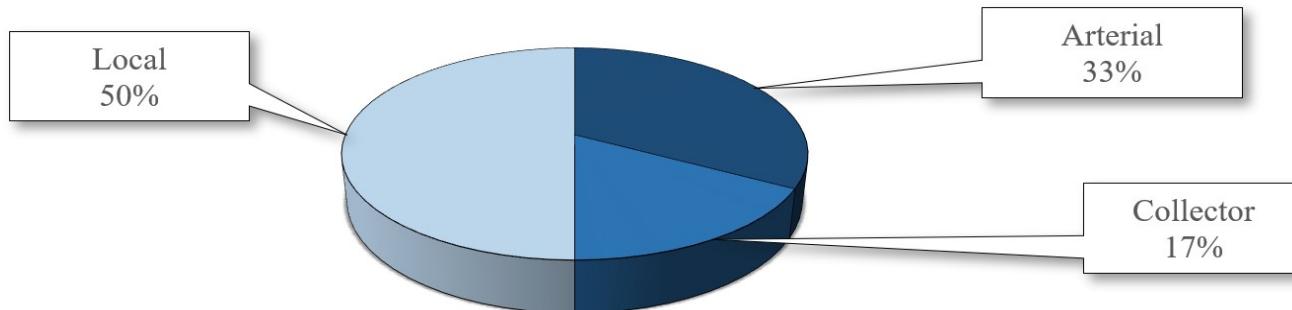


- **Current Adopted Transportation Plan: \$624M**
- **The revised total increased to \$710M to more accurately reflect expected costs of planned projects (Additional \$86M)**
 - +\$81M for revised project costs
 - +\$5M for two unprogrammed 2017 Penny projects
- **ARPA**
 - \$26.6M for local road projects, safe routes to school, and other one-time funding
- **Additional anticipated increases not budgeted**
 - Examples - East Lake Road and Dunedin Causeway Bridge
 - Estimated \$116M in transportation projects without available funding
- **Roadway Level of Service**

Overview of County's Road Assets



Pavement Classification Type / Description	Center Line Miles	Lane Miles	Area (sqft) • % of Network
Arterial (A) High capacity, urban roads which serve to carry traffic from collector roads to freeways.	266	737	81,875,339 • 33%
Collector (C) Low to moderate capacity roads which serve to move traffic from local streets to arterial roads.	202	435	54,937,274 • 17%
Local (L) Low-capacity roads which serve to provide access to residential property.	724	1,469	164,461,895 • 50%



Condition Assessment Process



ASTM D6433: Standard Practice for Roads and Parking Lots Pavement Condition Index Surveys

Pavement Condition Index (PCI) assigned based on pavement assessments per ASTM D6433

Level of Service (LOS) Assigned based on PCI score

ASTM D6433

ASTM CONDITION	ASTM PCI RANGE
Good	85.0 - 100
Satisfactory	70.0 - 84.9
Fair	55.0 - 69.9
Poor	40.0 - 54.9
Very Poor	25.0 - 39.9
Serious	10.0 - 24.9
Failed	0.0 - 9.9

FDOT recommends pavement with PCI scores less than **70** be reviewed and included in pavement maintenance and rehabilitation planning/scheduling

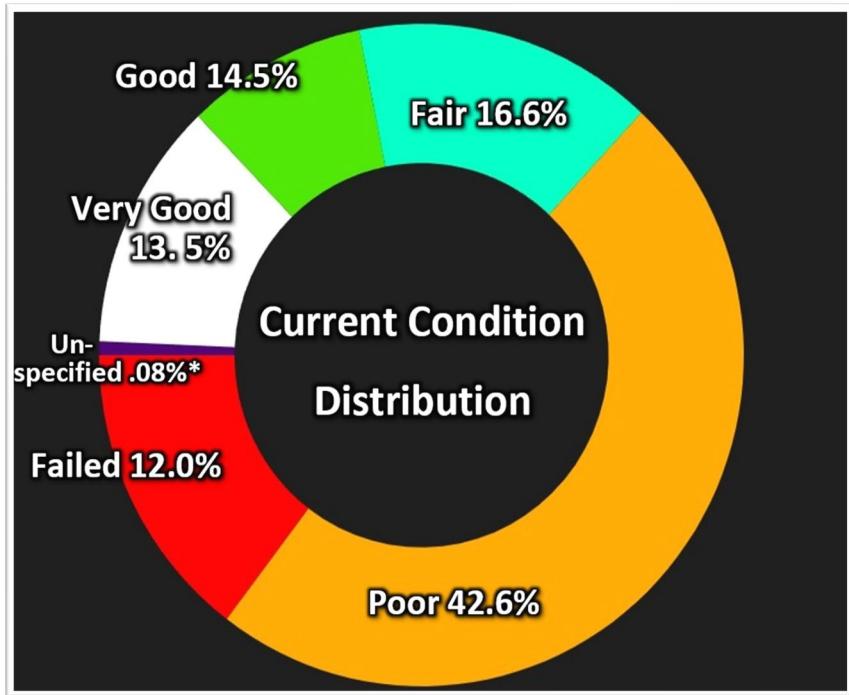
ASTM D6433
↓ Translated Into
Current Condition Rating

CURRENT CONDITION RATING

CURRENT CONDITION	CCR PCI RANGE
Very Good	85.0 - 100
Good	70.0 - 84.9
Fair	50.0 - 69.9
Poor	10.0 - 49.9
Failed	0.0 - 9.9

Asset LOS Grade
A ≥ 70 PCI
B 60-69.9 PCI
C 50-59.9 PCI
D 49.9-10.0 PCI
F ≤ 9.9 PCI

State of the County's Road Network

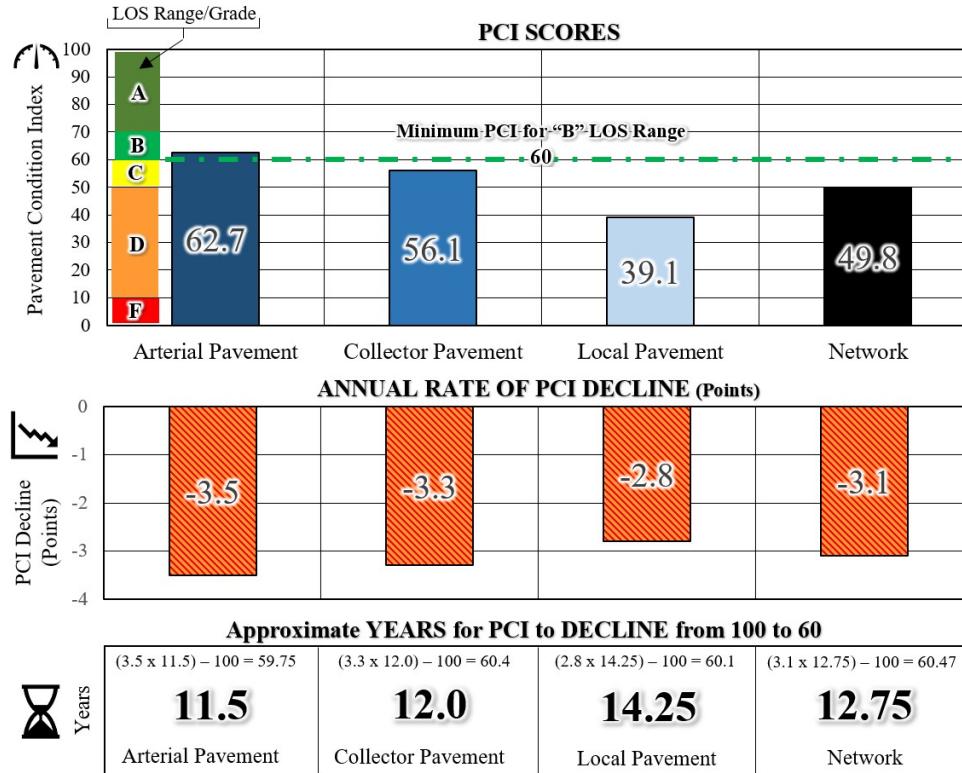


PCI by Road Type and Center Line Miles

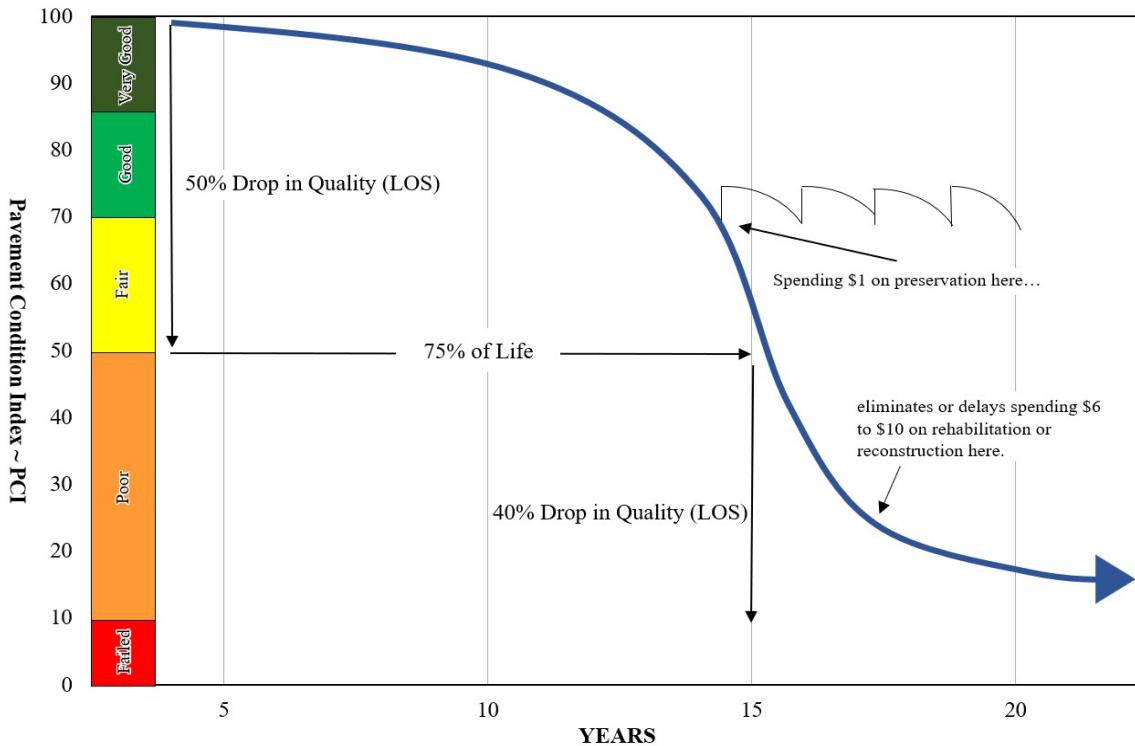


Corresponding ▼ Asset LOS	CONDITION PCI Range	NETWORK Center Line Miles	% of Total Network	ARTERIAL Center Line Miles	COLLECTOR Center Line Miles	LOCAL Center Line Miles
A	◀ 70-100 Very Good PCI = 85.0 – 100.0	160.37	13.5%	41.16	49.53	69.68
	◀ 70-100 Good PCI = 70.0 – 84.9	173.23	14.5%	85.87	35.96	51.39
B	◀ 60-69.9 Fair					
C	◀ 50-59.9 PCI = 50 – 69.9	198.37	16.6%	60.70	35.53	111.83
D	◀ 10-49.9 PCI = 10.0 – 49.9	508.23	42.6%	73.39	66.14	368.69
F	◀ 0-9.9 Failed PCI = 0 – 9.9	142.51	12.0%	4.78	15.47	122.26

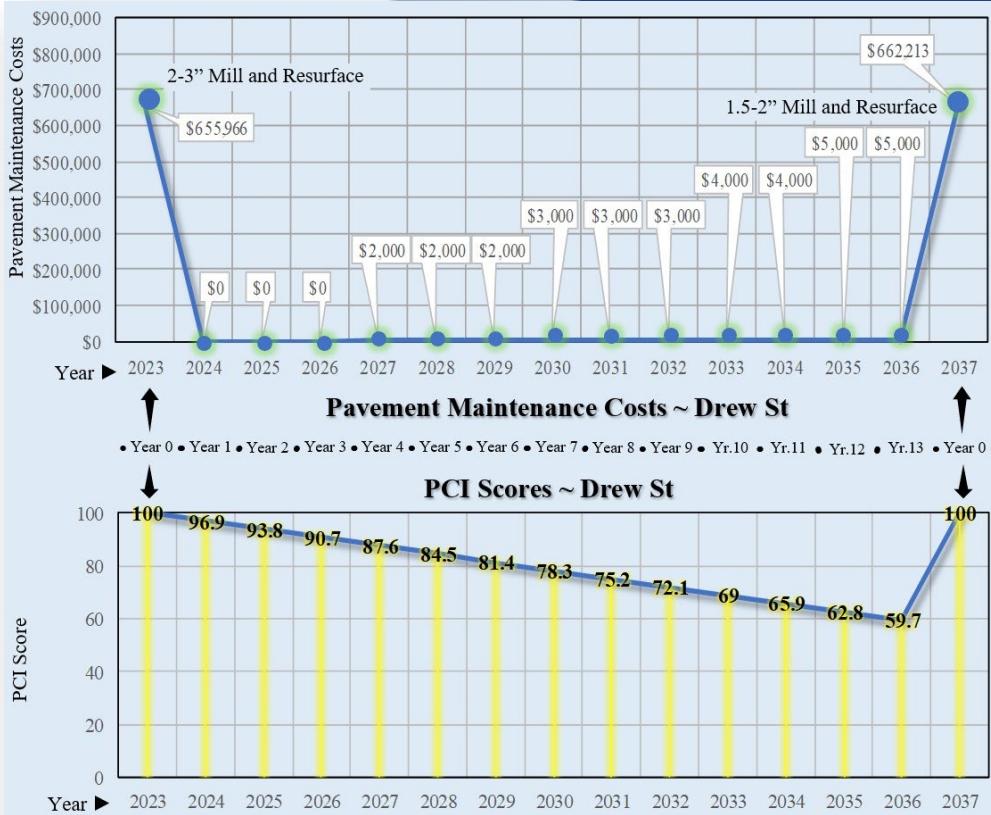
Road Network Summary Stats



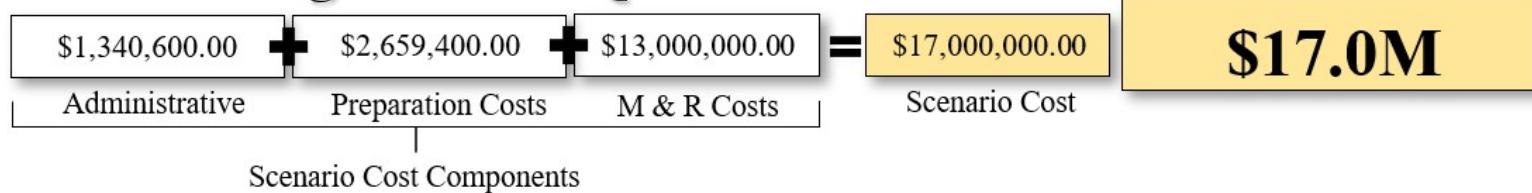
Pavement Deterioration



Local Example – Drew Street



Current Budget ~ Status Quo Scenario



METRIC

LOS

49.8

to 43.9

Network PCI

IN

6

YEARS

D

to D

Current PCI	Pavement Classification	Scenario PCI	LOS	Annual PCI Growth
62.7	Arterial	27.7	D	-3.5
56.1	Collector	23.1	D	-3.3
39.1	Local	11.1	F	-2.8

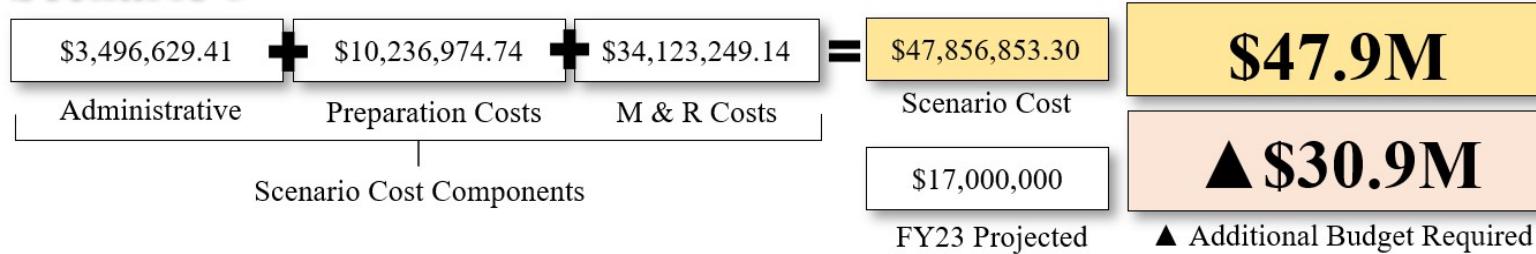
Scenario Synopsis

Current funding level is not sufficient to maintain network PCI in the desired asset level of service PCI range of 60-69.9. PCI scores will continue to deteriorate with a resulting decline in operating condition.

10 Year Performance for Status Quo

Fiscal Year ►	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032
Scenario Cost (annual)	\$17M									
Network PCI	49.3	48.7	48.7	47.5	46.9	46.3	45.7	45.1	44.5	43.9

Scenario 5



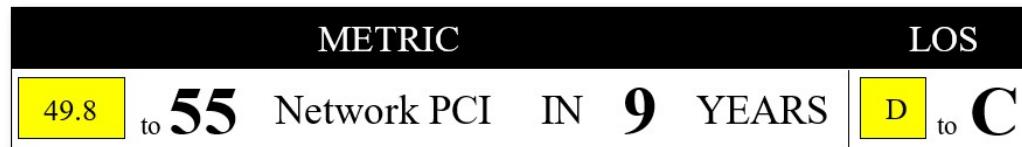
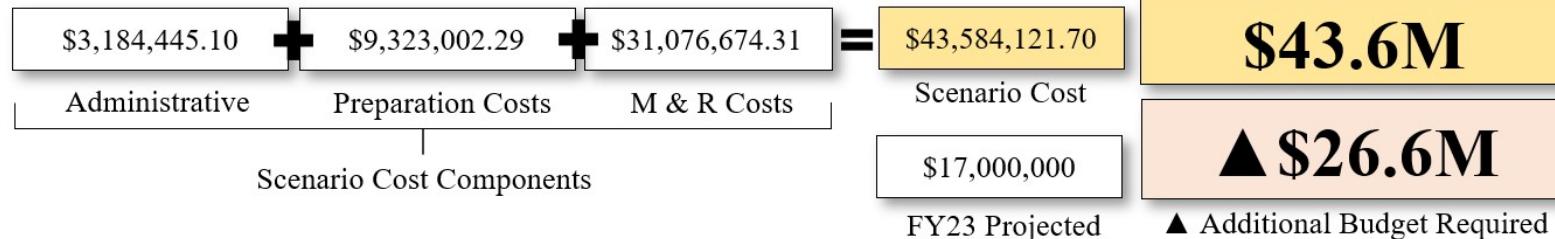
METRIC					LOS	
49.8	to 60	Network PCI	IN 6 YEARS	D	to B	
Current PCI	Pavement Classification	Scenario PCI	LOS	Annual PCI Growth	Scenario Synopsis	
62.7	Arterial	60	B	0.0 ▼		
56.1	Collector	60	B	+1.3		
39.1	Local	60	B	+2.6		

10 Year Performance for Scenario 5

S5 is the B scenario. All pavement has a LOS of a “B”. PCI for arterial decreases slightly to achieve higher LOS elsewhere in network. Equal condition is created across the network and network PCI is stabilized.

Fiscal Year ►	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032
Scenario Cost (annual)	\$48M	\$49M	\$51M	\$52M	\$54M	\$55M	\$57M	\$59M	\$60M	\$62M
Network PCI	51.5	53.1	54.7	56.3	57.9	60.0	60.0	60.0	60.0	60.0

Scenario 6



Current PCI	Pavement Classification	Scenario PCI	LOS	Annual PCI Growth
62.7	Arterial	60	B	0.0 ▼
56.1	Collector	60	B	+1.3
39.1	Local	50	C	+2.6

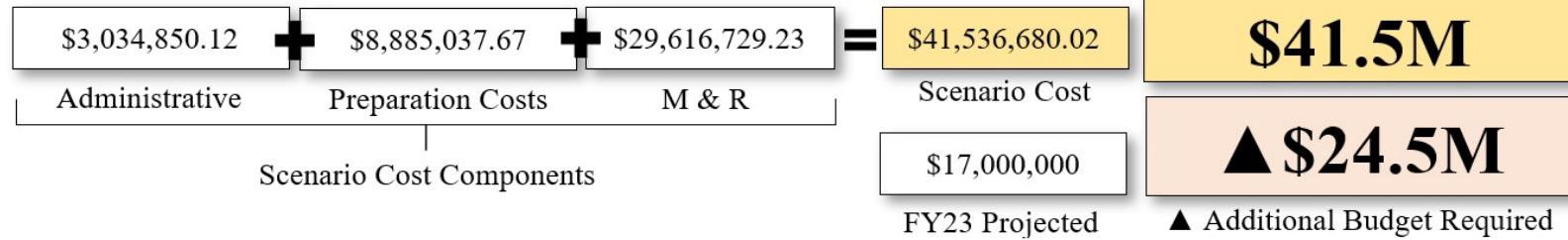
Scenario Synopsis

S6 stops negative PCI trending and introduces small incremental improvements over 9 years when a network PCI of 55 is achieved. Arterial and Collector pavement is maintained at a B LOS, but a slight PCI loss for Arterial occurs to improve Local pavement.

10 Year Performance for Scenario 6

Fiscal Year ►	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032
Scenario Cost (annual)	\$44M	\$45M	\$46M	\$48M	\$49M	\$51M	\$52M	\$54M	\$55M	\$57M
Network PCI	50.5	51.0	51.6	52.1	52.7	53.2	53.8	54.3	55.5	55.0

Scenario 7



Current PCI	Pavement Classification	Scenario PCI	LOS	Annual PCI Growth
62.7	Arterial	60	B	0.0 ▼
56.1	Collector	50	C	0.0 ▼
39.1	Local	50	C	+2.0

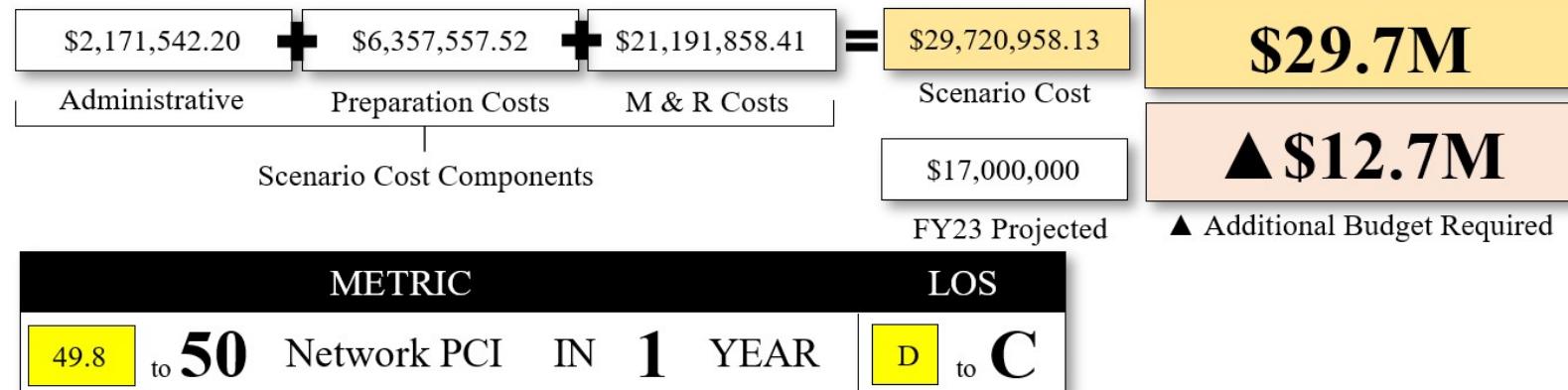
Scenario Synopsis

S7 is similar to S6 in its results. Negative PCI decline is stopped and a slight improvement in network PCI is achieved. Arterial and Collector PCI are lowered to improve Local and overall network PCI.

10 Year Performance for Scenario 7

Fiscal Year ►	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032
Scenario Cost (annual)	\$42M	\$43M	\$44M	\$45M	\$47M	\$48M	\$50M	\$51M	\$53M	\$54M
Network PCI	50.3	50.7	51.1	51.5	51.9	52.3	52.7	53.1	53.3	53.3

Scenario 8



Current PCI	Pavement Classification	Scenario PCI	LOS	Annual PCI Growth
62.7	Arterial	50	C	0.0 
56.1	Collector	50	C	0.0 
39.1	Local	50	C	+2.0

Scenario Synopsis

S8 is the C LOS scenario. Its benefits are that it stabilizes network PCI quickly and prevents further PCI deterioration. Arterial and Collector PCIs decrease to improve Local pavement conditions.

10 Year Performance for Scenario 8

Questions