

PIMA COUNTY TRANSPORTATION ADVISORY COMMITTEE

December 3, 2019

Roadway FY21 Prioritization Plan

- Arterial/Collector - Local Budget Split
- Local Road Budget Distribution
- Preliminary Recommendation



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PIMA COUNTY

FY21 Road List Schedule

With new PCI data

TAC Subcommittee Criteria Review and Public & Local Input	September - November
TAC Approval of Criteria	December
Data Prep Complete	December
Upload Dataset to StreetSaver	January
Run Scenarios	February
Prepare Bid Package road lists and submit to TAC and BOS for Information	March – April
FY21 Bid Packages to Procurement	May

FY 20 Ending PCI by BOS District for Local Roads

11/15/2019

District	PCI After FY20 Treatments	Miles of Local Road		Miles of Failed Local Roads	
1	29	457	37%	231	46%
2	50	55	4%	16	3%
3	42	312	25%	114	23%
4	42	304	25%	100	20%
5	42	108	9%	38	8%
All Local	38	1236		499	
All Arterial Collector	53	668			

Review of the Basic Budget Splits

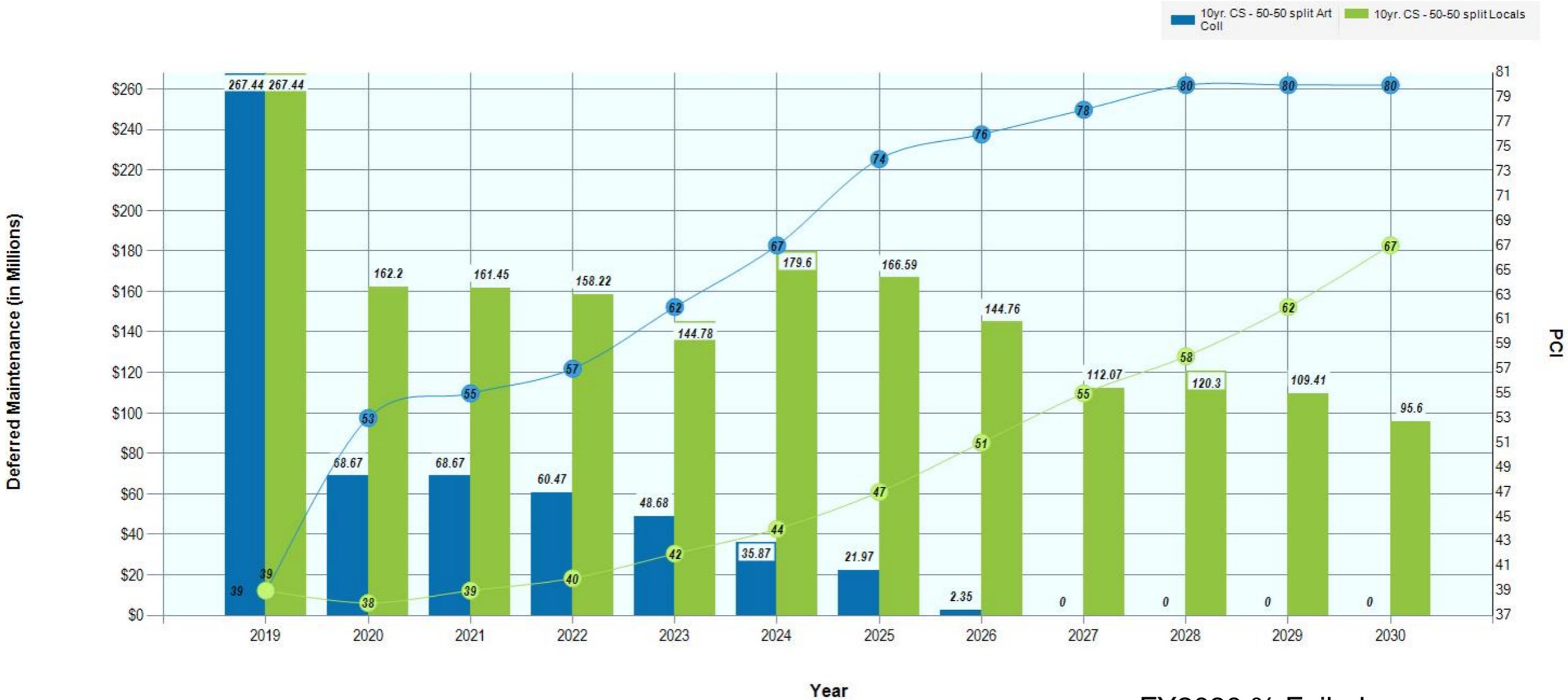
Locals	Arterials/Collectors
50	50
60	40
66	34
70	30

Review of the Basic Budget Splits

Locals	Arterials/Collectors
50	50
66	34

Basic Budget Split 50-50

● Arterial/Collectors 50% ● Locals 50%

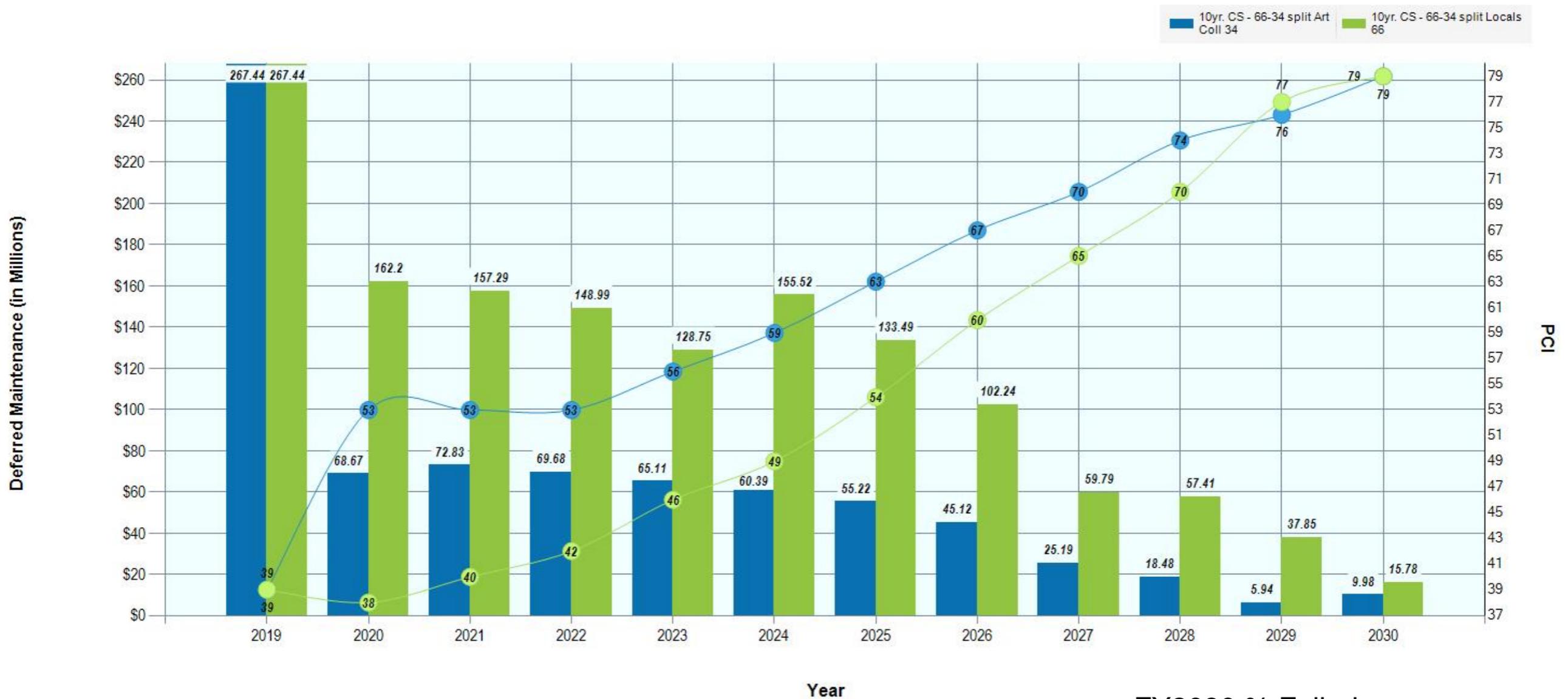


FY2030 % Failed:
 Locals: 13.9%
 Arterial/Collector: 0%
 Total DM: 95.60

2019 amount is the overall needs analysis and combined starting PCI

Basic Budget Split 66-34

● Arterial/Collectors 34% ● Locals 66%



FY2030 % Failed:
 Locals: 0%
 Arterial/Collector: 0%
 Total DM: 25.76

2019 amount is the overall needs analysis and combined starting PCI

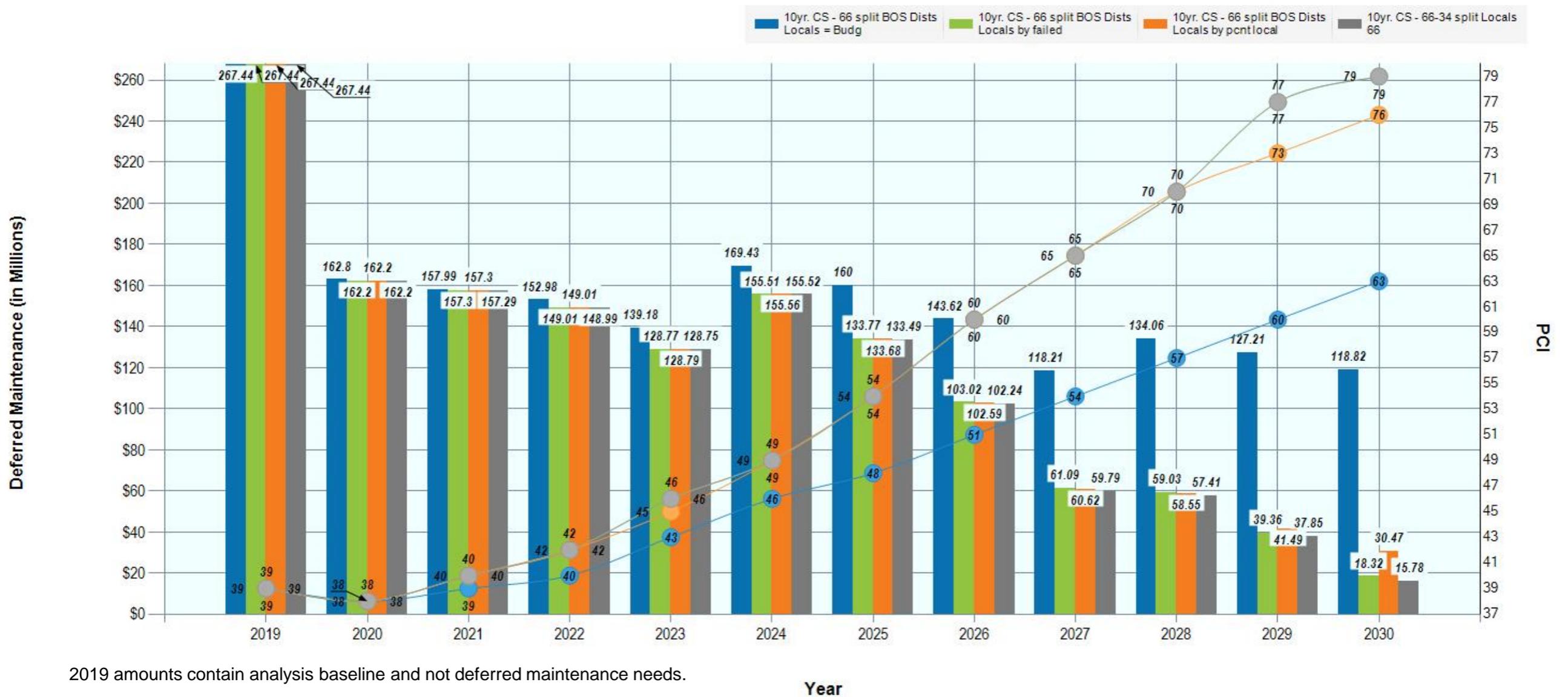
Comparison of Local Roads Budget Distribution Scenarios:

- **Equal** Distribution of funds by BOS District
- Distribution by the **percent of local** roads in each BOS District
- Distribution by the **percent of failed** local roads as of the end of FY20 in each BOS district
- **No Filters** in StreetSaver

All Local Roads Network PCI Overview of Scenarios – 66% Split

- Equal
- No Filters
- Percent of local
- Percent of failed (tracks 0.4% lower than “No Filters”)

Scenario Comparison - Deferred Maintenance and PCI



2019 amounts contain analysis baseline and not deferred maintenance needs.

Return on Investment Comparison For 66-34 Basic Budget Split (for \$530 Million*)

Local Distribution Scenario	Arterial/ Collector	Local	Deferred \$
Equal	79.4	62.9	128.8M
Percent of Local	79.4	75.9	40.5M
Percent of Failed	79.4	79.0	28.3M
No Filter	79.4	79.5	25.8M

*Note that Board of Supervisor November 5, 2019 PAYGO Policy Memoranda was approved based on the roadway system being raised to PCI 80 within ten years.

Primary and Secondary Criteria & Data available in GIS*

Worst First

- PCI rating – Primary Criteria

Safety

- Sidewalks = n – Secondary Criteria #2
- Bike route (y/n)
- Number of Moving Violations
- Street Lights (y/n)
- School Crosswalks = y – Secondary Criteria #1

Volume/Equity

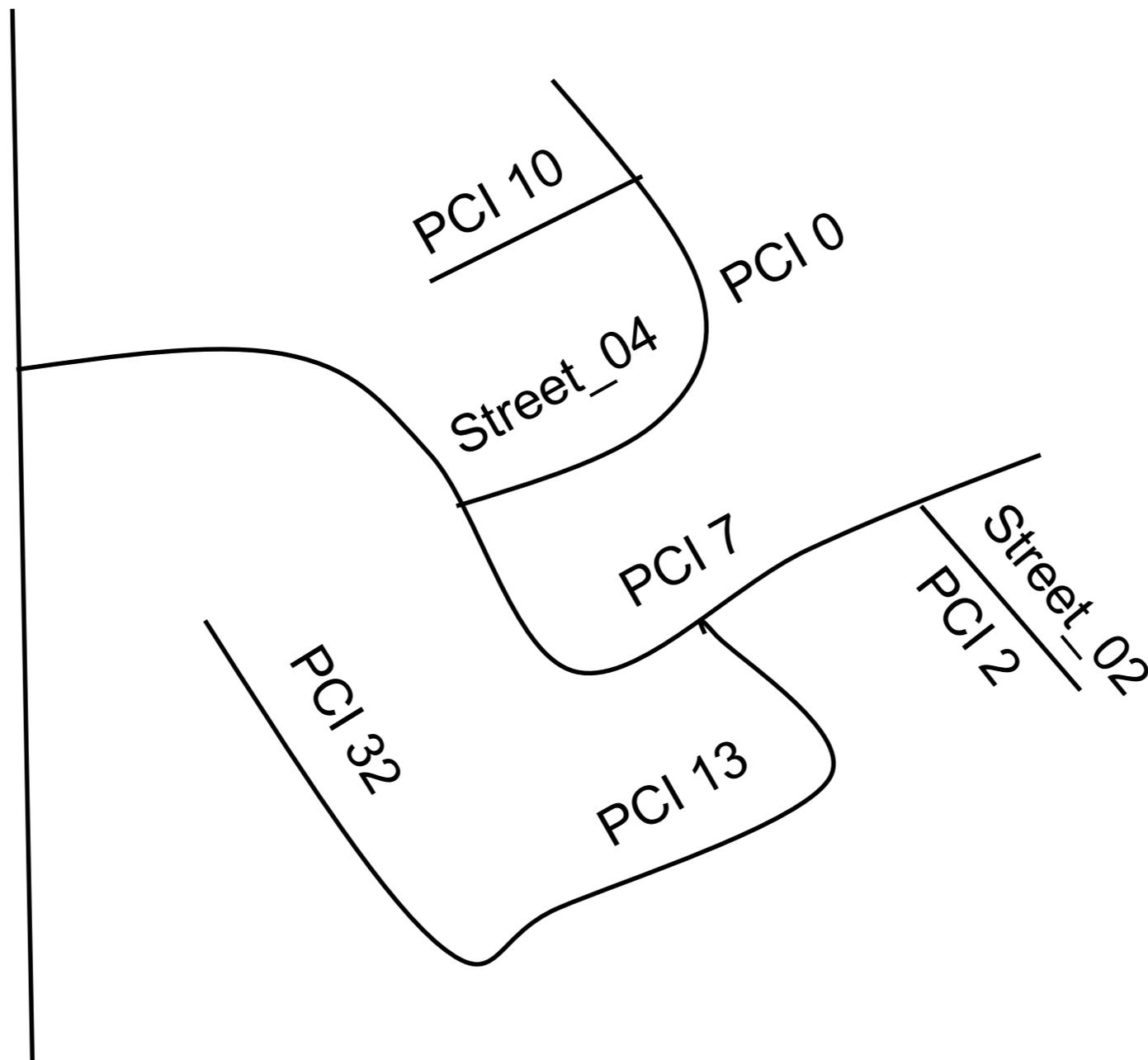
- Subdivision (y/n)
- Lot density on local street (# lots/ft of street) – Secondary Criteria #3

Note that applying any criteria detracts from ROI*

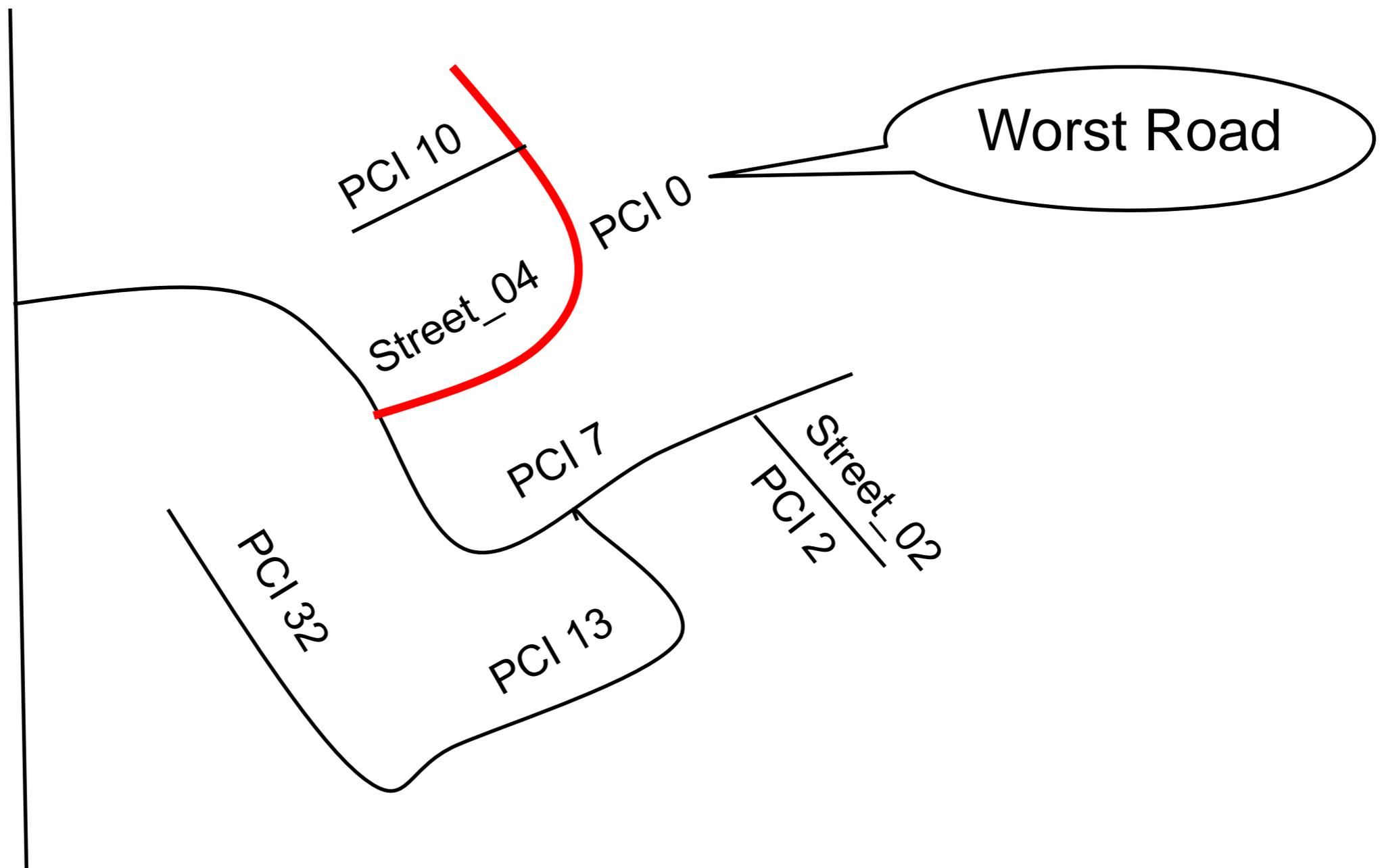
Sample of Road List Ranked by Primary and Secondary Criteria

Rank	Management Section	PCI	School Crosswalk-Y	Sidewalk-N	# Lots/ Street Feet
1	Street_04	0	y	N	0.016589
2	Street_09	0	Y	N	0.011878
3	Street_05	0		N	0.014640
4	Street_01	0			0.302664
5	Street_08	0			0.012386
6	Street_15	1	Y	N	0.002721
7	Street_13	1		N	0.007466
8	Street_14	1		N	0.004718
9	Street_06	1			0.013033
10	Street_02	2	Y	N	0.016936
11	Street_03	2			0.016591
12	Street_07	2			0.012912
13	Street_10	2			0.009766
14	Street_11	2			0.009204
15	Street_12	2			0.008867

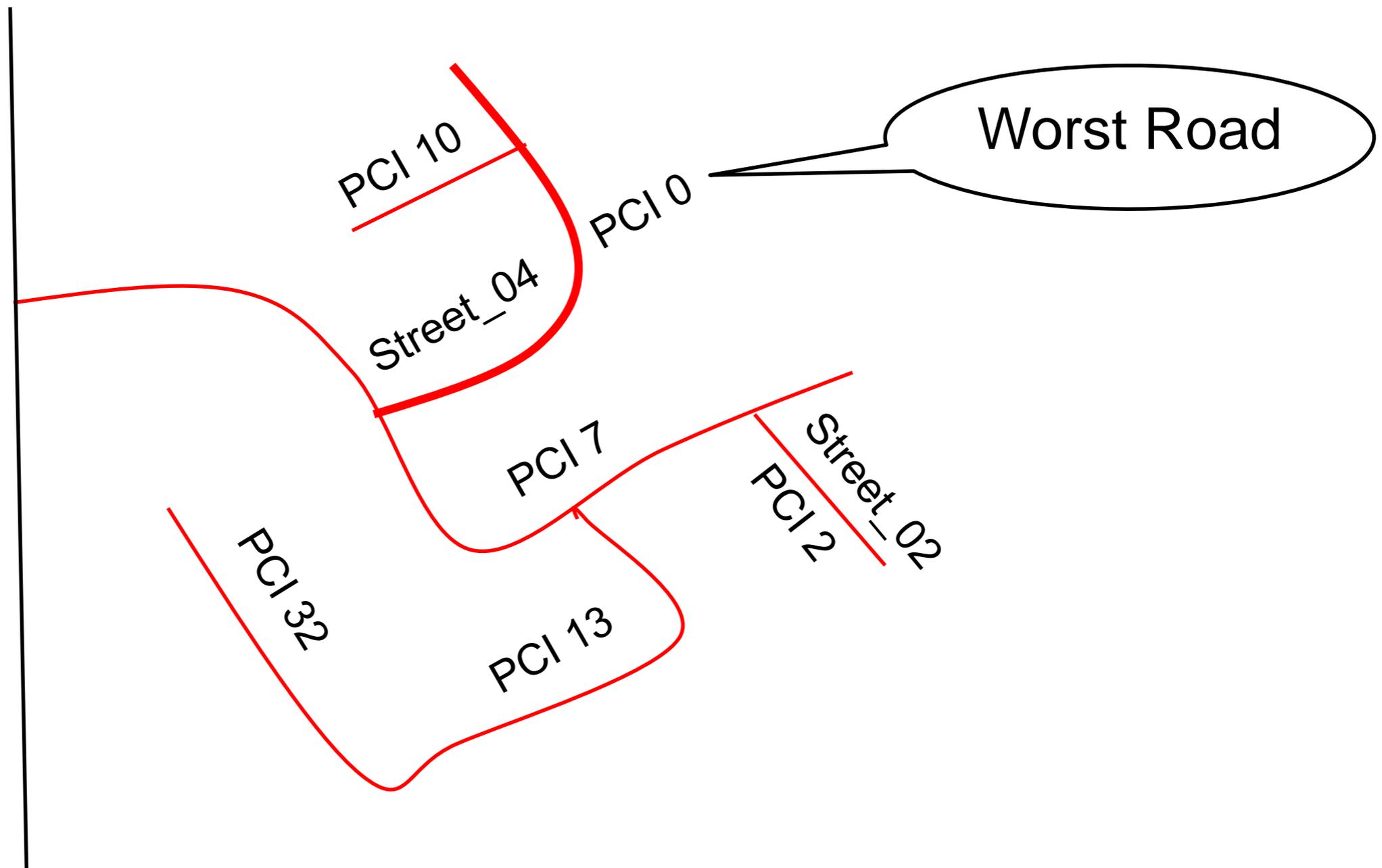
Sample of Selecting Worst Road and Surrounding or Contiguous Failed or Poor Roads



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DOT Recommended FY 2021 Local Road Selection Process Overview

1. Upload new Pavement Condition Index (PCI) ratings into Streetsaver.
2. Run StreetSaver needs calculation and export road list to Excel.
3. In Excel, sort list of road segments from worst to best by PCI. For roads of same PCI further sort by order of: 1) presence of school crosswalks, 2) lack of sidewalks and 3) lot density.
4. Select worst ranked road segment from list, then select all road segments in same subdivision or contiguous to that road in failed or poor status (PCI less than 50).
5. Once all qualifying road segments have been selected, select the next worst road on ranked list from Step 3 and repeat Step 4.
6. When remaining budget is too small to select the next qualifying worst road on ranked list and associated subdivision/contiguous segments, skip that worst road and select the next worst road on ranked list.
7. Repeat Step 6 until budget remnant is too small to select any subdivision.

Discussion