

PIMA COUNTY TRANSPORTATION ADVISORY COMMITTEE
Subcommittee

March 13, 2020

Roadway FY21 Prioritization Plan

Pavement Condition Index (PCI)



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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

StreetSaver Factors

Road inventory

1 - Quantity – LiDAR Area

2 - Condition – IMS PCI

Preservation Treatments

3 - Decision Tree

4 - Breakpoints

5 - Budget

6 - Target PCI

7 - Scenario Ending Deferred Maintenance

Breakpoint Analysis



PIMA COUNTY

Condition Category	Breakpoint Adjustment			
	StreetSaver Default	Adjustment		
I - Very Good	100	100		
II / III - Good	70	75		
IV - Poor	50	60		
V - Failed	25	40		
Condition Category	DPASER 50/25			IMS PCI 60/40
	% of Area	FY2020	After FY2020 Work	% of Area
I - Very Good	17.5%		25.3%	29.0%
II / III - Good	16.3%		16.3%	14.9%
IV - Poor	28.8%		28.8%	35.0%
V - Failed	37.4%	7.8%	29.6%	21.1%

Condition Comparison



10yr 66-34 Budget Split with DPASER & 50/25 Breakpoints

Condition in base year 2020, prior to applying treatments.					
Condition	Arterial	Collector	Res/Loc	Other	Total
I - Very Good	0.2%	8.3%	4.2%	4.8%	17.5%
II / III - Good	0.2%	2.4%	9.4%	4.2%	16.3%
IV - Poor	1.5%	2.9%	22.0%	2.5%	28.8%
V - Failed	1.9%	8.8%	26.2%	0.5%	37.4%
Total	3.8%	22.5%	61.8%	11.9%	100.0%
Condition in year 2030 after schedulable treatments applied.					
Condition	Arterial	Collector	Res/Loc	Other	Total
I - Very Good	3.6%	21.4%	51.0%	6.9%	82.8%
II / III - Good	0.0%	1.1%	4.4%	3.3%	8.8%
IV - Poor	0.2%	0.0%	6.4%	1.8%	8.4%
V - Failed	0.0%	0.0%	0.0%	0.0%	0.0%
Total	3.8%	22.5%	61.8%	11.9%	100.0%

10yr 66-34 Budget Split with IMS PCI & 60/40 Breakpoints

Condition in base year 2021, prior to applying treatments.					
Condition	Arterial	Collector	Res/Loc	Other(UHV)	Total
I - Very Good	1.1%	7.2%	15.2%	5.4%	29.0%
II / III - Good	0.0%	3.1%	8.9%	2.9%	14.9%
IV - Poor	0.5%	5.7%	22.7%	6.0%	35.0%
V - Failed	1.3%	6.7%	11.6%	1.6%	21.1%
Total	3.0%	22.7%	58.4%	15.9%	100.0%
Condition in year 2030 after schedulable treatments applied.					
Condition	Arterial	Collector	Res/Loc	Other(UHV)	Total
I - Very Good	3.0%	21.0%	55.1%	11.6%	90.6%
II / III - Good	0.0%	0.9%	0.0%	2.2%	3.1%
IV - Poor	0.0%	0.9%	3.3%	2.1%	6.3%
V - Failed	0.0%	0.0%	0.0%	0.0%	0.0%
Total	3.0%	22.7%	58.4%	15.9%	100.0%

Treatment Comparison



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10yr Baseline (DPASER) 50/25 Locals Treatments

Sum of Cost	Column Label				
Row Labels	DOUBLE CHIP SEAL	MILL AND THICK OVERLAY	SEAL CRACKS	SINGLE CHIP SEAL	Grand Total
2020		19,902,632			19,902,632
2021	583,800	16,301,274	274,748		17,159,822
2022	1,022,384	19,436,238			20,458,622
2023	1,353,437	25,705,946			27,059,383
2024	1,584,750	30,095,033			31,679,782
2025	1,200,521	33,856,371	582,614		35,639,505
2026	1,254,888	34,484,984	560,122		36,299,994
2027	1,056,881	35,111,451	791,635		36,959,967
2028	1,033,148	37,618,463	947,878		39,599,489
2029	832,940	39,500,804	1,246,064		41,579,808
2030	20,544,948	19,881,352	1,006,441	2,127,131	43,559,871
Grand Total	30,467,697	311,894,546	5,409,502	2,127,131	349,898,876

IMS PCI 60/40 BP Locals Treatments

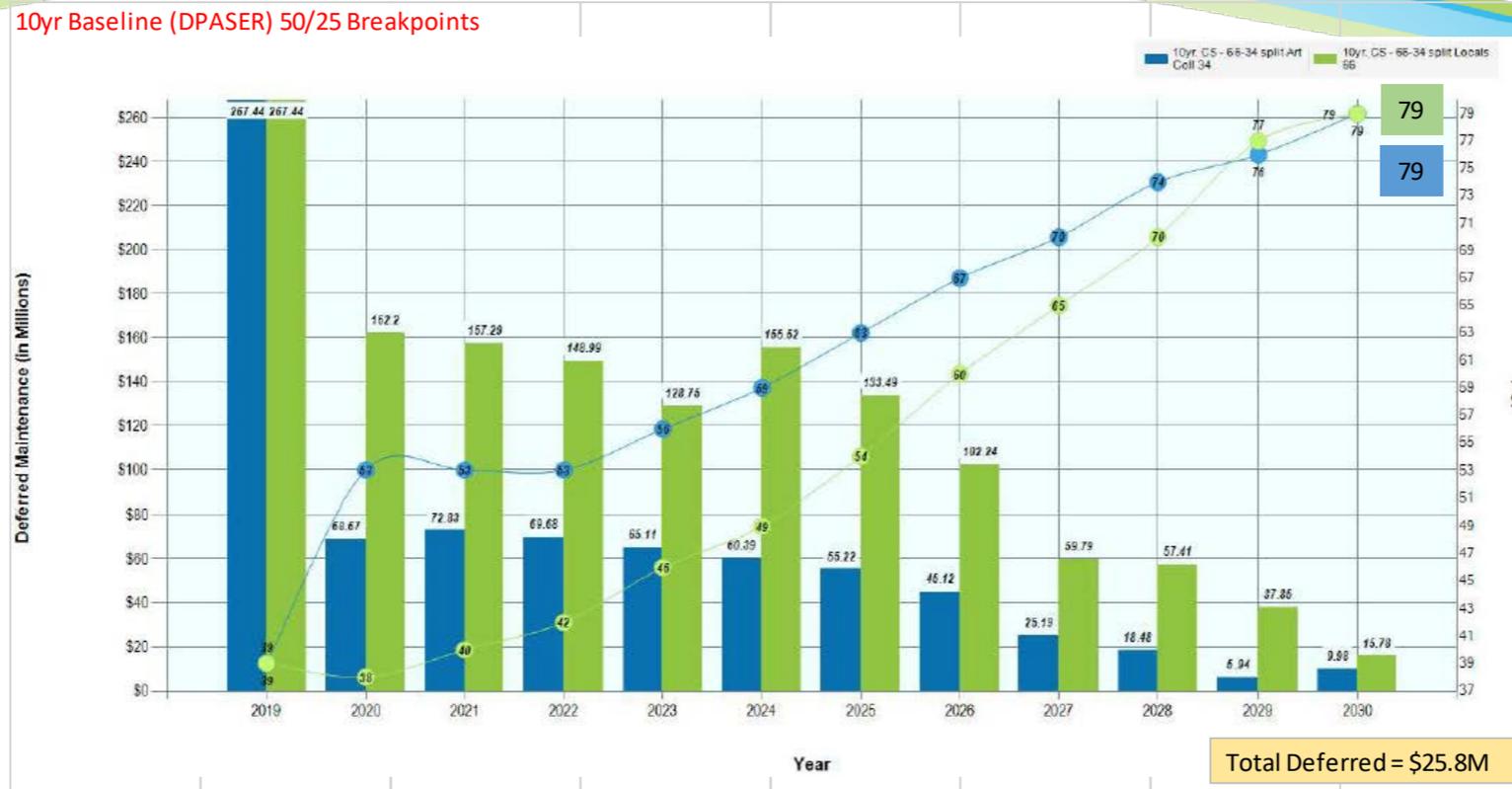
Sum of Cost	Column Label			
Row Labels	DOUBLE CHIP SEAL	MILL AND THICK OVERLAY	SEAL CRACKS	Grand Total
2021	951,985	18,181,349	6,626	19,139,960
2022	1,020,157	19,436,270	3,543	20,459,970
2023	1,353,130	25,706,565		27,059,696
2024	1,570,176	30,095,669	13,950	31,679,796
2025	1,758,382	33,856,546	24,954	35,639,881
2026	1,790,999	34,483,028	25,784	36,299,811
2027	1,815,429	35,110,370	33,748	36,959,546
2028	1,941,101	37,619,158	39,552	39,599,810
2029	12,029,647	29,504,953	45,100	41,579,700
2030	30,061,110	13,451,486	47,142	43,559,738
Grand Total	54,292,116	277,445,394	240,400	331,977,909

PCI & DM Comparison

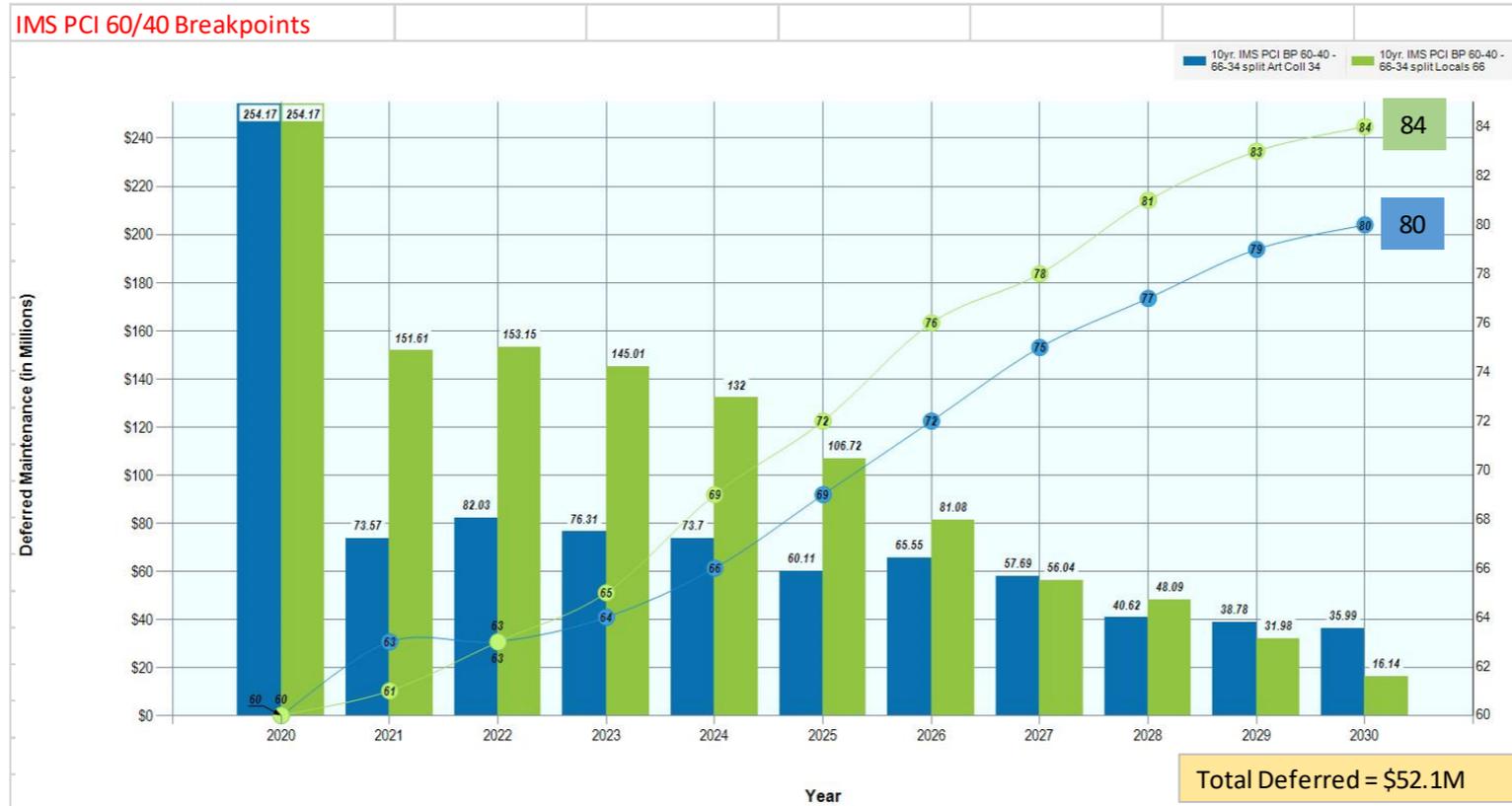


PIMA COUNTY

10yr Baseline (DPASER) 50/25 Breakpoints



IMS PCI 60/40 Breakpoints



Next Steps

- Receive Mt. Lemmon PCIs
- Create local road ranked list worst to best
- Run FY21 Arterial-Collector Scenario
- Start Building FY 21 Bid Packages

Next data update for FY 22 – Curb Ramps