

PIMA COUNTY TRANSPORTATION ADVISORY COMMITTEE

August 27, 2019

Roadway Condition  
And  
Prioritization Discussion FY21



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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
Field Verify Road Lists	March
Prepare Bid Package and submit to TAC and BOS for Information	April
FY21 Bid Packages to Procurement	May

### Miles by Functional Class and District

PCI = projected FY2021 starting Network PCI after FY2020 programed treatments applied 8/9/2019

District:	1		2		3		4		5		Total	
	Miles	PCI	Miles	PCI	Miles	PCI	Miles	PCI	Miles	PCI	Miles	PCI
Arterial/Collector	145	61	42	69	254	44	191	54	36	74	668	54
Local	457	28	55	38	312	40	304	41	108	37	1,236	35
Total	602	-	97	-	565	-	495	-	144	-	1,904	-

### FY 2021 conditions following programed FY2020 treatments

Condition by Functional Class by Area & Miles Calculated based on standard width assumptions: Arterial 42, Collector 32 and Residential 24

#### All Unincorporated Pima County

Condition*	Arterial	Collector	Res/Loc	Other(UHV)	Total
I - Very Good	11 2%	210 27%		78 15%	300 44%
II / III - Good	3 1%	46 6%		56 11%	106 17%
IV - Poor	20 4%	58 8%		29 5%	107 17%
V - Fail	17 3%	138 18%		0 0%	155 21%
<b>Total</b>	<b>51 10%</b>	<b>453 59%</b>		<b>163 31%</b>	<b>668 100%</b>

  

Condition*	Arterial	Collector	Res/Loc	Other(UHV)	Total
I - Very Good			111 9%		
II / III - Good			188 15%		
IV - Poor			439 36%		
V - Fail			498 40%		
<b>Total</b>			<b>1236 100%</b>		

#### District 1

Condition*	Arterial	Collector	Res/Loc	Other(UHV)	Total
I - Very Good	1 0%	25 13%		40 32%	65 46%
II / III - Good	0 0%	3 2%		27 21%	30 23%
IV - Poor	0 0%	9 5%		18 14%	27 19%
V - Fail	0 0%	23 12%		0 0%	23 12%
<b>Total</b>	<b>1 0%</b>	<b>60 32%</b>		<b>84 68%</b>	<b>145 100%</b>

  

Condition*	Arterial	Collector	Res/Loc	Other(UHV)	Total
I - Very Good			21 5%		
II / III - Good			25 6%		
IV - Poor			180 40%		
V - Fail			231 51%		
<b>Total</b>			<b>457 100%</b>		

#### District 2

Condition*	Arterial	Collector	Res/Loc	Other(UHV)	Total
I - Very Good	2 5%	18 34%		9 25%	29 63%
II / III - Good	0 0%	0 0%		10 27%	10 27%
IV - Poor	2 6%	1 1%		1 3%	4 10%
V - Fail	0 0%	0 0%		0 0%	0 0%
<b>Total</b>	<b>4 10%</b>	<b>19 35%</b>		<b>19 55%</b>	<b>42 100%</b>

  

Condition	Arterial	Collector	Res/Loc	Other(UHV)	Total
I - Very Good			8 15%		
II / III - Good			6 12%		
IV - Poor			24 44%		
V - Fail			16 30%		
<b>Total</b>			<b>55 100%</b>		

#### District 3

Condition*	Arterial	Collector	Res/Loc	Other(UHV)	Total
I - Very Good	3 2%	71 26%		8 4%	82 32%
II / III - Good	2 1%	29 11%		10 6%	41 17%
IV - Poor	0 0%	30 11%		2 1%	32 12%
V - Fail	17 9%	81 30%		0 0%	99 39%
<b>Total</b>	<b>22 12%</b>	<b>212 77%</b>		<b>20 11%</b>	<b>254 100%</b>

  

Condition	Arterial	Collector	Res/Loc	Other(UHV)	Total
I - Very Good			36 12%		
II / III - Good			56 18%		
IV - Poor			106 34%		
V - Fail			114 37%		
<b>Total</b>			<b>312 100%</b>		

#### District 4

Condition*	Arterial	Collector	Res/Loc	Other(UHV)	Total
I - Very Good	5 3%	76 35%		16 10%	96 49%
II / III - Good	1 1%	14 7%		7 5%	22 12%
IV - Poor	18 12%	15 7%		6 4%	39 23%
V - Fail	0 0%	33 15%		0 0%	33 15%
<b>Total</b>	<b>24 16%</b>	<b>138 64%</b>		<b>29 19%</b>	<b>191 100%</b>

  

Condition*	Arterial	Collector	Res/Loc	Other(UHV)	Total
I - Very Good			34 11%		
II / III - Good			81 27%		
IV - Poor			89 29%		
V - Fail			100 33%		
<b>Total</b>			<b>304 100%</b>		

#### District 5

Condition*	Arterial	Collector	Res/Loc	Other(UHV)	Total
I - Very Good	1 3%	19 46%		7 24%	27 73%
II / III - Good	0 0%	0 1%		3 10%	3 12%
IV - Poor	0 0%	4 8%		2 7%	5 15%
V - Fail	0 0%	0 0%		0 0%	0 0%
<b>Total</b>	<b>1 3%</b>	<b>23 55%</b>		<b>12 41%</b>	<b>36 100%</b>

  

Condition*	Arterial	Collector	Res/Loc	Other(UHV)	Total
I - Very Good			12 11%		
II / III - Good			20 18%		
IV - Poor			39 36%		
V - Fail			38 35%		
<b>Total</b>			<b>108 100%</b>		

### Condition

Condition categories are established in StreetSaver to group ranges of PCI into treatment type categories. Separate ranges can be created for each functional class and each pavement type. Currently we are using the following ranges:

	Arterials	collectors	Residential	Other(UHV)
I - Very Good	90 60	90 50	Do Nothing	90 70
II / III - Good	60 50	50 40	Worst First	70 50
IV - Poor	50 25	40 25	50 25	50 25
V - Fail	25 0	25 0	25 0	25 0

### Other(UHV)

Other is a functional class provided by StreetSaver. This functional class is used for Urban High Volume (UHV) arterials and collectors, for example Campbell Av and Valencia Rd. These roads are differentiated from rural arterials and collectors, for example Sahuarita Rd and Arivaca Rd. Different treatments can then be programmed, for example a poor UHV road could receive a capesal and a poor arterial could receive a double chip seal.

### Data notes

Data set for analysis is the January 2019 PASER data converted to PCI  
 Source: Scenario 6 [A/C or Local] Budget by BOS...  
 File names: Locals: By BOS [#] 50% to Local, no 6M NSG ...  
 A/C: By BOS[#] ALL 50% to Art, Coll, Otr+6MHURF Project added...

**Miles by Functional Class and District** 8/9/2019

PCI = projected FY2021 starting Network PCI after FY2020 programmed treatments applied

District:	1		2		3		4		5		Total	
	Miles	PCI	Miles	PCI	Miles	PCI	Miles	PCI	Miles	PCI	Miles	PCI
Arterial/Collector	144.6	61	41.8	69	253.8	44	191.3	54	36.0	74	667.6	54
Local	456.9	28	55.1	38	311.7	40	303.9	41	108.4	37	1,236.1	35
Total	601.6	-	96.9	-	565.5	-	495.2	-	144.4	-	1,903.7	-

**FY 2021 conditions following prograded FY2020 treatments**

Condition by Functional Class by Area &amp; Miles Calculated based on standard width assumptions: Arterial 42, Collector 32 and Residential 24

All Unincorporated Pima County						District 1															
Condition*	Arterial		Collector		Res/Loc		Other(UHV)		Total		Condition*	Arterial		Collector		Res/Loc		Other(UHV)		Total	
I - Very Good	11	2%	210	27%			78	15%	300	44%	I - Very Good	1	0%	25	13%			40	32%	65	46%
II / III - Good	3	1%	46	6%			56	11%	106	17%	II / III - Good	0	0%	3	2%			27	21%	30	23%
IV - Poor	20	4%	58	8%			29	5%	107	17%	IV - Poor	0	0%	9	5%			18	14%	27	19%
V - Fail	17	3%	138	18%			0	0%	155	21%	V - Fail	0	0%	23	12%			0	0%	23	12%
<b>Total</b>	<b>51</b>	<b>10%</b>	<b>453</b>	<b>59%</b>			<b>163</b>	<b>31%</b>	<b>668</b>	<b>100%</b>	<b>Total</b>	<b>1</b>	<b>0%</b>	<b>60</b>	<b>32%</b>			<b>84</b>	<b>68%</b>	<b>145</b>	<b>100%</b>
Condition*	Arterial		Collector		Res/Loc		Other(UHV)		Total		Condition*	Arterial		Collector		Res/Loc		Other(UHV)		Total	
I - Very Good					111	9%					I - Very Good					21	5%				
II / III - Good					188	15%					II / III - Good					25	6%				
IV - Poor					439	36%					IV - Poor					180	40%				
V - Fail					498	40%					V - Fail					231	51%				
<b>Total</b>					<b>1236</b>	<b>100%</b>					<b>Total</b>					<b>457</b>	<b>100%</b>				

District 2								
Condition*	Arterial		Collector		Res/Loc	Other(UHV)	Total	
I - Very Good	2	5%	18	34%		9	25%	29 63%
II / III - Good	0	0%	0	0%		10	27%	10 27%
IV - Poor	2	6%	1	1%		1	3%	4 10%
V - Fail	0	0%	0	0%		0	0%	0 0%
<b>Total</b>	<b>4</b>	<b>10%</b>	<b>19</b>	<b>35%</b>		<b>19</b>	<b>55%</b>	<b>42 100%</b>

  

Condition	Arterial		Collector		Res/Loc	Other(UHV)	Total	
I - Very Good					8	15%		
II / III - Good					6	12%		
IV - Poor					24	44%		
V - Fail					16	30%		
<b>Total</b>					<b>55</b>	<b>100%</b>		

District 3								
Condition*	Arterial		Collector		Res/Loc	Other(UHV)	Total	
I - Very Good	3	2%	71	26%		8	4%	82 32%
II / III - Good	2	1%	29	11%		10	6%	41 17%
IV - Poor	0	0%	30	11%		2	1%	32 12%
V - Fail	17	9%	81	30%		0	0%	99 39%
<b>Total</b>	<b>22</b>	<b>12%</b>	<b>212</b>	<b>77%</b>		<b>20</b>	<b>11%</b>	<b>254 100%</b>

  

Condition	Arterial		Collector		Res/Loc	Other(UHV)	Total	
I - Very Good					36	12%		
II / III - Good					56	18%		
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V - Fail					114	37%		
<b>Total</b>					<b>312</b>	<b>100%</b>		

District 4								
Condition*	Arterial		Collector		Res/Loc	Other(UHV)	Total	
I - Very Good	5	3%	76	35%		16	10%	96 49%
II / III - Good	1	1%	14	7%		7	5%	22 12%
IV - Poor	18	12%	15	7%		6	4%	39 23%
V - Fail	0	0%	33	15%		0	0%	33 15%
<b>Total</b>	<b>24</b>	<b>16%</b>	<b>138</b>	<b>64%</b>		<b>29</b>	<b>19%</b>	<b>191 100%</b>

  

Condition*	Arterial		Collector		Res/Loc	Other(UHV)	Total	
I - Very Good					34	11%		
II / III - Good					81	27%		
IV - Poor					89	29%		
V - Fail					100	33%		
<b>Total</b>					<b>304</b>	<b>100%</b>		

District 5								
Condition*	Arterial		Collector		Res/Loc	Other(UHV)	Total	
I - Very Good	1	3%	19	46%		7	24%	27 73%
II / III - Good	0	0%	0	1%		3	10%	3 12%
IV - Poor	0	0%	4	8%		2	7%	5 15%
V - Fail	0	0%	0	0%		0	0%	0 0%
<b>Total</b>	<b>1</b>	<b>3%</b>	<b>23</b>	<b>55%</b>		<b>12</b>	<b>41%</b>	<b>36 100%</b>

  

Condition*	Arterial		Collector		Res/Loc	Other(UHV)	Total	
I - Very Good					12	11%		
II / III - Good					20	18%		
IV - Poor					39	36%		
V - Fail					38	35%		
<b>Total</b>					<b>108</b>	<b>100%</b>		

**Condition**

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	Arterials		collectors		Residential		Other(UHV)	
<b>I - Very Good</b>	90	60	90	50	Do Nothing		90	70
<b>II / III - Good</b>	60	50	50	40	Worst First		70	50
<b>IV - Poor</b>	50	25	40	25	50	25	50	25
<b>V - Fail</b>	25	0	25	0	25	0	25	0

**Other(UHV)**

Other is a functional class provided by StreetSaver. This functional class is used for Urban High Volume (UHV) arterials and collectors, for example Campbell Av and Valencia Rd. These roads are differentiated from rural arterials and collectors, for example Sahuarita Rd and Arivaca Rd. Different treatments can then be programmed, for example a poor UHV road could receive a capeseal and a poor arterial could receive a double chip seal.



## Draft FY21 Department Recommendations

- Overall \$ distribution: by district or to allow PCI to rise uniformly across region for greater equity and efficiency
- Road type \$ distribution: 50% local and 50% arterial/collector:
- Arterial/collector selection/treatment criteria: allow the department to prioritize based on greatest ROI modeling
- Local road selection criteria refined with community input: worse first with sub criteria as determined by TAC