


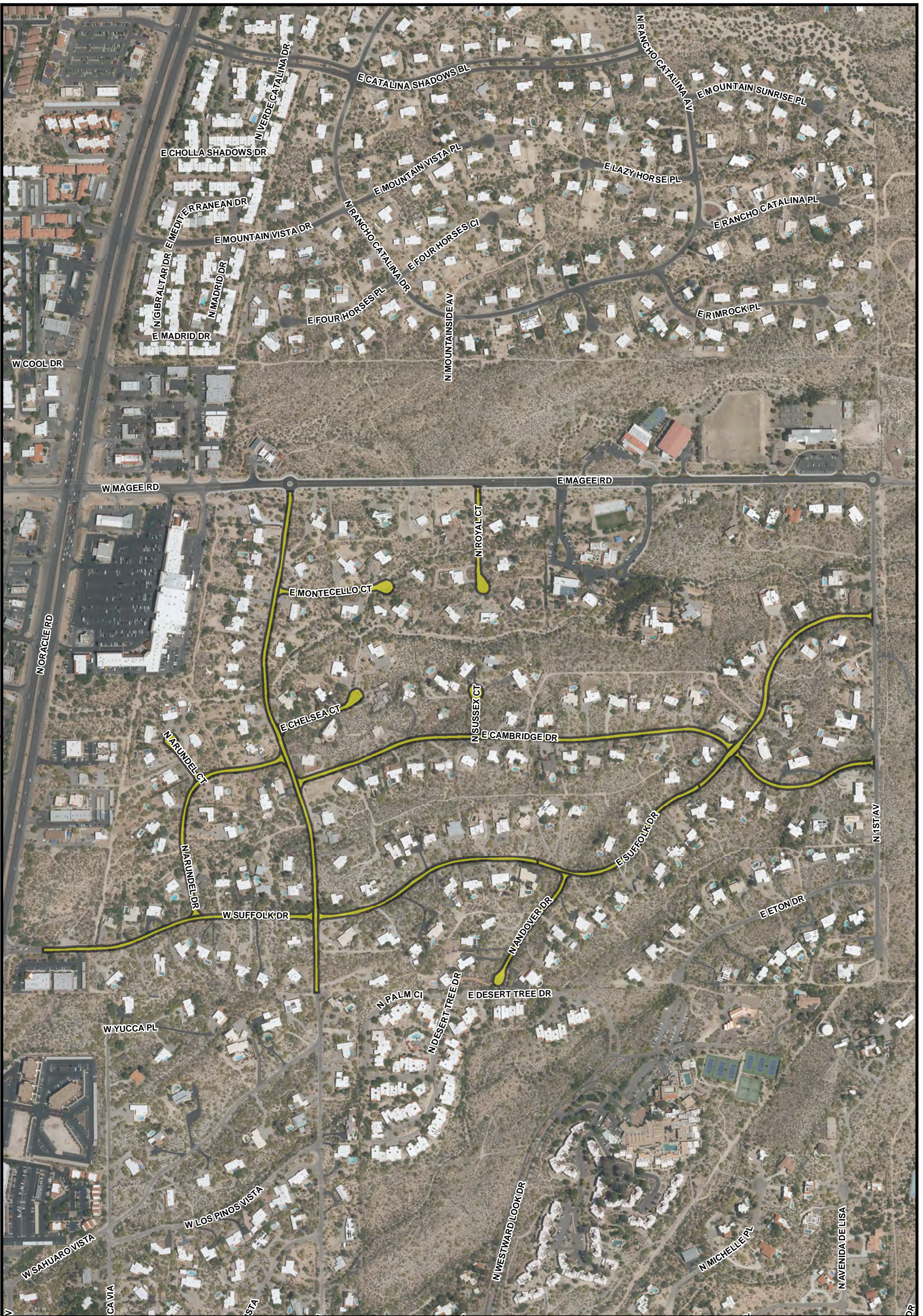


**Legend**


 Area to be Treated

**Town of Oro Valley**  
**Copper Creek Block A and N/Copper Spring Trail**  
**(SQ Yards = 36,340)**

*Surface Treatment Type - SAM*



**Legend**

 Area to be Treated

**Town of Oro Valley  
Suffolk Hills  
(SQ Yards =44,512)**

**Surface Treatment Type SAM**



# Pavement Preservation Program

Regional Local Road Repair Program  
August 14<sup>th</sup>, 2017

Town of Oro Valley

# Oro Valley Pavement Preservation Program

Data-driven process established in 2007

- ▶ Inventory
- ▶ Evaluate
- ▶ Rank
- ▶ Program
- ▶ Implement

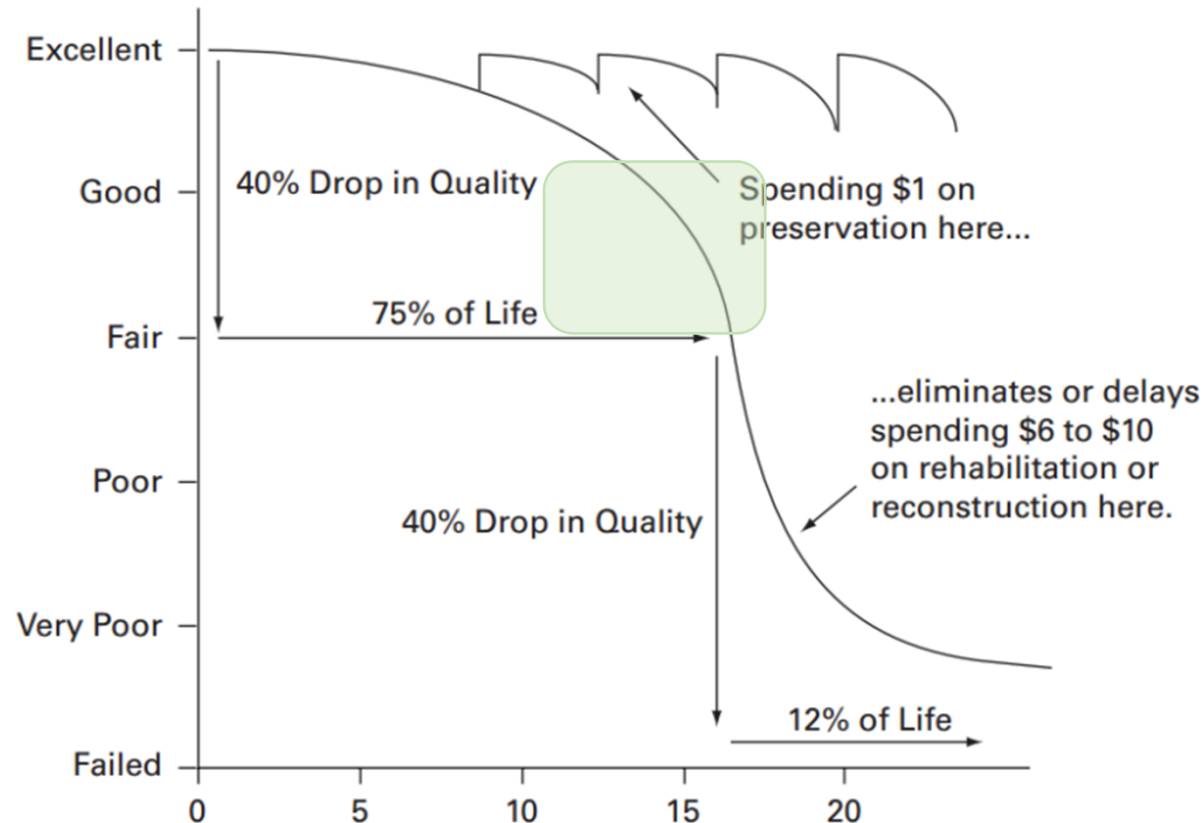
**Town of Oro Valley**  
[www.orovalleyaz.gov](http://www.orovalleyaz.gov)





# Pavement Evaluation

**Pavement Preservation Program goal: protect assets and maximize effectiveness of public funds by applying the right treatment, at the right time, to the right pavement**





Town of Oro Valley

## Treatments Utilized

The right treatment, at the right time, for the right pavement

- ▶ Fog seal
- ▶ Stress-absorbing membrane
- ▶ Slurry seal



## Public Outreach

### **Community request: continued proactive maintenance of a street system of the highest quality**

- ▶ Responses to resident inquiries and concerns
- ▶ [Online services](#) for dissemination of information
- ▶ Communication via mail, email, flyers
- ▶ Encouragement of constituent attendance at Council meetings





Town of Oro Valley

## 2017 Stress Absorbing Membrane (SAM) Treatment List

### **Scheduled Subdivisions:**

- ▶ Catalina Shadows
- ▶ Catalina Shadows Estates
- ▶ Catalina Shadows Estates, Phase 4
- ▶ Fairhaven Village
- ▶ Rancho Vistoso NH 2, Phase 1 and 2
- ▶ Rancho Vistoso NH 7, Parcel G
- ▶ Rancho Feliz (Lots 442 – 647)
- ▶ Shadow Mountain Estates
- ▶ Shadow Mountain Estates East
- ▶ Sunnyslope

### **Scheduled Streets:**

- ▶ Calle Concordia
- ▶ Cool Drive
- ▶ Palisades South,  
Skywire Road





Town of Oro Valley

# 2017 Crack Seal Project List

## **Approved Subdivisions:**

- ▶ Catalina Shadows
- ▶ Catalina Shadows Estates, Phase 4
- ▶ Desert Willows
- ▶ Fairhaven Village
- ▶ Lambert Acres
- ▶ Lambert Lane Subdivision
- ▶ Rancho Catalina
- ▶ Rancho Feliz (Lots 353 – 389, 442 – 647)
- ▶ Rancho Vistoso NH 2, Phase 1 and 2
- ▶ Rancho Vistoso NH 5, Parcel C, T
- ▶ Rancho Vistoso NH 7, Parcel C, F, G, H, K
- ▶ Rancho Vistoso NH 10 W (Lots 1 – 36)
- ▶ Rivers Edge
- ▶ Shadow Mountain Estates
- ▶ Shadow Mountain Estates East
- ▶ Sunny Slope
- ▶ Tangerine Terrace

## **Approved Streets:**

- ▶ Arrowsmith Drive
- ▶ Calle Concordia
- ▶ Cool Drive
- ▶ Egleston Drive
- ▶ Palisades South, Skywire Road



# Questions

Please visit [www.orovalleyaz.gov/town/projects](http://www.orovalleyaz.gov/town/projects) for a list of past, current and future roadway projects

Town of Oro Valley

# **ATTACHMENT 3c**

## **Town of Sahuarita Two-Year Plan**

Year 1

		Crack Seal	Scrub Seal	Microsurface	Patch with Other Treatments
12874 SY	La Joya Verde	\$19,230	\$15,734		
20750 SY	Las Quintas Serena	\$34,221	\$36,400		
15222 SY	Colona La Canada	\$19,525		\$20,832	
10451 SY	La Canada Norte	\$22,198	\$18,162		
12874 SY	Rancho Buena Vista (ST13)	\$18,071	\$14,786		
10602 SY	Rancho Buena Vista (ST14)	\$9,174	\$7,506		
16812 SY	Presidio Del Flores	\$21,465	\$17,563		
15298 SY	Presidio De Arboles	\$19,531		\$20,774	
18100 SY	Presidio De Cancion	\$23,148		\$24,621	
36355 SY	Presidio Del Cielo 1				\$47,600
10602 SY	Presidio Del Cielo 2				\$31,000
19312 SY	Presidio Monterey				\$60,042
27264 SY	Presidio De La Madera				\$76,100
12874 SY	Presidio Del Rio				\$37,372
12117 SY	Presidio De Valle				\$21,330
9088 SY	Madera Highlands	\$9,024	\$7,384		
44682 SY	Madera Highlands 2	\$33,190	\$29,110		
32565 SY	Madera Highlands 3	\$26,400	\$21,600		
1742 SY	Via De Santo Tomas			\$6,900	
		\$255,177	\$168,245	\$73,127	\$273,444

\$102,071

	Base + Accelerated	Base Tax Required	Accelerated
Steve Christy - District 4	\$80,728	\$75,327	\$5,401
Sharon Bronson - District 3	\$97,686	\$25,219	\$72,467
Ramon Valadez - District 2	\$336,402	\$135,811	\$200,591
	\$514,816	\$236,357	\$278,459

		Year 2						
		Crack Seal	Scrub Seal	Chip Seal with Cape Seal	Fog Seal	HA-5	Green Asphalt	Base Repair
1817	SY Camino Antigua			\$7,268				
	Santo Tomas Del Norte	\$4,800						
6723	SY Calle Del Ensayador area						\$169,000	
6000	SY Calle de Cobre area		\$10,000					
46197	SY Valle Verde Del Norte	\$13,800	\$55,200					
14384	SY Colonias La Canada Lots 1-82	\$5,500	\$22,000					
10451	SY La Canada Norte	\$3,900	\$15,600					
8936	SY Santo Tomas Village Lots 1-37	\$3,400	\$13,600					
4880	SY Presidios Rancho Sahuarita	\$2,400			\$10,000			
17721	SY Presidio De Las Estrellas	\$6,000				\$39,000		\$9,000
27415	SY Sonora at Rancho Sahuarita	\$8,000				\$60,300		
1893	SY W. Calle Arroyo Norte			\$7,600				
9845	SY Pesidio De La Luna				\$22,510			
9998	SY Las Qunitas De Santo Tomas			\$37,000				
3938	SY Mountain View Estates	\$1,500	\$6,000					
29930	SY La Hoya Verde 3	\$4,400	\$17,600					
8482	SY La Hoya Verde Block B					\$17,000		
		\$53,700	\$140,000	\$51,868	\$32,510	\$116,300	\$169,000	\$9,000

	Proposed	Base Tax Required	Accelerated
Steve Christy - District 4	\$77,600	\$75,327	\$2,273
Sharon Bronson - District 3	\$292,668	\$25,219	\$267,449
Ramon Valadez - District 2	\$148,410	\$135,811	\$12,599
	\$518,678	\$236,357	\$282,321



## MEMORANDUM

TRANSPORTATION

**To:** Rob Lane, P.E., PTOE – Pavement Preservation Manager  
**From:** Beth Abramovitz, P.E. – Town of Sahuarita Assistant Town Engineer  
**Date:** September 25, 2017  
**Re:** Regional Local Road Pavement Preservation Program – Year 2 Streets

---

Per the Memorandum of August 29, 2017 regarding the Financing Options for the Local Road Repair Program, the Town of Sahuarita would like to submit the list of roads recommended for inclusion in Year 2 of the Regional Local Road Pavement Preservation Program.

Please find attached for your use three “slides” in the format presented for Year 1. Slide 1 outlines the neighborhoods, treatment types, miles of road, distribution of the preservation areas, etc. Slide 2 shows how the Town is leveraging our dollars in Year 2 and slide 3 is a map of the Town that includes Year 1 and 2 of the pavement preservation with the base tax distribution color coded in each district.

Should you have any questions, or require additional information, please do not hesitate to contact me.





BASE TAX DISTRIBUTION

# DISTRICT 3

Sharon Bronson

# DISTRICT 2

Ramon Valadez

# DISTRICT 4

Steve Christy

PIMA MINE RD

W HELMET PEAK RD

EL TORO RD

DUVAL MINE RD

CONTINENTAL RD

I19

I19

I19

I19

I19

LA CANADA DR

LA CANADA DR

LA CANADA DR

TWIN BUTTES RD

LA VILLITA RD

NOGALES HY

SAHUARITA RD

NOGALES HY

NOGALES HY

OLD NOGALES HY

OLD NOGALES HY

WHITEHOUSE CANYON RD

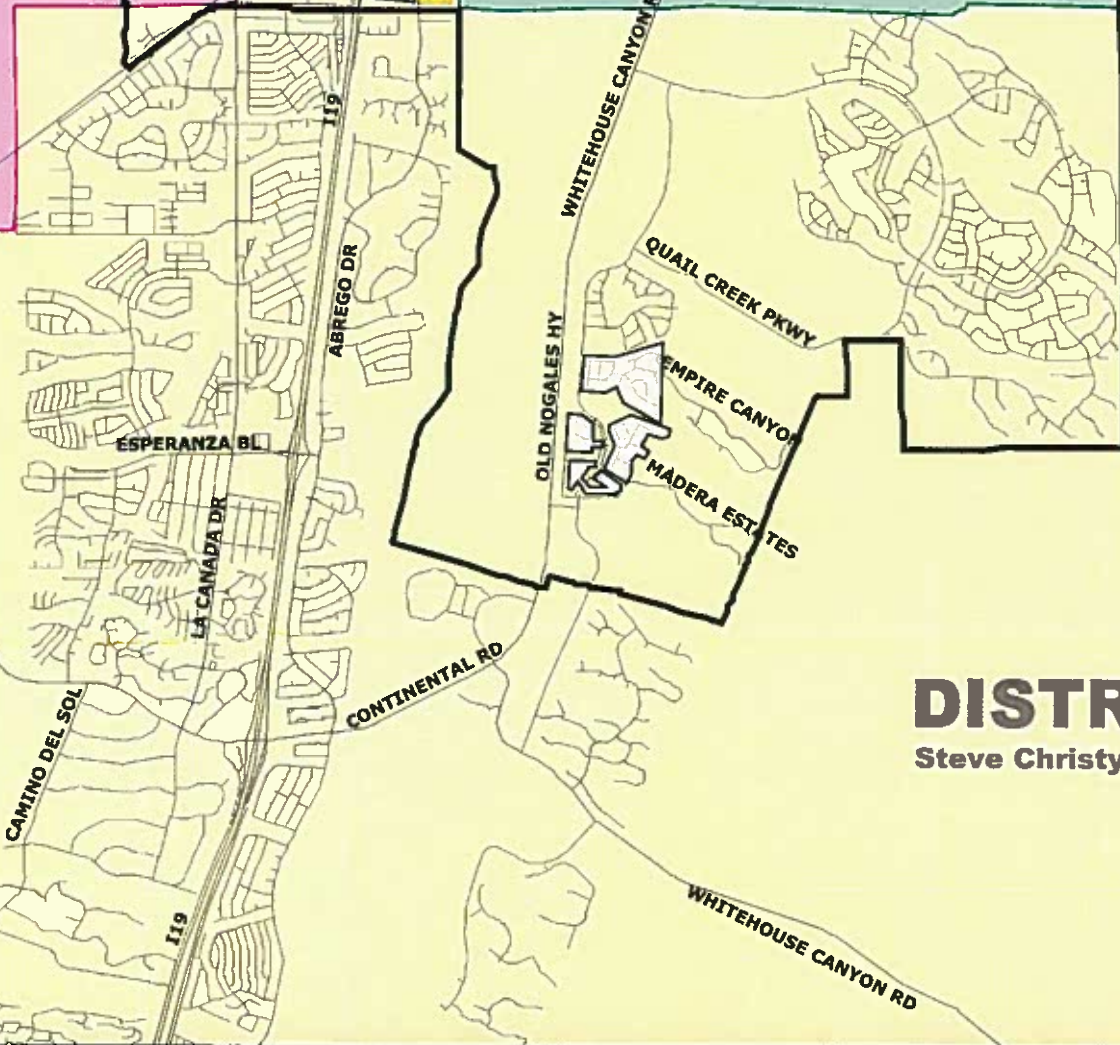
QUAIL CREEK PKWY

EMPIRE CANYON

MADERA EST. TES

CONTINENTAL RD

WHITEHOUSE CANYON RD



## Proposed Neighborhoods and Treatment Types (Year 2)

	Crack Seal	Scrub Seal	Chip Seal with Cape Seal	Fog Seal	HA-5	Green Asphalt	Base Repair
Camino Antigua						\$44,000	
Santo Tomas Del Norte	\$4,800	\$19,200					
Valle Verde Del Norte	\$13,800	\$55,200					
Colonias La Canada Lots 1-82	\$5,500	\$22,000					
La Canada Norte	\$3,900	\$15,600					
Santo Tomas Village Lots 1-37	\$3,400	\$13,600					
Presidios Rancho Sahuarita	\$2,400			\$10,000			
Presidio De Las Estrellas	\$6,000	\$26,200					\$9,000
Sonora at Rancho Sahuarita	\$8,000	\$41,000					
W. Calle Arroyo Norte						\$49,000	
Via De Santo Tomas						\$46,000	
Las Qunitas De Santo Tomas			\$37,000				
Mountain View Estates	\$1,500	\$6,000					
La Hoya Verde 3	\$4,400	\$17,600					
La Hoya Verde Block B					\$17,000		

These proposed pavement preservation treatments will include close to 18 miles\* of local roads.

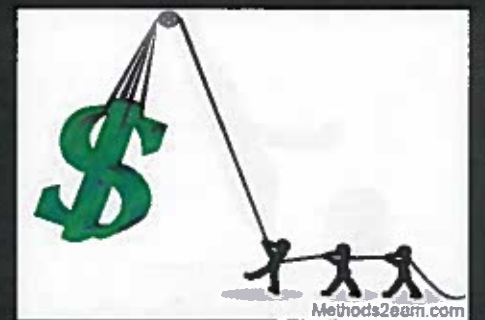
	Proposed	Base Tax Required
Steve Christy - District 4	\$123,600	\$75,327
Sharon Bronson - District 3	\$169,600	\$25,219
Ramon Valadez - District 2	\$135,200	\$135,811





## Leveraging our Dollars to Get More Miles of Pavement Preservation – Year 2

- Total for all work proposed = \$482,100.
- The total includes Crack Seal which is anticipated to cost approximately \$53,700 if completed by a Contractor.
- Town owns the equipment to Crack Seal and can complete the same amount of work for approximately \$21,480. Will utilize a portion of our fall pavement preservation program money to complete this work.
- Town will Crack Seal prior to other treatments.
- The Year 1 program includes \$640,660 of pavement preservation to allow flexibility to the program. Any streets not completed as part of the Year 1 plan will be moved to Year 2. Year 2 includes \$428,400 of pavement preservation. The average of the programs is \$534,000 which is in line with the Town's allotment.





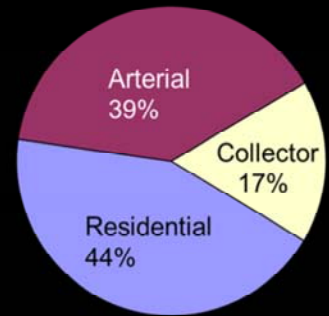
# Regional Local Road Repair Program

August 2017



## Some information about Sahuarita...

- Sahuarita's roads range in age from over 55 years old to new.
- The roads fall into 3 main categories – arterials, collectors and residential.
- Approximately 309 LANE MILES or 111 MILES of roads.



- Linear miles are a straight measure along the center line of a road (however, roads have varying widths).
- Lane miles are measured along the center line of each lane - this is a better measure of the amount of surface area to maintain.

## Road Ratings

- The Town utilizes the PASER (PAVement Surface Evaluation and Rating) system to evaluate the condition of roads.
- PASER is a rating system based on the surface conditions (roughness, potholes, etc.) as described in the manual developed by the University of Wisconsin.
- The region uses a special van which determines road conditions on the Arterial and Collector network, roughly every two years (the most recent van survey and update for Sahuarita was completed in 2016).
- Local roads are evaluated by a physical survey of the road condition.
- Pavement ratings are available for 100% of the Town's arterial and collector roads. The Town will have compiled rating data for 100% of the Town's residential roads by the end of this year.



TOWN OF  
**Sahuarita**

## Existing Pavement Preservation Efforts

- The Town budgets for approximately \$350,000 in pavement preservation each year which is broken into two rounds of pavement preservation programs.
- In the fall the Town focuses on residential streets with arterial and collector streets being the primary focus of the spring program.
- The Town's pavement preservation program is designed to include not only those roads in the worst condition, but to ensure roads in good condition do not deteriorate.
- Each year approximately 25% of the pavement preservation budget is spent on roads in the "poor" category with treatments designed to bring them at least into a "fair" rating. The remaining budget is spent on roads in the "good" and "fair" categories to ensure they do not degrade further.
- The Town plans to continue with our own yearly Pavement Preservation Projects in addition to the Regional Local Repair Program.



TOWN OF  
**Sahuarita**

**Arizona Pavement Preservation Condition Guide for Agency  
Use to Determine Materials Usage**

Pavement Condition Range	Qualified Treatments
10-8	Various Fog Seal Applications
10-7	Crack Seal/Patching/Scrub Seal Various Fog Seal Applications Slurry Seal/Micro Surface
7-5	Crack Seal/Patching/Scrub Seal Slurry Seal/Micro Surface PMRE/CRS-2P Chip Seal PG-TR Chip Seal Cape Seal (Various) Double Chip Seal (Various) Conventional Overlay
5-3	Crack Seal/Patching/Scrub Seal Asphalt Rubber Chip/Cape Seal Double Chip Seal (Various) Hot in Place Recycling/Seal Three Layer Cape Seal (Various) SAMI/Rubber Modified Overlay Mill and Fill
3-0	Crack Seal/Patching/Scrub Seal SAMI/Rubber Modified Overlay Cold in Place Recycling/Seal Reconstruction

Type of treatments typically considered by the Town based on the pavement condition .

However, due to limited funding the types of treatments typically used are highlighted.



## In a Perfect World...

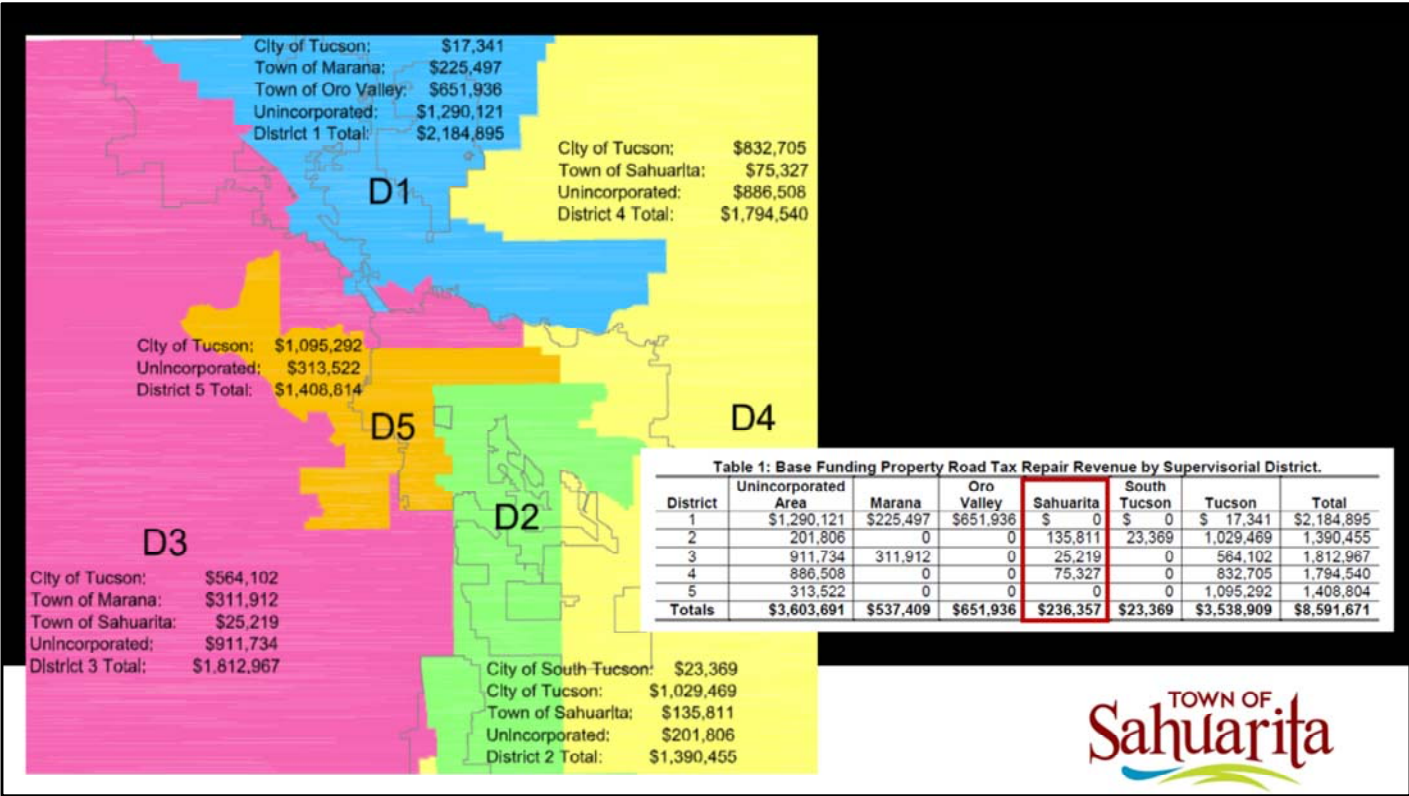
To bring all streets within the jurisdiction of the Town of Sahuarita to a PASER rating of 7 to 8 (Good) today:

Residential	\$ 2,460,700
Collector	\$ 3,922,900
Arterial	\$11,158,200

**Total = \$17,541,800**

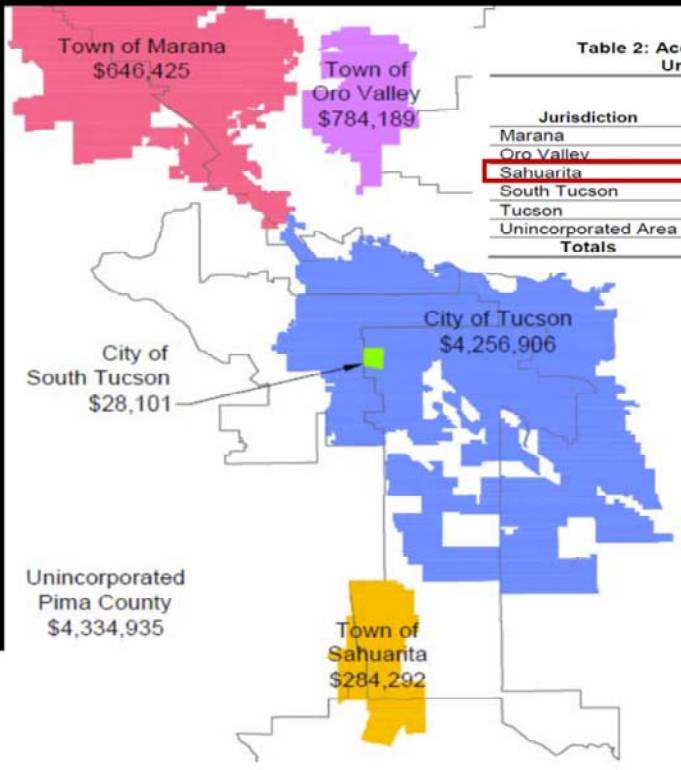


- The City has discussed “rolling over” their first year of funds.
- If Sahuarita could “borrow” a portion of the City’s first year’s allotment (equal to our next four years) and return our remaining four years back to the City, the Town of Sahuarita could bring ALL OF OUR RESIDENTIAL STREETS TO A PASER RATING OF 7 TO 8 IN YEAR ONE.



- Sahuarita is part of Districts 2, 3 and 4.





**Table 2: Accelerated Property Tax Road Repair Revenue by City, Town and Unincorporated Area (14-cent tax increase, \$10,934,854).**

Jurisdiction	% of Assessed Value	Accelerated Property Road Tax Repair Allocation	Debt Issuance and Interest Cost Allocation	Adjusted Accelerated Property Road Tax Repair Allocation
Marana	6.255	\$ 683,955	(\$ 37,530)	\$ 646,425
Oro Valley	7.588	829,717	(45,528)	784,189
Sahuarita	2.751	300,798	(16,506)	284,292
South Tucson	0.272	29,733	(1,632)	28,101
Tucson	41.190	4,504,046	(247,140)	4,256,906
Unincorporated Area	41.944	4,586,605	(251,664)	4,334,941
<b>Totals</b>	<b>100.000</b>	<b>\$10,934,854</b>	<b>(\$600,000)</b>	<b>\$10,334,854</b>

**Table 3: Total Road Repair Revenue by Jurisdiction.**

Jurisdiction	Base Funding Allocation	Adjusted Accelerated Property Road Tax Repair Allocation	Total
Marana	\$ 537,409	\$ 646,425	\$ 1,183,834
Oro Valley	651,936	784,189	1,436,125
Sahuarita	236,357	284,292	520,649
South Tucson	23,369	28,101	51,470
Tucson	3,538,909	4,256,906	7,795,815
Unincorporated Area	3,603,691	4,334,941	7,938,632
<b>Totals</b>	<b>\$8,591,671</b>	<b>\$10,334,854</b>	<b>\$18,926,525</b>



# How do our roads compare to the other jurisdictions?

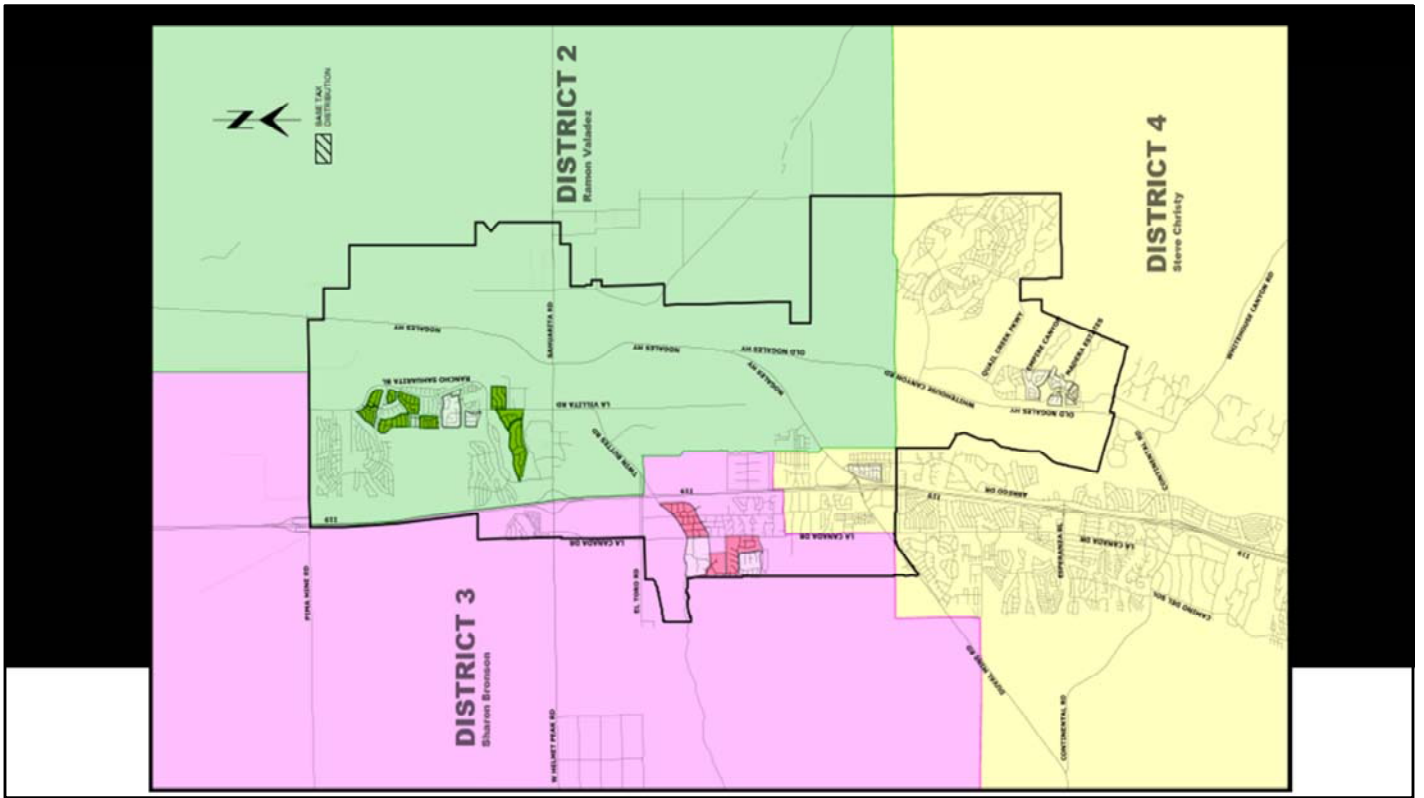
ROAD CONDITION	JURISDICTION RATING AND MILES PER CONDITION														
	TOWN OF MARANA (OCI)			TOWN OF ORO VALLEY (OCI)			TOWN OF SAHUARITA (PASER)			CITY OF TUCSON (OCI)			PIMA COUNTY (PASER)		
	ARTERIAL	COLLECTOR	LOCAL	ARTERIAL	COLLECTOR	LOCAL	ARTERIAL	COLLECTOR	LOCAL	ARTERIAL	COLLECTOR	LOCAL	ARTERIAL	COLLECTOR	LOCAL
UNRATED/ NEWLY ACCEPTED	0.00	0.00	10.17	0	0	0	0	0	0	0	0	2	2	2	62
FAILED/ VERY POOR	0 - 39			0 - 40			0 - 3			0 - 39			1 - 3		
	0.00	0.00	0.00	0	0	0	0	0	0	13	16	379	8	109	212
POOR	40 - 59			41 - 55			3 - 5			40 - 59			4 - 5		
	0.00	0.00	0.07	6	7	29	0	1	1	100	48	690	90	201	582
FAIR	60 - 69			56 - 70			5 - 7			60 - 69			6		
	2.30	27.33	10.72	28	62	127	11	16	36	24	5	91	16	28	119
GOOD	70 - 79			71 - 85			7 - 8			70 - 79			7		
	4.49	35.64	59.90	35	13	84	14	4	18	66	7	85	47	60	102
VERY GOOD	80 - 100			86 - 100			8 - 10			80 - 100			8 - 10		
	12.95	35.74	37.70	16	4	6	7	0	3	97	9	71	37	32	158

- It is the Town's goal to keep all roads at a pavement condition of 5 (Fair) or greater.
- Due to our pavement preservation system, the Town currently has no roads that fall into the "Failed" condition category and less than 2% of our roads fall into the "Poor" category.

The Town's pavement preservation program is designed to include not only those roads in the worst condition, but to ensure roads in good condition do not continue to deteriorate.



- Town's goal is to never allow a road to fall below a rating of 5.
- Would like to be able to get all roads to a condition of good (7-8) or better.



- This map shows the areas the Town is proposing to complete as part of this year’s program.
- White highlighted areas are those areas where the Base Funding allocation is utilized.

# Proposed Neighborhoods and Treatment Types (Year 1)

	Crack Seal	Scrub Seal	Microsurface	Patch with Other Treatments
La Joya Verde	\$19,230	<b>\$15,734</b>		
Las Quintas Serena	\$34,221	\$36,400		
Colona La Canada	\$19,525		<b>\$20,832</b>	
La Canada Norte	\$22,198	\$18,162		
Rancho Buena Vista (ST13)	\$18,071	\$14,786		
Rancho Buena Vista (ST14)	\$9,174	<b>\$7,506</b>		
Presidio Del Flores	\$21,465	\$17,563		
Presidio De Arboles	\$19,531		\$20,774	
Presidio De Cancion	\$23,148		\$24,621	
Presidio Del Cielo 1				\$47,600
Presidio Del Cielo 2				\$31,000
Presidio Monterey				<b>\$60,042</b>
Presidio De La Madera				<b>\$76,100</b>
Presidio Del Rio				\$37,372
Presidio De Valle				\$21,330
Pesidio De La Luna				\$22,510
Presidio De Madrid				\$35,870
Presidio De Las Montana's				\$34,183
Presidio De La Tierra				\$40,181
Madera Highlands	\$9,024	<b>\$7,384</b>		
Madera Highlands 2	\$33,190	<b>\$29,110</b>		
Madera Highlands 3	\$26,400	<b>\$21,600</b>		

These proposed pavement preservation treatments will include close to 25 miles\* of local roads.

Steve Christy - District 4	\$73,828
Sharon Bronson - District 3	\$97,686
Ramon Valadez - District 2	\$469,146



- The Regional Local Road Repair Program funds, combined with the Sahuarita pavement preservation program, will enable the Town of Sahuarita to perform pavement preservation treatments on approximately 25 miles of roads.
- \*Local Roads are estimated to be two lanes totaling approximately 30 feet in width.
- Areas utilizing Base Funding are in RED.
- BOLD areas are utilizing Accelerated Tax.
- Remainder (unbolded black) is work being performed in conjunction with this project by Sahuarita.
- Majority of accelerated funding is being programmed in District 2.
- As you can see, the majority of the local roads / developments proposed in this District require base pavement patching as one of the elements. The roads in this category are all in the 5, or POOR to FAIR, range. Typically, this type of repair would significantly deplete our pavement preservation budget. With the additional funds from this program the Town can bring a much larger percent of our fair roads into the GOOD category than we'd be able to do with our own program.

## Leveraging our Dollars to Get More Miles of Pavement Preservation

- Total for all work proposed = \$895,837 with \$520,649 from the Regional Local Road Repair Program.
- The total includes Crack Seal which is anticipated to cost approximately \$255,177 if completed by a Contractor.
- Town owns the equipment to Crack Seal and can complete the same amount of work for approximately \$102,000. Will utilize a portion of our fall pavement preservation program money to complete this work.
- Town will Crack Seal prior to other treatments.
- Cost for Pima County to provide inspections = \$20,826. Town personnel will perform inspections.
- Cost for Pima County to provide materials testing = \$5,206. Town will perform materials testing where necessary.



TOWN OF  
**Sahuarita**

# Public Information and Outreach

Green Valley News



ARIZONA IS NOW A  
HANDS-FREE STATE

CALL 520.688.1111 or visit  
www.aznews.com

## County road funds will stretch far in Sahuarita

By David Rosenberger drosenberg@gmna.com



Sahuarita may not be receiving much money from the county's new property tax hike, but it believes it can stretch the half-million dollars it will get across a good number of road repairs.

The tax, approved by the Board of Supervisors in June, raised the primary property tax rate by 25 cents to fund repair of local or local collector roads.

The tax funds are split into two categories, base and accelerated funding. The base funding is the 14 cents of the tax that was offset by adjustments made to other tax rates. This will be divided among the five supervisor districts and Sahuarita will receive a combined \$236,357 from the three districts that intersect its boundaries. The accelerated funding will be divided up based on the percentage of assessed value in each municipality compared to the county as a whole. Sahuarita will receive another \$284,292 of this money.

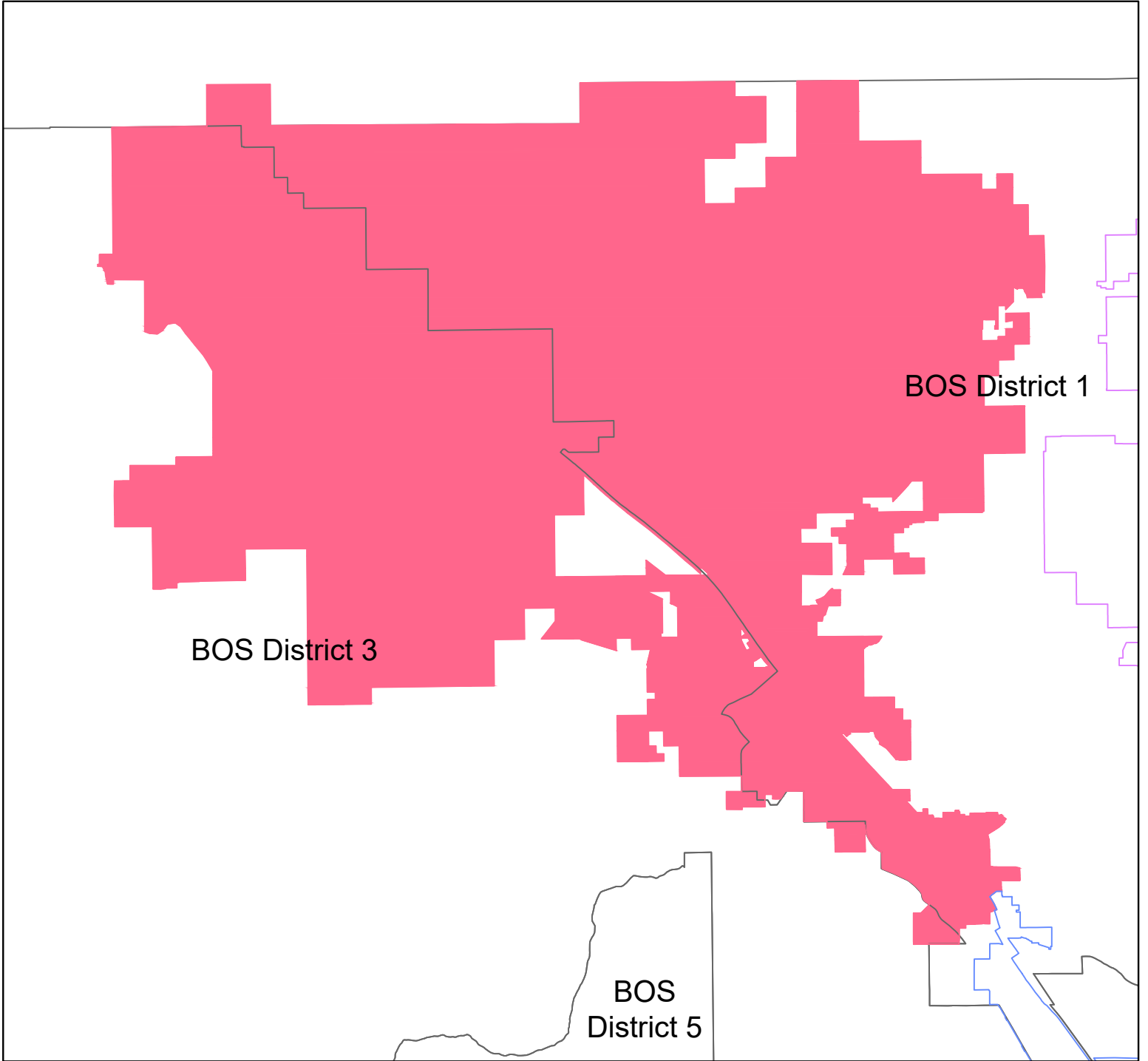


- Additionally, Public Works will be updating the Mayor and Council on the Pavement Preservation efforts with a presentation in the fall.

# **ATTACHMENT 3d**

## **Town of Marana Two-Year Plan**

# Marana Distribution



Year 1 - 17-18	Town of Marana	Year 2 - 18-19
Proposed Cost:	Base Tax	Proposed Cost:
D1: \$548,709	District 1: \$225,497	D1: \$548,709
D3: \$635,126	District 3: \$311,912	D3: \$635,126
Total: \$1,183,835	Accelerated Tax	Total: \$1,183,835
Delta: -\$1	Distribution: \$646,425*	Delta: -\$1
	Total: \$1,183,834	

\*A proportionate share of the Accelerated Property Tax Road Repair Revenues has been removed to pay financing costs, see Map 2





# **Pavement Preservation Program**

Regional Local Road Repair Program

September 26, 2017



## Town of Marana Pavement Preservation Program Overview

- Employs a proactive maintenance philosophy
- Delay the rate of deterioration
- Reduce overall maintenance cost
- Improve pavement conditions over time
- Increase safety
- Higher customer satisfaction



## Roadway Conditions and Treatments

- Marana's strategy to combat road deterioration begins with the Asset Management System (AMS). By recording factors including: age, observable pavement distresses, and the number, and the length of cracks: the computer software is able to assign each roadway an Overall Condition Index (OCI).
- Deterioration Factors
  - Weather
  - Chemicals
  - Wear
  - Time
- Treatment Types:
  - **Minor** (Fog Seal, Crack Seal, HA5, PMM)
  - **Moderate** (Chip Seal, Scrub Seal, Slurry Seal, Mill and Overlay)
- The Town's current overall average OCI is 74%.



# 2017-2018 Subdivisions Crack Sealant Treatment

## District 1

- Willow Edge Commons
- Cortaro Ranch
- Hartman Ten
- Hartman Vista
- Countryside Ridge
- Sombra Del Tecolote
- Oasis Hills II
- The Pines Phase I
- Continental Ranch Parcel 7
- Continental Ranch Parcel 9
- Continental Ranch Parcel 10


## District 3

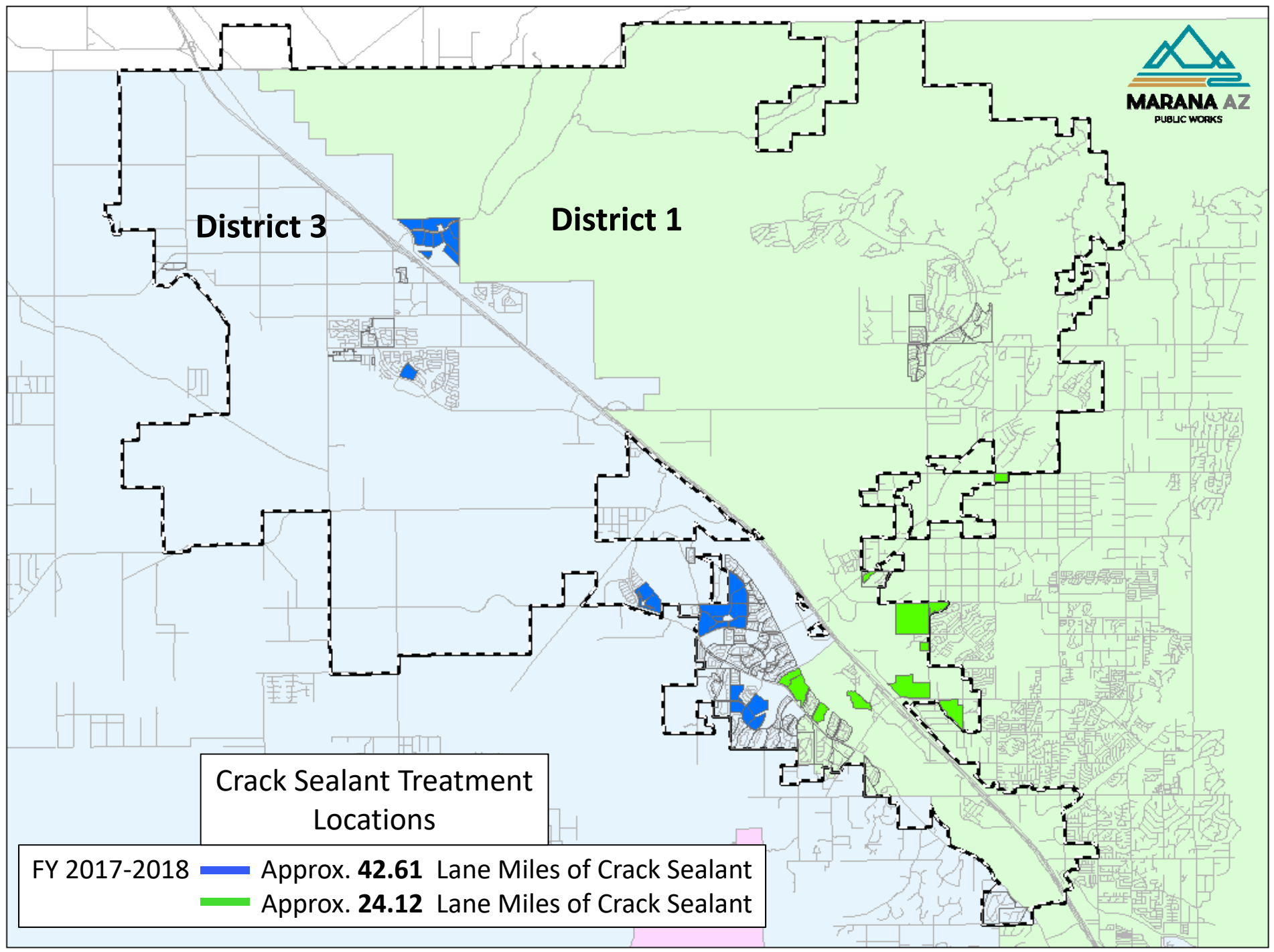
- Stone Ridge
- Continental Reserve Block 1&7,8,9
- San Lucas Subdivison
- Galdden Farms Block 9
- Parcel 11 Continental Ranch
- Marana Estates
- Sunflower Active Adult Community
- Saguaro Bloom Block 8B

District 3

District 1

Crack Sealant Treatment  
Locations

FY 2017-2018  Approx. **42.61** Lane Miles of Crack Sealant  
 Approx. **24.12** Lane Miles of Crack Sealant





# 2018-2019 Scheduled Subdivisions Treatment

## District 1

### PMM

- Willow Edge Commons
- Cortaro Ranch
- Hartman Ten
- Hartman Vista
- Countryside Ridge
- Sombra Del Tecolote
- Oasis Hills II
- The Pines Phase I
- Continental Ranch Parcel 7
- Continental Ranch Parcel 9
- Continental Ranch Parcel 10
- Stone Ridge

## District 3

### PMM

- Continental Reserve Block 1&7,8,9
- San Lucas Subdivision
- Gladden Farms Block 9
- Parcel 11 Continental Ranch
- Sunflower Active Adult Community
- Saguaro Bloom Block 8B

### Conventional Fog

- Continental Ranch Parcel 16
- Continental Ranch Parcel 17
- Continental Ranch Parcel 18




### Rubberized Chip

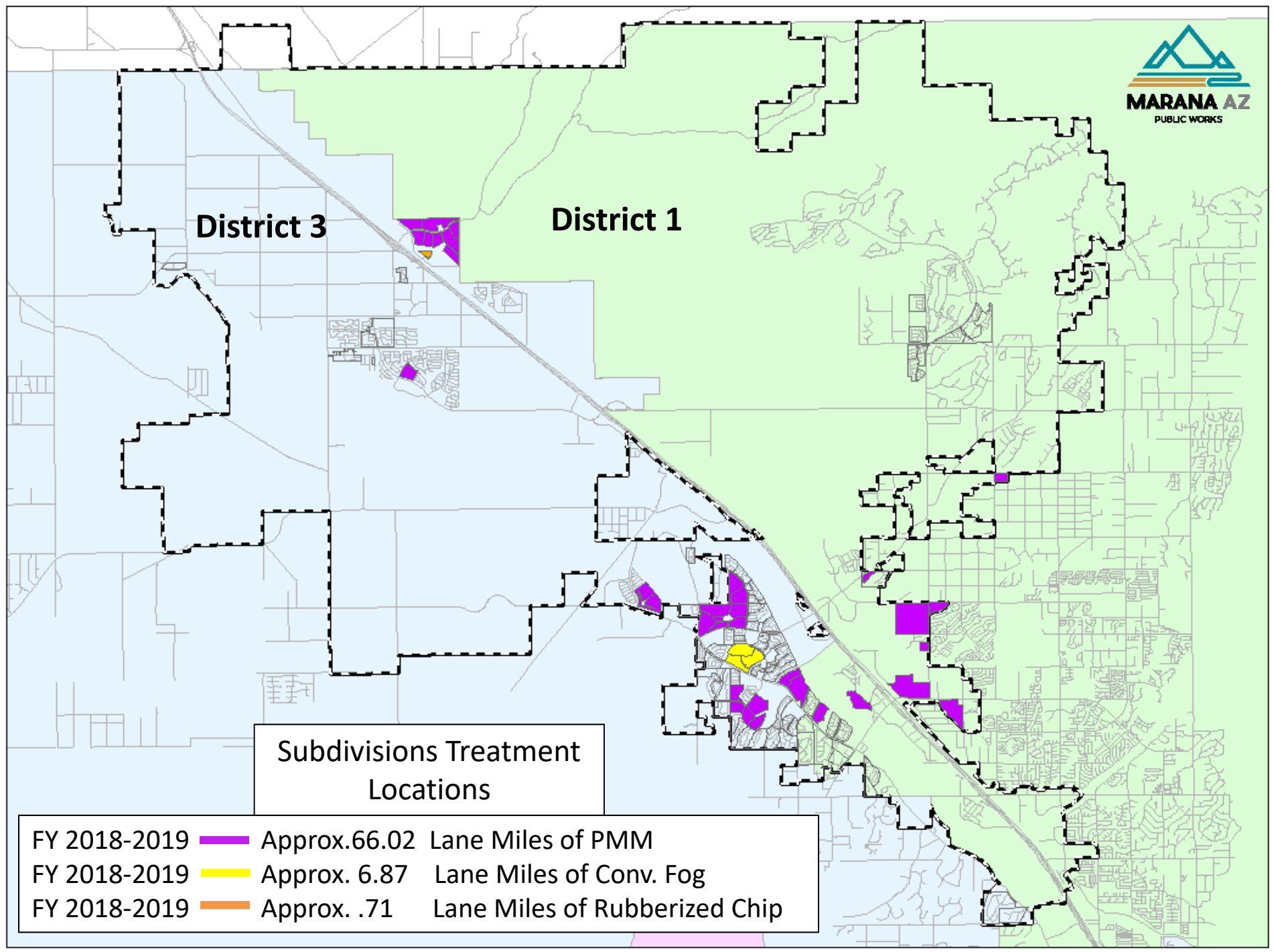
- Marana Estates

District 3

District 1

Subdivisions Treatment Locations

FY 2018-2019		Approx. 66.02	Lane Miles of PMM
FY 2018-2019		Approx. 6.87	Lane Miles of Conv. Fog
FY 2018-2019		Approx. .71	Lane Miles of Rubberized Chip





# 2018-2019 Subdivisions Crack Sealant Treatment

## District 1

- The Villages at Dove Mountain
- Quail Crossing
- Bluffs at Dove Mountain
- Tortilla Reserve
- Parcel 8, 50, 51, 52C Continental Ranch

## District 3

- Continental Ranch
- Continental Ranch Copper Moon
- Continental Ranch Parcel 15 The Villas
- Desert Traditions I, II
- Acacia Trails
- Cancion De La Luna
- El Rio At Continental Ranch
- Marana Vista
- Silverbell Hills Estates
- Los Morteros Estates
- Silver Moon
- Twin Peaks Highland
- Twin Peaks
- Sunset Ranch Estates
- Sunset Acres II
- Sonoran Moon

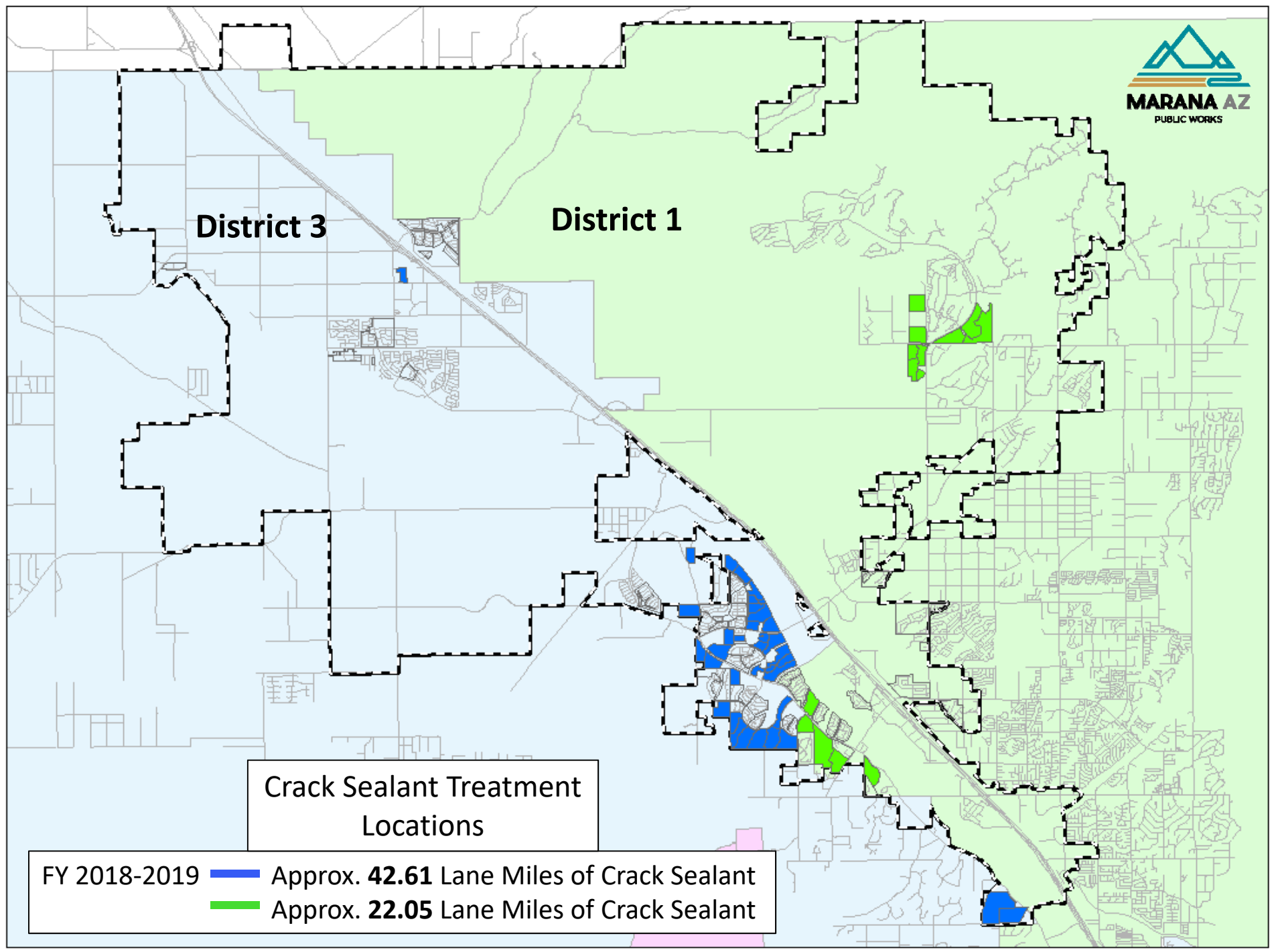


District 3

District 1

Crack Sealant Treatment Locations

- FY 2018-2019  Approx. **42.61** Lane Miles of Crack Sealant
-  Approx. **22.05** Lane Miles of Crack Sealant



**Pima County Regional Local Road Project District 1 = (\$548,709) Marana Subdivisions**

SUBDIVISION AREA	Lane Miles	Sq. Yds.	Avg. OCI	2017-2018	2018-2019	
WILLOW RIDGE COMMONS	2.74	29,208	84.59	Crack seal	\$40,307.00 Minor / PMM	
CORTARO RANCH	4.73	37,504	76.53	Crack seal	\$51,755.53 Minor / PMM	
HARTMAN TEN	0.19	2,027	82.43	Crack seal	\$2,796.80 Minor / PMM	
HARTMAN VISTAS	5.27	45,118	76.85	Crack seal	\$62,263.30 Minor / PMM	
COUNTRYSIDE RIDGE	1.25	45,118	76.85	Crack seal	\$15,018.07 Minor / PMM	
SOMBRA DEL TECOLOTE	0.33	3,307	82.28	Crack seal	\$4,563.81 Minor / PMM	
OASIS HILLS II	0.43	5,141	99.66	Crack seal	\$7,095.04 Minor / PMM	
THE VILLAGES AT DOVE MOUNTAIN	1.20	11,013	74.83		Crack seal	
THE VILLAGES AT REDHAWK	1.87	15,478	81.90		Crack seal	
THE VILLAGES III AT DOVE MOUNTAIN	1.90	14,462	83.26		Crack seal	
THE VILLAGES IV AT DOVE MOUNTAIN	0.55	5,724	96.57		Crack seal	
QUAIL CROSSING	2.77	24,182	93.11		Crack seal	
QUAIL CROSSING II	2.47	21,022	87.41		Crack seal	
BLUFFS AT DOVE MOUNTAIN	4.19	36,754	94.46		Crack seal	
TORTOLITA RESERVE	1.58	15,369	98.39		Crack seal	
SUBDIVISION AREA	Lane Miles	Sq. Yds.	Avg. OCI	2017-2018	2018-2019	
THE PINES PHASE I	2.08	21,287	80.26	Crack seal	\$25,544.28 Minor/PMM	
PARCEL 7 CONTINENTAL RANCH	1.77	17,696	80.10	Crack seal	\$21,235.18 Minor/PMM	
PARCEL 8 CONTINENTAL RANCH	2.37	25,552	98.66		Crack seal	
PARCEL 9 CONTINENTAL RANCH	3.79	40,311	98.04	Crack seal	\$48,373.32 Minor/PMM	
PARCEL 10 CONTINENTAL RANCH	1.81	18,788	79.07	Crack seal	\$22,545.06 Minor/PMM	
CONTINENTAL RANCH PARCEL 50	1.15	13,267	99.02		Crack seal	
CONTINENTAL RANCH PARCEL 51	4.30	33,515	97.14		Crack seal	
CONTINENTAL ESTATES PARCEL 52C	1.17	10,216	85.06		Crack seal	
				Minor Treatments	\$0.00	\$301,497.39
				Crack Seal/ Asphalt Failures	\$548,709.00	\$247,211.61
				<b>Total</b>	<b>\$548,709.00</b>	<b>\$548,709.00</b>

**Pima County Regional Local Road Project District 3 = (\$635,126) Marana Subdivisions**

SUBDIVISION AREA	Lane Miles	Sq. Yds.	Avg. OCI	2017-2018	2018-2019
SAN LUCAS BLOCK 2	1.88	19,622	86.55	Crack seal	\$27,078.97 Minor/PMM
SAN LUCAS BLOCKS 3-4	3.05	32,042	93.39	Crack seal	\$44,218.28 Minor/PMM
SAN LUCAS BLOCK 5	1.13	12,013	96.08	Crack seal	\$16,577.79 Minor/PMM
SAN LUCAS BLOCKS 6 ( Lots 61 -115 )	1.03	9,257	90.09	Crack seal	\$12,774.52 Minor/PMM
SAN LUCAS BLOCK 7	1.27	11,856	99.00	Crack seal	\$19,918.08 Minor/PMM
SAN LUCAS BLOCK 8	1.39	13,081	99.60	Crack seal	\$18,051.60 Minor/PMM
SAN LUCAS BLOCK 9	1.42	14,164	89.35	Crack seal	\$19,546.94 Minor/PMM
SAN LUCAS BLOCK 11	1.28	12,611	89.84	Crack seal	\$17,402.72 Minor/PMM
SAN LUCAS BLOCK 12	1.03	10,926	98.00	Crack seal	\$18,355.68 Minor/PMM
GLADDEN FARMS BLOCK 9	0.94	9,365	88.18	Crack seal	\$11,237.59
MARANA VISTA	1.36	8,873	54.92		Crack seal
MARANA ESTATES		5,204	64.28	Crack seal	\$24,843.68 Moderate Rub/Chip
SUNSET ACRES II	1.28	10,956	93.74		Crack seal
SILVERBELL HILLS ESTATES	3.43	26,184	81.74		Crack seal
SONORAN MOON	0.48	5,662	81.11		Crack seal
DESERT TRADITIONS I	1.05	9,689	64.74		Crack seal
DESERT TRADITIONS II	1.06	11,045	50.66		Crack seal
SUBDIVISION AREA	Lane Miles	Sq. Yds.	Avg. OCI	2017-2018	2018-2019
ACACIA TRAILS	0.58	5,483	75.76		Crack seal
CANCION DE LA LUNA	1.23	13,803	63.16		Crack seal
EL RIO AT CONTINENTAL RANCH	1.29	13,780	72.71		Crack seal
SONORAN VISTA	1.10	11,455	76.12		Crack seal
LOS MORTEROS ESTATES	0.86	6,045	68.91		Crack seal
SILVER MOON	1.71	13,314	69.44		Crack seal

**Pima County Regional Local Road Project District 3 = (\$635,126) Marana Subdivisions**

SUBDIVISION AREA	Lane Miles	Sq. Yds.	Avg. OCI	2017-2018	2018-2019
TWIN PEAKS HIGHLAND	1.62	14,452	87.05		Crack seal
TWIN PEAKS SUBDIVISION	1.39	10,382	74.39		Crack seal
SUNSET RANCH ESTATES	1.06	9,321	93.67		Crack seal
STONE RIDGE (1-76) & ( 1-71 )	2.43	23,170	80.23	Crack seal	\$27,803.75 Minor/PMM
CONTINENTAL RESERVE BLOCK 1 & 7	1.09	11,442	77.58	Crack seal	\$13,729.86 Minor/PMM
CONTINENTAL RESERVE BLOCK 7 & 8	1.36	12,516	78.21	Crack seal	\$15,018.67 Minor/PMM
CONTINENTAL RESERVE BLOCK 9	2.45	21,664	86.73	Crack seal	\$25,997.08 Minor/PMM
CONTINENTAL RESERVE BLOCK 10	1.23	13,358	83.86		Crack seal
CONTINENTAL RESERVE BLOCK 12	1.20	12,336	85.71		Crack seal
CONTINENTAL RESERVE BLOCK 14	1.37	11,866	81.33		Crack seal
CONTINENTAL RESERVE BLOCK 15	1.35	12,301	78.57		Crack seal
CONTINENTAL RESERVE BLOCK 16A	2.15	20,859	83.86		Crack seal
CONTINENTAL RESERVE BLOCK 16B	1.72	17,347	94.30		Crack seal
CONTINENTAL RESERVE BLOCKS 17-19	1.47	13,354	84.84		Crack seal
PARCEL 11 CONTINENTAL RANCH	2.27	26,097	66.00		Crack Seal
CONTINENTAL RANCH PARCEL 12A	1.92	22,420	100.00		Crack seal
CONTINENTAL RANCH PARCEL 12B	2.35	24,879	98.01		Crack seal
CONTINENTAL RANCH PARCEL 15 THE VILLAS	0.83	9,551	89.44		Crack seal
CONTINENTAL RANCH PARCEL 16	2.61	27,228	43.52		\$13,028.81 CQS Fog
CONTINENTAL RANCH PARCEL 17	1.83	17,880	48.80		\$8,555.58 CQS Fog
CONTINENTAL RANCH PARCEL 18	2.44	24,224	49.97		\$11,591.07 CQS Fog

**Pima County Regional Local Road Project District 3 = (\$635,126) Marana Subdivisions**

SUBDIVISION AREA	Lane Miles	Sq. Yds.	Avg. OCI	2017-2018	2018-2019
SUBDIVISION AREA	Lane Miles	Sq. Yds.	Avg. OCI	2017-2018	2018-2019
PARCEL 23 CONTINENTAL RANCH	1.23	11,758	46.01		Crack seal
PARCEL 26 CONTINENTAL RANCH	0.49	6,681	100.00		Crack seal
CONTINENTAL RANCH PARCEL 27A	0.99	10,456	47.91		Crack seal
CONTINENTAL RANCH PARCEL 27B	2.44	25,803	51.10		Crack seal
PARCEL 28 CONTINENTAL RANCH	1.92	18,261	100.00		Crack seal
CONTINENTAL RANCH PARCELS 38 & 40	1.54	16,124	60.86		Crack seal
CONTINENTAL RANCH PAR(36-38,40) PHASE II	1.54	17,263	53.94		Crack seal
CONTINENTAL RANCH PHASE III PAR. 36-38,40	1.67	16,293	44.27		Crack seal
CONTINENTAL RANCH COPPER MOON	1.94	21,085	67.49		Crack seal
CONTINENTAL RANCH ACTIVE ADULT COMMUNITY	2.85	21,872	79.29	Crack seal	\$26,245.87 Minor/PMM
CONTINENTAL RANCH SUNFLOWER PHASE II	2.06	20,463	78.69	Crack seal	\$24,555.07 Minor/PMM
CONTINENTAL RANCH SUNFLOWER PHASE III	3.23	25,575	79.04	Crack seal	\$30,690.26 Minor/PMM
CONTINENTAL RANCH SUNFLOWER PHASE IV	1.31	36,749	78.06	Crack seal	\$44,098.64 Minor/PMM
CONTINENTAL RANCH SUNFLOWER PHASE V	2.44	22,528	81.32	Crack seal	\$27,034.13 Minor/PMM
CONTINENTAL RANCH SUNFLOWER PHASE VI	2.20	17,460	81.09	Crack seal	\$20,951.60 Minor/PMM
CONTINENTAL RANCH SUNFLOWER PHASE VII	1.56	15,851	53.51	Crack seal	\$19,021.33 Minor/PMM
SAGUARO BLOOM BLOCK 8B	5.72	44,238	98.63	Crack seal	\$53,085.88 Minor/PMM
			Minor Treatments	\$0.00	\$591,413.46
			Crack Seal/ Asphalt Failures	\$635,126.00	\$43,712.54
			<b>Total</b>	<b>\$635,126.00</b>	<b>\$635,126.00</b>

# **ATTACHMENT 3e**

## **City of South Tucson Two-Year Plan**

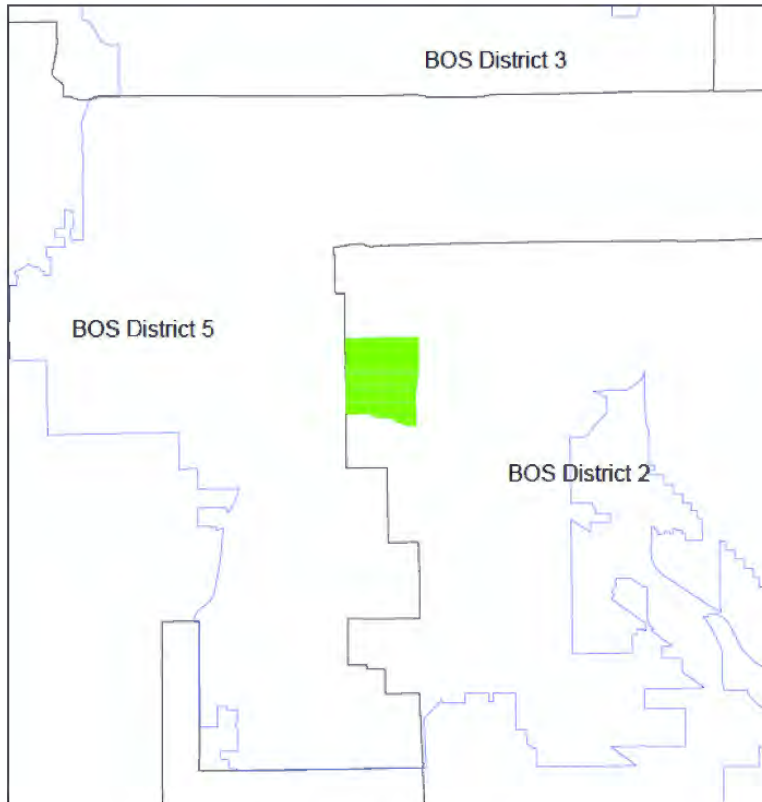


**City of South Tucson**

*The Pueblo within a city*

## Regional Local Road Repair Program Presentation

## South Tucson Distribution



City of South Tucson	
Base Tax	
District 2:	\$23,369
Accelerated Tax	
Distribution:	\$28,101*
Total:	\$51,470

\*A proportionate share of the Accelerated Property Tax Road Repair Revenues has been removed to pay financing costs, see Map 2

South Tucson Distribution is \$51,470, per year.

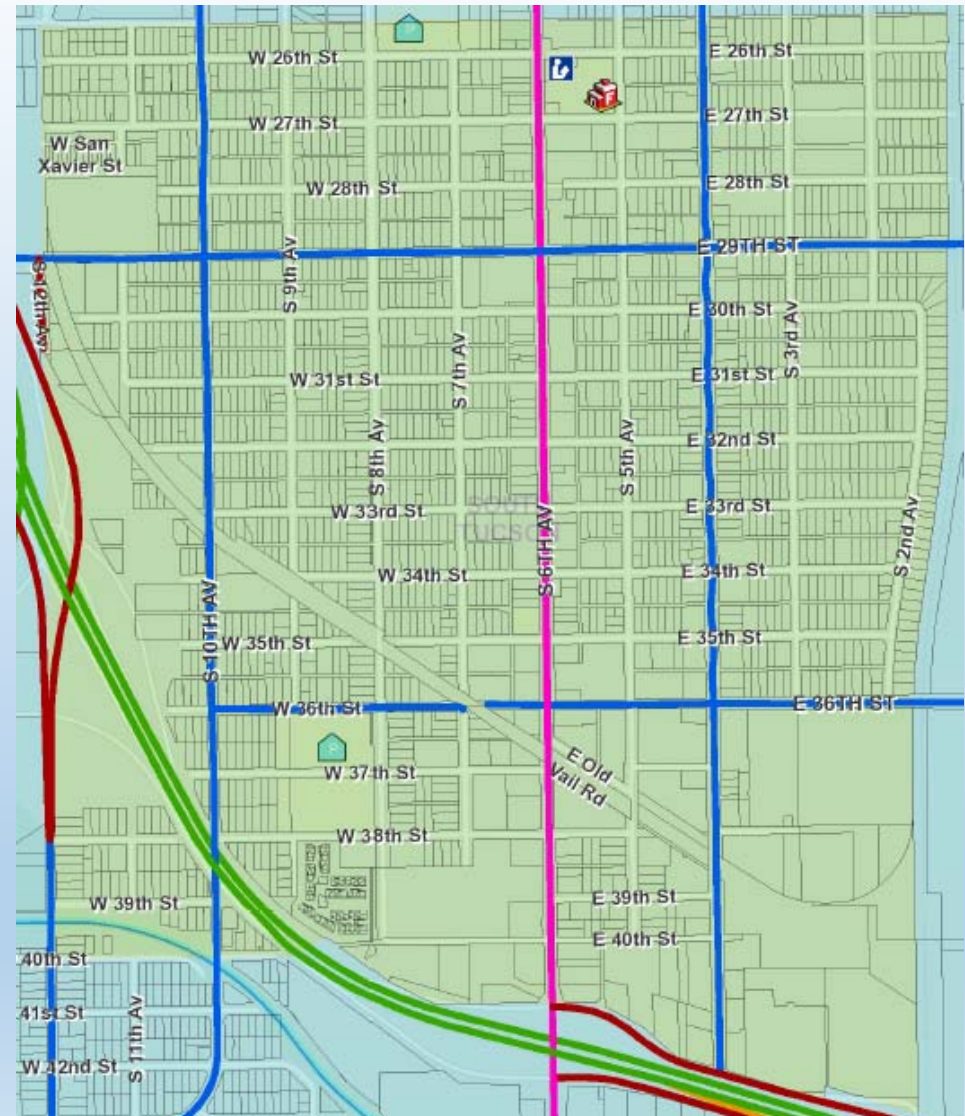
For the 2-Year Distribution of \$102,940 they have submitted a plan for \$96,460.



The City of South Tucson covers an area of about 1.2 square miles and is completely within BOS District 2.

CONDITION	PRINCIPAL ARTERIAL*	MINOR ARTERIAL	LOCAL	TOTAL
Unrated	1.17	0	0	1.17
Failed	0	0	0	0
Poor	1.10	2.96	0	4.06
Fair	0	0	18.07	18.07
Good	0	0.99	0	0.99
Very Good	0	0	0	0
<b>TOTAL</b>	<b>2.27</b>	<b>3.95</b>	<b>18.07</b>	<b>24.29</b>

\* 1.17 miles of Unrated classified as Urban Interstate, ADOT maintains



## Pavement Preservation Program

- In 2009-2010, Pima County DOT procured contractors to place chip seal on all local roads within the City of South Tucson.
- The roads were in Good to Fair condition at the time.
- The majority of roads still maintain a Fair condition rating.
- The current Pavement Preservation Program for the City of South Tucson is a quick-acting Maintenance Division that fixes potholes and paves patch areas as they are reported.

# Project Alternatives

PROJECT	STREET	FROM	TO	LENGTH	MILES
#1	8TH AV	26TH ST	27TH ST	376.63	0.071
	8TH AV	27TH ST	28TH ST	372.00	0.070
	8TH AV	28TH ST	29TH ST	375.04	0.071
#2A	5TH AV	29TH ST	30TH ST	347.59	0.066
	5TH AV	30TH ST	31ST ST	373.94	0.071
	31ST ST	5TH AV	4TH AV	471.68	0.089
#2B	E 32ND ST	4TH AV	3RD AV	478.25	0.091
	E 32ND ST	3RD AV	2ND AV	726.19	0.138
	S 2ND AV	32ND ST	33RD ST	385.39	0.073
#3	S 9TH AV	END OF ROAD	35TH ST	247.94	0.047
	S 9TH AV	35TH ST	36TH ST	379.78	0.072
	W 36TH ST	7TH AV	8TH AV	472.44	0.089
	W 36TH ST	8TH AV	9TH AV	487.18	0.092
	S 7TH AV	36TH ST	37TH ST	348.45	0.066
	W 37TH ST	6TH AV	7TH AV	476.01	0.090

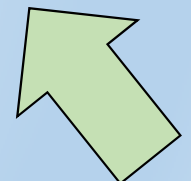
Due to the current classification of 36<sup>th</sup> Street, it cannot be funded as part of the RLRPP at this time.



# Project Alternative Selection

PROJECT INFORMATION TABLE												
PROJECT	ROADID	STREET	FROM	TO	LENGTH	MILES	PASER	TREATMENT	COST (/SY)	COST/LENGTH	RUNNING TOTAL	REMOVAL OF 36th ST (3r)
#1	29385	8TH AV	26TH ST	27TH ST	376.63	0.071	6	SEAL COAT	\$4.50	\$6,779.30	\$6,779.30	
	34313	8TH AV	27TH ST	28TH ST	372.00	0.070	6	SEAL COAT	\$4.50	\$6,696.07	\$13,475.38	
	29566	8TH AV	28TH ST	29TH ST	375.04	0.071	6	SEAL COAT	\$4.50	\$6,750.69	\$20,226.07	
				<b>SUBTOTAL</b>	1123.67	0.213						<b>\$20,226.07</b>
#2A	31291	5TH AV	29TH ST	30TH ST	347.59	0.066	6	SEAL COAT	\$4.50	\$6,256.70	\$6,256.70	
	54437	5TH AV	30TH ST	31ST ST	373.94	0.071	6	SEAL COAT	\$4.50	\$6,730.99	\$12,987.69	
	20736	31ST ST	5TH AV	4TH AV	471.68	0.089	6	SEAL COAT	\$4.50	\$8,490.26	\$21,477.95	
				<b>SUBTOTAL</b>	1193.22	0.226						<b>\$21,477.95</b>
#2B	7472	E 32ND ST	4TH AV	3RD AV	478.25	0.091	6	SEAL COAT	\$4.50	\$8,608.54	\$8,608.54	
	54031	E 32ND ST	3RD AV	2ND AV	726.19	0.138	6	SEAL COAT	\$4.50	\$13,071.35	\$21,679.89	
	21910	S 2ND AV	32ND ST	33RD ST	385.39	0.073	6	SEAL COAT	\$4.50	\$6,937.09	\$28,616.98	
				<b>SUBTOTAL</b>	1589.83	0.301						<b>\$28,616.98</b>
#3	57770	S 9TH AV	END OF ROAD	35TH ST	247.94	0.047	6	SEAL COAT	\$4.50	\$4,463.00	\$4,463.00	\$4,463.00
	48871	S 9TH AV	35TH ST	36TH ST	379.78	0.072	6	SEAL COAT	\$4.50	\$6,836.06	\$11,299.06	\$11,299.06
	48873	W 36TH ST	7TH AV	8TH AV	472.44	0.089	5	SEAL COAT	\$4.50	\$8,503.94	\$19,803.00	
	11294	W 36TH ST	8TH AV	9TH AV	487.18	0.092	5	SEAL COAT	\$4.50	\$8,769.29	\$28,572.29	
	8013	S 7TH AV	36TH ST	37TH ST	348.45	0.066	6	SEAL COAT	\$4.50	\$6,272.02	\$34,844.31	\$17,571.08
	46467	W 37TH ST	6TH AV	7TH AV	476.01	0.090	6	SEAL COAT	\$4.50	\$8,568.14	\$43,412.45	\$26,139.23
				<b>SUBTOTAL</b>	1311.64	0.457						<b>\$43,412.45</b>

AVAILABLE=	\$51,470	\$102,940
ALTERNATIVE	COST	MILES
1+2A=	\$41,704.02	0.439
1+2B=	\$48,843.05	0.514
1+3=	\$63,638.52	0.670
2A+2B=	\$50,094.93	0.527
2A+3=	\$64,890.40	0.683
2B+3=	\$72,029.44	0.758
1+2A+2B=	\$70,321.00	0.740
1+2A+3=	\$85,116.47	0.896
1+2B+3=	\$92,255.51	0.971
1+2A+2B+3=	\$113,733.45	1.197
2A+2B+3=	\$93,507.38	0.984
1+2A+2B+3r=	\$96,460.23	1.015



Due to the current classification of 36<sup>th</sup> Street, it cannot be funded as part of the RLRPP.

# **ATTACHMENT 4**

## **Supervisory Maps**