

City of Scottsdale, AZ

Pavement Preservation & Surface Treatment

Contract No. #15PB015

2015-2019

**2020 ISSA Preservation
Performance Award**



Applicant Contact Information

VSS International, Inc.

3785 Channel Drive
West Sacramento, California 95691

Jeff Roberts
Senior Vice President
General Manager
(916) 373-1500 – Office
(916) 471-9217 - Cellular
Jeff.roberts@slurry.com
www.slurry.com



Agency Contact Information

City of Scottsdale, Arizona

Mr. Craig Hanson

Street Operations Manager

City of Scottsdale Public Works Department
9191 East San Salvador Drive
Scottsdale, Arizona 85258

(480)312-5665 – Office
chan@scottsdaleaz.gov



Key Contract Information

Contract Value Total: \$15,790,968.11

Year:	Contract Value:
2015	\$3,656,064.00
2016	\$3,558,476.00
2017	\$2,968,976.11
2018	\$3,314,152.00
2019	\$2,293,300.00

ISSA Pavement Preservation Activities Utilized:

Micro surfacing & crack treatments



Project Background

- ❖ The City of Scottsdale's "Road Network" is one of the City's most valuable investments and largest asset.
- ❖ In the early 2000's the City enjoyed a PCI of 80+ on their road network.
- ❖ The citizens of Scottsdale were accustomed to this high level of service.
- ❖ Over time the City's Overall PCI rating slipped to 70 +/- and was continuing to decline.
- ❖ In 2014 the City decided to develop a plan to improve its declining road network
- ❖ The City Manager tasked the Pavement Team to put forth a viable plan and budget to once again place the City network as one of the highest ranked road networks in the nation for a city of 250,000 citizens.
- ❖ Over the past five years, The City of Scottsdale has implemented one of the most aggressive and innovative pavement preservation projects in the United States.



Project Summary

- ❖ The City's pavement management group was tasked to determine a viable and sustainable alternative to normal pavement preservation treatments and build a more sustainable network with a significant amount of structure added to the surface of their entire network.
- ❖ City Staff engaged local agencies and contractors to discuss methods of surface treatments that may be a viable option.
- ❖ The City chose to utilize micro surfacing as a primary treatment. Type 3 treatments were used on Arterial And Collector streets while type 2 treatments were used on all local streets, the City chose to perform treatments on 10% of their network annually, to ensure that each asset would receive a treatment every 10 years.
- ❖ The City awarded a contract to our local contractor VSS International, Inc. All micro surfacing treatments were reinforced with fiber.
- ❖ The City and VSS International partnered together and placed an aggressive preservation plan in high gear to put large amounts of resources in place to accomplish the large scope of work associated with this contract.



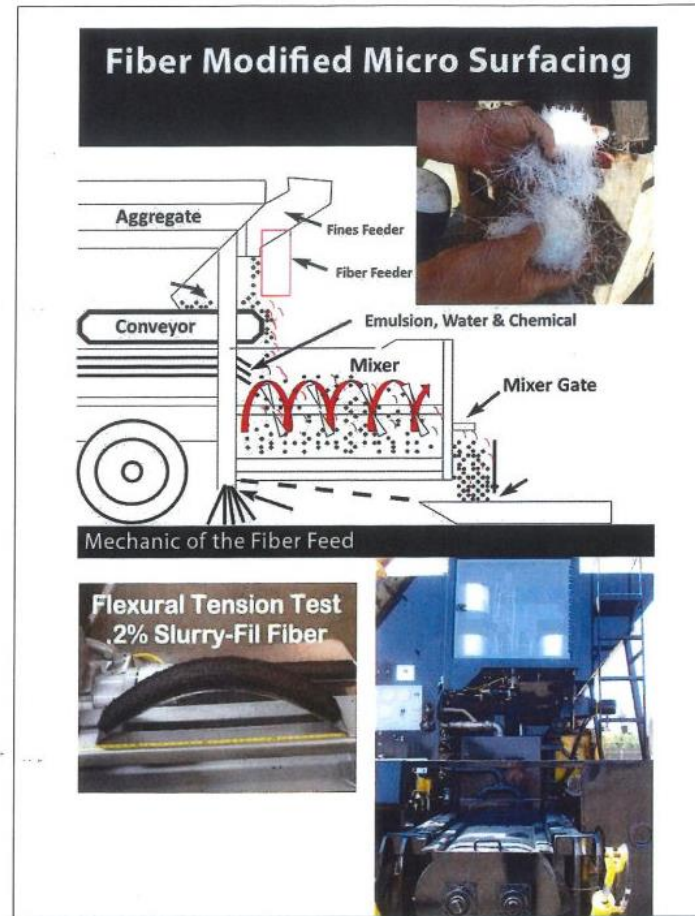
Preservation Tactics

- ❖ A third-party pavement survey company created a benchmark for the City of Scottsdale in early 2015 with an initial PCI prior to the City beginning the new process.
- ❖ This benchmark created a Pavement Condition Index and a Structural Index for all Arterial and Collector streets, the overall evaluation Produced a Pavement Condition Index of 69 and falling in 2015.
- ❖ Once the Pavement Team implemented their new plan, the results quickly began to show a reduction of phone calls for pothole requests and thermo cracking situations noticed by the residents.
- ❖ The scope of this project required placement of Type 2 and Type 3 micro surfacing on residential streets, collector streets and arterial roadways. Minor pavement and crack repairs were performed in advance of the micro surfacing application.
- ❖ VSS International, Inc. began the first application of micro surfacing in early spring of 2015, and was then awarded subsequent work orders in 2016, 2017, 2018 and 2019.
- ❖ The last job order was completed in the fall of 2019 to the full satisfaction of the City.

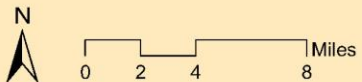
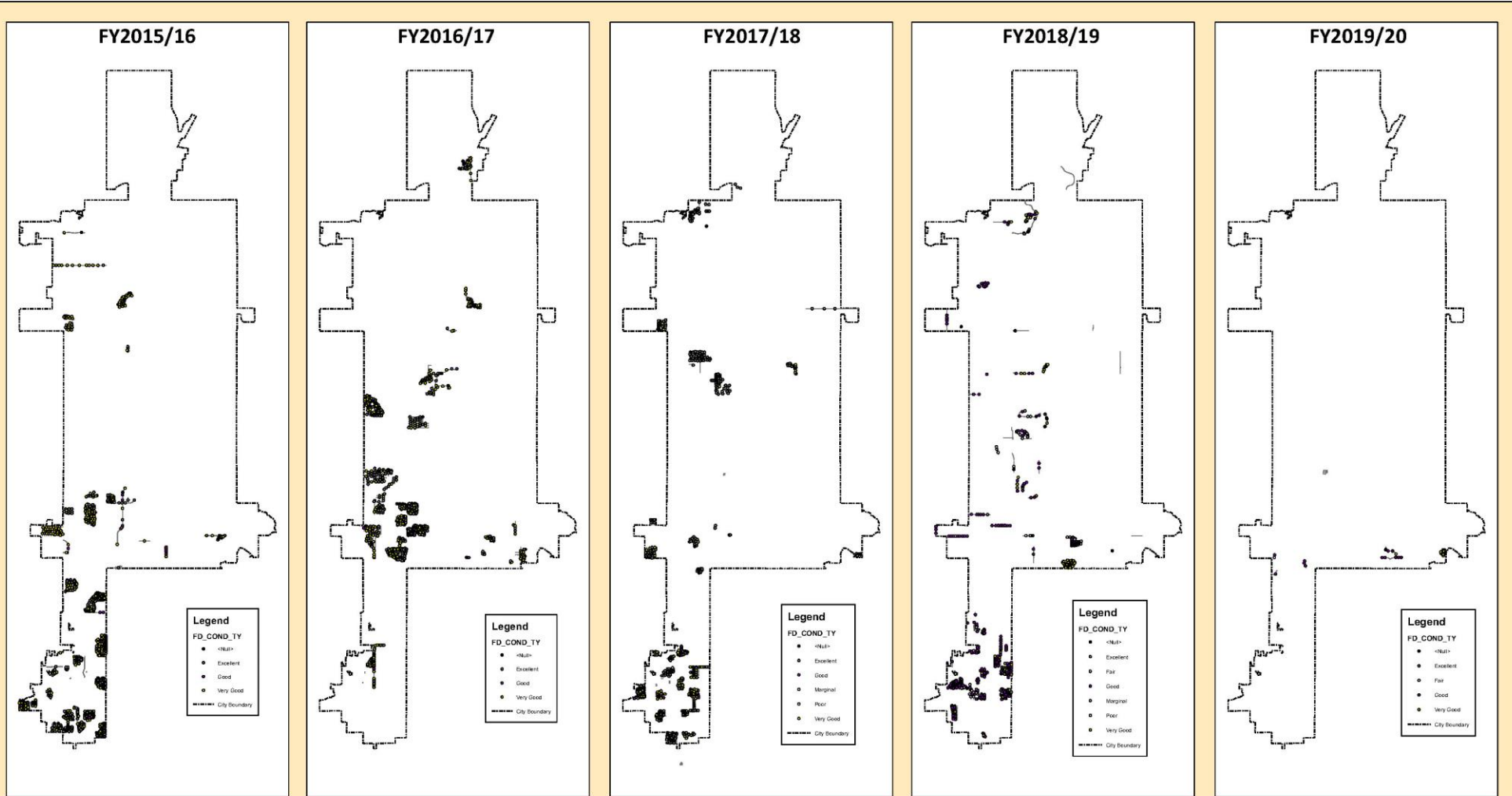


Special Feature – Fiber Reinforcement

- ❖ The scope of this project required placement of both Type 2 and Type 3 Fiber Reinforced Micro Surfacing applications on residential streets, collector streets & arterial roadways.
- ❖ One of the most outstanding feature of this project would be the innovative use of fiber reinforcement at a scale not seen anywhere else in the United States.
- ❖ The purpose of the extensive fiber reinforcement was to slow down the thermo cracking which was prevalent on many of the City's roadways.
- ❖ The City of Scottsdale has established itself as a leader in innovative pavement preservation techniques.



Project Location



FY2015/2016
5 Year Paving Treatment Starting July 1, 2015

Map Date 1-14-2020



Notice: This document is provided for general information purposes only. The City of Buckle does not warrant the accuracy, completeness, or suitability for any particular purpose. It is intended to be used as a guide only.

Agency's Life Extension Data

FY	SN_ID	SN_COM_1	SN_CLAS_1	SN_CLAS_2	SN_DATE	FD_PCI_D	FD_PCI	FD_OPCI	FD_OPCI_DT	FD_CUR_P	FD_MOD_DT	FD_MOD_TM	FD_PCL_1	FD_PCL_R	FD_COND	FD_COND_TY	FD_CRT_DTTM	FD_SURF_1	FD_SURF_2	FD_TRET_1	FD_TRET_2	SB_REHB_DT	SB_REHB_TY
FY2015/16	37135	2176305	1	Major Arte	5/1/2018	48.5	74.3	NULL	NULL	72.1	4/23/2019	12:27:00 PM	3.75625	22.03875	3	Good	10/22/2018 14:48	1	Asphalt	NULL	NULL	4/13/2016	20 Fiberseal 2 or 3
FY2015/16	37319	2176663	4	Local	5/1/2018	58.759	87.7	NULL	NULL	86.6	4/23/2019	12:28:00 PM	0	28.90518	1	Excellent	10/22/2018 14:48	1	Asphalt	NULL	NULL	12/14/2015	20 Fiberseal 2 or 3
FY2015/16	37320	2176664	4	Local	5/1/2018	57.553	83.1	NULL	NULL	82	4/23/2019	12:28:00 PM	0	25.59063	2	Very Good	10/22/2018 14:48	1	Asphalt	NULL	NULL	12/14/2015	20 Fiberseal 2 or 3
FY2015/16	37235	2176406	1	Major Arte	5/1/2018	49.3	74.4	NULL	NULL	72.2	4/23/2019	12:27:00 PM	2.725	22.39955	3	Good	10/22/2018 14:48	1	Asphalt	NULL	NULL	4/13/2016	20 Fiberseal 2 or 3
FY2015/16	37323	2176667	4	Local	5/1/2018	58.357	81.1	NULL	NULL	80	4/23/2019	12:28:00 PM	0	22.73957	2	Very Good	10/22/2018 14:48	1	Asphalt	NULL	NULL	12/14/2015	20 Fiberseal 2 or 3
FY2015/16	37324	2176668	4	Local	5/1/2018	57.821	86.8	NULL	NULL	85.7	4/23/2019	12:28:00 PM	0	28.96694	1	Excellent	10/22/2018 14:48	1	Asphalt	NULL	NULL	12/14/2015	20 Fiberseal 2 or 3
FY2015/16	37325	2176669	4	Local	5/1/2018	58.513	85.9	NULL	NULL	84.8	4/23/2019	12:28:00 PM	0	27.37851	1	Excellent	10/22/2018 14:48	1	Asphalt	NULL	NULL	12/14/2015	20 Fiberseal 2 or 3
FY2015/16	37327	2176671	4	Local	5/1/2018	57.389	83.6	NULL	NULL	82.5	4/23/2019	12:28:00 PM	0	24.89109	2	Very Good	10/22/2018 14:48	1	Asphalt	NULL	NULL	12/14/2015	20 Fiberseal 2 or 3
FY2015/16	37334	2176678	4	Local	5/1/2018	58.223	81.7	NULL	NULL	80.6	4/23/2019	12:28:00 PM	0	23.45195	2	Very Good	10/22/2018 14:48	1	Asphalt	NULL	NULL	12/14/2015	20 Fiberseal 2 or 3
FY2015/16	37335	2176679	4	Local	5/1/2018	58.692	82.7	NULL	NULL	81.6	4/23/2019	12:28:00 PM	0	24.01905	2	Very Good	10/22/2018 14:48	1	Asphalt	NULL	NULL	12/14/2015	20 Fiberseal 2 or 3
FY2015/16	37428	2176773	4	Local	5/1/2018	57.687	81.7	NULL	NULL	80.6	4/23/2019	12:28:00 PM	0	24.04262	2	Very Good	10/22/2018 14:48	1	Asphalt	NULL	NULL	12/14/2015	20 Fiberseal 2 or 3
FY2015/16	37429	2176774	4	Local	5/1/2018	56.77916	80.8	NULL	NULL	79.7	4/23/2019	12:28:00 PM	0	24.03404	2	Very Good	10/22/2018 14:48	1	Asphalt	NULL	NULL	12/14/2015	20 Fiberseal 2 or 3
FY2015/16	37430	2176775	4	Local	5/1/2018	56.7289	83	NULL	NULL	81.9	4/23/2019	12:28:00 PM	0	26.2718	2	Very Good	10/22/2018 14:48	1	Asphalt	NULL	NULL	12/14/2015	20 Fiberseal 2 or 3
FY2015/16	37432	2176777	4	Local	5/1/2018	57.871	82.1	NULL	NULL	82	4/23/2019	12:28:00 PM	0	25.38562	2	Very Good	10/22/2018 14:48	1	Asphalt	NULL	NULL	12/14/2015	20 Fiberseal 2 or 3
FY2015/16	37329																					berseal 2 or 3	
FY2015/16	37330																					berseal 2 or 3	
FY2015/16	37331																					berseal 2 or 3	
FY2015/16	37351																					berseal 2 or 3	
FY2015/16	37351																					berseal 2 or 3	
FY2015/16	37371																					berseal 2 or 3	
FY2015/16	37372																					berseal 2 or 3	
FY2015/16	37373																					berseal 2 or 3	
FY2015/16	37383																					berseal 2 or 3	
FY2015/16	37384																					berseal 2 or 3	
FY2015/16	37385																					berseal 2 or 3	
FY2015/16	37386																					berseal 2 or 3	
FY2015/16	37387																					berseal 2 or 3	
FY2015/16	37388																					berseal 2 or 3	
FY2015/16	37389																					berseal 2 or 3	
FY2015/16	37390																					berseal 2 or 3	
FY2015/16	37391																					berseal 2 or 3	
FY2015/16	37392																					berseal 2 or 3	
FY2015/16	37393																					berseal 2 or 3	
FY2015/16	37394																					berseal 2 or 3	
FY2015/16	37395																					berseal 2 or 3	
FY2015/16	37396	2176741	4	Local	5/1/2018	57.352	83.5	NULL	NULL	82.4	4/23/2019	12:28:00 PM	0	26.19142	2	Very Good	10/22/2018 14:48	1	Asphalt	NULL	NULL	12/14/2015	20 Fiberseal 2 or 3
FY2015/16	37397	2176742	4	Local	5/1/2018	57.6133	81.1	NULL	NULL	80	4/23/2019	12:28:00 PM	0	23.45195	2	Very Good	10/22/2018 14:48	1	Asphalt	NULL	NULL	12/14/2015	20 Fiberseal 2 or 3
FY2015/16	37398	2176743	4	Local	5/1/2018	57.82101	82.8	NULL	NULL	81.7	4/23/2019	12:28:00 PM	0	24.96211	2	Very Good	10/22/2018 14:48	1	Asphalt	NULL	NULL	12/14/2015	20 Fiberseal 2 or 3
FY2015/16	37399	2176744	4	Local	5/1/2018	57.5664	81.4	NULL	NULL	80	4/23/2019	12:28:00 PM	0	23.51019	2	Very Good	10/22/2018 14:48	1	Asphalt	NULL	NULL	12/14/2015	20 Fiberseal 2 or 3
FY2015/16	37400	2176745	4	Local	5/1/2018	57.218	84.3	NULL	NULL	83.2	4/23/2019	12:28:00 PM	0	27.08889	2	Very Good	10/22/2018 14:48	1	Asphalt	NULL	NULL	12/14/2015	20 Fiberseal 2 or 3
FY2015/16	37410	2176755	4	Local	5/1/2018	58.5044	86	NULL	NULL	84.9	4/23/2019	12:28:00 PM	0	27.54406	1	Excellent	10/22/2018 14:48	1	Asphalt	NULL	NULL	12/14/2015	20 Fiberseal 2 or 3
FY2015/16	37411	2176756	4	Local	5/1/2018	57.754	80	NULL	NULL	78.9	4/23/2019	12:28:00 PM	0	22.26807	2	Very Good	10/22/2018 14:48	1	Asphalt	NULL	NULL	12/14/2015	20 Fiberseal 2 or 3
FY2015/16	37415	2176760	4	Local	5/1/2018	58.4575	85.8	NULL	NULL	84.7	4/23/2019	12:28:00 PM	0	27.37393	1	Excellent	10/22/2018 14:48	1	Asphalt	NULL	NULL	12/14/2015	20 Fiberseal 2 or 3
FY2015/16	37416	2176761	4	Local	5/1/2018	56.98015	79.3	NULL	NULL	78.2	4/23/2019	12:28:00 PM	0	23.32456	2	Very Good	10/22/2018 14:48	1	Asphalt	NULL	NULL	12/14/2015	20 Fiberseal 2 or 3
FY2015/16	37417	2176762	4	Local	5/1/2018	57.62	79.8	NULL	NULL	78.7	4/23/2019	12:28:00 PM	0	22.209	2	Very Good	10/22/2018 14:48	1	Asphalt	NULL	NULL	12/14/2015	20 Fiberseal 2 or 3
FY2015/16	37418	2176763	4	Local	5/1/2018	57.888	80.2	NULL	NULL	79.1	4/23/2019	12:28:00 PM	0	22.32648	2	Very Good	10/22/2018 14:48	1	Asphalt	NULL	NULL	12/14/2015	20 Fiberseal 2 or 3
FY2015/16	37419	2176764	4	Local	5/1/2018	56.88301	81.8	NULL	NULL	80.7	4/23/2019	12:28:00 PM	0	24.87878	2	Very Good	10/22/2018 14:48	1	Asphalt	NULL	NULL	12/14/2015	20 Fiberseal 2 or 3
FY2015/16	37420	2176765	4	Local	5/1/2018	58.0354	80.4	NULL	NULL	79.3	4/23/2019	12:28:00 PM	0	22.88997	2	Very Good	10/22/2018 14:48	1	Asphalt	NULL	NULL	12/14/2015	20 Fiberseal 2 or 3
FY2015/16	37421	2176766	4	Local	5/1/2018	57.888	80.2	NULL	NULL	79.1	4/23/2019	12:28:00 PM	0	22.32648	2	Very Good	10/22/2018 14:48	1	Asphalt	NULL	NULL	12/14/2015	20 Fiberseal 2 or 3
FY2015/16	37422	2176767	4	Local	5/1/2018	57.754	84.2	NULL	NULL	83.1	4/23/2019	12:28:00 PM	0	26.49246	2	Very Good	10/22/2018 14:48	1	Asphalt	NULL	NULL	12/14/2015	20 Fiberseal 2 or 3
FY2015/16	37423	2176768	4	Local	5/1/2018	57.821	80.1	NULL	NULL	79	4/23/2019	12:28:00 PM	0	22.29736	2	Very Good	10/22/2018 14:48	1	Asphalt	NULL	NULL	12/14/2015	20 Fiberseal 2 or 3
FY2015/16	37424	2176769	4	Local	5/1/2018	58.357	80.9	NULL	NULL	79.8	4/23/2019	12:28:00 PM	0	22.52572	2	Very Good	10/22/2018 14:48	1	Asphalt	NULL	NULL	12/14/2015	20 Fiberseal 2 or 3
FY2015/16	37425	2176770	4	Local	5/1/2018	58.759	81.4	NULL	NULL	80.3	4/23/2019	12:28:00 PM	0	22.69006	2	Very Good	10/22/2018 14:48	1	Asphalt	NULL	NULL	12/14/2015	20 Fiberseal 2 or 3
FY2015/16	37426	2176771	4	Local	5/1/2018	58.424	82.7	NULL	NULL	81.6	4/23/2019	12:28:00 PM	0	24.31613	2	Very Good	10/22/2018 14:48	1	Asphalt	NULL	NULL	12/14/2015	20 Fiberseal 2 or 3
FY2015/16	37427	2176772	4	Local	5/1/2018	58.558	85.9	NULL	NULL	84.8	4/23/2019	12:28:00 PM	0	27.31754	1	Excellent	10/22/2018 14:48	1	Asphalt	NULL	NULL	12/14/2015	20 Fiberseal 2 or 3
FY2015/16	37433	2176778	4	Local	5/1/2018	57.754	83.2	NULL	NULL	82.1	4/23/2019	12:28:00 PM	0	25.48806	2	Very Good	10/22/2018 14:48	1	Asphalt	NULL	NULL	12/14/2015	20 Fiberseal 2 or 3
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FY2015/16	37435	2176780	4	Local	5/1/2018	57.687	82.2	NULL	NULL	81.1	4/23/2019	12:28:00 PM	0	24.52001	2	Very Good	10/22/2018 14:48	1	Asphalt	NULL	NULL	12/14/2015	20 Fiberseal 2 or 3
FY2015/16	37436	2176781	4	Local	5/1/2018	58.357	86.6	NULL	NULL	85.5	4/23/2019	12:28:00 PM	0	28.20664	1	Excellent	10/22/2018 14:48	1	Asphalt	NULL	NULL	12/14/2015	20 Fiberseal 2 or 3
FY2015/16	37437	2176782	4	Local	5/1/2018	58.0823	80.5	NULL	NULL	79.4	4/23/2019	12:28:00 PM	0	22.41	2	Very Good	10/22/2018 14:48	1	Asphalt	NULL	NULL	12/14/2015	20 Fiberseal 2 or 3
FY2015/16	37446	2176792	4	Local	5/1/2018	57.955	84.8	NULL	NULL	83.4	4/23/2019	12:28:00 PM											

Agency's Life Extension Data

Year of Service:	Avg PCI: (Treated Roadways)	Avg PCI (Network)	PCI Category:	Reactive Maintenance:
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Prior to Program		65 -75 +/-	Fair / Good	As Required
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2015	83.24		Very Good / Excellent	No
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2016	83.97		Very Good / Excellent	No
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2017	88.04	77.4	Very Good / Excellent	No
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2018	82.12	79.2	Very Good / Excellent	No
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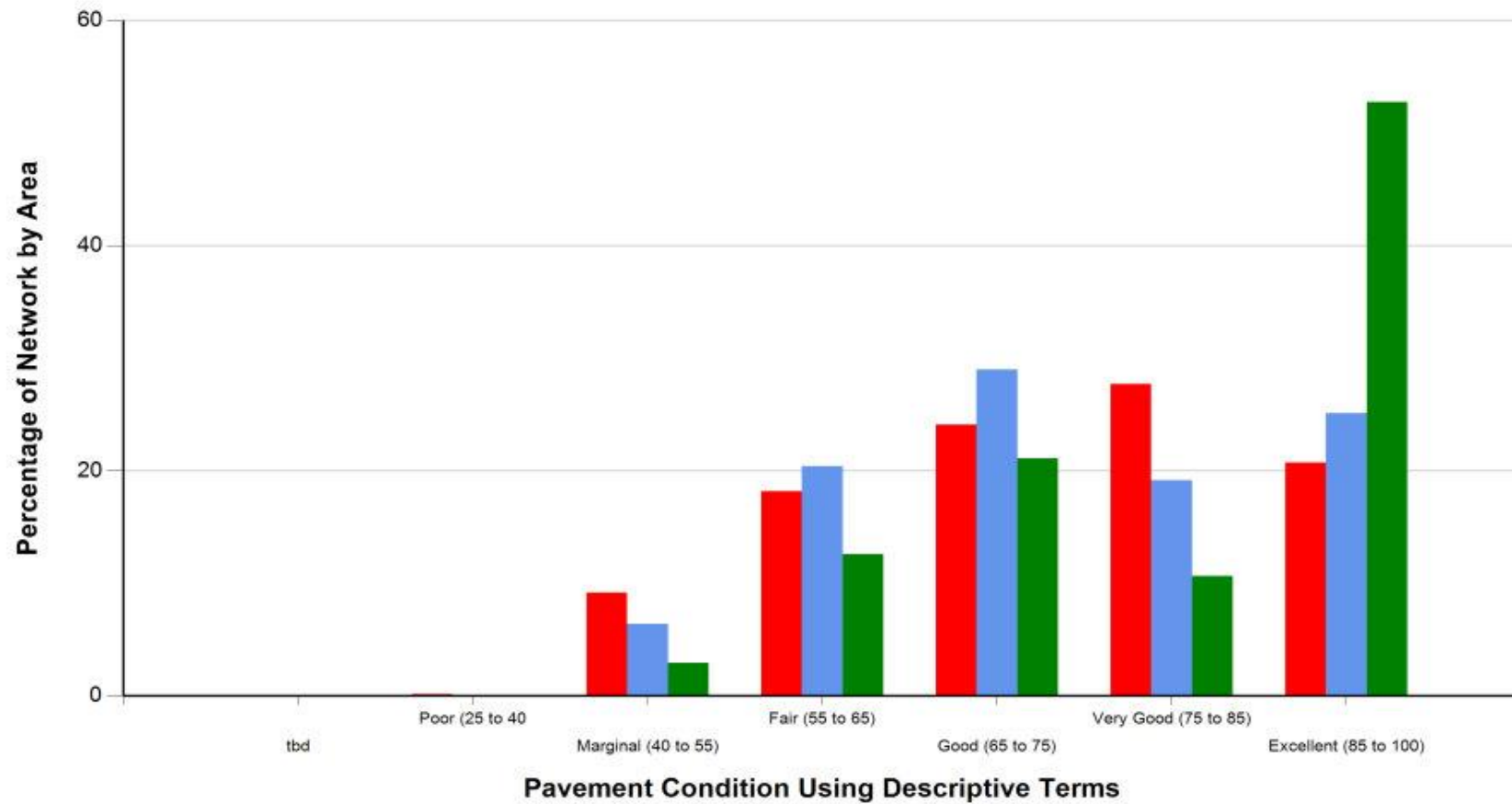
2019	78.8	78.8	Very Good / Excellent	No
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City of Scottsdale

Pavement Condition Using Descriptive Terms by Functional Class Group

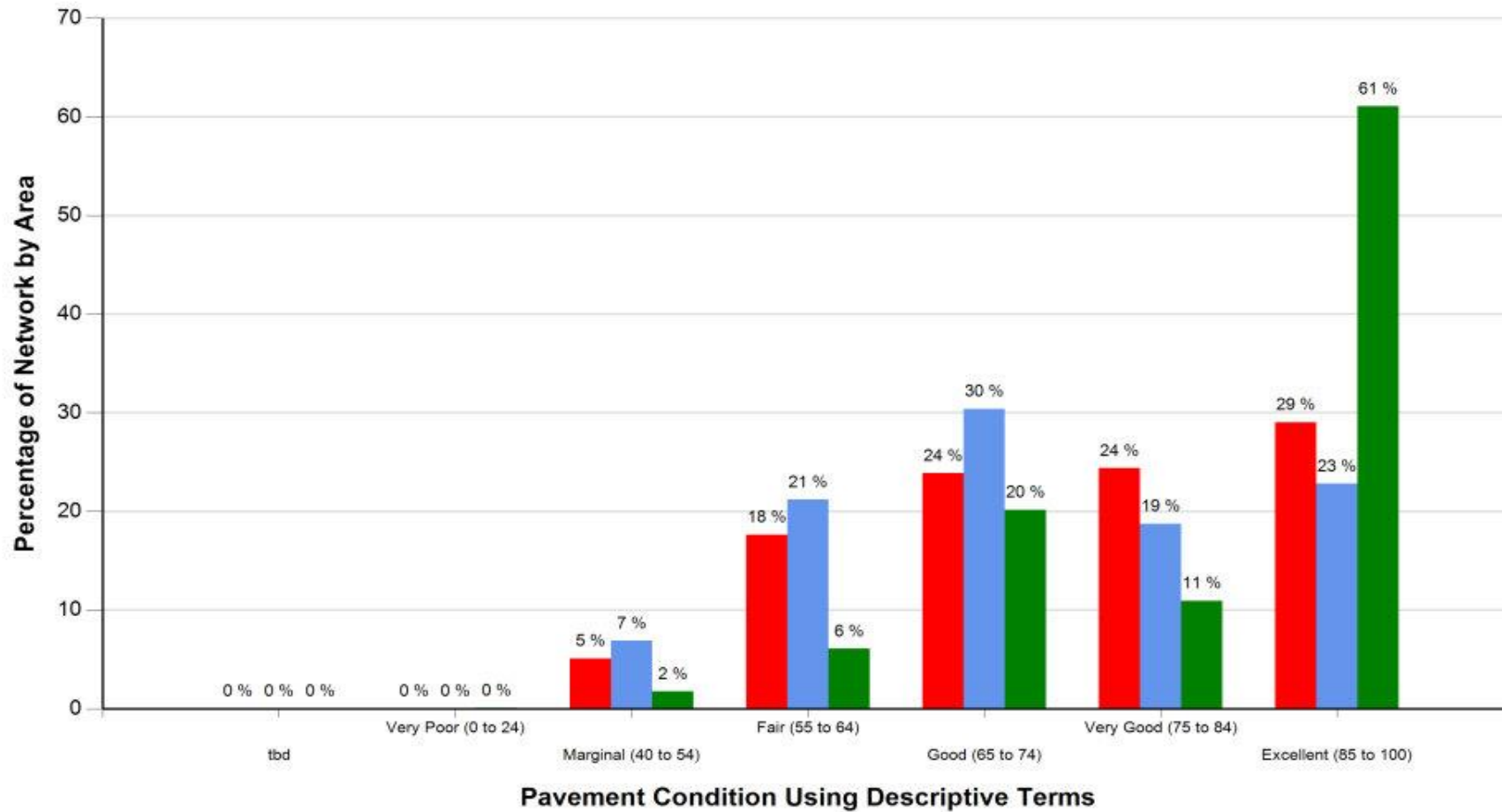
Functional Class	Average Condition as of August 01, 2017
NETWORK	77.4
ARTERIAL	73.3
COLLECTOR	74.5
LOCAL	80.5



City of Scottsdale

Pavement Condition Using Descriptive Terms by Functional Class Group

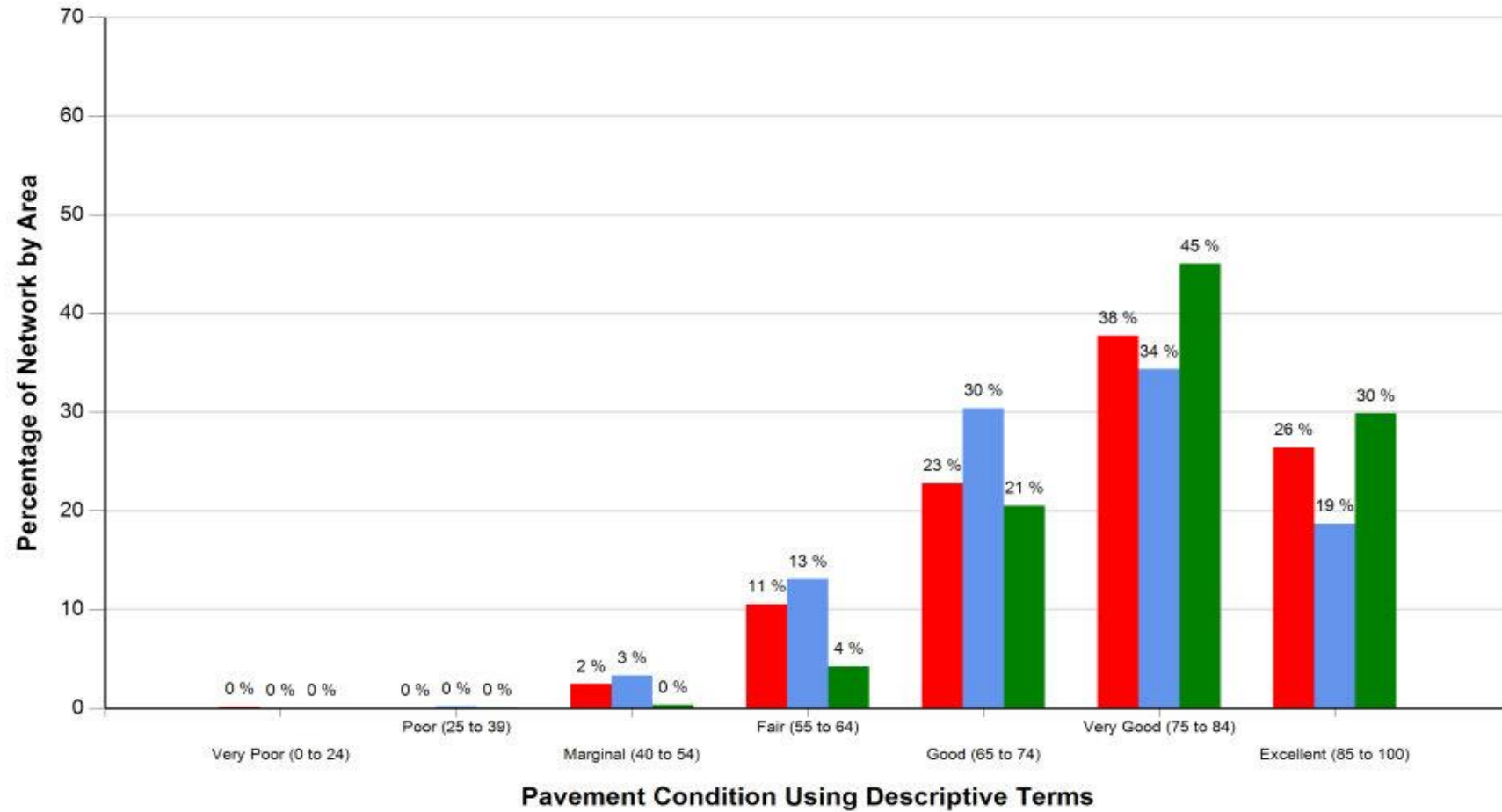
Functional Class	Average Condition as of July 02, 2018
NETWORK	79.2
ARTERIAL	76.4
COLLECTOR	73.8
LOCAL	82.5



City of Scottsdale

Pavement Condition Using Descriptive Terms by Functional Class Group

Functional Class	Average Condition as of January 14, 2020
NETWORK	78.8
ARTERIAL	77.3
COLLECTOR	75.3
LOCAL	80.7



Key Performance Criteria Met:

Life Extension Proved By:

Preservation of ride and aesthetic quality over a 5+ year term without need of major reactive maintenance



Live extension over a 5+ year term as shown by PCI



Rehabilitation and Life extension with the use of preservation products resulting with an increased PCI into the good category which has been maintained for a 5+ year term



Results & Conclusions

- ❖ In December of 2018 the City embarked on a new evaluation of the entire road network after 4 years of pavement preservation. The results of this survey confirmed that the City's network had returned to an astonishing Pavement Condition Index of 80+.
- ❖ The City's roadway network has continued to show substantial improvement through the 5th year of the program and this project is worthy of this award in that it proves the long-term performance and network enhancement of Pavement Preservation
- ❖ Both the ride and aesthetic quality of the City's streets have been preserved for 5+ years without the need for major reactive maintenance
- ❖ Life extension has been shown over 5+ years as shown by PCI improvements during the term of the contract.
- ❖ The treatments chosen by the City of Scottsdale increased the network's PCI into the good category and maintained it for a 5+ year term
- ❖ All Pavement Preservation activities (Micro surfacing and crack treatment) performed on this project are represented by the ISSA
- ❖ All Pavement Preservation activities on this project were performed by VSS International, Inc. who is a member in good standing.
- ❖ The City of Scottsdale is very satisfied with the contractor and the end results of the project



Owner Satisfaction & Acceptance



ASPHALT & MAINTENANCE / PUBLIC WORKS

Craig Hanson, Street Operations Manager

9191 E San Salvador Dr

Scottsdale, AZ 85258

PHONE 480-312-5665

WEB ScottsdaleAZ.gov

February 26, 2019

VSS International
3785 Channel Drive
West Sacramento CA, 95691

RE: Fiber Microsurfacing Reference Letter

To Whom It May Concern,

The City of Scottsdale Arizona is pleased to support VSS International in the placement of Fiberized Microsurfacing. The City of Scottsdale is very committed to maintaining the neighborhoods and pavements in our communities. Using innovative methods such as fiber in the microsurface has proven to preserve the pavement life and has been a key component to our success.

VSS International was the low bidder on our 2015 Pavement Preservation & Surface Treatment Services Project. This project has a 4-year renewable clause in place. We have been pleased to renew this contract each year and look forward to another successful year in 2019!

We find that VSS International works quickly and responsibly. They have always coordinated well with our residents in a timely manner and restored access expediently.

VSSI has shown professionalism and skill time and time again. This project has been a good reflection of their work and the City and residents are pleased with the outcome.

Sincerely,

Craig Hanson

City of Scottsdale



Project Photo Gallery

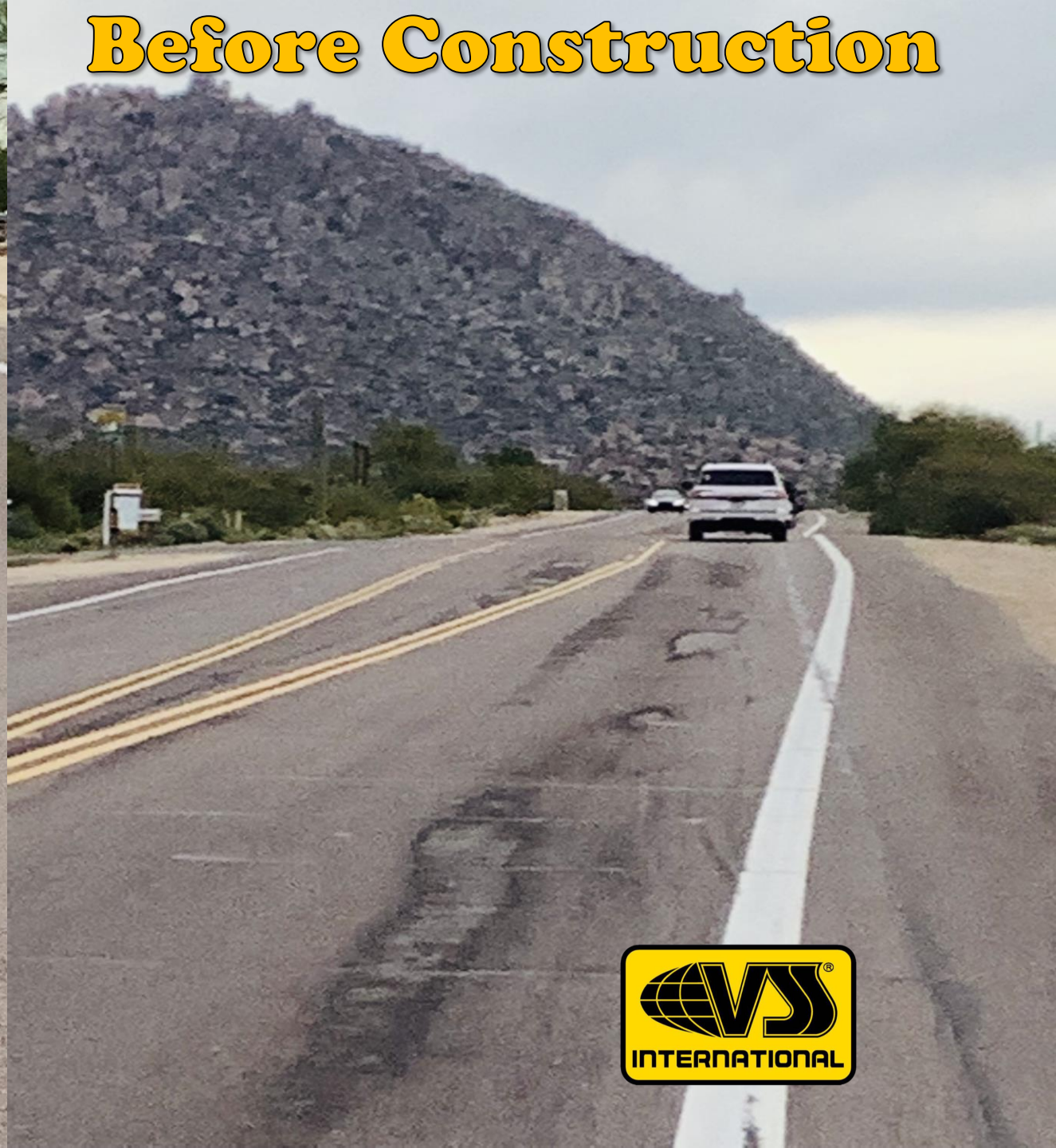


Before Construction





Before Construction



During Construction



During Construction



Upon Completion



Upon Completion



Upon Completion

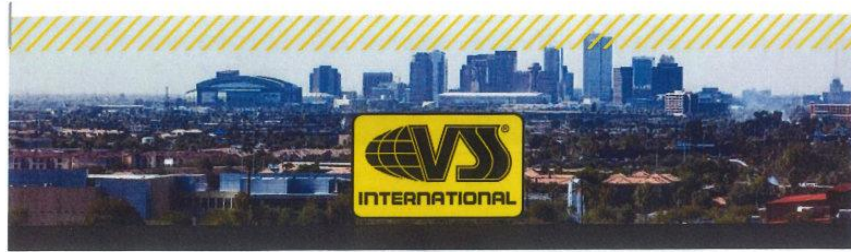




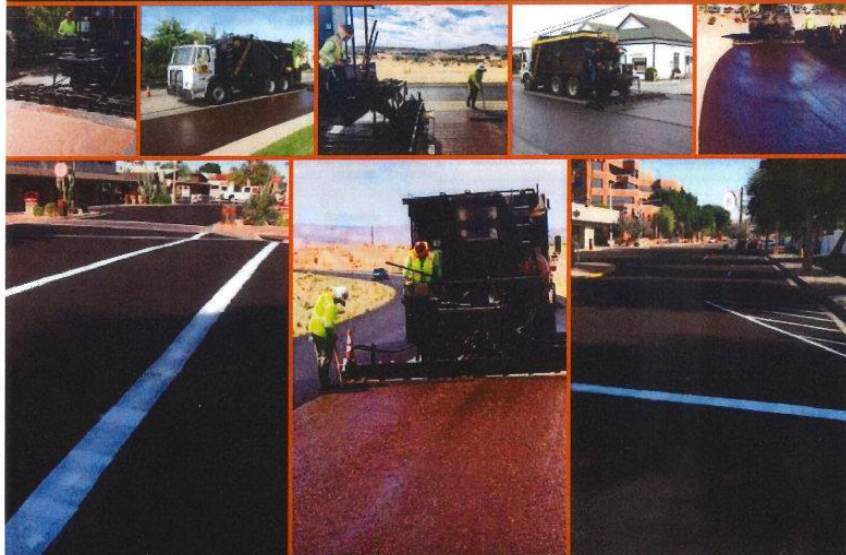
Upon Completion



Local Recognition by AZAGC



2020 AZAGC Build Arizona Awards



PAVEMENT PRESERVATION SPECIALISTS

VSS International, Inc. ▶ 6751 W. Galveston Street, Chandler, AZ 85226 ▶ Phone: (480) 940-9690 ▶ Fax: (480) 961-0766

The City of Scottsdale's Pavement Preservation & Treatment project was the recent recipient of the 2020 Arizona Association of General Contractors Build Arizona Award for Pavement Preservation



*Thank you for your
consideration
of this nomination*





*Safely Maintaining America's Roadways
Since 1919*

