

Unpaved Road Control Measure Feedback

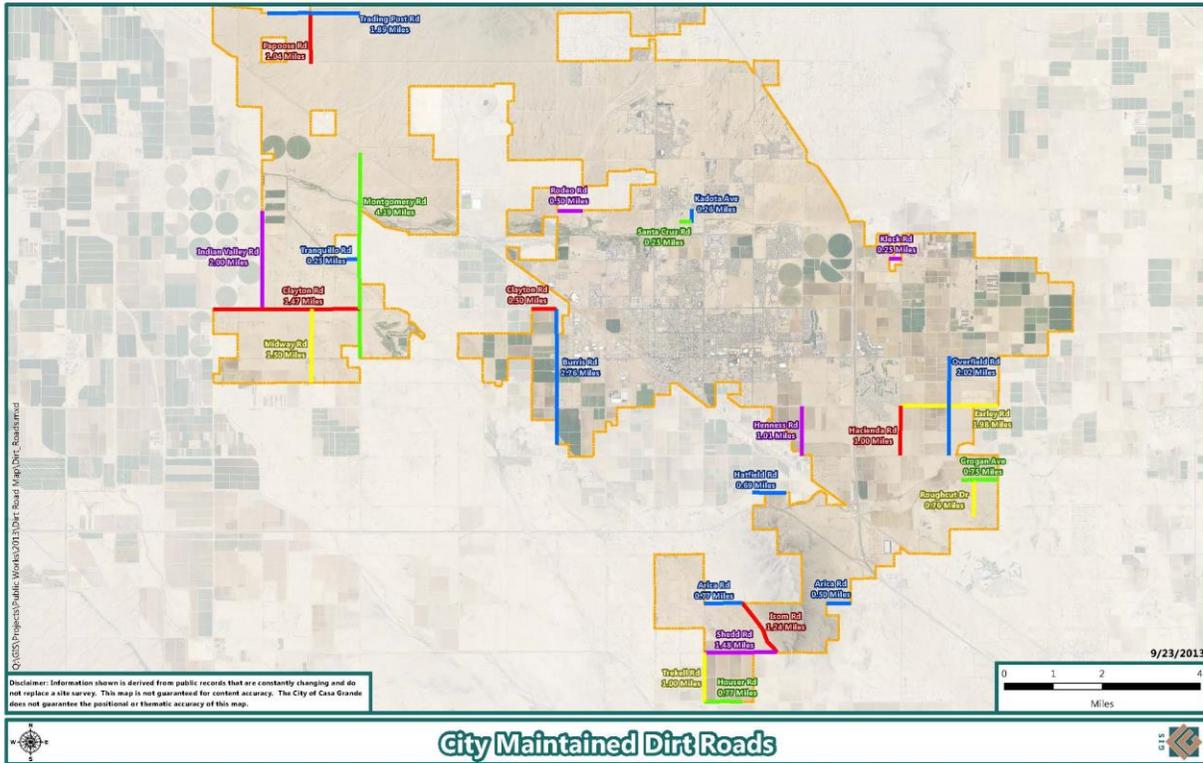
The following agencies have provided unpaved road information. This information can be found in the subsections on subsequent pages.

- City of Casa Grande*
- City of Maricopa*
- Pinal County*
- Apache Junction – Informed ADEQ that all roads in Pinal County are paved

*Information provided by these agencies requires further clarification.

City of Casa Grande

*It is unclear if the following map is only unpaved roadways within the city limits, or unpaved roadways within the city limits which may have some controls applied to them. Some questions were sent to Casa Grande trying to clarify some of these issues and ADEQ is currently awaiting a response.



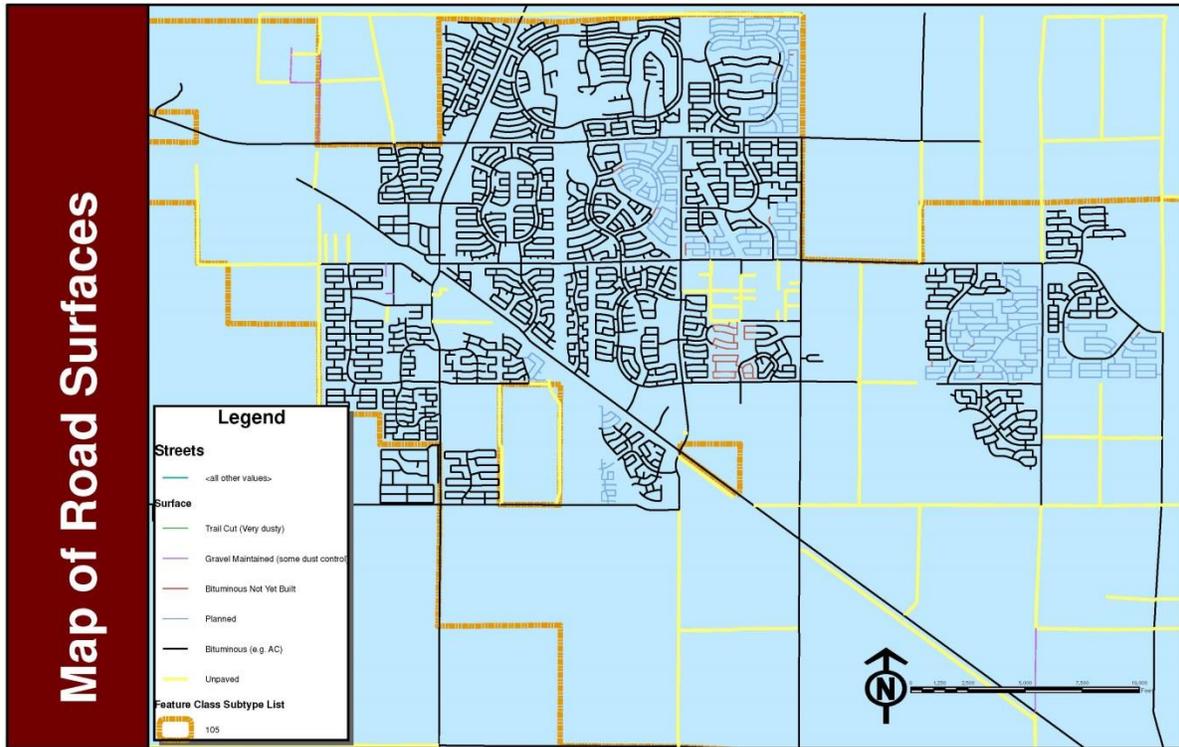
City of Maricopa

The City of Maricopa provided the following information on unpaved roads on October 9th. Further clarification is needed regarding unpaved roads within the Cowtown monitor modeling domain and any planned unpaved road projects for the next 5 years. ADEQ has also requested electronic versions of the maps shown in the following figures. ADEQ is currently awaiting a response.

As of September 17, 2009:

- Disclosure Stipulation is required: Subdivision developers are required to post a Disclosure at subdivision entrance or to require the home buyer to sign a Disclosure Stipulation at closing of a sale noting proximity of railroads, crop dusting, cattle and farming operations (activities that could generate complaints to the city by residents)
- In 2009, paving 2 miles of dirt roads every month
- Negotiated dust control improvements with garbage removal contractors to end speeding, achieve covered loads, and reroute truck traffic
- Lot Sale Prohibition Agreements: Subdivision developers that have graded pads to develop but are on hiatus due to the recession can enter an agreement to prevent trespass by posting signs and adding barriers, in exchange for permission to drop bonds to complete sewer and related services. No lot sales are allowed if bonds have been dropped. City can confiscate Off Highway Vehicles that trespass. Developer must also pave parking lots, cover the graded area with vegetation that must be mowed if it exceeds 6 inches, or restore the land to agriculture. Developer must return to the City Development Services and obtain bonds before being authorized to sell lots.
- Dustproofing shoulders
- Require all new parking lots and driveways into them to be paved as part of the permit application process

The following map shows road surfaces for the City of Maricopa owned and maintained roadways within the Maricopa and Cowtown modeling domains.



The follow Table is a list of unpaved roads maintained by the City of Maricopa in the Cowtown and Maricopa modeling domains.

Unpaved Roads	Road Name	Origin	Terminus	Miles
1.	Farrell Road	M-CG Hwy	White & Parker Rd	0.5
2.	Farrell Road	White & Parker Rd	Murphy Rd	3
3.	Steen Road	Murphy Rd	Anderson Rd	1
4.	Anderson Road	Steen Rd	Jarrett Rd	0.5
5.	Saddleback Vista Avenue	Steen Rd	Jarrett Rd	0.5
6.	Peters & Nall Road	Murphy Rd	Anderson Rd	1
7.	Hartman Road	M-CG Hwy	Farrell Rd	2
8.	Hartman Road	Sorento Develop	Farrell Rd	0.25
9.	Porter Road	Farrell Rd	Peter & Nalls Rd	2
10.	Peters & Nall Road	Hartman Rd	White & Parker Rd	2
11.	Murphy Road	Honeycutt Rd	Gila River Res	2
12.	Anderson Rd	Peters & Nall Rd	M/CG Hwy	1
13.	Seven Ranch Area	Gunsmoke Rd	Whisker Rd	1
			Total Miles	16.75

The following Table gives cost estimates for control measures.

Water cost for grading & watering is \$4,200 per year.
Roads are graded & watered a minimum of once a month.
Farrell, Steen & Porter Rds are usually graded & watered twice a month depending on farmers use.
Extra watering is done when farmers are hauling out of fields.

The following Table outlines the current or prior dust control projects the City of Maricopa has undertaken on unpaved roads.

Dust Control Projects			
Year	Location	Description	Length
2007	Hartman Rd north of Honeycutt Rd	Chip Seal	.5 miles
2009	Farrell Rd - Porter Rd to Palo Brea Development	Double Chip Seal	2.5 miles
2011	Plainview Ave extension beyond AC	Millings	0.1miles
2012	Roosevelt Ave & Lexington Ave	Millings	0.2 miles
2012	Alley behind Circle K	Millings	.25 miles
2012	Hamilton Ave	Millings	0.2 mile
2012	Whisker Rd from AC to Seven Ranch Rd.	Millings	.25 miles
2012	Bowlin Rd off pavement to Dump Site	Millings	.25 miles
2013	Hartman Rd north of Honeycutt Rd	Millings over Chips	.25 miles
		Total	4.5 miles

Pinal County

The following table shows county roads which Scott Bender identified as “the roads that had various dust palliatives applied in the 2009/2010 timeframe”. We will need to clarify what types of dust palliatives were used.

Road	Origin	Terminus	Length
Curry Rd	Selma Hwy	North 1.5 miles	1.5
Curry Rd	SR 287	Kleck Rd	2
Tweedy Rd	Selma Hwy	Randolph Rd	5
Tweedy Rd	Lake Powell Rd	Windsor Rd	0.5
Sunshine Blvd	0.5 miles south of SR 287	Kleck Rd	2.5
La Palma Rd	Hanna Rd	Cornman Rd	1
La Palma Rd	Selma Hwy	Earley Rd	1
La Palma Rd	SR 287	0.5 miles north of Kleck Rd	2.5
Hanna Rd	Curry Rd	La Palma Rd	4
Storey Rd	Curry Rd	0.5 miles east of Tweedy Rd	1.5
Storey Rd	Eleven Mile Corner Rd	SR 87	3
Kleck Rd	Signal Peak Rd	Tweedy Rd	2
Kleck Rd	Sunshine Blvd	0.75 miles east of La Palma Rd	1.75
Total			28.25

The following tables are unpaved road control measures (chip sealing) that were applied between July 1, 2010 and June 30th, 2013. Additional information is needed regarding planned projects for the next five years.

District 1 Heavy Maintenance Projects					
Project #	Road Name	ARDP (Application Date)	ARDP (Miles)	Final Chip Seal (Application Date)	Final (Miles)
6711159	Suizo Road North	4/20/2011	1.15	6/22/2011	1.15
6711185	Suizo Road South	4/21/2011	1.15	6/23/2011	1.15
6511172	Storey Road (Eleven Mile Corner to Sunshine)	See Notes Below	-	-	-
6511173	Storey Road (Sunshine to La Palma)	See Notes Below	-	-	-
6511174	Storey Road (La Palma to SR287)	See Notes Below	-	-	-
6511168	Silverbell Estates	9/30/2010	1.00	Slurry Seal	-

District 1 Heavy Maintenance Projects

Project #	Road Name	ARDP (Application Date)	ARDP (Miles)	Final Chip Seal (Application Date)	Final (Miles)
	(Capricorn & Zodiac)			Completed October, 2010 by Contractor	
6511169	Silverbell Estates (Moon Child Ave.)	9/30/2010	1.49	Slurry Seal Completed October, 2010 by Contractor	-
6511170	Silverbell Estates (Taurus Ave.)	10/6/2010	1.49	Slurry Seal Completed October, 2010 by Contractor	-
6511171	Silverbell Estates (Hydrous Ave.)	10/6/2010	1.28	Slurry Seal Completed October, 2010 by Contractor	-
6511175	Linda Vista Road	7/1/2010	0.60	7/29/2010	0.60
6621102	West Price Road	8/31/2011	1.00	10/5/2011	1.00
6621157	East Price Road	8/31/2011	1.15	10/5/2011	1.15
6511157	Attaway Road (Star View Road South to Bartlett Road)	9/1/2011	1.50	10/17/2011	1.50
6511184	Martin Road (Nafziger Road East to Attaway Road)	9/8/2011	1.00	10/13/2011	1.00
6511184	Martin Road (Christensen Road East for 2,000')	9/8/2011	0.38	10/13/2011	0.38
6511184	Nafziger Road (Kenilworth Road South for 600')	9/8/2011	0.11	10/13/2011	0.11
6511201	Hanna Road (La Palma Road to Sunshine Road)	8/30/2012	1.00	Final Chip Seal Completed Under Maintenance Contract	0.00
6511178	Hanna Road (Sunshine Road to Eleven Mile Corner)	8/30/2012	1.00	Final Chip Seal Completed Under Maintenance Contract	0.00
6511193	Hanna Road (Eleven Mile Corner to Tweedy Road)	8/23/2012	1.00	Final Chip Seal Completed Under Maintenance Contract	0.00

District 1 Heavy Maintenance Projects

Project #	Road Name	ARDP (Application Date)	ARDP (Miles)	Final Chip Seal (Application Date)	Final (Miles)
6511194	Hanna Road (Tweedy Road to Estrella Road)	8/23/2012	1.00	Final Chip Seal Completed Under Maintenance Contract	0.00
6511195	Harmon Road (Sunshine Road to La Palma Road)	7/24/2012	1.00	Final Chip Seal Completed Under Maintenance Contract	0.00
6511196	Harmon Road (La Palma Road to Barrett Road)	7-24-2012 & 7-26-2012	1.00	Final Chip Seal Completed Under Maintenance Contract	0.00
6511197	Harmon Road (Barrett Road to Picacho Hwy)	7/26/2012	1.00	Final Chip Seal Completed Under Maintenance Contract	0.00
6511172	Storey Road (11-Mile Corner Road East for 1.5 Miles)	7/12/2012	1.50	9/25/2012	1.50
6511174	Storey Road (State Route 87 West for 1.5 Miles)	7/17/2012	1.50	7/19/2012	1.50
60651192	HoHoKam (Wee Jog to Orville)	4/24/2013	0.50	Final Chip Seal Completed in Fiscal Year 2013-2014	
60651191	Orville (HoHoKam to Biznaga)	4/24/2013	0.50	Final Chip Seal Completed in Fiscal Year 2013-2014	
60651183	Biznaga (Orville to Pinebrook)	4/24/2013	1.00	Final Chip Seal Completed in Fiscal Year 2013-2014	
Total ARDP miles completed by Construction Crew:			25.30		
Total Chip Seal miles completed by Construction Crew:					11.04

District 2 Heavy Maintenance Projects

Project #	Road Name	ARDP (Application Date)	ARDP (Miles)	Final Chip Seal (Application Date)	Final (Miles)
6621144	Apache Junction Roads (NE)	5/12/2011	0.81	6/29/2011	0.81
6621147	Apache Junction Roads (SE)	5/19/2011	0.81	6/30/2011	0.81
6621148	Friend Road	5/24/2011	0.44	Projected Completion is July, 2011	-
6621150	Wardance Circle	5/25/2011	0.36	Projected Completion is July, 2011	-
6621134	Wild Horse Estates	11/10/2010	0.65	Slurry Seal Completed November 2010 by Contractor	-
6621136	Judd Road	10/26/2010	1.00	Final Chip Seal Completed under Maintenance Contract	-
6621132	Apache Junction Roads (Section 12)	9/23/2010	1.06	Final Chip Seal Completed under Maintenance Contract	-
6621133	Apache Junction Roads (Sections 13 & 14)	9/16/2010	0.52	Final Chip Seal Completed under Maintenance Contract	-
6621148	Friend Road			7/6/2011	0.44
6621150	Wardance Circle			7/6/2011	0.36
6621132	Saddlebutte Wash Crossing (Between Wolverine & Tomahawk)	9/13/2012	0.03	Final Chip Seal Completed Under Maintenance Contract	0.00
6621132	Moon Vista Wash Crossing (Between Wolverine & Tomahawk)	9/13/2012	0.02	Final Chip Seal Completed Under Maintenance Contract	0.00
6621132	14th Ave (Sixshooter to End	9/13/2012	0.22	Final Chip Seal	0.00

District 2 Heavy Maintenance Projects

Project #	Road Name	ARDP (Application Date)	ARDP (Miles)	Final Chip Seal (Application Date)	Final (Miles)
	of Pavement)			Completed Under Maintenance Contract	
6621132	Kaniksu & Whiteley St Wash Crossings (Between Deleware Drive & Grand Drive)	9/13/2012	0.04	Final Chip Seal Completed Under Maintenance Contract	0.00
6621132	Boyd Road Wash Crossing (Between Cody Street & Scenic Street)	9/13/2012	0.03	Final Chip Seal Completed Under Maintenance Contract	0.00
6621132	10th, 14th & 26th Avenue Wash Crossings (Between Mountain View & Geronimo)	9/13/2012	0.16	Final Chip Seal Completed Under Maintenance Contract	0.00
6621144	Pioneer Road (Geronimo East for 0.08 Miles)	9/13/2012	0.09	Final Chip Seal Completed Under Maintenance Contract	0.00
6621149	Virgil Road (Varnum Road to Edwards Road)	9/27/2012	0.27	10/18/2012	0.27
6621149	Edwards Road (Virgil Road to Judd Road)	9/27/2012	0.76	10/18/2012	0.76
6621149	Daniel Road Wash Crossing (Between Gary Road & Rocky Road)	9/27/2012	0.04	10/18/2012	0.04
6621135	Shadow Lane (Pinto Lane to Sierra Vista Road)	8-7-12 & 8-9-12	0.16	10-3-12 & 10-4- 12	0.16
6621135	Pinto Lane (Shadow Lane to Preakness Drive)	8-7-12 & 8-9-12	0.11	10-3-12 & 10-4- 12	0.11
6621135	Santa Clara Drive (Sierra Vista Road to Camino Largo)	8-7-12 & 8-9-12	0.17	10-3-12 & 10-4- 12	0.17
6621135	Red Bird Lane (Sierra Vista Road to Camino Largo)	8-7-12 & 8-9-12	0.21	10-3-12 & 10-4- 12	0.21
6621135	Vista Grande Drive (Sierra Vista Road to Camino Largo)	8-7-12 & 8-9-12	0.25	10-3-12 & 10-4- 12	0.25
6621135	Camino Largo (Skyline Drive	8-7-12 & 8-9-12	0.44	10-3-12 & 10-4-	0.44

District 2 Heavy Maintenance Projects					
Project #	Road Name	ARDP (Application Date)	ARDP (Miles)	Final Chip Seal (Application Date)	Final (Miles)
	to Santa Rita Drive)			12	
Total ARDP miles completed by Construction Crew:			8.65		
Total Chip Seal miles completed by Construction Crew:					4.83

District 3 Heavy Maintenance Projects					
Project #	Road Name	ARDP (Application Date)	ARDP (Miles)	Final Chip Seal (Application Date)	Final (Miles)
6731143	Hidden Valley Estates Unit #7 West	6/22/2011	0.97	Projected Completion is August, 2011	-
6731151	Hidden Valley Estates Unit #7 East	6/23/2011	0.96	Projected Completion is August, 2011	-
6731127	Farrell Road (Warren to Hidden Valley)	9/2/2010	1.00	10/12/2010	1.00
6731131	Hidden Valley Road (Farrell to Bowlin)	9/2/2010	1.00	10/12/2010	1.00
6731132	Hidden Valley Road (Bowlin to McDavid)	9/2/2010	1.04	10/12/2010	1.04
6731136	Hidden Valley Road (Papago to Amigos)	8/12/2010	0.56	10/12/2010	0.56
6731137	Hidden Valley Road (Amigos to Steen)	8/12/2010	1.04	10/13/2010	1.04
6731138	Hidden Valley Road (Steen to Farrell)	8/12/2010	1.08	10/13/2010	1.08
6731142	Farrell Road (Hidden Valley to Stone Bluff)	9/9/2010	0.66	10/13/2010	0.66
6731141	Hanna Road (Trekell to Passmore)	9/27/2010	0.74	10/19/2010	0.74
6731143	Hidden Valley Estates Unit #7 West			9/19/2011	0.97
6731151	Hidden Valley Estates Unit #7 East			9/20/2011	0.96
6731113	Blanco Road (Val Vista Road North to Hopi	7/14/2011	0.50	9/22/2011	0.50

District 3 Heavy Maintenance Projects

Project #	Road Name	ARDP (Application Date)	ARDP (Miles)	Final Chip Seal (Application Date)	Final (Miles)
	Drive)				
6731152	Robin Road (Warren Road to Ralston Road)	5/17/2012	1.00	Final Chip Seal Completed Under Maintenance Contract	
6731153	Ralston Road (State Route 84 to Robin Road)	5/22/2012	1.50	Final Chip Seal Completed Under Maintenance Contract	
6731154	Ralston Road (Century Road to Dune Shadow)	5/30/2012	1.00	Final Chip Seal Completed Under Maintenance Contract	
6731155	Dune Shadow (Ralston Road to Warren Road)	5/24/2012	1.00	Final Chip Seal Completed Under Maintenance Contract	
6621135	Preakness Drive (Surrey Lane to Sierra Vista Road)	8-7-12 & 8-9-12	0.53	10-3-12 & 10-4-12	0.53
6621135	Pony Track Lane (Sierra Vista Road to Pinto Lane)	8-7-12 & 8-9-12	0.17	10-3-12 & 10-4-12	0.17
Total ARDP miles completed by Construction Crew:			14.75		
Total Chip Seal miles completed by Construction Crew:					10.25