

November 4, 2011

Dear Recipient of the Archuleta County Department of Public Works 5-Year Road Plan – 2012 – 2016,

Every organization requires an appropriate level of planning in order to function in the most effective, efficient, and logical manner possible. This plan is an attempt to do just that; this plan does not represent a funding commitment. We recognize that a plan is essentially a list of intended actions which will take place if all factors which affect the plan unfold as we expect. This plan is, however, sufficiently flexible to account for the fact that the future is unpredictable.

Managing improvement projects and service delivery systems are the most difficult tasks facing Public Works Departments today. Resources are often inadequate, priorities change with little notice, costs overrun and schedules slip. Our transportation system users continue to expect more services to be provided with no increase in funding. We continue to strive for improvement in our service delivery systems.

The first step in striving for improvement is to plan for improvement. Quality does not just happen; improvement is not inevitable. Improvement is created by people who care enough to plan for it; people with a mental picture of how things should be, and the desire to make good things happen.

The Archuleta County Public Works Department exists in order to serve the public's transportation needs. First, and foremost, we exist to maintain what we have. What we have is a transportation infrastructure consisting of approximately 327 miles of roadway (222 miles of Primary Roads and 105 miles of Secondary Roads, including 44 miles of paved roads and 283 miles of gravel roads), 27 bridges, an estimated 1300 culverts and other drainage structures, over 500 miles of open drainage ditches, numerous cattle guards and an estimated 2,000 traffic control devices. It is no small task to maintain all of these facilities and the cost of this maintenance represents a major expenditure of tax dollars.

There are six basic elements to successful Public Works program management. These are:

- Identify management objectives and factors critical to realizing these objectives;
- Develop a five-year horizon improvement plan and an annual work plan based upon the County's Strategic Plan;
- Estimate the required resources such as funding, staff, materials, etc. for all work elements within these plans;
- Establish an annual budget designed to facilitate implementation of the plans;
- Assign project and function management responsibility and authority; and,
- Monitor the progress and functionality of all systems and projects and make adjustments in all systems as required.

The scope of this document is to restate Public Works goals and objectives in general terms and as specific project work items for the year 2012 through the year 2016. The pages which follow are the product of a substantial effort directed toward focusing the efforts of the Department of Public Works on the tasks to be completed during the next five years.

This document will be revised and improved on an annual basis to reflect changing needs and priorities. These revisions will be available to you upon request after January 15 each year.

We trust that you will find this document to be beneficial to you in your endeavors. Do not hesitate to contact us with any questions or concerns relative to this plan or the department.

Road	Location	Class	Category	Road Surface	Length (mi)
Abbey Ct	Trails Blvd to Cds	Local Access	Secondary	Unpaved	0.03
Ace Court	County Road 600 to Surface Change	Local Access	Primary	Asphalt	0.01
Ace Court	Surface Change to Dead End	Local Access	Primary	Asphalt	0.03
Ace Court	Surface Change to Solomon Dr	Local Access	Primary	Unpaved	0.11
Agate Ct	Antelope Ave to Cds	Local Access	Secondary	Unpaved	0.04
Andrews Dr	Andrews Ln to Cedar Dr	Local Access	Secondary	Unpaved	0.16
Andrews Ln	County Rd 500 to Andrews Dr	Local Access	Secondary	Unpaved	0.08
Antelope Ave	N Pagosa Blvd to Srfch	Local Access	Secondary	Unpaved	0.03
Antelope Ave	Srfch to Srfch	Local Access	Secondary	Unpaved	0.41
Antelope Ave	Srfch to Srfch	Local Access	Secondary	Unpaved	0.02
Antelope Ave	Srfch to Srfch	Local Access	Secondary	Unpaved	0.32
Antelope Ave	Srfch to Peninsula Pl	Local Access	Secondary	Unpaved	1.16
Antero Drive	Pagosa Blvd to Pavement Change	Local Access	Secondary	Asphalt	0.01
Antero Drive	Pavement Change to Buckeye Pl	Local Access	Secondary	Unpaved	0.72
Antler Court	Belford Pl to 217	Local Access	Secondary	Unpaved	0.23
Appaloosa Cir	Hatcher Cir to Hatcher Cir	Local Access	Secondary	Unpaved	0.72
Arbor Drive	1- Falcon Pl to CR 600	Local Access	Secondary	Unpaved	0.51
Arrow Ct	Arrowhead Dr to Cds	Local Access	Secondary	Unpaved	0.03
Arrowhead Dr	Lake Forest Cir to Dutton Dr	Local Access	Secondary	Unpaved	0.44
Ashtil Court	Lake Forest Cir to Surface Change	Local Access	Secondary	Asphalt	0.01
Ashtil Court	Surface Change to Dead End	Local Access	Secondary	Unpaved	0.02
Aspenglow Boulevard	Nocturn Dr to N Pagosa Blvd	Minor Collector	Primary	Asphalt	0.37
Aspenglow Boulevard	County Rd 600 to Surface Change	Minor Collector	Primary	Asphalt	0.01
Aspenglow Boulevard	Surface Change to Nocturn Dr	Minor Collector	Primary	Asphalt	0.88
Aviation Ct	Cloman Blvd to End	Local Access	Secondary	Unpaved	0.14
Back Swing Drive	County Road to East Golf Pl	Local Access	Primary	Asphalt	0.07
Balfour Ct	Capitan Cir to Cds	Local Access	Secondary	Unpaved	0.10
Bastille Dr	Srfch to Us Hwy 160	Local Access	Secondary	Unpaved	0.22
Bastille Dr	Hopi Dr to Srfch	Local Access	Secondary	Unpaved	0.16
Bastille Drive	N Pagosa Blvd to Hopi Dr	Local Access	Primary	Asphalt	0.29
Bastille Drive	Hopi Dr to Navajo Trail Dr.	Local Access	Primary	Unpaved	0.19
Bay Ct	Saturn Dr to Cds	Local Access	Secondary	Unpaved	0.03
Bayview Cir	Northlake Ave to Northlake Ave	Local Access	Secondary	Unpaved	0.19
Beaver Circle	Lake Forest Cir to Surface Change	Local Access	Secondary	Asphalt	0.01
Beaver Circle	Surface Change to Lake Forest Cir	Local Access	Secondary	Asphalt	0.01
Beaver Circle	Surface Change to Surface Change	Local Access	Secondary	Unpaved	0.37
Beech Ct	Caballero Dr to Cds	Local Access	Secondary	Unpaved	0.06
Belford Place	Meadows Dr to Pavement Change	Local Access	Secondary	Asphalt	0.01
Belford Place	Pavement Change to Antler Ct	Local Access	Secondary	Unpaved	0.18
Belford Place	Antler to CDS	Local Access	Secondary	Unpaved	0.41
Bent Grass Court	1- Midiron Ave to 50- Dead End	Local Access	Secondary	Unpaved	0.03
Bermuda Court	East Golf Place to Dead End	Local Access	Secondary	Unpaved	0.04
Big Horn Court	10 to 180	Local Access	Secondary	Unpaved	0.15
Big Sky Place	Pavement Change to Pavement Change	Local Access	Secondary	Asphalt	0.02
Big Sky Place	Pavement Change to 841	Local Access	Secondary	Unpaved	0.72
Big Sky Place	Feather Ct to Pavement Change	Local Access	Secondary	Unpaved	0.16
Big Valley Drive	Perry Dr to 508	Local Access	Secondary	Unpaved	0.42
Blanca Pl	S Pagosa Blvd to Srfch	Local Access	Secondary	Unpaved	0.01
Blanca Pl	Srfch to Cds	Local Access	Secondary	Unpaved	0.57
Blue Mountain Pl	County Rd 326 to Widch	Local Access	Secondary	Unpaved	0.14
Blue Mountain Pl	Nofishum Pl to End	Local Access	Secondary	Unpaved	0.12
Blue Mountain Pl	Widch to Nofishum Pl	Local Access	Secondary	Unpaved	0.41
Bonanza Avenue	1- Vista Blvd to Surface Change	Minor Collector	Primary	Asphalt	0.46
Bonanza Avenue	Surface Change to Trail Blvd	Minor Collector	Primary	Unpaved	0.47
Bonita Drive	Trail Blvd to Roosevelt Dr	Local Access	Secondary	Unpaved	0.17
Bradley Pl	Harvard Ave to Cds	Local Access	Secondary	Unpaved	0.37
Brassie Court	5- Pines Dr to 26- Dead End	Local Access	Secondary	Unpaved	0.04
Bristlecone Dr	Srfch to County Rd 500	Major Collector	Primary	Unpaved	0.72
Brook Dr	Vista Blvd to Fireside St	Local Access	Secondary	Unpaved	0.21

Road	Location	Class	Category	Road Surface	Length (mi)
Brookhill Drive	1- Rainbow Dr to Crestview Dr	Local Access	Primary	Unpaved	0.42
Bross Pl	Widch to Cds	Local Access	Secondary	Unpaved	0.26
Bross Pl	Harvard Ave to Widch	Local Access	Secondary	Unpaved	0.16
Buck Drive	10 to 830	Local Access	Secondary	Unpaved	0.85
Buckeye Place	Buttress Ave to Pavement Change	Local Access	Secondary	Asphalt	0.01
Buckeye Place	Antero Dr to 303	Local Access	Secondary	Unpaved	0.12
Buckeye Place	Pavement Change to Antero Dr	Local Access	Secondary	Unpaved	0.19
Buena Vista Pl	County Rd 411 to End	Local Access	Secondary	Unpaved	0.52
Buffalo Court	Lake Forest Cir to Surface Change	Local Access	Secondary	Asphalt	0.01
Buffalo Court	Surface Change to 64- Dead End	Local Access	Secondary	Unpaved	0.06
Bunker Court	5- Pines Dr to 70- Dead End	Local Access	Secondary	Unpaved	0.07
Burro Ct	Falcon Pl to Cds	Local Access	Secondary	Unpaved	0.03
Butte Dr	Sysch to End	Local Access	Secondary	Chip Seal	0.08
Butte Drive	Aspenglow Blvd to Monument	Local Access	Primary	Chip Seal	0.24
Buttress Avenue	1- 602	Major Collector	Primary	Asphalt	0.59
Buttress Avenue	Cascade Road to Pavement Change	Major Collector	Primary	Unpaved	0.36
Buttress Avenue	Cascade to end of rd	Major Collector	Secondary	Unpaved	0.58
Caballero Dr	N Pagosa Blvd to Escobar Ave	Local Access	Secondary	Unpaved	0.22
Caddy Circle	West Golf Pl to End of Loop @ Dead End	Local Access	Secondary	Unpaved	0.67
Caleta Pl	Twin Creek Cir to Cds	Local Access	Secondary	Unpaved	0.19
Cameo Ct	County Rd 600 to Cds	Local Access	Secondary	Unpaved	0.12
Cameron Place	Pagosa Blvd to Pavement Change	Local Access	Secondary	Asphalt	0.01
Cameron Place	Pavement Change to 473	Local Access	Secondary	Unpaved	0.47
Candelaria Pl	San Marcial Pl to End	Local Access	Secondary	Unpaved	0.11
Canyon Circle	13- Highland Ave to Highland Ave	Local Access	Secondary	Asphalt	0.44
Cape Pl	N Pagosa Blvd to Cds	Local Access	Secondary	Unpaved	0.22
Capitan Cir	N Pagosa Blvd to N Pagosa Blvd	Local Access	Primary	Unpaved	0.97
Capricho Circle	Pagosa Blvd to Capricho Cir	Major Collector	Primary	Asphalt	0.41
Capricho Circle	Pavement Change to Pagosa Blvd	Local Access	Secondary	Asphalt	0.01
Capricho Circle	Capricho Ave to Pavement Change	Local Access	Secondary	Unpaved	0.49
Carefree Place	15 to End of Loop @ Dead End	Local Access	Secondary	Chip Seal	0.20
Carino Pl	Sysch to Srfch	Local Access	Primary	Asphalt	0.01
Carino Place	Meadows Dr to Pavement Change	Local Access	Primary	Asphalt	0.02
Carino Place	Hersch Ave to Pavement Change	Local Access	Primary	Unpaved	0.80
Carino Place	Pavement Change to 1700	Local Access	Secondary	Unpaved	0.41
Carino Place	Scenic to Hersch Ave	Local Access	Secondary	Unpaved	0.48
Carlee Place	Park Ave to Pine Club	Major Collector	Primary	Asphalt	0.24
Carlee Place	Pines Club to 374	Major Collector	Primary	Asphalt	0.12
Carlee Place	375 to 460- Dead End	Local Access	Secondary	Chip Seal	0.10
Carpin Cir	Saturn Dr to Saturn Dr	Local Access	Secondary	Unpaved	0.30
Carrico Street	County Road 337 to Surface Change	Forest/Recreation	Secondary	Asphalt	0.03
Carrico Street	Bridge to Bridge	Forest/Recreation	Secondary	Unpaved	0.29
Carrico Street	Surface Change to Bridge	Forest/Recreation	Secondary	Chip Seal	0.04
Cascade Avenue	Buttress Ave to County Rd 500	Major Collector	Primary	Unpaved	0.93
Castle Place	1 to 289	Local Access	Secondary	Unpaved	0.32
Cattail Ct	Driftwood Dr to Cds	Local Access	Secondary	Unpaved	0.04
Cedar	State Hwy 151 to Milton Ln	Local Access	Secondary	Unpaved	0.17
Cedar Dr	Cds to End	Local Access	Secondary	Unpaved	0.14
Cherry Ct	Arbor Dr to Cds	Local Access	Secondary	Unpaved	0.05

Road	Location	Class	Category	Road Surface	Length (mi)
Chestnut Ct	Mission Dr to Cds	Local Access	Secondary	Unpaved	0.07
Chickadee Court	5 to 50	Local Access	Secondary	Unpaved	0.06
Chieftain Ct	Yeoman Dr to Cds	Local Access	Secondary	Unpaved	0.04
Chipper Court	9- Pines Dr to 84- Dead End	Local Access	Secondary	Unpaved	0.09
Cimaron Cir	10- Falcon Pl to 500- Falcon Pl	Local Access	Secondary	Unpaved	0.47
Clearwater Drive	10 to 330	Local Access	Secondary	Unpaved	0.33
Cleek Court	5- Pines Dr to 91- Dead End	Local Access	Secondary	Unpaved	0.09
Clemente Ct	Morro Cir to Cds	Local Access	Secondary	Unpaved	0.03
Cloister Pl	Sam Houston Ave to Cds	Local Access	Secondary	Unpaved	0.09
Cloman Boulevard	County Rd 600 to Industrial Cir	Minor Arterial	Primary	Unpaved	0.71
Cloman Boulevard	Industrial Cir to End	Minor Arterial	Primary	Unpaved	0.57
Cloud Cap Avenue	County Rd 600 to 1010- Nocturn Dr	Major Collector	Primary	Chip Seal	1.06
Cloud Cap Avenue	1011- Nocturn Dr to Monument Ave	Major Collector	Primary	Chip Seal	0.32
Cloud Cap Court	464- Cloud Cap Ave to 601- Cloud Cap Ave	Local Access	Secondary	Chip Seal	0.20
Cloud Cap Court	645- Cloud Cap Ave to 705- Cloud Cap Ave	Local Access	Secondary	Chip Seal	0.12
Clover Lane	10 to 95	Local Access	Secondary	Unpaved	0.09
Colony Ct	Fireside St to Cds	Local Access	Secondary	Unpaved	0.01
Columbia Court	1 to 200	Local Access	Secondary	Unpaved	0.22
Columbine Ct	Snow Cir to Cds	Local Access	Secondary	Unpaved	0.04
Condor Dr	County Rd 600 to Sysch	Local Access	Secondary	Unpaved	0.13
Condor Drive	Piedra to Dead end	Local Access	Secondary	Unpaved	0.51
Convention Pl	Sam Houston Ave to Cds	Local Access	Secondary	Unpaved	0.10
Corona Court	Morro Cir to 60- Dead End	Local Access	Secondary	Unpaved	0.06
Coronado Cir	N Pagosa Blvd to N Pagosa Blvd	Local Access	Secondary	Unpaved	1.13
Cortez Court	1- Hersch Ave to End of Road	Local Access	Secondary	Unpaved	0.15
Cotton Ct	Falcon Pl to Cds	Local Access	Secondary	Unpaved	0.06
County Rd 113	W Us Hwy 160 to Usfs 666	Local Access	Primary	Unpaved	1.01
County Rd 119	Scl to State Hwy 84	Major Collector	Primary	Asphalt	2.19
County Rd 139	Hwy 160 to Pavement Change	Minor Collector	Primary	Asphalt	0.01
County Rd 139	Haley Pl to Cattle Guard	Local Access	Secondary	Unpaved	0.35
County Rd 139	Pavement Change to Haley Pl	Minor Collector	Primary	Unpaved	0.74
County Rd 146	Width Change to Forest Service	Local Access	Primary	Unpaved	0.54
County Rd 146	Hwy 160 to Width Change	Local Access	Primary	Unpaved	0.14
County Rd 146	Width Change to Width Change	Local Access	Primary	Unpaved	0.91
County Rd 166	Hwy 160 to Surface Change	Forest/Recreation	Primary	Unpaved	0.19
County Rd 166	Surface Change to Forest Service	Forest/Recreation	Primary	Unpaved	0.20
County Rd 175	Surface Change to State Hwy 160	Rural Access	Primary	Asphalt	0.72
County Rd 175	Hwy 160 to Surface Change	Rural Access	Primary	Asphalt	0.07
County Rd 175	Unknown to Surface Change	Rural Access	Primary	Unpaved	0.43
County Rd 175	Surface Change to Unknown	Rural Access	Primary	Unpaved	1.11
County Rd 200	City Limits to Surface Change	Forest/Recreation	Primary	Asphalt	0.97
County Rd 200	Width Change to Forest Service	Forest/Recreation	Primary	Unpaved	1.78
County Rd 200	Surface Change to Width Change	Forest/Recreation	Primary	Unpaved	2.18
County Rd 302	US- 84 to Pavement Change	Local Access	Primary	Asphalt	0.02
County Rd 302	1891 to 4100	Local Access	Primary	Unpaved	2.28
County Rd 302	600 to 1891	Local Access	Primary	Unpaved	1.36
County Rd 302	Pavement Change to 600	Local Access	Primary	Unpaved	0.50
County Rd 326	US- 84 to Surface Change	Forest/Recreation	Primary	Asphalt	0.00
County Rd 326	10 to 1255	Forest/Recreation	Primary	Unpaved	1.18

Road	Location	Class	Category	Road Surface	Length (mi)
County Rd 326	11811 to 14250	Forest/Recreation	Primary	Unpaved	2.63
County Rd 326	1256 to 11810	Forest/Recreation	Primary	Unpaved	10.57
County Rd 335	US- 84 to Pavement Change	Minor Collector	Primary	Asphalt	0.02
County Rd 335	Pavement change to Widch	Minor Collector	Primary	Unpaved	0.30
County Rd 335	Widch to LG	Minor Collector	Primary	Unpaved	5.77
County Rd 337	Srfch to Str	Local Access	Primary	Asphalt	0.01
County Rd 337	Surface Change to US- 84	Local Access	Primary	Asphalt	0.01
County Rd 337	US- 84 to Pavement Change	Local Access	Primary	Asphalt	0.01
County Rd 337	Bridge to Surface Change	Local Access	Primary	Chip Seal	0.06
County Rd 337	End of Asphalt to Bridge	Local Access	Primary	Unpaved	0.24
County Rd 337	Surface Change to Surface Change	Local Access	Primary	Unpaved	0.19
County Rd 339	State Hwy 84 to Srfch	Minor Collector	Primary	Asphalt	0.01
County Rd 339	Srfch to State Hwy 84	Local Access	Secondary	Asphalt	0.01
County Rd 339	Str to Sysch	Minor Collector	Primary	Unpaved	0.26
County Rd 339	Sysch to Srfch	Local Access	Secondary	Unpaved	0.80
County Rd 339	Srfch to Str	Minor Collector	Primary	Unpaved	0.20
County Rd 359	US- 84 to Pavement Change	Major Collector	Primary	Asphalt	0.02
County Rd 359	4411 to 7810	Major Collector	Primary	Unpaved	3.43
County Rd 359	Pavement Change to 4410	Major Collector	Primary	Unpaved	4.23
County Rd 382	US-84 to Pavement Change	Local Access	Primary	Asphalt	0.02
County Rd 382	Pavement Change to 750- Pavement Change	Local Access	Primary	Chip Seal	0.76
County Rd 382	3550- Unpaved to 6190	Local Access	Primary	Unpaved	2.52
County Rd 382	750- Pavement to 3380- Pavement	Local Access	Primary	Unpaved	2.60
County Rd 382	Str to Usfs 731	Local Access	Primary	Unpaved	1.22
County Rd 382	Widch to Str	Local Access	Secondary	Unpaved	0.55
County Rd 382	3381- Pavement Change to 3550	Local Access	Primary	Unpaved	0.24
County Rd 391	Bridge to Bridge	Rural Access	Primary	Asphalt	0.01
County Rd 391	US- 84 to Pavement Change	Rural Access	Primary	Asphalt	0.01
County Rd 391	Pavement Change to Bridge	Rural Access	Primary	Unpaved	3.64
County Rd 391	Widch to County Rd 359	Rural Access	Primary	Unpaved	0.23
County Rd 391	Bridge to County Line	Rural Access	Primary	Unpaved	0.42
County Rd 400	City Limits to 2324	Forest/Recreation	Primary	Unpaved	1.78
County Rd 400	2325 to Width Change	Forest/Recreation	Primary	Unpaved	2.17
County Rd 400	Width Change to Forest Service	Forest/Recreation	Primary	Unpaved	3.09
County Rd 411	Surface Change to 1526	Rural Access	Primary	Unpaved	0.54
County Rd 411	1527 to 3502	Rural Access	Primary	Unpaved	2.05
County Rd 500	County Line to Surface Change	Minor Arterial	Primary	Chip Seal	2.24
County Rd 500	Pavement Change to SH 151	Rural Access	Primary	Asphalt	0.01
County Rd 500	Surface Change to Surface Change	Minor Arterial	Primary	Unpaved	0.53
County Rd 500	Bridge to County Road 542	Rural Access	Primary	Unpaved	0.84
County Rd 500	Bridge to Unknown	Rural Access	Primary	Unpaved	0.08
County Rd 500	Surface Change to Cascade Ave	Minor Arterial	Primary	Unpaved	1.15
County Rd 500	19892 to Bridge	Rural Access	Primary	Unpaved	4.38
County Rd 500	Bridge to Unknown	Rural Access	Primary	Unpaved	4.45
County Rd 500	Bridge to Bridge	Rural Access	Primary	Unpaved	0.01

Road	Location	Class	Category	Road Surface	Length (mi)
County Rd 500	Unknown to STR	Rural Access	Primary	Unpaved	4.93
County Rd 500	Widch to County Road 551	Rural Access	Primary	Unpaved	2.23
County Rd 500	Surface Change to Surface Change	Minor Arterial	Primary	Unpaved	0.38
County Rd 500	Cascade Ave to Bridge	Minor Arterial	Primary	Unpaved	8.79
County Rd 500	Unknown to 14642- Bridge	Rural Access	Primary	Unpaved	0.06
County Rd 500	Bridge to Pavement Change	Rural Access	Primary	Unpaved	6.53
County Rd 500	Unknown to 19890	Rural Access	Primary	Unpaved	5.19
County Rd 500	Bridge to Bridge	Rural Access	Primary	Unpaved	0.01
County Rd 500	Str to Srfch	Rural Access	Primary	Unpaved	6.52
County Rd 500	Widch to CR 551	Rural Access	Primary	Unpaved	2.30
County Rd 542	CR 500 to CR 359	Rural Access	Primary	Unpaved	10.80
County Rd 551	Unknown to Unknown	Rural Access	Primary	Unpaved	4.02
County Rd 551	County Rd 500 to Bridge	Rural Access	Primary	Unpaved	0.04
County Rd 551	Bridge to Unknown	Rural Access	Primary	Unpaved	0.62
County Rd 557	County Rd 500 to Widch	Rural Access	Secondary	Unpaved	0.08
County Rd 557	Str to Lg	Rural Access	Secondary	Unpaved	0.10
County Rd 557	Widch to Str	Rural Access	Secondary	Unpaved	0.16
County Rd 600	Hwy 160 to Solomon Dr	Minor Arterial	Primary	Asphalt	0.07
County Rd 600	Solomon Dr to Ace Ct	Minor Arterial	Primary	Asphalt	0.14
County Rd 600	Ace Ct to Forest Service	Minor Arterial	Primary	Chip Seal	5.46
County Rd 600	USFS Boundary to Widch	Minor Arterial	Primary	Chip Seal	0.48
County Rd 600	Pagosa to Widch	Minor Arterial	Primary	Chip Seal	0.06
County Rd 600	Widch to Pagosa	Minor Arterial	Primary	Chip Seal	0.07
County Rd 700	Bridge to Section 4	Major Collector	Primary	Unpaved	0.38
County Rd 700	Little Bridge to Big Bridge	Major Collector	Primary	Unpaved	0.19
County Rd 700	Section 4 to Bridge	Major Collector	Primary	Unpaved	9.83
County Rd 700	Section 3 to Section 5	Major Collector	Primary	Unpaved	0.17
County Rd 700	Bridge to County Rd 500	Major Collector	Primary	Unpaved	0.64
County Rd 700	Bridge to Section 8	Major Collector	Primary	Unpaved	1.13
County Rd 700	Hwy 160 to Bridge	Major Collector	Primary	Unpaved	0.03
County Rd 700	Section 7 to Bridge	Major Collector	Primary	Unpaved	3.10
County Rd 700 Extension	Bridge to County Rd 700	Major Collector	Primary	Unpaved	0.89
County Rd 700 Extension	Hwy 160 to Bridge	Major Collector	Primary	Unpaved	0.08
County Rd 917	Hwy 151 to Surface Change	Rural Access	Primary	Chip Seal	0.01
County Rd 917	Surface Change to End of Rd	Rural Access	Primary	Unpaved	2.48

II. b. Inventory and Assessment

In this section of the **5 – Year Road Plan** you will find a prioritized listing of the work that is recommended for each respective road segment identified. Annually, the Board of Archuleta County Commissioners (BOCC) must determine the budget for work to be undertaken on its transportation infrastructure the ensuing calendar year. **The BOCC established a budget of \$550,000.00 for budget year/calendar year 2012 for work that does not include the ordinary maintenance activities undertaken by County staff such as grading roads, plowing roads, and the like.** The BOCC has further directed that the budgeted funds are to be apportioned in the **5 – Year Road Plan** as follows:

- 80% of \$550,000.00 or \$440,000.00 is to be spent on gravel roads
- 20% of \$550,000.00 or \$110,000 is to be spent on paved roads

As is always the case, the BOCC and Public Works will apply available funding to address transportation priorities as effectively as possible. This year and in years to come, the BOCC and Public Works have a powerful tool to assist in establishing those priorities. This tool is a spreadsheet that calculates priorities based upon a number of factors including the condition of the road as established by an assessment, the age of the road, the road classification, the road category (Primary or Secondary) and average daily traffic on the road. The 2012 version of the 5 – Year Road Plan assumes a similar level of funding each year for the life of this plan (2012 – 2016).

Priority	Road	Location	Classification	Category	Road Surface	Condition Index	Assessed Condition	Length (ft)	ADT	Year of Inception	Recommended Treatment
1	Park Avenue	N Pagosa Blvd to Carlee Pl	Major Collector	Primary	Asphalt	95	Excellent	5097	2506, 2094	2010	Crack Seal
2	Park Avenue	Carlee Pl to Cloud Cap Ave	Major Collector	Primary	Asphalt	95	Excellent	4080	2241, 1889	2010	Crack Seal
3	Carlee Place	Park Ave to Pine Club	Major Collector	Primary	Asphalt	96	Excellent	1262	963	2010	Crack Seal
4	Buttress Avenue	1- 602	Major Collector	Primary	Asphalt	85	Good	3125	163	2011	Crack Seal
5	Carlee Place	Pines Club to 374	Major Collector	Primary	Asphalt	96	Excellent	613		2010	Crack Seal
6	Holiday Avenue	North Lake Ave to Masters Cir	Minor Collector	Primary	Asphalt	95	Excellent	2957	619	2010	Crack Seal
7	Handicap Avenue	County Road 600 to just passed Masters Cr	Minor Collector	Primary	Asphalt	97	Excellent	884	605	2010	Crack Seal
8	Aspenglow Boulevard	Nocturn Dr to N Pagosa Blvd	Minor Collector	Primary	Asphalt	97	Excellent	1937	529	2010	Crack Seal
9	Aspenglow Boulevard	County Rd 600 to Surface Change	Minor Collector	Primary	Asphalt	97	Excellent	41	385	2010	Crack Seal
10	Aspenglow Boulevard	Surface Change to Nocturn Dr	Minor Collector	Primary	Asphalt	97	Excellent	4632	228	2010	Crack Seal
11	Handicap Avenue	Masters Cr to Pine's Club Pl	Local Access	Primary	Asphalt	97	Excellent	2973	1023	2010	Crack Seal
12	County Rd 175	Surface Change to State Hwy 160	Rural Access	Primary	Asphalt	97	Excellent	3811	60	2009	Crack Seal
13	County Rd 600	Hwy 160 to Solomon Dr	Minor Arterial	Primary	Asphalt	77	Fair	374	6549	1998	Chip Seal
14	County Rd 600	Solomon Dr to Ace Ct	Minor Arterial	Primary	Asphalt	77	Fair	714	3714	1998	Chip Seal
15	N Pagosa Blvd	Hwy 160 to Shell Driveway	Minor Arterial	Primary	Asphalt	74	Fair	168		1998	Chip Seal
16	Vista Boulevard	Hwy 160 to Lake Forest Cir	Major Collector	Primary	Asphalt	75	Fair	4281	1741	1998	Chip Seal
17	Cloud Cap Avenue	County Rd 600 to 1010- Nocturn Dr	Major Collector	Primary	Chip Seal	70	Fair	5599	1012	1998	Chip Seal
18	N Pagosa Boulevard	Old Sawmill Cr to County Rd 600	Major Collector	Primary	Asphalt	89	Good	11609	911	1998	Chip Seal
19	County Rd 359	US- 84 to Pavement Change	Major Collector	Primary	Asphalt	75	Fair	97	372	1998	Chip Seal
20	Cloud Cap Avenue	1011- Nocturn Dr to Monument Ave	Major Collector	Primary	Chip Seal	70	Fair	1712	185	1998	Chip Seal
21	Capricho Circle	Pagosa Blvd to Capricho Cir	Major Collector	Primary	Asphalt	87	Good	2168	31	1998	Chip Seal
22	County Rd 119	Scl to State Hwy 84	Major Collector	Primary	Asphalt	89	Good	11584			Chip Seal
23	N Pagosa Boulevard	N Pagosa Blvd S to N Pagosa Blvd S	Major Collector	Primary	Asphalt	74	Fair	3302		1998	Chip Seal
24	N Pagosa Boulevard	N Pagosa Blvd S to N Pagosa Blvd S	Major Collector	Primary	Asphalt	75	Fair	3590		1998	Chip Seal
25	Park Ave	Vista Blvd to Widch	Major Collector	Primary	Asphalt	70	Fair	3965			Chip Seal
26	Pinon Cswy	Ncl to Carlee Pl	Major Collector	Primary	Asphalt	95	Excellent	2292			Chip Seal
27	Port Avenue	Vista Blvd to Surface Change	Major Collector	Primary	Asphalt	75	Fair	70		1998	Chip Seal
28	Trails Boulevard	Hwy 160 to Surface Change	Major Collector	Primary	Asphalt	75	Primary	66		1998	Chip Seal
29	Bonanza Avenue	1- Vista Blvd to Surface Change	Minor Collector	Primary	Asphalt	84	Good	2405	1817	1998	Chip Seal
30	Pike Drive	80 to 148	Minor Collector	Primary	Asphalt	75	Fair	372	610	1998	Chip Seal
31	Holiday Avenue	Midiron Ave to Northlake Ave	Minor Collector	Primary	Chip Seal	95	Excellent	317	495	1998	Chip Seal
32	Rainbow Drive	1 to 19	Minor Collector	Primary	Asphalt	75	Fair	77	477	1998	Chip Seal
33	Masters Circle	Surface Change to Handicap Ave	Minor Collector	Primary	Asphalt	90	Excellent	53	196	1998	Chip Seal
34	Hatcher Circle	1- N Pagosa Blvd to N Pagosa Blvd	Minor Collector	Primary	Asphalt	74	Fair	9113	175	1998	Chip Seal
35	County Rd 139	Hwy 160 to Pavement Change	Minor Collector	Primary	Asphalt	75	Fair	64		1998	Chip Seal
36	County Rd 339	State Hwy 84 to Srfch	Minor Collector	Primary	Asphalt	75	Fair		53		Chip Seal
37	Eight Mile Mesa Road	Hwy 84 to surface change	Minor Collector	Primary	Asphalt	75	Fair	328		1998	Chip Seal
38	Hersch Avenue	Hwy 160 to Pavement Change	Minor Collector	Primary	Asphalt	75	Fair	62		1998	Chip Seal
39	Holiday Drive	US-84 to Pavement Change	Minor Collector	Primary	Asphalt	75	Fair	41		1998	Chip Seal
40	Masters Circle	Handicap Ave to Surface Change	Minor Collector	Primary	Asphalt	95	Excellent	52		1998	Chip Seal
41	Nocturn Drive	Aspenglow Blvd to Cloud Cap Ave	Minor Collector	Secondary	Asphalt	74	Fair	601		1998	Chip Seal
42	Northlake Ave	N Pagosa Blvd to Holiday Ave	Minor Collector	Primary	Asphalt	75	Fair		5718		Chip Seal
43	River Forest Drive	US-84 to Pavement Change	Minor Collector	Primary	Asphalt	75	Fair	52		1998	Chip Seal
44	Scenic Avenue	Hwy 160 to Pavement Change	Minor Collector	Secondary	Asphalt	75	Fair	54		1998	Chip Seal
45	Bastille Drive	N Pagosa Blvd to Hopi Dr	Local Access	Primary	Asphalt	84	Good	1542	3076	1998	Chip Seal
46	Butte Drive	Aspenglow Blvd to Monument	Local Access	Primary	Chip Seal	76	Fair	1267.2	460	1993	Chip Seal

Priority	Road	Location	Classification	Category	Road Surface	Condition Index	Assessed Condition	Length (ft)	ADT	Year of Inception	Recommended Treatment
47	Prospect Boulevard	642 to 673	Local Access	Secondary	Asphalt	75	Fair	106	308	1998	Chip Seal
48	Monument Avenue	Surface Change to Aspenglow Blvd	Local Access	Primary	Asphalt	75	Fair	99	276	2001	Chip Seal
49	Ace Court	County Road 600 to Surface Change	Local Access	Primary	Asphalt	74	Fair	71	191	1998	Chip Seal
50	Big Sky Place	Pavement Change to Pavement Change	Local Access	Secondary	Asphalt	74	Fair	129	154	1998	Chip Seal
51	Greenbrier Drive	N Pagosa Blvd to Park Ave	Local Access	Secondary	Asphalt	84	Good	1147	137	1998	Chip Seal
52	County Rd 975	County Border to State Hwy 151	Local Access	Secondary	Asphalt	95	Excellent	9126	115	1998	Chip Seal
53	Antero Drive	Pagosa Blvd to Pavement Change	Local Access	Secondary	Asphalt	85	Good	64	110	1998	Chip Seal
54	Ace Court	Surface Change to Dead End	Local Access	Primary	Asphalt	75	Fair	149		1998	Chip Seal
55	Ashtil Court	Lake Forest Cir to Surface Change	Local Access	Secondary	Asphalt	74	Fair	63		1998	Chip Seal
56	Beaver Circle	Lake Forest Cir to Surface Change	Local Access	Secondary	Asphalt	75	Fair	62		1998	Chip Seal
57	Beaver Circle	Surface Change to Lake Forest Cir	Local Access	Secondary	Asphalt	75	Fair	65		1998	Chip Seal
58	Belford Place	Meadows Dr to Pavement Change	Local Access	Secondary	Asphalt	74	Fair	74		1998	Chip Seal
59	Buckeye Place	Buttress Ave to Pavement Change	Local Access	Secondary	Asphalt	75	Fair	51		1998	Chip Seal
60	Buffalo Court	Lake Forest Cir to Surface Change	Local Access	Secondary	Asphalt	75	Fair	67		1998	Chip Seal
61	Cameron Place	Pagosa Blvd to Pavement Change	Local Access	Secondary	Asphalt	75	Fair	59		1998	Chip Seal
62	Capricho Circle	Pavement Change to Pagosa Blvd	Local Access	Secondary	Asphalt	87	Good	51		1998	Chip Seal
63	Carino Pl	Sysch to Srfch	Local Access	Primary	Asphalt	85	Good	53			Chip Seal
64	Carino Place	Meadows Dr to Pavement Change	Local Access	Primary	Asphalt	87	Good	130		1998	Chip Seal
65	County Rd 302	US- 84 to Pavement Change	Local Access	Primary	Asphalt	85	Good	84		1998	Chip Seal
66	County Rd 337	Srfch to Str	Local Access	Primary	Asphalt	75	Fair	53			Chip Seal
67	County Rd 337	Surface Change to US- 84	Local Access	Primary	Asphalt	75	Fair	72		1998	Chip Seal
68	County Rd 337	US- 84 to Pavement Change	Local Access	Primary	Asphalt	75	Fair	67		1998	Chip Seal
69	County Rd 339	Srfch to State Hwy 84	Local Access	Secondary	Asphalt	75	Fair	53			Chip Seal
70	County Rd 382	US-84 to Pavement Change	Local Access	Primary	Asphalt	85	Good	96		1998	Chip Seal
71	Davis Cup Drive	Surface Change to Park Ave	Local Access	Primary	Chip Seal	75	Fair	2007		1998	Chip Seal
72	Dichoso Street	Hwy 160 to Pavement Change	Local Access	Primary	Asphalt	85	Good	69		1998	Chip Seal
73	Dichoso Street	Pavement Change to Pavement Change	Local Access	Primary	Asphalt	85	Good	131		1998	Chip Seal
74	Dragoon Court	Lake Forest Cir to Surface Change	Local Access	Secondary	Asphalt	75	Fair	69		1998	Chip Seal
75	Dutton Drive	Surface Change to Lake Forest Cir	Local Access	Secondary	Asphalt	75	Fair	73		1998	Chip Seal
76	Dutton Drive	N Pagosa Blvd to Surface Change	Local Access	Secondary	Asphalt	75	Fair	66		1998	Chip Seal
77	Easy Street	US- 84 to 85	Local Access	Secondary	Asphalt	85	Good	61		1998	Chip Seal
78	Echo Creek Drive	US- 84 to Pavement Change	Local Access	Secondary	Asphalt	75	Fair	84		1998	Chip Seal
79	Falcon Place	County Road 600 to Surface Change	Local Access	Primary	Asphalt	75	Fair	66		1998	Chip Seal
80	Fawn Court	Lake Forest Cir to Surface Change	Local Access	Secondary	Asphalt	75	Fair	51		1998	Chip Seal
81	Fish Cove Court	Lake Forest Cir to Surface Change	Local Access	Secondary	Asphalt	74	Fair	68		1998	Chip Seal
82	Hackamore Pl	Northlake Ave to Cds	Local Access	Secondary	Asphalt	90	Excellent	824			Chip Seal
83	Harvard Avenue	Meadows Dr to Pavement Change	Local Access	Primary	Asphalt	75	Fair	61		1998	Chip Seal
84	Hills Circle	N Pagosa Blvd to Surface Change	Local Access	Secondary	Asphalt	75	Fair	70		1998	Chip Seal
85	Hills Circle	Surface Change to N Pagosa Blvd	Local Access	Secondary	Asphalt	75	Fair	68		1998	Chip Seal
86	Laguna Place	Saturn Dr to Surface Change	Local Access	Secondary	Asphalt	85	Good	52		1998	Chip Seal
87	Lakeside Dr	Park Ave to N Pagosa Blvd	Local Access	Primary	Asphalt	70	Fair	3643			Chip Seal
88	Luxury Pl	Saturn Dr to Srfch	Local Access	Secondary	Asphalt	75	Fair	53			Chip Seal
89	Marmot Court	Meadows Dr to Pavement Change	Local Access	Secondary	Asphalt	75	Fair	56		1998	Chip Seal
90	Martinez Place	Lake Forest Cir to Surface Change	Local Access	Secondary	Asphalt	75	Fair	66		1998	Chip Seal
91	Morro Circle	Saturn Dr to Surface Change	Local Access	Secondary	Asphalt	75	Fair	31		1998	Chip Seal
92	Morro Circle	Surface Change to Saturn Dr	Local Access	Secondary	Asphalt	74	Fair	36		1998	Chip Seal
93	Navajo Trail Dr	N Pagosa Blvd to Vista Blvd	Local Access	Secondary	Asphalt	70	Fair	4081			Chip Seal
94	Old Sawmill Cir	N Pagosa Blvd to Srfch	Local Access	Secondary	Asphalt	80	Good	69			Chip Seal
95	Oriole Court	Lake Forest Cir to Surface Change	Local Access	Secondary	Asphalt	75	Fair	65		1998	Chip Seal
96	Paciente Place	Meadows Dr to Pavement Change	Local Access	Secondary	Asphalt	75	Fair	75		1998	Chip Seal
97	Pacifico Drive	Meadows Dr to Pavement Change	Local Access	Secondary	Asphalt	75	Fair	55		1998	Chip Seal
98	Periwinkle Drive	Lake Forest Cir to Arrowhead Drive	Local Access	Secondary	Asphalt	75	Fair	83		1998	Chip Seal
99	Pines Club Pl	Carlee Pl to Sysch	Local Access	Primary	Asphalt	95	Excellent	211			Chip Seal
100	Pines Club Place	Carlee Pl to Golf Course	Local Access	Primary	Chip Seal	65	Poor	369		1998	Chip Seal
101	Pineview Rd	State Hwy 84 to Terry Robinson Rd	Local Access	Secondary	Asphalt	75	Fair	158			Chip Seal
102	Point Place	Saturn Dr to Surface Change	Local Access	Secondary	Asphalt	75	Fair	54		1998	Chip Seal
103	Quartz Court	Lake Forest Dr to Surface Change	Local Access	Secondary	Asphalt	75	Fair	65		1998	Chip Seal
104	Rifle Place	Meadows Dr to Pavement Change	Local Access	Secondary	Asphalt	74	Fair	73		1998	Chip Seal
105	Saddle Circle	N Pagosa Blvd to Surface Change	Local Access	Secondary	Asphalt	75	Fair	65		1998	Chip Seal
106	Saddle Circle	Surface Change to N Pagosa Blvd	Local Access	Secondary	Asphalt	75	Fair	67		1998	Chip Seal
107	Seminole Dr	Navajo Trail to Park Ave	Local Access	Primary	Asphalt	80	Good	1119			Chip Seal
108	Walnut Place	N Pagosa Blvd to Surface Change	Local Access	Secondary	Asphalt	75	Fair	68		1998	Chip Seal

Priority	Road	Location	Classification	Category	Road Surface	Condition Index	Assessed Condition	Length (ft)	ADT	Year of Inception	Recommended Treatment
109	Wilderness Drive	253- Surface Change to Lake Forest Dr	Local Access	Secondary	Asphalt	75	Fair	58		1998	Chip Seal
110	Wilderness Drive	Lake Forest Dr to Surface Change	Local Access	Secondary	Asphalt	75	Fair	69		1998	Chip Seal
111	County Rd 391	Bridge to Bridge	Rural Access	Primary	Asphalt	95	Excellent	79		1998	Chip Seal
112	County Rd 391	US- 84 to Pavement Change	Rural Access	Primary	Asphalt	85	Good	66		1998	Chip Seal
113	Carrico Street	County Road 337 to Surface Change	Forest/Recreation	Secondary	Asphalt	75	Fair	133		1998	Chip Seal
114	County Rd 326	US- 84 to Surface Change	Forest/Recreation	Primary	Asphalt	74	Fair	26		1998	Chip Seal
115	County Rd 600	Ace Ct to Forest Service	Minor Arterial	Primary	Chip Seal	46	Failed/Critical	28830	1388, 1122	1998	Base/Gravel/Pavement Replacement
116	Lake Forest Circle	1- N Pagosa Blvd to 2140- N Pagosa Blvd	Major Collector	Primary	Asphalt	30	Failed/Critical	10671	1249, 918	1998	Base/Gravel/Pavement Replacement
117	County Rd 600	USFS Boundary to Widch	Minor Arterial	Primary	Chip Seal	46	Failed/Critical	2534	1024, 1060	1998	Base/Gravel/Pavement Replacement
118	County Rd 500	County Line to Surface Change	Minor Arterial	Primary	Chip Seal	65	Poor	11840		1998	Gravel/Pavement Replacement
119	County Rd 600	Pagosa to Widch	Minor Arterial	Primary	Chip Seal	46	Failed/Critical	317		1998	Base/Gravel/Pavement Replacement
120	County Rd 600	Widch to Pagosa	Minor Arterial	Primary	Chip Seal	46	Failed/Critical	370		1998	Base/Gravel/Pavement Replacement
121	County Rd 700	Bridge to Section 4	Major Collector	Primary	Unpaved	30	Failed/Critical	2020		1998	Re-const. Crown, Regravel - 4in, Full Depth Stabilization
122	County Rd 700	Little Bridge to Big Bridge	Major Collector	Primary	Unpaved	30	Failed/Critical	1017		1998	Re-const. Crown, Regravel - 4in, Full Depth Stabilization
123	County Rd 700	Section 4 to Bridge	Major Collector	Primary	Unpaved	30	Failed/Critical	51896	93	1998	Re-const. Crown, Regravel - 4in, Full Depth Stabilization
124	County Rd 335	US- 84 to Pavement Change	Minor Collector	Primary	Asphalt	30	Failed/Critical	110		1998	Base/Gravel/Pavement Replacement
125	Solomon Drive	County Rd 600 to David Dr	Local Access	Primary	Asphalt	30	Failed/Critical	244	922	1998	Base/Gravel/Pavement Replacement
126	Mission Drive	1- N Pagosa Blvd to County Road 600	Minor Collector	Primary	Asphalt	30	Failed/Critical	1659	622	1998	Base/Gravel/Pavement Replacement
127	Saturn Drive	1- N Pagosa Blvd to Hatcher Circle	Minor Collector	Primary	Asphalt	30	Failed/Critical	2629	271	1998	Base/Gravel/Pavement Replacement
128	Pinon Hills Drive	Pavement Change to 192	Local Access	Primary	Unpaved	30	Failed/Critical	1022	62	1998	Re-const. Crown, Regravel - 4in, Full Depth Stabilization
129	County Rd 339	Str to Sysch	Minor Collector	Primary	Unpaved	55	Failed/Critical	1373		1998	Re-const. Crown, Regravel - 4in, Full Depth Stabilization
130	County Rd 982	Hwy 151 to Unknown	Local Access	Primary	Asphalt	30	Failed/Critical	64		1998	Base/Gravel/Pavement Replacement
131	Eight Mile Mesa Road	175 to 185	Minor Collector	Primary	Chip Seal	30	Failed/Critical	167		1998	Base/Gravel/Pavement Replacement
132	Masters Circle	Surface Change to Surface Change	Minor Collector	Primary	Chip Seal	30	Failed/Critical	1535		1998	Base/Gravel/Pavement Replacement
133	County Rd 982	Unknown to Navajo State Park	Local Access	Primary	Chip Seal	30	Failed/Critical	7942	683	1998	Base/Gravel/Pavement Replacement
134	Davis Cup Drive	Village Dr to Surface Change	Local Access	Primary	Asphalt	30	Failed/Critical	33	679	1998	Base/Gravel/Pavement Replacement
135	County Rd 382	Pavement Change to 750- Pavement Change	Local Access	Primary	Chip Seal	30	Failed/Critical	4030	243	1998	Base/Gravel/Pavement Replacement
136	Sunset Trail	Hwy 151 to 297	Local Access	Primary	Unpaved	51	Failed/Critical	1373	149	1998	Re-const. Crown, Regravel - 4in, Full Depth Stabilization
137	Ace Court	Surface Change to Solomon Dr	Local Access	Primary	Unpaved	52	Failed/Critical	607	73	1998	Re-const. Crown, Regravel - 4in, Full Depth Stabilization
138	Pinon Hills Drive	192 to Mesa View	Local Access	Primary	Unpaved	30	Failed/Critical	353	62	1998	Re-const. Crown, Regravel - 4in, Full Depth Stabilization
139	County Rd 337	Bridge to Surface Change	Local Access	Primary	Chip Seal	30	Failed/Critical	341		1998	Base/Gravel/Pavement Replacement
140	County Rd 917	Hwy 151 to Surface Change	Rural Access	Primary	Chip Seal	30	Failed/Critical	78		1998	Base/Gravel/Pavement Replacement
141	County Rd 982	Unknown to Unknown	Local Access	Primary	Chip Seal	30	Failed/Critical	363		1998	Base/Gravel/Pavement Replacement

Priority	Road	Location	Classification	Category	Road Surface	Condition Index	Assessed Condition	Length (ft)	ADT	Year of Inception	Recommended Treatment
142	Dichoso Street	Pavement Change to Pagosa Blvd	Local Access	Primary	Asphalt	30	Failed/Critical	82		1998	Base/Gravel/Pavement Replacement
143	Harvard Avenue	Pavement Change to Unknow	Local Access	Primary	Unpaved	30	Failed/Critical	1903		1998	Re-const. Crown, Re-gravel - 4in, Full Depth Stabilization
144	Solomon Drive	David Dr to Ace Ct	Local Access	Primary	Chip Seal	30	Failed/Critical	443		1998	Base/Gravel/Pavement Replacement
145	Trails Boulevard	Surface Change to Ranger Park Dr	Major Collector	Primary	Unpaved	65	Poor	3429	614	1998	Cut Washboards/ Re-est. Crown & Compact
146	Port Avenue	Settler Dr to Pagosa Lakes	Major Collector	Primary	Unpaved	65	Poor	1012	458	1998	Cut Washboards/ Re-est. Crown & Compact
147	County Rd 200	City Limits to Surface Change	Forest/Recreation	Primary	Asphalt	57	Failed/Critical	5121.6	365	1998	Base/Gravel/Pavement Replacement
148	County Rd 326	10 to 1255	Forest/Recreation	Primary	Unpaved	30	Failed/Critical	6204	340	1998	Re-const. Crown, Re-gravel - 4in, Full Depth Stabilization
149	County Rd 391	Pavement Change to Bridge	Rural Access	Primary	Unpaved	30	Failed/Critical	19239	130	1998	Re-const. Crown, Re-gravel - 4in, Full Depth Stabilization
150	County Rd 175	Hwy 160 to Surface Change	Rural Access	Primary	Asphalt	42	Failed/Critical	367	40	1998	Base/Gravel/Pavement Replacement
151	County Rd 542	CR 500 to CR 359	Rural Access	Primary	Unpaved	30	Failed/Critical	57035	37	1998	Re-const. Crown, Re-gravel - 4in, Full Depth Stabilization
152	Terry Robinson Road	Divide View to dead end	Minor Collector	Primary	Unpaved	65	Poor	7233	7	1998	Reclaim Gravel & Compact (M/D)
153	County Rd 326	11811 to 14250	Forest/Recreation	Primary	Unpaved	30	Failed/Critical	13860		1998	Re-const. Crown, Re-gravel - 4in, Full Depth Stabilization
154	County Rd 326	1256 to 11810	Forest/Recreation	Primary	Unpaved	30	Failed/Critical	55834		1998	Re-const. Crown, Re-gravel - 4in, Full Depth Stabilization
155	County Rd 359	4411 to 7810	Major Collector	Primary	Unpaved	65	Poor	18093		1998	Cut Washboards/ Re-est. Crown
156	County Rd 500	Pavement Change to SH 151	Rural Access	Primary	Asphalt	30	Failed/Critical	52		1998	Base/Gravel/Pavement Replacement
157	County Rd 551	Unknown to Unknown	Rural Access	Primary	Unpaved	30	Failed/Critical	21228		1998	Re-const. Crown, Re-gravel - 4in, Full Depth Stabilization
158	Pines Drive	5- Park Ave to Masters Cir	Local Access	Primary	Chip Seal	65	Poor	2816	268	1998	Thick Overlay (3 in)
159	River Forest Drive	Surface Change to Greenview Dr	Minor Collector	Primary	Unpaved	65	Poor	1810	221	1998	Cut Washboards/ Re-est. Crown
160	Canyon Circle	13- Highland Ave to Highland Ave	Local Access	Secondary	Asphalt	38	Failed/Critical	2312	175	1998	Base/Gravel/Pavement Replacement
161	County Rd 166	Hwy 160 to Surface Change	Forest/Recreation	Primary	Unpaved	54	Failed/Critical	990	162	1998	Re-const. Crown, Re-gravel - 4in, Full Depth Stabilization
162	Lopez Road	63 to 990	Local Access	Secondary	Unpaved	30	Failed/Critical	5704	15	1998	Re-const. Crown, Re-gravel - 4in, Full Depth Stabilization
163	County Rd 500	Surface Change to Surface Change	Minor Arterial	Primary	Unpaved	79	Fair	2808		1998	Routine Regrading
164	Talisman Dr	Village Dr to Eagles Loft Cir	Local Access	Primary	Asphalt	65	Poor	2587			No Maintenance
165	Valley View Dr	Pinon Cswy to Srfch	Local Access	Primary	Asphalt	60	Poor	850			No Maintenance
166	Carlee Place	375 to 460- Dead End	Local Access	Secondary	Chip Seal	30	Failed/Critical	526	862	1998	Base/Gravel/Pavement Replacement
167	Cloman Boulevard	County Rd 600 to Industrial Cir	Minor Arterial	Primary	Unpaved	75	Fair	3752	424	1998	Routine Regrading
168	Monument Avenue	12 to 472	Local Access	Primary	Chip Seal	60	Poor	2587	401	1998	Thick Overlay (3 in)
169	Shenandoah Drive	Stage Coach to Coyote Dr	Local Access	Primary	Unpaved	66	Poor	13407	326	1998	Reclaim Gravel & Compact (M/D)
170	County Rd 700	Section 3 to Section 5	Major Collector	Primary	Unpaved	75	Fair	915	305	1998	Routine Regrading
171	Cloman Boulevard	Industrial Cir to End	Minor Arterial	Primary	Unpaved	75	Fair	3017	161	1998	Routine Regrading
172	Easy Street	85 to 910	Local Access	Secondary	Unpaved	30	Failed/Critical	4775	139	1998	Re-const. Crown, Re-gravel - 4in, Full Depth Stabilization
173	Andrews Dr	Andrews Ln to Cedar Dr	Local Access	Secondary	Unpaved	50	Failed/Critical	850			Re-const. Crown, Re-gravel - 4in, Full Depth Stabilization
174	Back Swing Drive	County Road to East Golf Pl	Local Access	Primary	Asphalt	65	Poor	379		1998	Thick Overlay (3 in)
175	Buena Vista Pl	County Rd 411 to End	Local Access	Secondary	Unpaved	55	Failed/Critical	2724			Re-const. Crown, Re-gravel - 4in, Full Depth Stabilization
176	Burro Ct	Falcon Pl to Cds	Local Access	Secondary	Unpaved	55	Failed/Critical	153			Re-const. Crown, Re-gravel - 4in, Full Depth Stabilization
177	Candelaria Pl	San Marcial Pl to End	Local Access	Secondary	Unpaved	50	Failed/Critical	581			Re-const. Crown, Re-gravel - 4in, Full Depth Stabilization
178	Cedar	State Hwy 151 to Milton Ln	Local Access	Secondary	Unpaved	50	Failed/Critical	913			Re-const. Crown, Re-gravel - 4in, Full Depth Stabilization

Priority	Road	Location	Classification	Category	Road Surface	Condition Index	Assessed Condition	Length (ft)	ADT	Year of Inception	Recommended Treatment
179	Cedar Dr	Cds to End	Local Access	Secondary	Unpaved	50	Failed/Critical	739			Re-const. Crown, Regravel - 4in, Full Depth Stabilization
180	Clearwater Drive	10 to 330	Local Access	Secondary	Unpaved	30	Failed/Critical	1762		1998	Re-const. Crown, Regravel - 4in, Full Depth Stabilization
181	Cloud Cap Court	464- Cloud Cap Ave to 601- Cloud Cap Ave	Local Access	Secondary	Chip Seal	30	Failed/Critical	1040		1998	Base/Gravel/Pavement Replacement
182	Columbine Ct	Snow Cir to Cds	Local Access	Secondary	Unpaved	55	Failed/Critical	232			Re-const. Crown, Regravel - 4in, Full Depth Stabilization
183	Cortez Court	1- Hersch Ave to End of Road	Local Access	Secondary	Unpaved	30	Failed/Critical	781		1998	Re-const. Crown, Regravel - 4in, Full Depth Stabilization
184	County Rd 139	Haley Pl to Cattle Guard	Local Access	Secondary	Unpaved	30	Failed/Critical	1834		1998	Re-const. Crown, Regravel - 4in, Full Depth Stabilization
185	County Rd 146	Width Change to Forest Service	Local Access	Primary	Unpaved	69	Poor	2842		1998	Re-const. Crown, Regravel (4"), Full Depth Stabilization
186	County Rd 339	Sysch to Srfch	Local Access	Secondary	Unpaved	55	Failed/Critical	4224			Re-const. Crown, Regravel - 4in, Full Depth Stabilization
187	County Rd 382	3550- Unpaved to 6190	Local Access	Primary	Unpaved	69	Poor	13306		1998	Reclaim Gravel & Compact (M/D)
188	County Rd 382	750- Pavement to 3380- Pavement	Local Access	Primary	Unpaved	69	Poor	13707		1998	Dust Control
189	County Rd 382	Str to Usfs 731	Local Access	Primary	Unpaved	60	Poor	6442			No Maintenance
190	County Rd 500	Bridge to County Road 542	Rural Access	Primary	Unpaved	68	Poor	4451		1998	Re-const. Crown, Regravel (4"), Full Depth Stabilization
191	County Rd 500	Bridge to Unknown	Rural Access	Primary	Unpaved	68	Poor	436		1998	Re-const. Crown, Regravel (4"), Full Depth Stabilization
192	County Rd 500	Surface Change to Cascade Ave	Minor Arterial	Primary	Unpaved	79	Fair	6053		1998	Routine Regrading
193	Croton Court	Morro Cir to 30- Dead End	Local Access	Secondary	Unpaved	30	Failed/Critical	140		1998	Re-const. Crown, Regravel - 4in, Full Depth Stabilization
194	David Drive	Ace Ct to Solomon Dr	Local Access	Secondary	Unpaved	30	Failed/Critical	467		1998	Re-const. Crown, Regravel - 4in, Full Depth Stabilization
195	Dolase Avenue	Hersch Ave to Unknown	Local Access	Secondary	Unpaved	30	Failed/Critical	739		1998	Re-const. Crown, Regravel - 4in, Full Depth Stabilization
196	E Sunbeam Court	1- Hersch Ave to 160	Local Access	Secondary	Unpaved	30	Failed/Critical	843		1998	Re-const. Crown, Regravel - 4in, Full Depth Stabilization
197	Eagles Place	10 to 137	Local Access	Secondary	Unpaved	30	Failed/Critical	771		1998	Re-const. Crown, Regravel - 4in, Full Depth Stabilization
198	Enchanted Place	15 to 180	Local Access	Secondary	Chip Seal	30	Failed/Critical	982		1998	Base/Gravel/Pavement Replacement
199	Fiesta Place	Monument Ave to 180	Local Access	Secondary	Chip Seal	30	Failed/Critical	930		1998	Base/Gravel/Pavement Replacement
200	Flatiron Drive	Big Valley Dr to Unknown	Local Access	Secondary	Unpaved	30	Failed/Critical	1307		1998	Re-const. Crown, Regravel - 4in, Full Depth Stabilization
201	Flintlock Place	1- Hidden Dr to 110- Dead End	Local Access	Secondary	Unpaved	30	Failed/Critical	489		1998	Re-const. Crown, Regravel - 4in, Full Depth Stabilization
202	Fritz And Mabels Pl	County Rd 411 to Roxannas Ct	Local Access	Secondary	Unpaved	55	Failed/Critical	1035			Re-const. Crown, Regravel - 4in, Full Depth Stabilization
203	Frolic Court	6- Cloud Cap Ave to Dead End	Local Access	Secondary	Unpaved	30	Failed/Critical	184		1998	Re-const. Crown, Regravel - 4in, Full Depth Stabilization
204	Gallop Court	5- Cloud Cap Ave to 40- Dead End	Local Access	Secondary	Chip Seal	30	Failed/Critical	198		1998	Base/Gravel/Pavement Replacement
205	Highland Avenue	179- Prospect Blvd to 430- Canyon Cir	Local Access	Secondary	Chip Seal	30	Failed/Critical	533		1998	Base/Gravel/Pavement Replacement
206	Homestead Drive	Lake St to Prospect Blvd	Local Access	Secondary	Chip Seal	30	Failed/Critical	840		1998	Base/Gravel/Pavement Replacement
207	Hoot N Holler	Wandering Hills to Run Around Rd	Local Access	Secondary	Unpaved	30	Failed/Critical	1103		1998	Re-const. Crown, Regravel - 4in, Full Depth Stabilization
208	Hunter Court	6- Cloud Cap Ave to 60- Dead End	Local Access	Secondary	Chip Seal	30	Failed/Critical	320		1998	Base/Gravel/Pavement Replacement
209	Lake Fork	Willard Way to Loop End	Local Access	Secondary	Unpaved	55	Failed/Critical	887			Re-const. Crown, Regravel - 4in, Full Depth Stabilization
210	Lake Street	523- Homestead to 593- Surface Change	Local Access	Secondary	Chip Seal	30	Failed/Critical	345		1998	Base/Gravel/Pavement Replacement
211	Lake View Dr	Willard Way to End	Local Access	Secondary	Unpaved	55	Failed/Critical	1172			Re-const. Crown, Regravel - 4in, Full Depth Stabilization

Priority	Road	Location	Classification	Category	Road Surface	Condition Index	Assessed Condition	Length (ft)	ADT	Year of Inception	Recommended Treatment
212	Lyn Ave	Canyon Cir to Prospect Blvd	Local Access	Secondary	Asphalt	50	Failed/Critical	264			Base/Gravel/Pavement Replacement
213	Manor Court	6- Prospect Blvd to 30- Dead End	Local Access	Secondary	Chip Seal	30	Failed/Critical	128		1998	Base/Gravel/Pavement Replacement
214	Meadow Lark	Sunset Trail to End	Local Access	Secondary	Unpaved	55	Failed/Critical	2587			Re-const. Crown, Re-gravel - 4in, Full Depth Stabilization
215	Meadow Lark	Sunset Trail to End	Local Access	Secondary	Unpaved	59	Failed/Critical	475			Re-const. Crown, Re-gravel - 4in, Full Depth Stabilization
216	Milton Lane	123 to County Rd 982	Local Access	Secondary	Unpaved	30	Failed/Critical	1025		1998	Re-const. Crown, Re-gravel - 4in, Full Depth Stabilization
217	Moccasin Court	1 to 100	Local Access	Secondary	Unpaved	30	Failed/Critical	397		1998	Re-const. Crown, Re-gravel - 4in, Full Depth Stabilization
218	Moon Ct	Grenadier Pl to Cds	Local Access	Secondary	Unpaved	59	Failed/Critical	121			Re-const. Crown, Re-gravel - 4in, Full Depth Stabilization
219	Mule Deer	Deer Park to 45	Local Access	Secondary	Unpaved	30	Failed/Critical	330		1998	Re-const. Crown, Re-gravel - 4in, Full Depth Stabilization
220	Musket Ct	Grenadier Pl to D End	Local Access	Secondary	Unpaved	59	Failed/Critical	180			Re-const. Crown, Re-gravel - 4in, Full Depth Stabilization
221	Nocturn Drive	Cloud Cap Ave to 150- Dead End	Local Access	Secondary	Unpaved	30	Failed/Critical	154		1998	Re-const. Crown, Re-gravel - 4in, Full Depth Stabilization
222	North Dawning Court	7 to Dead End	Local Access	Secondary	Unpaved	30	Failed/Critical	261		1998	Re-const. Crown, Re-gravel - 4in, Full Depth Stabilization
223	North Debonaire Court	16 to Dead End	Local Access	Secondary	Unpaved	30	Failed/Critical	227		1998	Re-const. Crown, Re-gravel - 4in, Full Depth Stabilization
224	Osprey Court	Flintlock Pl to Dead End	Local Access	Secondary	Unpaved	30	Failed/Critical	180		1998	Re-const. Crown, Re-gravel - 4in, Full Depth Stabilization
225	Overlook Ct	Hills Cir to D End	Local Access	Secondary	Unpaved	55	Failed/Critical	317			Re-const. Crown, Re-gravel - 4in, Full Depth Stabilization
226	Oxford Place	Elbert Pl to 217	Local Access	Secondary	Unpaved	30	Failed/Critical	1875		1998	Re-const. Crown, Re-gravel - 4in, Full Depth Stabilization
227	Par Place	12- Park Ave to 150- Dead End	Local Access	Secondary	Chip Seal	30	Failed/Critical	743		1998	Base/Gravel/Pavement Replacement
228	Pine Crest	Run Around Rd to Wandering Hills	Local Access	Secondary	Unpaved	30	Failed/Critical	1081		1998	Re-const. Crown, Re-gravel - 4in, Full Depth Stabilization
229	Pineview Drive	10 to 250	Local Access	Secondary	Unpaved	30	Failed/Critical	1173		1998	Re-const. Crown, Re-gravel - 4in, Full Depth Stabilization
230	Pineview Rd	Widch to End	Local Access	Secondary	Unpaved	55	Failed/Critical	2851			Re-const. Crown, Re-gravel - 4in, Full Depth Stabilization
231	Pinon Hills Cir	Srfch to Eagles Nest	Local Access	Secondary	Unpaved	50	Failed/Critical	4731			Re-const. Crown, Re-gravel - 4in, Full Depth Stabilization
232	Pinon Hills Drive	County Rd 982 to Pavement Change	Local Access	Secondary	Asphalt	30	Failed/Critical	85		1998	Base/Gravel/Pavement Replacement
233	Pioneer Ct	Roosevelt Dr to D End	Local Access	Secondary	Unpaved	50	Failed/Critical	127			Re-const. Crown, Re-gravel - 4in, Full Depth Stabilization
234	Pizarro Ct	Snow Cir to D End	Local Access	Secondary	Unpaved	55	Failed/Critical	190			Re-const. Crown, Re-gravel - 4in, Full Depth Stabilization
235	Ponderosa Drive	30 to 680	Local Access	Secondary	Unpaved	30	Failed/Critical	4065		1998	Re-const. Crown, Re-gravel - 4in, Full Depth Stabilization
236	Prospect Boulevard	568 to 641	Local Access	Secondary	Chip Seal	32	Failed/Critical	539		1998	Base/Gravel/Pavement Replacement
237	Prospect Boulevard	676- Surface Change to 800- Lyn Ave	Local Access	Secondary	Chip Seal	30	Failed/Critical	758		1998	Base/Gravel/Pavement Replacement

II.c. Bridge Inspection/Maintenance/Replacement

BRIDGE INSPECTION PROGRAM

Bridge structures within the off-system inventory (County maintained) are inspected and rated every two years. Major structures (those with a span of 20 feet or greater) are inspected by an engineering consultant under contract with the Colorado Department of Transportation. Minor structures are inspected and rated every two years by a consultant under contract with Archuleta County. Based upon the inspection and rating performed by the consultant, structures are generally classified as follows:

- **Sufficient** – Capable of carrying legal loads and posing no threat to safety such as narrow width or poor alignment.
- **Structurally Deficient** – Structure is not capable of carrying established legal loads either due to inadequate original design, deterioration or damage since construction. Load posting is required to restrict the weight of vehicles using the structure to a level below the legal loads established for the overall transportation system by the Federal Highway Administration and Colorado Department of Transportation.
- **Functionally Obsolete** – Capable of carrying legal loads but does not meet current safety standards due to factors such as narrow width, poor alignment, etc.

In addition to the above described inspections by a private consultant, the Public Works Department, Road and Bridge Division performs the following inspections on both major and minor bridge structures:

- Periodic observations of those bridges which require load posting are performed by a Supervisor to verify that the proper load posting signs are in place.
- Biannual observations of load posted bridges are performed by a Supervisor.
- Annual observations of all bridges are performed by a Supervisor.

BRIDGE MAINTENANCE PROGRAM

The Road and Bridge Division's Bridge Maintenance Program is an intense preventive maintenance program designed to preserve the functional and structural integrity of the County's bridges.

PROGRAM METHODOLOGY

The methodology adopted by the program consists of the following:

1. The identification of structures deemed to be excessively deteriorated to warrant a large expenditure of time and money for maintenance. These structures will be replaced as funding permits.
2. The identification of structures that require no maintenance at this time
3. The identification of those structures which require specific maintenance as identified by the most recent field inspection, whether by the private consultant or a Supervisor.

PROGRAM PROCEDURAL DIRECTIVE

The procedures outlined below are intended to facilitate an objective and systematic observation and are not intended to be a strict line of order. Sound judgment is still required. The Supervisor will be responsible for assuring conformance to this procedure.

- For all load posted bridges, schedule and perform an observation of the load posting signage once per month. Repair or replace signage as necessary.
- For all structures with a sufficiency rating of 50 or less, schedule and perform an observation of the structure every six months to identify minor maintenance items or unsafe conditions. Complete a preventative maintenance checklist form.
- For all other structures, perform an observation once per year and complete a preventative maintenance checklist form.
- Preventative maintenance of all structures for which preventative maintenance is recommended will be scheduled and performed as budgetary constraints allow. by the Bridge Team or Road Maintenance Team. All performed maintenance activities will be documented and the document shall be placed in the most recent inspection file.

Non-critical maintenance items shall be at the discretion of the Supervisor. Maintenance activities that involve structural changes or modifications shall be reported to and discussed with the Public Works Director prior to work being performed.

BRIDGE REPLACEMENT PROJECTS

The Archuleta County Bridge Replacement Program is designed to preserve the integrity of the County's transportation system.

Major bridge structures which are rated as either Structurally Deficient or Functionally Obsolete are eligible for off-systems Federal bridge funding (BRO funds) for design and construction of a replacement structure or rehabilitation of the existing structure. Eligible structures appear on the Select List published by the Colorado Department of Transportation.

Minor structures are not eligible for federal funding for replacement or rehabilitation. They must therefore be replaced or rehabilitated using local funding.

The goal of the bridge replacement program is to achieve a bridge inventory, both major and minor structures, which reflects only structures rated as sufficient.

Generally speaking, non-sufficient structures will be prioritized for replacement in consideration of several factors including sufficiency rating, eligibility for federal or state funding, local funding constraints, level of traffic served, availability of alternative access routes or detours, etc.

Included within this section is a copy of the most recent bridge inspection data for both Major and Minor structures. The individual bridge inspection reports are not included herein, only the summary.

CDOT OFF-SYSTEM BRIDGE INSPECTIONS

ARCHULETA COUNTY

2010-2011

FINAL REPORT AND SUMMARY



STANTEC CONSULTING

2000 South Colorado Boulevard, Suite 2-300

Denver, CO 80222

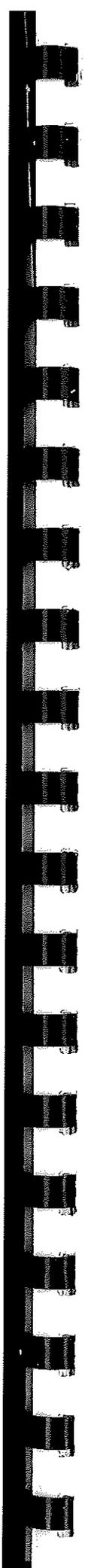
303-758-4058



Stantec

Structure Inventory List

Structure Number:	Facility Carried:	Feature Intersected:	Structure Type:	Year Built:	# Main Spans	ADT Total
AR337A-SO.1-S84	COUNTY ROAD 337A	RIO BLANCO	SSE	1979	1	83
AR337-SO.3-S84	COUNTY ROAD 337	RITO BLANCO	CIK	1940	1	28
AR339-SO.3-S84A	COUNTY ROAD 339	RIO BLANCO	SSM	1988	1	42
AR359-S7.6-S84A	IRR# CO RD 359	NAVAJO RIVER	CPG	1994	1	85
AR382-6.5-S84	COUNTY ROAD 382	NAVAJO RIVER	SSM	1980	1	101
AR391-S3.8-S84A	IRR# CO RD 391	NAVAJO RIVER	CPG	2001	1	32
AR500-15.8-S151	IRR# CO RD 500	CAT CREEK	SLT	1927	1	44
AR500-6.5-S151	IRR# CO RD 500	SANDOVAL CANYON	SSS	1970	1	154
AR500-S136-160A	IRR# CO RD 500	SAN JUAN RIVER	CBGCP	1992	2	108
AR500-S146-160A	IRR# CO RD 500	SAN JUAN RIVER	CBGCP	1991	2	108
AR551-S0.1-500A	IRR#CO RD 551	SAN JUAN RIVER	CPG	2010	1	62
AR557-SO.3-500A	IRR#CO RD 557	SAN JUAN RIVER	SSM	2010	1	239
AR700A-0.1-S160	IRR# CO RD 700A	STOLLSTEIMER CREEK	SSMC	1958	2	375
AR700-S102-160A	IRR# CO RD 700	CAT CREEK	CIK	1997	1	30
AR700-S146-160A	IRR# CO RD 700	CAT CREEK	CIK	1997	1	30



Structure Number:	Facility Carried:	Feature Intersected:	Structure Type:	Year Built:	# Main Spans	ADT Total
AR700-SO.1-S160	IRR# CO RD 700	STOLLSTEIMER CREEK	SSM	1965	1	265
AR988-0.4-151A	IRR# CO RD 988	SAMBRITO CREEK	CIK	1992	1	113
ARF50-WO.1-S151	IRR# CO RD F50	PIEDRA RIVER	SIT	1935	1	20
AR-HAREBELL.DR	HAREBELL DR.	SAN JUAN RIVER	SSM	1955	3	45
AR-N.PAGOSA.BLV	N. PAGOSA BLVD.	RESERVOIR SPILLWAY	CI	1975	1	3114

Structure Inspection Results

Structure Number:	NBI Condition Rating Codes:				Load Posting Restrictions:			*SD / FO Indicator:	Replacement / Rehabilitation:	Estimated Cost:
	Deck #58	Super #59	Sub #60	Culvert #62	Type 3	Type 3S2	Truck 3-2			
AR337A-SO.1-S84	6	5	6	N	7	12	12	SD	Replacement Cost	\$1,040,000.00
AR337-SO.3-S84	7	7	7	N	0	0	0			
AR339-SO.3-S84A	6	6	5	N	0	0	0			
AR359-S7.6-S84A	7	8	8	N	0	0	0			
AR382-6.5-S84	8	7	5	N	0	0	0	FO		
AR391-S3.8-S84A	8	8	8	N	0	0	0			
AR500-15.8-S151	5	6	5	N	24	37	36			
AR500-6.5-S151	6	7	7	N	0	0	0			
AR500-S136-160A	7	6	7	N	0	0	0			
AR500-S146-160A	7	7	7	N	0	0	0			
AR551-S0.1-500A	8	8	8	N	0	0	0			
AR557-SO.3-500A	8	8	8	N	0	0	0			
AR700A-0.1-S160	4	5	5	N	13	20	21	SD	Replacement Cost	\$880,000.00
AR700-S102-160A	8	8	8	N	0	0	0			
AR700-S146-160A	8	8	7	N	0	0	0			

*SD = Structurally Deficient / FO = Functionally Obsolete

2010-2011 CDOT Off-System Bridge Inspections



NBI Condition Rating Codes:

Load Posting Restrictions:

Structure Number: Deck #58 Super #59 Sub #60 Culvert #62 Type 3 Type 3S2 Truck 3-2

Sufficiency Rating: *SD / FO Indicator: Replacement Cost / Rehabilitation: Estimated Cost:

Structure Number	Deck #58	Super #59	Sub #60	Culvert #62	Type 3	Type 3S2	Truck 3-2	Sufficiency Rating	*SD / FO Indicator	Replacement Cost	Rehabilitation	Estimated Cost
AR700-SO.1-S160	8	5	5	N	11	17	17	37.4		Replacement Cost		\$828,000.00
AR988-0.4-151A	7	8	7	N	0	0	0	99				
ARF50-WO.1-S151	6	5	5	N	5	9	9	17.5	SD	Replacement Cost		\$2,100,000.00
AR-HAREBELL.DR	5	5	5	N	0	0	0	41.9	FO			
AR-N.PAGOSA.BLV	6	7	7	N	0	0	0	76.9				

*SD = Structurally Deficient / FO = Functionally Obsolete

2010-2011 CDOT Off-System Bridge Inspections



Maintenance / Repairs per Structure

Structure Number:	Maintenance Activity Priority:	Activity Description:	Estimated Cost
AR337A-SO.1-S84	PROGRAMMED MAINTENANCE / REPAIRS:	Remove gravel above downstream girder, pull girder in at top, install tie strap across top flanges of girders at midspan to prevent rotation of girder.	\$1,100.00
		Reinforce welded splices of girders by welding splice plates to top and bottom flanges.	\$1,500.00
		Extend northwest and northeast wingwalls with steel piling and corrugated metal cribbing to prevent erosion.	\$2,250.00
		Remove brush growing in channel at corners of bridge to increase capacity for flow. Clear shrubs from inlet and outlet of overflow culvert at south.	\$400.00
AR337A-SO.1-S84	SAFETY MAINTENANCE / REPAIRS:	If bridge is not scheduled for replacement, install adequate bridge and approach rails.	\$23,600.00
AR337-SO.3-S84	PROGRAMMED MAINTENANCE / REPAIRS:	Repair spalls at both ends of south abutment (A1) cap.	\$900.00
		Remove soil and gravel on bridge deck in front of curbs and clean the joint.	\$500.00
		Remove willows encroaching into roadway along shoulder northeast of bridge. Remove log from Girder A at north abutment (A2).	\$150.00
		Seal deck to prevent further infiltration of moisture and prolong the life of the structure.	\$3,000.00
		Install large riprap along face of south abutment (A1) and 50 ft upstream along south bank to direct flow toward center of bridge.	\$2,500.00
AR337-SO.3-S84	SAFETY MAINTENANCE / REPAIRS:	Install adequate bridge and approach rails.	\$25,000.00
AR339-SO.3-S84A	PROGRAMMED MAINTENANCE / REPAIRS:	Install transverse support angle on top of girders at north end under decking to prevent deflection of decking between girders. Close gap between deck and backwall. Weld decking to girders. Regrade gravel across bridge during normal grading operations.	\$750.00
		Place large riprap along face of southeast wingwall and south abutment (A1).	\$1,000.00
		Remove brush and willows growing along shoulders at northeast and southeast to improve sight distance of bridge and visibility of Narrow Bridge sign. Clean debris from bearings at abutments and exterior flanges.	\$800.00



Structure Number:	Maintenance Activity Priority:	Activity Description:	Estimated Cost
AR339-SO.3-S84A	SAFETY MAINTENANCE / REPAIRS:	Install adequate bridge and approach rails.	\$26,400.00
AR359-S7.6-S84A	PROGRAMMED MAINTENANCE / REPAIRS:	Patch spall at northwest corner of deck.	\$200.00
		Clean and seal cracks in asphalt at ends of bridge and on approach behind north abutment (A2).	\$200.00
		Cut brush/trees growing around rails and below northwest corner of bridge to improve visibility.	\$150.00
AR359-S7.6-S84A	SAFETY MAINTENANCE / REPAIRS:	Install 3L transitions at all (4) corners and replace damaged end sections.	\$10,000.00
		Repair damaged approach rail at southeast and southwest corners.	\$1,250.00
AR382-6.5-S84	PROGRAMMED MAINTENANCE / REPAIRS:	Consider adding horizontal struts from piles at south abutment (A1) to piles at north abutment (A2) to stabilize rotation of cap at north abutment (A2).	\$5,000.00
AR382-6.5-S84	SAFETY MAINTENANCE / REPAIRS:	Install object marker (delineation panel) where missing at southwest.	\$100.00
		Install adequate bridge and approach rails.	\$25,000.00
AR391-S3.8-S84A	PROGRAMMED MAINTENANCE / REPAIRS:	Clean soil and gravel from deck and joints.	\$300.00
		Pave approaches for approximately 50-feet from bridge extents to help mitigate gravel accumulation in expansion joints and on approach slabs.	\$9,000.00
AR391-S3.8-S84A	SAFETY MAINTENANCE / REPAIRS:	Install longer approach rail at northwest and place breakaway end sections at all ends.	\$9,000.00
AR500-15.8-S151	PROGRAMMED MAINTENANCE / REPAIRS:	Remove vegetation growing at corners.	\$100.00
		Clean and re-paint bottom chord truss members and bearing areas.	\$300.00
		Patch snag at northwest.	\$300.00
		Tighten loose nuts at the northeast and southeast corners where truss bolts to cap at east abutment (A2).	\$100.00
AR500-15.8-S151	SAFETY MAINTENANCE / REPAIRS:	Install adequate bridge and approach rails.	\$25,000.00

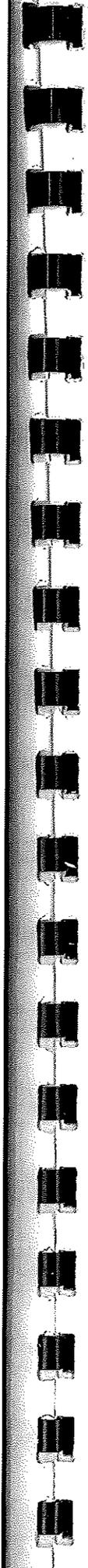


Structure Number:	Maintenance Activity Priority:	Activity Description:	Estimated Cost
AR500-6.5-S151	PROGRAMMED MAINTENANCE / REPAIRS:	Reset bearing below Girder G at west abutment (A1). Remove excess gravel from bridge deck and along curbs to prolong the life of the deck, during normal grading operations. Clean bearing areas at exterior girders. Remove nest at east abutment (A2).	\$0.00 \$300.00 \$100.00
AR500-6.5-S151	SAFETY MAINTENANCE / REPAIRS:	Install adequate bridge and approach rails. Install supplemental delineation panels at all (4) corners.	\$26,800.00 \$400.00
AR500-S136-160A	PROGRAMMED MAINTENANCE / REPAIRS:	Remove gravel along edges of deck to reduce abrasion. Trim tree branches encroaching into roadway at northwest, northeast and southwest corners. Remove vegetation from approach rails. Consider sealing concrete deck.	\$200.00 \$725.00 \$8,500.00
AR500-S136-160A	SAFETY MAINTENANCE / REPAIRS:	Install supplemental delineation panels at all (4) corners. Replace post at northwest approach rail, connect cable end anchor at northwest, & install 1 swedge bolt at west bottom rail splice on northwest wing. Replace missing backing block at southwest. Drive two 16d galvanized nails from block to post at each app	\$400.00 \$585.00
AR500-S146-160A	PROGRAMMED MAINTENANCE / REPAIRS:	Remove form between girders at pier, west side, downstream end. Seal concrete deck to prevent further infiltration of moisture and prolong the life of the structure.	\$100.00 \$8,000.00
AR500-S146-160A	SAFETY MAINTENANCE / REPAIRS:	Install supplemental delineation panels at all (4) corners. Add compacted fill under and adjacent to approach rails to effectively raise rail height to be between 27 to 32 inches and replace damaged end section.	\$400.00 \$3,000.00
AR551-S0.1-500A	PROGRAMMED MAINTENANCE / REPAIRS:	No maintenance recommended.	\$0.00
AR557-SO.3-500A	PROGRAMMED MAINTENANCE / REPAIRS:	Remove dirt on exterior bearing.	\$100.00



Structure Number:	Maintenance Activity Priority:	Activity Description:	Estimated Cost
AR557-SO.3-500A	SAFETY MAINTENANCE / REPAIRS:	Modify bridge and approach rails to current CDOT/AASHTO standards.	\$55,000.00
AR700A-0.1-S160	URGENT MAINTENANCE / REPAIRS:	Replace posting sign reading 13T 20T 21T at north.	\$100.00
AR700A-0.1-S160	PROGRAMMED MAINTENANCE / REPAIRS:	Remove debris/old timber piles remnants and wire fence in channel.	\$200.00
AR700A-0.1-S160	SAFETY MAINTENANCE / REPAIRS:	Place riprap at southwest corner and in front of both abutments.	\$2,200.00
AR700A-0.1-S160	SAFETY MAINTENANCE / REPAIRS:	If bridge is not scheduled for replacement, install adequate bridge and approach rails.	\$21,600.00
AR700-S102-160A	PROGRAMMED MAINTENANCE / REPAIRS:	Seal cracks at abutments.	\$125.00
AR700-S102-160A	PROGRAMMED MAINTENANCE / REPAIRS:	Feather asphalt for 10 ft at both ends of bridge to eliminate bumps.	\$450.00
AR700-S102-160A	PROGRAMMED MAINTENANCE / REPAIRS:	Remove vegetation growing along approach rails.	\$300.00
AR700-S102-160A	PROGRAMMED MAINTENANCE / REPAIRS:	Place riprap across bottom of channel under bridge to protect toe of existing riprap.	\$750.00
AR700-S102-160A	SAFETY MAINTENANCE / REPAIRS:	Double nest W-beam at all (4) corners at transitions.	\$1,400.00
AR700-S146-160A	PROGRAMMED MAINTENANCE / REPAIRS:	Feather asphalt for an additional 8 ft at ends of bridge to eliminate bumps.	\$450.00
AR700-S146-160A	PROGRAMMED MAINTENANCE / REPAIRS:	Seal cracks at both abutments.	\$150.00
AR700-S146-160A	PROGRAMMED MAINTENANCE / REPAIRS:	Remove vegetation on the south side of bridge.	\$200.00
AR700-S146-160A	PROGRAMMED MAINTENANCE / REPAIRS:	Fix erosion at the northeast corner (A2) behind the wingwall to prevent further sloughing of the slope.	\$400.00
AR700-S146-160A	SAFETY MAINTENANCE / REPAIRS:	Modify existing approach rail transitions to meet current CDOT/AASHTO standards.	\$1,000.00
AR700-SO.1-S160	PROGRAMMED MAINTENANCE / REPAIRS:	Place additional large riprap in front of north abutment and in front of northwest wingwall to protect exposed footing.	\$1,800.00
AR700-SO.1-S160	PROGRAMMED MAINTENANCE / REPAIRS:	Place riprap for 150 feet upstream on north bank to redirect channel under bridge.	\$1,500.00
AR700-SO.1-S160	PROGRAMMED MAINTENANCE / REPAIRS:	Remove fence upstream and clean bearing area at the northeast corner.	\$200.00





Structure Number:	Maintenance Activity Priority:	Activity Description:	Estimated Cost
AR700-SO.1-S160	SAFETY MAINTENANCE / REPAIRS:	If bridge is not scheduled for replacement, install adequate bridge and approach rails.	\$25,000.00
AR988-0.4-151A	PROGRAMMED MAINTENANCE / REPAIRS:	Remove vegetation along approach rails and metal fence on upstream side. Seal concrete deck to prevent further infiltration of moisture into concrete. Place riprap along south berm and south abutment (A1) under bridge and along south bank of channel for approximately 20 ft upstream and 10 ft downstream to prevent additional erosion and direct channel flows to center of crossing.	\$300.00 \$4,000.00 \$3,000.00
AR988-0.4-151A	SAFETY MAINTENANCE / REPAIRS:	Install adequate approach rails. Install supplemental delineation panels at all (4) corners.	\$15,000.00 \$400.00
ARF50-WO.1-S151	PROGRAMMED MAINTENANCE / REPAIRS:	Clean soil and gravel off truss members (especially at eyebar connections) and bearing areas at all four corners. Reinforce welds in truss diagonals, vertical L1U1 in south truss and stringer splices by welding splice plates to each side of each member. Tighten turnbuckles on loose diagonal truss members. Trim scrub oaks encroaching over roadway at east approach. Remove all asphalt, weld decking to stringers, repave.	\$250.00 \$5,000.00 \$500.00 \$5,160.00
ARF50-WO.1-S151	SAFETY MAINTENANCE / REPAIRS:	If bridge is not scheduled for replacement, install adequate bridge and approach rails. Consider installing a load posting sign at SH 151 in order to notify motorists of restricted bridge limits before they turn onto CR F50.	\$39,000.00 \$200.00
AR-HAREBELL.DR	PROGRAMMED MAINTENANCE / REPAIRS:	Clean girder bearing areas at abutments and on tops of bottom exterior girder flanges to prevent further corrosion and section loss. Place well-graded riprap at abutments and piers to protect footings from scour.	\$200.00 \$1,500.00
AR-N.PAGOSA.BLV	PROGRAMMED MAINTENANCE / REPAIRS:	Seal deck to prevent further infiltration of moisture and prolong the life of the structure. Patch potholes and deteriorated concrete at ends of bridge. Clean and install new compression seal.	\$4,000.00 \$750.00 \$7,000.00

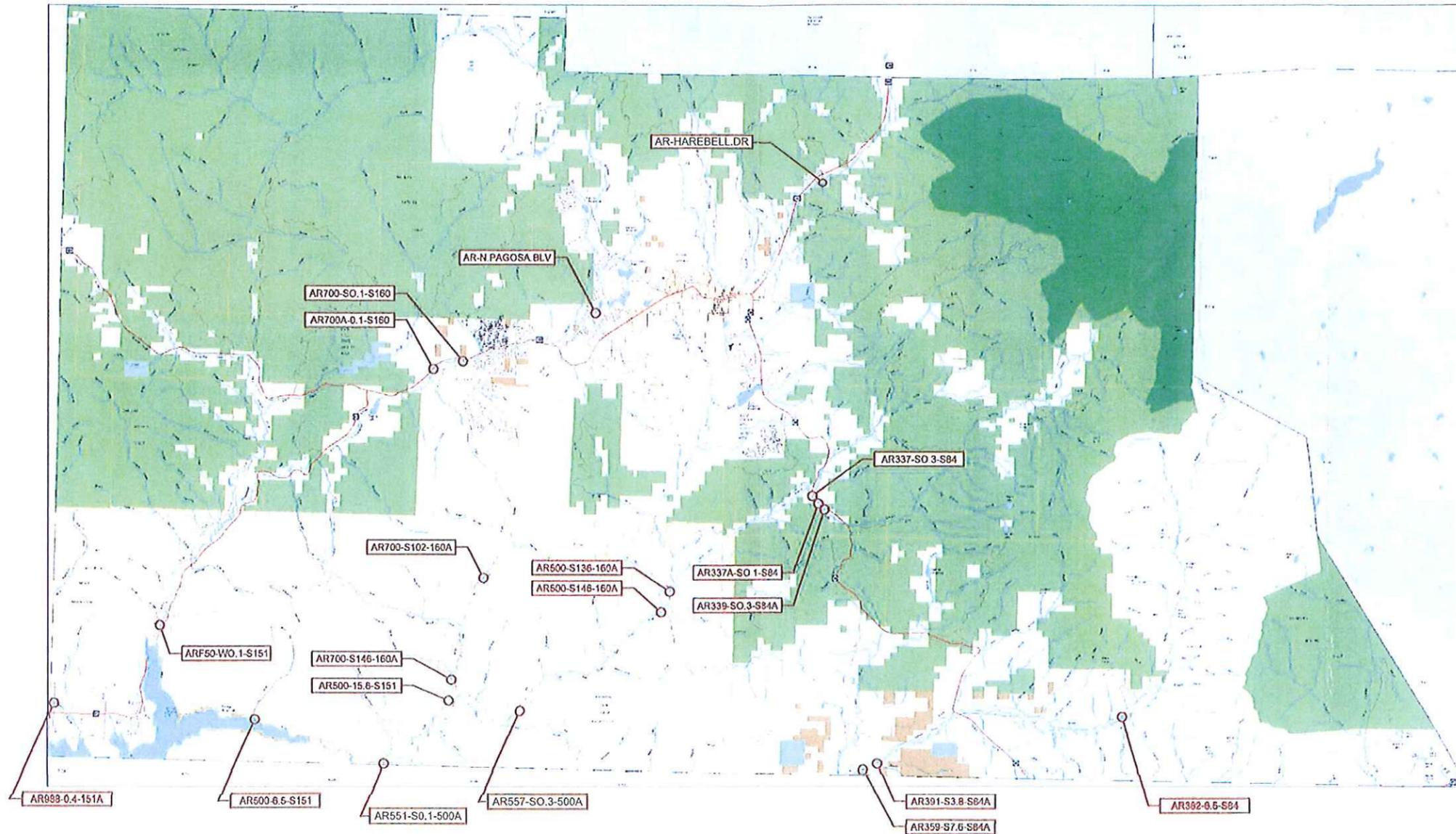


Structure Number:	Maintenance Activity Priority:	Activity Description:	Estimated Cost
AR-N.PAGOSA.BLV	PROGRAMMED MAINTENANCE / REPAIRS:	Fill voids under approach sidewalk to prevent settlement and erosion and patch holes in pavement.	\$800.00
		Seal cracks in asphalt at ends of bridge.	\$300.00
AR-N.PAGOSA.BLV	SAFETY MAINTENANCE / REPAIRS:	Install adequate bridge and approach rails.	\$30,000.00
		Install supplemental delineation panels at all (4) corners.	\$400.00



Archuleta County

Produced December, 2010



MAP LEGEND

- | | | | |
|----------------------|-----------------------|-------------|------------------------------|
| Highways | Rivers/Streams | Forest | Bureau of Land Management |
| Gravel | County Lines | Wilderness | Indian Reservation |
| Bladed | Township Lines (PLSS) | State Lands | Lakes |
| Paved | | | City Limits (various colors) |
| Congested Area Roads | | | |



OFF-SYSTEM BRIDGES
UPDATED 2010 - 2011



The information on this map is based on the best available data and is not guaranteed for accuracy. COOT does not guarantee the accuracy of any information presented on this map in any respect for any purpose other than that for which it was prepared. The user assumes all responsibility for any errors or omissions on this map.

ARCHULETA COUNTY BRIDGE INSPECTIONS

MINOR BRIDGES

2010

FINAL REPORT AND SUMMARY



STANTEC CONSULTING

2000 South Colorado Boulevard, Suite 2-300

Denver, CO 80222

303-758-4058



Stantec

Structure Inventory List

Structure Number:	Facility Carried:	Feature Intersected:	Structure Type:	Year Built:	# Main Spans	ADT Total
AR302-E2.3-S84	CO RD 302	MILL CREEK	SSE	1958	1	20
AR326-E12.1-S84	CO RD 326	SQUARETOP CREEK	SSE	1970	1	10
AR359-W2.8-S84	CO RD 359	TRIB OF COYOTE CREEK	SSE	1960	1	50
AR391-W0.3-S84	CO RD 391	LITTLE NAVAJO RIVER	SSE	1958	1	88
AR700-S100-S160	CO RD 700	CAT CREEK	SSE	1980	1	37
AR700-S144-S160	CO RD 700	CANADA DE LA NUTRIA	SSE	1957	1	27
AR-O.GALLEGOSRD	OLD GALLEGOS ROAD	STOLLSTEIMER CREEK	SSE	2006	1	25

Structure Inspection Results

Structure Number:	NBI Condition Rating Codes:				Load Posting Restrictions:			Sufficiency Rating:	*SD / FO Indicator:	Replacement / Rehabilitation:	Estimated Cost:
	Deck #58	Super #59	Sub #60	Culvert #62	Type 3	Type 3S2	Truck 3-2				
AR302-E2.3-S84	7	6	5	N	0	0	0	68.6			
AR326-E12.1-S84	7	6	6	N	23	36	37	70.2			
AR359-W2.8-S84	6	6	7	N	0	0	0	95.6			
AR391-W0.3-S84	6	6	5	N	0	0	0	77.5			
AR700-S100-S160	7	6	6	N	25	40	40	79.5			
AR700-S144-S160	7	6	7	N	0	0	0	80.4			
AR-O.GALLEGOSRD	7	7	6	N	0	0	0	67.1			

*SD = Structurally Deficient / FO = Functionally Obsolete

2010 Archuleta County Minor Bridge Inspections



Maintenance / Repairs per Structure

Structure Number:	Maintenance Activity Priority:	Activity Description:	Estimated Cost
AR302-E2.3-S84	PROGRAMMED MAINTENANCE / REPAIRS:	Place well-graded riprap in front of west abutment (A2), southwest wingwall and northeast wingwall to redirect flow through center of opening.	\$250.00
		Replace rotted abutment and wingwall planks with galvanized corrugated metal.	\$7,900.00
		Remove barbed wire fence and shrubs at upstream to prevent catching of debris.	\$300.00
		Re-align channel to protect structure from scour.	\$5,000.00
AR302-E2.3-S84	SAFETY MAINTENANCE / REPAIRS:	If railing is not scheduled for replacement, re-weld post to fascia girder at northeast.	\$400.00
		Install adequate bridge and approach rail.	\$25,000.00
AR326-E12.1-S84	PROGRAMMED MAINTENANCE / REPAIRS:	Clean dirt and debris from caps.	\$300.00
		Install 1 bolt at post for load posting sign at west approach.	\$100.00
		Move cobble pile at the center of the upstream channel to the northwest wingwall in order to protect from further scour.	\$1,000.00
		Extend half round at the southwest to close gap.	\$200.00
		Regrade west approach and deck to remove potholes.	\$300.00
AR326-E12.1-S84	SAFETY MAINTENANCE / REPAIRS:	Install adequate bridge and approach rails.	\$30,000.00
AR359-W2.8-S84	PROGRAMMED MAINTENANCE / REPAIRS:	Remove vegetation growing out of east wingwalls.	\$200.00
		Grade approaches and deck to repair potholes/ruts.	\$300.00
AR359-W2.8-S84	SAFETY MAINTENANCE / REPAIRS:	Install adequate bridge and approach rails.	\$30,000.00
AR391-W0.3-S84	PROGRAMMED MAINTENANCE / REPAIRS:	Remove log, tree debris and cattle fence under the downstream side of the bridge to improve flow through the structure and decrease the potential for scour of channel material.	\$100.00



Structure Number:	Maintenance Activity Priority:	Activity Description:	Estimated Cost
AR391-W0.3-S84	PROGRAMMED MAINTENANCE / REPAIRS:	Realign channel through structure and place riprap along the west abutment.	\$1,000.00
AR391-W0.3-S84	SAFETY MAINTENANCE / REPAIRS:	Install adequate bridge and approach rails.	\$30,000.00
AR700-S100-S160	PROGRAMMED MAINTENANCE / REPAIRS:	Place well-graded riprap in front of both abutments to prevent further scour.	\$15,000.00
AR700-S100-S160	SAFETY MAINTENANCE / REPAIRS:	Extend southeast, southwest and northeast wingwalls by 10 feet with steel sheet cribbing to retain embankment.	\$4,500.00
AR700-S100-S160	SAFETY MAINTENANCE / REPAIRS:	Install adequate bridge and approach rails.	\$19,200.00
AR700-S144-S160	PROGRAMMED MAINTENANCE / REPAIRS:	Raise all wingwalls to a suitable height to retain embankment material and place fill at bridge corners where sloughing/erosion has occurred.	\$2,000.00
AR700-S144-S160	SAFETY MAINTENANCE / REPAIRS:	Install adequate bridge and approach rails.	\$25,000.00
AR-O.GALLEGOSRD	SAFETY MAINTENANCE / REPAIRS:	Install adequate bridge and approach rails.	\$19,200.00



Archuleta County is in the process of inventorying and assessing cattle guards located within County rights of way. A list of such cattle guards will appear in future versions of this 5 – Year Road Plan.

A DRAFT policy regarding cattle guards within Archuleta County right of way is included in this section.

DECLARING ARCHULETA COUNTY POLICY WITH REGARD
TO THE ESTABLISHMENT AND MAINTENANCE OF CATTLE
GUARDS ON AND ACROSS COUNTY HIGHWAYS

WHEREAS, pursuant to §43-2-211, C.R.S., the Board of County Commissioners has the authority to establish cattle guards on County highways at the expense of the County or to permit the owners of land adjoining a County highway to establish cattle guards on highways at the expense of the land owners; which cattle guards shall be established according to fixed specifications and design and under the supervision of the Board of County Commissioners; and

WHEREAS, it is the recommendation of Archuleta County Public Works that the Board of County Commissioners adopt a definite policy concerning the establishment and maintenance of cattle guards on and across County highways; and

WHEREAS, this Board concurs with the aforementioned recommendation and, pursuant to the aforementioned statutory authority, desires to adopt the policy set forth below for the establishment and maintenance of cattle guards on and across County highways.

NOW, THEREFORE, BE IT RESOLVED by the Board of County Commissioners of Archuleta County, Colorado, that the following policy be, and hereby is, adopted concerning the establishment and maintenance of cattle guards on and across County highways;

1. Archuleta County, acting by and through Archuleta County Public Works, shall maintain all existing cattle guards located on and across County highways until such time as any such cattle guard is no longer required. The determination as to whether or not a particular cattle guard is no longer required shall be left to the discretion of the adjacent property owners. Where it is determined that a particular cattle guard is no longer required, it shall then be removed by Archuleta County and either junked, stored for further use, or used to replace other cattle guards located on or across County highways as deemed appropriate by Archuleta County.
2. A party requesting that a cattle guard be established at a location not presently served by a cattle guard must fund the entire cost of the construction and installation of an approved cattle guard. Each approved cattle guard must be constructed and installed by a licensed, bonded, and insured excavator in accordance with the County's existing regulations. Archuleta County shall provide a standard for cattle guard construction to the person desiring to establish an approved cattle guard. During the construction and installation process, Archuleta County shall inspect the construction and installation of the cattle guard to insure it is being constructed and installed in accordance with County specifications before it shall be considered an approved cattle guard. Following the construction and installation of a cattle guard, Archuleta County must accept the cattle guard as being constructed and installed in accordance with County specifications before it shall be considered an approved cattle guard. A newly installed cattle guard which does not meet County specifications remains the responsibility of the person requesting the installation of

the cattle guard until such time as Archuleta County approves the cattle guard as being constructed and installed in accordance with County specifications.

3. Following approval of a cattle guard by Archuleta County, Archuleta County shall be responsible for perpetually maintaining the cattle guard. In no event, shall Archuleta County be responsible for the maintenance of a cattle guard until such time as the cattle guard has been approved by Archuleta County as being constructed and installed in accordance with County specifications.
4. Nothing contained in this Resolution shall limit or restrict the right of Archuleta County to discontinue or limit maintenance of a particular cattle guard or the highway upon which it is situated, or to abandon or vacate any such highway according to law, where such action is deemed to be in the public interest by the Board of County Commissioners of Archuleta County, Colorado.
5. This Resolution shall become effective upon passage and adoption by this Board.

II.e. Drainage Structure Maintenance/Improvements

DESCRIPTION AND PURPOSE

Improper drainage is the largest contributor to the damage of roadway surfaces and the underlying support of roadways. A problem that originates with defective drainage cannot be effectively and economically corrected by construction techniques or maintenance procedures without the drainage deficiency first being addressed.

One means of preventing damage to roadways is conducting periodic drainage surveys. Deficiencies or problems should be noted and plans developed to alleviate any local problems based upon a larger regional plan. In this way, solving local problems will fit into the “big picture” like pieces in puzzle, without moving problems downstream.

PROCEDURAL DIRECTIVE

Once an overall drainage plan has been developed for a given area, all improvements made in that area will be in accordance with the overall plan. Funding opportunities will dictate the level (5- Year Frequency, 10 -Year Frequency, etc.) to which all improvements will be designed. In areas where no formal plan for implementing drainage improvements exists, all County employees and the public will be relied upon for bringing drainage deficiencies to the attention of Public Works. Public Works will prioritize all planned improvements and seek to acquire necessary funding for the prioritized improvements. Where formal drainage plans exist, Public Works will recommend the sequencing of improvements, acquire the necessary approvals and funding and schedule the improvements. As a general rule, County forces or outside contractors will construct these improvements based upon approved plans.

The Public Works Director is designated as the supervisor of this function. The Superintendent is the designated first alternate supervisor.

In the future as drainage improvement projects are identified, a list of non-bridge-related planned drainage improvement projects will be included in this section. This list will include drainage improvement projects scheduled for implementation over the next 5 years. This plan is not a commitment to funding but an outline of the direction in which the Public Works Department believes we need to proceed.

FUTURE DRAINAGE IMPROVEMENT PROJECT LIST

Archuleta County does not maintain any specific drainage improvements other than those contained within the roadway Right-of-Way. The only drainage improvements the County maintains are those associated with the roadway. At this time, due to the very limited funding, there is no specific drainage improvements planned. However, whenever any roadway reconstruction occurs, all drainage structures are inspected and repaired or replaced as needed. Also, during the spring and fall grading, roadside ditches and culverts are observed and cleaned as time and crew availability permit.

PERFORMANCE STANDARDS

Performance standards related to drainage improvements are difficult to arrive at because of the varied sub-tasks involved with each type of improvement. However, the following standards will be utilized to measure performance:

Culvert Cleaning	40 to 100 feet per cleaning day
Cross-Culvert Installation	40 to 80 feet per installation day
Linear Culvert Installation	80 to 120 feet per installation day
Box Culvert Construction	1400 construction hours

These standards will be reviewed annually or as performance dictates and revised as necessary.

II.f. Ditch Cleaning

DESCRIPTION AND PURPOSE

Ditch cleaning, like most infrastructure maintenance tasks within Archuleta County, is accomplished by the same personnel that perform multiple functions for Road and Bridge. As such, there is not a dedicated *DITCH Cleaning Team* assigned to ditch cleaning only. The County must prioritize this work against all other needs to arrive at the work plan that makes the most sense. However, when assigned to clean ditches, work crews will conform to the procedures discussed in this section.

PROCEDURAL DIRECTIVE

The program procedural directive will be followed with the work method. The procedures outlined below are intended to facilitate an objective and systematic approach and not a strict line of order. Sound judgment is still required. The Superintendent is designated as the ditch cleaning supervisor; the Public Works Director is designated as the first alternate supervisor. Each of these supervisors is responsible for conforming to this procedure and for meeting the required performance standards.

1. The Superintendent is responsible for monitoring the overall performance of the ditch cleaning program. The Superintendent is responsible for the organization, prioritization, supervision and inspection of the program including the scheduling of staff and equipment.

WORK METHOD (assuming backhoe operation)

1. Place safety devices and signs per standard Traffic Control Plan.
2. Use attached schedule of ditch cleaning routes unless an emergency or reassignment occurs. The judgment of the supervisor will dictate where the staff is reassigned.
3. Excavate from downstream toward upstream as determined by the supervisor when considering traffic conditions, haul route of trucks or safety hazards.
4. Overhead lines are to be approached with caution by the backhoe operator and truck drivers. Additional safety devices should be used as needed.
5. Truck drivers:
 - a. Drivers are to back up to the backhoe when operator dictates.
 - b. Drivers are to go in residential areas or county dump sites for disposal of excavated material, whichever is closer, as directed by the supervisor.
 - c. Dirt dump-sites will be kept in order by the Superintendent to be used with ditch cleaning schedule.

- d. Drivers are to remove spilled dirt from roadways and clean the ends of culverts using shovels while awaiting the filling of their truck.

PERFORMANCE STANDARD

There are approximately 500 miles of ditches which require maintenance in a given year, including those that may be maintained via road grading operations. Taking all factors including equipment failure, haul length, equipment availability, etc., into account, the performance standard for ditch cleaning is set at 1,200 linear feet per operating day, average.

That is to say, for any given month, the average of each operating day's progress should be 1,200 linear feet per team. This standard will be reviewed and revised if necessary on an annual basis or as performance dictates.

FUTURE DITCH CLEANING PROJECTS

Due to the extremely limited resources of the Road & Bridge Department, there are no planned specific ditch cleaning projects. However, on an annual basis, during the spring and fall roadway grading efforts, roadside ditches are inspected. When deficiencies or problems are discovered, a work order is prepared and a crew is assigned to perform the corrective action.

II. g. Patching of Paved Roads

Proper maintenance will significantly lengthen the life of our pavement system, but eventually rehabilitation or reconstruction is required. In many cases more than one technique or combination of techniques will be used to solve a specific problem.

There are five basic maintenance operations used to care for asphalt pavement surfaces:

- A. Deep patching, which consists of the excavation and reconstruction of fairly contained areas.
- B. Skin patching, a surface repair for distortion, wear, settlement, and extensive surface damage. This may consist of excavation and repair, leveling course and overlay.
- C. Crack Sealing, a repair of cracking in the pavement. This consists of filling the crack with a hot bituminous material after the crack has been heat-lanced or blown free of debris and moisture.
- D. Chip Seal, a repair process selected when the deterioration of the surface has gone beyond repair with crack sealing. This consists of placing an emulsified asphalt on the surface and covering it with a clean, angular, uniformly-sized aggregate.
- E. Rehabilitation – reconstruction, consisting of the repair and complete rebuilding of the subgrade and wearing surface.

There is probably no more widespread maintenance problem than patching. No type of pavement is immune. If potholes do not occur from natural causes, man-made service cuts and trenches will produce them. These defects vary from shallow abrasions to deep block cracks, and from small spots to extensive areas. Patching requires skill and close supervision. It is very important that it be done properly and promptly. The prompt repair of small asphalt pavement defects will have significant impacts on reducing costs, because once an area is open to the intrusion of water, a larger failure can result.

In large part, the ***Condition Index*** of the road is used to determine the appropriate maintenance technique to be employed. Additionally, the road's functional classification, category and average daily traffic is used to prioritize maintenance activities.

Archuleta County does not have a full-time patch crew. The same staff that would patch roads is also tasked with numerous other maintenance activities.

Generally speaking, Archuleta County will attempt to patch potholes in all paved roads (estimated to be 58 miles) as potholes are identified each year. As roads deteriorate beyond their reasonably useful life, and with currently estimated funding, the County will be unable to keep up with patching needs. Entire sections of paved roads will deteriorate beyond reasonable repair and the County will be faced with the decision to revert these sections to gravel.

As mentioned in previous sections, the life expectancy of a paved road is 20 years (presuming it is constructed to a 20 year design life). That would mean that Archuleta County must reconstruct almost 3 miles of paved road each year, on the average, to keep from falling further behind in its roadway maintenance. The budget established by the BOCC for road maintenance in 2012 is \$550,000.00. The portion of that budget designated for paved road maintenance is \$110,000.00. This level of funding can support no reconstruction and, in fact, does not provide sufficient means to prevent the County's paved roads from further deterioration.

Nonetheless, patching potholes is the first priority for pavement maintenance in 2012 and assuming a similar level of funding, for 2013 – 2016 as well.

The pages that follow in this section represent a prioritized list of roads to be patched in 2012. The list remains the same for each year 2013 – 2016 based upon a similar funding level, and continued deterioration from year to year.

Additional patching may be required on roads to be chip sealed, if the annual budget allows for chip sealing.

The general procedure to be followed for patching is as described below. Patching that is done in winter should be deemed "temporary patching" and does not necessarily need to conform to the procedures, though these temporary patches should be replaced pursuant to the approved procedure as soon as weather allows (hot mix is available).

Procedural Directive

The standard asphalt patch is 4-inches (2, 2-inch lifts) of HBP on top of a minimum of 8-inches of compacted ABC Class 6.

- A. Place traffic control devices per standard Traffic Control Plan
- B. Jack-hammer area to be patched
- C. Excavate area to be patched to a minimum depth of one foot below the adjacent road surface
- D. Tack sides and bottom of hole.
- E. Shovel mix into hole and level 1/2 inch above adjacent surfaces to allow for compaction.
- F. Compact with vibratory plate or roller in 2 inch lifts.
- G. Place top layer and compact to match adjacent surface and cross-slope

PERFORMANCE STANDARD

The performance standard for conventional hot-mix patching is established at 15 tons; cold mix, 8 tons.

This performance standard has been developed utilizing performance history, including equipment breakdown, material acquisition, etc. This performance standard is subject to review and revision on an annual basis or as performance dictates.

Roads to be Patched in 2012 - 2016

Priority	Road	Location	Classification	Category	Assessed Condition	Length (ft)
1	Park Avenue	N Pagosa Blvd to Carlee Pl	Major Collector	Primary	Excellent	5097
2	Park Avenue	Carlee Pl to Cloud Cap Ave	Major Collector	Primary	Excellent	4080
3	Carlee Place	Park Ave to Pine Club	Major Collector	Primary	Excellent	1262
4	Buttress Avenue	1- 602	Major Collector	Primary	Good	3125
5	Carlee Place	Pines Club to 374	Major Collector	Primary	Excellent	613
6	Holiday Avenue	North Lake Ave to Masters Cir	Minor Collector	Primary	Excellent	2957
7	Handicap Avenue	County Road 600 to just passed Masters Cr	Minor Collector	Primary	Excellent	884
8	Aspenglow Boulevard	Nocturn Dr to N Pagosa Blvd	Minor Collector	Primary	Excellent	1937
9	Aspenglow Boulevard	County Rd 600 to Surface Change	Minor Collector	Primary	Excellent	41
10	Aspenglow Boulevard	Surface Change to Nocturn Dr	Minor Collector	Primary	Excellent	4632
11	Handicap Avenue	Masters Cr to Pine's Club Pl	Local Access	Primary	Excellent	2973
12	County Rd 175	Surface Change to State Hwy 160	Rural Access	Primary	Excellent	3811
13	County Rd 600	Hwy 160 to Solomon Dr	Minor Arterial	Primary	Fair	374
14	County Rd 600	Solomon Dr to Ace Ct	Minor Arterial	Primary	Fair	714
15	N Pagosa Blvd	Hwy 160 to Shell Driveway	Minor Arterial	Primary	Fair	168
16	Vista Boulevard	Hwy 160 to Lake Forest Cir	Major Collector	Primary	Fair	4281
17	Cloud Cap Avenue	County Rd 600 to 1010- Nocturn Dr	Major Collector	Primary	Fair	5599
18	N Pagosa Boulevard	Old Sawmill Cr to County Rd 600	Major Collector	Primary	Good	11609
19	County Rd 359	US- 84 to Pavement Change	Major Collector	Primary	Fair	97
20	Cloud Cap Avenue	1011- Nocturn Dr to Monument Ave	Major Collector	Primary	Fair	1712

Roads to be Patched in 2012 - 2016

Priority	Road	Location	Classification	Category	Assessed Condition	Length (ft)
21	Capricho Circle	Pagosa Blvd to Capricho Cir	Major Collector	Primary	Good	2168
22	County Rd 119	Scl to State Hwy 84	Major Collector	Primary	Good	11584
23	N Pagosa Boulevard	N Pagosa Blvd S to N Pagosa Blvd S	Major Collector	Primary	Fair	3302
24	N Pagosa Boulevard	N Pagosa Blvd S to N Pagosa Blvd S	Major Collector	Primary	Fair	3590
25	Park Ave	Vista Blvd to Widch	Major Collector	Primary	Fair	3965
26	Pinon Cswy	Ncl to Carlee Pl	Major Collector	Primary	Excellent	2292
27	Port Avenue	Vista Blvd to Surface Change	Major Collector	Primary	Fair	70
28	Trails Boulevard	Hwy 160 to Surface Change	Major Collector	Primary	Fair	66
29	Bonanza Avenue	1- Vista Blvd to Surface Change	Minor Collector	Primary	Good	2405
30	Pike Drive	80 to 148	Minor Collector	Primary	Fair	372
31	Holiday Avenue	Midiron Ave to Northlake Ave	Minor Collector	Primary	Excellent	317
32	Rainbow Drive	1 to 19	Minor Collector	Primary	Fair	77
33	Masters Circle	Surface Change to Handicap Ave	Minor Collector	Primary	Excellent	53
34	Hatcher Circle	1- N Pagosa Blvd to N Pagosa Blvd	Minor Collector	Primary	Fair	9113
35	County Rd 139	Hwy 160 to Pavement Change	Minor Collector	Primary	Fair	64
36	County Rd 339	State Hwy 84 to Srfch	Minor Collector	Primary	Fair	53
37	Eight Mile Mesa Road	Hwy 84 to surface change	Minor Collector	Primary	Fair	328
38	Hersch Avenue	Hwy 160 to Pavement Change	Minor Collector	Primary	Fair	62
39	Holiday Drive	US-84 to Pavement Change	Minor Collector	Primary	Fair	41
40	Masters Circle	Handicap Ave to Surface Change	Minor Collector	Primary	Excellent	52
41	Nocturn Drive	Aspenglow Blvd to Cloud Cap Ave	Minor Collector	Secondary	Fair	601
42	Northlake Ave	N Pagosa Blvd to Holiday Ave	Minor Collector	Primary	Fair	5718
43	River Forest Drive	US-84 to Pavement Change	Minor Collector	Primary	Fair	52
44	Scenic Avenue	Hwy 160 to Pavement Change	Minor Collector	Secondary	Fair	54
45	Bastille Drive	N Pagosa Blvd to Hopi Dr	Local Access	Primary	Good	1542
46	Butte Drive	Aspenglow Blvd to Monument	Local Access	Primary	Fair	1267.2
47	Prospect Boulevard	642 to 673	Local Access	Secondary	Fair	106
48	Monument Avenue	Surface Change to Aspenglow Blvd	Local Access	Primary	Fair	99
49	Ace Court	County Road 600 to Surface Change	Local Access	Primary	Fair	71
50	Big Sky Place	Pavement Change to Pavement Change	Local Access	Secondary	Fair	129
51	Greenbrier Drive	N Pagosa Blvd to Park Ave	Local Access	Secondary	Good	1147
52	County Rd 975	County Border to State Hwy 151	Local Access	Secondary	Excellent	9126

Roads to be Patched in 2012 - 2016

Priority	Road	Location	Classification	Category	Assessed Condition	Length (ft)
53	Antero Drive	Pagosa Blvd to Pavement Change	Local Access	Secondary	Good	64
54	Ace Court	Surface Change to Dead End	Local Access	Primary	Fair	149
55	Ashtil Court	Lake Forest Cir to Surface Change	Local Access	Secondary	Fair	63
56	Beaver Circle	Lake Forest Cir to Surface Change	Local Access	Secondary	Fair	62
57	Beaver Circle	Surface Change to Lake Forest Cir	Local Access	Secondary	Fair	65
58	Belford Place	Meadows Dr to Pavement Change	Local Access	Secondary	Fair	74
59	Buckeye Place	Buttress Ave to Pavement Change	Local Access	Secondary	Fair	51
60	Buffalo Court	Lake Forest Cir to Surface Change	Local Access	Secondary	Fair	67
61	Cameron Place	Pagosa Blvd to Pavement Change	Local Access	Secondary	Fair	59
62	Capricho Circle	Pavement Change to Pagosa Blvd	Local Access	Secondary	Good	51
63	Carino Pl	Sysch to Srfch	Local Access	Primary	Good	53
64	Carino Place	Meadows Dr to Pavement Change	Local Access	Primary	Good	130
65	County Rd 302	US- 84 to Pavement Change	Local Access	Primary	Good	84
66	County Rd 337	Srfch to Str	Local Access	Primary	Fair	53
67	County Rd 337	Surface Change to US- 84	Local Access	Primary	Fair	72
68	County Rd 337	US- 84 to Pavement Change	Local Access	Primary	Fair	67
69	County Rd 339	Srfch to State Hwy 84	Local Access	Secondary	Fair	53
70	County Rd 382	US-84 to Pavement Change	Local Access	Primary	Good	96
71	Davis Cup Drive	Surface Change to Park Ave	Local Access	Primary	Fair	2007
72	Dichoso Street	Hwy 160 to Pavement Change	Local Access	Primary	Good	69
73	Dichoso Street	Pavement Change to Pavement Change	Local Access	Primary	Good	131
74	Dragoon Court	Lake Forest Cir to Surface Change	Local Access	Secondary	Fair	69
75	Dutton Drive	Surface Change to Lake Forest Cir	Local Access	Secondary	Fair	73
76	Dutton Drive	N Pagosa Blvd to Surface Change	Local Access	Secondary	Fair	66
77	Easy Street	US- 84 to 85	Local Access	Secondary	Good	61
78	Echo Creek Drive	US- 84 to Pavement Change	Local Access	Secondary	Fair	84
79	Falcon Place	County Road 600 to Surface Change	Local Access	Primary	Fair	66
80	Fawn Court	Lake Forest Cir to Surface Change	Local Access	Secondary	Fair	51
81	Fish Cove Court	Lake Forest Cir to Surface Change	Local Access	Secondary	Fair	68
82	Hackamore Pl	Northlake Ave to Cds	Local Access	Secondary	Excellent	824
83	Harvard Avenue	Meadows Dr to Pavement Change	Local Access	Primary	Fair	61
84	Hills Circle	N Pagosa Blvd to Surface Change	Local Access	Secondary	Fair	70
85	Hills Circle	Surface Change to N Pagosa Blvd	Local Access	Secondary	Fair	68

Roads to be Patched in 2012 - 2016

Priority	Road	Location	Classification	Category	Assessed Condition	Length (ft)
86	Laguna Place	Saturn Dr to Surface Change	Local Access	Secondary	Good	52
87	Lakeside Dr	Park Ave to N Pagosa Blvd	Local Access	Primary	Fair	3643
88	Luxury Pl	Saturn Dr to Srfch	Local Access	Secondary	Fair	53
89	Marmot Court	Meadows Dr to Pavement Change	Local Access	Secondary	Fair	56
90	Martinez Place	Lake Forest Cir to Surface Change	Local Access	Secondary	Fair	66
91	Morro Circle	Saturn Dr to Surface Change	Local Access	Secondary	Fair	31
92	Morro Circle	Surface Change to Saturn Dr	Local Access	Secondary	Fair	36
93	Navajo Trail Dr	N Pagosa Blvd to Vista Blvd	Local Access	Secondary	Fair	4081
94	Old Sawmill Cir	N Pagosa Blvd to Srfch	Local Access	Secondary	Good	69
95	Oriole Court	Lake Forest Cir to Surface Change	Local Access	Secondary	Fair	65
96	Paciente Place	Meadows Dr to Pavement Change	Local Access	Secondary	Fair	75
97	Pacifico Drive	Meadows Dr to Pavement Change	Local Access	Secondary	Fair	55
98	Periwinkle Drive	Lake Forest Cir to Arrowhead Drive	Local Access	Secondary	Fair	83
99	Pines Club Pl	Carlee Pl to Sysch	Local Access	Primary	Excellent	211
100	Pines Club Place	Carlee Pl to Golf Course	Local Access	Primary	Poor	369
101	Pineview Rd	State Hwy 84 to Terry Robinson Rd	Local Access	Secondary	Fair	158
102	Point Place	Saturn Dr to Surface Change	Local Access	Secondary	Fair	54
103	Quartz Court	Lake Forest Dr to Surface Change	Local Access	Secondary	Fair	65
104	Rifle Place	Meadows Dr to Pavement Change	Local Access	Secondary	Fair	73
105	Saddle Circle	N Pagosa Blvd to Surface Change	Local Access	Secondary	Fair	65
106	Saddle Circle	Surface Change to N Pagosa Blvd	Local Access	Secondary	Fair	67
107	Seminole Dr	Navajo Trail to Park Ave	Local Access	Primary	Good	1119
108	Walnut Place	N Pagosa Blvd to Surface Change	Local Access	Secondary	Fair	68
109	Wilderness Drive	253- Surface Change to Lake Forest Dr	Local Access	Secondary	Fair	58
110	Wilderness Drive	Lake Forest Dr to Surface Change	Local Access	Secondary	Fair	69
111	County Rd 391	Bridge to Bridge	Rural Access	Primary	Excellent	79
112	County Rd 391	US- 84 to Pavement Change	Rural Access	Primary	Good	66
113	Carrico Street	County Road 337 to Surface Change	Forest/Recreation	Secondary	Fair	133
114	County Rd 326	US- 84 to Surface Change	Forest/Recreation	Primary	Fair	26
115	County Rd 600	Ace Ct to Forest Service	Minor Arterial	Primary	Failed/Critical	28830

Roads to be Patched in 2012 - 2016

Priority	Road	Location	Classification	Category	Assessed Condition	Length (ft)
116	Lake Forest Circle	1- N Pagosa Blvd to 2140- N Pagosa Blvd	Major Collector	Primary	Failed/Critical	10671
117	County Rd 600	USFS Boundary to Widch	Minor Arterial	Primary	Failed/Critical	2534
118	County Rd 500	County Line to Surface Change	Minor Arterial	Primary	Poor	11840
119	County Rd 600	Pagosa to Widch	Minor Arterial	Primary	Failed/Critical	317
120	County Rd 600	Widch to Pagosa	Minor Arterial	Primary	Failed/Critical	370
124	County Rd 335	US- 84 to Pavement Change	Minor Collector	Primary	Failed/Critical	110
125	Solomon Drive	County Rd 600 to David Dr	Local Access	Primary	Failed/Critical	244
126	Mission Drive	1- N Pagosa Blvd to County Road 600	Minor Collector	Primary	Failed/Critical	1659
127	Saturn Drive	1- N Pagosa Blvd to Hatcher Circle	Minor Collector	Primary	Failed/Critical	2629
130	County Rd 982	Hwy 151 to Unknown	Local Access	Primary	Failed/Critical	64
131	Eight Mile Mesa Road	175 to 185	Minor Collector	Primary	Failed/Critical	167
132	Masters Circle	Surface Change to Surface Change	Minor Collector	Primary	Failed/Critical	1535
133	County Rd 982	Unknown to Navajo State Park	Local Access	Primary	Failed/Critical	7942
134	Davis Cup Drive	Village Dr to Surface Change	Local Access	Primary	Failed/Critical	33
135	County Rd 382	Pavement Change to 750- Pavement Change	Local Access	Primary	Failed/Critical	4030
139	County Rd 337	Bridge to Surface Change	Local Access	Primary	Failed/Critical	341
140	County Rd 917	Hwy 151 to Surface Change	Rural Access	Primary	Failed/Critical	78

Roads to be Patched in 2012 - 2016

Priority	Road	Location	Classification	Category	Assessed Condition	Length (ft)
141	County Rd 982	Unknown to Unknown	Local Access	Primary	Failed/Critical	363
142	Dichoso Street	Pavement Change to Pagosa Blvd	Local Access	Primary	Failed/Critical	82
144	Solomon Drive	David Dr to Ace Ct	Local Access	Primary	Failed/Critical	443
147	County Rd 200	City Limits to Surface Change	Forest/Recreation	Primary	Failed/Critical	5121.6
150	County Rd 175	Hwy 160 to Surface Change	Rural Access	Primary	Failed/Critical	367
156	County Rd 500	Pavement Change to SH 151	Rural Access	Primary	Failed/Critical	52
158	Pines Drive	5- Park Ave to Masters Cir	Local Access	Primary	Poor	2816
160	Canyon Circle	13- Highland Ave to Highland Ave	Local Access	Secondary	Failed/Critical	2312
164	Talisman Dr	Village Dr to Eagles Loft Cir	Local Access	Primary	Poor	2587
165	Valley View Dr	Pinon Cswy to Srfch	Local Access	Primary	Poor	850
166	Carlee Place	375 to 460- Dead End	Local Access	Secondary	Failed/Critical	526
168	Monument Avenue	12 to 472	Local Access	Primary	Poor	2587
174	Back Swing Drive	County Road to East Golf Pl	Local Access	Primary	Poor	379
181	Cloud Cap Court	464- Cloud Cap Ave to 601- Cloud Cap Ave	Local Access	Secondary	Failed/Critical	1040
198	Enchanted Place	15 to 180	Local Access	Secondary	Failed/Critical	982
199	Fiesta Place	Monument Ave to 180	Local Access	Secondary	Failed/Critical	930
204	Gallop Court	5- Cloud Cap Ave to 40- Dead End	Local Access	Secondary	Failed/Critical	198
205	Highland Avenue	179- Prospect Blvd to 430- Canyon Cir	Local Access	Secondary	Failed/Critical	533
206	Homestead Drive	Lake St to Prospect Blvd	Local Access	Secondary	Failed/Critical	840
208	Hunter Court	6- Cloud Cap Ave to 60- Dead End	Local Access	Secondary	Failed/Critical	320

Roads to be Patched in 2012 - 2016

Priority	Road	Location	Classification	Category	Assessed Condition	Length (ft)
210	Lake Street	523- Homestead to 593- Surface Change	Local Access	Secondary	Failed/Critical	345
212	Lyn Ave	Canyon Cir to Prospect Blvd	Local Access	Secondary	Failed/Critical	264
213	Manor Court	6- Prospect Blvd to 30- Dead End	Local Access	Secondary	Failed/Critical	128
227	Par Place	12- Park Ave to 150- Dead End	Local Access	Secondary	Failed/Critical	743
232	Pinon Hills Drive	County Rd 982 to Pavement Change	Local Access	Secondary	Failed/Critical	85
236	Prospect Boulevard	568 to 641	Local Access	Secondary	Failed/Critical	539
237	Prospect Boulevard	676- Surface Change to 800- Lyn Ave	Local Access	Secondary	Failed/Critical	758
238	Prospect Boulevard	Surrey Dr to Lake St	Local Access	Secondary	Failed/Critical	2297
239	Ray Court	1 to 12- Highland Drive	Local Access	Secondary	Failed/Critical	129
246	Sierra Court	Cloud Cap Ave to Dead End	Local Access	Secondary	Failed/Critical	298
250	Stone Court	Aspenglow Blvd to Surface Change	Local Access	Secondary	Failed/Critical	61
258	Valley View Dr	Srfch to Park Ave	Local Access	Primary	Poor	961
265	N Pagosa Boulevard	Bastille Dr to Bridge	Minor Arterial	Primary	Good	4662
284	N Pagosa Blvd	Shell Driveway to Park Bridge	Minor Arterial	Primary	Good	856
285	N Pagosa Boulevard	Bridge to Monument	Minor Arterial	Primary	Good	16695
295	Carrico Street	Surface Change to Bridge	Forest/Recreation	Secondary	Failed/Critical	212
304	S Pagosa Boulevard	Cameron Pl to 2790	Major Collector	Primary	Good	6241

Roads to be Patched in 2012 - 2016

Priority	Road	Location	Classification	Category	Assessed Condition	Length (ft)
305	S Pagosa Boulevard	Hwy 160 to North Vista San Juan	Major Collector	Primary	Good	1214
309	Dayspring Place	13 to 190	Local Access	Secondary	Poor	1052
312	Carefree Place	15 to End of Loop @ Dead End	Local Access	Secondary	Poor	1064
343	Cloud Cap Court	645- Cloud Cap Ave to 705- Cloud Cap Ave	Local Access	Secondary	Poor	638
352	County Rd 975	CR 973 to end of road	Local Access	Secondary	Poor	2064
357	Eagles Loft Cir	Park Ave to Park Ave	Local Access	Secondary	Poor	4979
366	Fairway Place	Handicap Ave to 190- Dead End	Local Access	Secondary	Poor	981
384	Inspiration Drive	10- Cloud Cap Ave to 305- Nocturn Dr	Local Access	Secondary	Poor	1747
386	Knollwood Court	15- Sundown Cir to 45- Dead End	Local Access	Secondary	Poor	219
397	Meadows Drive	Hwy 160 to 35	Major Collector	Primary	Good	198
398	Moccasin Court	Meadows Dr to Pavement Change	Local Access	Secondary	Poor	62
414	Pines Club Place	Golf Course to 300- Dead End	Local Access	Secondary	Poor	1390
420	S Pagosa Boulevard	Cameron Pl to Capricho Cr	Major Collector	Primary	Good	6336
435	Trap Court	12- Park Ave to 60- Dead End	Local Access	Secondary	Poor	337
442	Meadows Drive	Big Sky Pl to Buttress Ave	Major Collector	Primary	Good	8886
443	Meadows Drive	Widch to Big Sky Pl	Major Collector	Primary	Good	9457
458	Pinon Causeway	Village Dr to Carlee Pl	Major Collector	Primary	Good	2482
460	S Pagosa Boulevard	Pagosa Lakes Ranch to Cameron Pl	Major Collector	Primary	Good	1373
511	Butte Dr	Sysch to End	Local Access	Secondary	Fair	422
679	Pinon Causeway	Village Dr to Surface Change	Local Access	Secondary	Good	96

Roads to be Patched in 2012 - 2016

Priority	Road	Location	Classification	Category	Assessed Condition	Length (ft)
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Roads to be Patched in 2012 - 2016

Priority	Road	Location	Classification	Category	Assessed Condition	Length (ft)
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II.h. Crack Sealing of Paved Roads

Proper maintenance will significantly lengthen the life of our pavement system, but eventually rehabilitation or reconstruction is required. In many cases more than one technique or combination of techniques will be used to solve a specific problem.

There are five basic maintenance operations used to care for asphalt pavement surfaces:

- A. Deep patching, which consists of the excavation and reconstruction of fairly contained areas.
- B. Skin patching, a surface repair for distortion, wear, settlement, and extensive surface damage. This may consist of excavation and repair, leveling course and overlay.
- C. Crack Sealing, a repair of cracking in the pavement. This consists of filling the crack with a hot bituminous material after the crack has been heat-lanced or blown free of debris and moisture.
- D. Chip Seal, a repair process selected when the deterioration of the surface has gone beyond repair with crack sealing. This consists of placing an emulsified asphalt on the surface and covering it with a clean, angular, uniformly-sized aggregate.
- E. Rehabilitation – reconstruction, consisting of the repair and complete rebuilding of the subgrade and wearing surface.

Sealing cracks in pavement before the cracks can develop into potholes is one of the most effective means of maintain paved roads and extending service life for the least cost. It is very important that it be done properly and promptly. The prompt repair of small asphalt pavement defects will have significant impacts on reducing costs, because once an area is open to the intrusion of water, a larger failure can result.

In large part, the ***Condition Index*** of the road is used to determine the appropriate maintenance technique to be employed. Additionally, the road's functional classification, category and average daily traffic are criteria used to prioritize maintenance activities.

Archuleta County does not have a crack sealing crew. Typically, it is most cost effective to contract for this work to be done by an experienced, qualified contractor.

Generally speaking, Archuleta County will attempt to seal cracks in all paved roads that have not received a chip seal within the last 3 years. Chip seals will generally fend off reflective cracking for up to 3 years before crack sealing would be warranted.

As mentioned in previous sections, the life expectancy of a paved road is 20 years (presuming it is constructed to a 20 year design life). That would mean that Archuleta County must reconstruct almost 3 miles of paved road each year, on the average, to keep from falling further behind in its roadway maintenance. The budget established by the BOCC for road maintenance in 2012 is \$550,000.00. The portion of that budget designated for paved road maintenance is

\$110,000.00. This level of funding can support no reconstruction and, in fact, does not provide sufficient means to prevent the County's paved roads from further deterioration.

Nonetheless, sealing cracks is the second, if not first priority for pavement maintenance in 2012 and assuming a similar level of funding, for 2013 – 2016 as well.

The pages that follow in this section represent a prioritized list of roads to be sealed in 2012. The list will likely be different each year depending upon what roads are chip sealed the previous year. It is assumed that the roads identified for chip seal in 2012 will not require crack sealing until 2015. A similar funding level is assumed for years 2013 – 2016.

The general procedure to be followed for crack sealing is as described below. Crack sealing done in the spring and fall is best in order to seal the cracks when they are roughly at the midpoint of their expansion/contraction cycle.

Procedural Directive

The recommended material is an ASTM D3405 hot applied rubberized asphaltic mixture that is typically delivered in 60 pound boxes. The solid material is removed from the box and placed in the tank of the heating/application apparatus. Upon reaching the required temperature the material is ready for application to prepared cracks.

1. Place traffic control pursuant to a standard plan.
2. Cracks should be clean and free of dust and debris. A heat lance is the preferred method of cleaning the crack of dust, debris and moisture and warming the pavement to achieve better adherence of the crack sealant. Cracks can also be routed, followed by compressed air cleaning but decent results can usually be achieved through use of the heat lance alone, thereby reducing costs slightly.
3. Backer rods should be employed pursuant to the manufacturer's directions.
4. As the cracks are cleaned, the crack sealant is applied at a rate required to fill the crack as the wand moves along the crack.
5. Another worker follows behind the crack sealant applicator wand with a long-handled squeegee shaved in a "V" to level the sealant in the crack and provide 2-inches or so adhesion surface next to the crack.
6. If the road must be opened to traffic immediately, a blotting material should be applied to the crack before it cools too much. Single ply toilet paper is a favorite blotting material among many road maintenance agencies.

PERFORMANCE STANDARD

No performance standard is recommended due to the fact that a Contractor will likely be performing the work and Contractors generally seek to be as productive as possible to reduce cost/increase profit, and because Contractors can assign more workers to the project in order to expedite the work.

2012 Crack Sealing of Paved Roads

Priority	Road	Location	Classification	Category	Length (ft)	Estimate of Cost	Cumulative Total
1	Park Avenue	N Pagosa Blvd to Carlee Pl	Major Collector	Primary	5097	\$497	\$497
2	Park Avenue	Carlee Pl to Cloud Cap Ave	Major Collector	Primary	4080	\$398	\$895
3	Carlee Place	Park Ave to Pine Club	Major Collector	Primary	1262	\$123	\$1,018
4	Buttress Avenue	1- 602	Major Collector	Primary	3125	\$305	\$1,323
5	Carlee Place	Pines Club to 374	Major Collector	Primary	613	\$60	\$1,383
6	Holiday Avenue	North Lake Ave to Masters Cir	Minor Collector	Primary	2957	\$288	\$1,671
7	Handicap Avenue	County Road 600 to just passed Masters Cr	Minor Collector	Primary	884	\$86	\$1,757
8	Aspenglow Boulevard	Nocturn Dr to N Pagosa Blvd	Minor Collector	Primary	1937	\$189	\$1,946
9	Aspenglow Boulevard	County Rd 600 to Surface Change	Minor Collector	Primary	41	\$4	\$1,950
10	Aspenglow Boulevard	Surface Change to Nocturn Dr	Minor Collector	Primary	4632	\$452	\$2,402
11	Handicap Avenue	Masters Cr to Pine's Club Pl	Local Access	Primary	2973	\$290	\$2,692
12	County Rd 175	Surface Change to State Hwy 160	Rural Access	Primary	3811	\$372	\$3,064
17	Cloud Cap Avenue	County Rd 600 to 1010- Nocturn Dr	Major Collector	Primary	5599	\$546	\$3,610
19	County Rd 359	US- 84 to Pavement Change	Major Collector	Primary	97	\$9	\$3,619
20	Cloud Cap Avenue	1011- Nocturn Dr to Monument Ave	Major Collector	Primary	1712	\$167	\$3,786
21	Capricho Circle	Pagosa Blvd to Capricho Cir	Major Collector	Primary	2168	\$211	\$3,998
22	County Rd 119	Scl to State Hwy 84	Major Collector	Primary	11584	\$1,130	\$5,128
23	N Pagosa Boulevard	N Pagosa Blvd S to N Pagosa Blvd S	Major Collector	Primary	3302	\$322	\$5,450
24	N Pagosa Boulevard	N Pagosa Blvd S to N Pagosa Blvd S	Major Collector	Primary	3590	\$350	\$5,800
25	Park Ave	Vista Blvd to Widch	Major Collector	Primary	3965	\$387	\$6,187
26	Pinon Cswy	Ncl to Carlee Pl	Major Collector	Primary	2292	\$224	\$6,410
27	Port Avenue	Vista Blvd to Surface Change	Major Collector	Primary	70	\$7	\$6,417
28	Trails Boulevard	Hwy 160 to Surface Change	Major Collector	Primary	66	\$6	\$6,424
29	Bonanza Avenue	1- Vista Blvd to Surface Change	Minor Collector	Primary	2405	\$235	\$6,658
30	Pike Drive	80 to 148	Minor Collector	Primary	372	\$36	\$6,694
31	Holiday Avenue	Midiron Ave to Northlake Ave	Minor Collector	Primary	317	\$31	\$6,725
32	Rainbow Drive	1 to 19	Minor Collector	Primary	77	\$8	\$6,733
33	Masters Circle	Surface Change to Handicap Ave	Minor Collector	Primary	53	\$5	\$6,738

2012 Crack Sealing of Paved Roads

Priority	Road	Location	Classification	Category	Length (ft)	Estimate of Cost	Cumulative Total
34	Hatcher Circle	1- N Pagosa Blvd to N Pagosa Blvd	Minor Collector	Primary	9113	\$889	\$7,627
35	County Rd 139	Hwy 160 to Pavement Change	Minor Collector	Primary	64	\$6	\$7,633
36	County Rd 339	State Hwy 84 to Srfch	Minor Collector	Primary	53	\$5	\$7,638
37	Eight Mile Mesa Road	Hwy 84 to surface change	Minor Collector	Primary	328	\$32	\$7,670
38	Hersch Avenue	Hwy 160 to Pavement Change	Minor Collector	Primary	62	\$6	\$7,676
39	Holiday Drive	US-84 to Pavement Change	Minor Collector	Primary	41	\$4	\$7,680
40	Masters Circle	Handicap Ave to Surface Change	Minor Collector	Primary	52	\$5	\$7,685
41	Nocturn Drive	Aspenglow Blvd to Cloud Cap Ave	Minor Collector	Secondary	601	\$59	\$7,744
42	Northlake Ave	N Pagosa Blvd to Holiday Ave	Minor Collector	Primary	5718	\$558	\$8,302
43	River Forest Drive	US-84 to Pavement Change	Minor Collector	Primary	52	\$5	\$8,307
44	Scenic Avenue	Hwy 160 to Pavement Change	Minor Collector	Secondary	54	\$5	\$8,312
45	Bastille Drive	N Pagosa Blvd to Hopi Dr	Local Access	Primary	1542	\$150	\$8,462
46	Butte Drive	Aspenglow Blvd to Monument	Local Access	Primary	1267.2	\$124	\$8,586
47	Prospect Boulevard	642 to 673	Local Access	Secondary	106	\$10	\$8,596
48	Monument Avenue	Surface Change to Aspenglow Blvd	Local Access	Primary	99	\$10	\$8,606
49	Ace Court	County Road 600 to Surface Change	Local Access	Primary	71	\$7	\$8,613
50	Big Sky Place	Pavement Change to Pavement Change	Local Access	Secondary	129	\$13	\$8,626
51	Greenbrier Drive	N Pagosa Blvd to Park Ave	Local Access	Secondary	1147	\$112	\$8,737
52	County Rd 975	County Border to State Hwy 151	Local Access	Secondary	9126	\$890	\$9,628
53	Antero Drive	Pagosa Blvd to Pavement Change	Local Access	Secondary	64	\$6	\$9,634
54	Ace Court	Surface Change to Dead End	Local Access	Primary	149	\$15	\$9,648
55	Ashtil Court	Lake Forest Cir to Surface Change	Local Access	Secondary	63	\$6	\$9,655
56	Beaver Circle	Lake Forest Cir to Surface Change	Local Access	Secondary	62	\$6	\$9,661
57	Beaver Circle	Surface Change to Lake Forest Cir	Local Access	Secondary	65	\$6	\$9,667
58	Belford Place	Meadows Dr to Pavement Change	Local Access	Secondary	74	\$7	\$9,674
59	Buckeye Place	Buttress Ave to Pavement Change	Local Access	Secondary	51	\$5	\$9,679
60	Buffalo Court	Lake Forest Cir to Surface Change	Local Access	Secondary	67	\$7	\$9,686
61	Cameron Place	Pagosa Blvd to Pavement Change	Local Access	Secondary	59	\$6	\$9,691
62	Capricho Circle	Pavement Change to Pagosa Blvd	Local Access	Secondary	51	\$5	\$9,696
63	Carino Pl	Sysch to Srfch	Local Access	Primary	53	\$5	\$9,702
64	Carino Place	Meadows Dr to Pavement Change	Local Access	Primary	130	\$13	\$9,714
65	County Rd 302	US- 84 to Pavement Change	Local Access	Primary	84	\$8	\$9,722
66	County Rd 337	Srfch to Str	Local Access	Primary	53	\$5	\$9,728
67	County Rd 337	Surface Change to US- 84	Local Access	Primary	72	\$7	\$9,735
68	County Rd 337	US- 84 to Pavement Change	Local Access	Primary	67	\$7	\$9,741
69	County Rd 339	Srfch to State Hwy 84	Local Access	Secondary	53	\$5	\$9,746
70	County Rd 382	US-84 to Pavement Change	Local Access	Primary	96	\$9	\$9,756
71	Davis Cup Drive	Surface Change to Park Ave	Local Access	Primary	2007	\$196	\$9,951
72	Dichoso Street	Hwy 160 to Pavement Change	Local Access	Primary	69	\$7	\$9,958
73	Dichoso Street	Pavement Change to Pavement Change	Local Access	Primary	131	\$13	\$9,971
74	Dragoon Court	Lake Forest Cir to Surface Change	Local Access	Secondary	69	\$7	\$9,978

2012 Crack Sealing of Paved Roads

Priority	Road	Location	Classification	Category	Length (ft)	Estimate of Cost	Cumulative Total
75	Dutton Drive	Surface Change to Lake Forest Cir	Local Access	Secondary	73	\$7	\$9,985
76	Dutton Drive	N Pagosa Blvd to Surface Change	Local Access	Secondary	66	\$6	\$9,991
77	Easy Street	US- 84 to 85	Local Access	Secondary	61	\$6	\$9,997
78	Echo Creek Drive	US- 84 to Pavement Change	Local Access	Secondary	84	\$8	\$10,005
79	Falcon Place	County Road 600 to Surface Change	Local Access	Primary	66	\$6	\$10,012
80	Fawn Court	Lake Forest Cir to Surface Change	Local Access	Secondary	51	\$5	\$10,017
81	Fish Cove Court	Lake Forest Cir to Surface Change	Local Access	Secondary	68	\$7	\$10,023
82	Hackamore Pl	Northlake Ave to Cds	Local Access	Secondary	824	\$80	\$10,104
83	Harvard Avenue	Meadows Dr to Pavement Change	Local Access	Primary	61	\$6	\$10,110
84	Hills Circle	N Pagosa Blvd to Surface Change	Local Access	Secondary	70	\$7	\$10,116
85	Hills Circle	Surface Change to N Pagosa Blvd	Local Access	Secondary	68	\$7	\$10,123
86	Laguna Place	Saturn Dr to Surface Change	Local Access	Secondary	52	\$5	\$10,128
87	Lakeside Dr	Park Ave to N Pagosa Blvd	Local Access	Primary	3643	\$355	\$10,484
88	Luxury Pl	Saturn Dr to Srfch	Local Access	Secondary	53	\$5	\$10,489
89	Marmot Court	Meadows Dr to Pavement Change	Local Access	Secondary	56	\$5	\$10,494
90	Martinez Place	Lake Forest Cir to Surface Change	Local Access	Secondary	66	\$6	\$10,501
91	Morro Circle	Saturn Dr to Surface Change	Local Access	Secondary	31	\$3	\$10,504
92	Morro Circle	Surface Change to Saturn Dr	Local Access	Secondary	36	\$4	\$10,507
93	Navajo Trail Dr	N Pagosa Blvd to Vista Blvd	Local Access	Secondary	4081	\$398	\$10,905
94	Old Sawmill Cir	N Pagosa Blvd to Srfch	Local Access	Secondary	69	\$7	\$10,912
95	Oriole Court	Lake Forest Cir to Surface Change	Local Access	Secondary	65	\$6	\$10,918
96	Paciente Place	Meadows Dr to Pavement Change	Local Access	Secondary	75	\$7	\$10,926
97	Pacifico Drive	Meadows Dr to Pavement Change	Local Access	Secondary	55	\$5	\$10,931
98	Periwinkle Drive	Lake Forest Cir to Arrowhead Drive	Local Access	Secondary	83	\$8	\$10,939
99	Pines Club Pl	Carlee Pl to Sysch	Local Access	Primary	211	\$21	\$10,960
100	Pines Club Place	Carlee Pl to Golf Course	Local Access	Primary	369	\$36	\$10,996
101	Pineview Rd	State Hwy 84 to Terry Robinson Rd	Local Access	Secondary	158	\$15	\$11,011
102	Point Place	Saturn Dr to Surface Change	Local Access	Secondary	54	\$5	\$11,016
103	Quartz Court	Lake Forest Dr to Surface Change	Local Access	Secondary	65	\$6	\$11,023
104	Rifle Place	Meadows Dr to Pavement Change	Local Access	Secondary	73	\$7	\$11,030
105	Saddle Circle	N Pagosa Blvd to Surface Change	Local Access	Secondary	65	\$6	\$11,036
106	Saddle Circle	Surface Change to N Pagosa Blvd	Local Access	Secondary	67	\$7	\$11,043
107	Seminole Dr	Navajo Trail to Park Ave	Local Access	Primary	1119	\$109	\$11,152
108	Walnut Place	N Pagosa Blvd to Surface Change	Local Access	Secondary	68	\$7	\$11,158
109	Wilderness Drive	253- Surface Change to Lake Forest Dr	Local Access	Secondary	58	\$6	\$11,164
110	Wilderness Drive	Lake Forest Dr to Surface Change	Local Access	Secondary	69	\$7	\$11,171
111	County Rd 391	Bridge to Bridge	Rural Access	Primary	79	\$8	\$11,179
112	County Rd 391	US- 84 to Pavement Change	Rural Access	Primary	66	\$6	\$11,185
113	Carrico Street	County Road 337 to Surface Change	Forest/Recreation	Secondary	133	\$13	\$11,198
114	County Rd 326	US- 84 to Surface Change	Forest/Recreation	Primary	26	\$3	\$11,201
115	County Rd 600	Ace Ct to Forest Service	Minor Arterial	Primary	28830	\$2,812	\$14,013

2012 Crack Sealing of Paved Roads

Priority	Road	Location	Classification	Category	Length (ft)	Estimate of Cost	Cumulative Total
116	Lake Forest Circle	1- N Pagosa Blvd to 2140- N Pagosa Blvd	Major Collector	Primary	10671	\$1,041	\$15,053
117	County Rd 600	USFS Boundary to Widch	Minor Arterial	Primary	2534	\$247	\$15,301
118	County Rd 500	County Line to Surface Change	Minor Arterial	Primary	11840	\$1,155	\$16,455
119	County Rd 600	Pagosa to Widch	Minor Arterial	Primary	317	\$31	\$16,486
120	County Rd 600	Widch to Pagosa	Minor Arterial	Primary	370	\$36	\$16,522
124	County Rd 335	US- 84 to Pavement Change	Minor Collector	Primary	110	\$11	\$16,533
125	Solomon Drive	County Rd 600 to David Dr	Local Access	Primary	244	\$24	\$16,557
126	Mission Drive	1- N Pagosa Blvd to County Road 600	Minor Collector	Primary	1659	\$162	\$16,719
127	Saturn Drive	1- N Pagosa Blvd to Hatcher Circle	Minor Collector	Primary	2629	\$256	\$16,975
130	County Rd 982	Hwy 151 to Unknown	Local Access	Primary	64	\$6	\$16,981
131	Eight Mile Mesa Road	175 to 185	Minor Collector	Primary	167	\$16	\$16,998
132	Masters Circle	Surface Change to Surface Change	Minor Collector	Primary	1535	\$150	\$17,147
133	County Rd 982	Unknown to Navajo State Park	Local Access	Primary	7942	\$775	\$17,922
134	Davis Cup Drive	Village Dr to Surface Change	Local Access	Primary	33	\$3	\$17,925
135	County Rd 382	Pavement Change to 750- Pavement Change	Local Access	Primary	4030	\$393	\$18,318
139	County Rd 337	Bridge to Surface Change	Local Access	Primary	341	\$33	\$18,352
140	County Rd 917	Hwy 151 to Surface Change	Rural Access	Primary	78	\$8	\$18,359
141	County Rd 982	Unknown to Unknown	Local Access	Primary	363	\$35	\$18,395
142	Dichoso Street	Pavement Change to Pagosa Blvd	Local Access	Primary	82	\$8	\$18,403
144	Solomon Drive	David Dr to Ace Ct	Local Access	Primary	443	\$43	\$18,446
147	County Rd 200	City Limits to Surface Change	Forest/Recreation	Primary	5121.6	\$500	\$18,945
150	County Rd 175	Hwy 160 to Surface Change	Rural Access	Primary	367	\$36	\$18,981
156	County Rd 500	Pavement Change to SH 151	Rural Access	Primary	52	\$5	\$18,986
158	Pines Drive	5- Park Ave to Masters Cir	Local Access	Primary	2816	\$275	\$19,261
160	Canyon Circle	13- Highland Ave to Highland Ave	Local Access	Secondary	2312	\$226	\$19,486
164	Talisman Dr	Village Dr to Eagles Loft Cir	Local Access	Primary	2587	\$252	\$19,739
165	Valley View Dr	Pinon Cswy to Srfch	Local Access	Primary	850	\$83	\$19,822
166	Carlee Place	375 to 460- Dead End	Local Access	Secondary	526	\$51	\$19,873
168	Monument Avenue	12 to 472	Local Access	Primary	2587	\$252	\$20,125
174	Back Swing Drive	County Road to East Golf Pl	Local Access	Primary	379	\$37	\$20,162
181	Cloud Cap Court	464- Cloud Cap Ave to 601- Cloud Cap Ave	Local Access	Secondary	1040	\$101	\$20,264
198	Enchanted Place	15 to 180	Local Access	Secondary	982	\$96	\$20,360
199	Fiesta Place	Monument Ave to 180	Local Access	Secondary	930	\$91	\$20,450
204	Gallop Court	5- Cloud Cap Ave to 40- Dead End	Local Access	Secondary	198	\$19	\$20,470
205	Highland Avenue	179- Prospect Blvd to 430- Canyon Cir	Local Access	Secondary	533	\$52	\$20,522
206	Homestead Drive	Lake St to Prospect Blvd	Local Access	Secondary	840	\$82	\$20,603
208	Hunter Court	6- Cloud Cap Ave to 60- Dead End	Local Access	Secondary	320	\$31	\$20,635
210	Lake Street	523- Homestead to 593- Surface Change	Local Access	Secondary	345	\$34	\$20,668

2012 Crack Sealing of Paved Roads

Priority	Road	Location	Classification	Category	Length (ft)	Estimate of Cost	Cumulative Total
212	Lyn Ave	Canyon Cir to Prospect Blvd	Local Access	Secondary	264	\$26	\$20,694
213	Manor Court	6- Prospect Blvd to 30- Dead End	Local Access	Secondary	128	\$12	\$20,707
227	Par Place	12- Park Ave to 150- Dead End	Local Access	Secondary	743	\$72	\$20,779
232	Pinon Hills Drive	County Rd 982 to Pavement Change	Local Access	Secondary	85	\$8	\$20,787
236	Prospect Boulevard	568 to 641	Local Access	Secondary	539	\$53	\$20,840
237	Prospect Boulevard	676- Surface Change to 800- Lyn Ave	Local Access	Secondary	758	\$74	\$20,914
238	Prospect Boulevard	Surrey Dr to Lake St	Local Access	Secondary	2297	\$224	\$21,138
239	Ray Court	1 to 12- Highland Drive	Local Access	Secondary	129	\$13	\$21,150
246	Sierra Court	Cloud Cap Ave to Dead End	Local Access	Secondary	298	\$29	\$21,180
250	Stone Court	Aspenglow Blvd to Surface Change	Local Access	Secondary	61	\$6	\$21,185
258	Valley View Dr	Srfch to Park Ave	Local Access	Primary	961	\$94	\$21,279
265	N Pagosa Boulevard	Bastille Dr to Bridge	Minor Arterial	Primary	4662	\$455	\$21,734
284	N Pagosa Blvd	Shell Driveway to Park Bridge	Minor Arterial	Primary	856	\$83	\$21,817
285	N Pagosa Boulevard	Bridge to Monument	Minor Arterial	Primary	16695	\$1,628	\$23,446
295	Carrico Street	Surface Change to Bridge	Forest/Recreation	Secondary	212	\$21	\$23,466
304	S Pagosa Boulevard	Cameron Pl to 2790	Major Collector	Primary	6241	\$609	\$24,075
305	S Pagosa Boulevard	Hwy 160 to North Vista San Juan	Major Collector	Primary	1214	\$118	\$24,194
309	Dayspring Place	13 to 190	Local Access	Secondary	1052	\$103	\$24,296
312	Carefree Place	15 to End of Loop @ Dead End	Local Access	Secondary	1064	\$104	\$24,400
343	Cloud Cap Court	645- Cloud Cap Ave to 705- Cloud Cap Ave	Local Access	Secondary	638	\$62	\$24,462
352	County Rd 975	CR 973 to end of road	Local Access	Secondary	2064	\$201	\$24,664
357	Eagles Loft Cir	Park Ave to Park Ave	Local Access	Secondary	4979	\$486	\$25,149
366	Fairway Place	Handicap Ave to 190- Dead End	Local Access	Secondary	981	\$96	\$25,245
384	Inspiration Drive	10- Cloud Cap Ave to 305- Nocturn Dr	Local Access	Secondary	1747	\$170	\$25,415
386	Knollwood Court	15- Sundown Cir to 45- Dead End	Local Access	Secondary	219	\$21	\$25,437
397	Meadows Drive	Hwy 160 to 35	Major Collector	Primary	198	\$19	\$25,456
398	Moccasin Court	Meadows Dr to Pavement Change	Local Access	Secondary	62	\$6	\$25,462
414	Pines Club Place	Golf Course to 300- Dead End	Local Access	Secondary	1390	\$136	\$25,598
420	S Pagosa Boulevard	Cameron Pl to Capricho Cr	Major Collector	Primary	6336	\$618	\$26,216
435	Trap Court	12- Park Ave to 60- Dead End	Local Access	Secondary	337	\$33	\$26,248
442	Meadows Drive	Big Sky Pl to Buttress Ave	Major Collector	Primary	8886	\$867	\$27,115
443	Meadows Drive	Widch to Big Sky Pl	Major Collector	Primary	9457	\$922	\$28,038

2012 Crack Sealing of Paved Roads

Priority	Road	Location	Classification	Category	Length (ft)	Estimate of Cost	Cumulative Total
458	Pinon Causeway	Village Dr to Carlee Pl	Major Collector	Primary	2482	\$242	\$28,280
460	S Pagosa Boulevard	Pagosa Lakes Ranch to Cameron Pl	Major Collector	Primary	1373	\$134	\$28,414
511	Butte Dr	Sysch to End	Local Access	Secondary	422	\$41	\$28,455
679	Pinon Causeway	Village Dr to Surface Change	Local Access	Secondary	96	\$9	\$28,464

II.i. Chip Sealing of Paved Roads

Proper maintenance will significantly lengthen the life of our pavement system, but eventually rehabilitation or reconstruction is required. In many cases more than one technique or combination of techniques will be used to solve a specific problem.

There are five basic maintenance operations used to care for asphalt pavement surfaces:

- A. Deep patching, which consists of the excavation and reconstruction of fairly contained areas.
- B. Skin patching, a surface repair for distortion, wear, settlement, and extensive surface damage. This may consist of excavation and repair, leveling course and overlay.
- C. Crack Sealing, a repair of cracking in the pavement. This consists of filling the crack with a hot bituminous material after the crack has been heat-lanced or blown free of debris and moisture.
- D. Chip Seal, a repair process selected when the deterioration of the surface has gone beyond repair with crack sealing. This consists of placing an emulsified asphalt on the surface and covering it with a clean, angular, uniformly-sized aggregate.
- E. Rehabilitation – reconstruction, consisting of the repair and complete rebuilding of the subgrade and wearing surface.

Sealing cracks in pavement before the cracks can develop into potholes is one of the most effective means of maintain paved roads and extending service life for the least cost. It is very important that it be done properly and promptly. The prompt repair of small asphalt pavement defects will have significant impacts on reducing costs, because once an area is open to the intrusion of water, a larger failure can result. When a road reaches a certain stage in its life, usually about 10 years, it is generally time to consider doing a *Chip Seal*. A Chip Seal is an asphalt maintenance technique used to seal fairly pervasive cracking with little to no displacement and restore the road surface. Hot emulsified asphalt is spread evenly over the road surface followed by placement of “chips” which is typically an angular, uniform-size crushed aggregate in a single layer. A good chip seal can help “hold a road together” until money is available to overlay or reconstruct the road. Chip seals add negligible structural value to the road cross section, so chip seals should not be relied upon to replace overlays.

In large part, the ***Condition Index*** of the road is used to determine the appropriate maintenance technique to be employed. Additionally, the road’s functional classification, category and average daily traffic are criteria used to prioritize maintenance activities.

Archuleta County does not have a chip sealing crew. Typically, it is most cost effective to contract for this work to be done by an experienced, qualified contractor.

Generally speaking, Archuleta County will attempt to chip seal roads all paved roads beginning at about the 10th year of the life of the pavement. The life expectancy of a chip seal is about 7 years.

The budget established by the BOCC for road maintenance in 2012 is \$550,000.00. The portion of that budget designated for paved road maintenance is \$110,000.00. This level of funding can support no reconstruction and, in fact, does not provide sufficient means to prevent the County's paved roads from further deterioration.

Nonetheless, Chip seals are the third priority for pavement maintenance in 2012 and assuming a similar level of funding, for 2013 – 2016 as well.

The pages that follow in this section represent a prioritized list of roads to be chip sealed each budget year, 2012 - 2016. The lists may vary from those shown depending upon what roads are chip sealed the previous year. It is assumed that the roads identified for chip seal in 2012 will be chip sealed and will not require crack sealing until 2015. Roads that are chip sealed in 2013, will not require crack sealing until 2016, and so on.

The general procedure to be followed for chip sealing is as described below. Chip sealing achieves the best results when performed in the hottest time of the year, due to the more predictable nature of emulsions during the hot months.

Procedural Directive

The recommended material is an ASTM D3405 hot applied rubberized asphaltic mixture that is typically delivered in 60 pound boxes. The solid material is removed from the box and placed in the tank of the heating/application apparatus. Upon reaching the required temperature the material is ready for application to prepared cracks.

1. Place traffic control pursuant to a standard plan.
2. Cracks should be clean and free of dust and debris. A heat lance is the preferred method of cleaning the crack of dust, debris and moisture and warming the pavement to achieve better adherence of the crack sealant. Cracks can also be routed, followed by compressed air cleaning but decent results can usually be achieved through use of the heat lance alone, thereby reducing costs slightly.
3. Backer rods should be employed pursuant to the manufacturer's directions.
4. As the cracks are cleaned, the crack sealant is applied at a rate required to fill the crack as the wand moves along the crack.
5. Another worker follows behind the crack sealant applicator wand with a long-handled squeegee shaved in a "V" to level the sealant in the crack and provide 2-inches or so adhesion surface next to the crack.
6. If the road must be opened to traffic immediately, a blotting material should be applied to the crack before it cools too much. Single ply toilet paper is a favorite blotting material among many road maintenance agencies.

PERFORMANCE STANDARD

No performance standard is recommended due to the fact that a Contractor will likely be performing the work and Contractors generally seek to be as productive as possible to reduce cost/increase profit, and because Contractors can assign more workers to the project in order to expedite the work.

2016 Chip Sealing of Paved Roads

Priority	Road	Location	Classification	Category	Length (ft)	Estimate of Cost	Cumulative Total
42	Northlake Ave	N Pagosa Blvd to Holiday Ave	Minor Collector	Primary	5718	\$50,390	\$50,390
43	River Forest Drive	US-84 to Pavement Change	Minor Collector	Primary	52	\$458	\$50,848
44	Scenic Avenue	Hwy 160 to Pavement Change	Minor Collector	Secondary	54	\$476	\$51,324
45	Bastille Drive	N Pagosa Blvd to Hopi Dr	Local Access	Primary	1542	\$13,588	\$64,912
47	Prospect Boulevard	642 to 673	Local Access	Secondary	106	\$934	\$65,847
48	Monument Avenue	Surface Change to Aspenglow Blvd	Local Access	Primary	99	\$872	\$66,719
49	Ace Court	County Road 600 to Surface Change	Local Access	Primary	71	\$626	\$67,345
50	Big Sky Place	Pavement Change to Pavement Change	Local Access	Secondary	129	\$1,137	\$68,481
51	Greenbrier Drive	N Pagosa Blvd to Park Ave	Local Access	Secondary	1147	\$10,108	\$78,589
52	County Rd 975	County Border to State Hwy 151	Local Access	Secondary	9126	\$80,420	\$159,009

II.j. Striping

On an annual basis, Archuleta County will strive to re-stripe roads that are currently striped. This will generally consist of all primary paved roads. There are presently no plans to add striping or other pavement markings to roads that are not currently marked.

II.k. Grading

DESCRIPTION AND PURPOSE

Gravel roads require periodic maintenance in order to maintain positive drainage, all-weather characteristics and improve rideability.

In an effort to ensure that each gravel road receives the level of maintenance that it requires, the County is broken down into grading territories with a six-person crew assigned to each territory.

PROCEDURAL DIRECTIVE

The Superintendent is designated as the supervisor for all territories. The Superintendent will inspect each territory to determine the adequacy of the work and to identify any changes in the territory cycles. The Public Works Director is designated as the alternate supervisor. The same resources will be used as necessary to complete graveling operations throughout the County.

WORK METHOD

1. All approved traffic control and safety devices will be placed prior to beginning grading operations and removed upon cessation of grading operations. Beacons will be operating at all times during grading operations as will the backup signal. A slow moving vehicle emblem shall be placed on the back of each machine at all times as will flags on the mold board ends.
2. Drainage ditches are to be cut and shaped as necessary and gravel material retrieved from these ditches.
3. Grading will be performed pursuant to the handbook, *Blading Aggregate Surfaces*, published by the National Association of County Engineers and pursuant to the County's training. Additionally, water and compaction methods are to be used when possible on all particularly frequently graded roads to help reduce the frequency. No wind-rows are to be left on the shoulder of roadway or in the ditches. Roadways shall have a 3% center crown for proper drainage unless otherwise directed.
4. The roads assigned to each operator are organized in geographical sequence. The listing provided to each operator should be used as a guide in determining the order in which the roads should be maintained. The judgment of the supervisor or the operator must be used to determine the actual sequencing of roads to be graded based upon the need for maintenance.
5. When completed with a territory cycle and if no additional grading is required anywhere within the territory, the operator is to notify his supervisor who will re-assign the operator to help in another territory.

6. Construction which requires the use of a grader, e.g., graveling operations, etc., will be assigned to the operator whose territory the road is located in. Construction or emergency operations will take precedent over the completion of a grading cycle.

PERFORMANCE STANDARDS

Each territory has a maintenance factor (productivity factor) associated with it due to the nature of the roads in that territory, whether or not the roads are in a mountainous areas, etc. An operating day, as far as this section is concerned, is a 10 hour day in which grading operations take place. Snow removal and construction work are not considered grading operations for the purpose of developing a performance standard in this section.

Taking all factors into consideration, the following performance standards have been developed for each territory.

South of Hwy 160: 4-5 miles per day depending on the proximity to the Road & Bridge maintenance yard and the condition of the road.

North of Hwy 160: 3-4 miles per day depending on the proximity to the Road & Bridge maintenance yard and the condition of the road.

These standards will be reviewed on an annual basis and revised as necessary.

II.1. Graveling

DESCRIPTION AND PURPOSE

Graveling is an important aspect related to the maintenance of gravel roads. The structural integrity, rideability, all-weather performance and frequency of maintenance are all aspects of gravel roads which can be improved upon with the proper sequencing of graveling efforts.

Typically it will be left to the Superintendent and each grader operator to identify roads which require additional gravel. Lists of roads which require gravel are to be submitted to the Superintendent for prioritization, scheduling, etc., with the Director of Public Works.

Unfortunately, graveling operations, except in emergencies, must take a back seat to other maintenance activities of a more urgent nature.

PROCEDURAL DIRECTIVE

All Equipment Operators are responsible for advising the Superintendent of roads which require gravel. The Superintendent is responsible for scheduling pre-construction conferences, coordinating labor, equipment and materials, etc. Graveling which is required as force account work on construction projects will take precedent over all other graveling operations. The Public Works Director is designated alternate supervisor of this activity.

WORK METHOD

1. Work is to proceed as prioritized.
2. Trucks will be directed to haul from specific gravel pits by the Superintendent and instructed on where to dump by grader operators.
3. All safety rules, regulations and procedures must be followed including roadway work zone signing and approved traffic control plans.
4. To the greatest extent possible, all graveling is to be completed utilizing adequate water and compaction equipment.
5. Other necessary direction will be provided by the supervisor during each operation.

GRAVEL PRIORITIES

The following lists represent the roads to be graveled in 2012 – 2016 based upon estimated available funding. The work identified on these lists could also be categorized as Gravel Road Reconstruction. As additional funding is made available, more focus will be placed on separating these projects into the appropriate categories.

2012 Road Graveling Program

Priority	Road	Location	Classification	Category	Assessed Condition	Length (ft)	Estimate of Cost	Cumulative Total
1	County Rd 700	Bridge to Section 4	Major Collector	Primary	Failed/Critical	2020	\$98,513	\$98,513
2	County Rd 700	Little Bridge to Big Bridge	Major Collector	Primary	Failed/Critical	1017	\$49,598	\$148,111
3	County Rd 700	Section 4 to Bridge	Major Collector	Primary	Failed/Critical	51896	\$2,530,913	\$2,679,024
4	Pinon Hills Drive	Pavement Change to 192	Local Access	Primary	Failed/Critical	1022	\$49,842	\$2,728,866
5	County Rd 339	Str to Sysch	Minor Collector	Primary	Failed/Critical	1373	\$66,950	\$2,795,816
6	Sunset Trail	Hwy 151 to 297	Local Access	Primary	Failed/Critical	1373	\$66,960	\$2,862,776
7	Ace Court	Surface Change to Solomon Dr	Local Access	Primary	Failed/Critical	607	\$29,603	\$2,892,379
8	Pinon Hills Drive	192 to Mesa View	Local Access	Primary	Failed/Critical	353	\$17,215	\$2,909,594
9	Harvard Avenue	Pavement Change to Unknow	Local Access	Primary	Failed/Critical	1903	\$92,807	\$3,002,401

II.m. Dust Treatment

Archuleta County is considering policy options associated with our dust treatment program. It has yet to be determined if dust treatments will be funded in 2012 and beyond, and if so, to what degree.

DESCRIPTION AND PURPOSE

It is a requirement of state statute that the owner or entity responsible for the maintenance of any non-paved roadway mitigate or control the creation of fugitive dust caused by vehicular traffic on the road whenever a certain level of traffic is reached. For "attainment areas", which includes Archuleta County, the level of traffic where some form of control or mitigation is required is an average daily traffic (ADT) of 200 or more.

PROCEDURAL DIRECTIVE

The list of roads to be treated will be reviewed each year. Based upon the most recent traffic counts, the maintenance record for the preceding year and condition of the road base and surface, additional roads may be added within budget constraints or, where warranted, roads may be deleted. The maintenance record for roads receiving a stabilization treatment will be reviewed compared to the record for untreated years to assure the benefit received justifies the cost. A recommendation for the roads to be treated will be made by the Public Works Director.

Upon BOCC approval of the list of roads to be treated, the Public Works Department will prepare technical specifications and contract documents for the receiving of bids for supply and application of the magnesium chloride solution. Upon award of the contract the Superintendent will be responsible for overseeing the field operations of the project, including participation of County forces and the performance of the contractor. The Public Works Director will manage the overall contract and process all contract documents and requests from the contract for payment.

2012 MAG PROGRAM

Archuleta County Road and Bridge Crews will start the 2012 Magnesium Chloride(Mag) application April 30th, weather permitting. The application process will begin in the Arboles area starting on C.R. 973 and will end on C.R. 382 in the Chromo area. Approximately 150 miles of County Roads will receive a Mag application. Depending on the application rate, crews can complete 5 to 7 miles of road and apply 25 to 30 thousand gallons per day. Generally a crew consists of 4 motorgraders, 5 to 6 watertrucks, and 2 flagmen. The Mag supplier provides 2 to 3 transport trucks and the distributor truck.

County crews start to prepare the road by applying an ample amount of water, motorgraders then begin to cut the surface of the road making a windrow of gravel, the windrow of gravel is then spread back across the road surface (5 to 8 loads of water will be used during this process depending on the amount of moisture in the road and the quality of the gravel). At this point

the roadway is ready to receive the application of Mag. With the anticipated amount of Mag to be applied this year, it should take the crew around 5 weeks to complete all work.

Due to decreasing budgets the County will only be doing one application of Mag this year. The roads selected to receive Mag in 2012 is identical to the roads that received Mag in the spring of 2011. The only change is the application rate put on the road. Roads that generally had a spring and fall application will receive a higher application rate to help maintain the Mag residual in the road.

For those roads the County will not be applying Mag, residents may pay for the material cost and the County will perform all necessary work efforts to apply the Mag. Roadway sections are considered from street intersection to street intersection and/or end of road.

Archuleta County Road and Bridge removes snow on approximately 330 miles of roads.

County Roads are categorized on a priority basis and the roads with the higher priorities are plowed first such as school bus routes. Remaining roads are plowed based on priority and route efficiencies. Both Primary and Secondary Roads will be plowed.

Although snow removal crews normally begin clearing the roads at 2:00 am, some of the lower priority roads may not be cleared the day of the storm.

Hills are sanded for safety as required.

Normal Circumstance:

- Typically, plowing operations begin when there is snowfall accumulation in excess of 4 inches.
- Days without snow, crews will cleanup and push back snow routes as needed. All roads may not receive attention on those days.
- On regular working days plowing operations typically begin at 2:00 a.m.
- Weekends and extended shift plowing may take place under the direction of the Road and Bridge Superintendent.

Extreme Circumstances:

- County Roads may not receive same day snow removal. First priority roads will be plowed and kept open on extreme snow days.
- Lower priority roads may not receive attention on those days.

Usually there are two separate snow removal operations:

1. The first is during the storm itself and consists of passes with the plows to keep the roads open. This includes clearing a path sufficient for two vehicles to pass. It also includes clearing cul-de-sacs enough to allow a vehicle to turn around.
2. The second operation begins when the storm subsides. It consists of widening the traveled portion of the road, pushing snow back and plowing out wide spots on the roadways. It may be several days between the first plowing and final cleanup.

Reserved for Work Elements Not
Addressed Elsewhere in this Plan

III.d. Bridge/Culvert Replacements

BRIDGE REPLACEMENT PROJECTS

The Archuleta County Bridge Replacement Program is designed to preserve the integrity of the County's transportation system.

Major bridge structures which are rated as either Structurally Deficient or Functionally Obsolete are eligible for off-systems Federal bridge funding (BRO funds) for design and construction of a replacement structure or rehabilitation of the existing structure. Eligible structures appear on the Select List published by the Colorado Department of Transportation.

Minor structures are not eligible for federal funding for replacement or rehabilitation. They must therefore be replaced or rehabilitated using local funding.

The goal of the bridge replacement program is to achieve a bridge inventory, both major and minor structures, which reflects only structures rated as sufficient.

Generally speaking, non-sufficient structures will be prioritized for replacement in consideration of several factors including sufficiency rating, eligibility for federal or state funding, local funding constraints, level of traffic served, availability of alternative access routes or detours, etc.

Based upon current and anticipated funding levels, Archuleta County plans to replace only those bridges for which we receive outside funding for the majority of the cost.

No culverts are planned for replacement.

2012 Planned Bridge Replacements

Harebell Bridge, Harebell Drive crossing the San Juan River, has the design completed and will be constructed during the summer of 2012. The San Juan River Village Metro District received an 80% grant through CDOT for this project. The District is responsible for all remaining costs.

West Cat Creek Bridge, CR 700 (Cat Creek Road) crossing Stollsteimer Creek, has the design completed and will be constructed during the summer of 2012. The County received an 80% grant through CDOT for this project. The County is responsible for all remaining costs.

Rio Blanco Bridge, CR 337A crossing the Rio Blanco River, will be designed during 2012 with a planned construction during the summer of 2013. The County received an 80% grant through CDOT for this project. The County is responsible for all remaining costs.