

TELLER COUNTY PUBLIC WORKS

DEPARTMENT OF TRANSPORTATION



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A N N U A L

R O A D M A I N T E N A N C E

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I M P R O V E M E N T P L A N

(Approved 06/30/2011)

Introduction

In 2006 Teller County introduced the Road Maintenance and Improvement Plan. The plan established the guiding principles and methodologies for maintaining and improving our road system consisting of today's tally of 563 miles of roadways with 491 miles being gravel road surfaces, primarily in subdivisions.

This year our primary focus will be on hard surfaced roads. Based on past assessment criteria we believe that by cycling the plan between the hard surfaced roads and gravel road systems we can achieve reasonable assessment rating improvements to our road system as a whole.

Our primary emphasis will be maintenance overlays, shouldering, patching and pothole repairs on our hard surfaced road system.

Our operational employees will be organized to beef up the hard surface maintenance crews, when needed, for maintenance overlays and shouldering operations. This does not mean that we will not continue to put our efforts into the gravel road system. Drainage and grading crews and all other available graders will continue to be focused on pulling ditches and establishing a proper shape to our roadways. Our material has been lost over the years from the roadway system due to the constant snowplowing, grading, traffic use and heavy rain falls. We will retrieve the material and place it back onto the road to maintain the proper shape of the road for correct drainage off of the road surface. This means that we will be leaving material on the road instead of just cutting it, which will make the driving surface not as smooth until the material is compacted by the traffic. This will include placing gravel as necessary, to make a road more maintainable. We plan to utilize 2 graders for the dust suppressant crew, 1 grader for hard surface shouldering and the remaining 9 graders for spreading gravel, ditching and routine grading operations. Like last year, without any road reconstruction projects, we can utilize more manpower and equipment to aid in the gravel and hard surfaced road maintenance. Gravel road maintenance such as grading, ditching and minor repairs will be performed as needed throughout the County. The goal is to keep the gravel roads maintained and steadily improve the hard surfaced road system in 2011.

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PUBLIC RELATIONS

We have had great success in meeting many of our residents at public meetings. This venue provides a proactive means in which we can interact with our community. We have built many good relationships in this manner. We have several volunteer programs available, so if you are interested in participating in the transportation volunteer program, please contact us. If you would like for us to make a presentation for your subdivision or Homeowners Association (HOA), please call 687-8812. We want our presentations to meet your concerns so when scheduling a meeting let us know what YOU want us to speak about. ***Our plan is generally approved in April of each year and we encourage you to visit our website to review the approved plan and we will be glad to attend one of your meetings after our plans approved to assist you in distributing the correct information. Remember that unless information is obtained from approved plans or from the Public Works Department, it should be considered as subject to change and could be misleading, additionally, sometimes in rare instances even approved plans can change due to the weather or unforeseen budgetary issues.***

We will continue to utilize our work order system as it has proved to be effective in helping to resolve concerns and to get to know our citizens. Many HOA's have a designated transportation officer who regularly communicates issues within their community to us. This has proved to be a successful program and allows us to work with our community.

Feedback is important, and we log every call that we receive and strive to ensure that every issue is responded to by either a return call or a visit from one of our team. Feedback is analyzed to identify trends so that we can adjust our services to better serve the public.

We encourage you to visit the Teller county Website at www.co.teller.co.us as we post weather conditions and road information on the website to keep residents informed during blizzard, flooding, and general road closure or constructions information.

ROAD MAINTENANCE PLAN

In 2010 the maintenance plan was focused on maintenance and improvements on the gravel roads within the subdivisions; and many improvements were made to the gravel road system. This year we plan to uphold the maintenance to the gravel road system, but at the same time we must also focus on maintenance and repairs to the hard surfaced road system. We feel that we can uphold the same level of service as in the past and continue to perform improvements to the infrastructure as a whole for 2011.

I. GRAVEL ROAD MAINTENANCE

The regular grading schedule will consist of six dedicated routes covering about 70 miles of non-dust suppressed roadways each. Each non-dust suppressed gravel road will be maintained and ditched as needed. We will combine the construction crew with the grading crew for the first round of grading in the spring, which will help speed up the needed ditching operations while the conditions are optimal. Road base will be added, as needed, in areas for maintenance purposes or which may have any safety concerns. ***Residents should be advised that during ditching operations material within the ditches will be placed on the roadway and that the material will be used to regain the proper profile of the road. When ditching is performed the surface of the road will seem rough or loose until the material is compacted by traffic. This is a necessary step in improving the overall quality of the roadway.***

Graders will not deviate from their routes schedules unless there is a safety concern or an emergency situation. Our goal is to strive for equality throughout the County. Graders will not be pulled from their routes for service requests, as this would not be fair for residents waiting for their roads to be graded on the regular scheduled route. By accomplishing this, we feel that we can uphold a level of service that encompasses equality in service throughout the County.

All dust suppressed gravel roads will be maintained as needed using water and compaction equipment to help retain the dust suppressing materials that have been applied to the roadway. These operations will be completed by a properly equipped grading crew. Dedicated route operators will maintain a dust suppressed gravel road only if it has been identified as a safety concern, during emergency situations or when conditions are optimal.

If you feel any gravel road is in need of maintenance and you would like to know when it is scheduled to be maintained, please feel free to contact us. At (719) 687-8812 or send us an e-mail.

A.) RESURFACING

Throughout the year, weather permitting, road base will be added (resurfacing) to roads for maintenance purposes or for improvement purposes (i.e. – preparation for new hard surface). These roads placed in this category are roads that are being improved, roads that have a high maintenance cost in their current condition, or roads that have been identified as having high traffic counts.

This year the following roads are scheduled for resurfacing:

- Circle St. from Hwy 24 to 2nd St.
- 2nd St. from Circle St. to Mesa Dr.

- Add gravel to areas as needed and deemed necessary county-wide (see below)

We feel that it is important to evaluate our roads and place the gravel where it will do the most good. If a roadway is acceptable for a mile and has one section in the middle that is unacceptable we are going to put our efforts into that one bad section of roadway so that the overall condition of the road is improved. This will save repeated responses to the same problematic area. By using this strategy the overall condition of our gravel road system will steadily improve.

B.) DUST SUPPRESSANT

Dust suppressant application operations will begin in May depending on weather. A dust suppressant material will be applied to any gravel road with 300 or more cars a day.

This year we plan to apply dust suppressant to the following roads:

| 2011 Mag Schedule | | | | | |
|--------------------------|---|---------------|--------------|------------|--|
| Road Name | Location | Length | Width | ADT | |
| North Mtn. Estates | CR 1 to Pinewood Rd. | 1.2 | 30 ft. | 1158 | |
| So Mtn. Estates | North Mtn. Estates to Paint Pony Ln. | 0.1 | 28 ft | 451 | |
| Duesouth Rd. | Homestead Ln. to Turnabout Ln. | 0.1 | 24 ft. | 421 | |
| Homestead Ln. | North Mtn. Estates to Duesouth Rd. | 0.2 | 28 ft. | 280 | |
| Matterhorn Rd. | CR 1 to just past Red Cloud Rd. to MBUs | 0.3 | 24 ft. | 346 | |
| Sunnywood Ave. | Lovell Gulch Rd. to City Limits | 0.8 | 26 ft. | 872 | |
| Apache Trail | Hwy 67 to Ute Trail | 0.5 | 26 ft. | 320 | |
| Sourdough Rd. | Hwy 67 to Mills Ranch Dr. | 0.3 | 28 ft. | 350 | |
| CR 21 | Aspen Garden Way to Summer Haven Dr | 0.6 | 24 ft. | 629 | |
| Laura Ln. | CR 21 to Park St. | 0.2 | 24 ft. | 757 | |
| Spruce Rd. | Hwy 67 to Spruce Ln. | 2 | 28 ft. | 423 | |
| Tripple B | Hwy 67 to Tripple B Ranch Resort | 0.2 | 28 ft. | 334 | |
| CR 78 | Hwy 67 to Cattle Guard | 1.2 | 26 ft. | 350 | |
| Piney Pt. | Hwy 24 to Lakewood Dr. | 0.3 | 30 ft. | 847 | |
| Club Dr. | Lakewood Dr. to Vista Ln. | 0.2 | 24 ft. | 430 | |
| Lakewood Dr. | Piney Pt. to Club Dr. | 0.2 | 24 ft. | 560 | |
| Vista Ln. | Club Dr. to Illini Dr. | 0.1 | 24 ft. | 399 | |
| West Valley | CR 231 to Pavement | 0.4 | 24 ft. | 467 | |
| Weaverville Rd. | Hwy 24 to Hybrook Rd. South | 0.2 | 24 ft. | 839 | |
| Penn Ave. | Hwy 24 to Rutgers Pl. | 0.3 | 24 ft. | 312 | |
| Spring Valley Dr. | CR 5 to Valley Rd. | 1.4 | 24 ft. | 510 | |
| Omer Dr. | CR 5 to Lake Dr. West | 0.15 | 26 ft. | 348 | |
| Trout Haven Rd. | CR 42 to Uintah Vale | 0.4 | 30 ft. | 334 | |
| CR 46 | Hwy 24 to Park County Line | 2.3 | 26 ft. | 643 | |
| CR 46 | | 0.5 | 26 ft. | 643 | |
| High Chateau Dr. | CR 11 to Spring Valley Dr. | 0.8 | 24 ft. | 289 | |
| Twin Lakes Dr. | CR 512 to Cottonwood Lake Dr. | 1.2 | 28 ft. | 624 | |
| Blue Mesa Dr. E | Cottonwood Lake Dr. to Deep Lake | 0.25 | 24 ft. | 381 | |
| Blue Mesa Dr. W | CR 512 to Lost Lake Dr. | 0.55 | 26 ft. | 335 | |
| CR 512 | Blue Mesa Dr. West to Pinon Lake Dr. | 0.2 | 26 ft. | 324 | |

| | | | | |
|--------------------|--|-------------|--------|-----|
| Pikes Peak Dr. | Circle Dr. to Valley View Dr. | 0.2 | 28 ft. | 545 |
| Arapahoe Creek Tr. | CR 3 to Kiowa Crk.Tr. | 0.9 | 26 ft. | 442 |
| Wilson Dr. | CR 24 to Forest Glen Tr. | 0.1 | 22 ft. | 316 |
| Pikes Peak Dr. | CR 31 to Circle Dr. | 0.8 | 26 ft. | 545 |
| CR 3 | Arapahoe Crk Tr. to Conestoga Crk. Rd. | 0.8 | 26 ft. | 504 |
| CR 421 | CR 42 to Berylium Rd. | 0.6 | 28 ft. | 316 |
| CR 31 | CR 47 to Pikes Peak Dr. | 0.2 | 24 ft. | 543 |
| CR 51 | Rangeview Rd. toSring Crk. Dr. | 0.6 | 30 ft. | 382 |
| CR 51 | Spring Crk. to Trout Crk. Dr. | 0.8 | 26 ft. | |
| CR 51 | Trout Crk. Dr. to John Dr. | 0.5 | 24 ft. | |
| CR 47 | Hwy 24 to CR 31 | 0.2 | 22 ft. | 468 |
| Circle Dr. | Hwy 24 to Mesa Dr. | 0.1 | 24 ft. | 465 |
| Trout Haven Rd. | Uintah Vale to Mt. Elbert Rd. | 0.6 | 24 ft. | 334 |
| Longbow Dr. East | Robin Hood Dr. to Herald Ln. | 0.1 | 24 ft. | 304 |
| Silbani Ln. | Deer Ridge Tr. to Donzi Tr. | 0.3 | 24 ft. | |
| Deer Ridge Tr. | Denwood Dr. to Silbani Ln. | 0.1 | 24 ft. | 212 |
| Denwood Dr. | CR 42 to Deer Ridge Tr. | 0.3 | 28 ft. | 336 |
| Mistletoe Ln. | Hwy 24 to Stonehenge Dr. | 0.15 | 30 ft. | 327 |
| CR 86 | CR 81 to Skagway Rd. | 0.6 | 24 ft. | 386 |
| CR 82 | Hwy 67 to CR 821 | 0.8 | 30 ft. | 299 |
| CR 25 | Hwy 24 to Pine Bluff Rd. | 0.6 | 26 ft. | 446 |
| CR 281 | CR 28 to Y in Road | 1.2 | 26 ft. | 380 |
| Woodland W. Dr. | Pennsylvania Ave. to Cornell Dr. | 0.5 | 26 ft. | 319 |
| Trail Crk. Rd. | Park County Line to Spruce Crk. Dr. | 1.1 | 26 ft. | 333 |
| Anges Dr. | CR 1 to Troy Dr. | 1.2 | 26 ft. | 308 |
| | Total Miles | 30.9 | | |
| | | | | |
| | | | | |

C.) DRAINAGE

We will focus on things such as re-grading all ditches that have been damaged from winter maintenance operations, cleaning-out clogged culverts as well as installing rock checks and drop boxes to prevent silt migration. Please remember that driveway culverts are the responsibility of the homeowner and by keeping your driveway culvert clean you can help the overall condition of our road system. If you would like tips on how to prevent your culvert from getting clogged, please call our offices or send us an e-mail and we can schedule an onsite meeting to evaluate and asses your culvert for improvements

Drainage will be prioritized by the following criteria: Safety concerns, erosion/storm water concerns, structural integrity of roadway, classification and traffic counts. Crews will maintain and install culverts, as needed also mitigating and repairing any erosion/storm water issues. This crew will also assist other crews with drainage needs.

II. HARD SURFACE MAINTENANCE

For Hard Surface Roads, **patching**, **pothole repair**, and **shouldering** will be year round. Road segments presenting safety hazards will take priority, and operations will then begin on the highest traffic count roads and work to the lowest traffic count roads. In the summer, the crews will focus their efforts to **overlays and repairs**. In the winter, along with snow

and Ice removal, **crack-sealing** operations will begin. This is a preventative maintenance program to seal all hard surface roads.

A.) MAINTENANCE OVERLAY

This year the following roads are scheduled for maintenance overlays

- CR 11 from CR 1 to CR 112
- Lovell Gulch from HWY 67 to Ridge Dr. Depending on budget.

III. WINTER MAINTENANCE

Since 2006 steady improvements have been made to the snow removal operations. These improvements have been made to enhance the speed and efficiency of our snow removal efforts. We feel confident that we can uphold these levels of service in 2011:

- In and out snowplow service to ALL county roads within 24 hours after the snow has stopped.
- Enhanced application of anti-skid material to the roadways.
- Plan each individual storm event to provide the best service possible with current resources. Every storm is different so the response to each storm may be different.
- Route operators have more flexibility to deal with on the spot conditions.
- Additional coverage on level I and level II roads.

Please feel free to review our procedures on our website.

Snowplowing is an essential and necessary service provided to our citizens and we are committed to giving the highest level of service possible with our available resources. Below are a few tips that you can follow to make your winter commute as safe as possible:

- ***Ensure that your vehicle is properly maintained for winter travel. Ensure that you have good wiper blades, washer fluid and adequate tires for the conditions that you will be traveling in.***
- ***Stay at least 200 feet back from a snowplow. Vehicles following too close to a plow hamper sanding operations and put you at risk for a broken windshield.***
- ***Refrain from passing a snowplow.***
- ***Prepare for the conditions that you may be driving in. Even though plows are operating there will be areas of ice and snow that present hazards..... Expect the unexpected.***
- ***For the safety of your children please do not allow them to make snow caves, play or sled in the roadway.***
- ***Refrain from plowing snow from private property into a roadway. If you must do this you should ensure that no ridges or snow are left on the traveled surface.***

ROAD IMPROVEMENT PLAN

I. HARD SURFACE ROAD IMPROVEMENT

Many of the roads that will meet the criteria for the **Hard Surface Road Improvement** are the gravel roads that have required dust suppressant applications in the past

A.) NEW HARDSURFACE

None scheduled this year.

B.) DESIGN LIFE APPLICATION

- CR 28 from HWY 24 to end
- CR 51 from beginning of Forest Service to Rangeview Rd
- Robinhood Dr. from HWY 24 to Longbow Dr. East.
- Longbow Dr. East from Robinhood Dr. to Little John Ln.
- Little John Ln. from Longbow Dr. East to Will Scarlet Dr.
- Blackfoot Tr. From Kelly Rd. City limit
- Chippewa Tr. From Kelly Rd. to City limit
- Sunshine Cir. From Kelly Rd. to Wildflower Dr.
- Main St. from Kelly Rd. Kiowa Ave.
- CR 231 (AKA West Road) from HWY 24 to City limit

II. ROAD RECONSTRUCTION

- Depending upon successful easement acquisition - Intersection improvements to CR 42/CR421/Deer Ridge Trail intersections.

III. OTHER IMPROVEMENTS

Gold Camp Tunnel # 9

The tunnel is on the National, State and County registers for historical places and is one of the last timber framed railroad tunnels being used for vehicular traffic left in the state. TDOT has received a \$200,000.00 grant from the State Historical Fund to begin improvements to the tunnel. The project team includes representatives from the Colorado Historical Society the United States Forest Service and Teller County. The final phase of this project is slated to begin in early April and continue into early June. This phase involves applying colored shotcrete to the ceiling and reinstalling/replacing the timber frame supports of the tunnel. Additionally, if the budget allows, an interpretive kiosk will also be installed at the easterly portal of the tunnel depicting and describing the history of the tunnel and surrounding area.

County Road #11

We have received a \$400,000.00 grant from the Local Government Limited Gaming Impact Program (LGLGIP) grant process and have matched this amount for a total of

\$800,000.00 to be used this year on CR 11. The project limits are from its intersection with CR 112 to its intersection with CR 1, 4.2 miles. This project entails removal and replacement of areas of failing sub-grade, asphalt patching of those areas, culvert replacement and a surface treatment of a 2" mat of asphalt.

III. RIGHT-OF-WAY(ROW), SIGNAGE AND TRAFFIC CONTROL

The Right-of-Way (ROW) Division is responsible for identifying public ROW, assuring compliance with the Teller County Roadway Design and Construction Standards, acquiring additional ROW and easements when needed, and ensuring that traffic control devices and safety appurtenances such as guardrail meet MUTCD requirements/specifications.

Prior to road improvement projects, it is necessary to identify the public ROW so that the entire ROW can be utilized to construct a proper roadway with adequate drainage. This is a very time consuming process and needs to happen years in advance of a proposed project. The ROW crew will notify residents when they are identifying ROW and will place markers to designate the ROW. It's always a good idea for residents to locate and mark their property pins so that you know where your property is. The traffic control crew is responsible for signage and road safety throughout the County. They also collect information related to usage of the road so that we have accurate data to provide for enhanced engineering of the roads. We now have several road classifiers that provide detailed traffic information.

The Department is still working to acquire the necessary easements for the intersections of CR 42/CR 421/Deer Ridge Trail to provide safety improvements.

Some core areas that will be worked on this year are:

Repair or replace damaged/missing delineators. (Yearly activity.)

Replace one-tenth of the Traffic Control Devices. (Mandated by FHWA that all TCD's be upgraded to High-Intensity Sheeting or have a Replacement/Maintenance Plan in effect. We have chosen a Blanket Replacement Plan, dividing the county in ten parts with equal sign distribution – each section getting replaced on a ten year cycle which is also equal to sign longevity.)

Replace 220 pair of Street Signs. (Mandated by FHWA that Street Signs on roads with a Speed Limit of 30mph or higher be up-graded to signs with 6" Capital and 4" lower case lettering. We have accomplished this, however, we feel that it is in the best interest of our citizens to up-grade all Street Signs, especially for Emergency Response purposes. We are working on a ten year cycle which is equal to sign longevity.)

Record Average Daily Traffic Counts (Alternating between local roads and Arterials every other year.)

Work with Operations Department on signage of Work Areas or Detours as necessary.

OTHER PROJECTS

GASB 34 (Governmental Accounting Standards Board Law 34) Conduct inspections of a third of all the following assets in order to comply with Federal Regulations: Roads, Street signs, Regulatory signs, Culverts, Guardrail, Cattle guards, Bridges, Tunnels and Trails.

GRANT APPLICATIONS

We are looking at grant sources such as Hazard Mitigation Grants for projects that were identified in the All Hazard Mitigation Plan and Transportation Enhancement grants through the Colorado Department of Transportation. Future improvement projects are in the planning and engineering phases in preparation for the 2012 grant season.