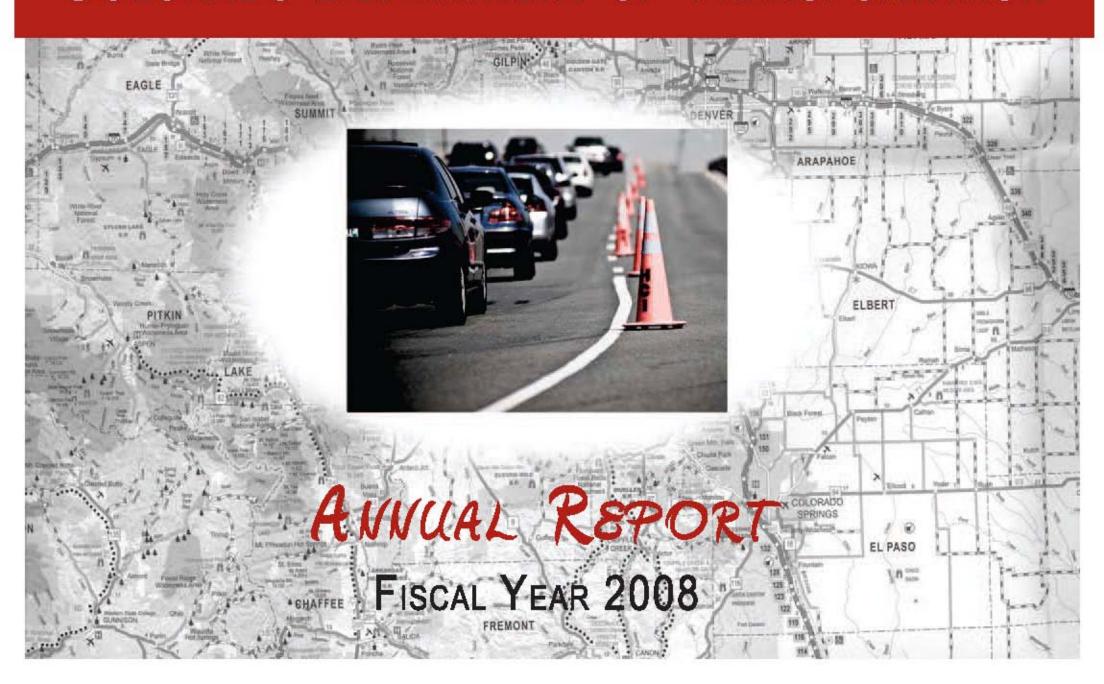


# COLORADO DEPARTMENT OF TRANSPORTATION



## A Message from the Governor

#### TO ALL COLORADOANS

The Colorado Department of Transportation has had a year of remarkable achievement in terms of project completions, safety improvements, and service to the traveling public.

Since its transition from the Colorado Department of Highways to the Colorado Department of Transportation in 1991, CDOT has made the transition to a multifaceted transportation agency. With responsibilities ranging from highways to transit to pedestrian to aviation, CDOT is involved in nearly every aspect of transportation in Colorado.

Completion of major transportation projects such as COSMIX in Colorado Springs, the Maroon Creek Bridge in Aspen, and the ongoing phases of the North Forty, I-25 from Denver north Fort Collins, are certainly cause for celebration. Where these improvements have been made, we all benefit, directly or indirectly, from reduced traffic congestion and improved traffic safety.

Our CDOT employees are some of the strongest, most innovative of all Colorado state employees. Of a total workforce of approximately 3,100, nearly 1,900 work in the highway maintenance division. These employees are located at approximately 250 sites statewide, and it is their responsibility to keep the roadways as clear and safe as possible in all kinds of weather conditions. When conditions are worst, these employees are out on the roads, plowing, clearing debris, getting rid of ice buildup, and providing thousands of acts of kindness and roadside assistance each year. Their hard work in very difficult conditions cannot be overemphasized.

CDOT is at the forefront in establishing partnerships with local and county governments to address transportation needs most pressing in their individual areas. CDOT's dedicated transit funds over the past few years have resulted in vital transportation improvements in areas such as Aspen, Durango, Glenwood Springs, and others.

What this annual report does not show is the impending funding crisis

brought on by the economic downturn and resulting decrease of both federal and Senate Bill 97-01 dollars, which alone will cost CDOT nearly one third of its annual operating budget for state fiscal year 2010, beginning July 1, 2009. This is all occurring at a time when our state population is continuing to grow and demand on our various transportation systems is at an all-time high.

Efficient and safe transportation systems, which allow us personal and corporate mobility to move information, goods, and people, are central to Colorado's quality of life and our economic future.

CDOT's predecessor agencies dating back to the early 1900s became accustomed to funding fluctuations. CDOT is now faced with the task of adjusting to a major funding decline. As Governor of Colorado, I will be doing everything I can to help identify additional transportation funding sources. After meeting with other state governors and President-elect Barack Obama in Washington, D.C., in early December 2008, I know that the transportation funding crisis will remain high on the list of national priorities.

By working together, I am confident we can continue to move forward while this funding situation is sorted out. Despite the challenges, I know CDOT will continue its legacy of innovation, partnership, and relentless service to the traveling public.

### Bill Ritter



### A Note from the Executive Director

For the Colorado Department of Transportation (CDOT), the keys to success in 2008 were innovation and stretching every available dollar as far as it could possibly go. Undaunted by the pressures of increasing traffic loads, mounting public expectations, and dwindling financial resources, our CDOT employees moved their job performance even a step higher this past year. CDOT delivered outstanding transportation projects in fiscal year 2008. Following are four such examples:

Completion of the only four-expressway interchange in Colorado (I-25/I-270/I-76/US 36 in Denver);

Completion of widening and reconstruction on US 285 near Richmond Hill in Jefferson County;

Completion of the Maroon Creek Bridge replacement project in Aspen; and

Completion of a first-in-the-nation wildlife detection system being piloted on US 160 east of Durango.

Of course, if space allowed, I could mention many more; and I hope you will read more highlights in our construction accomplishments in this report. I commend our CDOT employees and our private-sector partners for all 2008 accomplishments. I commend them even more for not being discouraged by the threat of funding reductions, current budget cuts, shortages in the supplies of asphalt, and spiraling costs of fuel and other materials.

It takes a remarkable, resilient workforce to successfully face the transportation challenges presented by Colorado's rising population and

visitor industry. Throughout the year, travelers wrote to us time and time again to thank our employees for their acts of kindness and heroism, for roadside service, and for watching out for their safety.

At CDOT, we face an uncertain future with unwavering commitment to our transportation system. We will always think 'safety first,' and we will always approach our duties as if we're serving our own family members and loved ones, because in many cases we are doing exactly that. I hope all Coloradans are as proud of our CDOT employees as I am. It is my privilege to work with them.

Sincerely,

### Russell George





#### MONTHLY TRAFFIC VOLUMES

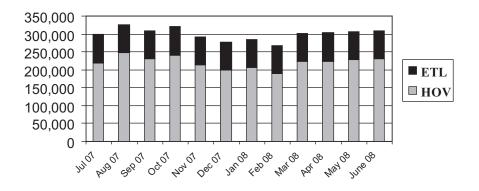
Express Toll Lanes (ETL) and High Occupancy Vehicle (HOV) use

Creation of the Colorado Tolling Enterprise (CTE) was authorized in 2002 by HB 02-1310/SB 179. It is a government-owned nonprofit business operating within, and as a division of, CDOT. The CTE exists to finance, construct, operate, regulate and maintain a system of tolling highways in Colorado. Legislation allows for tolling of new capacity only.

The CTE's first and only project is the I-25 HOV/tolled Express Lanes, which opened in June 2006. (See progress chart, this page.) This project converted existing high-occupancy vehicle (HOV) lanes on I-25 north of Denver into high-occupancy toll (HOT) lanes with the long-term benefit of maximizing the use of the highway without adding new lanes. Carpools, buses and motorcycles still travel free of charge, but solo drivers can pay a toll to access the facility for a quicker, more reliable trip.

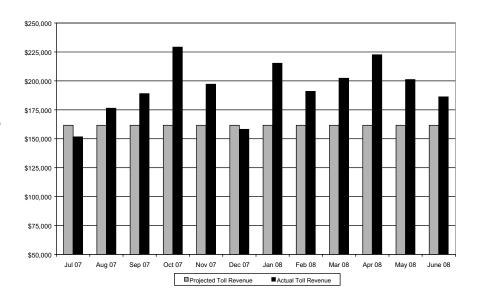
To limit the number of solo drivers so as not to adversely impact HOVs, toll rates vary by time of day. Proceeds go towards the facility's snow removal, maintenance and operations costs, and repayment of a loan to construct the conversion. In cooperation with the public and local elected officials, CTE will continue to analyze tolling as a potential revenue stream to help fund highway congestion solutions and promote long-term congestion management.

In Fiscal Year 2008, the traffic on the I-25 HOV/*Express Lanes* averaged approximately 11,000-12,500 vehicles per weekday, representing over 15% of the total person trips along that stretch of I-25 and these vehicles travel at full highway speeds, as compared to peak hour traffic operating at a much lower level of service. As was the case in 2007, toll revenues in 2008 exceeded the costs of operations, snow removal, and maintenance.



#### MONTHLY ESTIMATED TOLL REVENUES

Fiscal Year 2008 monthly estimated toll revenues vs. actual revenues





### DIVISION OF TRANSPORTATION DEVELOPMENT Multimodal Planning Branch

The Multimodal Planning Branch, composed of a planning section, a modal programs section and an investment analysis unit, aims to enhance transportation in our state for all those who travel.

The Planning Section coordinates planning efforts for all modes for inclusion in the long-range Statewide Transportation Plan, as well as planning efforts for Colorado's 15 Transportation Planning Regions (TPRs). In FY 08, staff facilitated the completion of the 2035 Statewide and Regional Transportation Plans, adopted in March 2008. The Statewide Transportation Plan is created from the 15 Regional Transportation Plans. Top strategies from about 350 multi-modal transportation corridors were identified to help improve safety, reduce congestion and maintain the transportation system (see www.dot.state.co.us/StatewidePlanning/PlansStudies/2035Plan.asp).

The Investment Analysis Unit works with all facets of the organization to conduct performance measure reporting and to analyze policy in support of the long-range Statewide Transportation Plan. An annual performance report can be viewed at www.dot.state.co.us/TopContent CDOT FY2007AnnualPerformanceReport.pdf.

The Modal Programs Section is responsible for funding transit programs and projects, bicycle/pedestrian planning efforts and programs. The Scenic Byways program is responsible for administering Federal Transit Administration (FTA) grant funds and SB 97-01 fund programs to Colorado transit projects. FTA grants were awarded to 41 different organizations; \$1.4 million for the purchase of buses to transport the elderly and disabled; and \$7.1 million for the operating and capital costs of providing public transportation in rural and small urban areas. At least 10 percent of SB 1 funds is made available for strategic transit projects. In 2008, over \$21 million was awarded to these projects. The funds will be used to make bus rapid transit (BRT) improvements, purchase 68 buses and construct four bus-related facilities. Bike/pedestrian activities include the *Safe Routes to School* program, under which CDOT awarded funds to 18 local governments totaling \$1.5 million. Close to 30,000 each of bicycle maps and manuals were distributed throughout the state promoting safer bicycle travel. Addi-

tionally, the "Don't Be A Road Hog, Share The Road" campaign was expanded by creating two videos targeting new drivers and driver education schools. The state scenic byways program contributed to or advanced several tourism initiatives including two new publications, a new brochure highlighting Colorado's 25 Scenic and Historic Byways; and a publication that features nationally designated byways in five southwestern states.



Trail of the Ancients in southwestern Colorado passes through Hovenweep National Monument, shown above. This byway group is working with the Sonoran Institute and the National Geographic Society to develop a "geo-tourism" program, which focuses on tourism that sustains or enhances the geographic character of a place—its environment, culture, aesthetics, heritage, and the well-being of its residents.

#### Information Management Branch

The Information Management Branch contains two sections: mobility analysis and GIS. The mobility analysis section continues to collect travel time and delay information on all congested state highway corridors as part of CDOT's mobility performance measures program. Several studies were conducted involving average vehicle occupancy across the state, speed profiles at key permanent traffic count locations and collection of freight origin and destination data. The results of these studies will be incorporated into long-range Statewide Transportation Plan updates and in the upgrade of travel demand models. The GIS section provides key information about state highway and local roadway systems critical not only for monitoring and mapping programs but for state and local distribution of the Highway Users Tax Fund.

#### **Environmental Programs Branch**

The Environmental Programs Branch conducted approximately 1,000 video and classroom courses for CDOT and non-CDOT employees on topics ranging from wetland soils and plant identification to National Environmental Policy Act (NEPA) document development and compliance. In cooperation with Federal Highway Administration, the Branch completed a scan tour of four states' environmental programs, resulting in process improvements in efficiency and responsiveness. In FY 08, the branch completed nearly 1,200 environmental clearances with an on-time processing rate of 98 percent.

#### Research Branch

The Research Branch conducted research applying directly to planning, design, construction, maintenance and operations. In FY 08, research activities addressed a broad spectrum of applied research questions, including those on worker safety, transportation safety, greening in state government, work zone speed control, and more. Currently of special interest is the area of vehicle miles traveled-based fees that will reflect the connection between the use of the highway system and revenue generation. Two research papers were written containing significant findings on the *Relationship between Congestion and Safety on Urban Freeways* and were published in the Transportation Research Record.

#### **Building Projects: A Public Process**

#### **Determine Possible Projects**

Statewide and Regional Transportation Plans: 20-Plus Year Plans

The Statewide Transportation Plan integrates state Transportation Commission policy with Regional Transportation Plans. Both Regional and Statewide Transportation Plans identify transportation needs, corridor visions, policy, and investment strategies for all modes of transportation in the state.

- ☐ The public can participate in regional and state planning activities—within local Transportation Planning Regions (TPRs)—hosted by the Regional Planning Commission (RPC), Metropolitan Planning Organization (MPO) and/or CDOT.
- ☐ Individuals get involved in the corridor vision development and prioritization process, helping identify the transportation needs in areas of congestion, mobility, safety, system preservation or maintenance. Transportation needs are determined in response to community values, economic development, and environmental considerations.

#### Which Projects Get Built?

Statewide Transportation Improvement Program (STIP): A 6-Year Plan

The STIP identifies how available funds will be programmed over the next six years. Every STIP project must align with the long-term corridor visions, goals and strategies set forth in the Statewide Transportation Plan adopted by the Transportation Commission. The STIP must comply with state and federal regulations.

- ☐ The public can attend the Project Priority Programming Process (4P) meetings led by CDOT. This process consists of optional county meetings, as well as mandatory individual and joint TPR meetings. Recent accomplishments, available funding, and current local and regional project priorities are discussed at these meetings.
- Individuals living in large urbanized areas can take part in the MPO programming process as part of the STIP development.
- Individuals can review the draft STIP and provide comments. The Transportation Commission then releases the STIP for approval by the Federal Highway Administration (FHWA) and the Federal Transit Administration (FTA).

#### **Projects Are Implemented**

STIP projects are budgeted on an annual basis, allowing work to begin on environmental clearances, design, right of way acquisition, or construction.

Individuals can review status of major projects on the CDOT or project web site or contact CDOT for rrent project information.

## Legislation

#### **OFFICE OF POLICY & GOVERNMENT RELATIONS**

Staff provide resources and outreach to officials at the federal, state, and local levels and to external partners of CDOT, helping to bridge complex information on transportation financing, planning, and engineering practices.

The Office of Government Relations provides strategic and analytical support to CDOT the Transportation Commission in both transportation policy development and government relations.

Below are the transportation-related bills that passed through the Legislature during the past year.

**SB 14** allows I-25 High Occupancy Toll lane violations to use the E-470 administrative process instead of the Adams County Court.

**HB** 1036 the "Charles Mather Safety Act" gives CDOT, in conjunction with the Colorado State Patrol, the ability to use photo-radar to enforce speed limits in highway "high-risk" construction zones.

**HB 1057** allows businesses on rural expressways and freeways to utilize the Tourist Oriented Directional Signs (TODS) program.

HB 1074 changed the "nonconforming" statute language within the Outdoor Advertising Act to allow for signs to become nonconforming when their status is changed from legal to illegal through no action of the sign owner. HB 1257 creates a new permit for divisible load vehicles to carry up to 110,000 pounds on non-interstates (provided no additional damage is caused to Colorado's roads and bridges) bringing Colorado up to par with surrounding states.

**HB** 1194 increases drunk driving penalties by extending the length of time a person's drivers license is revoked or suspended, increases license reinstatement fees, expands the ability for more drivers to use the ignition interlock device and provides a funding stream to increase the number of high-visibility drunk driving law enforcement episodes across the state.

# Budgeting

#### **DIVISION OF ACCOUNTING & FINANCE**

#### The Accounting Team

The accounting team is responsible for the overall transaction processing and financial reporting of CDOT. The team supports financial processing in the areas of cash, State Treasury, State collections, accounts payable, general ledger, accounts receivable, asset management, and payroll. The CDOT controller ensures all internal transactions feed into the state's accounting book of record, reviews contractual documents in support of CDOT business activities to ensure funding is available before contracts are executed, and facilitates all activities related to the fiscal year end closing of accounts.

#### Office of Financial Management and Budget (OFMB)

The office is responsible for the overall financial management of CDOT. Among other responsibilities, OFMB forecasts revenue, develops the Statewide Transportation Improvement Program (STIP), prepares the budgets for all CDOT organizations, manages the Strategic Transportation Project program (pg. 15), analyzes pending legislation for potential fiscal impacts on CDOT, programs federal-aid projects, and prepares fiscal notes for the Legislative Council.

#### **Funding Sources**

Funding received by CDOT is identified in four categories: Highway Users Tax Fund (HUTF), federal-aid highway funding, State General Fund transfers, and revenues from other miscellaneous sources. CDOT allocates these funds in four investment categories: *System Quality*, the transportation system's functionality and aesthetics; *Safety*, services and programs that reduce fatalities, injuries, and property damage; *Mobility*, the movement of people, goods and information; and *Program Delivery*, functions supporting the delivery of CDOT programs and services.

Highway Users Tax Fund (HUTF) revenue is the primary source of transportation funding for the state. The fund is comprised of motor fuel taxes (about 71 percent of the total), motor vehicle registration fees, and driver's license fees. Distribution of the HUTF includes off-the-top appropriations to the Colorado Department of Revenue and the Colorado State Patrol with the remaining funds allocated to municipalities, counties and CDOT based on statutory formulas.

Federal Funding comes from the federal Highway Trust Fund (HTF) which consists primarily of federal motor fuel taxes. Congress passed SAFETEA-LU in 2005, authorizing funding from 2005-2009. The *Safe, Accountable, Flexible, Efficient Transportation Equity Act* is a measure that provides the state with an increase in guaranteed federal funding and with authorization for several significant federal transportation programs. SAFETEA-LU provides \$2.45 billion in guaranteed funding for Colorado over the bill's six-year life, including over \$332 million in earmarks for projects around the state. The bill also acknowledges priorities for Colorado, including an increased emphasis on freight and transit programs and recognition of the need for innovative financing programs.

General Fund transfers approved by the state Legislature fluctuate depending upon current economic conditions. They include SB 97-01 which, if general fund appropriations reach the statutory six percent growth, is designed to transfer the auto-related portion of the state's sales and use tax to CDOT; and HB 02-1310, which transfers two-thirds of the amount in excess of the four percent statutory reserve to state transportation for construction.

Miscellaneous Funding Sources include fees for overweight and oversize permits on state highways, interest on balances in the State Highway Fund, and requested appropriations from the State Gaming Fund used to offset major increases in traffic on state highways in the vicinity of Colorado's gaming areas.

#### **Funding & Investments**

#### Fiscal Year 2008

Actual Revenue	\$1,564.3 Million		
Highway Users Tax Fund	\$433.1 M	27.8%	
Federal	\$533.8 M*	34.1%	
Senate Bill 97-01	\$241.2 M	15.4%	
Miscellaneous	\$190.0 M	12.1%	
House Bill 02-1310	\$166.2 M	10.6%	

#### Fiscal Year 2008

Actual Allocations	\$1,564.3 Million			
System Quality	\$336.1 M	21.5%		
Mobility	\$243.7 M	15.6%		
Program Delivery	\$516.5 M**	33.0%		
Safety	\$117.6 M	7.5%		
Strategic Projects	\$350.3 M	22.4%		

#### Fiscal Year 2009

<b>Estimated Revenue</b>	\$997.5 Million			
Highway Users Tax Fund	\$414.3 M	41.5%		
Federal	\$337.1 M*	33.8%		
Senate Bill 97-01	\$129.7 M	13.0%		
Miscellaneous	\$116.3 M	11.7%		
House Bill 02-1310	not estimated			

#### Fiscal Year 2009

<b>Estimated Investments</b>	\$997.5 Million		
System Quality	\$305.7 M	30.6%	
Mobility	\$198.1 M	19.9%	
Program Delivery	\$200.8 M	20.2%	
Safety	\$99.9 M	10.0%	
Strategic Projects	\$192.9 M	19.3%	

<sup>\*</sup> Estimated federal receipts are based on the federal authorization bill, as the actual federal receipts were not available at this report's printing.

<sup>\*\*</sup> This amount includes \$166.2 million in HB 02-1310 funds transferred to CDOT during the fiscal year.

#### Fy 2008 Revenue Sources Allocation to CDOT Distributions \$1.8 Billion \$1.5 Billion \$1,974.8 Million Total Cities HUTF \$106.7 M CDOT Investment \$804.1 M Categories Taken Off Remaining Includes: the Top **HUTF** Funds \$97.1 M Counties \$707.0 M Motor Fuel Tax Safety \$163.7 M \$577.4 M \$117.6 M State Patrol Other Vehicle Ports of Entry Related Fees \$226.6 M CDOT \$433.1 M System Quality \$336.1 M Federal\* Funds Federal\* \$573.3 M Funds Miscellaneous includes: Safety Grants, \$10 M; Transit, \$533.8 M \$15.2 M; Aeronautics, \$41.2 M; Gaming Funds, \$14.3 M; (reduction reflects Mobility Local Funds, \$21.1 M; Bridge Fund Interest, \$0; Construction 91.85% obligation \$243.7 M Misc. Funds earnings \$1.1 M; Other Misc., \$62 M (includes State limitation) Infrastructure Bank & Rail Bank); Capital Construction \$25 M \$190.0 M HB 02-1310: 2002 legislation that includes a funding package to help address the state's long-term funding Program Delivery\*\* House Bill 1310 shortfall \$516.5 M \$166.2 M SB 97-01: 1997 legislation that allocates approximately 10 percent of the proceeds from sales and use taxes to the State Highway Fund Senate Bill 1 \$241.2 M

28 Strategic Transp. Projects \$350.3 M

<sup>\*</sup> These amounts are the actual federal appropriations as of August 6, 2008. The obligation limit rate is 91.85 percent.

<sup>\*\*</sup> This amount includes \$166.2 million in HB 02-1310 funds transferred to CDOT during the fiscal year. It is subsequently allocated out to the other investment categories for construction projects. It also includes the Transportation Commission's \$43.9 million contingency reserve.

# Building Infrastructure

#### **OFFICE OF THE CHIEF ENGINEER**

CDOT's Chief Engineer oversees the Division of Engineering and Maintenance, which includes operations in the department's six transportation regions and nine maintenance sections statewide, staff branches and the newly organized Office of Transportation Safety.

#### **Highway Projects in the six Transportation Regions**

In FY 2008, CDOT's Engineering staff awarded 182 contracts for highway and bridge construction projects totaling \$610,622,938 in FY 2008. Some of these were multi-year projects.

Surface Treatment Program Annual funding is directed to surface treatment in order to meet objectives set by the Transportation Commission (specifically, that 60 percent of pavement would be rated in fair or good condition). About \$158.6 million was budgeted for this program in FY 2008. Approximately 64 projects were fully or partially awarded to contractors with these funds; 51 for asphalt resurfacing and 13 for concrete.

Bridge Program The objective is to replace or repair—over the next 20-plus years—the structurally deficient bridges on the state system. The budget for the Bridge Program (both on- and off-system) was \$47.6 for FY 2008.

Regional Priority Program (RPP) The projects selected and completed under this category are established through the regional planning process. There was \$28.2 million budgeted for this program in FY 08. There was \$18.87 million in supplemental funds made available later via HB 02-1310 transfers to CDOT (total HB 1310 transfers amounted to \$166.2 million, providing funding to other programs as well.)

Additional Statewide Construction Programs These include CDOT's safety construction, budgeted \$28 million, and intelligent transportation systems, budgeted \$8.7 million. Traffic & Safety divisions in the six Transportation regions statewide installed a total of 18 new traffic signals and refurbished 22 signals (some in coordination with developers) in FY 2008.

REGION ONE Counties: Adams, Arapahoe, Cheyenne, Clear Creek, east Denver, Douglas, Elbert, Gilpin, west Jefferson, Kit Carson, Lincoln, Park, Summit

**US 6** Clear Creek Canyon: rock fall mitigation

**US 6** Golden west: resurfacing **SH 9** between Frisco &

Breckenridge: reconstruction

SH 9 Hoosier Pass: resurfacing

SH 9 Fairplay to Alma: resurfacing. Received CCA\* project management award

SH 9 Alma: reconstruction with curb, gutter, sidewalk, storm drainage facilities, two water quality ponds

quality ponds
I-25 5th St. to Meadows Pkwy.,
Castle Rock: reconstruction/
widening; received ACPA\* Award
for Excellence for "Best Portland
Cement Concrete Pavement for
Divided Highways," Urban category
I-25 Larkspur north: resurfacing
US 40 Berthoud Falls west: major
reconstruction/widening (Strategic
Transportation Project final phase)
US 40 Berthoud Pass east/west:
culvert repair/slope stability
US 40/US 287 Kit Carson Bridge:
structure replacement, roadway

structure replacement, roadway realignment, concrete paving (part of *Ports to Plains*, a Strategic Transportation Project

I-70 Hogback Parking Facility: construction of 800-space parking facility at I-70/Morrison Rd. interchange; received CCA\* project management award







Photos: CDOT Chief Engineer Pam Hutton; US 285 at Richmond Hill; I-70 eastbound between Silverthorne and the Eisenhower/Johnson Memorial Tunnels - Region 1 \*American Concrete Pavement Association (ACPA); Colorado Contractors Assn. (CCA)







Photos: US 287 Ports to Plains route; SH 78 east of Beulah - both Region 2; SH 13 near WY state line (showing oversized load) - Region 3

\*American Concrete Pavement Association (ACPA); Colorado Contractors Assn. (CCA); American Concrete Institute (ACI)

I-70 Morrison Rd. to Chief Hosa: resurfacing

I-70 Silverthorne to Eisenhower/Johnson Memorial

Tunnels (EJMT): resurfacing

I-70 EJMT: new lighting north bore/variable message sign

I-70 EJMT: resurfacing

I-70 Georgetown Hill: rockfall mitigation

I-70 County Road Bridge (east of EJMT): emergency repairs

I-70 near Strasburg: emergency bridge column replacement

SH 71 Middle/South Rush Creek: two bridges replaced

SH 83 Douglas/El Paso County Line north: resurfacing

**US 85** Sedalia: reconstruction north of Sedalia, utility relocations & grading south of Sedalia; received CCA\* project management award

SH 86 Franktown east: resurfacing

**US 285** Foxton Rd. to Richmond Hill: widening/reconstruction including new grade-separated interchange at Richmond Hill; landscaping; named "Best Owner Designed Bridge of 2008" by Precast/Prestressed Concrete Institute

US 385 Burlington north: resurfacing

#### **Traffic & Safety Projects**

SH 9 north of Silverthorne: safety improvements
I-25 Larkspur: bridge anti-icing device installation
SH 67 Sedalia west: centerline rumble strips
I-70 Morrison to Vail: road closure gate installation
I-70 west of EJMT: shoulder guardrail installation
I-70 Chief Hosa to Hidden Valley: median guardrail installation

I-70 Mt. Vernon Canyon: median slope/ditch paving I-70 Idaho Springs area: variable message sign installation

I-70 Mountain Corridor: chain stations constructed SH 74 at Upper Bear Creek Rd.: intersection improvements

SH 83 Douglas/El Paso County Line north: new guardrail Regionwide: signing, striping, pavement markings – various locations

### **Local Agency/Transportation Enhancement Projects**

None completed in FY 2008

**REGION TWO** Counties: Baca, Bent, Crowley, Custer, El Paso, Fremont, Huerfano, Kiowa, Las Animas, Otero, Prowers, Pueblo, Teller

SH 12 La Veta to Cucharas Pass: resurfacing

SH 12 Weston: rock mitigation

I-25 (COSMIX, Colorado Springs) Colorado Avenue to North Academy Blvd.: widening/reconstruction (Strategic Transportation Project final phase); largest transportation construction project in state this year I-25 Eagleridge Interchange, Pueblo: reconstruction; ACI\* Award of Excellence for Transp. Construction

US 50 east and west of Holly: resurfacing

**US 50** Pueblo, Salt Creek Bridge: grouting/road reconstruction/drainage

**US 50** Pueblo, Morris Ave./Fortino Blvd. to Wills Blvd.: median/turn lane

US 50 east of Manzanola: bridge rehabilitation

US 50 north of Lamar: bridge rehabilitation

**SH 78** east of Beulah, over Charles River: emergency bridge replacement

SH 89 south of Holly: resurfacing

SH 96 junction SH 167 to Ordway: resurfacing

SH 109 south of La Junta: resurfacing

SH 109 north of La Junta: bridge rehabilitation

SH 120 east of Florence, Arkansas River Bridge:

emergency temporary bridge

**US 287** junction SH 116 north: reconstruction (*Ports to Plains* route) won an ACPA Excellence Award

#### Traffic & Safety Projects

**US 24** Manitou Springs/Divide: guardrail/snow gate **I-25** north of Pueblo: median cable guardrail (first installation in Region 2)

**US 50** at 20<sup>th</sup> Lane, east of Pueblo: signal upgrade **US 50** at Purcell Blvd., Pueblo West: intersection widening/signal upgrades; earned a CCA\* Project Management Award

US 50 at SH 209 intersection: turn lanes

US 50 Pueblo: VMS (variable message sign) installation

US 50 at SH 45 intersection, Pueblo: fiber optics/ITS

device installation

SH 67 north of Cripple Creek: guardrail/snow gate installation

SH 115 Colorado Springs & Penrose: VMS installations US 287 Lamar & Eads: VMS installations (Ports to Plains) Regionwide: signing, striping, pavement markings various locations

#### **Local Agency/Transportation Enhancement Projects**

Santa Fe Avenue, Pueblo: streetscaping

Pueblo Chemical Depot Rd.: William White extension

Manzanola Train Depot: renovation

Pikes Peak Heritage Interpretive Center: interpretive information

Clark Ranch: scenic easement purchase

Region 3 Counties: Delta, Eagle, Garfield, Grand, Gunnison, Hinsdale, Jackson, Lake, Mesa, Moffat, north Montrose, Pitkin, Rio Blanco, Routt

US 6 Rifle east: resurfacing

SH 13 Meeker south: resurfacing and minor widening

SH 13 north of Craig: bridge replacement

**US 34** north of Granby: beetle kill tree removal for safety

**US 40** Winter Park: concrete barrier installation

**US 40** Rabbit Ears Pass: resurfacing

US 50/SH 135 Gunnison: safety upgrades/resurfacing through town, removal and replacement of concrete curb ramps; resurfacing north of town; project won a CCA\* Award for Project Management

SH 64 west of Meeker, Black Gulch: bridge replacement

SH 65 Cedaredge north and south: resurfacing

I-70 at 20 Rd. in Fruita: bridge rehabilitation; project nominated for CCA\* Award for Innovative Bridge Deck Replacement/Resurfacing

I-70 Clifton east: resurfacing, nominated for a CAPA\* Award

I-70 No Name Tunnel: lining rehabilitation

I-70 Edwards east, phase I: resurfacing/safety improve I-70 Wolcott to Dowd Junction (at US 24): wildlife fence I-70 Glenwood Canyon west end, eastbound lanes: resurfacing

SH 82 Basalt: new signal; designed by CDOT, funded by Town of Basalt

SH 82 Aspen, Maroon Creek Bridge: new bridge construction; completed in coordination with the Aspen Bus Lanes Project; existing bridge, the oldest in service on state highway system, originally constructed as a railroad trestle bridge in 1888 (this structure will remain in place); won 2007 CDOT Environmental Project Award and Gold Hard Hat award from Colorado Construction Magazine for Outstanding Highway/Heavy Projects; nominated for Road & Bridge "Top 10 Bridges" of 2008; 18-minute project video available SH 92 south of Crawford, Smith Fork: bridge replaced

SH 125 & 127 Cowdrey north: resurfacing

SH 131 Catamount south: minor widening/reconstruct/ resurfacing

SH 133 Redstone area: guardrail installation

#### **Traffic & Safety Projects**

US 50 at 29 Rd., Grand Junction: intersection reconfiguration/traffic signal

I-70 DeBeque Canyon to Glenwood Springs: inlaid markings

SH 133 Redstone south: guardrail installation Regionwide: signing, striping, pavement markings various locations

#### **Local Agency/Transportation Enhancement Projects**

Rifle signalization: upgraded signals at Railroad Ave. Glenwood Springs Rio Grande Trail: multi-use trail extension

Basalt Trail: multi-use trail extension







Photos: SH 82 Maroon Creek Bridge, Aspen -Region 3 (courtesy of Terry Shapiro); US 385 in Wray bridge replacement; US 34 in Loveland resurfacing - both Region 4

\*Colorado Contractors Assn. (CCA): Colorado Asphalt Pavement Association (CAPA)







Photos: SH 145 west of Telluride climbing lane; US 285 at Johnson Village signal and median; US 160 east of Durango wildlife detection system - all Region 5

\*American Concrete Pavement Association (ACPA); Colorado Contractors Assn. (CCA); American Concrete Institute (ACI); Colorado Asphalt Pavement Association (CAPA)

### **REGION 4** Counties: Boulder, Larimer, Logan, Morgan, Phillips, Sedgwick, Washington, Weld, Yuma

I-25 between Mead and Ft. Collins: concrete slab replacement

US 34 Kersey east: resurfacing

US 34 Morning Dr. to I-25 in Loveland: resurfacing

US 34 Garfield to Morning Dr.: resurfacing

**US 36** in Lyons: bridge replacement; replaced two structurally deficient bridges, improved sight distance on US 36 and added bike lanes & multi-use path

**SH 59** Peterson Canal, south of Sedgwick: bridge replacement

**SH 60** and 83rd Ave., Jefferson Cnty., Two Rivers Pkwy.: intersection/safety improvements; project won a CCA\* Project Management Award

SH 60 & SH 257: resurfacing

I-76 Sedgwick to Nebraska: concrete reconstruction US 85 Latham Canal near La Salle: two bridge replacements

**US 85** LaSalle to 22nd St., Greeley: resurfacing; project replaced three intersections, resurfaced approximately two miles in Greeley and Evans

SH 93 near Boulder: resurfacing/safety improvements

SH 119 at St. Vrain Creek: bridge replacement

**US 385** Wray: bridge replacement

#### **Traffic & Safety Projects**

I-25 & I-76 various locations: variable message signs
US 34 at CR 53, Weld County: new traffic signal
SH 52 at CR 41, Weld County: left turn lanes
SH 392 at I-25, Weld County: interchange improvements

**SH 392** at CR 33, Weld County: left turn lanes Regionwide: signing, striping, pavement markings – various locations **REGION 5** Counties: Alamosa, Archuleta, Chaffee, Conejos, Costilla, Dolores, La Plata, Mineral, Montezuma, south Montrose, Ouray, Rio Grande, Saguache, San Juan, San Miguel

**US 24** south of Chaffee/Park County Line: bridge replacement

SH 24 south of Granite: culvert repair

US 50 & CR 107 in Salida: new signal

SH 145 west of Telluride: climbing lane; approximately one-mile project included nine retaining walls, six-foot-wide shoulders, guardrails, drainage improvements; 14,444 cubic yards of excavation involved; contractor earned *Colorado Construction* magazine Silver Hard Hat Award for Outstanding Highway/Heavy Projects SH 145 Dolores north: full-depth pavement rehabilitation with five inches of new asphalt with partial funding from federal Public Lands Highway Fund

SH 149 north of South Fork: shoulder repair/guardrail

US 160 Durango west: intersection/acceleration lane

US 160 Durango: bridge joint replacement

**US 160** Durango east: wildlife detection system; first-in-the-nation pilot project uses security system technology to detect wildlife crossing and light up variable message boards to warn drivers; accident data collected over the next few years

**US 160** through Alamosa: major reconstruction; partnering with the San Luis Railroad and the City of Alamosa; created separated 2-lane alignments for east-west traffic through downtown; received ACPA Award for "Best Portland Cement Concrete Project for Municipal Streets and Intersections" greater than 30,000 sy

US 160 Alamosa at Victoria St.: new signal

US 550 Durango to Ouray: culvert repair, six locations

US 550 Molas Pass: rockfall mitigation

US 285 at Johnson Village: new signal/median

#### **Traffic & Safety Projects**

**US 550** Silverton: intersection improvements, with Town of Silverton

**SH 291** north of Salida: access, ped/bike path to relocated hospital

SH 172 Ignacio: new development access/signalized intersection; partnership with Southern Ute Tribe; design and oversight by CDOT with Tribe funding US 50 in Salida: development deceleration lane US 160 Pagosa Springs: auxiliary lanes at Piedra Rd. Regionwide: signing, striping, pavement markings – various locations

### **Local Agency/Transportation Enhancement Projects**

Pagosa Springs San Juan River Walk, phase I City of Durango Animas River Trail: multi-use trail extension

Pagosa Springs Cemetery Rd.: paving of dirt road to meet Congestion Mitigation & Air Quality requirements

### **REGION 6** Counties: west Adams, west Arapahoe, Denver, north Douglas, east Jefferson

**US 6** (6<sup>th</sup> Ave) 19<sup>th</sup> St. in Golden to Colfax: resurfacing **I-25** 48<sup>th</sup> Ave. to US 36: concrete slab replacement **I-25** near 58<sup>th</sup> Ave.: emergency sinkhole repair; city water main break opened up a hole 50 feet wide, 16 feet deep, 225 feet long on I-25; engineers and contractors worked 24/7 to restore 6 lanes of interstate within eight days, with traffic delays kept to a minimum **SH 30** (Havana St.), SH 83 (Parker Rd.) to Florida Ave.: resurfacing

I-70 US 40 to Colfax Ave.: resurfacing

**SH 75** (Platte Canyon Rd.) near C-470: culvert replaced **I-76** SH 95 (Sheridan Blvd.) to I-25: median cable guardrail

I-76 US 85 to Burlington Canal: resurfacing SH 83 (Parker Rd.) at Dartmouth Ave.: intersection improvements

SH 93 SH 58 to 58th Ave.: resurfacing

**SH 121** (Wadsworth Blvd.) 66<sup>th</sup> to 90<sup>th</sup> Ave.: resurfacing **I-225** 6<sup>th</sup> Ave. to Colfax Ave.: concrete slab replacement **SH 265** (Brighton Blvd.) 47<sup>th</sup> Ave. to 54<sup>th</sup> Ave.: resurfacing

**US 285** over Willow Springs Rd. and Turkey Creek Rd.: bridge replacements

**SH 391 (Kipling St.)** 6<sup>th</sup> Ave. to US 40 (Colfax Ave.): resurfacing

**McIntyre St.** over SH 58: bridge deck rehabilitation **Peoria St.** over I-76: bridge deck rehabilitation

Perry St. over US 6: bridge deck rehabilitation

**Speer Blvd.** at I-25: interchange reconst., 2008 WTS\* Large Project of the Year

**Tabor St.** over I-70: bridge deck rehabilitation

#### **Traffic & Safety Projects**

**US 6/85** at 56<sup>th</sup> Ave., signal upgrade **I-25** Alameda to I-70, sign replacement **I-70** at 32<sup>nd</sup> Ave.: new chain station **I-70** at C-470: new chain station

I-70 Brighton Blvd. to Tower Rd.: sign replacement

SH 93 at SH 72: signal installation

SH 93 at 62<sup>nd</sup> Ave.: closure gate installation SH 93 at 64<sup>th</sup> Ave.: variable message sign (VMS) installation

**SH 121** (Wadsworth Blvd.) at Layton Ave.: signal upgrade

I-270 near Brighton Blvd. (SH 265): sign replacement I-25 and US 36 High Occupancy Vehicle VMS replacements

SH 121 Quincy to Ken Caryl & 26<sup>th</sup> Ave. to 104<sup>th:</sup> Wadsworth Interconnect

**Regionwide:** signing, striping, pavement markings – various locations

### Local Agency/Transportation Enhancement Projects

I-25 at Lincoln Ave.: interchange improvements Douglas County, University Interconnect Holly Street over Cherry Creek: bridge replacement Thornton, Colorado Blvd. Interconnect







Photos: US 285 over Willow Springs bridge replacements; I-25 at Speer Blvd. in Denver interchange improvements; I-25 near 58th in Denver emergency sinkhole repairs (courtesy of Gregg Gargan, CDOT photographer) - all Region 6

\*American Concrete Pavement Association (ACPA); Colorado Contractors Assn. (CCA); American Concrete Institute (ACI); Colorado Asphalt Pavement Association (CAPA); Women in Transportation Seminar (WTS)

#### ASPHALT PRODUCT SHORTAGE IMPACTS PROJECTS

Due to a national asphalt and polymer shortage announced in June 2008, CDOT reviewed its existing and upcoming highway projects to identify those that may be impacted and what actions should be taken. The asphalt shortage was expected to be short-term, but had the potential to affect many projects. Priority was given to projects in areas with the most significant pavement damage or those in the middle of construction. At the end of the fiscal year (July 1, 2008) CDOT had 72 projects with some amount of asphalt to place. Of those, 14 contractors could not complete paving in calendar year 2008, but delayed completion until 2009. Some 57 contracts were able to complete paving operations in 2008; the majority of these have used a change in source of asphalt cement and/or a change in asphalt cement grade in order to complete the work.



Resurfacing on I-25 north of Larkspur (Region 1) is one of the projects that experienced a delayed paving schedule due to the nationwide asphalt shortage in 2008. The paving was 40 percent complete and will receive a top mat of asphalt in the summer of 2009.

#### STRATEGIC TRANSPORTATION PROJECTS

#### Some Annual Progress Updates

The Transportation Commission adopted this program in 1996, which identified 28 high-priority transportation corridors to receive funding for accelerated construction. Some notable, recent progress on these corridor projects includes the following:

**I-25/US 26/I-76/I-270**: the tenth and final phase which constructed a 2,200-foot long flyover ramp from eastbound I-270 to eastbound I-70 was completed in 2008.

**US 287, Campo to Hugo** *(on Ports to Plains route)*: concrete reconstruction progresses, with the completion of a 13-mile segment between Lamar and Springfield in FY 08; also, the functionally obsolete UPRR overpass south of Kit Carson was replaced.

**US 550, NM State Line to Durango**: right of way purchases for the corridor continue and the second construction phase, involving widening to four lanes, is underway (project phase to be completed in June 2009). **US 160, SH 3 to the Florida River (east of Durango)**: Widening to add a fourth lane and new interchange construction began in the summer of 2008 as a modified design-build project (project phase to be completed in September 2010).

I-70 West EIS: Through a collaborative effort, and after eight years, the I-70 Mountain Corridor Team identified a long-term (50-year) vision transportation solution for I-70 between Denver and Glenwood Springs. A Context Sensitive Solution (CSS) approach to all projects undertaken in the I-70 Mountain Corridor was identified and put into affect in FY 08. Projects included expanded truck parking, chain stations, sediment removal, and Intelligent Transportation System (ITS) efforts. A comprehensive incident management plan was developed in partnership with mountain corridor agencies. (The current West Mountain Corridor Programmatic Environmental Impact Statement can be found at www.dot.state.co.us/I70mtncorridor/.)

#### **Funding Sources**

The Strategic Transportation Projects receive funding from federal and state gas tax revenues and from the sources described below.

#### Senate Bill 97-01

This 1997 legislation allocates a portion of the state's General Fund sales and use tax revenue, considered to be motor-vehicle related, to the Strategic Transportation Projects. Due to a decline in the state's economy, CDOT did not receive any revenue from this source in fiscal years 2003 through 2005. However, the 2005 passage of Referendum C indirectly enabled SB 97-01 funds to once again flow to CDOT. Referendum C allows the state to retain revenues in excess of the state fiscal year spending levels set forth in TABOR (Taxpayer's Bill of Rights) for five fiscal years, which began with the 2006 fiscal year.

#### Senate Bill 97-01 and House Bill 1310-02 Status Report

The laws which allow SB 97-01 and HB 1310-02 transfers to occur remain intact and unchanged. This is especially important as Governor Ritter's Transportation Finance and Implementation Panel considers changes in the way transportation is funded in Colorado.



Reconstruction of US 287 south of Kit Carson (on Ports to Plains route) included replacement of the 1936 Union Pacific Railroad overpass, which was rated "functionally obsolete."

#### **Strategic Transportation Projects**

#### **Corridors Already Complete**

I-25/US 50/SH 47 Interchange I-25, Owl Canyon Road to Wyoming C-470 Extension US 34, I-25 to US 85 Santa Fe Corridor I-76 at 120th Avenue US 285, Goddard Ranch Ct. to Foxton Rd. I-225 at Parker Road (SH 83) I-70 East, Tower Road to Kansas State Line I-70/I-25. The Mousetrap US 50, Grand Junction to Delta SH 82, Basalt to Buttermilk I-25. SH 7 to SH 66 US 40 Berthoud Pass I-25 and I-225 (T-REX) US 287, Broomfield to Loveland I-25 through Colorado Springs I-25/US 36/I-76/I-270

#### **Corridors Nearly Complete or Fully Funded**

US 160 Wolf Creek Pass

#### **Corridors with Some Remaining Projects**

Powers Boulevard in Colorado Springs US 287, Campo to Hugo (part of *Ports to Plains* route) US 160, SH 3 to the Florida River US 550, New Mexico State Line to Durango

#### **Major Investment Corridors**

I-25, SH 66 to Fort Collins: Environmental Impact Statement (EIS) underway

I-70 West, Denver to Eagle County: Programmatic EIS draft complete

I-25 Denver to Colorado Springs: EIS completed from Lincoln Avenue to CastleRock; Environmental Assessment (EA)completed from Monument through Colorado Springs

East Corridor & West Corridor: Two Major Investment Studies; undergoing necessary environmental clearance to identify future projects

(As of January 2009)

# Enhancing our System

#### **DIVISION OF STAFF BRANCHES**

The Division of Staff Branches includes maintenance & operations, business & technical support, project development, intelligent transportation systems, materials & geotechnical, traffic engineering, agreements & market analysis, bridge design & management and innovative contracting. Five of these areas are highlighted with greater detail throughout the next pages, as they more directly impact Colorado citizens.

#### Intelligent Transportation Systems

CDOT's Intelligent Transportation Systems (ITS) Branch works to improve and enhance mobility and traffic safety throughout Colorado. This is accomplished by providing traveler information and traffic and incident management services utilizing variable message signs (VMS), highway advisory radio, closed circuit television, the internet, broadcast fax, automated traveler information telephone system, weather stations, vehicle detection and location systems, ramp metering, HOV sign systems, courtesy patrols and coordination with partnering agencies.

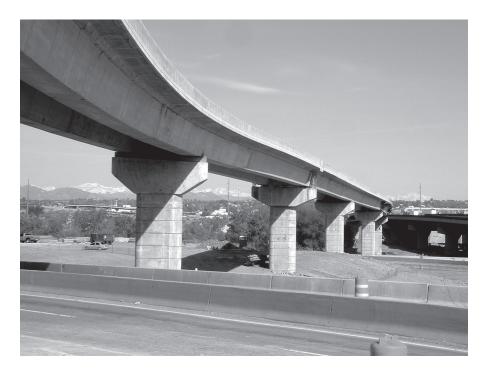
In FY 08, crews extended the fiber optic communications on I-70 west from Officer's Gulch to the top of Vail Pass; replaced 10 Variable Message Sign (VMS) on I-70 west with upgraded overhead VMSs; installed a wireless network on US 36 from Sheridan Blvd. in Denver to Boulder.

The ITS Branch also includes the Colorado Transportation Management Center, where staff monitor these systems and maintain the traveler information Web site <a href="https://www.cotrip.org">www.cotrip.org</a>, widely recognized as one of the best in the nation (receiving more than 500 million hits in calendar year 2008). The statewide traveler information service received 2.3 million calls in calendar year 2008. This system can be accessed by calling 511 (the nationwide number for traveler information).

#### **Bridge Design & Management**

CDOT typically inspects state-owned major vehicular bridges every other year or every fourth year. However, bridges that are in poor condition or cause concern are inspected more frequently. The nationwide bridge sufficiency rating system uses a scale from 1 to 100 (1 being the worst). If

warranted, a bridge can receive a status of *Structurally Deficient* or *Functionally Obsolete*. A number of variables are used to produce this rating but the main focus is on capacity and condition.



Construction on the I-270 ramp bridge over I-76 in Denver (Region 6) was recently completed. This bridge was designed by CDOT bridge engineers and is an example of CDOT's use of innovative technology, in this case, the use of long segment precast girders for a curved bridge.

Structural engineers determine the current safe load capacity of the bridges. Bridge inspectors review the condition of the bridges and note any deterioration or damage to the concrete and steel members. Low bridge sufficiency ratings do not necessarily indicate an unstable bridge. Bridge sufficiency ratings are based 55 percent on structure condition, 30 percent on service and functionality and 15 percent on how essential they are for public use.

For FY 08, CDOT budgeted approximately \$26 million for state system bridge replacement and major rehabilitation projects. Some bridges are replaced with other funding sources when combined with highway construction projects. CDOT has 3,406 major vehicular bridges on the state system

(2008 reporting database.) Of those 125 are in poor condition and need replacement or major rehabilitation, 361 are in fair condition, and the remainder are considered to be in good condition. (The total number of major vehicular bridges in the state is 8,173, which includes city owned structures, county owned structures, and ownership other than federal.)

Bridge staff inspected 1,713 structures on the state system in FY 08 and contracted inspection of 2,400 bridge structures on other roadways. A four-year effort utilizing contracted work was completed; it involved inventory and inspection of the 6,092 minor structures/culverts, 1,159 overhead signs, 4,291 mast arm signals, and 171 high-mast lights on the state system.

On the state system in FY 08, 14 major vehicular bridges were replaced; 143 existing major vehicular bridges had critical inspection findings that are addressed on a case by case basis; and 105 major vehicular bridges underwent minor rehabilitations.

Bridge staff had an especially busy year in FY 08 responding to inquiries on the condition of Colorado's bridges. The interest was prompted by the August 2007 bridge collapse in Minneapolis. In response to the accident, staff conducted special inspections on all 28 of the state system major vehicular truss bridges.

#### Materials and Geotechnical

Rockfall Program CDOT's Rockfall Program staff responded and evaluated 27 incidents or potential incident sites. These responses are in addition to the regular rockfall inspections performed by maintenance crews along rockfall corridors. Most mitigation work resulting from these incidents receives funds from the regional maintenance budget and is sometimes supplemented with Transportation Commission contingency funds. In FY 08, six of these responses for rockfall evaluations resulted in rockfall mitigation, which was determined necessary for highway safety.

Scheduled mitigation projects totaled just over \$3 million in FY 08 (the program's average annual budget). A project on I-70 at Georgetown Hill consisted of installing rockfall fence, draped rockfall netting and a new style of hybrid rockfall fence. This hybrid was developed during a series of tests designed to improve the mitigation designs used at this location. Two other projects on US 550 along Molas Pass and on US 50 in Big Horn Sheep Canyon involved rockfall bolting, rock scaling, and draping rockfall netting.

#### **Traffic Engineering**

CDOT administers the state's federally-funded traffic safety program. The goal of the program is to reduce traffic deaths on Colorado's highways. Primarily, the program focuses on: reducing the frequency and severity of crashes through engineering solutions, reducing alcohol-related traffic deaths, increasing adult seat belt use and car seat and seat belt use for children, and reducing teen driving deaths.

Hazard Elimination Program Addressing safety concerns on Colorado roadways is an important part of the safety program. The objective is to maximize accident reduction within the limitations of available budgets by making road safety improvements at locations where it does the most good or prevents the most accidents. Through the use of geographically referenced traffic crash data and statistically driven data evaluation criteria, locations that exhibit atypical crash history can be identified. In FY 08, the Hazard Elimination Program allocated \$17.6 million for 38 projects statewide.

Statistics In calendar year 2007 (the most recent data available), traffic deaths increased by 3.6 percent to 554 compared to 535 in 2006. However, Colorado is still showing a downward trend in fatalities from 742 in 2002 to 554 in 2007. In 2007, alcohol was involved in 226 (40.8 percent) of Colorado's 554 fatalities. On July 1, 2004, a .08 blood alcohol content (BAC) law took effect, lowering a Driving Under the Influence (DUI) charge from .10 BAC to .08 BAC. Colorado also retains a Driving With Ability Impaired (DWAI) offense at .05 BAC.

In 2007, drivers and passengers accounted for 480 of the traffic-related deaths, in which 90 were motorcycle fatalities and 390 were drivers and passengers in other motor vehicles. Of these 390 fatalities, 206 (53 percent) were not buckled up. If everyone had buckled up, about half of those victims should have survived. The 390 driver and passenger deaths included 23 (5.9 percent) children under the age of 16. Twelve or 52.2 percent of these young victims were riding unrestrained.

Overall seat belt use in Colorado increased from 81.1% in 2007 to 81.7 percent in 2008. For children under age five, car seat use increased from 83.1 percent in 2007 to 86.9 percent in 2008. Seat belt use for children ages five through 15 increased from 69.7 percent in 2007 to 71.3 percent in 2008.

In 2007, 45 young drivers and passengers, ages 16 to 20, died on Colorado highways, and 28 or 62.2 percent of these victims were not using seat belts. In 2007, 42 or 93.3 percent of these fatalities involved teen drivers at the wheel. Of these 42 fatalities, 26 were the teen drivers themselves, and 16 were teen passengers. An additional four teens, ages 16-20, also died in motorcycle crashes in 2007. The 2008 seat belt usage rate for ages 16 to 20 was 79.2 percent, which is 2.5 percent lower than the overall usage rate for Colorado.

#### Office of Transportation Safety

The Office of Transportation Safety has been newly organized under CDOT's Chief Engineer and includes highway safety programs, as well as the homeland security program and employee safety programs. An overview of the federally funded highway safety programs is given below, as these programs more directly impact the public. These programs are designed to reduce traffic crashes, fatalities, and injuries in Colorado through the coordinated efforts of state and local agencies, groups, coalitions, and organizations.

Impaired Driving Education/Prevention Law Enforcement Assistance Funds (LEAF) are used to increase and improve the enforcement of DUI laws and to coordinate the efforts of law enforcement agencies. Since 1982, LEAF agencies have been responsible for at least 60 percent of the impaired driving arrests. Under the "Heat is On" campaign, seven high visibility DUI enforcement periods have been conducted over the past year.

DUI Checkpoint Colorado, an extensive statewide summertime sobriety checkpoint program, was in effect again from Memorial Day through Labor Day of 2008. Ten law enforcement agencies across the Front Range received a total of \$249,000 to conduct checkpoints during this period.

Pilot DUI Courts have been implemented in the southwest part of Colorado. The purpose of this pilot program is to assist courts in the region in adapting the principals of DUI/Problem Solving Courts and to improve court supervision and treatment outcomes for persistent drunk drivers.

CDOT partnered with Mothers Against Drunk Driving (MADD) Colorado to fund two youth program specialists to launch youth programs in Colorado. The youth programs specialists facilitate programs centered on: underage drinking prevention, safe driving and the prevention of impaired and high-risk driving for those of legal drinking age.

Occupant Protection The goal of CDOT's Occupant Protection program is to increase seatbelt and child passenger safety seat usage rates statewide. Community outreach projects target high-risk segments of the driving population, such as: teens, young men 18-34, pick-up truck drivers and minority communities. The program supports several types of projects that include: high-visibility enforcement education, such as the "Click It or Ticket" campaign; and coalition work with communities and state agencies to promote traffic safety. Compliance is measured by three annual seatbelt surveys: a statewide survey, a juvenile and teen usage survey, and a neighborhood survey.

Safety seat check-up events are conducted statewide on a regular basis. Colorado has 1012 child passenger safety certified technicians to assist parents in safety seat installation at 142 operating fit stations statewide. NHTSA and CDOT also conducted a statewide teen seatbelt campaign to improve seat belt use in the 16-20 year-old age group.

Projects in the minority communities reached at least 5000 Hispanics and about 4,000 African-Americans through a variety of activities and safety-seat check-up events. All were exposed to traffic safety messages to



CDOT's new "Live to Ride" campaign was launched at a news conference in April 2008.

buckle up and to secure children in safety seats. In 2008, the combined African-American and Hispanic estimated seatbelt usage rate was 75.1 percent.

The Colorado State Patrol, and over 264 law enforcement agencies statewide, participated in the "Click it or Ticket" High Visibility Seat Belt Enforcement Campaign, better known as "May Mobilization." Over a two week period from May 19th through June 1st, 2008, approximately 870 officers working 7,626 overtime hours, issued just over 9,800 violations.

CDOT launched the state's first motorcycle safety campaign called "Live to Ride." The campaign includes a web site, <u>comotorcyclesafety.com</u> as well creative materials to encourage riders to get proper training, wear appropriate gear and ride sober.

STATE	21111			

	2003	2004	2005	2006	2007
Total Traffic Fatalities	644	667	606	535	554 <sup>1</sup>
Alcohol Related	258	249	242	219	226¹
% Alcohol Related	40.1%	37.3%	39.9%	40.9%	40.8%
Vehicle Fatalities	505	505	462	387	390¹
(drivers & passengers)					
Motorcycle Fatalities	70	81	87	74	90
Bicycle Fatalities	3	11	8	10	11
Pedestrian Fatalities	62	70	48	59	58
Other Fatalities	4	0	1	5	5
Fatalities per	1.48	1.46	1.26	1.10	1.14
100 Million VMT					

SOURCE: Fatality Analysis Reporting System and Safety and Traffic Engineering Branch; 2007 data subject to change per Colorado Coroners/ Hospital Reports through February 2009

<sup>1</sup> Based on Fatality Analysis Reporting System (FARS) data as of Sept. 30, 2008

## Maintaining

### **DIVISION OF TRANSPORTATION MAINTENANCE** *Highway Maintenance*

CDOT maintenance work falls into two categories. Regular maintenance includes: blading, cleaning drainage structures, slope and fence repair, some rockfall and wetlands mitigation, sweeping, litter removal and highway resurfacing and repairs (chip seal, patching). In FY 08, highway resurfacing/repairs expenditures totaled \$53.1 million. Regular maintenance also includes upkeep and operations for the state's 34 rest areas, which was allocated \$3.4 million in FY 08. Snow and ice control involves: plowing, sanding, deicing and controlling avalanches. CDOT's annual budget for snow and ice is about \$42.9 million. This past winter, however, CDOT spent an estimated \$68.9 million, including an additional \$27 million on snow and ice activities, due to an extraordinarily heavy winter in the high country.

#### Avalanche Management Program

During the 2007-08 winter, CDOT triggered more than 500 avalanches with explosives, of which 160 impacted Colorado highways. CDOT experienced 1,128 hours of road closures due to avalanche control and spent 8,406 hours performing avalanche mitigation.

#### **Maintenance Activities FY 2008**

During the 2008 fiscal year, members of the Maintenance Program staff tended more than 23,000 lane miles by:

☐ Repairing and maintaining more than 8.7 million square yards of roadway surface ☐ Utilizing 248,018 tons of asphalt and 178,841 gallons of liquid asphalt in asphalt preservation activities ☐ Striping more than 22,540 miles of roadway and creating 167,596 square feet of pavement markings using 1.7 million pounds of glass beads, 218,959 gallons of paint ☐ Snowplowing, sanding, and/or deicing 7.2 million miles of highway ☐ Managing 2,371 hours of road closures, at various locations statewide, due to snow ☐ Applying 326,517 tons of salt/sand and 11.4 million gallons of liquid deicer to the highways ☐ Repairing/installing 146,823 feet of snow fence ☐ Disposing of 82,222 cubic yards of trash off the rightof-way with the help of 10,512 Adopt-A-Highway volunteers and another 13,569 bags of trash with the support of 26 corporate sponsors ☐ Replacing and repairing 67,830 signs and sign posts

☐ Replacing, installing, and repairing over 17.125 million linear feet of fencing along CDOT right-of-way







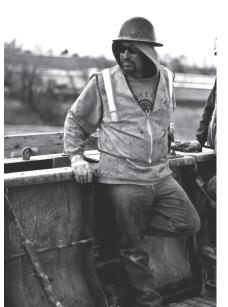
Photos: Tony Velasquez, Region 5 east area maintenance, evaluates the daunting task ahead: clearing SH 17 near the New Mexico state line; Region 6 maintenance crews help block traffic on I-25 during the Democratic National Convention in Denver; Region 4 crews trim trees off SH 402 near Loveland

## Providing Equal Opportunity

#### **DIVISION OF HUMAN RESOURCES & ADMINISTRATION**

Business During Federal Fiscal Year 2007, CDOT contracted over \$25 million to small, disadvantaged, and emerging businesses. These small businesses are major employers in Colorado and are a critical part of Colorado's economy. CDOT's unique Business Opportunity & Workforce Development Program (BOWD), that works closely with 20 small, disadvantaged businesses to build their business capacity and competitiveness, has continued to be successful and innovative. The BOWD participants continue to bid successfully as subcontractors on CDOT highway construction and design projects and are becoming the future contractors that will build and maintain Colorado's transportation system.

Employment Staff provide assistance to CDOT employees and job applicants who have concerns or questions about diversity, options for injured or disabled employees, options for disabled applicants, and any kind of workplace discrimination. The Colorado Construction Career Days in Denver and Colorado Springs provide hands-on introduction to careers in



highway construction to over 2,000 high school students. Also, the Federal Highway Administration, Colorado State University in Pueblo and CDOT partner each year to hold a summer transportation institute introducing students to opportunities in transportation engineering.

Community Development The Center for Equal Opportunity (EO) serves the community and the highway construction industry through our Making a Connection Consortium (MACC) that trained over 200 and placed over 125 people from traditionally underutilized communities in entry level construction jobs.

Equal Access for the Public The EO Office also answers questions about road or sidewalk access, equitable access to CDOT services and benefits, and participation in programs receiving federal funding through CDOT (including women- or minority-owned businesses wishing to provide services to CDOT). If a business feels it has been discriminated against, the Internal EO Office may be able to provide assistance.

## Taking Flight

#### **AERONAUTICS**

Funded exclusively from aviation fuel tax revenues directed into the Colorado Aviation Fund, Colorado airports, in FY 2008, were awarded more than \$9 million in Colorado Discretionary Aviation Grants. These grants impacted capital improvement, development, safety programs and maintenance at the 76 public-use airports in the State. In conjunction with the Colorado Discretionary Aviation Grant program, Federal Aviation Administration Airport Improvement Program funds provided nearly \$79 million to commercial service airports and \$20.1 million to general aviation airports for capital infrastructure projects. Entitlement refunds generated from state aviation fuel taxes reimbursed more than \$39 million to local community airport sponsors for use in developing, maintaining and operating their aviation facilities. In 2008, the Colorado Department of Revenue conducted an audit of fuel tax revenues and found a substantial amount of revenue that was not properly identified as aviation fuel sales. The additional tax revenues found in the audit resulted in a second discretionary grant cycle for FY 2008.

The 2008 Colorado Airports Economic Impact Study revealed that Colorado airports generate \$32.2 billion in overall output to the Colorado economy. Additionally, the report stated that airports in the Colorado support over 340,000 jobs that produce \$11.2 billion in employee payroll.



Steamboat Springs Hayden Airport

The Colorado Division of Aeronautics is taking a leadership role in nationally recognized issues that have an impact on the Colorado Airport System. Due to increased demand and lack of radar coverage at Colorado's mountain airports, FAA's Next Generation Air Traffic Control technology began its initial testing phase. This next generation technology is known formally as Automated Dependent Surveillance Broadcast (ADSB), and has been tested at several locations in northwest Colorado. Upon completion of phase 1 testing and implementation, phase 2 will begin in Alamosa, Eagle, Gunnison, La Plata, Montezuma, Montrose, Pitkin, and San Miguel counties. The Colorado Radar Project will be the first installation of this type of next generation radar in the United States. The Colorado Radar Project is supported by the Colorado Aeronautical Board, Colorado Transportation Commission, local governments, DOLA, and the Federal Aviation Administration.

As a result of the Colorado Mountain AWOS (Automated Weather Observing System) Project, the Division found deficiencies in the compilation of Federal weather data. The Colorado Aeronautics Division partnered

with the National Association of State Aviation Officials to initiate a memorandum of understanding for a nationally collaborative effort to develop an improved weather data collection system.

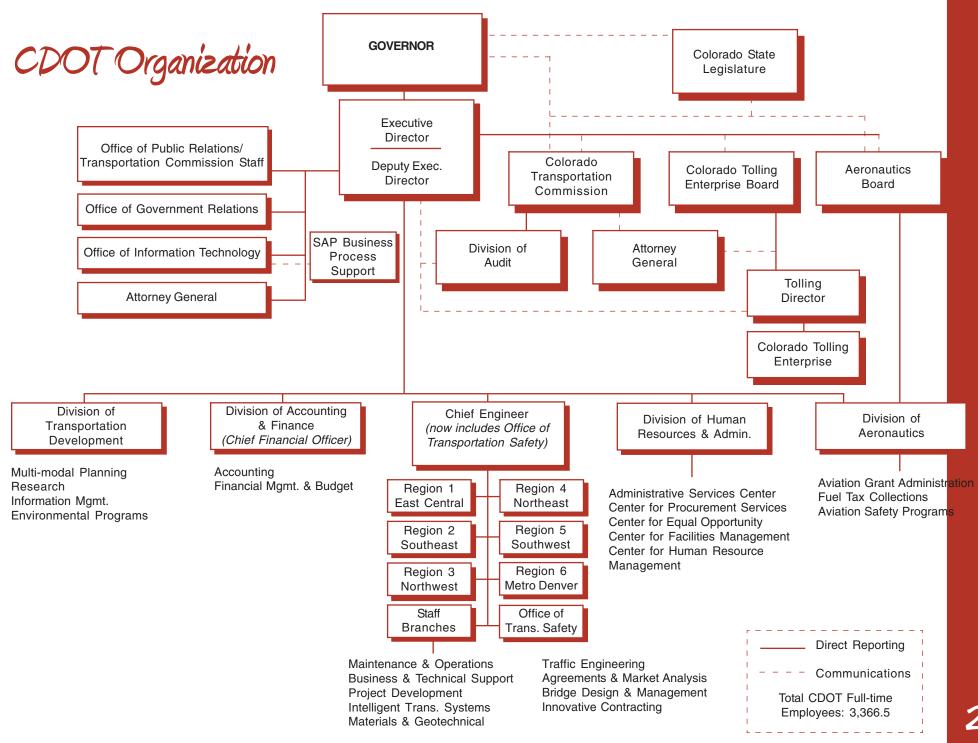
The Division's involvement in nationally recognized endeavors and the staff's dedication to promoting solid partnerships with public and private constituents resulted the following locally and nationally recognized awards: the FAA Northwest Mountain Region Annual Regional Administrator Award for Aviation/Aerospace Partnership; the American Association of State Highway and Transportation Officials President's Transportation Award for Aviation; the 2008 FAA Airports Ally Award in recognition of significant assistance to the FAA.

During the 40<sup>th</sup> anniversary of Centennial Airport, the Division was presented an award for Outstanding Contributions to Centennial Airport and General Aviation.

## Being Accountable

#### **DIVISION OF AUDIT**

The Division of Audit, organized into internal and external branches, reports directly to the Transportation Commission through the Audit Review Committee. The Internal Audit Branch conducts performance audits to determine the adequacy and effectiveness of CDOT's system of internal control; provides investigative services related to allegations of fraud, waste, abuse, or employee misconduct; and provides consulting services to the Transportation Commission and CDOT management. During FY 08, staff completed 11 performance audits of various CDOT organizations and functions. They also operate an "Audit Hotline" to provide employees with a tool to anonymously report suspected fraud, waste, or abuse. The External Audit Branch conducts final cost audits of CDOT contracts to assure payments were made in compliance with the contract terms and with federal and state regulations. The Branch also audits contractor claims and conducts training for internal and external audiences. During FY 2008, staff completed 61 final cost and contractor claim audits.



### A Final Word...

I am pleased to have had the opportunity to serve as chair of the Transportation Commission for the past two years. I would like to thank all of the dedicated employees at CDOT for their outstanding effort on behalf of the citizens of Colorado. I would also like to acknowledge the leadership of Executive Director Russ George and his entire management team for their efforts to provide the citizens of Colorado the best multimodal transportation system possible.

Developing a plan to provide for a stable and sustainable long-term funding source for CDOT remains a high priority. As the Transportation Commission began work on the FY 09-10 budget, the outlook was very bleak. We are now facing a budget that does not meet the needs in any of the major programs areas. Without additional revenue, CDOT will simply not be able to continue to meet the public's expectations and the public will begin to notice even more deterioration in the condition of the state highway system.

After the 2008 legislative session, Governor Ritter asked his Transportation Finance and Implementation Panel to continue work on refining their initial recommendations made in January 2008. To that end, the panel continued to meet throughout the spring and summer and conducted 25 public meetings all over the state to help raise public awareness of the challenges and seek public input. In November, the panel summarized the results of their additional work and will present those recommendations to Governor Ritter and the legislature for their consideration in the 2009 legislative session.

The Transportation Commission would like to thank all of our planning partners for your continued commitment and support during the past year. We stand ready to work with elected officials as all levels of government to find solutions that are in the best interest of all of the citizens of Colorado. A well-planned multimodal transportation system is vital to maintaining a growing economy that will provide economic stability and opportunity for the citizens of Colorado.

All the best.

Doug Aden

Colorado Transportation Commissioner

(Chairman through FY 2008)

