



**COLORADO**

Department of  
Transportation

## Statewide Transportation Advisory Committee (STAC)

August 24, 2018

9:00 AM – 12:00 PM

**CDOT HQ Auditorium**  
**2829 W. Howard Place**  
**Denver, CO**

### Agenda

- 9:00-9:05 **Welcome and Introductions** – Sean Conway, STAC Vice-Chair
- 9:05-9:10 **Approval of July STAC Meeting Minutes** – Sean Conway
- 9:10-9:20 **Transportation Commission Report (Informational Update)** – Sean Conway
- Summary report of the most recent Transportation Commission meeting.
- 9:20-9:35 **TPR Reports (Informational Update)** – STAC Representatives
- Brief update from STAC members on activities in their TPRs.
- 9:35-9:45 **Federal and State Legislative Report (Informational Update)** – Herman Stockinger & Andy Karsian, CDOT Office of Policy and Government Relations (OPGR)
- Update on recent federal legislative activity.
  - Potential ballot question update.
- 9:45-10:00 **FY 2018-19 Amended Annual Budget (Informational Item)** – Jeff Sudmeier, Chief Financial Officer
- Update on CDOT's amended FY18-19 Annual Budget
- 10:00-10:15 **CDOT Statewide Fiber Optic Master Plan (Informational Item)** – Amy Ford, Chief of Advance Mobility and Bob Fifer, Transportation Systems Management & Operations (TSM&O)
- Update on CDOT's Statewide Fiber Optic Master Plan effort and other related topics.
- 10:15-10:25 **Break**
- 10:25-11:10 **State Demography Presentation (Informational Item)** – Elizabeth Garner, Department of Local Affairs (DOLA)
- Overview of demographic and population trends in Colorado.
- 11:10-11:30 **Policy Directive 14 Scorecard (Informational Item)** – William Johnson, Division of Transportation Development (DTD)
- Overview and update on the annual performance of PD 14 objectives.
- 11:30-11:45 **Active Transportation Element of Development Program (Informational Item)** – Debra Perkins-Smith and Tim Kirby, DTD
- Update on the creation of the active transportation element of the Development Program.
- 11:45- 11:55 **Bustang / Outrider Service Schedules Update (Informational Item)** – David Kurtsinger and Mike Timlin, Division of Transit and Rail (DTR)
- Update on Bustang and Outrider service schedules.
- 11:55-12:00 **Other Business-** Sean Conway
- 12:00 **Adjourn**

STAC Conference Call Information: 1-877-820-7831 321805#

STAC Website: <http://www.coloradodot.info/programs/statewide-planning/stac.html>

New CDOT Region 1/ Headquarters Location: 2829 W Howard Place, Denver, CO 80204

**Draft STAC Meeting Minutes  
July 27, 2018**

**Location:** CDOT Headquarters Auditorium

**Date/Time:** July 27, 2018, 9:00 a.m. - 12:00 p.m.

**Chairman:** Vince Rogalski, STAC Chair

**Attendance:**

In Person: Vince Rogalski (GV), Dick Elsner (CFR), Gary Beedy (EA), Peter Baier (GVMPO), Roger Partridge (DRCOG), Doug Rex (DRCOG), Ron Papsdorf (DRCOG), Thad Noll (IM), Sean Conway (NFRMPO), Suzette Mallette (NFRMPO), Becky Karasko (NFRMPO), Heather Sloop (NW), John Liosatos (PPACG), Terry Hart (PACOG), Michael Yohn (SLV), Stephanie Gonzales (SE), Douglas McDonald (SUIT), Bentley Henderson (SW), Barbara Kirkmeyer (UFR), Elizabeth Relford (UFR).

On the Phone: Dean Bressler (GVMPO), Walt Boulden (SC).

<b>Agenda Item / Presenter (Affiliation)</b>	<b>Presentation Highlights</b>	<b>Actions</b>
<p>Introductions &amp; June STAC Minutes / Vince Rogalski (STAC Chair)</p>	<ul style="list-style-type: none"> <li>• Review and approval of June STAC Minutes without revisions.</li> </ul>	<p><i>Minutes approved.</i></p>
<p>Transportation Commission Report / Vince Rogalski (STAC Chair)</p>	<p><b>Presentation</b></p> <ul style="list-style-type: none"> <li>• <u>Transportation Commission</u> <ul style="list-style-type: none"> <li>○ Discussed the 2018 State Freight and Passenger Rail Plan prior to request TC approval in August.</li> <li>○ Received a quarterly report on Bustang and discussed the ideal level of fare box recovery.</li> <li>○ Reviewed current PD 14 measures and how CDOT is doing in anticipation of the annual budget setting process.</li> </ul> </li> <li>• <u>High Performance Transportation Enterprise (HPTE)</u> <ul style="list-style-type: none"> <li>○ HPTE Board approved the yearly interagency agreement that outlines roles and responsibilities with CDOT.</li> <li>○ HPTE has also launched a master planning process for their projects throughout the state.</li> </ul> </li> </ul>	<p>No action taken.</p>

<p>TPR Reports / STAC Representatives</p>	<p><b>Presentation</b></p> <ul style="list-style-type: none"> <li>• <u>DRCOG</u>: Board approved the 2020-2023 TIP policy at the last meeting; 20% goes to regional projects, the other 80% split up between the sub-regions, it's a new approach but we think it will work and appreciate CDOT participation in this process; Bike to Work Day recently occurred, 35,000 riders totaling 625,000 miles cumulatively.</li> <li>• <u>GVMPO</u>: To add to what Vince said, I was very passionate about taking the Northwest Rail project off the ballot list since there are many smaller needs <i>not</i> on the ballot that it would suck up.</li> <li>• <u>NFRMPO</u>: Submitted a BUILD grant application for I-25 North (similar application to 2017 INFRA); design on N I-25 Express Project continues; learned yesterday from Larimer County that construction has been pushed back by 1 month as the contractor re-phases; the US 34 PEL is wrapping up; presentation to the MPO and North I-25 Coalition will occur next week, our appreciation to CDOT staff in R4 on their great work getting that done in under 2 years; Weld CR 49 is now completed, a phenomenal project, largest ever undertaken by the county; R4 telephone town hall will be next week on 7/31.</li> <li>• <u>PACOG</u>: Several project ongoing; I-25 in the lane-shift process right now; US 50 to Pueblo West is moving along nicely, expansion from 2-3 lanes; in the process of selecting a consultant to study the relocation of our transit facility; recently updated bike/ped map and distributing throughout the community; 1A effort (De-Brucing) also underway, including several local projects, one of which interfaces with I-25; recent telephone town hall for R2 and had a record number of participants.</li> <li>• <u>PPACG</u>: Adopted updated Small Area Plan and UPWP at our last meeting.</li> <li>• <u>Central Front Range</u>: New representative Dick Elsner introduced himself and is looking forward to working with the STAC.</li> <li>• <u>Eastern</u>: Reconstruction of SH59 over I-70 (taken out by a semi truck) is underway, thanks to CDOT R4 for their speedy work in replacing that; there was a presentation at a recent TPR meeting about the potential of removing travel lanes to use for bike lanes (which are lightly used), which might not be the best way to keep traffic flowing, we'd like to see CDOT revisit policies on how they are incorporated and any policy of removing travel lanes on state highways, more appropriate on local roads.</li> </ul>	<p>No action taken.</p>
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- Gunnison Valley: Recent TPR meeting talked a lot about the Transit Development Program, added some rural park-and-rides to the list that are an increasing priority for the region; a number of deaths have occurred on US 550 over the past months and years, R5 is adding mumble strips to try to prevent those head on collisions without creating a lot of noise for the residents in the area.
- Intermountain: Held a TPR meeting last week, discussed the ballot measures, agreed that the list is not perfect but without something passing we're back to square 1; also losing our R3 RTD Dave Eller after many years, those are big shoes to fill and we appreciate his service.
- Northwest: No TPR meeting since May, meet next month; big resurfacing underway but haven't heard any complaints about delays so far; chip seal on SH 13 underway; a few signal changes in Steamboat working out the bugs but looking forward to the final results; ADA grants moving along and working with folks to understand the prioritization process.
- San Luis Valley: Concerns about SH 17 being repaired, held a county meeting last week, thanks to Matt Muraro for attending; new courthouse project in Alamosa causing some work zone delays; SH 17 in the Valley used as a detour during the fire on US 160 in La Veta and they were striping at the time, so that was a complication.
- South Central: Our bike/ped PEL study moving along; resurfacing south of Trinidad is moving along; first PHEV van purchased for the local transit agency, and I believe it's the first of its kind in the state.
- Southeast: Lamar Main St. progressing nicely; June TPR meeting had a lot of discussion of the Transit Development Program and identified project list for that; had a presentation on Wednesday that helped to answer questions on the ballot list and felt that there was good rural support there; also participated in R2 telephone town hall and thought it was very successful.
- Southwest: Big project right now is surface treatment between Pagosa Springs and Wolf Creek Pass; region and communities pursuing grants for a number of projects at the moment; TPR meeting on Thursday, Bentley will be stepping down as Chair at that time and electing a new Chair.
- Upper Front Range: Last UFR meeting was in June, since then we had a 4 TPR meeting in R4 (with Upper Front Range, Eastern, North Front Range MPO, and DRCOG), a very productive meeting and a discussion of RPP

	<p>projects and funding, reaffirmed the commitment for funds coming off the top for I-25 and I-76 so we're always ready to go on those projects, straightened out a discrepancy in funding levels for RPP; Commissioners Gilliland and Hoffmeister both participated, discussed moving larger pots of money around the 4 regions to get projects done more quickly, agreed to take care of Eastern first to allay fears of Front Range getting priority; submitted US 85 rural road project for a BUILD grant, hopefully we can get the 120<sup>th</sup> in Adams County interchange fixed; CR 49 completed, a \$160 million project with 5 lanes of concrete.</p> <ul style="list-style-type: none"> <li>• <u>Southern Ute Indian Tribe</u>: Council passed sub-award agreement with CDOT to work on US 160 wildlife crossing project; submitted application for BUILD grant; signed an agreement to work on dirt roads for hunting access in Archuleta County; Tribal Council is also receptive to the US550 Farmington Hill project.</li> <li>• <u>Ute Mountain Ute Indian Tribe</u>: <i>No report.</i></li> <li>• <u>CDOT Chief Engineer Josh Laipply</u>: The new Region 3 RTD is Mike Goolsby, the former Maintenance Director for R3 and someone who has worked his way up from a TM1 many years ago.</li> <li>• <u>CDOT Executive Director Mike Lewis</u>: I want to thank you all once again for your work these past months to develop a list of projects that can be funded with any ballot money that comes along, especially through your working session with the TC last month. I appreciate the time and effort that you put in every month at these and other meetings. Sometimes it's like watching paint dry, but it's really important paint. I don't know what's going to happen in November, but I know that it wouldn't be anywhere near happening without your hard work and collaborative planning efforts. We will know in the coming weeks about specifically which measures appear on the ballot, and as you know for many people that will be the start of the real conversation across the state.</li> </ul>	
<p>Federal &amp; State Legislative</p>	<p><b>Presentation</b></p> <ul style="list-style-type: none"> <li>• House Transportation Committee Chairman Shuster put out a vision for an infrastructure package, but he is not planning to run a bill or hold any hearings, and then he is retiring, so it's not likely to progress too far. The vision is interesting – he talks about raising fuel taxes significantly for a 10-</li> </ul>	<p>No action taken.</p>

	<p>year stabilization of the HUTF, running a national RUC pilot, bringing back earmarks, etc.</p> <ul style="list-style-type: none"> <li>• In terms of the ballot initiatives, the Secretary of State has to count signatures and review, so we should know by the end of August whether there are zero, one, or two transportation measures on the ballot this November.</li> <li>• SB 1 distributions are now expected in August, and the Treasurer’s Office is working through some city and county distribution questions but we don’t have a great window on that.</li> </ul>	
<p>National Highway Freight Program Project Selection / Tim Kirby and Jason Wallis (CDOT Multimodal Planning Branch)</p>	<p><b>Presentation</b></p> <ul style="list-style-type: none"> <li>• We talked about this before but wanted to hear from the FAC before voting on our recommendations.</li> <li>• I will start by walking you through the overall process using the memo in your packet.</li> <li>• It started with a joint workshop of CDOT HQ and regional staff to sit down, develop the MODA methodology, and then issue a call for projects. Regional planners worked with stakeholders to identify projects that should be included. Then the group ran through the MODA analysis, talked over their scores and results, and then agreed to a recommended project list.</li> <li>• In the last page of your packet there is a color-coded project list that Jason will be referring to.</li> <li>• During the process, the FAC identified 3 key principles that they wanted to maintain. These were that projects should have: <ul style="list-style-type: none"> <li>○ A clear freight focus in terms of making an impact on the movement of goods throughout the state.</li> <li>○ Timeliness and availability, in terms of making an immediate impact with high visibility (meaning that studies and long-term improvements would receive lesser priority).</li> <li>○ Connectivity across regions, the state, and neighboring states.</li> </ul> </li> <li>• Using these key principles, we rated each project and color-coded from red to green using this scale.</li> <li>• Staff and FAC members considered projects from every region, the CDOT Division of Maintenance, and Division of TSMO.</li> </ul>	<p><u>STAC Action:</u></p> <p><i>The STAC voted unanimously to recommend approval of the proposed NHFP project list.</i></p>

	<ul style="list-style-type: none"> <li>The final list consists of 16 projects, and we review them in detail if the group would like.</li> </ul> <p><b>STAC Comments</b></p> <ul style="list-style-type: none"> <li><u>Gary Beedy (FAC participant)</u>: Through the whole process, we tried to make sure that these projects were truly freight-related, not just large projects that happen to benefit freight. For some projects it was not very clear how they impacted freight, and as a result they didn't score as well. However, in future years those same projects may do better if they illustrate that freight connection more clearly.</li> <li><u>Vince Rogalski</u>: On the back of the memo there's the list of the 3 critical criteria: freight nexus, high visibility, and statewide impact. This helps us to connect these projects directly to the needs of the industry.</li> <li><u>Suzette Mallette</u>: Can you explain why the green is used in two separate locations?</li> <li><u>Jason Wallis</u>: The first are prioritized through the process described above, and the others are CDOT recommendations based on the existing budget.</li> <li><u>Tim Kirby</u>: And to be clear, projects excluded from this round are not precluded for future submission. We intentionally did a 1-year call so we could work out this process without locking ourselves in over the long-term.</li> <li><u>Bentley Henderson</u>: Projects #3, #5, and #6 show construction only, but no design. Are they already designed?</li> <li><u>Jason Wallis</u>: Yes, that's correct.</li> </ul> <p><b>STAC Action</b></p> <ul style="list-style-type: none"> <li>Gary Beedy moved to recommend approval of the proposed project list, with Barbara Kirkmeyer seconding the motion. The STAC approved the motion unanimously.</li> </ul>	
<p>Transit Development Program / David Krutsinger (CDOT Division of Transit &amp; Rail)</p>	<p><b>Presentation</b></p> <ul style="list-style-type: none"> <li>This has been downgraded from an action item to a discussion topic since we got feedback that our process was moving a bit too fast for people.</li> <li>Most of the transit projects out there are not CDOT owned and operated, rather they are local projects, so our role is largely to support your work.</li> </ul>	<p>No action taken.</p>

- Our question for you is how do we take the list we've developed so far and best support your communication processes through November? How can we help you?

#### **STAC Comments**

- Roger Partridge: We appreciate you taking stock and reassessing your approach, but I'm wondering if you have an understanding of what happened here in terms of the process getting off-track. Were people not informed, were they not approached in the right way, or was it something else?
- David Krutsinger: I think the concern was that we wanted to get this done ahead of the finalized ballot list, but people wanted more time to discuss and didn't like the seemingly arbitrary deadline of August. The bonding portion that we were focusing on only accounts for 20%-30% of the total dollars that would potentially be available through the Multimodal Options Fund, but by starting with that we inadvertently created the impression that we were excluding a lot of important needs.
- Vince Rogalski: I think another issue is that in many parts of the state there is nothing close to that \$10 million bonding minimum, and people want to talk about their smaller \$1 and \$2 million projects but don't feel like there has been an avenue for that.
- Ron Papsdorf: Is the TC going to develop a distribution formula for allocating the Multimodal Options Fund across the MPOs/TPRs within the eligibilities of the ballot initiative, or is the TC going to decide what portion of the MMOF is going to each component of that fund across the regions?
- Deb Perkins-Smith: We are looking at some options on that, but it won't be until January that we have clarity on how we're receiving those funds.
- David Krutsinger: There is a clause in SB 1 requiring us to go to the Legislature for apportionment, which is not the case for highway projects. The way the legislation is set-up, 80% of the funding is meant to support local projects, so I think passing that portion through the TPRs makes the most sense. The other 20% is meant to be statewide, so in that case the TC prioritization may be more appropriate.

- Deb Perkins-Smith: Do projects have to be on the Transit Development Program to be considered for SB 1 funding? Or could there be proposed projects which aren't on the list?
- David Krutsinger.: I think there could be projects added, since the TDP by itself can be updated. Also we're still in the process for building it, it hasn't been officially approved by any group, so it makes sense to keep that fluid.
- Suzette Mallette: We've been talking about transit a lot, but when is the time to discuss the bike/pedestrian needs?
- Debra Perkins-Smith: Our Bike/Ped folks are starting that conversation in the TPRs, and we're also planning to bring that topic to the STAC next month and begin working through those issues together.
- Thad Noll: We seem to be referring to the TDP and the MMOF list interchangeably, but they are very different. Is the intention to develop a statewide list of multimodal needs? Because that will be huge.
- Debra Perkins-Smith: Our intention with the Development Program is to gradually build that out for different modes, including a Bike/Ped Development Program eventually. But at this point we're focusing on a MMOF list for the purposes of the ballot.
- Heather Sloop: Am I hearing correctly that you want us to focus on developing a Bike/Ped list as soon as possible, like we did recently did for the transit project needs?
- Debra Perkins-Smith: We haven't established a process for building that yet, but since the locals will likely be receiving some portion of MMOF dollars it makes sense to have those conversations soon so that you know what you're going to do if and when you receive those funds.
- Thad Noll: Am I correct that we're going to make a Bike/Ped list, a Transit List, and a Highway List, and then eventually combine them?
- Debra Perkins-Smith: In terms of Bike/Ped, we're still collecting information at this point so please send us anything you have in that area, regardless of size. Up to now we've just been focusing on those \$10 million, bondable projects but we need and want to develop a full picture of all the statewide needs and your submissions will help us do that.
- John Liosatos: We're building 3 separate Development Programs – highway, transit, and bike/ped. But if money falls from the sky, those latter two are collapsed into one list based on the rules of the Ballot Initiative. If

	<p>there's a different funding source, you'd break them out differently. But in any case having the three lists established makes the rest of the process easier.</p> <ul style="list-style-type: none"> <li>• <u>Ron Papsdorf</u>: There is an order to things that's necessary. We need a collaborative process as dictated by SB 1 to determine the allocation of local funds – 85% of the MMOF. Let's get that process rolling. For the 15% statewide portion, let's have a process but remember to focus on statewide, significant improvements rather than individual local needs, since that will be covered by the TPRs soliciting project ideas for their specific context. Let's not create a duplicative process of submitting TPR/MPO level projects to a statewide list when those decisions will be made at the local level anyway. And keep in mind that this is not just for capital, it's operations as well and I know that many rural transit agencies have a much greater need for operations than for capital.</li> <li>• <u>Gary Beedy</u>: In the SB 1 legislation, there is potential for the TC to reduce the match amount, and I think that would be a key piece for a lot of rural agencies with operational needs being able to apply for some portion of those funds through a statewide process. We need to keep it simple and avoid a lengthy evaluation / list-building process.</li> <li>• <u>David Krutsinger</u>: Thanks to all of you for your questions and suggestions, I think this has been very helpful.</li> </ul>	
<p>PD 14 Scorecard / William Johnson (CDOT Division of Transportation Development)</p>	<p><b>Presentation</b></p> <ul style="list-style-type: none"> <li>• We always review our PD 14 performance measures as a ahead of each new SWP, and we're getting back into that cycle again.</li> <li>• PD 14 identifies the TC's performance measures and targets that they've adopted.</li> <li>• We are looking at this now as we re-enter our budget cycle so that the TC can determine how to direct or re-direct funds to achieve our statewide goals and targets.             <ul style="list-style-type: none"> <li>○ The Goal Areas covered in PD 14 encompass roughly 60% of CDOT's budget.</li> </ul> </li> <li>• These numbers always have a story – good or bad – about how we're doing as a Department and as a state.</li> <li>• <u>Safety Goal Area</u>:</li> </ul>	<p>No action taken.</p>

	<ul style="list-style-type: none"> <li>○ Fatalities continue to increase (a national trend), and we are still analyzing our data to understand why that's happening. The fatality rate is increasing beyond the rate of population and VMT growth, so it appears to be behaviorally driven. Despite this, we are keeping our existing target.</li> <li>○ There is an increase in Bike/Ped fatalities and serious injuries as well, and we think this is related to distracted driving, speeding, and other behavioral factors.</li> </ul> <p><b>STAC Comments</b></p> <ul style="list-style-type: none"> <li>• <u>Thad Noll</u>: To this point and the one made previously by Gary, I don't know specifically what occurred in your communities, but my experience is that often times reducing the number of lanes and creating a separate bike/ped lane decreases those incidents.</li> <li>• <u>Gary Beedy</u>: From my experience in driving through some communities this summer, I think that the narrowing of lanes to allow for other uses takes away the margin of error, and I think we would be better served to encourage those bikes to stay on local roads rather than using state highways, which seems to be an increasing trend.</li> <li>• <u>Sean Conway</u>: This data is inclusive of local roads as well, so the increase in crashes could be occurring there rather than specifically on our state highways. There is a lot of distracted driving, walking, and biking these days and that could be a contributing factor. I also think that it would be very helpful to see this data broken out by facility type, region, etc. so we can get a better sense of what's occurring and where. That might help us to better target our response.</li> <li>• <u>Barbara Kirkmeyer</u>: I agree that it would be important to pull out the numbers specific to state highways so you're focusing on what CDOT can directly affect.</li> <li>• <u>Deb Perkins-Smith</u>: That's Transportation Commission's view as well, and it sounds like this group would like to see that presentation when it's ready.</li> <li>• <u>Ryan Rice</u>: I would also add that up to 50% of our HSIP funds are available for off-system use, so that is something that CDOT could work with locals to impact.</li> </ul> <p><b>Presentation</b></p> <ul style="list-style-type: none"> <li>• <u>System Performance Goal Area</u>:</li> </ul>	
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- This aims to limit the increase in congestion and we are currently hitting those targets.
- Transit ridership is increasing, bucking a national trend. These measures don't include RTD, so this increase is largely driven by rural transit.
- Transit Infrastructure Condition targets are also being met.

#### **STAC Comments**

- Thad Noll: I've said this since the start of PD 14, but that ridership increase of 1.5% doesn't even match the rate of population growth, so it doesn't really feel like a victory to hit it. We need to be more ambitious beyond that 1.5% to truly make an impact.
- Deb Perkins-Smith: I hear your comment, and I think that since this was the first effort at tracking and setting targets for these types of figures it's natural that we might need reassess those based on additional information.
- Barbara Kirkmeyer: To that point, based on our recent meeting with the TC there are six TPRs that would not receive any transit projects via the ballot initiative. So if we talk about setting a higher transit ridership goal I want to know how much money that would entail and how it would be distributed. I would also like to discuss when we anticipate getting a return on investment from the Bustang system.
- Suzette Mallette: I'm not clear on why we aren't including RTD numbers in these figures.
- David Krutsinger: RTD doesn't receive funds from CDOT (with small exceptions), so we are focused on those areas we directly work with.
- Sean Conway: But they do submit those numbers, so it would be useful to see them included here.
- FTA database link: <https://www.transit.dot.gov/ntd/data-product/2016-metrics>
- Thad Noll: Kudos to CDOT on the Consolidated Call for Capital Projects grant process that was instituted a few years back, it makes things run a lot more smoothly than in the past.

#### **Presentation**

- Maintenance Goal Area:
  - Some of these targets are currently not being met. Staff will return next month to go over those numbers in more detail.

<p>Customer Service Survey Results and In-the-Moment Focus Group / Amy Ford (CDOT Office of Communications)</p>	<p><b>Presentation</b></p> <ul style="list-style-type: none"> <li>• We are genuinely interested in the overall customer experience of the public with our services.</li> <li>• We completed a Statewide Customer Survey at the end of last year, and we're presenting those results now after taking time for analysis and subsequently being disrupted by the cyber incident.</li> <li>• We are also engaging in an "In-the-Moment" polling effort to understand specific seasonal experiences, such as winter driving.</li> <li>• Some key results of the Customer Service Survey:             <ul style="list-style-type: none"> <li>○ CDOT approval by the public is at 80% (consistent with previous surveys).</li> <li>○ Transportation is considered the 4th most pressing issue for the state.</li> <li>○ 48% of those surveyed trust CDOT to do what is best for the public.                 <ul style="list-style-type: none"> <li>▪ This is a decrease from last survey several years back, possibly due to an increase in controversial and/or innovative projects (US 36, Central 70, more tolling, etc.).</li> <li>▪ Approval is a fragile thing, so we need to constantly work to maintain it.</li> </ul> </li> </ul> </li> <li>• Other interesting feedback:             <ul style="list-style-type: none"> <li>○ 65% say that CDOT should spend more money to do construction at night.</li> <li>○ 57% say we should fix potholes to maintain a smooth surface.</li> <li>○ The #1 focus identified by the public was "implementing technology to improve safety", while a close #2 was "economic development".</li> <li>○ 52% want CDOT to expand high-speed rail across the state.</li> </ul> </li> <li>• Major obstacles for CDOT moving forward:             <ul style="list-style-type: none"> <li>○ 44% think that CDOT efficiently uses taxpayer dollars, 56% say that for the State as a whole, and 54% say that for the government.</li> <li>○ Only 28% of people know that the gas tax funds transportation; 30% have "no idea" how CDOT is funded.</li> <li>○ 38% feel that express lanes charge drivers for something that's already paid for through their taxes.</li> </ul> </li> <li>• In-the-Moment (ITM) polling allows us to get more granular feedback on specific seasonal travel experiences.</li> <li>• Surveyed 118 participants across the state.</li> </ul>	<p>No action taken.</p>
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	<ul style="list-style-type: none"> <li>• Some initial results:             <ul style="list-style-type: none"> <li>○ The worst part about driving is the other drivers.</li> <li>○ Some confusion about winter driving laws, terminology, and benefits.</li> <li>○ People value the natural amenities of Colorado and want to access them.</li> </ul> </li> <li>• These and other surveys will help direct the 2045 SWP. ITM in particular will serve as an ongoing focus group for us to touch base with the public throughout the SWP process and beyond.</li> <li>• Finally, we have developed a Together We Go section of our website that will be a great resource for you all moving forward, especially if you want to talk about project locations, benefits, costs, etc.</li> <li>• CDOT is also developing some short videos for higher-profile projects.</li> <li>• This resource is ballot measure neutral – it’s about transportation needs and benefits, not any one funding proposal.</li> </ul>	
<p>CDOT Smart Mobility Plan / Wes Maurer (CDOT Division of Transportation Systems Management &amp; Operations)</p>	<p><b>Presentation</b></p> <ul style="list-style-type: none"> <li>• Smart Mobility Planning is a new role for CDOT and we are developing a process to accomplish this.</li> <li>• The Smart Mobility Plan is a first-of-its-kind effort to identify statewide, regional, and local investments needs and develop a 5-to-10 year vision for maximizing technological benefits in the transportation sector.</li> <li>• Technology is moving at a rapid pace, so this plan is designed to create a pipeline for innovation for your regions, sketching out what new tools and challenges may be coming, how we can take advantage of those changes, and how we can make the CDOT Regions into laboratories of innovation.</li> <li>• Our approach is to start at the regional level, engaging with MPOs, TPRs, and COGs, to build a foundation for the state-level plan.</li> <li>• This effort will integrate with the SWP, RTPs, and a number of other ongoing planning efforts at CDOT to ensure overall cohesion.</li> <li>• Today we want to let you know that later this year Bob Wilson from CDOT’s Division of TSMO will be coming out to your regions, interfacing with your local experts, and making sure that you have a role in this process from the start.</li> </ul>	<p>No action taken.</p>
<p>Central 70 Project Update / Rebecca White</p>	<p><b>Presentation</b></p> <ul style="list-style-type: none"> <li>• Tony DeVito is retiring at the end of August – a big loss for CDOT – and we are working on the transition process for this project.</li> </ul>	<p>No action taken.</p>

<p>(Central 70 Project Team)</p>	<ul style="list-style-type: none"> <li>• It has been a 15-year effort on this project and we are breaking ground next week.</li> <li>• Central 70 is a 10.2 mile project from the I-25/I-70 “MouseTrap” to Chambers Road – a few miles short of what the EIS covered due to funding constraints. <ul style="list-style-type: none"> <li>○ One of the last stretches of highway in the Metro that hasn’t been addressed since construction (in 1964).</li> <li>○ One portion is a standard widening, a second portion is a full reconstruction (including a 30 ft. lowered section between Colorado Blvd and York St.), and finally a re-striping for the final section connecting to I-25 (previously widened to allow for it).</li> </ul> </li> <li>• Central 70 is the largest Public Private Partnership ever undertaken at CDOT, so lots of procurement and public engagement work has been required over the last 3 years to get to this point.</li> <li>• One major point of conversation has been Swansea Elementary, reconstructed in 1975 after the highway was built but existing in that location since the 1800s, so moving the location was not considered an option by the community.</li> <li>• Acquisitions of required properties have been completed and demolition underway.</li> <li>• Utilities relocation is beginning and implementation of community commitments are underway.</li> <li>• Job training and local hiring is a big focus, with a request to the contractor to aim for 20% local hires, which is a challenge given the very low unemployment in Colorado right now.</li> <li>• Kiewit-Meridiam Partners (KMP) was selected as the contractor last August. <ul style="list-style-type: none"> <li>○ Colorado company for 70 years, built Union Station, I-225, and TREN.</li> <li>○ Will be a partner with CDOT for 30 years.</li> <li>○ Pledged to complete the project a season ahead of schedule, have a single team to create a seamless transition between construction and later operations.</li> </ul> </li> <li>• Construction Stages: <ul style="list-style-type: none"> <li>○ East Area is relatively simple, should be completed by 2019.</li> <li>○ Central Area more complicated, should be done by 2021.</li> <li>○ West Area is the most complex given the trench and viaduct removal. Trenching will occur while the viaduct remains in operation, then all traffic will move to the new trench, and then the viaduct will come down in 2020. Another complexity we’re facing is to work around the existing</li> </ul> </li> </ul>	
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	<p>rail line, which is currently under I-70 but eventually will be relocated above it.</p> <ul style="list-style-type: none"> <li>• KMP must maintain 3 lanes open in each direction during daylight hours.</li> <li>• Will phase ramp and interchange closures to reduce traveler impacts.</li> <li>• Programs and incentives are in place to encourage TDM and use of other modes along the corridor during the project period.</li> <li>• Important to maintain flow given the role of this corridor for commuters and movement of goods.</li> </ul> <p><b>STAC Comments</b></p> <ul style="list-style-type: none"> <li>• <u>Gary Beedy</u>: I've heard questions about the flow of traffic under the cap since we saw a lot of problems caused by shadows in the old Stapleton airport tunnels.</li> <li>• <u>Rebecca White</u>: There has been a lot of focus on that and we are designing to ensure that we don't have that abrupt transitioning effect that slows traffic.</li> <li>• <u>Mike Lewis</u>: I just got back from Boston and was reminded that the issues faced there with the "Big Dig" project were much more complex than ours and since we were able to address the tunnel issue there, so we're confident we can do so here as well.</li> <li>• <u>Thad Noll</u>: Kudos to CDOT again for managing this extremely complex project, all of the extensive outreach and engagement, the partnerships with the community on job training, etc. A lot of people around the room had a hand in making this possible and we should look to this as an example for future CDOT efforts.</li> <li>• <u>Mike Lewis</u>: Thank you for that. We should recognize Rebecca, Tony, and all the other project staff that made it possible. That said, this was a great effort to get to this point, but now we're really starting to impact people on a daily basis so we need to continue working with them to make sure they're engaged and comfortable. This is a process of continuous improvement – there will always be something more. Again, I just got back from Boston and seeing the benefits of that public investment 20-some years ago is incredible, but there is still traffic in Boston. No single project will fix every issue.</li> <li>• <u>Josh Laipply</u>: We've talked about how we've gotten to this place and how there's still a lot of challenges ahead. What is the biggest challenge to overcome now?</li> </ul>	
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	<ul style="list-style-type: none"> <li>• <u>Rebecca White</u>: I'm not an engineer, but from my perspective it's working with the communities, and specifically those who live right next to this project and will be very directly impacted. Our goal is to work with them with heart, and not lose sight of that.</li> <li>• <u>Josh Laipply</u>: We also have a challenge in terms of the railroad's schedule, they have had a good level of engagement with us so far, but that can always ebb and flow. We need to keep a close eye on that moving forward.</li> </ul>	
<p>Nondiscrimination Policy Directive / Eboni Younger-Riehl (Civil Rights &amp; Business Resource Center)</p>	<p><b>Presentation</b></p> <ul style="list-style-type: none"> <li>• We have an existing Nondiscrimination Policy Directive, created as an internal document to explain how we go about complying with policies like NEPA, DBE, etc.</li> <li>• One requirement that matters to this group is that we collect demographic data at public meetings in which we gather information from impacted communities and citizens.</li> <li>• This means that you may see sign-in sheets that include fields for demographic data. This does not mean that you have to collect that data, just that it's one avenue for CDOT to do so.</li> <li>• There is also a new FHWA Discrimination Complaint process – they will collect these complaints and decide which ones CDOT should investigate.</li> </ul> <p><b>STAC Comments</b></p> <ul style="list-style-type: none"> <li>• The September STAC Meeting (9/28) is on the same date as the CDOT Transportation Summit, starting at 11:00 AM. We wanted to suggest that on that date we start the STAC Meeting at 8:00 AM in the same location as the Summit (Hyatt Regency), which will allow you all to participate in both.</li> <li>• STAC members concur.</li> </ul>	<p>No action taken.</p>
<p>Other Business / Vince Rogalski (STAC Chair)</p>	<p><b>Presentation</b></p> <ul style="list-style-type: none"> <li>• The September STAC Meeting is scheduled for September 28<sup>th</sup>, which is the same date as the CDOT Transportation Summit, which starts at 11:00 AM. We suggest that on that date we start the STAC Meeting at 8:00 AM in the same location as the Summit (the Denver Hyatt Regency), which will allow STAC members all to participate in both. We'll talk more about that next month at the August STAC Meeting.</li> </ul> <p><b>STAC Comments</b></p>	<p>No action taken.</p>

	<ul style="list-style-type: none"><li>• <u>Sean Conway</u>: Thank you to Executive Director Lewis for making the effort to get here today. We discussed earlier that Weld County Road 49 is now complete, but the old “Kersey Road” signs are still on I-76 so I’d like to request that we get those switched as soon as possible.</li></ul>	
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**STAC ADJOURNS**

DRAFT

**The Transportation Commission Workshops were Wednesday, August 15, 2018 and the regular meeting was Thursday, August 16, 2018. Both the workshops and the regular meeting took place at the Colorado Department of Transportation Headquarters at 2829 W. Howard Place, Denver, CO 80204.**

Documents are posted at <http://www.coloradodot.info/about/transportation-commission/meeting-agenda.html> no less than 24 hours prior to the meeting. The documents are considered to be in draft form and for information only until final action is taken by the Transportation Commission (TC).

## Transportation Commission Workshops

**Wednesday, August 15, 2018**

**1:00 pm to 4:00 pm**

### Right of Way Workshop (Josh Laipply)

**Purpose:** The purpose of the workshop was to discuss six right-of-way acquisition (negotiations) and one Condemnation Authorization request.

**Action:** Prepare to act on agreed upon proposed acquisitions and condemnation authorizations at the regular Commission meeting.

The six projects with requests for authorization of property acquisitions for August 2018 included:

- Region 1
  - I-25 Gap Project Phase 2 - Project Code 21102
- Region 2
  - I-25 at South Douglas Creek Wall Repair, Project Code 22312
- Region 3
  - US 24 Leadville Resurfacing, Lake Count, Project Code 21818.
- Region 4
  - SH-60 and WCR-40 Intersection, Project Code 21876.
  - I-25 North: SH 402 to SH 14, Project Code 21506.
- Region 5
  - I-70 Central, Project Code: 19631.

Two projects for condemnation authorization with four sets property owners for August 2018 included:

- Region 4
  - I-25 North: SH 402 to SH 14, Project Code 21506.
    - Johnny Olson, CDOT Regional Transportation Director (RTD) of Region 4, provided an overview of this project's yearlong negotiations with the property owner, Mr. Horton. Condemnation for a small parcel on the property is required due to lack of property being deeded to Mr. Horton. Need title reports. The relationship with the property owner is positive and a preliminary agreement has been reached, but to stay on project timeline need to start condemnation to ensure no more project time is lost. The TC raised no comments or concerns for this condemnation authorization.
- Region 5
  - US 550 South Connection, Project Code 19378 (for three sets of property owners).
    - Mike McVaugh, CDOT RTD for Region 5 provided an overview of the three requests for condemnation with the US 550 South Connection project. First parcel owned by Mr. Webb. CDOT built a good relationship with the property owner, but there are many contingency requests that the owner is making that CDOT cannot accept. The hope is to continue to negotiate to get an agreeable counter offer from the owner while

condemnation court date is being scheduled. It is anticipated that Mr. Webb will attend a regular TC meeting in the future to provide comments to the TC. An attorney is anticipated to speak on behalf of Mr. Webb tomorrow.

- For the second parcel, the property owner intends to develop his land and have direct access to the highway. Currently access to site is from a secondary roadway. Owner is working towards the highest and best use of the property.
- Third parcel is an access issue to and how it plays out – CDOT is under pressure to resolve this quickly due to project schedule constraints.
- Mike Lewis, CDOT Executive Director, asked Mike McVaugh to explain in more detail why the need for this condemnation authorization now.
  - Mike McVaugh noted that if we don't get condemnation authorization now, we could lose time – next court dates for condemnation proceedings are out to March of 2019 – could lose March and April 2019 for the project if not we do not move forward now.
  - US 550 condemnation authorizations are important and there is potential for audience participation to occur for this project at tomorrow's regular TC meeting.

#### Discussion:

- Mike Lewis made mention of the bridge collapse in Genoa Italy and that these tragedies don't happen very often, but when they do they are catastrophic. We can't lose sight of the importance of asset management and bridge inspections being important – this is a reminder.
- Commissioner Hofmeister asked about the confidential owner listed on one of the projects.
- The response was that the owner is a police officer and the local jurisdiction requested CDOT to not include information on this property owner.
- Commissioner Scott raised a question about shortening the process for right-of-way acquisitions at TC workshops – could the process be by consent agenda.
- CDOT Staff will check further into if this process to determine if it could be changed. The Efficiency and Accountability Committee is also planning to discuss this and legislative changes.
- Other Commissioners supported the idea of checking into the feasibility of a consent agenda.
- This is especially related to temporary easement right-of-way acquisitions.

#### National Highway Freight Program (Deb Perkins-Smith)

**Purpose:** To review and discuss FY 18 National Highway Freight Program (NHFP) projects.

**Action:** Review of proposed FY 18 NHFP project selection process and projects for action in September.

**Background:** The NHFP is a formula freight program created under the FAST Act. The NHFP provides approximately \$15 million (federal) annually to Colorado. A staff recommendation has been developed for the Fiscal Year 2018. For Fiscal Year 2018, \$18.4 million (federal and state) are available for freight specific projects. CDOT Staff has recommended six projects to be funded. Per federal requirements, these projects will be identified in the Freight Investment Plan upon approval by the Transportation Commission (TC).

**Project Selection:** Sixteen project requesting approximately \$75 million were submitted by the five CDOT regions and the Divisions of Highway Maintenance and Transportation Systems Management and Operations. The staff recommendation includes: • I-25 South Monument Hill Climbing Lane (Region 1) - \$2,500,000 • US 287 Passing Lane South of Lamar (Region 2) - \$4,500,000 • I-70 Truck Parking (Region 3) - \$1,625,000 • US 40/US 287 Passing Lanes (Region 4) - \$4,500,000 • Mountain Pass Critical Safety Needs (Region 5) - \$2,400,000 • Truck Parking (Region 5) - \$2,220,000 Advisory Committee Input FAC formally recommended the approval of the projects listed for recommended selection at their July 24, 2018 meeting. A letter of support from FAC and was approved at the July 24, 2018 FAC meeting, and STAC unanimously concurred with the recommendation from FAC. The FY 18 NHFP staff recommendation is the same as the FAC and STAC recommendation.

#### Next Steps:

- September: Transportation Commission adoption of FY 18 NHFP projects.
- September: Designation of Critical Rural Freight Corridors as necessary (FHWA Requirement).
- September: Incorporate projects into Freight Investment Plan and the Colorado Freight Plan.

#### Discussion:

- Debra Perkins-Smith, CDOT Division of Transportation Development (DTD) Director, introduced the workshop and explained that the Multiple Objective Decision Analysis (MODA) tool was used to score proposed NHFP projects. However, MODA is not specifically outlined as part of Policy Directive 703.0 that guides the project budgeting process. MODA is a tool and does not determine final decisions, but informs the decision making process for project selection. This was the first time MODA was used at CDOT to score projects for the NHFP. Tim Kirby, CDOT Multimodal Planning Branch Manager will explain the MODA process in more detail.
- Debra confirmed that the projects proposed for TC Approval tomorrow is for FY 18 projects only.
  - Tim Kirby provided an overview of the MODA process that includes nine steps.
    1. MODA Workshop with CDOT staff and Region planners resulted in an agreed upon methodology using the MODA process and tool.
    2. Call for projects from Regions, where Region planners worked with local planning partners to identify projects.
    3. MODA Analysis employed the agreed upon method resulting in preliminary results.
    4. Peer Review among CDOT staff the Regions promoted consistent ranking/scoring of projects and finalized the results of MODA that went to STAC, EMT, RTDs, etc.
    5. Freight Advisory Council (FAC) Review for NFHP projects. FAC used three guiding principles to prioritize projects: – (1) a clear freight nexus; (2) projects ready for construction; and (3) statewide connectivity (geographic equity)
    6. Programmatic Review (EMT and CDOT Program Staff)
    7. STAC Review
    8. Staff Recommendation
    9. TC Review and Approval
- Deb offered RTDs to speak and comment on individual projects
- Commissioner Scott noted that at the High Performance Transportation Enterprise (HPTE) board meeting today the issue of commercial vehicles not using toll roads due to high tolls was discussed. How do we know which projects contribute or detract from the transportation system as a whole?
- Debra noted that mobility is a criterion evaluated in the MODA process and any project that improves mobility of freight, also improves mobility for all.
- Debra noted that the Colorado Motor Carriers and E-470 are exploring the issue of commercial use on toll roads. We also evaluate freight projects for their freight nexus.
- Commissioner Scott commented that we need more time spent on analyzing technology's impact on roadways.
- Debra responded that the new Statewide Travel Model would provide the capability to do this type of analysis.
- Commissioner Connell expressed concerns with potentially creating a new problem if trucks that can't keep up their speeds start using the toll roads.
- Mike Lewis noted that this is what plans are for to look at issues more broadly. Public sentiments heard have included banning trucks from the left lane.
- Debra explained that a real life example of a project is Monument where they are adding a climbing lane where trucks can stay to the right and this will improve mobility for all traffic.
- Commissioner Gilliland agreed that a climbing lane is a good solution and makes a difference for other travelers on the road.
- Debra asked TC if they are good with the list provided today and with the idea of coming back in September to approve the NHFP project list.
- Commissioner Scott asked if other advisory committees are on board with supporting this list.
- Debra responded yes. We have gotten support and two members of the Statewide Transportation Advisory Committee (STAC) are represented on the FAC, so STAC participates in FAC review too.

- Commissioner Peterson asked for more details on a project on the FY 18 NHFP project list. The list was then distributed to the TC and Commissioner Peterson was satisfied with the description provided on the project in the table.
- Staff is recommending six projects for NHFP FY 18 projects. The list with other projects included was just to be all inclusive of what underwent evaluation and the MODA process.
- Vince Rogalski, STAC Chair, explained that those projects not highlighted in green on this list are not precluded from future consideration.

#### PD 14 Report - Infrastructure Conditions and Maintenance (Deb Perkins-Smith and William Johnson)

**Purpose** To provide more information on the asset management program using pavements and bridges as examples, and to report on the results of the objectives in Policy Directive 14 (PD 14) in the areas of Infrastructure Condition (Asset Management) and Maintenance for fiscal/calendar year 2017.

**Action:** No action requested this month. The Transportation Commission (TC) reviews the performance of PD 14 objectives to determine if there is a need to modify objectives or realign resources to meet an objective(s). This month will be a review of current performance of Infrastructure Condition (Asset Management) and Maintenance goal areas from PD 14.

**Background:** PD 14 provides a framework for development of the Statewide Transportation Plan (SWP) and guides the distribution of resources in the SWP, the Statewide Transportation Improvement Program (STIP), and the annual budget. In 2017, the TC refined many performance metrics and targets for Infrastructure Condition. The refinements resulted in changes to performance metrics and targets for various asset programs. The refinements were a result of process improvements, analysis, and fiscal constraints. Additionally, the refinements were made to optimize how asset management programs would be able to best achieve the performance targets of PD 14.

**PD 14 Report:** The PD 14 Scorecard report has been updated with performance achievement data for calendar/fiscal year 2017. Attachment A: 2017 PD 14 Scorecard graphically summarizes the performance of PD 14 objectives for 2017 and the prior year. The August TC workshop included a review of performance measures for Infrastructure Condition (Asset Management) and Maintenance. In July 2018, the TC reviewed the performance of Safety, System Performance, and Transit goal areas. PD 14 performance areas comprise roughly 60% of CDOT's total budget (excluding Senate Bill 228 transfers).

#### **Next Steps:**

- Consideration of PD 14 in development of FY 2020 CDOT Budget

#### **Discussion:**

- Debra Perkins Smith introduced the workshop explaining that Policy Directive 14 helps the TC with investment decisions based on performance reporting that identifies if performance targets are being met.
- William Johnson, CDOT Asset Management and Performance Branch Manager kicked off the presentation on performance related to bridge and pavement, that is the focus of today's workshop. William introduced the asset data managers present. A Safety performance workshop to occur next month.
- Commissioner Gifford raised a question regarding low clearance bridges. Asked how did the number of low clearance bridges increase between years?
- Josh Laipply, CDOT Chief Engineer, responded that new paving can reduce pavement clearance and better data is being collected to account for this change.
- William noted that the funding short fall for asset management is roughly \$201 million per year.
- Stephen Henry, CDOT Materials and Geotechnical Branch, noted that for roadway pavement that roughly 350 centerline miles treated under the pavement maintenance program that relates to 800 lane miles. If pavement were properly maintained over a 10-year period, we would treat 2,300 lane miles annually as we have 23,000 lane miles in the state.

- Commissioner Hofmeister commented concerns that rural areas under the drivability life method of maintenance do not get treated.
- Commissioner Connell supports the drivability life approach.
- Josh agreed with both – that drivability life is based on traffic, and not a long-term treatment for roadway maintenance, generally patching with limited funds.
- Johnny Olson noted that lane miles do not cover frontage roads or on ramps.
- Commissioner Gilliland agreed that drivability life is a short-term fix for surface treatment.
- Debra reiterated that every year we are short roughly \$200 million for asset management.
- Commissioner Hofmeister noted that if we actually consider going back to dirt roads in some areas that this would negatively affect commerce especially in rural areas. Semis with cattle and grain driving 40 mph vs. 60 mph. It is hard to keep dirt roads in drivable condition, concerns with safety also on washboard dirt roads.
- Mike Lewis noted that without money things would revert and get worse and more expensive to fix. The situation we are in for maintenance is not sustainable.
- Commissioner Scott stressed the importance of having the ability to communicate the situation and find solutions to the problem – not continue to reiterate the problems we face.
- Commissioner Peterson agreed with Commissioner Scott. The narrative provided for drivability life does not point out the negatives of the situation adequately. We need to figure out a way to tell the story, that without investment in transportation; the results are negative impacts to sustainability and quality of life for Coloradans. This messaging is hard.
- Debra agreed with everything stated just now, the Together We Go initiative on the CDOT website provides some messaging. Today we are providing performance information to help with budget focus.
- Commissioner Peterson noted that a drivability graph in the presentation is missing information on how much time we are getting from the drivability life approach. We will need this for discussions with the public.
- Johnny Olson explained that for preventative maintenance for pavement the focus is always keeping your good roads good (generally focusing on roadways treated 5 years ago) – need this information included in life cycle pavement maintenance discussions.
- Messaging needs to address rural farmers and freight impacts to folks getting supplies. Need messages for entire state.
- Commissioner Scott asked about CDOT's comfort level with focusing on maintenance vs. capacity improvements.
- Mike Lewis responded that it is all related to funding. What happened in Italy is a lesson teaching us that we need to focus on assets vs. capacity improvements to avoid these types of incidents.
- Commissioner Hofmeister recommended that we tell the public about enhanced maintenance programs.
- Josh Laipply noted that PD 14 information shows how costs saved by bridge maintenance over time compared to bridge replacement.
- Josh provided an overview of CDOT bridge inspection program – it is a robust system to avoid what happened in Italy.
- Bridge Enterprise (BE) funds can only be spent on poor condition bridges for major repair or rehab.
- Mike Lewis noted that it takes hundreds of millions of dollars to move the needle to improve asset condition.

### [Budget Workshop \(Jeff Sudmeier\)](#)

**Purpose:** The workshop summarized information related to FY 2019-20 budget.

#### **Budget topics and timing include:**

- *Introduction to CDOT budget process* - that includes developing a draft and final FY 2019-20 Budget.
- *Revenue Forecasts* - In September 2018, DAF will present the TC with FY 2019-20 revenue estimates. A draft FY 2019-20 Annual Budget will be prepared based on estimated revenue.
- *Decision Items* - DAF will present Decision Items to the EMT and TC in January and February. Decision items are newly initiated division-requested programmatic opportunities for funding that require EMT

approval if a line item on the Final Annual Budget remains unchanged or TC approval if a line item on the Final Annual Budget requires an increase.

- *Final Budget* - The FY 2019-20 Proposed Annual Budget will be updated in February to reflect updated revenue projections, Decision Items, and legislative and Governor's Office initiatives. The TC will have a chance to make recommendations in the February workshop in anticipation of adoption in March. The statutory mandate for delivery of the FY 2019-20 Final Annual Budget to the Governor is April 15.

**Action:** No formal action required. Content was presented to the Transportation Commission (TC) for informational purposes only.

**Discussion:**

- Three topics to be covered today: FY 18 roll forwards, amendments to FY 19 budget, brief overview FY 20 process to begin next month.
- PD 703.0 covers policy and procedures on how to handle remaining balances between fiscal years. Balances over \$1 million require TC approval. Under this amount may be approved by EMT.
- EMT approved Attachment B –the TC raised no questions.
- Attachment A includes rollovers that are over \$1 million and require TC approval - \$11.9 for TC for roll forwards to approve.
  - A question was raised by a Commissioner regarding friction sensors – if they are under Division of Highway Maintenance (DHM) or under RoadX. The response was they are a DHM responsibility.
  - A discussion occurred regarding CDOT's responsibility to pay for maintenance on general purpose lanes adjacent to managed express toll lanes.
  - Josh Laipply explained that cost increases unforeseen on US 36 resulted in CDOT needing to pay concessionaire for increased materials costs for maintenance.
- Amended FY 19 budget – Jeff highlighted the amendments that occurred since last month's TC approval.
- Commissioner Theibaut noted that there was a discrepancy between listed needs and expenditures in the FY 19 budget.
- Jeff Sudmeier explained that CDOT used SB 1 funds were used to level out expenses in the FY 19 budget where Responsible Acceleration of Maintenance of Partnerships (RAMP) projects were paid for in advance with FY 19 dollars. CDOT got \$100 million in projects out in advance under RAMP). SB 1 funds were used to make the transition easier between the when the budget included RAMP funding and in FY 19 the first year in recent times without RAMP program funds.
- No TC comments were raised on the amended FY 19 budget.
- The FY 20 budget process is kicking off next month and process will occur over the next six months.
- Commissioner Gilliland asked if the ballot passes, how we could make changes to FY 20 budget.
- Jeff explained the current FY 20 budget does not assume the ballot passed, but changes could be made in November, and a final budget is not formalized until March 2019. The can amend the budget if needed, monthly supplemental actions usually take care of needed changes, but we did change last year due to SB 267.
- Commissioner Zink raised the issue of a gubernatorial candidate noting that the CDOT budget is complicated and not transparent.
- Jeff admitted that the budget is complicated. We have had the current format for past 5 years. Recognized that one view of budget can't answer all questions – not proposing to change budget but additional tools to explain it is planned.
- A sixty+-page narrative budget is available and a legislative budget format exists. These are publically available.
- Commissioner Connell – supports CDOT's budget transparency using different formats.
- Commissioner Theibaut also supports CDOT approach to budget formats.

[Technology Committee \(Amy Ford and Ryan Rice\)](#)

**Purpose:** To inform the Transportation Commission and the Technology Committee on CDOT's Statewide Fiber Optic Master Plan effort and other related topics.

**Action:** Information only.

**Details:** CDOT's fiber optic network is critical to improve safety and mobility through operations strategies and support connected and autonomous vehicle infrastructure. The expansion of CDOT's fiber optic network is critical over the next five to ten years to make significant improvements in safety and mobility throughout the State. Over the past several months, the Intelligent Transportation Systems (ITS) Branch in the Division of Transportation Systems Management and Operations (TSM&O) has been updating its Statewide Fiber Optic Master Plan as a major component of the Smart Mobility Plan. In June, the Transportation Commission received information in the Technology Workshop on the Smart Mobility Plan and the Statewide Fiber Optic Master Plan. In July, the Transportation Commission received information on the Internet of Roadways V2X (vehicle to everything) deployment plan, which is a major component of the Smart Mobility Plan. This Technology Committee workshop will focus on updating the Commission on the Statewide Fiber Optic Master Plan, which is in final draft form, as well as public-private partnerships for fiber optics and other related topics.

**Discussion:**

- Amy Ford, CDOT Advanced Mobility and Communications Director introduced the workshop and noted that this workshop is a third workshop in a series considering broader technology as a whole with the Smart Mobility Plan that includes the internet of Roadways (IoR) and under IoR is the fiber plan. The Fiber Plan is the focus for today.
- Ryan Rice, Transportation Systems Management & Operations (TSM&O) Director, introduced Wes Maurer, of TSM&O to present information on the Fiber Plan.
- Planning, People, and Partnerships are the focus of fiber plan. Multiple partners in the plan include: CDOT, Information Technology Team (ITT), Office Economic Development and International Trade (OEDIT), Department of Local Affairs (DOLA) and Colorado Counties Incorporated (CCI), Colorado Municipal League (CML), and others.
- Fiber Plan is being finalized now.
- Commissioner Scott asked if CDOT is soliciting proposals to expedite projects.
- Wes noted that CDOT has a transparent process and a web presence to share data and accelerate conversations to bring in unsolicited proposals.
- Commissioner Scott asked about cyber security interruptions and how robust is the effort to be in front of this challenge. Requested Wes to give us comfort that the path we are on regarding our dependence on fiber.
- Ryan Rice responded that redundancy via private industry partners is key, that is developed through public private partnerships (P3)
- Josh Laipply mentioned that the Optiv consultant firm is working to provide CDOT information regarding gaps in cyber protection with an evaluation coming soon.
- A discussion with Commissioners on cyber security occurred and discussed potential cost effective options for finding opportunities to enhance security.
- Josh Laipply that any meaningful security enhancements would be very costly and require internationally recognized cyber security consultant.
- Amy Ford noted that although the budget does not include these costs, budget items for cyber security are buried now, but we will start to see more funds dedicated to this.
- The concept for the Fiber Plan is that CDOT provides ROW and private entities provide the fiber.
- Commissioner Gilliland noted it is good to have a map and plan for fiber. We don't want to miss out on opportunities for partnerships. We need a strong policy established related to fiber and to find funding to pay for elements of this now for technology that makes sense. .
- Utah has barter system that works well for fiber. We will evaluate this over next six months, and use best practices from other states.
- 
- Amy Ford noted that in terms of policy, CDOT intends to always plan for fiber. Utah is the leader in this arena. Colorado is ahead of the nation on this. We are partnering with counties and cities on this too, along with OEDIT, DOLA, Broad Band Office, etc. There exists an opportunity also to leverage the

knowledge we have leveraging the experience of Bob Fifer with fiber. We need to let industry know about ongoing projects where fiber installation can occur.

- Commissioner Hofmeister expressed concerns over the rural areas of state further away from Interstates not getting a fair share of fiber and other benefits.
- Ryan Rice mentioned that rural areas of the state have an opportunity to increase safety with the IoR project. Safety is anticipated to be able to be increased with a 17:1 cost benefit ratio.
- Ryan Rice noted, that as Amy mentioned, a policy to take care of this for all major construction projects as Why dig twice.?
- Commissioner Zink mentioned that a fiber company in Durango approached her regarding fiber and CDOT and confirmed that providing Bob Fifer's name, as a contact, was the right information to provide this entity.
- Commissioner Gilliland suggested providing education to the rural areas on the correct CDOT contact would help.
- Commissioner Scott confirmed that the general life of fiber is 20 years per Ryan Rice.
- Josh Laipply that where fiber is eventually installed is driven by the private sector customers. Government investment is required to cover other areas.
- Commissioner Scott stressed the need to look at cyber security in terms of establishing policy.
- Redundancy and separate platforms is key. TSM&O did wonderful job protecting their information during the cyber incident.
- Amy Ford mentioned that she is planning to present and provide an update on the work of the Advanced Mobility Task Force at tomorrow's TC meeting, and will request the TC to approve a resolution to bless this process.

#### Central 70 Update (Tony DeVito)

**Purpose:** To provide the TC with the April through June 2018 70 Central Quarterly Status Report. The update summarized the status of the Central 70 Project across the following areas:

- Status of Notice to Proceed (NTP)
- Status of Pre-Development Budget
- Status of Community Commitments

More specifically, information outlined in the quarterly update document include:

- Completed milestones
- Lawsuit update
- Issues
- Schedule status
- Budget status
- Contract change notices
- Quality issues
- Safety, Maintenance and Traffic issues
- Civil rights
- Mitigation/Commitments status
- Community Engagement

**Action:** Information only.

#### **Discussion:**

- Commissioner Gifford noted that this is Tony's last report to the TC on the 70 Central project, as Tony is retiring.
- Key highlights of Tony's report included:
  - Many meetings occur in between the TC quarterly updates – EOC, PMT, etc. if anything important arises it can be brought to TC in between quarterly updates.
  - Made a note to add milestone payments to events for future reports.
  - There are no changes to budget at this point.

- Civil rights status - \$4 million to DBE design firms is one of many civil rights related actions taking place for this project.
- Glad to be leaving the project overall in good shape before retiring. Tony expressed gratitude to the Central 70 team and feels the team to take over is well prepared and up for this task.
- Tony DeVito received an applause after he finished his report.
- Mike Lewis noted that KMP, the Central 70 consultant, responded to 600 courtesy patrol calls along the project corridor in the first month.

## **Transportation Commission Regular Meeting Thursday, August 16, 2018, 9:30 am – 11:30 am**

**Call to Order, Roll Call** –Eleven of 11 Commissioners attended.

**Audience Participation; Subject Limit: 10 minutes; Time Limit: 3 minutes**

- None

### **Comments of Individual Commissioners**

- Commissioner D’Angelo mentioned she was impressed with staff preparations for a meeting in Castle Rock regarding ballot initiative projects.
- Commissioner Peterson reported that he had gone to two meetings on Jefferson County to discuss transportation issues: one an association of businesses along West Colfax, and the other with Jefferson County commissioners. He, too, was pleased with how well the staff dealt with questions from the audience.
- Commissioner Gilliland co-hosted a Telephone Town Hall call, and met with a group at which Jon Caldara of the Independence Institute was present. At another meeting, she was disappointed in the poor turnout of state legislators. One speaker at another meeting stressed that CDOT should use “value capture” – a type of public financing intended to recover some or all the value of public infrastructure generates for private landowners. This idea makes sense to her. Commissioner Gilliland also congratulated Gary Vansuch for the Top 25 Innovation in American Government for 2018 CDOT’s Lean Everyday Ideas received from Harvard University’s John F. Kennedy School of Government.
- Commissioner Zink attended a San Luis Valley TPR meeting in Alamosa, at which the group was excited about news that the San Luis Valley would be getting a radar station to assist with weather prediction. She also mentioned a letter to the editor in the Durango newspaper from someone who complimented CDOT for repaving US 550, but asked why CDOT did not add more lanes at the same time. The letter indicates the writer did not understand the expense of capacity projects, and the lack of funding for them.
- Commissioner Scott said he was very happy about the start of the gap project from Monument to Castle Rock to add a lane to I-25 in both directions. He serves on the Technology Commission of the TC. Although technology is important, the TC needs to keep in mind the contribution of infrastructure improvements to public safety and mobility.
- Commissioner Stuart took part in three Telephone Town Halls this month. One of the interesting aspects of the questions is that they indicated public confusion about the respective transportation roles of CDOT and the Regional Transportation District. The public wants transportation improvements, and does not care what entity carries them out. She also said she spent some time playing with CDOT’s online interactive map of the ballot initiative projects. The interactive map seemed complete and easy to use.
- Commissioner Hall, who is from Grand Junction, had distributed Colorado peaches from the Palisade area to other Commissioners before the meeting, an action earning her thanks from the TC. She praised Tony DeVito for the work that he and his staff put in to get the Central 70 project ready to start. She also enjoyed taking part in a Telephone Town Hall at which people seemed to thank CDOT more than in the past.
- Commissioner Hofmeister said not much has been going on in his area in transportation.

- Commissioner Connell reported on a meeting she attended in Clear Creek County. People there seemed to be happy with CDOT, a fact she attributed to the leadership of Region 1 Regional Transportation Director (RTD) Paul Jesaitis.
- Commissioner Thiebaut thanked Commissioner Gifford for arranging a productive dinner meeting with the board of the Denver Regional Transportation District Wednesday. He also complimented Region 2 RTD Karen Rowe and her staff for their work. In addition, he commented that he thinks he saw his first autonomous car in use on the streets of Phoenix.
- Commissioner Gifford said she has attended on Telephone Town Hall, and wished Tony DeVito well in his future endeavors.

#### **Executive Director's Report (Michael P. Lewis)**

- Mike Lewis congratulated Mike Goolsby for becoming the new RTD for Region 3, taking the place of Dave Eller, who retired from CDOT.
- He also mentioned that construction of another I-25 gap project, this one on north I-25, would begin soon.
- In discussing the Central 70 project that now has become a construction project, Mike mentioned that the I-70 viaduct, if not replaced, could have collapsed in the same way that the bridge in Genoa, Italy, did last week.
- Colorado has some very complicated tunnels that are very important to the transportation infrastructure.

#### **Chief Engineer's Report (Josh Laipply)**

- Public comments made at the Telephone Town Halls with commissioners seemed to be a good validation of the project lists that CDOT put together.
- The Central 70 project will bring with it benefits for area residents, ranging from affordable housing to job training in construction. CDOT recently wrote a large check to help pay for affordable housing, the first time that CDOT has paid for something like that.
- Josh is serving on a group concerned with preventing cyber security attacks such as the one CDOT suffered in February 2018.
- Advances in data collection and analysis may help CDOT and other DOTs make more informed transportation investments in preventing secondary crashes, those that are a direct result of previous crashes.

#### **High Performance Transportation Enterprise (HPTE) Report (David Spector)**

- The first workshop for the Express Lane Master Plan will take place soon. Those who are interested in attending should contact HPTE.
- HPTE's success with public-private partnerships (P3) is garnering a number of invitations for staff to speak before such organizations as the National Conference of State Legislatures.
- HPTE is working with other states to assure interoperability of transponders so that people can easily drive in more than one state with toll roads using the same transponders.
- A 400-page *I-25 South Gap and Revenue Study* carried out for HPTE indicates that more than half of those polled support express and toll lanes. The study also indicates the rates that people consider reasonable. Those interested in the study may contact him for an electronic version.

#### **FHWA Colorado Division Administrator's Report (Vershun Tolliver, Assistant Division Administrator)**

- Vershun mentioned that Cynthia Walker, the acting executive director of FHWA since June 1, was very pleased with what she saw when she visited the state for the launch of Central 70.
- FHWA is having a meeting with state divisions on the rail highway crossings program.

#### **STAC Report (STAC Chair, Vincent Rogalski)**

- The STAC approved the ballot initiative list. Some were concerned that if a project were not on the ballot initiative lists, CDOT would not build it. CDOT staff assured some STAC members that passage of the ballot initiative could help free funds for other projects.
- Among the comments made about the Transit Development Program was that transit agencies have a great need for operating funds.
- The STAC discussed use of the “multimodal funds”, which are for bicycle, pedestrian, and transit projects.
- Concerning safety data, some STAC members would like to know the locations of frequent bike-vehicle collisions. If CDOT is interested in working toward zero deaths on the roads, it needs to know the locations.

**Autonomous Mobility Task Force and Process to Approve Autonomous Vehicle Testing (Amy Ford) – Approved unanimously on August 16, 2018**

- The Autonomous Mobility Task Force comprises representatives of CDOT, the Department of Revenue, and the Colorado State Patrol. The three agencies established the task force under SB 17-213 to oversee a process to approve testing of autonomous vehicles. The three entered into a Memorandum of Understanding about governance of the task force.
- The process follows the National Highway Traffic Safety Administration’s guidance on how states should manage autonomous vehicles. The process includes submission of an application packet from an interested tester that explains the request. The task force has approved two requests to date: a field-deployment request for CDOT’s Autonomous Truck Mountain Attenuator, and a request for EasyMile, Inc.’s autonomous shuttle.
- A resolution included in the packet authorizes CDOT staff on the task force to work with the Colorado State Patrol, the Department of Revenue’s Division of Motor Vehicles, and other stakeholders as needed to process autonomous vehicle testing requests in accordance with the process the task force developed, and make recommendations to the CDOT Deputy Executive Director.
- After some discussion, the TC decided to change the resolution to state that recommendations on autonomous vehicle applications should go to the CDOT Executive Director for approval since CDOT does not always have a Deputy Executive Director. They also agreed to change the title of the resolution.

**Act on Consent Agenda – Approved unanimously on August 16, 2018.**

- [Resolution to Approve the Regular Meeting Minutes of June 21, 2018 \(Herman Stockinger\)](#)
- [Resolution to Approve Disposal: Lowell Ponds State Wildlife Area \(Parcels 64, 64A, 65, 66 & 68\) \(Paul Jesaitis\)](#)

**Discuss and Act on SB 228 Year 3 Transit Projects (David Krutsinger and Jeff Sanders) – Approved unanimously on August 16, 2018.**

**Discuss and Act on State Freight and Passenger Rail Plan (David Krutsinger and Sharon Terranova) – Approved unanimously on August 16, 2018.**

- Commissioner Gifford said she appreciated that the Division of Transit and Rail (DTR) staff stepped up to soften the resolution so that the TC isn’t committing itself to actions beyond distribution of federal highway crossing rail funds.

**Discuss and Act on the Amended FY2018-2019 CDOT Annual Budget – Approved unanimously on August 16, 2018.**

**Discuss and Act on the 2nd Budget Supplement of FY 2019 (Jeff Sudmeier) – Approved unanimously August 16, 2018.**

[Discuss and Act on Budget Roll Forward Requests \(Jeff Sudmeier\)](#) – **Approved unanimously on August 16, 2018.**

[Discuss and Act on ROW Acquisition Authorization Requests \(Josh Laipply\)](#) – **Approved unanimously on August 16, 2018.**

[Discuss and Act on ROW Condemnation Authorization Requests \(Josh Laipply\)](#) – **Approved unanimously on August 16, 2018 in two separate actions: one to approve the right of way condemnation authorization for two properties, and one to approve condemnation authorization for a third property on US 550.**

- Lawyer Dan Gregory of Durango and Telluride, representing landowners of the third property, the Webb Ranch, contended that CDOT's offer of \$746,000 did not take into account the market value of the gravel on the property that could be used for developing the property or for selling it, but which could not be used due to CDOT's proposed acquisition.
- He asked that the TC not authorize condemnation because he did not believe a good faith effort to negotiate had been completed.
- CDOT met with the landowners on June 25 and gave the landowners an offer on Aug. 8. The landowners did not make a counter-offer, nor are they required to do so, according to Kathy Young, Senior Assistant of the Colorado Attorney General's Office.
- Authorization to proceed with condemnation does not mean all negotiation will cease, nor does it mean that condemnation will occur. The difficulty is that the parties are too far apart in their valuations, according to Kathy Young.

[Confirm Transportation Commission Committee Appointments \(Herman Stockinger\)](#) – **Approved unanimously on August 16, 2018.**

#### **Recognition**

- Mike Lewis recognized Tony DeVito for his decades of work for CDOT beginning as a temporary worker while in high school, saying that Tony's departure precipitated one of the longest goodbyes he has seen of several months. The Colorado School of Mines graduate worked his way up the organization to become RTD of Region 1 and then headed the giant Central 70 project until construction was ready to start.
- Tony said he has grown up in CDOT, and that he has had great opportunities with CDOT. He added that he looks forward to working with CDOT in a slightly different role.
- Commissioners Gilliland, Peterson, and D'Angelo shared recollections of their dealings with him.
  - D'Angelo said she first met Tony when she had been a commissioner for about a month. Their sons were both involved in the same fender-bender in the high school parking lot, and Tony handled the situation with his usual cool and aplomb.
  - Gilliland recalled when Tony was working on the Twin Tunnels project as the Region 1 RTD, and had to call each of the commissioners personally to obtain approval to proceed when costs escalated. Tony was so humble and forthright that it was impossible to refuse him.
  - Peterson joked that Tony is not only an admirable public servant, but he has been effective serving as a *squeaky wheel* also.

**Colorado Department of Transportation  
FY 2018 - 19 Amended Annual Budget**

CDOT	Budget Category		Directed By	FY 2018-19 Budget	Funding Source
1	<b>Maintain - Maintaining What We Have</b>				
2		CDOT Performed Work			
3		Roadway Surface	TC	37,487,230	
4		Roadside Facilities	TC	25,002,562	
5		Roadside Appearance	TC	10,964,746	
6		Structure Maintenance	TC	6,311,352	
7		Tunnel Activities	TC	6,141,692	
8		Snow and Ice Control	TC	82,553,949	
9		Traffic Services	TC	68,365,868	
10		Planning and Scheduling	TC	17,761,243	
11		Material, Equipment and Buildings	TC	18,211,358	
12					
13					
14					
15					
16		<b>Contracted Out Work</b>			
17		Surface Treatment /1 /2	TC	313,682,698	FHWA/ SH/ 09-108: \$0.98M/ SB 18-001
18		Structures On-System Construction /1 /2	TC	47,589,367	FHWA/ SH/ 09-108: \$16.12M/ SB 18-001
19		Structures Inspection and Management /1 /2	TC	9,450,000	SH
20		Geohazards Mitigation /1	TC	8,400,000	09-108: \$10.3M
21		Highway Safety Improvement Program	FR	43,054,370	FHWA / SH
22		Railway-Highway Crossings Program	FR	3,395,698	FHWA / SH
23		Hot Spots	TC	2,167,154	FHWA / SH
24		Traffic Signals /1 /2	TC	17,810,758	FHWA/ SH/ 09-108: \$12.6M /SB 18-001
25		FASTER - Safety Projects	TC	67,360,121	09-108
26		Permanent Water Quality Mitigator	TC	6,500,000	FHWA / SH
27					
28					
29					
30		<b>Capital Expenditure</b>			
31		Road Equipment /1 /2	TC	26,800,000	SH
32		Capitalized Operating Equipmen	TC	3,028,000	SH
33		Property /1 /2	TC	20,200,000	SH
34					
35					
36					
37					
38					
39		<b>CDOT Performed Work</b>			
40		TSM&O: Performance Programs and Services	TC	2,794,487	SH
41		TSM&O: Traffic Incident Management	TC	4,102,288	SH
42		TSM&O: ITS Maintenance /1	TC	23,500,000	SH
43					
44					
45					
46		<b>Contracted Out Work</b>			
47		Safety Education	Comb	11,203,720	NHTSA / SSE
48		TSM&O: Congestion Relief	TC	6,450,000	FHWA / SH
49		Regional Priority Program	TC	48,677,000	FHWA / SH
50		ROADX	TC	12,096,525	FHWA / SH
51		ADA Compliance		5,000,000	FHWA / SH / SB 18-001
52					
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59		<b>Capital Expenditure</b>			
60		TSM&O: ITS Investments	TC	10,000,000	FHWA / SH
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**Flexible Funds**

/1 FASTER Safety funds (\$40.0M) were substituted for flexible funds in appropriate Asset Management Programs.

**Revenue**

**2,044,799,240**

**Key to acronyms:**

LOC=Local Matching Funds

DS= Debt Service Covenants

SH=State Highway funding

SL=State Legislation

SIB=St. Infrastructure Bank Interest

AB=Aeronautics Board

FHWA=Federal Highway Administration

Comb=Combination

TC=Transportation Commission

FTA=Federal Transit Administration

FR=Federal Requirements

SSE=State Safety Education

**State Bridge Enterprise  
Attachment A: FY 2018 - 19 Amended Annual Budget**

State Bridge	Budget Category	Program Area	Directed By	FY 2018-19 Budget	Funding Source
1	Maintain - Maintaining What We Have				
2		CDOT Performed Work			
3					
4		Maintenance	BEB	300,000	09-108
5		Support Services	BEB	350,000	09-108
6		Bridge Preservation		100,000	
7				750,000	
8		Contracted Out Work			
9		Bridge Enterprise Projects	BEB	95,596,057	09-108
10				95,596,057	
11					
12				<b>Total:</b>	<b>96,346,057</b>
13	Maximize - Safely Making the Most of What We Have				
14		CDOT Performed Work			
15					
16					
17		Contracted Out Work			
18					
19					
20					
21				<b>Total:</b>	<b>-</b>
22	Expand - Increasing Capacity				
23		CDOT Performed Work			
24					
25					
26		Contracted Out Work			
27					
28					
29					
30				<b>Total:</b>	<b>-</b>
31	Deliver - Program Delivery/Administration				
32					
33		Administration and Legal Fees		1,659,943	09-108
34					
35				1,659,943	
36					
37				<b>Total:</b>	<b>1,659,943</b>
38	Pass-Through Funds/Multi-modal Grants				
39		Highway			
40					
41					
42					
43				<b>Total:</b>	<b>-</b>
44	Bridge Enterprise Contingency / Debt Service				
45		Contingency			
46		Contingency	BEB		09-108
47					
48		Debt Service			
49		Debt Service	BEB	18,234,000	FHWA/SH
50					
51				18,234,000	
52					
53				<b>Total:</b>	<b>18,234,000</b>
				<b>116,240,000</b>	

Revenue **116,240,000**

**Key to acronyms:**

BEB= Bridge Enterprise Board

DS= Debt Service Covenants

**High Performance Transportation Enterprise  
Attachment A: FY 2018 - 19 Amended Annual Budget**

HPTE	Budget Category	Program Area	Directed By	FY 2018-19 Budget	Funding Source
1	Maintain - Maintaining What We Have				
2		CDOT Performed Work			
3					
4		Contracted Out Work			
5					
6					
7				<b>Total:</b>	<b>-</b>
8	Maximize - Safely Making the Most of What We Have				
9		CDOT Performed Work			
10					
11					
12		Contracted Out Work			
13					
14		Property			
15					
16				<b>Total:</b>	<b>-</b>
17	Expand - Increasing Capacity				
18		CDOT Performed Work			
19		Maintenance	HPTEB		Tolls/Managed Lanes Revenue
20					
21					
22		Contracted Out Work			
23		Express Lanes Operations	HPTEB	10,942,648	Tolls/Managed Lanes Revenue
24					
25				10,942,648	
26					
27				<b>Total:</b>	<b>10,942,648</b>
28	Deliver - Program Delivery/Administration				
29					
30		Administration and Legal Fees		5,194,500	Fee for Service/Interest Income
31					
32					
33				5,194,500	
34					
35				<b>Total:</b>	<b>5,194,500</b>
36	Pass-Through Funds/Multi-modal Grants				
37		Highway			
38					
39					
40				<b>Total:</b>	<b>-</b>
41	HPTE Contingency / Debt Service				
42		Contingency			
43					
44		Debt Service			
45					Fee for Service
46					
47				<b>Total:</b>	<b>-</b>
				<b>16,137,148</b>	

Revenue **16,137,148**

**Key to acronyms:**

HPTEB=High Performance Transportation Enterprise Board

HPTE Fee For Service Allocation Adjustment **(5,169,500)**

Total Consolidated Allocations **2,172,006,888**  
Total Consolidated Revenue **2,172,006,888**



2829 West Howard Place  
Denver, CO 80204

**MEMORANDUM**

**TO:** STATEWIDE TRANSPORTATION ADVISORY COMMITTEE (STAC)  
**FROM:** AMY FORD, CHIEF OF ADVANCED MOBILITY, RYAN D. RICE, DIRECTOR, DIVISION OF TSM&O  
**DATE:** AUGUST 17, 2018  
**SUBJECT:** CDOT STATEWIDE FIBER OPTIC MASTER PLAN

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**Purpose**

To inform STAC on CDOT's Statewide Fiber Optic Master Plan effort and other related topics.

**Action**

Information only

**Details**

CDOT's fiber optic network is critical to improve safety and mobility through operations strategies and support connected and autonomous vehicle infrastructure. The expansion of CDOT's fiber optic network is critical over the next five to ten years to make significant improvements in safety and mobility throughout the State. Over the past several months, the Intelligent Transportation Systems (ITS) Branch in the Division of Transportation Systems Management and Operations (TSM&O) has been updating its Statewide Fiber Optic Master Plan as a major component of the Smart Mobility Plan.

August STAC will focus on updating STAC on the Statewide Fiber Optic Master Plan, which is in final draft form, as well as public-private partnerships for fiber optics and other related topics.

**Attachments**

Attached slide presentation.





# INTELLIGENT TRANSPORTATION SYSTEMS

## AUGUST STATEWIDE TRANSPORTATION ADVISORY COMMITTEE





# FIBER PLANNING & DEVELOPMENT

## PRESENTATION SUMMARY...



PLANNING



PEOPLE



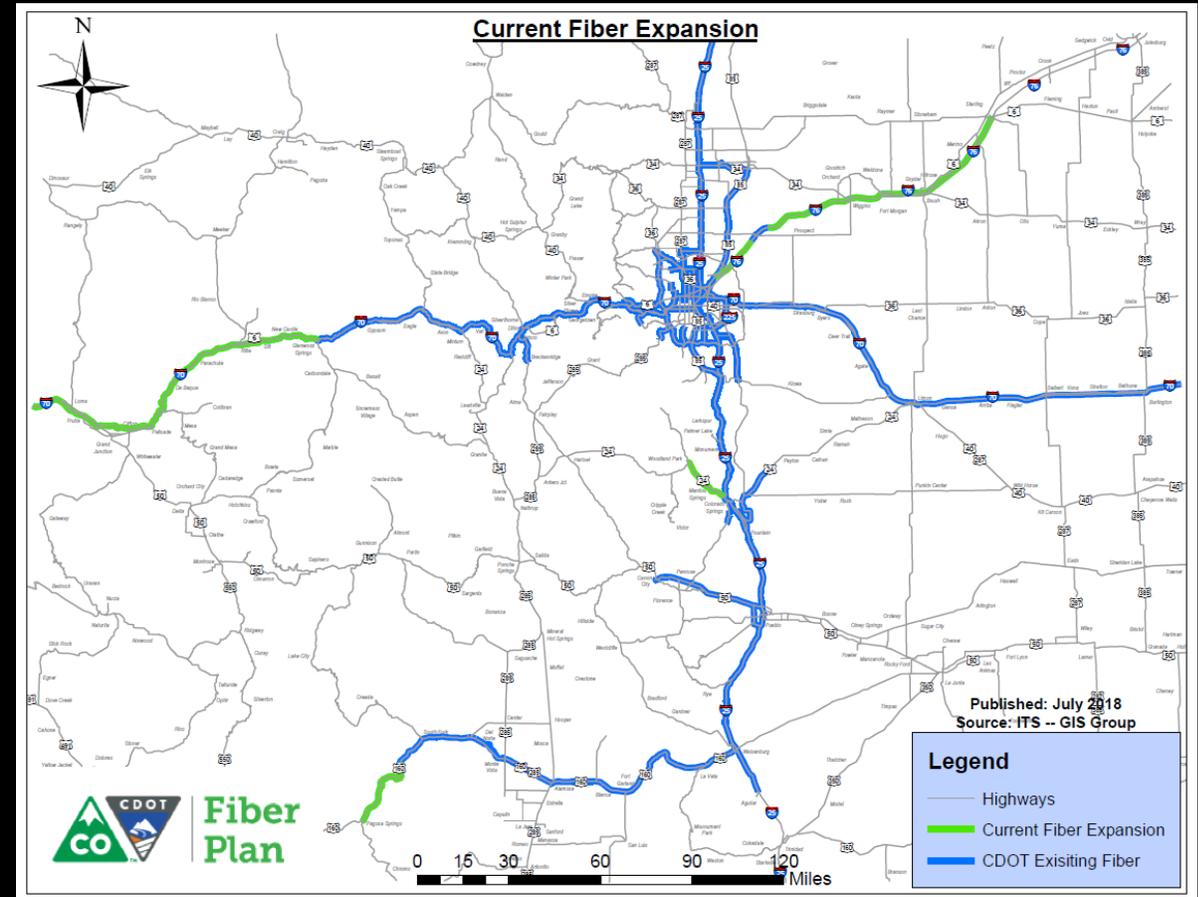
PARTNERSHIPS



# FIBER PLANNING & DEVELOPMENT

## Fiber Planning, the foundation...

- Develop a 10 year fiber and network strategy to support the future transportation network with connected and autonomous vehicles.
- Identified routes based on a weighted factors, which include CDOT Region input, economic development and public safety needs.
- Building blocks to the Smart Mobility Plan.





# FIBER PLANNING & DEVELOPMENT

## **Building Partnerships to expand CDOT's fiber footprint...**

- Opportunities to partner with Public and Private organizations come to CDOT in many forms.
- Once an opportunity is identified, the entity submits a Unsolicited Proposal to ITS Planning.
- ITS Planning, who chairs Fiber Management Team (FMT) will present the opportunity to the FMT to review and approve.
- Once the terms and conditions are ironed out, ITS Planning submit to the appropriate State and CDOT Departments for finalization.



# FIBER PLANNING & DEVELOPMENT

## P3s, why are these partnerships important...

- Fiber Private Partnerships have brought approximately \$8 M per month in fiber assets in 2018 in exchange for access to the Rights-of-Way
- Create an environment that fosters **communications & technology** advancement for **ALL** of Colorado
- Improve community and State **resiliency**
- Promote **economic development**
- Grow an **interoperable** and **consistent** transportation network system
- To **expand information networks** while leveraging the existing transportation “hard” infrastructure
- **Collecting data** to create **thoughtful, informed decisions** to improve our transportation network, while **enhancing technology abilities locally**





# DISCUSSION



# CONTACT INFORMATION

## **Ryan Rice, Transportation Systems Management & Operations Director**

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M: 303-919-7764

## **Wes Maurer, Intelligent Transportation Systems Branch Manager**

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M: 303.319.5121



**COLORADO**  
**Department of Transportation**

Office of the Chief Engineer  
Performance and Asset Management Branch  
Multimodal Planning Branch  
2829 West Howard Place, 4<sup>th</sup> Floor  
Denver, CO 80204

**MEMORANDUM**

**DATE:** August 17, 2018  
**TO:** Statewide Transportation Advisory Committee (STAC)  
**FROM:** Joshua Laipply, Chief Engineer  
Debra Perkins-Smith, Director, Division of Transportation Development  
William Johnson, Performance and Asset Management Branch Manager  
Tim Kirby, Multimodal Planning Branch Manager  
**SUBJECT:** Policy Directive 14 Current Performance Update

**Purpose**

To provide more information on the asset management program using pavements and bridges as examples, and to report on the results of the objectives in Policy Directive 14 (PD 14) in the areas of Infrastructure Condition (Asset Management) and Maintenance for fiscal/calendar year 2017.

**Action**

No action requested this month. Review of current performance of Infrastructure Condition (Asset Management) and Maintenance goal areas from PD 14.

**Background**

PD 14 provides a framework for development of the Statewide Transportation Plan (SWP) and guides the distribution of resources in the SWP, the Statewide Transportation Improvement Program (STIP), and the annual budget.

**Details**

The PD 14 Scorecard report has been updated with performance achievement data for calendar/fiscal year 2017. Attachment A: 2017 PD 14 Scorecard graphically summarizes the performance of PD 14 objectives for 2017 and the prior year. Attachment A also includes information on the dedicated funding sources and funding levels associated with each objective. The notes column provides additional background and technical details, where applicable.

The August STAC meeting will include a review of highway performance measures for Infrastructure Condition and Maintenance (Safety, System rel, transit Infrastructure Condition were reviewed in July 2018). As shown in Chart 1, PD 14 performance areas comprise roughly 60% of CDOTs total Budget (excluding Senate Bill 228 transfers).

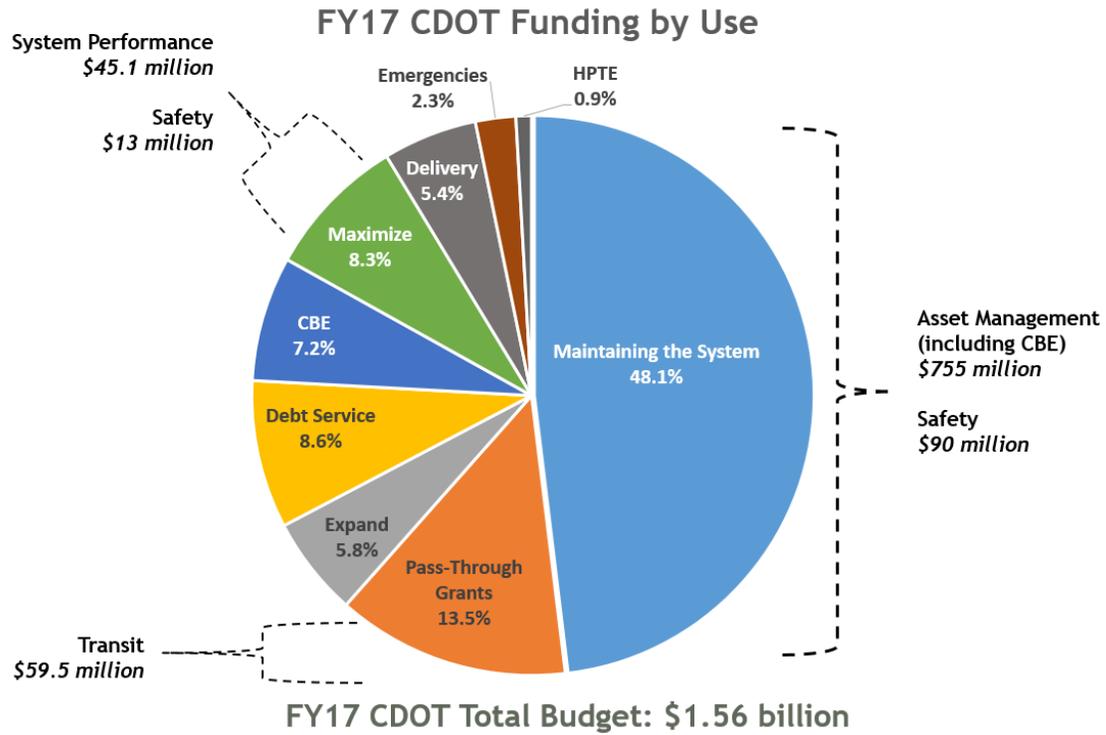
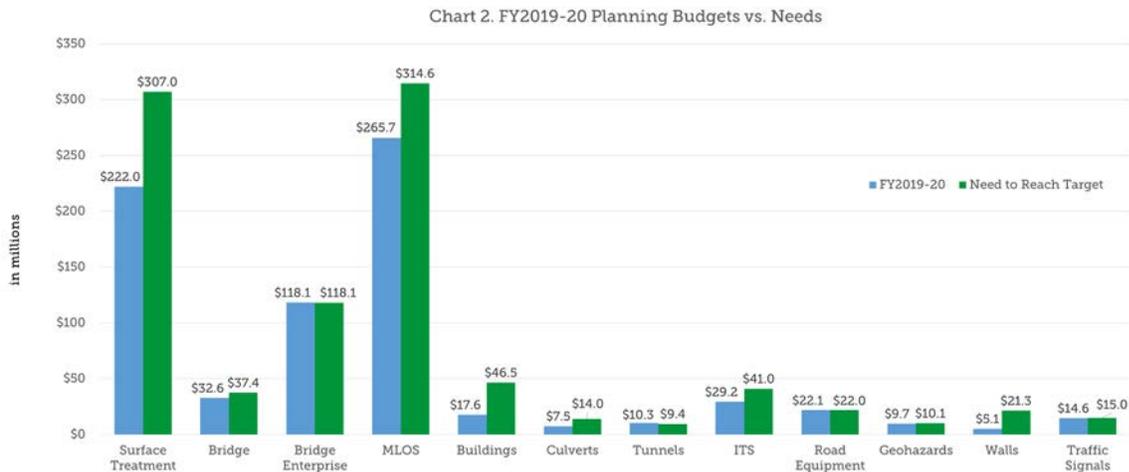


Chart 1.

Current performance in these areas is described below. No changes to performance measures and objectives for any of the goal areas are proposed at this time.

#### Estimated Need to Achieve Targets

Chart 2 shows that the total planning budget for FY2019-20 is \$755M, and the need is \$956M (resulting in a \$201M funding gap). The TC, during the FY2019-20 budget process, can make a decision to adjust funding levels for the asset management program.



Next Steps

- Consideration of PD 14 in development of FY 2020 CDOT Budget

Attachments

- Attachment A: 2017 PD 14 Scorecard
- Attachment B: Presentation



# 2017 Policy Directive 14 Scorecard

## Infrastructure Condition

### Highways

PD 14.0 Objectives	2017				2016				Dedicated Funding Sources <sup>1</sup>	Notes
	Budget	Target	Results	Target Met?	Budget	Target	Results	Target Met?		
Achieve 80% High/Moderate Drivability Life for Interstates based on condition standards and treatments set for traffic volume categories	\$252.1 million	80%	88%		\$235.9 million	80%	94%		Surface Treatment Program RAMP Funding	Although targets were met in 2017, given the current planning budgets, it is anticipated that targets for pavement condition will not be met beginning next year, and will continue to remain below the target through 2027. In 2027 it is anticipated that only 68% of the state highway system will have high or moderate Drivability Life. \$307 million per year is needed annually beyond FY 2022 to achieve the target by 2027.  Recommended Next Steps - Staff will work to improve/tighten the link between pavement maintenance and pavement model recommendations, and evaluate the effect of pavement preventive maintenance on DL to identify strategies. Additionally, continuing work to align current DL metric with new NPM metrics of Good/Fair/Poor pavement condition of the NHS System.
Achieve 80% High/Moderate Drivability Life for NHS, excluding Interstates, based on condition standards and treatments set for traffic volume categories		80%	84%			80%	85%			
Achieve 80% High/Moderate Drivability Life for the state highway system based on condition standards and treatments set for traffic volume categories		80%	80%			80%	80%			

## Infrastructure Condition

### Bridges

PD 14.0 Objectives	2017				2016				Dedicated Funding Sources <sup>1</sup>	Notes
	Budget	Target	Results	Target Met?	Budget	Target	Results	Target Met?		
Maintain the percent of NHS total bridge deck area that is not structurally deficient at or above 90%	\$167.4 million	90.0%	95.8%		\$164.1 million	90.0%	95.5%		Colorado Bridge Enterprise On-System Bridge RAMP Funding	A structurally deficient bridge is typically one where corrosion or deterioration has resulted in a portion of the bridge being in poor condition; for example, where water leaking through an expansion joint has caused the end of a steel girder to rust. Currently exceeding target and will continue to exceed target through 2027; (\$37.4 million is needed in preventative maintenance to continue meeting the current target and expecting 96% not poor condition in 2017) however, the bridge program has 7 metrics geared towards mitigation of risks (below), and none of those are not achieving their target.  Recommended Next Steps - For the seven risk mitigation metrics not achieving their target, staff are working to identify additional strategies that can be implemented with no additional funding. Current strategies include identifying bridges that can easily be repaired or remedied with the most cost-effective treatment.  Scour critical bridges are at risk of failure during a storm event of sufficient size.  A bridge with a vertical clearance of less than 14'-6" (statutory maximum vehicle height) has a high risk of being hit by a tall load or legal load.  Changed target last year (2017 Target = 1.0%; 2016 Target = 0.4%) due the number of bridges with vertical clearance issues is greater than projected.  16'-6" is the minimum clearance used when designing new bridges over a roadway. A bridge with a vertical clearance less than 16'-6" but greater than or equal to 14'-6" has a medium to high risk of being hit by a tall load.  Changed target last year (2017 Target = 18.0%; 2016 Target = 4.8%) due the number of bridges with vertical clearance issues is greater than projected.
Maintain the percent of state highway total bridge deck area that is not structurally deficient at or above 90%		90.0%	95.4%			90.0%	95.1%			
Percentage of CDOT-owned bridges over waterways that are scour critical.		5.0%	6.5%			5.0%	6.4%			
Percentage of bridge crossings over Interstates, U.S. routes and Colorado state highways with a vertical clearance less than the statutory maximum vehicle height of 14 feet-6 inches		1.0%	2.4%			0.4%	1.7%			
Percentage of bridge crossings over Interstates, U.S. Routes and Colorado state highways with a vertical clearance less than the minimum design requirement of 16 feet-6 inches		18.0%	21.8%			4.8%	19.8%			

<sup>1</sup> Additional flexible funding sources with a wide range of eligibility could be used to address multiple objectives. Examples include RPP, STP-M, CMAQ, and TAP



# 2017 Policy Directive 14 Scorecard

## Infrastructure Condition

### Bridges

PD 14.0 Objectives	2017				2016				Dedicated Funding Sources <sup>1</sup>	Notes
	Budget	Target	Results	Target Met?	Budget	Target	Results	Target Met?		
Percentage of CDOT-owned bridges posted for load	\$167.4 million	0.1%	0.2%		\$164.1 million	0.0%	0.2%		Colorado Bridge Enterprise On-System Bridge RAMP Funding	Vehicles meeting the legal load limits (as defined in C.R.S. 42-4-502 - 42-4-504) can travel on Colorado Interstates, US and State Highways without an approved permit. Older bridges may need to be posted since some of these bridges were not designed for legal loads. Load posted structures impact mobility by restricting both legal and permitted loads. Changed target last year (2017 target = 0.1%; 2016 target = 0.0%) due to updated inventory found more bridges with lower than desirable conditions.
Percentage of CDOT-owned bridges with a load restriction		0.9%	1.7%			3.0%	1.6%			Permit loads (as defined in the Colorado Bridge Weight Limit Map/CDOT Bridge Rating Manual) are typically heavier and longer than the legal loads and require an approved permit in order to travel on Colorado highways. Older bridges may need to be restricted for passage since some of these bridges were not designed for permit loads. Permitted loads have a certain combination of axle weight and spacing that distributes the load in an acceptable combination for crossing over structures. Changed target last year (2017 target = 0.9%; 2016 target = 3.0%) due to better conditions that originally projected.
Percentage of expansion joints in fair, poor, or severe condition (by length) on CDOT-owned bridges		26% or less	28.5%			15% or less	25.3%			Leaking expansion joints allow water and deicing chemicals onto superstructure and substructure elements which can accelerate corrosion and lead to early onset of a structural deficiency. Keeping expansion joints sealed slows the rate of bridges dropping into poor condition. Changed target last year (2017 target = 26%; 2016 target = 15%) due to updated inventory found more bridges with lower than desirable conditions.
Percentage of CDOT-owned bridge deck area that is unsealed or otherwise unprotected		35% or less	41.7%			30% or less	44.5%			Unsealed bridge decks deteriorate faster than sealed bridge decks. Changed target last year (2017 target = 35%; 2016 target = 30%) due to updated inventory found more bridges with lower than desirable conditions.

### Maintenance

PD 14.0 Objectives	2017				2016				Dedicated Funding Sources <sup>1</sup>	Notes
	Budget	Target	Results	Target Met?	Budget	Target	Results	Target Met?		
Maintain a LOS B grade for snow and ice removal	\$86.1 million	B	B-		\$83.4 million	B	B		Snow and Ice Control Snow and Ice Reserve	Maintenance has two performance objectives in PD 14: to maintain an overall Maintenance Levels of Service (MLOS) B minus for the statewide system, and to maintain an LOS B minus grade for snow and ice removal. For 2017, both performance objectives were not met. The cost of achieving a B minus for MLOS requires an average annual budget of \$315M compared to FY2016-17 funding of \$272.6M. The level of current funding and staff resources limits the ability to achieve the current maintenance performance objectives.
Maintain an overall MLOS B minus grade for the state highway system	\$272.6 million	B-	C+		\$254.4 million	B-	C+		Maintenance	Recommended next steps - Staff are developing a new Preventive Maintenance Program that will better position CDOT to plan and track maintenance work, thereby reducing the need for costly emergency repairs. In addition, the program will establish enhanced staff development and training, which will improve performance and increase cost saving innovations.

<sup>1</sup> Additional flexible funding sources with a wide range of eligibility could be used to address multiple objectives. Examples include RPP, STP-M, CMAQ, and TAP



# 2017 Policy Directive 14 Scorecard

## Infrastructure Condition

### Buildings

PD 14.0 Objectives	2017				2016				Dedicated Funding Sources <sup>1</sup>	Notes
	Budget	Target	Results	Target Met?	Budget	Target	Results	Target Met?		
Statewide letter grade (Percent C or better) of CDOT Buildings	\$21.4 million	85% C or better	83%		\$12.9 million	90% C or better	74%		Property Allocation Program RAMP Funding	Given the current planning budgets, buildings will not achieve its target between now and 2027. In 2027 the expected performance is 73%. \$47 million per year is needed annually beyond FY 2022 to achieve the target of 85% C or better by 2027.  Recommended Next Steps - Staff has worked to improve awareness of preventive maintenance as a priority, and the importance of completing annual building assessments in an effort to determine level of funding needed for building preventive maintenance.  Changed target last year due to analysis that indicated that, due to fiscal constraints, old target is not achievable.

### ITS

PD 14.0 Objectives	2017				2016				Dedicated Funding Sources <sup>1</sup>	Notes
	Budget	Target	Results	Target Met?	Budget	Target	Results	Target Met?		
Average Percent Useful Life of ITS Equipment	\$24.5 million	90% or less	82%		\$21.4 million	90% or less	70%		ITS Maintenance RAMP Funding	Given the current planning budgets, ITS will not achieve its target in 2027. In 2027, the expected performance is 220%. \$41 million per year is needed annually beyond FY 2021 to achieve the target by 2027.  Recommended Next Steps - Staff to refine inventory by breaking down devices into manageable maintenance pieces that can be tracked individually for cost savings advantages. Staff will also investigate the benefits of preventive maintenance for select devices, and further refine device useful life parameters by tracking asset service life to compare to manufacturer estimates.

### Fleet

PD 14.0 Objectives	2017				2016				Dedicated Funding Sources <sup>1</sup>	Notes
	Budget	Target	Results	Target Met?	Budget	Target	Results	Target Met?		
Average Percent Useful Life of Fleet Equipment	\$26.4 million	75% or less	66%		\$18.4 million	70% or less	87%		Road Equipment Program RAMP Funding	Given the current planning budgets, road equipment will not achieve its target in 2027. In 2027 the expected performance is 76%. \$22 million per year is needed annually beyond FY 2022 to achieve the target of 75% by 2027.  Recommended Next Steps - Staff will communicate the importance of fleet planning and develop regional fleet optimization recommendations, develop a fleet performance measure that reflects cost effectiveness rather than asset life, and monitor implementation of fleet preventive maintenance work orders.  Changed target last year due to analysis indicating that, due to fiscal constraints, the old target is not achievable.

### Culverts

PD 14.0 Objectives	2017				2016				Dedicated Funding Sources <sup>1</sup>	Notes
	Budget	Target	Results	Target Met?	Budget	Target	Results	Target Met?		
Percent of culverts in poor condition (have culvert rating of 4 or less)	\$11.9 million	5%	5.09%		\$8.2 million	5%	4.87%		Structures On-System RAMP Funding	Although the target is currently being met, given current planning budgets, it is expected that the target will not be met in the future. In 2027 the expected performance is 8%. \$14 million per year is needed annually beyond FY 2022 to achieve the target by 2027.  Metric description was updated last year (from "structurally deficient" to "poor") for clarification purposes.

<sup>1</sup> Additional flexible funding sources with a wide range of eligibility could be used to address multiple objectives. Examples include RPP, STP-M, CMAQ, and TAP



# 2017 Policy Directive 14 Scorecard

## Infrastructure Condition

### Geohazards

PD 14.0 Objectives	2017				2016				Dedicated Funding Sources <sup>1</sup>	Notes
	Budget	Target	Results	Target Met?	Budget	Target	Results	Target Met?		
Percent of geohazard segments at or above risk grade B	\$11.8 million	85%	84%		\$9.2 million	80% (Risk Grade C or above)	N/A	N/A	Rockfall Mitigation RAMP Funding	Increased data collection efforts have provided a better picture of actual performance. Current performance results in a \$40.5M annual risk from Geohazard events. \$10.1 million per year is needed annually beyond FY 2022 to achieve the updated of 85% risk grade B or above by 2027.  Recommended Next Steps - Target and metric adjusted last year based on better inventory data. Focusing investment based on the new target will result in a reduction in statewide risk exposure.

### Tunnels

PD 14.0 Objectives	2017				2016				Dedicated Funding Sources <sup>1</sup>	Notes
	Budget	Target	Results	Target Met?	Budget	Target	Results	Target Met?		
Percentage of network tunnel length with all elements in equal or better condition than 2.5 Weighted Condition Index	\$10.5 million	75%	70%		\$5.2 million	80%	91%		Structures On-System RAMP Funding	Target is currently not being met, given current planning budgets, it is expected that the target will meet in 2022. In 2027, the expected performance is 100%. \$9.4 million per year is needed annually beyond FY 2022 to achieve the target of 75% by 2027.  Recommended Next Steps -Though the existing condition is 70%, elements at the Eisenhower-Johnson Memorial Tunnel (EJMT) could bring condition down back to 47%, because systems were assigned to one bore structure that in fact affected both. Initial 2017 model and future models need refinement to better predict the cost of treatments.  Target was changed last year (2017 target = 75%; 2016 target = 80%) due to condition being worse than originally projected.

### Traffic Signals

PD 14.0 Objectives	2017				2016				Dedicated Funding Sources <sup>1</sup>	Notes
	Budget	Target	Results	Target Met?	Budget	Target	Results	Target Met?		
Percent of signal infrastructure in severe condition (Dollar weighted)	\$16.9 million	2%	8%		\$5.7 million	N/A	N/A	N/A	Traffic Signals Program	Given the current planning budgets, signals is expected to achieve the target by 2026. In 2027, the expected performance is 2.69%. \$15.1 million per year is needed annually beyond FY 2022 to achieve the target of 2% or less by 2027.  Recommended Next Steps - The metric was changed last year. The new metric and target allows the program to focus on signals with the greatest performance deficiencies as opposed to all signals without regards to performance.

### Walls

PD 14.0 Objectives	2017				2016				Dedicated Funding Sources <sup>1</sup>	Notes
	Budget	Target	Results	Target Met?	Budget	Target	Results	Target Met?		
Percentage of CDOT-owned walls, by square foot, that are poor (have a rating of 4 or less)	\$10.2 million	2.5%	3.10%		\$2.4 million	1%	4.15%		Structures On-System RAMP Funding	Given the current planning budgets, walls is not expected to meet its target between now and 2027. In 2027 the expected performance is 12%. \$21.3 million per year is needed annually beyond FY 2022 to achieve the target of 2.5% by 2027.  Recommended Next Steps - Metric description and target were updated last year. Description of the metric was changed for clarification purposes. Updated inventory found more walls with lower than desirable conditions. Current funding is unable to keep with the rate of decline, thus the target was updated to reflect these issues.

<sup>1</sup> Additional flexible funding sources with a wide range of eligibility could be used to address multiple objectives. Examples include RPP, STP-M, CMAQ, and TAP



# 2017 Policy Directive 14 Scorecard

## Safety

### All Highways

PD 14.0 Objectives	2017				2016				Dedicated Funding Sources <sup>1</sup>	Notes
	Budget	Target	Results	Target Met?	Budget	Target	Results	Target Met?		
Reduce fatalities by 12 per year from 548 in 2008 to 344 in 2025	\$103.2 million	440	648		\$88.7 million	452	608		FASTER Safety HSIP Highway Safety Education Hot Spots	Safety performance data and economic impact of crashes for 2017 is preliminary and will not be finalized until December 31, 2018 (this is due to delayed reporting of some crashes, data incompleteness due to data system upgrade and transition, and 2017 data not being official until late 2018). Performance objectives for fatalities were not met in 2017. Fatalities continue on an upward trend, increasing to 648 in 2017 as compared to a target of 440. Colorado has seen an increase in fatalities that is greater than the increase in population and vehicle miles of travel (VMT, leading to an increase in fatality rate.  Objectives were not met for serious injuries, with an increase in the number of serious injuries from 2,994 in 2016 to 3,031 in 2017 (still preliminary). The rate per 100 million VMT also increased from 5.66 in 2016 to 5.83 in 2017. While the significant increase in fatalities in recent years is concerning, staff are not recommending changes to the performance objective at this time. The current objectives still reflect the statewide and CDOT commitment to Toward Zero Deaths and to Colorado's 2015-19 Strategic Highway Safety Plan to halve fatalities by 2030 and reduce fatalities to single digits by 2050. While safety targets have not been met, rapid improvements in vehicle technology and CDOT's plan for connected vehicle and infrastructure technology have the potential to improve vehicle safety in the future.  Recommended next steps - Improve safety solutions, develop new technology, deploy targeted safety improvements, continue corridor specific traffic incident management, improved public information, conduct more research, implement best practices, and other strategies to reduce crashes.
Reduce the fatality rate per 100 million VMT by 0.025 per year from 1.03 in 2013 to 0.79 in 2025		0.95	1.21			0.97	1.17			
Reduce the serious injuries by 90 per year from 3,200 in 2013 to 2,120 in 2025		2,840	3,030			2,930	2,994			
Reduce the serious injury rate by 0.2 per 100 million VMT per year from 6.86 in 2013 to 4.46 in 2025		6.06	5.68			6.26	5.66			
Reduce the economic impact of crashes annually by 1% over the previous calendar year		\$5.68 B	\$5.63 B			\$4.76 B	\$5.74 B			

### Bike & Pedestrian

PD 14.0 Objectives	2017				2016				Dedicated Funding Sources <sup>1</sup>	Notes
	Budget	Target	Results	Target Met?	Budget	Target	Results	Target Met?		
Reduce the number of bicyclist and pedestrian fatalities involving motorized vehicles, from 67 in 2013 to 47 in 2025	N/A	60	108		N/A	62	100		N/A	2017 performance data is preliminary and is not final until December 31, 2018. Several factors may be contributing to growth in both fatal and severe crashes, including distracted driving, increasing motorized vehicle congestion and speeding.  Recommended next steps - Perform a bicycle and pedestrian crash data analysis to identify problem corridors and the common factors contributing to bicycle and pedestrian crashes on those corridors. Identify cost effective countermeasures or campaigns that can be applied to target problem areas. Staff are also looking at making refinements to existing safety programs to direct more funding to projects that address safety concerns and improve infrastructure for bicycles & pedestrians.  In addition, staff are updating the Bicycle and Pedestrian Facility Design classes and guidance to ensure that designers understand how design decisions can lead to the common factors which contribute to crashes for bicyclists and pedestrians (e.g. excessive motor vehicle speed, inadequate separation, conflicts at crossings).
Reduce the number of bicyclist and pedestrian serious injuries involving motorized vehicles by 14 per year from 469 in 2013 to 311 in 2025		413	449			430	390			

<sup>1</sup> Additional flexible funding sources with a wide range of eligibility could be used to address multiple objectives. Examples include RPP, STP-M, CMAQ, and TAP



# 2017 Policy Directive 14 Scorecard

## System Performance

### Highways

PD 14.0 Objectives	2017				2016				Dedicated Funding Sources <sup>1</sup>	Notes
	Budget	Target	Results	Target Met?	Budget	Target	Results	Target Met?		
Prevent the spread of congestion by maintaining a Planning Time Index (PTI) of 1.05 or less on 90% or greater of Interstate centerline miles	\$45.1 million	90%	93.8%		\$34.5 million	90%	92.6%		ITS Maintenance ITS Investments TSMO Performance Program Congestion Relief ROADX	The 2017 PD 14 Scorecard results demonstrate target achievement in slowing the rate of the spread of congestion, measured through the Planning Time Index (PTI) on Colorado's interstates, NHS and Colorado Freight Corridors. While the results look promising, it is important to remember that the PD 14 Objectives for System Performance are to slow the spread of congestion, not to necessarily reduce it. In 2017, CDOT improved travel time reliability in some corridors with the Tolled Express Lanes, expanded Safety Patrol services, enhanced winter operations coordination and improved Traffic Incident Management with corridor first responders. As Colorado's population grows, and demand on the system increases the travel reliability performance of both interstate corridors, National Highway system (NHS) corridors, and Colorado Freight Corridors will continue to decline.  Recommended next steps - Continue deployment of operational solutions, new technology, targeted capacity improvements, improved signal phase and timing, corridor specific traffic incident management, improved public information, and other strategies to incrementally mitigate the speed at which congestion grows on the interstate and NHS.
Prevent the spread of congestion by maintaining a PTI of 1.16 or less on 90% or greater of National Highway System (NHS) centerline miles, excluding Interstates		90%	92.6%			90%	95.9%			
Prevent the spread of congestion by maintaining a PTI of 1.12 or less on 90% or greater of Colorado Freight Corridor centerline miles		90%	94.2%			90%	95.6%			

### Transit

PD 14.0 Objectives	2017				2016				Dedicated Funding Sources <sup>1</sup>	Notes
	Budget	Target	Results	Target Met?	Budget	Target	Results	Target Met?		
Increase ridership of small urban and rural transit grantees by at least an average of 1.5%, per year, statewide over a five-year period beginning in 2012	\$59.5 million	15,652,200	17,769,742		\$54.5 million	15,419,690	17,212,856		FTA Programs FASTER Transit SB-228	The target reflects a five-year rolling period from 2012-2017, a 7.7% overall increase. The source of ridership data is from the National Transit Database. Results reflect data only from agencies supported by CDOT programs in 2012 and not the additional agencies who have since become CDOT rural awardees. Although 2017 results are exceeding the 2017 target, staff need to analyze more years of data to inform any potential changes to the target.  Recommend next steps - We have retained consultant support to assist with revenue service miles data collection, reporting, and other tasks. Refinement of revenue service miles data will continue.
Maintain or increase the total number of revenue service miles of CDOT-funded regional, inter-regional, and inter-city passenger service over that recorded for 2012		TBD	TBD	TBD		N/A	N/A	N/A		

## Infrastructure Condition

### Transit

PD 14.0 Objectives	2017				2016				Dedicated Funding Sources <sup>1</sup>	Notes
	Budget	Target	Results	Target Met?	Budget	Target	Results	Target Met?		
Maintain the percentage of vehicles in the rural Colorado transit fleet at no less than 65% operating in fair, good, or excellent condition, per Federal Transit Administration Guidelines	\$59.5 million	65%	68.7%		\$54.5 million	65%	N/A	N/A	FTA Programs FASTER Transit SB-228	The 2017 results for percentage of fleet operating in fair, good, or excellent condition reflects data as of August 2017. A new inventory of transit fleet condition is expected in mid-to-late 2018. Asset data in CDOT's Transit Asset Inventory System was inadequate prior to this date to provide a 2016 summary result. Positive performance in 2017 can be attributed to a grant selection process that strategically prioritizes replacing older and higher-mileage vehicles.  Recommended next steps -DTR will continue to encourage rural Colorado transit agencies to update inventory and condition of their fleet annually, according to the Federal Transit Administration (FTA) guidelines on age and mileage of vehicles.

<sup>1</sup> Additional flexible funding sources with a wide range of eligibility could be used to address multiple objectives. Examples include RPP, STP-M, CMAQ, and TAP



**COLORADO**

Department of  
Transportation



# TAM Program and Policy Directive 14 Reporting

Colorado Department of Transportation

August 15, 2018

- Debra Perkins-Smith (Director of Division of Transportation Development)
- William Johnson (Performance & Asset Management Branch Manager)
- Tim Kirby (Multimodal Planning Branch Manager)



## 1. Infrastructure Condition Goal Areas

- Pavement
- Bridge Condition and Bridge Risk Metrics
- Maintenance Goals Area
- Buildings
- ITS
- Fleet
- Geohazards
- Tunnels
- Traffic Signals
- Culverts
- Walls

## 2. Asset Management Planning Budget vs Asset Management Need



# Goal Area – Infrastructure Condition (Pavement Metrics)

Infrastructure Condition					
Highways					
PD 14.0 Objectives	2017				Dedicated Funding Sources
	Budget	Target	Results	Target Met?	
Achieve 80% High/Moderate Drivability Life for Interstates based on condition standards and treatments set for traffic volume categories	\$252.1 million	80%	88%		Surface Treatment Program RAMP Funding
Achieve 80% High/Moderate Drivability Life for NHS, excluding Interstates, based on condition standards and treatments set for traffic volume categories		80%	84%		
Achieve 80% High/Moderate Drivability Life for the state highway system based on condition standards and treatments set for traffic volume categories		80%	80%		



# Goal Area – Infrastructure Condition (Bridges)

Infrastructure Condition					
Bridges					
PD 14.0 Objectives	2017				Dedicated Funding Sources
	Budget	Target	Results	Target Met?	
Maintain the percent of NHS total bridge deck area that is not structurally deficient at or above 90%	\$167.4 million	90.0%	95.8%		Colorado Bridge Enterprise On-System Bridge RAMP Funding
Maintain the percent of state highway total bridge deck area that is not structurally deficient at or above 90%		90.0%	95.4%		



# Goal Area – Infrastructure Condition (Bridges Risk Metrics)

Infrastructure Condition					
Bridges					
PD 14.0 Objectives	2017				Dedicated Funding Sources
	Budget	Target	Results	Target Met?	
Percentage of CDOT-owned bridges over waterways that are scour critical.	\$167.4 million	5.0%	6.5%		Colorado Bridge Enterprise On-System Bridge RAMP Funding
Percentage of bridge crossings over Interstates, U.S. routes and Colorado state highways with a vertical clearance less than the statutory maximum vehicle height of 14 feet-6 inches		1.0%	2.4%		
Percentage of bridge crossings over Interstates, U.S. Routes and Colorado state highways with a vertical clearance less than the minimum design requirement of 16 feet-6 inches		18.0%	21.8%		
Percentage of CDOT-owned bridges posted for load		0.1%	0.2%		
Percentage of CDOT-owned bridges with a load restriction		0.9%	1.7%		
Percentage of expansion joints in fair, poor, or severe condition (by length) on CDOT-owned bridges		26% or less	28.5%		
Percentage of CDOT-owned bridge deck area that is unsealed or otherwise unprotected		35% or less	41.7%		



# Goal Area – Maintenance

Maintenance					
PD 14.0 Objectives	2017				Dedicated Funding Sources
	Budget	Target	Results	Target Met?	
Maintain a LOS B grade for snow and ice removal	\$86.1 million	B	B-		Snow and Ice Control Snow and Ice Reserve
Maintain an overall MLOS B minus grade for the state highway system	\$272.6 million	B-	C+		Maintenance



<b>Infrastructure Condition</b>					
<b>Buildings</b>					
<b>PD 14.0 Objectives</b>	<b>2017</b>				<b>Dedicated Funding Sources</b>
	Budget	Target	Results	Target Met?	
Statewide letter grade (Percent C or better) of CDOT Buildings	\$21.4 million	85% C or better	83%		Property Allocation Program RAMP Funding
<b>ITS</b>					
<b>PD 14.0 Objectives</b>	<b>2017</b>				<b>Dedicated Funding Sources</b>
	Budget	Target	Results	Target Met?	
Average Percent Useful Life of ITS Equipment	\$24.5 million	90% or less	82%		ITS Maintenance RAMP Funding
<b>Fleet</b>					
<b>PD 14.0 Objectives</b>	<b>2017</b>				<b>Dedicated Funding Sources</b>
	Budget	Target	Results	Target Met?	
Average Percent Useful Life of Fleet Equipment	\$26.4 million	75% or less	66%		Road Equipment Program RAMP Funding



# Goal Area – Infrastructure Condition (Smaller Asset Programs Continued)

Infrastructure Condition					
Geohazards					
PD 14.0 Objectives	2017				Dedicated Funding Sources
	Budget	Target	Results	Target Met?	
Percent of geohazard segments at or above risk grade B	\$11.8 million	85%	84%		Rockfall Mitigation RAMP Funding
Tunnels					
PD 14.0 Objectives	2017				Dedicated Funding Sources
	Budget	Target	Results	Target Met?	
Percentage of network tunnel length with all elements in equal or better condition than 2.5 Weighted Condition Index	\$10.5 million	75%	70%		Structures On-System RAMP Funding
Traffic Signals					
PD 14.0 Objectives	2017				Dedicated Funding Sources
	Budget	Target	Results	Target Met?	
Percent of signal infrastructure in severe condition (Dollar weighted)	\$16.9 million	2%	8%		Traffic Signals Program

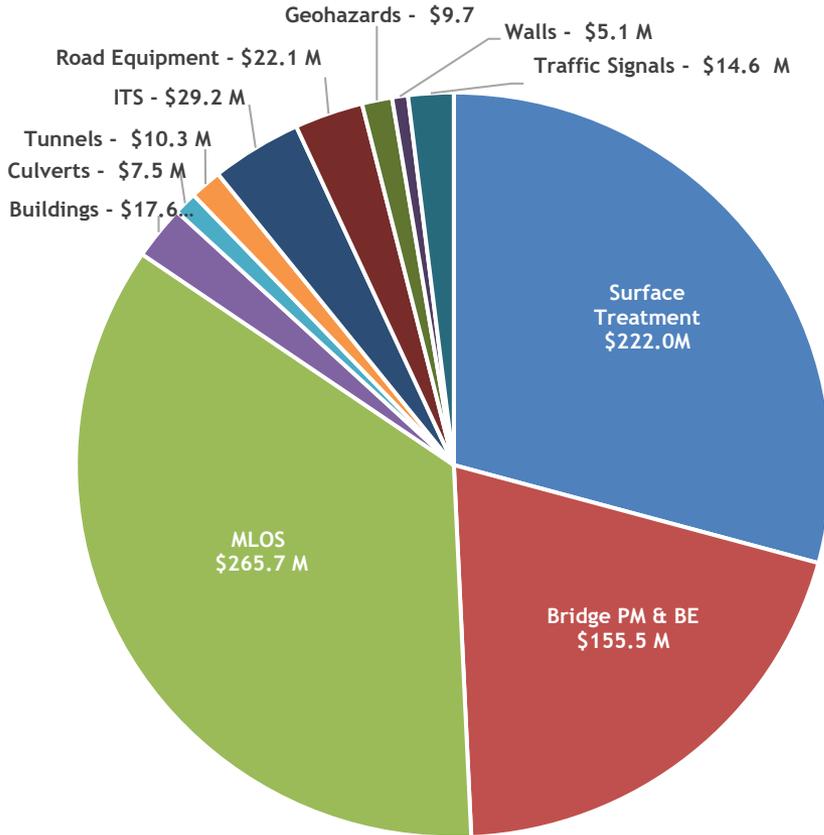


# Goal Area – Infrastructure Condition (Smaller Asset Programs Continued)

Infrastructure Condition					
Culverts					
PD 14.0 Objectives	2017				Dedicated Funding Sources
	Budget	Target	Results	Target Met?	
Percent of culverts in poor condition (have culvert rating of 4 or less)	\$11.0 million	5%	5.09%		Structures On-System RAMP Funding
Walls					
PD 14.0 Objectives	2017				Dedicated Funding Sources
	Budget	Target	Results	Target Met?	
Percentage of CDOT-owned walls, by square foot, that are poor (have a rating of 4 or less)	\$10.2 million	2.5%	3.10%		Structures On-System RAMP Funding

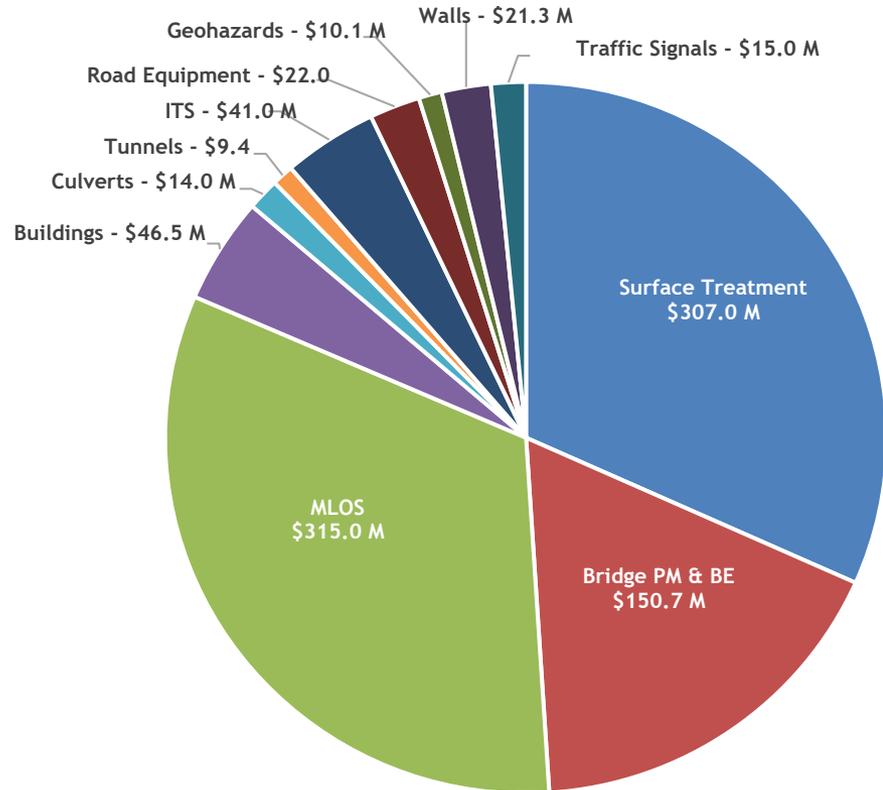


**FY2020 Asset Management Budget**



**Total Budget = \$755 million**

**Need to Reach Fiscally Constrained Targets by 2027**



**Total Need = \$956 million**



**COLORADO**  
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Transportation

# QUESTIONS?





**COLORADO**

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Transportation

# Active Transportation Element of Development Program

August 17, 2018



# Agenda

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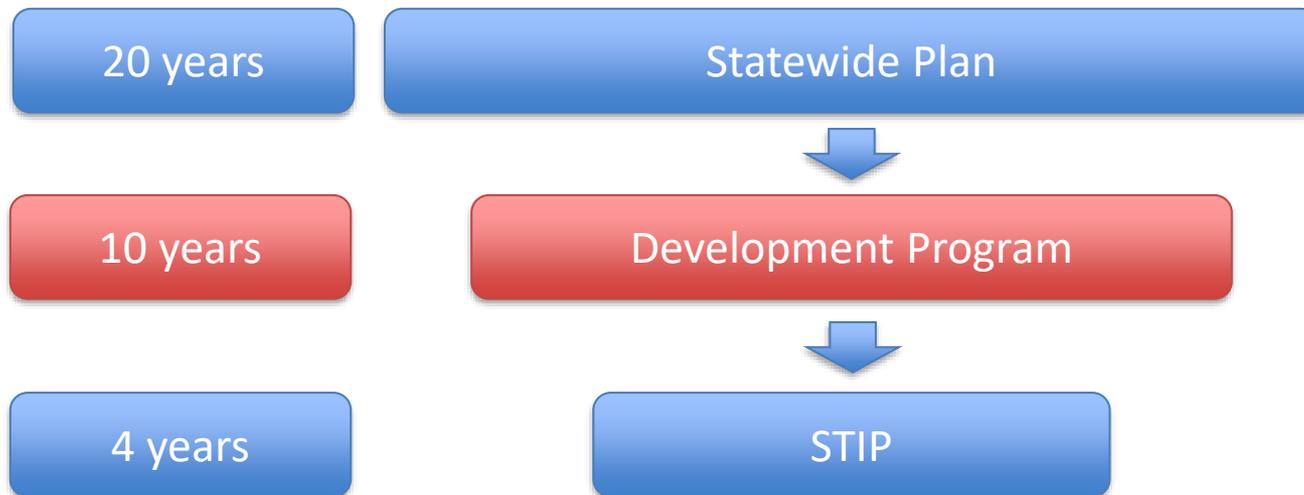
- Development Program Overview
- Elements of Development Program
- Use of the Development Program
- Process for Active Transportation Element Development
- Next Steps



# Development Program Overview

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- Focused on identifying major investment needs and establishing priorities for large-scale projects
- Focused on projects that otherwise couldn't be constructed based on funding constraints
- Bridges the gap between the between Statewide Transportation Plan (SWP) and Statewide Transportation Improvement Program (STIP)





# Elements of Development Program

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# Process for Development

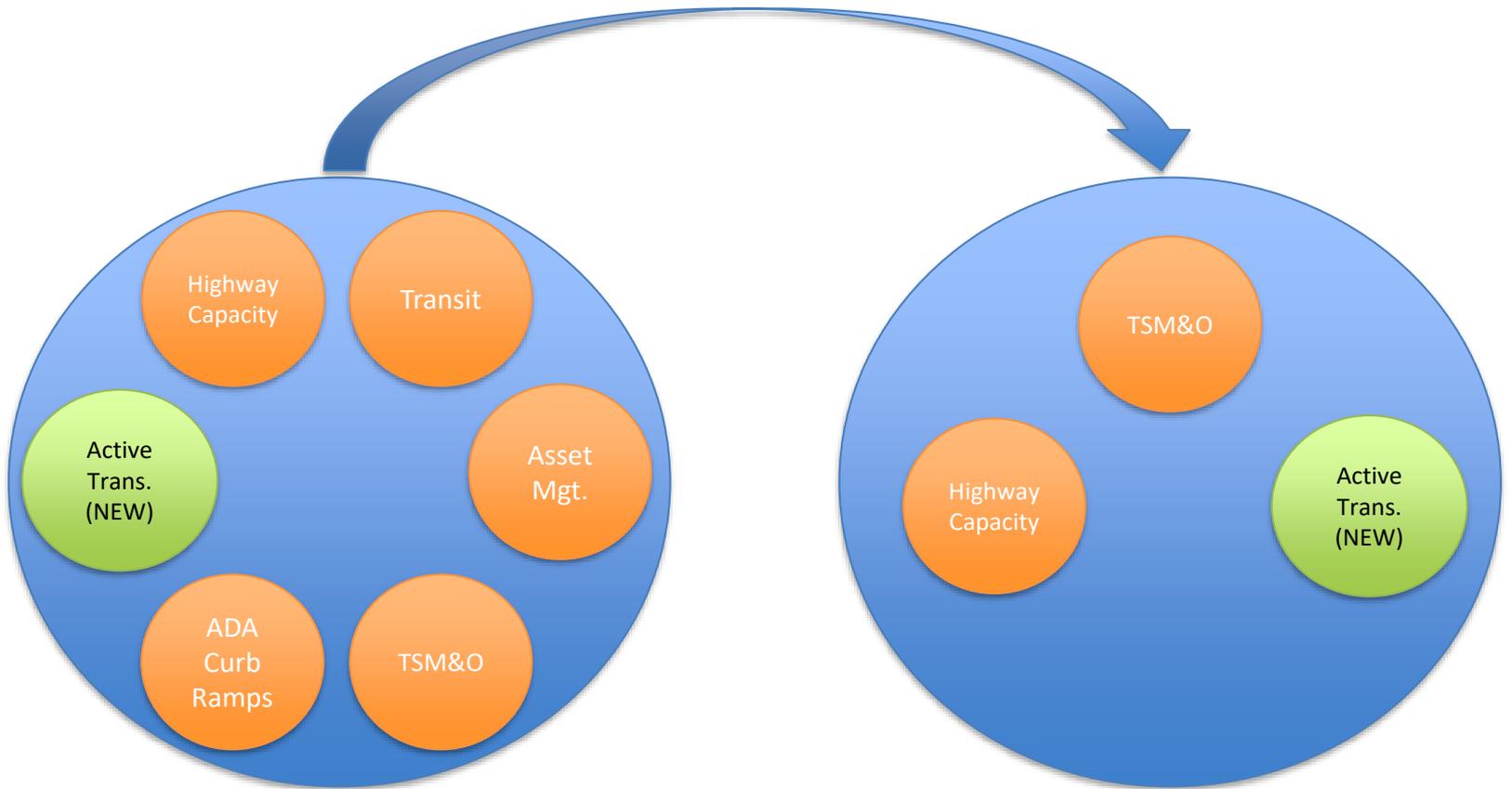


1. CDOT's Division of Transportation Development (DTD) and Regions review applicable planning documents
  - Studies
  - Environmental
  - Regional Transportation Plans
2. Transportation Planning Regions (TPRs) and Metropolitan Planning Organizations (MPOs) review initial list.
3. TPRs and MPOs discuss with respective memberships and add on-system projects to the list
4. List evolves over time as priorities emerge or change



# Uses of the Development Program

- Expression of needs
- Readiness for new/or additional funding sources



Development Program

Example: New Funding Program



## Next Steps

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- DTD/Regions will complete analysis of plans, studies and environmental
- MPO/TPR review and comments



**COLORADO**  
**Department of Transportation**  
 Division of Transportation Development

Multimodal Planning Branch  
 2829 W. Howard Place  
 Denver, CO 80204

TO: STAC Members

FROM: Debra Perkins-Smith, Division of Transportation Development (DTD)

DATE: August 17<sup>th</sup>, 2018

RE: ALT Fuels Colorado Program: Statewide Funds for Alternative Fuel Vehicle Replacements Now Available

### Purpose

The ALT Fuels Colorado Program is a partnership between CDOT, the Regional Air Quality Council (RAQC), and the Colorado Energy Office (CEO) to support greater adoption of alternative fuels throughout Colorado. Since 2014, the RAQC vehicle purchase portion of AFC has provided funding for 884 vehicles within the 11-county ozone non-attainment and carbon monoxide maintenance area using \$15 million of federal CMAQ funding allocated by the Transportation Commission with the endorsement of the STAC.

Starting in 2018, an additional \$18 million are being added to the existing AFC Program via the State of Colorado's \$68.7 million allocation of funds from the national Volkswagen Settlement for diesel emissions violations. The first application round for these funds is open between August 15<sup>th</sup> and September 27<sup>th</sup>, 2018.

### Expanded Eligibility

The use of Settlement Funds in the AFC Program has expanded the geographic eligibility of applicants beyond the original 11-county area to the entire State of Colorado. Funds are available to public and private fleets and may support the purchase of propane, CNG, or electric Class 4 - Class 8 trucks, shuttle buses, and school buses within defined percentages and dollar caps. Successful applicants are required to scrap an existing vehicle in order to replace it with a new alternative fuel model.

For more details on eligibility, funding caps, and grantee requirements, see the RAQC's [AFC Program Overview](#).

### Details and Application

For additional details, including FAQs, fact sheets, and the online application form, visit the RAQC's [ALT Fuels Colorado Program](#) page.

### Contacts

Questions and request for application support can be routed to Kaylyn Bopp at: [kbopp@raqc.org](mailto:kbopp@raqc.org)

