

AGENDA
REGIONAL TRANSPORTATION COMMITTEE
Tuesday, September 20, 2016
8:30 a.m.
1290 Broadway
Independence Pass Board Room

1. Call to Order
2. Public Comment
3. August 16, 2016 RTC Meeting Summary
(Attachment A)

ACTION ITEMS

4. Discussion on amendments of the 2016-2021 Transportation Improvement Program (TIP).
(Attachment B) Todd Cottrell
5. Discussion on redetermination of air quality conformity for the 2015 Cycle 2 2040 Fiscally Constrained Regional Transportation Plan (2040 RTP), Amended 2016-2021 Transportation Improvement Program (TIP) and associated air quality conformity documents.
(Attachment C) Robert Spotts

INFORMATIONAL ITEM

6. Briefing on Collaborative Infrastructure Data Project.
(Attachment D) Ashley Summers

ADMINISTRATIVE ITEMS

7. Member Comment/Other Matters
8. Next Meeting – October 18, 2016
9. Adjournment

Persons in need of auxiliary aids or services, such as interpretation services or assisted listening devices, are asked to contact DRCOG at least 48 hours in advance of the meeting by calling (303) 480-6744.



ATTACHMENT A

MEETING SUMMARY REGIONAL TRANSPORTATION COMMITTEE Tuesday, August 16, 2016

MEMBERS PRESENT:

Ed Peterson	Colorado Department of Transportation
Gary Reiff	Colorado Department of Transportation
Paul Jesaitis (Alternate)	Colorado Department of Transportation
Debra Perkins-Smith (Alternate)	Colorado Department of Transportation
Elise Jones (Chair)	Denver Regional Council of Governments
Douglas Rex (Alternate)	Denver Regional Council of Governments
Ron Rakowsky	Denver Regional Council of Governments
Jennifer Schaufele	Denver Regional Council of Governments
Ashley Stolzmann	Denver Regional Council of Governments
David Genova	Regional Transportation District
Tina Francone	Regional Transportation District
Tom Tobiassen (Alternate)	Regional Transportation District
Ernest Archuleta (Alternate)	Regional Transportation District
Jeff Kullman	Other-Business Interests

Others Present: Liz Adams, CRL Associates

DRCOG Staff: Steve Cook, Jacob Riger, Todd Cottrell, Brad Calvert, Matthew Helfant, Mark Northrop, Casey Collins

Call to Order

Past Chair Jackie Millet called the meeting to order at 8:34 a.m.

Public Comment

There was no public comment heard.

Summary of July 19, 2016 Meeting

The summary was accepted as written.

ACTION ITEMS

Discussion on participation in the Mobility Choice Blueprint Initiative and administratively modify the 2016-2021 Transportation Improvement Program (TIP) to include \$500,000 of Surface Transportation Program-Metro funds towards the endeavor.

Doug Rex introduced former CDOT Executive Director, Don Hunt, who presented an overview of the proposed initiative created by the Denver Metro Chamber of Commerce called Mobility Choice. Mr. Hunt, who will be the initial managing director, described the initiative's purpose to maximize investments and advance transportation technologies to improve future mobility in the region.

Mr. Rex noted the DRCOG Board, at its July meeting, had a discussion about the merits of participating in Mobility Choice and directed staff to proceed with a formal action to participate and contribute funding for the Mobility Choice Blueprint. Other possible funding partners include CDOT (approved funding) and RTD. All three partners must approve funding for the initiative to proceed. If it proceeds, a

consultant-led study called the Mobility Choice Blueprint will be developed over the next year and a half to explore what is needed to prepare the region for future mobility technologies.

The Blueprint's estimated cost is \$1.5 million, of which the DRCOG share is \$500,000, to be funded through STP-Metro. It is proposed CDOT and RTD would each provide \$500,000 towards the blueprint. The Denver Metro Chamber will provide \$500,000 for operational funding for the Mobility Choice non-profit organization.

Tom Tobiassen MOVED to recommend to the Board of Directors DRCOG participation in the Mobility Choice Blueprint Initiative and to administratively modify the *2016-2021 Transportation Improvement Program (TIP)* to include \$500,000 of Surface Transportation Program-Metro funds for the Mobility Choice Blueprint study. The motion was seconded and passed with one opposed.

Discussion on project selection recommendations for funding in fiscal years 2016 and 2017 for the Traffic Signal System Improvement Program (TSSIP) and the Regional Intelligent Transportation System (ITS) Deployment Program miscellaneous equipment call for projects.

Greg MacKinnon presented the list of recommended miscellaneous equipment projects to be allocated set-aside FY 2016 and 2017 CMAQ funding identified in the TSSIP and the Regional ITS Deployment Program.

A call for projects was held in April/May 2016. Nine applications were received from seven jurisdictions, of which seven applied for TSSIP (five funded), two for ITS (both funded), and no applications applied for multimodal signal operations support.

The projected funding distribution was as follows:

	FY16	FY17	Total
TSSIP	\$435,000	\$328,000	\$763,000
Multimodal Signal Operations Support		\$356,000	\$356,000
ITS	\$127,300	\$513,700	\$641,000
			\$1,760,000

The recommended projects are:

Jurisdiction	Project	Federal Allocation	Non-Federal Match
Arvada	Extend communications on 64 th Ave	\$15,380	\$0
Brighton	Upgrade traffic signal controllers citywide	\$40,584	\$0
CDOT	Travel time monitoring system equipment	\$104,000	\$26,000
CDOT	Travel time monitoring system equipment	\$345,600	\$86,400
Centennial	Extend communications on Arapahoe Rd	\$2,200	\$0
Commerce City	Upgrade cabinets and controllers on Quebec St	\$33,000	\$0
Commerce City	Upgrade cabinets and controllers on SH 2	\$99,000	\$0
Superior/Louisville	Upgraded signal control system on McCaslin Blvd	\$142,300	\$0
	Remainder Unallocated	\$977,936	

Ron Rakowsky MOVED to recommend to the Board of Directors the project selection recommendations for funding in fiscal years 2016 and 2017 for the *Traffic Signal System Improvement Program (TSSIP)* and the *Regional Intelligent Transportation System (ITS) Deployment Program* miscellaneous equipment call for projects. The motion was seconded and passed unanimously.

INFORMATIONAL ITEMS

Discussion on the proposed update to *The Prospectus-Transportation Planning in the Denver Region*.

Doug Rex presented a review draft of the planning process document that was last updated in 2011. Updated information includes revisions to incorporate the new federal surface transportation act (FAST Act) and new planning regulations for performance management, along with other edits. The document's name was shortened to *Transportation Planning in the Denver Region*. The committee was asked to submit any comments to staff. The committee will be acting on a recommendation in October 2016.

Briefing on the draft *Active Transportation* component of the *2040 Metro Vision Regional Transportation Plan*.

Melina Dempsey presented the draft Active Transportation component for the forthcoming 2040 MVRTP. This component of the 2040 MVRTP replaces the Bicycle and Pedestrian section (from the previous 2035 MVRTP) and is the foundation for the development of the Active Transportation Plan, a task in DRCOG's *2016-2017 Unified Planning Work Program*.

The meeting was adjourned at 9:33 a.m. The next scheduled meeting is September 20, 2016.

ATTACHMENT B

To: Chair and Members of the Regional Transportation Committee

From: Todd Cottrell, Senior Transportation Planner
303 480-6737 or tcottrell@drcog.org

Meeting Date	Agenda Category	Agenda Item #
September 20, 2016	Action	4

SUBJECT

DRCOG's transportation planning process allows for Board-approved amendments to the current Transportation Improvement Program (TIP), taking place on an as-needed basis. Typically, these amendments involve the addition or deletion of projects, or adjustments to existing projects and do not impact funding for other projects in the TIP.

PROPOSED ACTION/RECOMMENDATIONS

DRCOG staff recommends approval of the proposed amendments because it complies with the Board adopted [TIP Amendment Procedures](#).

ACTION BY OTHERS

[August 22, 2016](#) – TAC recommended approval.

SUMMARY

The TIP projects to be amended are shown below and listed in Attachment 1. Highlighted items in the attachment depict the specific proposed changes. The proposed policy amendments to the [2016-2021 Transportation Improvement Program](#) have been found to conform with the State Implementation Plan for Air Quality.

- **New Project US-85 Corridor Improvements: I-76 to 124th Ave (CDOT Region 1)**
This project will conduct preconstruction activities for corridor improvements to US-85, from I-76 to 124th Ave.
- **2012-081 North Metro Rail Bicycle/Pedestrian Access to Three FasTracks Stations (Thornton)**
This project is moved to the current TIP and the scope is adjusted to reflect no improvements at 144th Ave. and other project modifications.

Additional TIP Funding for Waiting List Projects

Earlier this year, DRCOG was made aware of additional revenues to program due to the Fixing America's Surface Transportation (FAST) Act. This additional funding, combined with previous project savings and returns, totaled \$21,399,000. DRCOG staff began the process of selecting projects from the Board-approved waiting list according to the protocols adopted by the Board in June, 2016. The waiting list protocol is shown in Attachment 2.

The first step was to ask existing project sponsors if they would like to advance any of their existing project phases into an earlier year. Three sponsors requested to advance project phases: Castle Rock, RTD, and Superior.

The proposed amendments in which existing project phases and corresponding funding would shift to an earlier fiscal year are listed below:

- **2016-041 Founders Pkwy and Allen Way Intersection Improvements (Castle Rock)**
Funding is advanced per TIP waiting list protocol.
- **2016-019 Colfax 15L Transit Improvements: I-225 to I-25 (RTD)**
Funding is advanced per TIP waiting list protocol.
- **2016-034 Superior Trail: McCaslin BRT to Davidson Mesa Underpass (Superior)**
Funding is advanced per TIP waiting list protocol.

The next step was to contact sponsors of the ranked projects on the waiting list by funding category. The waiting list contains two ranked lists of projects; one for STP-Metro and the other for CMAQ and/or TAP. STP-Metro is allocated to fund all roadway projects and studies, while CMAQ and/or TAP are used to fund bicycle/pedestrian and transit projects. Of the \$21,399,000 available, \$12,223,000 is STP-Metro and \$9,176,000 is CMAQ.

STP-Metro

DRCOG contacted the first two sponsors on the list, Commerce City and Longmont, and offered the full federal funding request of \$150,000 and \$300,000 respectively. Each sponsor accepted and agreed to complete the projects as originally submitted. With a remaining balance of \$11,273,000, Douglas County was offered the amount to partially fund its project. Douglas County accepted and agreed to complete the project as originally submitted with the reduced federal amount.

- **New Project 88th Ave NEPA Study: I-76 to Hwy 2 (Commerce City)**
Add new NEPA study per waiting list protocol.
- **New Project Southwest Longmont Subarea Operations Study (Longmont)**
Add new operational study per waiting list protocol.
- **New Project US-85: Blakeland Dr to County Line Rd Operational Improvements (Douglas County)**
Add new project per waiting list protocol for operational improvements along US-85.

CMAQ

DRCOG contacted the first two sponsors on the list, University of Colorado-Boulder and the City of Boulder, and offered the full federal funding request of \$4,798,000 and \$3,200,000 respectively. Each sponsor accepted and agreed to complete the projects as originally submitted. With a remaining balance of \$1,178,000, Denver was offered

the amount to partially fund its project. Denver accepted and agreed to complete the project as originally submitted with the reduced federal amount.

- **New Project** **19th Street Trail and Bridge: Boulder Creek Trail to CU Main Campus (University of Colorado-Boulder)**
Add new project per waiting list protocol for a new trail and bridge connecting the CU campus to Boulder.
- **New Project** **SH-157/Foothills Pkwy Bike/Ped Underpass: north and south of Colorado Ave (Boulder)**
Add new bicycle/pedestrian underpass project per waiting list protocol.
- **New Project** **South Platte Greenway Access Sidewalk Improvements: Iowa Ave RR Underpass and Santa Fe Dr (Denver)**
Add new sidewalk improvements project per waiting list protocol.

Amendment to Table 5 of the 2016-2021 TIP

If action is taken to fund projects off the waiting list, the partial and fully funded projects per the protocol will need to be removed from Table 5 and the remaining projects renumbered. Attachment 3 displays a draft revised Table 5 of the 2016-2021 TIP assuming all projects contained within these amendments are funded.

PREVIOUS DISCUSSIONS/ACTIONS

N/A

PROPOSED MOTION

Move to recommend to the Board of Directors the attached amendments and adjustments to Table 5 (waiting list) of the *2016-2021 Transportation Improvement Program* (TIP).

ATTACHMENTS

1. Proposed TIP Amendments
2. Waiting List Protocol (Appendix E of the 2016-2021 TIP)
3. Revised Waiting List (Table 5 of the 2016-2021 TIP)

ADDITIONAL INFORMATION

If you need additional information, please contact Todd Cottrell, Senior Transportation Planner, Transportation Planning and Operations at (303) 480-6737 or tcottrell@drcoq.org.

New Project: Add new project from CDOT Region 1.

New Project

Title: **US-85 Corridor Improvements: I-76 to 124th Ave**

Project Type: **Roadway Operational Improvements**

TIP-ID: **Request**

STIP-ID:

Open to Public:

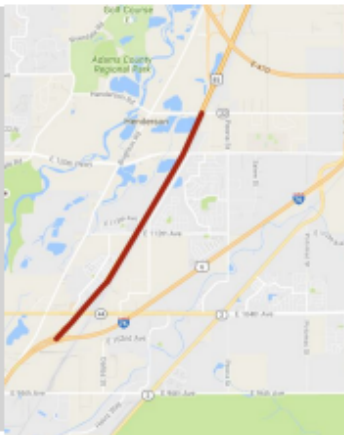
Sponsor: **CDOT Region 1**

Project Scope

US-85 corridor operational improvements between I-76 and 124th Ave.

Current funding is for pre-construction activities, including ROW, environmental, and design.

Affected Municipality(ies)	Affected County(ies)
Brighton Commerce City	Adams



Amounts in \$1,000s	Prior Funding	FY16	FY17	FY18	FY19	FY20-21	Future Funding	Total Funding
Federal		\$0	\$0	\$0	\$0	\$0		
State (TCC)		\$0	\$15,000	\$0	\$0	\$0		
Local		\$0	\$0	\$0	\$0	\$0		
Total	\$0	\$0	\$15,000	\$0	\$0	\$0	\$0	\$15,000

2012-081: Revise scope.

Existing (2012-2017 TIP)

Title: **North Metro Rail Bicycle/Pedestrian Access to Four FasTrack Stations**

TIP-ID: **2012-081**

STIP-ID:

Open to Public:

Project Type: **Bicycle and Pedestrian Projects (New)**

Sponsor: **Thornton**

Project Scope

Project will provide pedestrian and bicycle sidewalks and trails at the 88th Ave, 104th, Eastlake-124th, and the 144th stations

This project constructs the following facilities:

1. Welby Rd, west side, from Beachwood Dr approx. 1700 ft south: 8 ft detached walk fill in attached or detached, here and following
2. 88th Ave, north side, from Welby Rd to Monroe St: 8 ft detached walk
3. Moon Ct extension from Carnation Way approx. 1400 ft east: 10 ft trail
4. "New" Welby Rd, west side from 88th Ave to current Welby Rd (see TIP ID 2012-084): 8 ft detached walk
5. Presidential Estates east side from 100th Ave to Settlers Chase trail: 10 ft trail
6. York St, east side, from 112th Ave approx. 1900 ft north: 8 ft detached walk
7. Claude Ct, east side, from 128th Ave approx. 2200 ft. south: 8 ft detached walk
8. 1st St, west side, from 124th Ave approx. 420 ft north: 10 ft trail
9. Eastlake Estates connection (1st St extension) from Lake Ave approx. 700 ft north: 8 ft detached walk
10. Haven South (west side of railroad) from 144th Ave to 145th Ct: 10 ft trail
11. 144th Ave, south side, from railroad to Detroit St: 10 ft trail
12. Fallbrook Farms (east side of railroad) from 142nd Pl to 144th Ave: 10 foot trail



Revised (2016-2021 TIP)

Title: **North Metro Rail Bicycle/Pedestrian Access to Three FasTracks Stations**

TIP-ID: **2012-081**

STIP-ID:

Open to Public: **2017**

Project Type: **Bicycle and Pedestrian Projects (New)**

Sponsor: **Thornton**

Project Scope

The Project will provide pedestrian and bicycle sidewalks and trails at the future city of Thornton FasTracks Stations. Construction will occur in the vicinity of the 88th Ave, 104th Ave, and Eastlake stations. Additional work may take place at the 88th Ave, 112th Ave, and 124th Ave stations as funding allows. Detached and attached sidewalks and trails, varying from 8 to 10 feet wide, along with appropriate drainage, retaining walls, ROW, and supporting improvements will be constructed:

- 1) 88th Station: 88th Ave, north side, from New Welby Rd to Old Welby Rd and Monroe St approximately 150 feet west,
- 2) 88th Station: Yucca Way extension to RTD pedestrian underpass,
- 3) 88th Station: "New" Welby Rd, west side from 88th Ave to 88th Ave Station Access Driveway (see TIP ID 2012-084),
- 4) 104th Station: 100th Ave, south side from Jackson St to Settlers Chase Trail; and
- 5) 124th Station: 1st St, west side, from 124th Ave approximately 420 feet north, Birch Ave approximately 480 feet south, and 128th Ave approx. 200 feet south.



2016-041: Advance funding per TIP waiting list protocol.

Existing

Title: **Founders Pkwy and Allen Way Intersection Improvements**

Project Type: **Roadway Operational Improvements**

TIP-ID: **2016-041**

STIP-ID:

Open to Public: **2020**

Sponsor: **Castle Rock**

Project Scope

Project will widen Founders Pkwy (SH-86) to accommodate a second eastbound left turn lane, and a dedicated westbound right turn lane. The new left turn lane will extend to the I-25 / Founders northbound ramp intersection. Project will also add a second southbound right turn lane at Founders and a second through lane at the Allen Way and Allen St intersection. The existing roadside trail will be replaced with a new 8-ft trail.



Affected Municipality(ies)	Affected County(ies)	Project Phases	
Castle Rock	Douglas	Year	Phase
		2017	Initiate Environmental
		2017	Initiate Design
		2018	Initiate ROW
		2019	Initiate Construction

Amounts in \$1,000s	Prior Funding	FY16	FY17	FY18	FY19	FY20-21	Future Funding	Total Funding
Federal		\$0	\$0	\$0	\$0	\$0		
Federal (STP-M)		\$0	\$284	\$269	\$1,447	\$0		
State		\$0	\$0	\$0	\$0	\$0		
State (Faster-S)		\$0	\$0	\$0	\$280	\$0		
Local		\$0	\$71	\$68	\$905	\$0		
Total	\$0	\$0	\$355	\$337	\$2,632	\$0	\$0	\$3,324

Revised Funding Table

Amounts in \$1,000s	Prior Funding	FY16	FY17	FY18	FY19	FY20-21	Future Funding	Total Funding
Federal		\$0	\$0	\$0	\$0	\$0		
Federal (STP-M)		\$0	\$284	\$1,716	\$0	\$0		
State		\$0	\$0	\$0	\$0	\$0		
State (Faster-S)		\$0	\$0	\$280	\$0	\$0		
Local		\$0	\$71	\$973	\$0	\$0		
Total	\$0	\$0	\$355	\$2,969	\$0	\$0	\$0	\$3,324

2016-019: Advance funding per TIP waiting list protocol.

Existing

Title: **Colfax 15L Transit Improvements: I-225 to I-25**

Project Type: **Transit Passenger Facilities**

TIP-ID: **2016-019**

STIP-ID:

Open to Public: **2018**

Sponsor: **R T D**

Project Scope

Project will replace or add existing bus stop amenities for stops along the 15L bus route servicing Colfax Ave, from I-225 to I-25. Improvements include new shelters, station furniture, lighting, and security cameras.



Affected Municipality(ies)	Affected County(ies)	Project Phases	
		Year	Phase
Aurora	Adams	2018	Initiate Construction
Denver	Arapahoe	2019	Initiate Construction
	Denver		

Amounts in \$1,000s	Prior Funding	FY16	FY17	FY18	FY19	FY20-21	Future Funding	Total Funding
Federal (STP-M)		\$0	\$0	\$1,300	\$1,300	\$0		
State		\$0	\$0	\$0	\$0	\$0		
Local		\$0	\$0	\$325	\$325	\$0		
Total	\$0	\$0	\$0	\$1,625	\$1,625	\$0	\$0	\$3,250

Revised Funding Table

Amounts in \$1,000s	Prior Funding	FY16	FY17	FY18	FY19	FY20-21	Future Funding	Total Funding
Federal (STP-M)		\$0	\$0	\$2,600	\$0	\$0		
State		\$0	\$0	\$0	\$0	\$0		
Local		\$0	\$0	\$650	\$0	\$0		
Total	\$0	\$0	\$0	\$3,250	\$0	\$0	\$0	\$3,250

2016-034: Advance funding per TIP waiting list protocol.

Existing

Title: **Superior Trail: McCaslin BRT to Davidson Mesa Underpass**

Project Type: **Bicycle and Pedestrian Projects (New)**

TIP-ID: **2016-034**

STIP-ID:

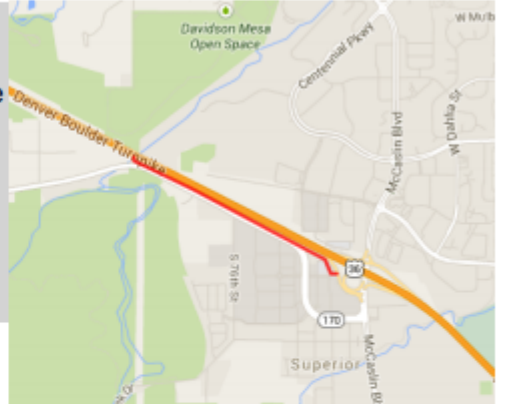
Open to Public: **2020**

Sponsor: **Superior**

Project Scope

This project constructs a 10 ft wide concrete multi-use trail between US 36 and Marshall Rd, from the McCaslin BRT Station to the US 36 pedestrian and bicycle underpass at Davidson Mesa.

A Bus-then-Bike Shelter with 31 covered bicycle parking spaces, lighting, landscaping, and way-finding signage with destination and distance information will also be included.



Affected Municipality(ies)	Affected County(ies)	Project Phases	
Superior	Boulder	Year	Phase
		2017	Initiate Design
		2018	Initiate ROW
		2019	Initiate Construction

Amounts in \$1,000s	Prior Funding	FY16	FY17	FY18	FY19	FY20-21	Future Funding	Total Funding
Federal (CMAQ)		\$0	\$200	\$147	\$350	\$0		
State		\$0	\$0	\$0	\$0	\$0		
Local		\$0	\$50	\$37	\$191	\$0		
Total	\$0	\$0	\$250	\$184	\$541	\$0	\$0	\$975

Revised Funding Table

Amounts in \$1,000s	Prior Funding	FY16	FY17	FY18	FY19	FY20-21	Future Funding	Total Funding
Federal (CMAQ)		\$0	\$200	\$497	\$0	\$0		
State		\$0	\$0	\$0	\$0	\$0		
Local		\$0	\$50	\$228	\$0	\$0		
Total	\$0	\$0	\$250	\$725	\$0	\$0	\$0	\$975

Request: Add a new Commerce City study selected from the waiting list.

New Project

Title: **88th Ave NEPA Study: I-76 to Hwy 2**

Project Type: **Roadway/Transit Studies**

TIP-ID: **Request**

STIP-ID:

Open to Public:

Sponsor: **Commerce City**

Project Scope

A NEPA study will be performed to determine the environmental effects of the proposed roadway project on 88th Ave, from NB I-76 Ramp to Highway 2.



Affected Municipality(ies)	Affected County(ies)	Project Phases	
		Year	Phase
Commerce City	Adams	2017	Initiate Study
Unincorporated			

Amounts in \$1,000s	Prior Funding	FY16	FY17	FY18	FY19	FY20-21	Future Funding	Total Funding
Federal (STP-M)		\$0	\$150	\$0	\$0	\$0		
State		\$0	\$0	\$0	\$0	\$0		
Local		\$0	\$100	\$0	\$0	\$0		
Total	\$0	\$0	\$250	\$0	\$0	\$0	\$0	\$250

Request: Add a new Longmont study selected from the waiting list.

New Project

Title: **Southwest Longmont Subarea Operations Study**

Project Type: **Roadway/Transit Studies**

TIP-ID: **Request**

STIP-ID:

Open to Public:

Sponsor: **Longmont**

Project Scope

The study will look at the operational improvements of three major intersections (Ken Pratt/Hover, Ken Pratt/Nelson, and Nelson/Hover), as well as the operations of the three corridors in this subarea. Planning-level costs and design for the three corridors and intersections for future construction projects will be developed, as well as incorporating future BRT along Ken Pratt Blvd/SH-119, in the next 10 years.



Affected Municipality(ies)	Affected County(ies)	Project Phases	
Longmont	Boulder	Year	Phase
		2017	Initiate Study

Amounts in \$1,000s	Prior Funding	FY16	FY17	FY18	FY19	FY20-21	Future Funding	Total Funding
Federal (STP-M)		\$0	\$300	\$0	\$0	\$0	\$0	
State		\$0	\$0	\$0	\$0	\$0	\$0	
Local		\$0	\$75	\$0	\$0	\$0	\$0	
Total	\$0	\$0	\$375	\$0	\$0	\$0	\$0	\$375

Request: Add a new Douglas County project selected from the waiting list.

New Project

Title: **US 85: Blakeland Dr to County Line Rd Operational Improvements**

Project Type: **Roadway Operational Improvements**

TIP-ID: **Request**

STIP-ID:

Open to Public: **2020**

Sponsor: **Douglas County**

Project Scope

This project will widen Santa Fe Dr (US-85) from 4 to 6 thru lanes from Blakeland Dr to approximately 1,200 ft north of the intersection with County Line Rd. Features include:

- 1) Intersection improvements, including adding or improving left turn lanes, auxiliary lanes, and traffic signals, where warranted,
- 2) Reconstructing and/or repaving existing lanes, where feasible,
- 3) Replacing the existing US-85 bridge over C-470, including shoulders,
- 4) New and improved signal interconnection and ITS infrastructure,
- 5) A bike/ped multi-use trail along the east side of US-85 from Blakeland Dr to the C-470 trail,
- 6) Grade separating the C-470 trail under US-85,
- 7) A bike/ped bridge over C-470 along US-85, and bike counters; and
- 8) Transit stop enhancements including bus pads, shelters, benches, sidewalk connections, and landscaped medians.



Affected Municipality(ies)	Affected County(ies)	Project Phases	
Unincorporated	Douglas	Year	Phase
		2019	Initiate Construction

Amounts in \$1,000s	Prior Funding	FY16	FY17	FY18	FY19	FY20-21	Future Funding	Total Funding
Federal (STP-M)		\$0	\$0	\$0	\$11,273	\$0		
State		\$0	\$0	\$0	\$0	\$0		
Local		\$0	\$0	\$0	\$18,727	\$0		
Total	\$0	\$0	\$0	\$0	\$30,000	\$0	\$0	\$30,000

Request: Add a new University of Colorado-Boulder project selected from the waiting list.

New Project

Title: **19th Street Trail and Bridge: Boulder Creek Trail to CU Main Campus** Project Type: **Bicycle and Pedestrian Projects (New)**

TIP-ID: **Request** STIP-ID: Open to Public: **2020** Sponsor: **University of Colorado-Boulder**

Project Scope

Construct a new 10' bike/ped bridge at 19th St and new 10' ADA compliant bike/ped trail from the bridge up the hillside to connect the City of Boulder to the University of Colorado campus.



Affected Municipality(ies)	Affected County(ies)	Project Phases	
Boulder	Boulder	Year	Phase
		2017	Initiate Environmental
		2017	Initiate Design
		2018	Initiate ROW
		2019	Initiate Construction

Amounts in \$1,000s	Prior Funding	FY16	FY17	FY18	FY19	FY20-21	Future Funding	Total Funding
Federal (CMAQ)		\$0	\$420	\$498	\$3,880	\$0		
State		\$0	\$0	\$0	\$0	\$0		
Local		\$0	\$105	\$125	\$970	\$0		
Total	\$0	\$0	\$525	\$623	\$4,850	\$0	\$0	\$5,998

Request: Add a new Boulder project selected from the waiting list.

New Project

Title: **SH-157/Foothills Pkwy Bike/Ped Underpass: north and south of Colorado Ave**

Project Type: **Bicycle and Pedestrian Projects (Upgrade/Reconstruct)**

TIP-ID: **Request**

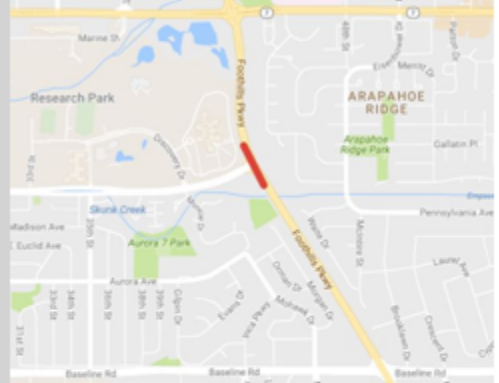
STIP-ID:

Open to Public: **2020**

Sponsor: **Boulder**

Project Scope

This project will construct a bike/ped underpass providing a grade separated crossing of Foothills Pkwy/SH-157 near Colorado Ave, meeting AASHTO and ADA design guidelines. The project will provide wayfinding/signage features, 20 bicycle parking spaces, and connections to existing bicycle and pedestrian facilities on either side of the crossing.



Affected Municipality(ies)	Affected County(ies)	Project Phases	
Boulder	Boulder	Year	Phase
		2017	Initiate Environmental
		2017	Initiate Design
		2019	Initiate Construction

Amounts in \$1,000s	Prior Funding	FY16	FY17	FY18	FY19	FY20-21	Future Funding	Total Funding
Federal (CMAQ)		\$0	\$400	\$160	\$2,640	\$0		
State		\$0	\$0	\$0	\$0	\$0		
Local		\$0	\$100	\$40	\$660	\$0		
Total	\$0	\$0	\$500	\$200	\$3,300	\$0	\$0	\$4,000

Request: Add a new Denver project selected from the waiting list.

New Project

Title: **South Platte Greenway Access Sidewalk Improvements: Iowa Ave RR Underpass and Santa Fe Dr** Project Type: **Bicycle and Pedestrian Projects (Upgrade/Reconstruct)**

TIP-ID: **Request**

STIP-ID:

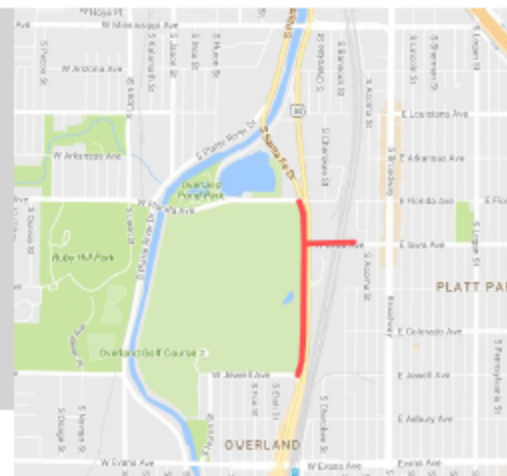
Open to Public: **2020**

Sponsor: **Denver**

Project Scope

This project will reconstruct the sidewalk along Iowa Ave from Bannock St to Santa Fe Dr (excludes the sidewalk underneath the railroad bridge), and the west side of Santa Fe Dr from Florida Ave to Jewell Ave. Improvements include:

- 1) Removing the existing stairs and replace them with a ramp with a 5-percent slope along Iowa Ave,
- 2) Constructing a queuing area at the Santa Fe Dr/Iowa Ave intersection to provide adequate waiting space, meet grade needs, and provide pedestrian/bicycle signal improvements,
- 3) Upgrading the sidewalk along Santa Fe Dr from 8 to 10-ft, including a 5-ft buffer; and
- 4) Way finding signage and 20 bicycle racks.



Affected Municipality(ies)	Affected County(ies)	Project Phases	
Denver	Denver	Year	Phase
		2017	Initiate Design
		2018	Initiate ROW
		2019	Initiate Construction

Amounts in \$1,000s	Prior Funding	FY16	FY17	FY18	FY19	FY20-21	Future Funding	Total Funding
Federal (CMAQ)		\$0	\$493	\$342	\$343	\$0		
State		\$0	\$0	\$0	\$0	\$0		
Local		\$0	\$495	\$863	\$864	\$0		
Total	\$0	\$0	\$988	\$1,205	\$1,207	\$0	\$0	\$3,400

ATTACHMENT 2

Waiting List Protocol (Appendix E of 16-21 TIP)

If additional funds become available in the first three years of the TIP (FY 2016-2018), DRCOG staff will initiate the process to allocate funds to waiting list projects as described below. Additional funding that becomes available in FY2019 (October 1, 2018) will be rolled over and included with the Call for Projects in the next TIP. This protocol does not apply to any TIP set-asides, pool programs, or projects not on the waiting list.

When DRCOG staff is informed of additional funds, the following steps will be followed:

1. Obtain official verification from CDOT of availability of funds.
2. When either a) \$2 million is accrued within one of the two specific funding program categories (STP-Metro or CMAQ/TAP) or b) an amount equal to 100% of the next-in-line (top-ranked) project funding request is accrued, staff will first contact sponsors of projects to try to advance project phases already identified in the TIP. Staff will then select projects in order from the waiting list(s) included in Appendix E, Table 4 of the 2016-2021 TIP to the limit of applicable funds available.
 - a. Contact the sponsor of the top ranked project on the waiting list, by funding category to determine the sponsor's interest in being selected. If the amount of funds available is less than the requested cost of that project, the sponsor will be asked if it would be willing to complete the entire project as submitted for the amount of funds available. Projects that accept partial funding will be removed from the list. If the response is no, or if all the available funds have not been fully allocated, DRCOG staff will proceed to the next project on the waiting list. Sponsors that request to be passed over on the funding opportunity will remain on the waiting list.
 - b. At the end of FY 2018 (September 30, 2018), even if less than \$2 million has accrued within a funding category, staff will go down the wait list in accordance with section 2.a. above to allocate available funds.
3. Recommend projects to be programmed and take them through the committee process to the Board as TIP Amendments.

Attachment 3

Table 5. Eligible Projects for Waiting List for the 2016-2021 TIP

STP-M	CMAQ and/or TAP	Sponsor	Project Name	TIP Project ID	TIP Score	Project Type	Federal Funding Request
4		Commerce City	88th Ave NEPA Study: I-76 to Hwy 2	CoCy-2014-006	N/A	Studies	\$150
2		Longmont	SW Longmont Subarea Operations Study	Long-2014-001	N/A	Studies	\$300
3		Douglas County	US-85 Operational Improvements: Blakeland Dr to County Line Rd	DgCo-2014-005	76.4	Operations	\$15,000
1		Commerce City	Vasquez Access Study: I-270 to Hwy 2/US-85	CoCy-2014-005	N/A	Studies	\$180
	1	Univ of Col - Boulder	N - 19th Street Trail and Bridge	UoCB-2014-002	70.5	B/P	\$4,798
	2	Boulder	U - SH-157/Foothills Pkwy Underpass at Colorado Ave	Bldr-2014-009	68.3	B/P	\$3,200
	3	Denver	U - South Platte Greenway Access: Iowa Ave RR Underpass to Santa Fe Dr	Denv-2014-024	68	B/P	\$1,704
	1	Denver	U - South Platte Greenway/Cherry Creek Trail: Confluence Bridge Upgrades	Denv-2014-025	68	B/P	\$7,980
	2	Univ of Col - Boulder	N - 19th St and 21st St Bridges and Trails	UoCB-2014-003	67.6	B/P	\$7,305
	3	Arvada	U - W 57th Ave Sidewalks: Independence St to Balsam St	Arvd-2014-034	67.2	B/P	\$628
	4	Denver	N - Peoria Station Multi Use Path: 39th Ave to 44th Ave	Denv-2014-026	66.9	B/P	\$1,950
	5	Wheat Ridge	N - Kipling St Multi-Use Trail: 32nd Ave to 44th Ave	WhRd-2014-006	66.9	B/P	\$2,240
	6	Denver	U - 1st Ave/Steele St Multimodal Improvements: 1st Ave to Colorado Blvd	Denv-2014-035	66.3	B/P	\$5,254
	7	Lakewood	N - Sheridan Blvd Bike Path: 6th Ave to 10th Ave	Lakw-2014-006	66.1	B/P	\$1,920
	8	Denver	N - 38th St/Marion St/Walnut St Multimodal Improvements: Walnut St to Lawrence St/Downing St	Denv-2014-028	65.6	B/P	\$2,131
	9	Boulder	N - Skunk Creek Bike/Ped Underpass at Moorehead Ave	Bldr-2014-002	65.4	B/P	\$2,640
	10	Denver	N - Sheridan Station Sidewalks: 8th to 10th/Colfax to 17th	Denv-2014-027	64.7	B/P	\$1,172
	11	Aurora	N - 6th Ave Bike/Ped Facility: Vaughn St to Del Mar Circle	Aura-2014-011	64.2	B/P	\$4,674
2		Denver	Colfax Ave Transit Enhancements: 7th St near I-25 to Yosemite	Denv-2014-011	63.8	Operations	\$12,004
	12	Arvada	U - Independence St Sidewalks: W 50th Ave to W 57th Ave	Arvd-2014-029	63.1	B/P	\$1,665
	13	Wheat Ridge	N - 32nd Ave Bike Lanes: Sheridan Blvd to Youngfield St	WhRd-2014-007	62.5	B/P	\$4,000
	14	Westminster	N - Walnut Creek Trail: 103rd Ave to 106th Ave	West-2014-003	62	B/P	\$8,280
	15	Boulder	U - SH-157/Foothills Pkwy Bike/Ped Underpass at Sioux Dr	Bldr-2014-010	61.2	B/P	\$3,440
	16	Lone Tree	N - Lincoln Ave Pedestrian Bridge: West of Heritage Hill Circle	Ltre-2014-001	59	B/P	\$1,500
	17	Arvada	N - Ridge/Reno Rd Mixed-use Trail: Garrison St to Allison St	Arvd-2014-018	58.7	B/P	\$1,442
3		Parker	Parker Road Transportation and Land Use Plan	Park-2014-005	N/A	Studies	\$125
4		Denver	56th Ave Widening: Chambers Rd to Pena Blvd	Denv-2014-012	58.3	Capacity	\$9,800
	18	Boulder County	N - Butte Mill Multimodal Connection: Valmont Path to Arapahoe Rd Transit	BICo-2014-007	57.9	B/P	\$312
	19	Denver	N - 38th/Blake Station: 35th St Multimodal Improvements: Wazee St to S Platte Greenway Trail	Denv-2014-030	57.9	B/P	\$3,479
	20	Boulder County	N - Williams Fork Trail Multi-use Path	BICo-2014-008	57.8	B/P	\$632
5		R T D	83L Enhancements: Downtown Civic Center to Nine Mile	RTD-2014-006	N/A	Studies	\$800
6		Douglas County	County Line Rd: Phillips Ave to University Blvd Capacity Improvements	DgCo-2014-001	57.4	Capacity	\$6,000
7		Lakewood	Wadsworth: Ohio Ave to 285 PEL	Lakw-2014-004	N/A	Studies	\$1,600
8		Aurora	Parker Rd/Quincy Ave/Smoky Hill Rd Operational Improvements	Aura-2014-005	56.9	Operations	\$4,492
	21	Boulder	N - 28th St/US-36: Fourmile Canyon to Yarmouth Ave Multi-Use Path	Bldr-2014-005	55.2	B/P	\$4,880
9		Longmont	Design: Oligarchy Ditch Trail/Main St Underpass: Mountain View Ave to 21st Ave	Long-2014-007	N/A	Studies	\$160
10		Lakewood	Alameda Ave Operational Improvements: Vance St to Pierce St	Lakw-2014-007	55	Operations	\$1,150
11		Thornton	104th Ave Widening: Grandview Ponds to S Platte River	Thor-2014-001	54.2	Capacity	\$8,040
	22	Boulder	N - Table Mesa Dr Bike/Ped Underpass	Bldr-2014-001	54	B/P	\$3,840
12		Westminster	Sheridan Blvd Operational Improvements: 87th Ave to US-36	West-2014-001	53.3	Operations	\$5,600
13		Aurora	Airport Blvd-Buckley Rd/Alameda Pkwy Intersection Operational Improvements	Aura-2014-006	53.1	Operations	\$1,664
14		Louisville	Hwy 42/96th St Corridor Operational Improvements: Pine St to S Boulder Rd	Lou-2014-003	53	Operations	\$8,837
	23	Arvada	U - W 60th Ave Bike/Ped Facilities: Tennyson St to Sheridan Blvd	Arvd-2014-030	52.8	B/P	\$1,378
	24	Arvada	N - W 52nd Ave Bike/Ped Facilities: Marshall St to Vance St	Arvd-2014-004	52.2	B/P	\$687
	25	Arapahoe County	N - Yale Ave/Holly St/Highline Canal Trail Pedestrian and Roadway Improvements	ApCo-2014-009	51.5	B/P	\$1,470
15		Lafayette	South Boulder Rd and 119th/120th St Operational Improvements	Lafa-2014-007	50.5	Operations	\$2,665
16		Commerce City	88th Ave Widening: I-76 to Hwy 2	CoCy-2014-003	50	Capacity	\$28,809
	26	Parker	N - Parker Road Sidewalk Connection: Twenty Mile Road to Indian Pipe Ln	Park-2014-003	49	B/P	\$541
17		Arvada	SH-72 at W 72nd Ave Intersection Operational Improvements	Arvd-2014-002	49	Operations	\$5,406
	27	Arvada	N - Little Dry Creek Bike/Ped Grade Separation	Arvd-2014-017	48.7	B/P	\$2,873
	28	Denver	U - High Line Canal Trail Underpass: Parker Rd and Mississippi Ave	Denv-2014-033	48.6	B/P	\$3,201
	28	Nederland	N - Middle Boulder Creek Bridge Project	Nedl-2014-002	48.1	B/P	\$726
	29	Boulder	N - Bear Creek Canyon Bike/Ped Underpass	Bldr-2014-003	47.5	B/P	\$4,480
18		Louisville	Highway 42/96th St Corridor Operational Improvements: Lock St to Pine St	Lou-2014-001	46.5	Operations	\$4,178
	30	Boulder	N - Fourmile Canyon Creek: 19th St to Violet Ave Bike/Ped Facilities	Bldr-2014-006	46.4	B/P	\$5,298
19		Aurora	6th Ave/Pkwy Extension: Liverpool St to E-470	Aura-2014-008	45.3	Capacity	\$13,918
20		Louisville	Hwy 42/96th St Corridor Operational Improvements: S Boulder Rd to Paschal Dr	Lou-2014-004	44.6	Operations	\$4,840
21		Denver	Quebec St Operational Improvements: Sandown Rd/40th Ave to I-70	Denv-2014-022	44.4	Operations	\$4,290
22		Castle Rock	Plum Creek Pkwy and Wilcox St Intersection Operational Improvements	CRck-2014-003	43.4	Operations	\$1,730
23		Aurora	Peoria St Operational Improvements: Fitzsimons Pkwy to North of Sand Creek	Aura-2014-007	43	Operations	\$11,874
	31	Arvada	N - Alkire St Pedestrian Bridge	Arvd-2014-001	42.8	B/P	\$2,039
	32	Erie	N - Coal Creek Extension: Reliance Park to Erie Village	Erie-2014-009	39.4	B/P	\$1,480
	33	Erie	N - Coal Creek Trail Extension: Reliance Park to Kenosha Rd	Erie-2014-003	36.5	B/P	\$1,840
	34	Nederland	U - Lakeview Dr/SH-72 Intersection Operational Improvements	Nedl-2014-001	35.9	B/P	\$467
	35	Longmont	N - County Line Rd Bike Shoulders: 9th Ave to SH-66	Long-2014-006	34.5	B/P	\$1,360
24		Castle Rock	Founders Pkwy and Crowfoot Valley Rd Intersection Operational Improvements	CRck-2014-002	34.4	Operations	\$2,042
	36	Lyons	N - US36 (Broadway) and SH-7 (5th Ave) Bike/Ped Facilities	Lyon-2014-001	34.1	B/P	\$1,309
	37	Westminster	U - 72nd Ave Sidewalk Reconstruct: Stuart St to Xavier St	West-2014-002	33.6	B/P	\$3,360
	38	Jefferson County	N - 32nd Ave Bike/Ped Facilities: Alkire St to Eldridge St	JfCo-2014-002	31.1	B/P	\$1,113
25		Erie	County Line Road Operational Improvements: Bonnel Ave to Erie Pkwy	Erie-2014-001	31	Operations	\$3,240
26		Erie	County Line Road Operational Improvements: Erie Pkwy to Telleen Ave	Erie-2014-002	30	Operations	\$2,640
27		Lafayette	Hwy 7 and 119th St Operational Improvements	Lafa-2014-006	29.9	Operations	\$1,510
	39	Boulder County	N - Isabelle Rd Shoulders: N 95th St to N 109th St	BICo-2014-002	26.4	B/P	\$1,418
	40	Erie	U - Pedestrian Underpass at Coal Creek Crossing	Erie-2014-007	25	B/P	\$320
28		Erie	County Line Road Operational Improvements: Telleen Ave to Evans St	Erie-2014-004	24	Operations	\$2,200
	41	Erie	N - County Line Road Bike Shoulders: Evans St to SH-52	Erie-2014-005	20.6	B/P	\$1,760
	42	Jefferson County	N - McIntyre St Bike/Ped Facilities: 32nd Ave to SH-58	JfCo-2014-003	20.4	B/P	\$824

ATTACHMENT C

To: Chair and Members of the Regional Transportation Committee

From: Robert Spotts, Senior Transportation/Air Quality Planner
303-480-5626 or rspotts@drcog.org.

Meeting Date	Agenda Category	Agenda Item #
September 20, 2016	Action	5

SUBJECT

This action concerns adoption of the redetermination of air quality conformity for the *2015 Cycle 2 2040 Fiscally Constrained Regional Transportation Plan (2040 RTP), Amended 2016-2021 Transportation Improvement Program (TIP)*, and associated air quality conformity documents.

PROPOSED ACTION/RECOMMENDATIONS

Staff recommends approval of the redetermination of air quality conformity.

ACTION BY OTHERS

[March 16, 2016](#) – Board approved 2015 Cycle 2 2040 RTP.

[August 22, 2016](#) – TAC recommended approval of 2015 Cycle 2 2040 RTP air quality conformity redetermination.

SUMMARY

The DRCOG Board approved the air quality conformity documents for the *2015 Cycle 2 2040 Regional Transportation Plan (2040 RTP) and Amended 2016-2021 Transportation Improvement Program (TIP)* on March 16, 2016. DRCOG staff subsequently discovered a coding error in the DRCOG travel model which calculates the inputs for the mobile source emissions model. The air quality Interagency Consultation Group decided to conduct a redetermination of regional conformity, including a new air quality conformity analysis. Staff corrected the error, re-ran the travel model, and provided the results to the Colorado Air Pollution Control Division to calculate mobile source emissions. Their analysis also used an updated version of the EPA MOVES emissions model.

The new emissions results have changed insignificantly compared with the previous conformity analysis, resulting in minor modifications to Table 4 in the *CO and PM10 Conformity Redetermination* and Table 3 and Appendix C in the *8-hour Ozone Conformity Redetermination*. The emission results for this redetermination of regional conformity remain significantly under each of the individual pollutant budgets. Therefore, a redetermination of conformity for the *2015 Cycle 2 2040 RTP and Amended 2016-2021 TIP* is demonstrated. More details can be found in the companion conformity documents ([CO and PM10 Conformity Redetermination](#) and [8-hour Ozone Conformity Redetermination](#)).

A public hearing was held on the redetermination at the August 17, 2016 Board meeting. No comments were received at the hearing or during the 30-day comment period. The Board is anticipated to act on the conformity redetermination at its September 2016 meeting.

PREVIOUS DISCUSSIONS/ACTIONS

N/A

PROPOSED MOTION

Move to recommend to the Board of Directors the redetermination of air quality conformity for the *2015 Cycle 2 2040 Fiscally Constrained Regional Transportation Plan*, and *Amended 2016-2021 Transportation Improvement Program (TIP)*, along with the *2015 Cycle 2 Denver Southern Subarea 8-hour Ozone Conformity Redetermination* and the *2015 Cycle 2 DRCOG CO and PM10 Conformity Redetermination*, concurrently.

ATTACHMENTS

Links:

- [DRCOG CO and PM 10 Conformity Redetermination](#) and [Denver Southern Subarea 8-hour Ozone Conformity Redetermination](#)

ADDITIONAL INFORMATION

For additional information, please contact Robert Spotts, Senior Transportation/Air Quality Planner, at (303) 480-5626 or rspotts@drcog.org.

ATTACHMENT D

To: Chair and Members of the Regional Transportation Committee

From: Douglas W. Rex, Director, Transportation Planning and Operations
303-480-6747 or drex@drcog.org

Meeting Date	Agenda Category	Agenda Item #
September 20, 2016	Information	6

SUBJECT

This item provides information on a collaborative data project that DRCOG and its partners (including RTD and CDOT) recently completed.

PROPOSED ACTION/RECOMMENDATIONS

N/A

ACTION BY OTHERS

N/A

SUMMARY

Detailed infrastructure data (e.g., “planimetric data”) is normally cost prohibitive for any one entity, but with help from CDOT, RTD, and others, DRCOG was able to acquire this highly valuable information that is already being used widely for a variety applications including pedestrian routing, bike/ped planning, sidewalk quality studies and much more.

PREVIOUS DISCUSSIONS/ACTIONS

N/A

PROPOSED MOTION

N/A

ATTACHMENT

Staff presentation.

ADDITIONAL INFORMATION

If you need additional information, please contact Ashley Summers, Information Systems Manager, at 303-480-6746.



Successful Data Collaboration: Planimetric Features

Presented by:
Ashley Summers

September 20, 2016



What are “planimetric features”?

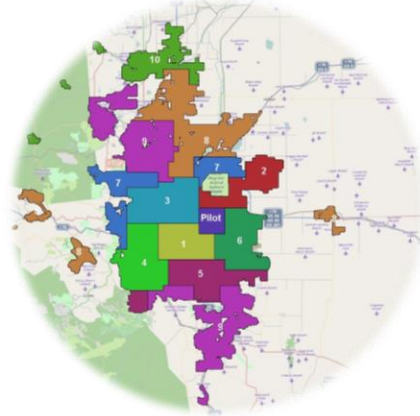
Building Roofprints | Edge of Pavement | Parking Lots |
Sidewalks | Trails | Ramps | Driveways





Project Background

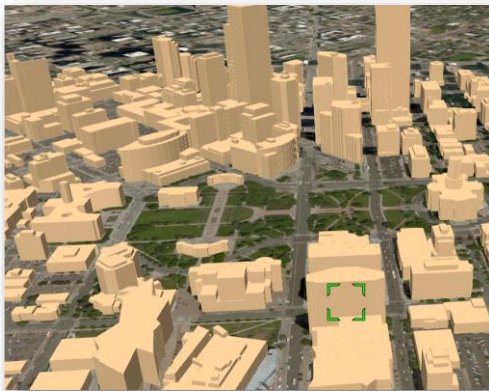
- In June 2016, DRCOG and 21 partners completed a project to develop planimetric features from the 2014 DRAPP imagery.
- RTD funded the centerline sidewalk data
- A TIP grant funded the edge of pavement data



<http://gis.drcog.org/datacatalog/subjects/planimetrics>



Data Uses



- [Special District Mapping](#)
- [Phone Apps for the Visually Impaired](#)
- [GoCode Colorado Winners Use Planimetrics](#)
- [Press release](#)

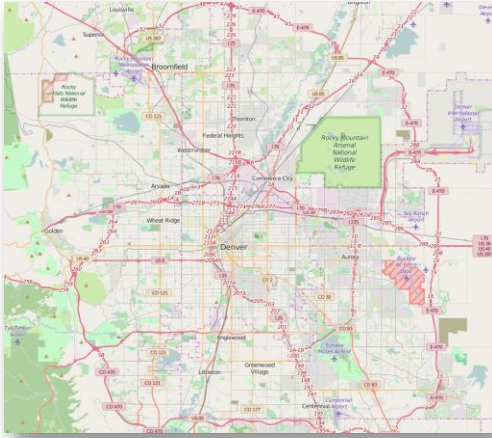
- Pedestrian routing (RTD)
- Fire rescue (South Metro Fire)
- Large scale energy simulation (NREL)
- Impervious surface analysis (Denver Water)
- Asset inventories
- Sidewalk availability and quality studies
- 3D building models
- Municipal mapping
- Bike/ped master plans

<http://gis.drcog.org/datacatalog/subjects/planimetrics>





Contributing to OpenStreetMap (OSM)



Purposes:

1. To make the data even more accessible to all potential users
2. To leverage a platform that DRCOG and RTD are already using for public, interactive maps

Priorities:

1. Building roofprints (~650,000)
2. Sidewalk centerlines

<http://gis.drcog.org/datacatalog/subjects/planimetrics>



What's next?

- What: updating the 2014 planimetric datasets using the 2016 imagery
- When: Q1 & Q2 of 2017, release RFP by October 5th
- Who: 25 potential partners, looking for more!
- Why: To leverage the data we've already captured, keep data current and useful (*updates are MUCH cheaper than new collections from scratch*)

<http://gis.drcog.org/datacatalog/subjects/planimetrics>

