



WORK SESSION AGENDA ITEM SUMMARY

City Council

STAFF

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SUBJECT FOR DISCUSSION

Transportation Capital Projects Prioritization Study (TCPPS).

EXECUTIVE SUMMARY

The purpose of this item is to discuss the results of the TCPPS as it relates to the prioritization and planning of our 10-year Transportation Capital Improvement Program (TCIP). The TCPPS is a methodology for selection of capital projects to improve intersections and roadway corridors in the City and aligns with our Vision Zero plan and our Active modes plan.

GENERAL DIRECTION SOUGHT AND SPECIFIC QUESTIONS TO BE ANSWERED

1. Do Councilmembers support the 10-year TCIP and TCPPS goals?
2. What feedback do Councilmembers have on the 10-year TCIP and TCPPS?

BACKGROUND / DISCUSSION

The City of Fort Collins conducted an Arterial Intersection Prioritization Study (AIPS) in 2010 and updated the study in 2016. The results of these efforts guided the selection of intersection improvement projects for pursuing grant funding, design, and construction. Most of the highest priority projects from the AIPS have been completed. The current TCPPS effort seeks to provide the next round of project identification and prioritization to guide capital project investment over the next 10 years.

TCPPS was performed in the light of on-going efforts by City staff to make informed, data-driven decisions on expenditures for transportation capital projects. Its primary focus is to find opportunities to improve traffic safety and congestion on the arterial network, while collaborating with parallel efforts such as the Active Modes Plan (AMP) and the Vision Zero Action Plan (Vision Zero). TCPPS was conducted in three phases: Data Collection and Initial Screening, Project Selection, and Concept Development.

Phase 1: Data Collection and Screening involved the collection and analysis of data to identify high-priority intersections and roadway segments. The analysis included reviewing traffic congestion and safety at all arterial streets and segments in the city. This process identified a ranked list sorted by delay and annual crashes at each intersection and segment, giving the team a variety of arterial intersections and segments that could be assembled into projects to carry forward.

Phase 2: Project Selection began with assembling a series of projects using the list of identified intersections and segments in Phase 1 along with improvements identified in parallel plans such as the AMP. Potential projects were selected based on their feasibility, potential impact, and ability to collaborate with other plans. Four quantitative and five qualitative criteria were developed in coordination with the AMP team and applied to the identified projects. This phase resulted in a draft list of ranked projects. The top 15 projects were then selected to move into the next phase.

Phase 3: Concept Development involved the development of conceptual designs, high-level cost estimation, and environmental screening for each of the top 15 projects. Project scoring was then refined, and a final ranked list of recommended projects was developed as follows:

Project ID	Project Name	Scope	Project Type
A	E Troutman Parkway & JFK Parkway Corridor Improvements	Implement a road diet on Troutman Pkwy and JFK Pkwy to add separated bike lanes.	Road Diet
B	S Shields Street & W Prospect Road Intersection Improvements	Implement protected intersections at Shields St and Prospect Rd, as well as at Stuart St, along with the addition of separated bike lanes on Shields St.	Intersection Improvements
C	S Shields Street & W Horsetooth Road Intersection Improvements	Add protected intersection at Shields St and Horsetooth Rd. Extend southbound left-turn lane, add separate bike lanes on Shields St.	Intersection Improvements
D	Drake Road Corridor Improvement	Implement a road diet on Drake Rd from Overland Trail to Taft Hill Rd to add separated bike lanes.	Road Diet
E	Lemay Avenue & Drake Road Intersection Improvements	Reconfigure intersection slip lanes for multimodal safety, and lane diet on Drake Rd to accommodate side paths.	Intersection Improvements
F	N Timberline Road - Segment 1 - Roadway Improvements	Widen Timberline Rd from Lincoln Ave to Vine Dr to a four-lane divided facility with separated bike lanes.	New Construction
G	N Timberline Road - Segment 2 Roadway Improvements	Widen Timberline Rd from Vine Dr to Mountain Vista to a four-lane divided facility with separated bike lanes.	New Construction
H	Heatheridge Road & W Prospect Road Intersection Improvements	Replace existing HAWK with full, three-leg traffic signal and improve pedestrian crossings.	Intersection Improvements
I	Shields Street Corridor Improvements	Implement a road diet on Shields St from Mulberry Ave to Mountain Ave to add separated bike lanes.	Road Diet
J	N Timberline Road Overpass at E Vine Drive	Grade separation of Timberline Rd over Vine Drive with multimodal connections.	New Construction
K	Boardwalk Drive & Harmony Road Signal Improvements	Signal/mast arm improvements.	Intersection Improvements
L	E Harmony Road & JFK Parkway/Hogan Drive Intersection Improvements	Signal improvements on JFK Pkwy with widening on Hogan Dr to improve lane alignment.	Intersection Improvements
M	Suniga Road Roadway Improvements	Extend Suniga Rd from Lemay Ave to Timberline Rd.	New Construction
N	E Prospect Rd Corridor Improvements	Widen Prospect Rd to a four-lane median divided facility with off street bike facilities.	Corridor Improvements
O	S Timberline Road & E Harmony Road Intersection Improvements	Add 3 rd NB and SB through lanes with separated bike lanes on Timberline Rd. Add protected intersection at Timberline Rd and Harmony Rd	Intersection Improvements

The top 15 projects serve as a foundation to the 10-year TCIP, which also combines our current capital project planning (projects already in construction or the design phase), the next ten years effort for the

Active Modes Plan, and other capital projects being developed with our regional and city partners such as CDOT, Larimer County, CSU, and the NFR MPO.

Our TCPPS consultant, Olsson, completed a desktop review of publicly available datasets to identify potential environmental resources within expected project boundaries of individual projects. The objective of the review was to evaluate each project for impacts to environmental features and possible environmental risks. The desktop review was completed by investigating publicly available datasets, which depict the potential locations of a variety of environmental resources. The datasets were compiled in a geographic information system (GIS), and map figures are included in **Attachment 4**. The following publicly available resources were used to complete the desktop review:

- Soil Survey Geographic (SSURGO) Database (USDA Natural Resources Conservation Service [NRCS] 2018)
- Colorado Parks and Wildlife (CPW). 2022. Non-Disclosure Agreement Nest Data
- USGS 2022 National Hydrography Dataset (NHD). U.S. Dept. of the Interior, U.S. Geological Survey
- National Wetlands Inventory (NWI), Version 2 (U.S. Fish and Wildlife Service [USFWS] 2020)
- Colorado Parks and Wildlife (CPW) and Colorado Oil and Gas Conservation Commission (COGCC) SB 181 High Priority Habitat (HPH) (2022)
- U.S. Geological Survey (USGS) Gap Analysis Project (GAP) 2022, Protected Areas Database of the United States (PAD-US) Version 3.0
- City of Fort Collins Natural Areas 2022
- National Flood Hazard Layer (NFHL) Larimer County, FEMA Floodplain 2022

Funding for these capital projects will come from a variety of sources. Traditionally, our transportation capital projects have been funded with federal and state grants, CCIP, TCEF, and the general fund (through the BFO process). This will continue to be the case moving forward, as historically we have received 40-50% of our capital funding through federal and state grants. Additionally, the TCCPS methodology is meant to provide project scoring based on the quantitative and qualitative criteria laid out in the study. The project scoring, combined with alignment of other City plans (such as City Plan, Our Climate Future, Strategic Plan, Vision Zero, Active Modes Plan, and Transit Master Plan) will provide further justification in the BFO process. The TCCPS report is listed at **Attachment 1**.

NEXT STEPS

This item is scheduled for the September 19, 2023, City Council Meeting for Council to consider the adoption of TCCPS into City Plan to be used as a methodology and foundation for the 10-year TCIP prioritization and planning process going forward.

ATTACHMENTS

1. TCPPS Report
2. TCPPS Public Engagement Summary
3. TCPPS GIS User's Manual
4. TCPPS Environmental Summary
5. TCPPS Scoring
6. Presentation