



AGENDA ITEM SUMMARY

City Council

STAFF

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SUBJECT

Resolution 2023-086 Adopting the Transportation Capital Projects Prioritization Study to be Used as a Methodology and Foundation for Ten-Year Transportation Capital Improvement Program Prioritization and Planning.

EXECUTIVE SUMMARY

The purpose of this item is to discuss the results of the Transportation Capital Projects Prioritization Study (TCPPS) as it relates to our ten-year Transportation Capital Improvement Program (TCIP) prioritization and planning. 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 Action Plan (Vision Zero) and our Active Modes Plan (AMP).

STAFF RECOMMENDATION

Staff recommends adoption of the Resolution.

BACKGROUND / DISCUSSION

The City 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 ten years.

TCPPS was performed in the light of on-going efforts by 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 AMP and 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	Project Limits	Project Type	Cost	Score	Rank
B	S Shields Street & W Prospect Road Intersection Improvements	W Stuart St to W Prospect Rd	Intersection Improvements	\$8,680,000	84	1
A	E Troutman Parkway & JFK Parkway Corridor Improvements	S College Ave to Boardwalk Dr & Harmony Rd to E Horsetooth Rd	Road Diet	\$2,518,000	81	2
E	Lemay Avenue & Drake Road Intersection Improvements	-	Intersection Improvements	\$4,850,000	77	3
J	N Timberline Road Overpass at E Vine Drive	Sykes Dr to E Suniga Rd	New Construction	\$55,927,000	76	4
D	Drake Road Corridor Improvement	Overland Trl to Taft Hill Rd	Road Diet	\$2,115,000	72	5
F	N Timberline Road - Segment 1 - Roadway Improvements	E Lincoln Ave to Sykes Dr	New Construction	\$12,264,000	70	6
G	N Timberline Road - Segment 2 Roadway Improvements	Suniga Dr to Mountain Vista	New Construction	\$12,452,000	69	7
H	Heatheridge Road & W Prospect Road Intersection Improvements	-	Intersection Improvements	\$1,519,000	69	7
N	E Prospect Rd Corridor Improvements	Sharp Pointe to I-25	Corridor Improvements	\$17,009,000	68	8
C	S Shields Street & W Horsetooth Road Intersection Improvements	-	Intersection Improvements	\$3,746,000	64	9
K	Boardwalk Drive & Harmony Road Signal Improvements	-	Intersection Improvements	\$616,000	62	10
O	S Timberline Road & E Harmony Road Intersection Improvements	-	Intersection Improvements	\$8,163,000	55	11
L	E Harmony Road & JFK Parkway/Hogan Drive Intersection Improvements	-	Intersection Improvements	\$670,000	47	12
I	Shields Street Corridor Improvements	Mulberry St to Mountain Ave	Road Diet	\$460,000	46	13
M	Suniga Road Roadway Improvements	Lemay Rd to Timberline Rd	New Construction	\$31,341,000	46	13

The top 15 projects serve as a foundation to the ten-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 AMP, and other capital projects being developed with our regional and City partners such as Colorado Department of Transportation, Larimer County, Colorado State University, and the North Front Range Metropolitan Planning Organization. Detailed scores and considerations are provided in Appendix F to the TCPPS.

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 the Environmental Summary at Appendix E to the TCPPS.

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, Community Capital Improvement Program (CCIP), the Transportation Capital Expansion Fee program, and the general fund (through the Budgeting for Outcomes (BFO) process). This will continue to be the case moving forward, as historically the City has received 40-50% of our capital funding through federal and state grants. Additionally, the TCPPS 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, AMP, and Transit Master Plan) will provide further justification in the BFO process.

Staff gave a presentation at the August 22, 2023, Council Work Session and received excellent feedback regarding the TCPPS methodology. Of note, the East Prospect Road Corridor project (Project N) will require further extensive study for environmental impacts, as this corridor has wildlife habitat, raptor nest presence, and Waters of the US likely present. Both jurisdictional and non-jurisdictional features are likely present, and a Jurisdictional Determination (JD) will be needed.

CITY FINANCIAL IMPACTS

The following is a summary of the project funding:

Prior Project Appropriations	
From CCIP Arterial Intersection Funding	\$177K

BOARD / COMMISSION / COMMITTEE RECOMMENDATION

Staff presented this to the Local Legislative Affairs Committee (Chamber of Commerce) on August 4, 2023, the Transportation Board on August 16, 2023, and the Bicycle Advisory Committee on August 28, 2023. All presentations were well received and received great feedback.

PUBLIC OUTREACH

The local community and stakeholders were engaged throughout the entire study to gain an understanding of the issues and challenges facing the transportation network in Fort Collins. Input from the overall effort was used to not only identify locations where improvements were needed but to also understand the desires of the public to inform creation and weighting of the prioritization criteria. A public involvement strategy consisting of a series of online and in person engagement opportunities, including the following outlets, was conducted:

- Webpage
- Social Media
- Press Releases
- Newsletters
- Community Partners Email Blasts
- In Person & Virtual Open Houses
- Public Surveys

- Transportation Board Presentations

The complete public involvement plan and engagement results can be found in the Public Engagement Summary at Appendix A to the TCPPS. The information gathered was incorporated into each phase of the study and used to guide the study, to ensure that the detailed engineering results produced aligned with the real-world observations and needs of the community.

Concurrent to the TCPPS, Olsson developed a GIS-based tool to assist the City in a data-driven approach to maintaining the capital projects list. An online Screening Tool was developed that houses the City-wide congestion and safety data as well as other relevant data used to perform the Phase 1 screening. These will be managed in a spreadsheet-based tool that inventories and scores projects. Future efforts beyond this study would develop a Management Tool that houses the capital project list from all City departments with associated tags and filters. These tools should be updated with new information, such as that related to congestion and safety. As the City continues to grow and develop, projects can be reprioritized as needs shift and funding becomes available. Section 1.4 of the TCPPS report provides a description of these tools, and user guides for each tool are included in Appendix B to the TCPPS.

ATTACHMENTS

1. Resolution for Consideration
2. Exhibit A to Resolution
3. Presentation