

DATE: August 30, 2022

TO: Chair Ramos and Transportation and Mobility Commission members

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CC: Ryan Lopossa, Chris Malone, Emily Benoit, Kate Drennan

RE: **TSP Draft Project Prioritization Framework**

Introduction

The Vancouver Transportation System Plan (TSP) will identify transportation projects, policies, and programs for the next twenty years. Infrastructure projects included in the plan will feed into the transportation element of the City's 20-year Capital Facilities Plan and into the Six-year Transportation Improvement Program (TIP). To identify which of the twenty-year projects should be included in the six-year program, the TSP includes a prioritization framework. The proposed draft prioritization framework evaluates transportation projects in two phases:

- Phase I: Geographic screening: **where** is it most important to invest in transportation infrastructure?
- Phase II: Implementation screening: **when** should investments be made?

This evaluation is intended to provide a starting point for grouping projects into near-term (TIP), medium-term, and long-term time frames. Other considerations may also influence the ultimate phasing and implementation of projects.

Phase One: Geographic Screening

The geographic screening identifies **where** in Vancouver it is most important to invest in transportation infrastructure, based on Equity, Safety, Climate and Transportation Choice goals. This geographic analysis uses existing spatial datasets and can be carried out using Geographic Information Systems (GIS). Recommended criteria for this phase of screening are:

- Equity Index score

- Crash rate and type
- Access to essential places
- Future growth

The datasets are overlaid to produce a combined score, by segment, for Vancouver’s entire transportation network. Previously planned projects are assigned a score based on the score of the street segment(s) they fall on. Shared-use paths can be assigned the score of the nearest parallel street that they provide an alternative route to. New projects can be created for the highest-priority areas by overlaying the TSP’s modal networks with the prioritized network. For example, a corridor with a high prioritization score that falls on the low-stress bicycle and small mobility network and is within a pedestrian center could become a Complete Streets project with new pedestrian crossings, new or upgraded sidewalks and curb ramps, and protected mobility lanes. Figure 1 provides a high-level summary of the proposed criteria and related goals for the geographic prioritization phase.

This phase of screening will result in three tiers of priority: high, medium, and low.

Figure 1 Proposed Geographic Screening Framework

Criteria	Description	Related TSP Goals
Equity Index score	Quantitative analysis: based on City Equity Index	Equity
Collision rate and type	Quantitative analysis: based on rate and type of injury or fatality of crashes	Safety
Access to essential places	Quantitative analysis: based on density of key destinations identified in Vancouver’s Essential Places dataset	Climate, Transportation Choice
Future growth areas	Quantitative analysis: based on projected jobs and residents from regional model and/or identified growth centers	Climate, Transportation Choice

Phase Two: Implementation Screening

The second phase of screening identifies **when** proposed projects should be implemented. The criteria in this phase are primarily qualitative, and consider factors related to feasibility, funding,

coordination, and impacts. It is anticipated that this second phase will result in projects being sorted into the following categories:

- Easy to implement
- Moderately easy to implement
- Challenging to implement

Figure 2 summarizes the proposed implementation screening criteria.

Figure 2 Proposed Implementation Screening Framework

Criteria	Description	Related TSP Goals
Cost and funding opportunities	Quantitative assessment: planning-level cost and level of existing or potential grant funding	Maintenance
Coordination	Qualitative assessment: opportunity to support another agency's project; opportunity to coordinate with pavement or sidewalk maintenance program	Regional Connectivity, Maintenance
Environmental and ROW impacts	Qualitative assessment: NEPA/SEPA and ESA requirements; impact to wetlands, habitat or aquatic resources; impact to cultural resources; need to acquire ROW	Climate
Quick wins	Qualitative assessment: project fills a gap in an otherwise continuous mobility (e.g., pedestrian, bicycle and small mobility, or transit) facility (including crossings and linear gaps of less than ¼-mile)	Safety, Transportation Choice

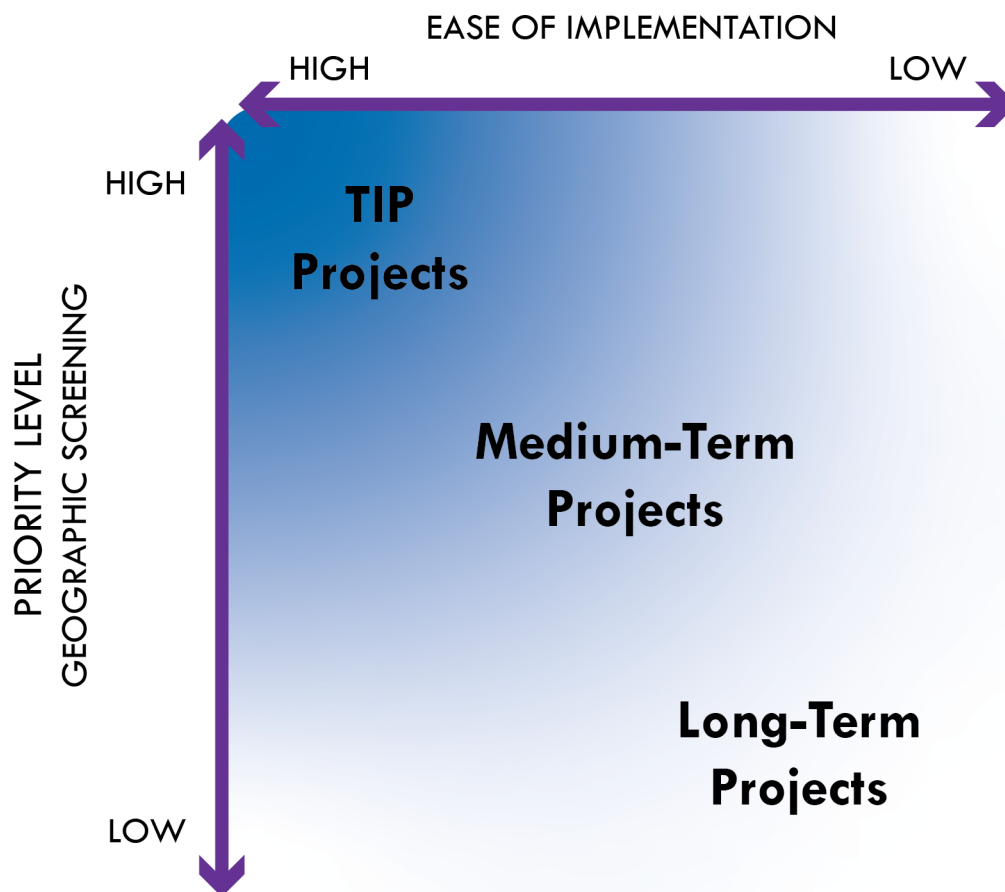
Final Prioritized Project Lists

The results of the Phase 1 and Phase 2 screening will be combined to assign all proposed transportation projects to the TIP (six-year), medium-term (six to ten year), or long-term (ten to twenty year) project list. The matrix in Figure 3 demonstrates one way this could be done. In reality, the boundaries between the project lists may not be as clearly defined. For example, projects that provide high benefits in high priority areas may be advanced into the TIP list despite implementation challenges. The graphic in Figure 4 illustrated this concept.

Figure 3 Final Project Categorization (Table)

Phase 1 (Rows) and Phase 2 (Columns) Screening Result	Easy to Implement	Moderately Easy to Implement	Challenging to Implement
High Priority	TIP	Medium-Term	Medium-Term
Medium Priority	Medium-Term	Long-Term	Long-Term
Low Priority	Long-Term	Long-Term	Remove from list

Figure 4 Final Project Categorization (Graphic)



Implementation

The City currently has in place an “interim project prioritization process” for the Transportation Improvement Program, which was developed at the request of Council and intended to provide a

system for ranking projects while the TSP process was underway. The updated proposal outlined in this memo includes some of the key rating factors included in the interim process (e.g., equity considerations, safety data, and ability to implement, etc.), and updates it to reflect TSP goals as well as more recent analysis staff have developed in support of the City's equity toolkit. It also reflects broad based community engagement and feedback received through TSP and other project outreach.

Given the time it will take to review and develop the geospatial and other tools needed to finalize and implement the proposed new framework, staff anticipate that the interim TIP prioritization process will need to be used for one additional year, for the development of the 2024-2029 TIP that begins in fall 2022 and is completed in June 2023. The inaugural year for the new prioritization framework is anticipated as part of the 2025-2030 TIP, which will be developed starting in the fall of 2023.