

MEMORANDUM

Date: September 10, 2020

Project #: 24392

To: Sai Midididdi, TE
City of Dublin

From: Amanda Leahy, AICP; Mike Alston, RSP

Project: Dublin Bicycle and Pedestrian Master Plan

Subject: Draft Prioritization Framework

PROPOSED FACTORS AND EVALUATION CRITERIA

The proposed evaluation process will be informed by the framework from NCHRP Report 803: ActiveTrans Priority Tool¹ (APT), the result of a national research effort. The APT methodology was based on an extensive review of existing prioritization processes being used by agencies across the country at the state, regional, and local level. It uses a standard set of terms and definitions to describe the different steps in the process. The following definitions apply within the APT:

- **Factors** are the categories used to express community or agency values considered in the prioritization process and contain groups of variables with similar characteristics. The APT has selected nine primary factors commonly used by agencies across the country that are particularly suited for prioritization of active transportation needs.
- **Variables (or evaluation criteria)** are characteristics of roadways, households, neighborhood areas, and other features that can be measured, organized under each factor. The terms *variables* and *evaluation criteria* may be used interchangeably.
- **Weights** are the numbers used to indicate the relative importance of different factors based on community or agency values. In order to increase transparency and legibility in the weighting step, weights are applied to factors, not to variables (which are often much more technical in nature).

¹ Lagerwey, Peter A., et al. *Pedestrian and Bicycle Transportation Along Existing Roads—ActiveTrans Priority Tool Guidebook*. NCHRP Report 803. Project No. 07-17. 2015. Available online at http://onlinepubs.trb.org/onlinepubs/nchrp/nchrp_rpt_803.pdf

- **Scaling** is the process of making two variables comparable to one another (e.g., number of collisions versus population density.)

The proposed prioritization factors and criteria is informed by NCHRP Report 803 and by the Plan’s goals as referenced above.

Table 1: Proposed Prioritization Factors and Evaluation Criteria

Factor	Criteria	Notes	Ped	Bicycle
Safety	High-Injury Corridors	This criterion will prioritize locations based on network screening analysis of bicycle- and pedestrian-related collisions. The network screening was conducted in Task 2 of the project. This criterion aligns with the safety goal .	X	X
Social Equity	Youth Population	Use variables from Census data at the block group level as indicators	X	X
	Senior population	Use variables from Census data at the block group level as indicators	X	X
	Camp Parks access	Identify bicycle and pedestrian network elements that directly connect to Camp Parks facility	X	X
	Affordable housing access	Identify bicycle and pedestrian network elements that directly connect to affordable housing	X	X
Connectivity	Bicycle Level of Traffic Stress	Prioritize locations based on the presence of existing high-stress riding facilities.	X	X
	Demand Analysis	Identify top bicycle or pedestrian infrastructure elements that would unlock latent demand (results of demand analysis)	X	X
Major Barriers	East-West Connectivity	Identify bicycle and pedestrian elements would provide enhanced east-west connectivity	X	X
	Freeway crossings	Prioritize improving safety and quality of service for ramp terminal intersection and freeway crossings.	X	X
Previously Identified Projects	Previously identified projects	Prioritize pedestrian and bicycle projects from the previous plan.	X	X

OTHER FACTORS

We will characterize public input received thematically and spatially but will not incorporate it in the quantitative portion of the prioritization.

FACTOR WEIGHTS

Factor weights are yet to be determined.

Table 2: Potential Factor Weights

Factor	Criteria	Equal Weights	Other Options
Safety	High-Injury Corridors	20%	To be discussed.
Social Equity	Youth Population	20%	
	Senior population		
	Camp Parks access		
	Affordable housing access		
Connectivity	Bicycle Level of Traffic Stress	20%	
	Demand Analysis		
Major Barriers	East-West Connectivity	20%	
	Freeway crossings		
Previously Identified Projects	Previously identified projects	20%	