

Smart Transportation Rank Choice (Smart TRAC)

Section I: Introduction

Transportation needs always outstrip funds available. The Hawaii Department of Transportation (HDOT) and many transportation stakeholder have made the case for more investment in transportation and will continue to do so. However, HDOT also recognizes that with more money will also come a longer list of ideas and projects to improve Hawaii's transportation system. Therefore, it will always be essential to have a system to identify the transportation projects that most effectively move the state's priorities forward. Those priorities are:

- improving safety;
- preserving the transportation system;
- providing access to jobs and necessities;
- reducing traffic congestion, and
- protecting the environment and cultural assets.

To ensure a strong connection between projects selected for funding and our statewide transportation goals, HDOT has developed an evaluation process – called Smart Transportation Rank Choice (Smart TRAC) – to assess the degree to which each project proposed for funding addresses a problem or state priority relative to the requested funding for the project. Without such a system, the process is opaque and always appears to be politically driven, even when it is not. Under Smart TRAC, HDOT and its partners and stakeholders have developed a quantifiable and transparent prioritization process for making funding decisions for limited transportation funds in our Statewide Transportation Improvement Program (STIP). The STIP is a federally required four-year program that identifies the transportation projects (highway, freight, public transit, bicycle and pedestrian) that will utilize federal transportation funding or require approval from either the Federal Highway Administration or the Federal Transit Administration. Aside from the federal requirement, the STIP is where the DOT communicates its project-level priorities and plans to external and internal stakeholders.

Section IV: Evaluation Measures and Scoring

This section summarizes the evaluation measures that are used in the Smart TRAC evaluation process, and the methods by which those evaluation measures will be calculated.

HDOT has identified five statewide surface transportation priorities against which projects should be evaluated under Smart TRAC:

- improving safety;
- preserving the transportation system;
- providing access to jobs and necessities;
- reducing traffic congestion, and
- protecting the environment and cultural assets.

HDOT worked with the sub-STAC to develop the measures for Smart TRAC. HDOT researched best practices from across the country to establish these measures and sought metrics that have a meaningful impact on our statewide priorities; minimize overlap between measures; are transparent and understandable; work in areas of all kinds (urban, suburban and rural); work for all modes of transportation.

Projects can receive up to a total of 80 points allocated as follows.

Safety Measures

Need input from safety team

	1. IMPROVE TRANSPORTATION SAFETY			
	High	Medium	Low	Comments
1a. Reduce Crashes	8	4	0	
	Anticipated to reduce crashes at a high crash location as listed on high-crash intersection or non-intersection lists prepared by	Anticipated to reduce crashes in a non-high crash location	Not anticipated to reduce crashes	

	HDOT.			
1b.	8	4	0	
Improves safety for vulnerable users	Anticipated to greatly improve safety and access to transportation for non-motorized travelers.	Anticipated to modestly improve safety and access to transportation for non-motorized travelers.	Not anticipated improve safety and access to transportation for non-motorized travelers.	
4 bonus points if project scores a high or medium in reducing crashes that have involved fatalities.				
Maximum Safety Score:			20	

Asset Management Measures

Need input from asset management team

2. PRESERVE THE TRANSPORTATION SYSTEM					
	High	Medium	Low	Comments	
2a. System Preservation -- roads	4	2	0		
	Addresses pavement rated "poor" or "fair" based on Pavement Condition Index (PCI) and project has been designed using the pavement optimization software.		Does not address pavement rated poor or fair.	Change this to rated highly in the asset management plan?	
2b. System Preservation -- bridges	4	2	0		
	Addresses bridge rated "poor" based on National Bridge Inspection Standards (NBIS)	Addresses bridge rated "fair" based on NBIS	Does not address bridge rated poor or fair.	Change this to rated highly in the asset management plan?	
2c. System Preservation -- transit	4	2	0		
	Addresses a transit asset (i.e., vehicles, equipment, systems or structures essential to transit operation) rated in "poor" condition.	Addresses a transit asset (i.e., vehicles, equipment, systems or structures essential to transit operation) rated in "fair" condition.	Does not address a transit asset rated in poor or fair condition.	Change this to rated highly in the asset management plan?	
4 bonus points if project scores a high or medium and serves a low-income community.					
4 bonus points if project scores a high or medium and will reduce an asset's vulnerability to the impacts of climate change.					
2d. Volume	4	3	2	1	0

(only for projects scored high or medium in 2a, 2b.)	>20,000 ADT	10,000-20,000 ADT	5,000-9,999 ADT	1,000-4,999 ADT	<1,000 ADT	
Maximum System Preservation Score:					24	

Accessibility Measures

Need input from accessibility team

3. PROVIDE ACCESS TO JOBS AND NECESSITIES				
	High	Medium	Low	Comments
3a.	4	2	0	
	Improves access to jobs by more than one mode	Improves access to jobs by least one mode	Does not improve access to jobs	Modes: auto, transit, bike, pedestrian. HDOT is acquiring Sugar Access to support scoring.
3b.	4	2	0	
	Improves access to non-work necessities by more than one mode	Improves access to non-work necessities by more than one mode	Does not improve access to non-work necessities by more than one mode	
4 bonus points if project scores a high or medium and serves a low-income community.				
Maximum Access Score: 12				

Traffic Congestion Measures

Need input from traffic congestion team

4. REDUCE TRAFFIC CONGESTION				
	High	Medium	Low	Comments
4a. Delay	4	2	0	
	Anticipated to significantly reduce person hours of delay	Anticipated to moderately improve person hours of delay	Not anticipated to improve person hours of delay	Need to define significant and moderate. Is this double counting? If improve auto accessibility, delay is already captured.
4 bonus points for project on a high priority freight route with high or medium rating on 4a.				
4 bonus points for a project on a corridor that accommodates transit with high or medium				

	rating on 4a.
Maximum Traffic Congestion Score:	12

Environment and Cultural Assets Measures

Need input from environment and cultural assets team

5. PROTECT THE ENVIRONMENT AND CULTURAL ASSETS				
	High	Medium	Low	Comments
5a. Emissions	4 Likely to significantly reduce long-term carbon emissions or NAAQS.	2 Likely to moderately reduce long-term carbon emissions or NAAQS.	0 Not likely to reduce long term carbon emissions or NAAQS.	Need to define significant, moderate and long-term.
5b. Sensitive lands	4 Improves cultural or environmental resources	0 Does not impact cultural or environmental resources	-4 Has a negative impact on cultural or environmental resources	
5c. Resilience	4 Improves asset's resilience to natural weather events or sea level rise.	0 Project is not vulnerable to natural weather events of sea level rise.	-4 Asset will be or will remain vulnerable to natural weather events or sea level rise.	
Maximum Environmental and Cultural Impacts Score:		12		