TRANSPORTATION IMPROVEMENT PROGRAM

FEDERAL FISCAL YEARS 2022 - 2025

REVISION #6 REVISED PROJECTS

DRAFT



AMENDMENTS

TRANSPORTATION IMPROVEMENT PROGRAM

FEDERAL FISCAL YEARS 2022 - 2025

REVISION #6 - AMENDMENTS

LIST OF REVISED PROJECTS

May 2022



Oahu Metropolitan Planning Organization

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The City and County of Honolulu is using the OahuMPO TIP public involvement process, as outlined in the Federal Highway Administration/Federal Transit Administration metropolitan transportation planning regulations (23 CFR 450/49 CFR 613), to satisfy the public hearing requirements for the Federal Transit Administration's Urbanized Area Formula Program (49 U.S.C. Section 5307) program-of-projects.

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1 ABBREVIATIONS

1.1 OVERALL INITIALISMS AND ACRONYMS

3-C	Continuing, Cooperative, Comprehensive	MAP-21	Moving Ahead for Progress in the 21 St Century [P.L.
ADA	Americans with Disabilities Act		112-141, 2012]
APE	Area of Potential Effects	MOA	Memorandum of Agreement
CAC	OahuMPO Citizen Advisory Committee	NEPA	National Environmental Policy Act NHPA
CATEX	Categorical Exclusion	NHPA	National Historic Preservation Act
CFR	Code of Federal Regulations	NTD	National Transit Database
CCTV	Closed-circuit television	0ahuMP0	Oahu Metropolitan Planning Organization
CMP	OahuMPO Congestion Management Process	ORTP	OahuMPO Oahu Regional Transportation Plan
DTS	City and County of Honolulu Department of	0WP	OahuMPO Overall Work Plan
FI	Transportation Services	PB	OahuMPO Policy Board (formerly Committee)
EJ	Environmental Justice	SAFETEA-LU	Safe, Accountable, Flexible, Efficient Transportation
FAST	Fixing America's Surface Transportation Act [P.L. 114-96, 2015]		Equity Act – A Legacy for Users [P.L. 109–59, 2005]
FMCSA	USDOT Federal Motor Carrier Safety	SMP	Special Maintenance Program
THOSA	Administration	SOGR	State of Good Repair
FHWA	USDOT Federal Highway Administration	STIC	Small Transit Intensive Cities
FTA	USDOT Federal Transit Administration	STIP	Statewide Transportation Improvement Program
FFY	Federal Fiscal Year (October 1- September 30)	TA	Transportation Alternatives
HART	Honolulu Authority for Rapid Transportation	TAC	OahuMPO Technical Advisory Committee
HDOT	Hawaii Department of Transportation	TIP	Transportation Improvement Program
HR	House Report	T6	Title VI of the Civil Rights Act of 1964
ITS	OahuMPO Intelligent Transportation System	U.S.C.	United States Code
	,	UZA	Urbanized Areas

1.2 PROJECT LISTING ABBREVIATIONS

FHWA Funding Categories

OS Bridge Off-System Bridges
CMAQ Congestion Mitigation and Air Quality Program

ER Emergency Relief Program

FLAP Federal Lands Access Program

NHPP National Highway Performance Program
HSIP Highway Safety Improvement Program

RHCP Rail-Highway Crossings Program (§130)

SRTS Safe Routes to School

STBG Surface Transportation Block Grant Program

TA Transportation Alternatives Set-Aside

TA-U Transportation Alternatives Set Aside for

Urbanized Areas

RTP Recreational Trails Program

FTA Funding Categories

§5307/5340 Urbanized Area Formula/ Growing States and

High-Density States Formula

§5309 New Starts

§5310 Enhanced Mobility

§5329 Public Transit Safety Program

§5337 State of Good Repair

§5339 Bus and Bus Facilities

§5340 Growing States and High-Density States Formula

Local Funding Category

Local Only Locally Funded

Project Phases (Chronological Order)

PLN Planning

PE1 Preliminary Design including NEPA

DES Design

PE2 Final Design

EQP Equipment

PREROW Pre-right-of-Way

ROW Right-of-Way

ADVCON Advance Construction Reimbursement

REL Utility Relocation

CON Construction

OPR Operations

INSP Inspection



2 INTRODUCTION

The Oahu Metropolitan Planning Organization (OahuMPO) is the metropolitan planning organization (MPO) for the island of Oahu. It is designated by the governor of the state to plan for, coordinate, and program the many transportation investments in the region, in this case, the island of Oahu. Under federal law and regulation, all plans and programs that involve federal funds or are of regional significance must be reviewed and approved by the OahuMPO Policy Board. This document, the Federal Fiscal Year (FFY) 2022-2025 Transportation Improvement Program (TIP), provides a listing of transportation projects that will be funded in our region over the next four years.

The FFY 2022-2025 TIP is the adopted, short-term program of public transit, highway, bicycle, and pedestrian projects on Oahu that will receive federal transportation funds or that are regionally significant. The TIP needs to be financially constrained; that is, there must be a reasonable expectation that projects that are identified will have the necessary federal and local funding. The OahuMPO's TIP lists surface transportation programs and projects that the Oahu Metropolitan Planning Organization (OahuMPO) Policy Board has selected for implementation during the program period.

The FFYs 2022-2025 TIP covers a period of four years (FFYs2022-2025) and contains two additional years (FFYs 2026 and 2027) for informational purposes ("information only"). The TIP is updated every three years and revised as needed (most often semi-annually). Once approved by the Policy Board and the Governor, or the Governor's designee, the TIP becomes the Oahu element of the Statewide TIP (STIP).

The following types of projects are included in the TIP:

- Surface transportation projects that are proposed to be funded with federal funds;¹
- Regionally significant projects that require action by the Federal Highway Administration (FHWA) or the Federal Transit Administration (FTA), regardless of if these projects are federally funded; and
- Regionally significant projects that are proposed to be funded with non-federal funds or with federal funds other than those administered by the FHWA or the FTA, such as congressional earmarks. These projects are included in the TIP for informational purposes.

The OahuMPO TIP identifies transportation programs and projects totaling approximately \$2 billion to be implemented during the four-year program period. The projects include those eligible for federal funding assistance, as well as regionally significant locally funded projects.

While OahuMPO does not implement or construct transportation projects, it provides oversight in prioritizing funding for transportation projects – especially those receiving federal funds.

¹ Under 23 U.S.C. and 49 U.S.C. Chapter 53 (including transportation enhancements, Federal Lands Highway Program projects, safety projects included in the State's Strategic Highway Safety Plan, trails projects, pedestrian walkways, and bicycle

3 DEVELOPMENT PROCESS

The OahuMPO is responsible for the development of the Oahu Transportation Improvement Program (TIP), however close coordination with HDOT and the City and County of Honolulu is required through the metropolitan transportation planning process. Because the update to the Oahu Regional Transportation Plan (ORTP) and TIP were due in the same year, Oahu MPO established a call for eligible TIP/ORTP projects simultaneously. Projects on the TIP must be consistent with the ORTP, meaning that the projects listed in the TIP must also be listed in the ORTP or at least be consistent with the ORTP Vision and Goals. The TIP is a management tool for implementing the projects programmed in the ORTP and the projects in the TIP move towards implementation once the funds are authorized and obligated. The OahuMPO TIP update process utilizes the MPO's Citizens Advisory Committee (CAC), Technical Advisory Committee (TAC), and Policy Board (PB) to validate and approve the new Oahu TIP. Ultimately, the Director of Transportation, as the Governor's designee, approves the Oahu TIP for inclusion in the Statewide Transportation Improvement Program (STIP). The STIP is then submitted to FHWA and FTA for review and approval. The planning process as a whole is detailed below in Figure 1.

Oahu Regional Transportation Goals

The TIP must contain projects that are consistent with the current Oahu Regional Transportation Plan (ORTP) and reflect the investment priorities established in the ORTP. Projects must be consistent with the vision and goals identified in the ORTP, which were developed based on public input, feedback from its working group, committees, and Policy Board. The ORTP Vision is: "In 2045, Oahu's path forward is multimodal and safe. All people on Oahu can reach their destinations through a variety of transportation choices, which are reliable, equitable, healthy, environmentally sustainable, and resilient in the face of climate change." The seven ORTP goals are:

- 1. Improve the safety of the transportation system;
- 2. Support active and public transportation;
- 3. Promote an equitable transportation system;
- 4. Improve the resiliency of the transportation system;
- 5. Preserve and maintain the transportation system;
- 6. Support a reliable and efficient transportation system; and
- 7. Improve air quality and protect environmental and cultural assets.

Figure 1 The Transportation Planning Process.

Needs Identification

 Need for transportation improvement projects identified by studies, committees, public etc

ORTP Development

 Long term goals, visions, and strategies laid out in long range transportation plan

Initial Project Assessment

•Initial project scoping and assessment of potential environmentl impacts

Project Evaluation

 New projects evaluated and ranked in priorit order

Transportation Improvement Program

Programming of evaluated projects that are ready-to-go and have reasonable expectation of funding available

Statewide Transportation Improvement Program

• Includes all improvement projects from TIP, but also includes other state and county projects

Project Development

- scoping and design

 Evaluatetion for conformity
- •Approvals & permits acquired

Project
Implementation
and
Construction

FAST Act Planning Factors

In addition to addressing its own strategic goals, the MPO must also operate under the tenets of the FAST Act, which provides funding for transportation projects and establishes federal transportation priorities. The FAST Act requires that the metropolitan transportation planning process, which results in core products such as the Metropolitan Transportation Plan (MTP) called the Oahu Regional Transportation Plan at OahuMPO, TIP, and Unified Planning Work Program (UPWP) called the Overall Work Program at OahuMPO, address the following ten planning factors or strategic focus areas:

- 1. Increase the safety of the transportation system for motorized and non-motorized users;
- 2. Protect and enhance the environment, promote energy conservation, improve the quality of life, and promote consistency between transportation improvements and state and local planned growth and economic development patterns;
- 3. Enhance the integration and connectivity of the transportation system, across and between modes, for people and freight;
- 4. Support the economic vitality of the metropolitan area, especially by enabling global competitiveness, productivity, and efficiency;
- 5. Increase the security of the transportation system for motorized and non-motorized users;
- 6. Increase accessibility and mobility of people and freight;
- 7. Promote efficient system management and operation;

- 8. Emphasize the preservation of the existing transportation system;
- 9. Improve the resiliency and reliability of the transportation system and reduce or mitigate stormwater impacts of surface transportation; and
- 10. Enhance travel and tourism.

Consistency with Other Plans

There are general and specific directions for the consistency requirement. 23 USC 134, Section 1201, states "Under the metropolitan planning process, transportation plans and TIPs shall be developed with due consideration of other related activities...." Document consistency is found in planning 6001(a)(j)(3)(c): "Each project shall be consistent with the long range transportation plan...." The latter is an implied instruction to include all plans in the TIP development process and is carried forward in FHWA interpretation of the revised 23 USC 134, and is to be found in 23 CFR 450.324. The MPO addresses this requirement by including planning and economic development personnel from the state and local level on the Citizens Advisory Committee, Technical Advisory Committee, and the Policy Board. The MPO consults with agencies and officials responsible for other planning activities within the Study Area that are affected by transportation when developing the ORTP and TIP. A contact list of officials and agencies has been developed and is maintained. These agencies are invited to attend all public involvement meetings including those specifically for the TIP and ORTP review.

Performance Measures

The TIP must also include, to the maximum extent practicable, a description of the anticipated effect of the TIP on achieving the performance targets described in the 2045 ORTP, linking investment priorities to those performance measures. Chapter 9 provides more information about the performance management process.

3.1 DEVELOPMENT OF FINANCIAL ESTIMATES

OahuMPO, HDOT, DTS and HART cooperatively formulate estimates of FHWA and FTA funds that are reasonably expected to be available for projects on the island of Oahu. These estimates are usually based on historic data. For more information see Chapter 7

3.2 CALL FOR PROJECTS

OahuMPO formally calls for projects from the implementing agencies. In response, the HDOT, DTS and HART submit projects to be considered for inclusion in the TIP. As mentioned above, the TIP projects must be consistent with the ORTP and thus most of the projects come from the ORTP list of short-term projects. For the 2045 ORTP and the FFY 2022-2025 TIP OahuMPO issued a single call for projects and programs from August 12, 2020 – September 30, 2020.

3.3 PROJECT PRIRITIZATION AND PROJECT SELECTION

Several factors are considered during the TIP project prioritization and financial constraint process.

Many of the projects in the TIP are programmed over several years and across several different TIP periods. Thus, the most important consideration was to make sure all carryover projects for the FFY 2019-2022 TIP were funded to completion (e.g., projects partially funded but not yet fully complete during the current/FFY 2019-2022 TIP cycle). These carryover projects constituted a very large portion of our total dollars available. While priorities largely remained the same from FFY 2019-2022, changing condition of roadways and bridges, available funding, federal performance measures and other factors were taken into consideration for the addition of new projects to the FFY 2022-2025 TIP.

One of the major factors considered is project readiness.

Project readiness is the most critical of the criteria. Project phases that are scheduled in the TIP should be programmed in years that are reasonably anticipated to be ready for funding. For example:

- For construction phases, this means that project plans, specifications and estimates, as well as environmental and right-of-way requirements should be completed.
- For right-of-way acquisitions, this means that environmental clearances must be completed.
- For projects being funded for final design, this means that environmental clearances must be completed.

Continual coordination with state and county project development

teams helped to determine project readiness.

Over-the-shoulder review meetings with project managers are held semi-annually to help consolidate project readiness information.

OahuMPO receives projects from HDOT, DTS and HART that conduct their own projects prioritization and selection according to their internal processes before submitting them to OahuMPO for inclusion in the TIP. Since these agencies all have a set amount of funds available to them (and there is no competition for the federal funds, as is common for most other MPOs in the USA) they have hitherto been submitting OahuMPO lists of projects and programs that have already been fiscally constrained.

However, should OahuMPO need to prioritize the projects, for example due to there being less funds available than anticipated by the agencies, OahuMPO has created its own project and program prioritization process to assist with project selection. The evaluation of the received projects and programs is done using measurable criteria based on the goals in the Oahu Regional Transportation Plan. It provides a quantitative method to compare projects and programs proposed for the TIP. The full project and program prioritization process is explained in the ORTP and can also be read in Appendix A. All new projects and programs received are to be scored using this process. See Appendix B for the new project and program scores. More information about the new projects can be found in the project information sheets in Chapter 6.

Additional criteria that are considered when selecting projects to be included in the TIP are:

- Federal/state funding program eligibility requirements;
- Availability of local match;
- Consistency with the ORTP, Oahu Regional ITS Architecture, and other existing local plans
- Compliance with FAST Act planning factors (as mentioned above);
- Title VI (T6) and Environmental Justice (EJ) analysis (Appendix C);
- Performance Measure and Congestion Management impacts.

Evaluation of Facilities Repeatedly Requiring Repair and Reconstruction Due to Emergency Events

Under the requirements of CFR 23 part 667 the Hawaii Department of Transportation (HDOT) must conduct statewide evaluations to determine if there are reasonable alternatives to roads, highways, and bridges that have required repair and reconstruction activities on two or more occasions due to emergency events. As part of these federal requirements, state DOTs are required to identify roads and bridges that require repeated repair or reconstruction as a result of emergencies. As defined by 23 CFR 667.3, emergency event means a natural disaster or catastrophic failure resulting in an emergency declared by the Governor of the state or an emergency or disaster declared by the President of the United States.

The Hawaii DOT conducted a statewide evaluation of all emergency events dating back to 1997, a total of 33 FEMA events between January 1997 and May 2019. There were approximately 60 State

Proclamations between January 1997 and May 2019. Using an iterative process, the HDOT cross-referenced the two lists with emergency projects that identified work on a road, highway, or bridge with reconstruction elements (permanent repair). Not every emergency event resulted in permanent damage to the transportation assets. Emergency repairs that minimized the extent of the damage, protected the remaining facilities, or helped to restore essential traffic were not included (23 CFR 668.103). The HDOT has included a complete summary of the emergency events and transportation assets affected in Appendix B of their 2019 Statewide Transportation Asset Management Plan. There is no transportation asset that has been replaced or reconstructed on two or more occasions as a result of emergency events.

3.4 PUBLIC OUTREACH EFFORTS

Public outreach efforts for the Transportation Improvement Program (TIP) are guided by the requirements and recommendations outlined in the OahuMPO Public Participation Plan. The OahuMPO Public Participation Plan specifically outlines the public involvement process for the TIP on pages 14-17. The Public Participation Plan may be viewed here: https://oahumpo.org/wp-content/uploads/2020/06/Final-Draft-PPP-for-IGR-reduced.pdf.

O'ahu Regional Transportation Plan and Transportation Improvement Program Outreach Efforts

The public outreach process for the annual TIP update informally

began with public outreach for the 2045 O'ahu Regional Transportation Plan (ORTP), which is the long-range transportation plan for the island of O'ahu. It contains projects and programs proposed for funding through 2045. Apart from other mid/long-term projects it also contains near-term projects and programs proposed for FFYs 2022-2025, which then go into the TIP. The initial outreach for the 2045 ORTP occurred from January 2019 through May 2019 with in person information and outreach booths, focus groups, and an online survey. These initial outreach methods were utilized to develop the vision and goals for the ORTP. All TIP projects and programs must be consistent with the vision and goals of the ORTP, which were written based on feedback gathered during this phase of outreach.

Upon the onset of COVID-19, OahuMPO shifted outreach strategies to virtual methods including virtual open houses, virtual community meetings, and an online survey from October 2020 through March 2021. The community meetings were hosted by OahuMPO staff, project agency sponsors (Honolulu Authority for Rapid Transportation, Department of Transportation Services, and the Hawaii Department of Transportation), and Honolulu City Councilmembers. The strategies employed were used to collect feedback on the proposed projects and programs of the 2045 ORTP, which subsequently included an opportunity for the community to comment on the proposed TIP projects and programs.

OahuMPO staff held a virtual open house to provide an opportunity for the community to ask questions of the project agency sponsors and provide feedback on the ORTP 2045 proposed projects and programs. OahuMPO staff also coordinated seven community

meetings with project agency sponsors and City Council members to discuss the near-, mid-, and long-term projects and programs in the 2045 ORTP.

In total, 140 number of comments were received during the community meetings from 50 participants. Comments and questions from the community meetings were directed to the appropriate agency for response and were documented and provided in writing to the project agency sponsors and the Policy Board for consideration. The feedback received was relevant to both the 2045 ORTP and the TIP as the 2045 ORTP project and program list includes FFYs 2022-2025 TIP projects and programs.

FFY 2022-2025 Transportation Improvement Program Specific Outreach

OahuMPO conducted three open house opportunities co-hosted with project agency sponsors in June 2021. The MPO scheduled these open house sessions to include a midday June 7, 2021, 12:00-1:30pm, evening June 14, 2021, 6:00-7:30pm, and weekend June 5, 2021, 10:00-11:30am option in efforts to provide the community ample options to participate. A presentation was given on the OahuMPO and the purpose and importance of the TIP. Participants were then given the opportunity to ask questions and provide comments about the proposed projects and programs. Notice of the open houses was distributed via MailChimp to the OahuMPO email list, a press release via the government delivery platform hosted by HDOT, posted on the OahuMPO website, and promoted via the OahuMPO Facebook.

Notice of Open Houses and Opportunity to Provide Comments:

- Newsletter email: OahuMPO sent three newsletter emails to 501 subscribers publicizing the TIP public comment period and open house opportunities via the MPO MailChimp email list.
- Press Release: OahuMPO sent one email to 2,044 publicizing the TIP public comment period and open house opportunities via government delivery platform hosted by HDOT.
- Social Media: OahuMPO posted information publicizing the TIP public comment period and open house events on the OahuMPO Facebook page 9 times from May 27, 2021- June 14, 2021. These Facebook posts resulted in a total audience reach of 202 and 12 engagements.
- Website update: OahuMPO updated the organization's website
 publicizing the TIP public comment period and open house
 events. The posting can be found here:
 https://www.oahumpo.org/plans-and-programs/transportation-improvement-program-tip/
- Calendar: OahuMPO posted the TIP public comment period and open house events via the MPO website calendar. The posting can be found here: https://www.oahumpo.org/get-involved/upcoming-meetings/

Public and Intergovernmental Review Period

OahuMPO staff conducted a Public and Intergovernmental Review Period between June 4, 2021 and June 22, 2021 for the TIP. The Citizens Advisory Committee, the general public, mandated stakeholders, and federally required agencies were emailed/mailed notifications of the final draft of the TIP, how to provide comments, and a deadline to provide comments. The public and intergovernmental review period was promoted via MailChimp to the OahuMPO email list, a press release via the government delivery platform hosted by HDOT and promoted via the OahuMPO Facebook. Where needed hard copies of the TIP draft were also mailed out. The TIP webpage also gave notice of the public and intergovernmental review period, and provided the draft TIP, an online map to visualize project locations, and information about how to provide comments.

Responses to Comments Received

All comments received, as well as responses to the comments, are provided to the Policy Board for their consideration when selecting projects for the final TIP. We received a total of _ comments. A summary of the comments received, and the responses provided can be found in the comments disposition section (Appendix D). A full listing of the comments can also be viewed on the OahuMPO website.

Committee and Policy Board Consideration

The new TIP must be considered by the OahuMPO Technical Advisory Committee (TAC). The Policy Board reviews agency consultations, technical analyses, public comments, and Citizen

Advisory Committee (CAC) and TAC recommendations, to decide whether to endorse the TIP.

OahuMPO Citizen Advisory Committee

The Citizen Advisory Committee (CAC) is comprised of representatives from neighborhood boards and various types of organizations representing resident transportation needs. The CAC was involved in the development and review of the 2045 ORTP (and the FFY 2022-2025 TIP) list of projects and programs and presented the final draft of the TIP on July 7, 2021.

OahuMPO Technical Advisory Committee

The Technical Advisory Committee (TAC) is comprised of representatives of the various transportation and government agencies. The TAC provides technical advice to the Policy Board and the OahuMPO Executive Director on technical matters and insures the technical competence of the planning process. The TAC was involved in the development and review of the 2045 ORTP (and FFY 2022-2025 TIP) list of projects and programs and presented the final draft of the TIP on July 9, 2021.

OahuMPO Policy Board

The Policy Board is the decision-making body of the OahuMPO. It determines the direction of the OahuMPO, considers and approves transportation planning documents, and has the final approval on OahuMPO matters, including the TIP. The voting membership of this body consists of two State Senators; two State Representatives; three City Councilmembers; the Hawaii Department of Transportation (HDOT) Director; the Department of

Transportation Services (DTS) Director; the Department of Planning and Permitting (DPP) Director, and the Honolulu Authority for Rapid Transportation (HART) Director. The non-voting members of the Policy Board include the Administrator of the Federal Highway Administration Hawaii Division Office, the Director of the State Department of Health, and the Director of the State Office of Planning. The Policy Board was involved in the development and review of the 2045 ORTP and presented the final draft of the TIP on July 27, 2021 and heard the recommendations of the TAC and CAC.

Both committee meetings and the Policy Board meeting provided an opportunity for members of the public to give written and/or oral testimony about the TIP.

3.5 APPROVAL OF THE TIP

After reviewing the results of the agency consultations and the technical analyses, the Technical Advisory Committee makes a recommendation to the Policy Board regarding endorsement of the TIP. The Policy Board decides whether to endorse the TIP after considering and discussing the early project recommendations, public comments on the draft TIP, the results of the technical analyses, and the Technical Advisorv Committee's recommendation. Following endorsement by the Policy Board, the TIP is then sent to the Governor's designee for approval. On June 17, 2015, Governor David Y. Ige re-designated the HDOT Director as the official responsible for approving the TIP and its amendments.

3.6 INCORPORATION OF THE TIP INTO THE STIP

Upon approval by the Policy Board and the Governor's designee, the TIP is incorporated, without change, as the O'ahu element of the STIP.

3.7 FHWA AND FTA ACTION ON THE STIP

The TIP is jointly approved by FHWA and FTA as part of the STIP. The decision-making is dependent on the thoroughness and completion of the statewide transportation planning process used in developing the STIP, as required by federal code and regulation.

4 REVISIONS

The TIP covers a period of no more than four years, and a new TIP will be adopted every three years. The TIP is frequently revised to reflect changes in project delivery schedules, changes in cost estimates and/or in scope, and changes in management systems and administrative priorities. These revisions are required to assure the efficient use of the annually apportioned federal funds. The following administrative provisions have been established to promote timely implementation and oversight of the TIP. A revision refers to a change to the TIP that occurs between the triennial updates. A minor revision is an "administrative modification," while a major revision is an "amendment."

Pre-Approved Administrative Modifications:

Pre-approved administrative modifications are minor revisions that are considered pre-approved and can be immediately processed without prior review by the OahuMPO Committees and Policy Board. No solicitation of public comment or redemonstration of financial constraint is required (23CFR450.104). However, it is assumed that financial constraint shall be re-established through the next TIP amendment process the following must be true:

- The administrative modifications must not affect the financial constraint of the TIP;
- The administrative modifications must not result in the addition of another project (excluding the addition of projects to grouped listings/programs with dedicated funding (such as Transportation Alternative Program (TAP), Safe Routes to School (SRTS), Special Maintenance Program (SMP) if the funding amounts stay within

certain guidelines (see TIP Policies and Procedures for details)

- The administrative modifications must not result in the deletion of project, including the deferral of a project to a year that is outside of the four-year TIP; and
- The affected project's implementing agency must concur with the actions.

Expedited Administrative Modifications:

Requests for expedited approval of administrative modifications are submitted directly to the Policy Board without prior review by the Technical Advisory Committee or solicitation of public comment.

Amendments:

Amendments are revisions to the TIP that involve major changes to the TIP. TIP amendments are submitted to the Technical Advisory Committee, the Policy Board, and the Governor's designee for action. Financial constraint is re-demonstrated and consistent with 23CFR450.220, the technical analyses are rerun, including the T6/EJ analysis, and the performance measure and CMP impacts are reassessed. Public comments are also solicited based on the procedures outlined in the OahuMPO Public Participation Plan, and the public comment period begins once the Amendment is posted on the OahuMPO website. Comments and the responses must be documented within the TIP Amendment document. The TIP may be revised at any time, if time permits. There will be two planned major revisions (Amendments) to the TIP in each federal fiscal year (October 1 to September 30). Table 4.1 below identifies the milestones in the semi-annual TIP revisions. Time frames below are subject to change.

Table 4.1 TIP Revision Milestones and Schedule

TIP REVISION	First Revision (fall/winter)	Second (last) Revision (spring/summer)
Step 1: IDENTIFY REVISIONS Notify implementing agencies that the TIP revision process is underway so that they may be	gin to prepare their list of change	es to TIP projects.
Early coordination: Send DTS and HART official email reminding that the TIP revision requests are due in 3 months	Early August	Early January
HDOT schedules Over-the-Shoulder-Reviews (OSRs) with HDOT, DTS, HART, and the OahuMPO to attend and obtain/share project status	Oct-Nov	March-April
TIP revision requests due to OahuMPO, along with PIJS [Project Information and Justification Sheet] or PPR [Planning Programming Request] if applicable	Mid November	Early-Mid April
Step 2: DRAFT TIP REVISION(S) Create draft TIP revision(s)		
OahuMPO develops and finalizes draft TIP revision(s); and works with HDOT, DTS, and HART to confirm accuracy & consistency with the current ORTP	Early December	Late April-Early May
HDOT, DTS, and HART review draft TIP revision(s)	Mid December	Late April-Early May
OahuMPO reruns analyses, and prepares a fiscally constrained draft revision document for distribution	Late December	Mid-Late May
Step 3: IGR AND PUBLIC COMMENTS Usually at least a two-week comment period is provided		
Revisions posted to OahuMPO website and public and agency comment period begins	Early-Mid January	Early-Mid June
Processing of public comments and preparation of presentations for OahuMPO Committees and Policy Board	Mid-Late January	Mid-Late June

TIP REVISION	First Revision (fall/winter)	Second (last) Revision (spring/summer)
Step 4: PRESENTATION TO OMPO COMMITTEES TIP Revisions are presented to the TAC for review and to the PB for approval.		
Technical Advisory Committee consideration	February	July
Policy Board (PB) action	Late Feb-Mid Mar	July
DahuMPO sends letter to Governor's Designee for approval of the TIP Amendment	Early-Mid March	Late July/ Early August
OahuMPO sends letter to HDOT requesting to incorporate TIP revision(s) into the STIP	Mid March	Early August
Step 5: FINALIZE Approval of Amendment and creation of a final "As-Of" TIP document including all the mod	ifications and amendment	
TIP/STIP Amendment jointly approved by FHWA and FTA (anticipated)	Early-Mid Mar	Early-Mid Aug
DahuMPO website updated to show date of revision approval and final revision document	Mid March	Mid August
A full "As of revision #X" TIP document is created and uploaded to the OahuMPO website	Mid-Late March	Mid-Late August

4.1 REVISION HISTORY

The FFYs 2022-2025 TIP was approved by the Policy Board in July 2021. Since then, it has been revised 6 times through May 2022 – approval still pending. The TIP and the revision documents are on the OahuMPO TIP webpage: http://www.oahumpo.org/plans-and-programs/transportation-improvement-program-tip/. Table 4.2 describes the Revisions for the reader's understanding.

Table 4.2 Revisions as of May 2022

PRE-APPROVED ADMINISTRATIVE MODIFICATIONS

REVISION NUMBER	DETAILS
1	January 2022: Deferred/advanced projects; refined project phasing; revised cost estimates
4	May 2022: Deferred projects; refined project phasing; added projects to programs, revised cost estimates

EXPEDITED ADMINISTRATIVE MODIFICATIONS

REVISION NUMBER	DETAILS
2	February: Changes to the size of revenue rolling stock; federalizing phases/projects; added new project phases
5	Pending: Added project phases

AMENDMENTS

REVISION NUMBER	DETAILS
3	February: Added new projects; deferred/advanced or added new project phases; increased amount of funds programmed
6	Pending: Added new projects; changing the quantity of revenue rolling stock; deferred/advanced or added new project phases; increased amount of funds programmed

4.2 PROJECTS MODIFIED IN THIS REVISION

This revision consists of Amendments which require OahuMPO Policy Board approval, a review by the Technical Advisory Committee, and the solicitation of public comments.

FHWA FUNDED PROJECTS:

STATE OF HAWAII

PROJECT NUMBER	PROJECT NAME (ALPHABETICAL ORDER)	REVISION DETAILS	PAGE
OS12	Destination Sign, Upgrade/Replacement - Phase 3	Request to split Phase 3 into two subphases, 3A and 3B, and double CON and ADVCON funds and increase estimated total project cost from \$32.346 million to \$42.346 million (C.8).	27
OS-22-61	Farrington Highway (Route 93), Bridge Rehabilitation, Ulehawa Stream Bridge	Request to add new project (C.1).	29
0S-22-62	Farrington Highway (RTE 93) Sidewalk Improvements, Hakimo Rd to Nanakuli Ave, MP 6.89 to MP 5.06	Request to add new project (C.1).	30
OS-21-48	Kamehameha Highway (Route 83) Safety Improvements, Kukuna Road to Kahana Valley Road, MP 21.6-26.3	Request to delete the project. The scope is to be picked up in ongoing IDIQ pavement project in the same area (C.2).	31
0S-22-63	Kamehameha Highway Wetland Enhancement at James Campbell National Wildlife Refuge	Request to add new project (C.1).	32
OS79	Shoreline Protection/Mitigation Program, Various Locations on Oahu, Priority 1 (Immediate/short-term) Locations, Kamehameha Highway (Route 83), Coastal Highway Mitigation at Kaaawa Elementary	Request to add new project to grouped listing (C.1).	33
OS79	Shoreline Protection/Mitigation Program, Various Locations on Oahu, Priority 1 (Immediate/short-term) Shoreline Erosion Mitigation, Experimental Sandsaver Installation, Kamehameha Hwy (Rte 83), Kualoa, Kalanianaole Hwy (Rte 72) at Bell Street	Request to add new project to grouped listing (C.1).	33

OS79	Shoreline Protection/Mitigation Program, Various Locations on Oahu, Priority 1 (Immediate/short-term) Locations, Kamehameha Highway (Route 83), Coastal Highway Mitigation, Phase 1	Request to defer and inflate ROW and CON by one year - NEPA clearance will not be ready to acquire land (A.2, A.11).	33
OS79	Shoreline Protection/Mitigation Program, Various Locations on Oahu, Priority 1 (Immediate/short-term) Locations, Kamehameha Highway (Route 83), Coastal Highway Mitigation, Phase 1	Request to defer and adjust AC conversion by one year (A.2, A.11).	33
OS79	Shoreline Protection/Mitigation Program, Various Locations on Oahu, Priority 2 (mid/long term) Locations - Farrington Highway (Rte 93) Coastal Highway Mitigation, Vicinity of Keaau Stream Bridge	Request to defer this priority 2 project to focus on new priority 1 projects (A.2).	33
OS79	Shoreline Protection/Mitigation Program, Various Locations on Oahu, Priority 2 (mid/long term) Locations – Kalanianaole Highway (Rte 72) Coastal Highway Mitigation, Vicinity of Bell Street	Request to delete this Priority 2 project from the group listing - Sandsaver project above will improve this area (C.2).	34
0S-22-64	Whitmore Avenue (Rte 7012) Sidewalk Improvements, Phase 2, Ihiihi Ave to Whitmore Community Center, MP 0.72 to MP 1.04	Request to add new project (C.1).	35

FTA FUNDED PROJECTS:

CITY AND COUNTY OF HONOLULU

PROJECT NUMBER	PROJECT NAME (ALPHABETICAL ORDER)	REVISION DETAILS	PAGE
OC13	Bus and Handi-Van Acquisition Program	Request to remove the quantity and length of buses from the project/phase description to allow greater flexibility in the future to expedite and satisfy the City's procurement and fiscal requirements in its purchase of transit vehicles (A.3). The detailed information on bus type and quantity will be available on the project's website.	37
OC13	Bus and Handi-Van Acquisition Program – FFY 2022	Request to add carry-over EQP funds in FFY 2022 (A.11).	37
OC13	Bus and Handi-Van Acquisition Program - FFY 2023	Request to increase EQP funds in FFY 2023 – funds are being reprogrammed to 0C13 from 0C20 FFY 2022 due to CRRSAA funds being applied to 0C20 (C.8).	37
OC13	Bus and Handi-Van Acquisition Program	Request to increase total estimated project cost from \$120.138 million to \$146.528 million (C.8).	37

NUMBER OF PROJECTS BEING REVISED IN REVISION # 6:	PERCENTAGE OF TOTAL TIP PROJECTS REVISED IN REVISION # 6:
8	(8/83) *100 = 10 %

5 PROJECT INFORMATION SHEETS

FHWA-Funded Projects

Hawaii Department of Transportation Projects ("State" projects)



Source: Esri, Maxar, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AeroGRID, IGN, and the GIS User Community

Project Description:

Replace and/or upgrade the existing destination signs and sign support structures on Interstate Routes H-1, H-2, H-201, and Pali Highway.

Mile Post/s: Not applicable

Complete Streets (CS):

Project will implement: No information available. However, CS

principles will be considered in all

Highway Projects.

Existing Feature/s: No information available.

Project Website: None

Neighborhood(s): Various Locations

Estimated Total Project Cost: \$42,346,000

(May include project costs outside of the 4-year TIP and 2 informational years.)

Project Sponsor: State of Hawaii (FHWA Funded)

Agency Responsible for Carrying Out Project/Phase:

														FOR II	<u>NFORM</u>	<u> IOITAI</u>	<u>1 ONL)</u>	<u> </u>	- 1
		FFY 2022	2		FFY 2023	}		FFY 2024			FFY 202	5		FFY 2026	;		FFY 202	7	-
	Total	Federal	Local	Total	Federal	Local	Total	Federal	Local	Funding									
Phase	(x\$1000)	(x\$1000) (x\$1000)	(x\$1000)	(x\$1000	(x\$1000)	(x\$1000)	Category											
INSP	3,000	2,400	600)	0 (0 0	(0	0	C) (0	C	0	0)	0	0	0 NHPP
Phase 3	'A																		
CON	() () (9,70	0 2,000	7,700	(0	0	C) (0	C	0	0)	0	0	0 NHPP
ADVCON	() () ()	0 (0 0	(2,000	-2,000	C	3,760	-3,760	C	0	0)	0	0	0 NHPP
Phase 3	B																		
CON	() () ()	0 (0 0	10,000	2,000	8,000	C) (0	C	0	0)	0	0	0 NHPP
ADVCON	() () ()	0 (0 0	(0	0	C	3,000	-3,000	C	3,000	-3,000)	0	0	0 NHPP
Phase 4	!																		
PE1	() () (57	2 458	3 114	(0	0	C) (0	C	0	0)	0	0	0 NHPP
PE2	() () ()	0 (0 0	832	2 666	166	C) (0	C	0	0)	0	0	0 NHPP
CON	() () ()	0 (0 0	(0	0	10,404	4,323	6,081	C	0	0)	0	0	0 NHPP
ADVCON	() () ()	0 (0 0	(0	0	C) (0	C	4,000	-4,000)	0	0	0 NHPP
Phase 5	i																		

OS12 Destination Sign, Upgrade and Replacement

														FOR IN	IFORM	ATION	ONLY	,	
		FFY 2022	2		FFY 2023	3		FFY 2024			FFY 2025	<u> </u>		FFY 2026	1		FFY 2027		
Phase	Total (x\$1000)	Federal (x\$1000)	Local (x\$1000)	Funding Category															
Phase 5	5																		
PE1	() () ()	0	0 (31	2 250	62	C	C	0	0	0	0) () (0 0	NHPP
PE2	() () ()	0	0 ()	0 0	0	469	375	94	0	0	0) () (0 0	NHPP
CON	() () ()	0	0 ()	0 0	0	C	C	0	0	0	0	8,160	6,32	4 1,836	NHPP
ADVCON	() () ()	0	0 ()	0 0	0	C	C	0	0	0	0) () (0 0	NHPP
Phase 6	6																		
PE1	() () ()	0	0 ()	0 0	0	0		0	877	789	88	3 () (0 0	NHPP
PE2	() () ()	0	0 ()	0 0	0	0	C	0	0	0	0	1,020	918	3 102	NHPP
CON	() () ()	0	0 ()	0 0	0	C	C	0	0	0	0) () (0 0	NHPP
Total	3,000	2,400	600	0 10,27	'2 2,45	8 7,814	1 11,14	4 4,916	6,228	10,873	11,458	-585	877	7,789	-6,912	9,180	7,24	2 1,938	

OS-22-61 Farrington Highway (Route 93) Bridge Rehabilitation, Ulehawa Stream Bridge



Source: Esri, Maxar, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AeroGRID, IGN, and the GIS User Community, Sources: Esri, HERE, Garmin, FAO, NOAA, OpenStreetMap contributors, and the GIS User Community

Project Description:

Rehabilitate the existing bridge

Mile Post/s:

Complete Streets (CS):

Project will implement: NA

Existing Feature/s: NA

Project Website: None

Neighborhood(s): Nanakuli-Maili

Estimated Total Project Cost: \$25,000,000

(May include project costs outside of the 4-year TIP and 2 informational years.)

Project Sponsor: State of Hawaii (FHWA Funded)

Agency Responsible for Carrying Out Project/Phase:

														FOR IN	IFORM	ATION	ONLY		
		FFY 2022	2		FFY 2023	<u> </u>		FFY 2024	<u> </u>		FFY 2025			FFY 2026			FFY 2027		
	Total	Federal	Local	Total	Federal	Local	Total	Federal	Local	Funding									
Phase	(x\$1000)	(x\$1000) (x\$1000)	(x\$1000)	(x\$1000)	(x\$1000) (k\$1000)	Category											
Phase :	1																		
CON	C) () (0	0 (0	(0 0	0	22,000	12,000	10,000	0	0	0	C	0	0	NHPP
ADVCON	C) C) (0	0 (0	(0 0	0	0	0	0	0	3,000	-3,000	C	2,600	-2,600	NHPP
Total	C) () (0	0 (0	(0 0	0	22,000	12,000	10,000	0	3,000	-3,000	C	2,600	-2,600	

OS-22-62 Farrington Highway (RTE 93) Sidewalk Improvements, Hakimo Rd to Nanakuli Ave, MP 6.89 to MP 5.06



Source: Esri, Maxar, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AeroGRID, IGN, and the GIS User Community, Sources: Esri, HERE, Garmin, FAO, NOAA, USGS, OpenStreetMap contributors, and the GIS User Community

Project Description:

Construct new PCC sidewalk and ramps, drainage facilities, utility relocations and adjustments, driveway adjustments, grade adjustment walls, modifications/adjustments to existing traffic appurtenances (signs, traffic signals, etc.)

Mile Post/s: 6.89 to 5.06

Complete Streets (CS):

Project will implement: The purpose of the project is to improve

pedestrian safety, accessibility, and mobility with the implementation of improvements in an "area of concern" identified in the Statewide Pedestrian Master Plan. There is a need to improve pedestrian facilities for safety, accessbility, and multimodal connectivity. The project will construct new PCC sidewalk and ramps, drainage facilities, utility relocations and adjustments, driveway adjustments, grade adjustment walls, modifications/ adjustments to existing traffic appurtenances (signs, traffic signals, etc.)

Existing utilities may need to be adjusted and/or relocated to accommodate the new

sidewalk alignment and/or elevation.

Project Website: None

Existing Feature/s:

Neighborhood(s): Nanakuli-Maili

Estimated Total Project Cost: \$17,000,000

(May include project costs outside of the 4-year TIP and 2 informational years.)

Project Sponsor: State of Hawaii (FHWA Funded)

Agency Responsible for Carrying Out Project/Phase:

														FOR IN	IFORM	ATIO	N ONLY	<u> </u>	
		FFY 2022	2		FFY 2023			FFY 2024			FFY 2025	<u> </u>		FFY 2026	i		FFY 2027	7	
	Total	Federal	Local	Total	Federal	Local	Total	Federal	Local	Funding									
Phase	(x\$1000)	(x\$1000) (x\$1000)	(x\$1000)	(x\$1000)(x\$1000)	(x\$1000)	Category											
CON	C	0) C	15,30	0 6,200	9,100	(0 0	0	(0	0	C	0	0)	0	0 0	NHPP
ADVCON	C	0) ()	0 0	0	(3,000	-3,000	(3,000	-3,000	C	0	0)	0	0 0	NHPP
Total	C	0) (15,30	0 6,200	9,100	(3,000	-3,000	C	3,000	-3,000	C	0	0)	0	0 0	

OS-21-48 Kamehameha Highway Safety Improvements, Kukuna Road to Kahana Valley Road



Project Description:

Scope includes, but is not limited to: installation of centerline milled rumble strips, shoulder milled rumble strips, widen shoulders to accommodate milled rumble strips where appropriate, apply safety edge, installation of HFST at sharp horizontal curves, intersection improvements at various locations, pavement markings, and signing.

Mile Post/s: MP 21.6 to 26.3

Complete Streets (CS):

Project will implement: No information available

Existing Feature/s: No information available

Project Website: None

Neighborhood(s): Koolauloa

Estimated Total Project Cost: \$4,530,000

(May include project costs outside of the 4-year TIP and 2 informational years.)

Project Sponsor: State of Hawaii (FHWA Funded)

Agency Responsible for Carrying Out Project/Phase:

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		FFY 202	2		FFY 2023	3		FFY 2024	<u>. </u>		FFY 202	5		FFY 2026			FFY 2027	7	
Phase	Total (x\$1000)	Federal (x\$1000)	Local (x\$1000)	Total (x\$1000)	Federal (x\$1000)	Local (x\$1000)	Total (x\$1000)	Federal (x\$1000)	Local (x\$1000)	Total (x\$1000)	Federal (x\$1000)	Local (x\$1000)	Total (x\$1000	Federal (x\$1000)	Local (x\$1000)	Total (x\$1000)	Federal (x\$1000)	Local (x\$1000)	Funding Category
CON	() () (0	0	0 0)	0 0	0	C) (0	(0	0	(0	0 0	HSIP
Total	() () (0	0	0 0)	0 0	0	C) (0 0	(0	0	(0	0 0	

OS-22-63 Kamehameha Highway Wetland Enhancement at James Campbell National Wildlife Refuge



Source: Esri, Maxar, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AeroGRID, IGN, and the GIS User Community, Sources: Esri, HERE, Garmin, FAO, NOAA, USG OpenStreetMap contributors, and the GIS User Community

Project Description:

Mitigation of wetland loss due to the Kam Hwy Helemano/Waialua Junction to Haleiwa Beach Park project (Haleiwa Bypass) and the Kahekili Hwy Widening, Likelike Hwy to Vicinity of Haiku Road project in accorance with CFR 33, Part 332. The project is to provide wetland enhancement work that is not currently funded by other means as a replacement for wetlands lost during the construction of the two former Department of Transportation projects.

Mile Post/s:

Complete Streets (CS):

Project will implement: NA

Existing Feature/s: NA

Project Website:

Neighborhood(s): Koolauloa

Estimated Total Project Cost: \$2,500,000

(May include project costs outside of the 4-year TIP and 2 informational years.)

Project Sponsor: State of Hawaii (FHWA Funded)

Agency Responsible for Carrying Out Project/Phase:

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		FFY 2022	2		FFY 2023			FFY 2024	<u>. </u>		FFY 202	5		FFY 2026	j		FFY 2027	7	
Phase		Federal (x\$1000)	Local (x\$1000)	Total (x\$1000)	Federal (x\$1000)	Local (x\$1000)	Total (x\$1000)	Federal (x\$1000)	Local (x\$1000)	Total (x\$1000)	Federal (x\$1000)	Local (x\$1000)	Total (x\$1000	Federal) (x\$1000)	Local (x\$1000)	Total (x\$1000	Federal)(x\$1000)		Funding Category
CON	0	C) (2,00	0 1,600) 400	1	0 0	0	() (0 0	() 0	0		0	0 0	STBG
Total	0	C) (2,00	0 1,600	400		0 0	0	() (0 0	(0	0		0	0 0	



Source: Esri, Maxar, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AeroGRID, IGN, and the GIS User Community

Project Description:

Develop and construct shoreline protection measures to better protect roadways from flooding and erosion as identified and prioritized in the Statewide Shoreline Protection Program. This funding is for the Oahu District Sub-Program.

Mile Post/s: Not applicable

Complete Streets (CS):

Project will implement: Not applicable

Existing Feature/s: Not applicable

Project Website: None

Neighborhood(s): Various Locations

Estimated Total Project Cost: \$70,000,000

(May include project costs outside of the 4-year TIP and 2 informational years.)

Project Sponsor: State of Hawaii (FHWA Funded)

Agency Responsible for Carrying Out Project/Phase:

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		FFY 2022	<u> </u>		FFY 2023			FFY 2024			FFY 2025	<u> </u>		FFY 2026			FFY 202	7	-
	Total	Federal	Local	Total	Federal	Local	Total	Federal	Local	Total	Federal	Local	Total	Federal	Local	Total	Federal		Funding
<u>Phase</u>	(x\$1000)	(x\$1000)	(x\$1000)	(x\$1000)	(x\$1000)	(x\$1000)	(x\$1000)	(x\$1000)	(x\$1000)	(x\$1000)	(x\$1000)	(x\$1000)	(x\$1000) (x\$1000)	(x\$1000)	(x\$1000))(x\$1000)	(x\$1000) Category
Priority	1 - (Shor	rt-Term) K	Kamehan	neha Hw	y, Coasta	l Highway	Mitigatio	n at Kaaa	wa Elem	entary									
CON	C) 0	(3,00	0 2,400	600	(0 0	0	0	0	0	0	0	0	(0	0	0 NHPP
Priority	1 - (Shor	t-Term) k	Kamehan	neha Hw	y, Phase	1													
ROW	C	0	() (0 (0	1,040	0 832	208	0	0	0	0	0	0	(0	0	0 NHPP
CON	C	0	() (0 (0	(0 0	0	21,000	10,000	11,000	0	0	0	(0	0	0 NHPP
ADVCON	C) 0	() (0 (0	(0 0	0	0	0	0	0	3,800	-3,800	(0 3,00	0 -3,0	00 NHPP
Priority	1 - (Shor	t-Term) k	Kamehan	neha Hw	y, Phase i	2													
ROW	C	0	() (0 (0	500	0 400	100	0	0	0	0	0	0	(0	0	0 NHPP
CON	C	0	() (0 (0	(0 0	0	20,000	11,000	9,000	0	0	0	(0	0	0 NHPP
ADVCON	C	0	() (0 (0	(0 0	0	0	0	0	0	5,000	-5,000	(0	0	0 NHPP
Priority	1 - (Shor	t-Term) S	Shoreline	Erosion	Mitigation	, Experim	ental Sa	ndsaver li	nstallatio	n, Kamel	hameha l	Hwy (Rte 8	33), Kua	loa, Kalar	nianaole i	Hwy (Rte	e 72) at L	Bell Stre	et
CON	C	0	(2,00	0 1,600	400	(0 0	0	0	0	0	0	0	0	(0	0	0 NHPP
Priority 2	2 - (Mid/L	Long-Teri	n) Farrin	gton Hw	y, Keaau														
PE1	C	0	() (0 (0	(0 0	0	570	456	114	O	0	0	(0	0	0 NHPP
PE2	C	0	() (0 (0	(0 0	0	0	0	0	O	0	0	37	5 30	0	75 NHPP

OS79 Shoreline Protection/Mitigation Program

														FOR IN	IFORM	ATION	ONLY	, 	
		FFY 2022	2		FFY 2023			FFY 2024	i		FFY 2025	5		FFY 2026	ı		FFY 2027		
	Total	Federal	Local	Total	Federal	Local	Total	Federal	Local	Total	Federal	Local	Total	Federal	Local	Total	Federal	Local	Funding
Phase	(x\$1000)	(x\$1000)	(x\$1000)	(x\$1000)	(x\$1000)	(x\$1000)	(x\$1000)	(x\$1000)	(x\$1000)	(x\$1000)	(x\$1000)	(x\$1000)	(x\$1000) (x\$1000)	(x\$1000)	(x\$1000)	(x\$1000)	(x\$1000)	Category
Priority .	2 - (Mid/L	Long-Terr	n) Farrin	gton Hw	y, Keaau														
ROW	0	0	C) () (0		0 0	0	0	0	0	C	0	0	52	2 4	11	NHPP
CON	0	0	C) (О С	0		0 0	0	0	0	0	C	0	0	C) (0	NHPP
Priority .	2 - (Mid/L	Long-Teri	n) Kalan	ianaole H	łwy, Bell														
PE1	0	0	C) () (0		0 0	0	0	0	0	C	0	0	C) (0	NHPP
PE2	0	0	C) (0 0	0		0 0	0	0	0	0	C	0	0	() (0	NHPP
ROW	0	0	C) (0 0	0		0 0	0	0	0	0	C	0	0	C) (0	NHPP
CON	0	0	C) () (0		0 0	0	0	0	0	C	0	0	C) (0	NHPP
Priority .	2 - (Mid/L	Long-Terr	n) Kalan	ianaole F	lwy, Kau	00													
PE1	0	0	C	1,00	008 C	200		0 0	0	0	0	0	C	0	0	C) (0	NHPP
PE2	0	0	C) () (0		0 0	0	500	400	100	C	0	0	C) (0	NHPP
ROW	0	0	C) () (0		0 0	0	50	40	10	C	0	0	C) (0	NHPP
CON	0	0	C) () (0		0 0	0	0	0	0	C	0	0	8,500	6,800	1,700	NHPP
Total	0	0	C	6,00	0 4,800	1,200	1,54	0 1,232	308	42,120	21,896	20,224	C	8,800	-8,800	8,927	7 10,14	-1,214	

OS-22-64 Whitmore Ave (RTE 7012) Sidewalk Improvements, Phase 2, Ihiihi Ave to Whitmore Community Center, MP 0.72 to MP 1.04



Source: Esri, Maxar, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AeroGRID, IGN, and the GIS User Community, Sources: Esri, HERE, Garmin, FAO, NOAA, USGS, OpenStreetMap contributors, and the GIS User Community

Project Description:

Construct new PCC sidewalk and ramps, drainage facilities, utility relocations and adjustments, driveway adjustments.

Mile Post/s:

Complete Streets (CS):

Project will implement: The purpose of the project is to improve

pedestrian safety, accessibility, and mobility by replacing older existing asphalt path (i.e., roadway shoulder) with a new concrete sidewalk. There is a need to improve pedestrian facilities for safety, accessbility, and multimodal connectivity. The project will construct new PCC sidewalk and ramps, drainage facilities, utility relocations and adjustments,

driveway adjustments.

Existing Feature/s: Existing utilities may need to be adjusted

and/or relocated to accommodate the new sidewalk alignment and/or elevation.

Project Website: None

Neighborhood(s): Wahiawa

Estimated Total Project Cost: \$3,100,000

(May include project costs outside of the 4-year TIP and 2 informational years.)

Project Sponsor: State of Hawaii (FHWA Funded)

Agency Responsible for Carrying Out Project/Phase:

														FOR IN	IFORM	ATIO	ONLY	<u> </u>	
		FFY 202	2		FFY 2023	}		FFY 2024	ļ		FFY 202	5		FFY 2026	j		FFY 2027	7	
	Total	Federal	Local	Total	Federal	Local	Total	Federal	Local	Funding									
Phase	(x\$1000)	(x\$1000) (x\$1000)	(x\$1000)	(x\$1000)(x\$1000)	(x\$1000)	Category											
CON	() () (2,80	0 2,240	560		0 0	0	()	0 0	(0	0		0	0 0	STBG
Total	C) () (2,80	0 2,240	560	(0 0	0	()	0 0	(0	0		0	0 0	

FTA-Funded Projects

City and County of Honolulu Projects ("City" Projects)



Project Description:

Purchase replacement transit buses and Handi-Van vehicles.

Not applicable Mile Post/s:

Complete Streets (CS):

Project will implement: Not applicable

Not applicable Existing Feature/s:

Project Website: http://www.thebus.org and http://www.honolulu.gov/dts

Neighborhood(s): Various Locations

Estimated Total Project Cost: \$146,528,000

(May include project costs outside of the 4-year TIP and 2 informational years.)

EOD INFORMATION ONLY

Project Sponsor: City and County of Honolulu

Agency Responsible for Carrying Out Project/Phase:

City Department of Transportation Services

												FOR INFORMATION ONLY					<u> </u>	-	
		FFY 2022	2		FFY 2023			FFY 2024			FFY 202	5		FFY 2026	;		FFY 202	7	•
	Total	Federal	Local	Total	Federal	Local	Total	Federal	Local	Total	Federal	Local	Total	Federal	Local	Total	Federal	Local	Funding
Phase	(x\$1000)	(x\$1000)	(x\$1000)	(x\$1000)	(x\$1000)	(x\$1000) (x\$1000)	(x\$1000)	(x\$1000)	(x\$1000)	(x\$1000)	Category							
INSP	49	39	10	49	9 39	9 10	49	9 39	10	49	9 39) 10	49	9 39	10	49	9 3	39 1	0 §5307/§5340
2022																			
EQP	10,239	8,191	2,048	, () (0	(0 0	0	() () 0) (0 0	0	()	0	0 §5307/§5340
EQP	140	112	28	; () (0	(0 0	0	C) () 0) (0 0	0	()	0	0 §5307/§5340
EQP	418	334	84	() (0	(0 0	0	C) () 0) (0 0	0	()	0	O §5310
EQP	1,850	1,480	370) () (0	(0 0	0	C) () 0) (0 0	0	()	0	0 §5337 SOGR
EQP	3,848	3,078	770) () (0	(0 0	0	C) () 0) (0 0	0	()	0	O §5339
2023																			
EQP	0	0	0	37,528	30,022	7,506	(0 0	0	C) () 0) (0 0	0	()	0	0 §5307/§5340
EQP	0	0	0	426	341	85	(0 0	0	C) () 0) (0 0	0	()	0	0 §5310
EQP	0	0	0	1,886	1,509	377	(0 0	0	C) () 0) (0 0	0	()	0	0 §5337 SOGR
EQP	0	0	0	3,925	3,140	785	(0 0	0	C) () 0) (0 0	0	()	0	0 §5339
2024																			
EQP	0	0	C) () (0	12,050	9,640	2,410	C) () 0) (0 0	0	()	0	0 §5307/§5340
EQP	0	0	0) () (0	43	5 348	87	C) () 0) (0 0	0	()	0	0 §5310
EQP	0	0	O) () (0	1,92	4 1,539	385	C) () 0) (0 0	0	()	0	0 §5337 SOGR

OC13 Bus and Handi-Van Acquisition Program

									FOR INFORMATION ONLY										
		FFY 2022	2		FFY 2023	}		FFY 2024			FFY 2025	5		FFY 2026	i	F	FY 2027	7	
	Total	Federal	Local	Total	Federal	Local	Total	Federal	Local	Total	Federal	Local	Total	Federal	Local	Total	Federal	Local	Funding
Phase	(x\$1000)	(x\$1000)	(x\$1000)	(x\$1000)	(x\$1000)	(x\$1000)	(x\$1000)	(x\$1000)	(x\$1000)(x\$1000)	(x\$1000)	Category							
2024																			
EQP	0	O) ()	0 (0	4,004	4 3,203	801	0	0	0	0	0	0	0		0 (§5339
2025																			ū
EQP	0	C) ()	0 (0	(0 0	0	12,839	10,271	2,568	0	0	0	0		0 (§5307/§5340
EQP	0	0) ()	0 (0	(0 0	0	444	355	89	0	0	0	0		0 (
EQP	0	O) ()	0 (0	(0 0	0	1,963	1,570	393	0	0	0	0		0 (§5337 SOGR
EQP	0	0) ()	0 (0 0	(0 0	0	4,084	3,267	817	0	0	0	0		0 (§5339
2026																			
EQP	0	0) ()	0 (0 0	(0 0	0	0	0	0	16,333	13,066	3,267	0		0 (§5307/§5340
EQP	0	0) ()	0 (0	(0 0	0	0	0	0	1,354	1,083	271	0		0 (§5310-Urban
EQP	0	0) ()	0 (0	(0 0	0	0	0	0	5,438	4,350	1,088	0		0 (§5337 SOGR
EQP	0	0) ()	0 (0	(0 0	0	0	0	0	481	385	96	0		0 (§5339
2027																			
EQP	0	0) ()	0 (0	(0 0	0	0	0	0	0	0	0	17,206	13,76	5 3,441	§5307/§5340
EQP	0	0) ()	0 (0	(0 0	0	0	0	0	0	0	0	1,380	1,10	4 276	§5310-Urban
EQP	0	0) ()	0 (0	(0 0	0	0	0	0	0	0	0	5,548	4,43	8 1,110	§5337 SOGR
EQP	0	0) ()	0 (0	(0	0	0	0	0	0	0	0	491	39	3 98	§5339
Total	16,544	13,234	3,310	43,81	4 35,05°	1 8,763	18,462	2 14,769	3,693	19,379	15,502	3,877	23,655	18,923	4,732	24,674	19,73	9 4,935	;

5.1 FUNDING SUMMARY

FHWA														ILL	.USTRAT	IVE YEAR	lS	
		FFY 2022			FFY 2023			FFY 2024			FFY 2025			FFY 2026			FFY 2027	
Oahu State (OS)	TOTAL	FEDERAL	LOCAL	TOTAL	FEDERAL	LOCAL	TOTAL	FEDERAL	LOCAL	TOTAL	FEDERAL	LOCAL	TOTAL	FEDERAL	LOCAL	TOTAL	FEDERAL	LOCAL
As of Revision # 3	206,661	156,345	50,316	98,278	140,707	(42,429)	185,454	141,694	43,760	171,493	117,564	53,929	98,717	73,791	24,926	146,770	79,324	67,446
As of Rev 6 Changes	(21,846)	(9,177)	(12,669)	43,977	6,082	37,895	(12,067)	2,708	(14,775)	24,210	9,868	14,342	6,300	16,840	(10,540)	(14,073)	(5,659)	(8,414)
Total as of Revision # 6	184,815	147,168	37,647	142,255	146,789	(4,534)	173,387	144,402	28,985	195,703	127,432	68,271	105,017	90,631	14,386	132,697	73,665	59,032
Oahu City (OC)																		
As of Revision # 3	51,678	17,420	34,258	14,402	9,387	5,015	23,073	18,000	5,073	22,969	18,000	4,969	29,752	24,273	5,479	4,025	2,700	1,325
As of Rev 6 Changes	(4,999)	(4,334)	(665)	7,738	7,089	649	(4,096)	(3,197)	(899)	(826)	(661)	(165)	6,233	4,903	1,330	0	0	0
Total as of Revision # 6	46,679	13,086	33,593	22,140	16,476	5,664	18,977	14,803	4,174	22,143	17,339	4,804	35,985	29,176	6,809	4,025	2,700	1,325
TOTAL FHWA	231,494	160,254	71,240	164,395	163,265	1,130	192,364	159,205	33,159	217,846	144,771	73,075	141,002	119,807	21,195	136,722	76,365	60,357

FTA

	FFY 2022			FFY 2023			FFY 2024			FFY 2025			FFY 2026			FFY 2027	
TOTAL	FEDERAL	LOCAL	TOTAL	FEDERAL	LOCAL	TOTAL	FEDERAL	LOCAL	TOTAL	FEDERAL	LOCAL	TOTAL	FEDERAL	LOCAL	TOTAL	FEDERAL	LOCAL
1,266	1,012	254	970	775	195	1,006	804	202	1,044	835	209	1,064	851	213	1,085	868	217
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1,266	1,012	254	970	775	195	1,006	804	202	1,044	835	209	1,064	851	213	1,085	868	217
120,580	108,773	11,807	826,915	286,530	540,385	1,627,564	530,649	1,096,915	46,731	37,382	9,349	51,008	40,804	10,204	52,027	41,620	10,407
(25,991)	(20,769)	(5,222)	26,250	21,000	5,250	0	0	0	0	0	0	0	0	0	0	0	0
94,589	88,004	6,585	853,165	307,530	545,635	1,627,564	530,649	1,096,915	46,731	37,382	9,349	51,008	40,804	10,204	52,027	41,620	10,407
95,855	89,016	6,839	854,135	308,305	545,830	1,628,570	531,453	1,097,117	47,775	38,217	9,558	52,072	41,655	10,417	53,112	42,488	10,624
	1,266 0 1,266 120,580 (25,991) 94,589	1,266 1,012 0 0 1,266 1,012 120,580 108,773 (25,991) (20,769) 94,589 88,004	TOTAL FEDERAL LOCAL 1,266 1,012 254 0 0 0 1,266 1,012 254 120,580 108,773 11,807 (25,991) (20,769) (5,222) 94,589 88,004 6,585	TOTAL FEDERAL LOCAL TOTAL 1,266 1,012 254 970 0 0 0 0 1,266 1,012 254 970 120,580 108,773 11,807 826,915 (25,991) (20,769) (5,222) 26,250 94,589 88,004 6,585 853,165	TOTAL FEDERAL LOCAL TOTAL FEDERAL 1,266 1,012 254 970 775 0 0 0 0 0 1,266 1,012 254 970 775 120,580 108,773 11,807 826,915 286,530 (25,991) (20,769) (5,222) 26,250 21,000 94,589 88,004 6,585 853,165 307,530	TOTAL FEDERAL LOCAL TOTAL FEDERAL LOCAL 1,266 1,012 254 970 775 195 0 0 0 0 0 0 1,266 1,012 254 970 775 195 120,580 108,773 11,807 826,915 286,530 540,385 (25,991) (20,769) (5,222) 26,250 21,000 5,250 94,589 88,004 6,585 853,165 307,530 545,635	TOTAL FEDERAL LOCAL TOTAL FEDERAL LOCAL TOTAL 1,266 1,012 254 970 775 195 1,006 0 0 0 0 0 0 0 0 1,266 1,012 254 970 775 195 1,006 120,580 108,773 11,807 826,915 286,530 540,385 1,627,564 (25,991) (20,769) (5,222) 26,250 21,000 5,250 0 94,589 88,004 6,585 853,165 307,530 545,635 1,627,564	TOTAL FEDERAL LOCAL TOTAL FEDERAL LOCAL TOTAL FEDERAL 1,266 1,012 254 970 775 195 1,006 804 0 0 0 0 0 0 0 0 0 1,266 1,012 254 970 775 195 1,006 804 120,580 108,773 11,807 826,915 286,530 540,385 1,627,564 530,649 (25,991) (20,769) (5,222) 26,250 21,000 5,250 0 0 94,589 88,004 6,585 853,165 307,530 545,635 1,627,564 530,649	TOTAL FEDERAL LOCAL TOTAL FEDERAL LOCAL TOTAL FEDERAL LOCAL 1,266 1,012 254 970 775 195 1,006 804 202 0 0 0 0 0 0 0 0 0 1,266 1,012 254 970 775 195 1,006 804 202 120,580 108,773 11,807 826,915 286,530 540,385 1,627,564 530,649 1,096,915 (25,991) (20,769) (5,222) 26,250 21,000 5,250 0 0 0 94,589 88,004 6,585 853,165 307,530 545,635 1,627,564 530,649 1,096,915	TOTAL FEDERAL LOCAL TOTAL TOTAL PEDERAL LOCAL TOTAL TOTAL PEDERAL LOCAL TOTAL PADERAL LOCAL TOTAL PEDERAL LOCAL TOTAL PADERAL LOCAL TOTAL PADERAL LOCAL TOTAL PEDERAL LOCAL TOTAL PADERAL LOCAL	TOTAL FEDERAL LOCAL TOTAL REDERAL 1,004 805 805 PROSE OF TOTAL TOTAL 1,006 <td>TOTAL FEDERAL LOCAL TOTAL FEDERAL LOCAL 1,266 1,012 254 970 775 195 1,006 804 202 1,044 835 209 1,266 1,012 254 970 775 195 1,006 804 202 1,044 835 209 120,580 108,773 11,807 826,915 286,530 540,385 1,627,564 530,649 1,096,915 46,731 37,382 9,349 (25,991) (20,769) (5,222) 26,250 21,000 5,250 0 0 0 0 0 0 0 0 0 0 0 0 94,589 88,004 6,585 853,165 307,530 545,635 1,627,564 530,649 1,096,915 46,731 37,382 9,349</td> <td>TOTAL FEDERAL LOCAL TOTAL 1,064 1,064 1,012</td> <td>TOTAL FEDERAL LOCAL TOTAL FEDERAL 1,266 1,012 254 970 775 195 1,006 804 202 1,044 835 209 1,064 851 0<td>TOTAL FEDERAL LOCAL TOTAL FEDERAL</td><td>TOTAL FEDERAL LOCAL TOTAL TOTAL</td><td>TOTAL FEDERAL LOCAL TOTAL FEDERAL</td></td>	TOTAL FEDERAL LOCAL 1,266 1,012 254 970 775 195 1,006 804 202 1,044 835 209 1,266 1,012 254 970 775 195 1,006 804 202 1,044 835 209 120,580 108,773 11,807 826,915 286,530 540,385 1,627,564 530,649 1,096,915 46,731 37,382 9,349 (25,991) (20,769) (5,222) 26,250 21,000 5,250 0 0 0 0 0 0 0 0 0 0 0 0 94,589 88,004 6,585 853,165 307,530 545,635 1,627,564 530,649 1,096,915 46,731 37,382 9,349	TOTAL FEDERAL LOCAL TOTAL 1,064 1,064 1,012	TOTAL FEDERAL LOCAL TOTAL FEDERAL 1,266 1,012 254 970 775 195 1,006 804 202 1,044 835 209 1,064 851 0 <td>TOTAL FEDERAL LOCAL TOTAL FEDERAL</td> <td>TOTAL FEDERAL LOCAL TOTAL TOTAL</td> <td>TOTAL FEDERAL LOCAL TOTAL FEDERAL</td>	TOTAL FEDERAL LOCAL TOTAL FEDERAL	TOTAL FEDERAL LOCAL TOTAL TOTAL	TOTAL FEDERAL LOCAL TOTAL FEDERAL

All values are in thousands of U.S. dollars (x1000).

5.2 FHWA REGULAR FORMULA FUNDS PROGRAMMED

	TRANSPORTATION IMPROVEMENT PI			PROGRAM	FOR INFORM	IATION ONLY	
	FFY 2022	FFY 2023	FFY 2024	FFY 2025	FFY 2026	FFY 2027	
Oahu State (OS)							
Highway Safety Improvement Program	14,887	3,600	0	1,600	0	1,600	
Railway Highway Crossings Program	0	2,070	0	0	0	0	
National Highway Performance Program	116,024	127,279	132,155	121,832	90,631	72,065	
Surface Transportation Block Grant Program	12,800	13,840	12,247	4,000	0	0	
Bridge On-System	0	0	0	0	0	0	
Recreational Trails Program	0	0	0	0	0	0	
STP Enhancement	3,457	0	0	0	0	0	
State - FHWA Total	147,168	146,789	144,402	127,432	90,631	73,665	
Oahu City (OC)							
Highway Safety Improvement Program	120	30	496	0	0	0	
Surface Transportation Block Grant Program	11,766	11,946	11,188	13,063	25,776	300	
Bridge Off-System	1,200	2,400	1,952	1,930	2,400	2,400	
Transportation Alternatives Program	0	0	167	1,346	0	0	
Transportation Alternatives Program - Urban	0	1,000	1,000	1,000	1,000	0	
Safe Routes To School	0	0	0	0	0	0	
Federal Lands Access Program	0	1,100	0	0	0	0	
City - FHWA Total	13,086	16,476	14,803	17,339	29,176	2,700	
FHWA TOTAL	160,254	163,265	159,205	144,771	119,807	76,365	

All values are in thousands of U.S. dollars (x1000).

6 FINANCIAL PLANNING

Projects and all their phases listed in the TIP must identify the funding to be used. Funding can come from federal sources, State/County sources, or private sources. The primary sources of revenue underlying the surface transportation system for Oʻahu are, however, our federal, state, and local governments. Federal funds are provided through the FHWA and the FTA. The amount of federal highway funding that is anticipated to be available for Oʻahu is estimated by HDOT and OahuMPO using a formula that distributes money among each of the Hawaiian Islands based on vehicle miles traveled. Funding levels may be revised based on future legislation. The first four years of the FFY 2022-2025 TIP are financially constrained; that is, there is a reasonable expectation that projects can be implemented using committed, available, or reasonably expected federal and local funding.

An inflation factor was used in the financial assumptions to reflect "year of expenditure" dollars. As of 2017, HDOT sets a compounded inflation rate of 2% for all STIP projects. Therefore, agencies were requested to apply a 2% inflation factor to all project estimates.

6.1 FUNDING SOURCES

There are three types of funding sources for the TIP projects: federal transportation appropriations (including grants from the FHWA and the FTA), the State Transportation Funds (primarily by bond authorizations), and local funds.

Federal funds are determined by federal surface transportation authorizations and are appropriated annually by Congress. This TIP document was originally based on authorization levels established under the Fixing America's Surface Transportation Act (FAST Act). The FAST Act is the authorization bill that governs federal surface transportation spending. It was signed into law by President Barack Obama on December 4, 2015 and has been extended by congress to September 30, 2021. The next reauthorization bill, Surface Transportation Reauthorization Act of 2021, was signed by congress in May 26, 2020. This new Act and the amendments made by the Act take effect on October 1, 2021.

The previous authorization bill for federal surface transportation spending was the Moving Ahead for Progress in the 21st Century (MAP-21) Act. President Barack Obama signed it on July 6, 2012. MAP-21 reformed aspects of the prior authorization bill, SAFETEA-LU. Map-21 consolidated bicycle and pedestrian transportation projects into one program for Transportation Alternatives (TA).

Prior to Map-21, SAFETEA-LU had been signed into law by President George W. Bush on August 10, 2005, and extended through 2010 by the Continuing Appropriations Resolution, 2010 (Public Law 111-68), as amended.

Detailed information on the revenues estimated to be available for the State of Hawaii is available in HDOT's FFY 2022-2025 STIP. OahuMPO's TIP focuses on transportation programs and projects for the island of O'ahu, only.

In developing the FFYs 2022-2025 TIP, OahuMPO, HDOT, and DTS cooperatively formulated estimates of FHWA funds that were reasonably expected to be available for projects on the island of Oʻahu. Statewide funding distribution estimates were developed based on a combination of historic data, daily vehicle miles travelled (DVMT), and public needs. It was estimated that about \$100 million FHWA funds would be available annually for projects on Oʻahu - about \$17 million would be available for projects sponsored by the City and County of Honolulu, and the remainder for projects sponsored by the State of Hawaii.

In the years to be endorsed by FHWA and FTA, 2022 -2025, the TIP identified FHWA projects totaling approximately \$775 million (\$387 million in federal funds) to be implemented during the four-year program period. FTA projects totaled \$1.3 billion (\$526 million in federal funds). The projects listed include those eligible for federal funding assistance as well as regionally significant, fully locally funded projects.

Under the FAST Act, HDOT may transfer apportionments from one program to another (with associated repercussions). For example, HDOT may transfer up to 50% of its National Highway System apportionment to the Statewide Transportation Program apportionment. Therefore, the total amount of FHWA funds programmed is key. However, although this provides more immediate flexibility, transferring from one fund type to another reduces the ability to follow through with the intent of the fund.

Descriptions of each category of funds and explanations of eligible uses, limitations, and availability are provided below.

FHWA Funds

FHWA funding sources include, but are not limited to:

- Congestion Mitigation Air Quality Improvement Program;
- Highway Safety Improvement Program;
- National Highway Performance Program;
- Surface Transportation Block Grant Program; and
- Transportation Alternatives
- Recreational Trails Program;
- Off-System Bridges
- Discretionary

Congestion Mitigation & Air Quality Improvement Program

The Congestion Mitigation and Air Quality (CMAQ) Improvement Program provides funding for transportation projects or programs that will contribute to attainment or maintenance of the national ambient air quality standards for ozone, carbon monoxide, and particulate matter. Because Oahu is an air quality attainment area, CMAQ funds provide a flexible funding source for transportation projects. The FAST Act emphasizes diesel engine retrofits and alternative fuel infrastructure.

Highway Safety Improvement Program

The purpose of the Highway Safety Improvement Program (HSIP) is to reduce traffic fatalities and serious injuries on all public roads. The HSIP requires a data-driven, strategic approach to improving highway safety on all public roads that focuses on performance. Projects must be consistent with the State's Strategic Highway Safety Program, and must be identified on the basis of crash experience, potential, rate, and/or other data-driven means.²

National Highway Performance Program (NHPP)

The NHPP provides support for the condition and performance of the National Highway System (NHS), for the construction of new facilities on the NHS, and to ensure that investments of federal-aid funds in highway construction are directed to support progress toward the achievement of performance targets established in a State's asset management plan for the NHS.

NHPP projects must be on an eligible facility and support progress toward achievement of national performance goals for improving infrastructure condition, safety, mobility, or freight movement on the NHS, and be consistent with Metropolitan and Statewide planning requirements. FAST Act allows States to use NHPP funds for reconstruction, resurfacing, restoration, rehabilitation, or preservation of a bridge on a non-NHS federal-aid highway if the Interstate System and NHS Bridge Condition provision requirements are satisfied.

The NHS within the O'ahu Region includes all the Interstate routes

as well as freeways and specially designated "Principal Arterials" included.

Surface Transportation Block Grant Program (STBG)

The FAST Act converts the long-standing Surface Transportation Program (STP) into the Surface Transportation Block Grant Program (STBG) keeping all prior STP eligibilities and adding a few new ones. This program provides flexible funding to best address State and local transportation needs. The STBG funds are meant to benefit minor arterial and collector roadways rather than the more critical principal arterials funded by the NHPP and other programs. The FHWA apportions funding as a lump sum for each State. That sum is then divided among apportioned programs. Part of the State's STBG apportionment is to be set aside for: Transportation Alternatives (TA), 2% for State Planning and Research, and bridges not on federal-aid highways ("Off-system bridges"). A State may also transfer up to 50% of the remaining STBG funds to the National Highway Performance Program, National Highway Freight Program, Highway Safety Improvement Program, and Congestion Mitigation and Air Quality Improvement Program. The STBG program has the most flexible eligibilities among all federalaid highway programs. Funds can be used for a wide range of projects, such as for projects on any federal-aid highway, or for reconstruction, resurfacing, restoration, rehabilitation, or preservation of a bridge on any public road, roadway widening, roadway reconstruction, transit capital projects, public bus terminals and facilities, ridesharing projects, etc.

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² 23 U.S.C. 148(c)(2)(B)

Transportation Alternatives

Transportation Alternatives (TA) is funded by set-aside Surface Transportation Block Grant program funding. These funds are thus referred to as TA Set-Aside funds. The TA program provides funding for programs and projects defined as transportation alternatives, including on- and off-road pedestrian and bicycle facilities, infrastructure projects for improving non-driver access to public transportation and enhanced mobility, community improvements such as historic preservation, vegetation management, certain environmental mitigation, recreational trails, and safe routes to school projects. Similar to the STBG funds, a portion of TA funds are sub-allocated based on population. All projects interested in using TA Set-Aside funds must got through a competitive application process.

Recreational Trails Program

Part of the Transportation Alternatives funds is set aside for the Recreational Trails Program (RTP). The RTP is a state-administered, federal assistance program to develop and maintain recreational trails and trail-related facilities for both non-motorized and motorized recreational trail uses. Nationwide, federal transportation funds benefit recreational uses such as hiking, bicycling, in-line skating, equestrian use, cross-country skiing, snowmobiling, off-road motorcycling, all-terrain vehicle riding, four-wheel driving, or using other off-road motorized vehicles.

Off-System Bridges

The "Off-System" Bridge Program contains set-aside funds from the Surface Transportation Block Grant Program. The program provides funds to replace or rehabilitate deficient bridges that are not on the federal-aid road system, therefore bridges on local roads or rural minor collectors.

Discretionary

Discretionary funds are additional funds (not formula funds) that the federal government may decide to award to the region. Examples include Corridor Planning, Ferry Boats, System Preservation funding; Public Lands Highways funding; and congressional allocations such as RAISE/BUILD grants.

FTA Funds

Each year, Congress passes legislation which, when signed by the President, appropriates funds for the Department of Transportation and related agencies. After that legislation is enacted, FTA publishes a Notice in the Federal Register that provides an overview of the apportionments and allocations based on these funds for the various FTA programs as well as statements of policy and guidance on public transit administration.

FTA's public transportation assistance program authorization is provided by federal transit law and Chapter 53 of Title 49, U.S. Code. The Fixing America's Surface Transportation (FAST) Act (Pub L. 114-94, December 4, 2015) made changes to Chapter 53

and provided contract authority and general fund authorizations for FTA's public transportation assistance programs for five years (fiscal years 2016 through 2020).

For financial constraint purposes, FTA formula apportionments, as estimated for FFYs 2022 and 2023 were used (https://www.transit.dot.gov/). For FFYs 2024 and 2025, the nationwide funding level is assumed to grow at an annual rate of 2.1%, consistent with the Congressional Budget Office forecast of the Highway Trust Fund revenues.

FTA Funds include, but are not limited to:

- §5307 Urbanized Area Formula Grants;
- §5340 Growing States and High-Density States;
- §5309 Fixed Guideway Modernization;
- §5309 New Starts;
- §5310 Enhanced Mobility;
- §5329 State Safety Oversight Program;
- §5337 State of Good Repair; and
- §5339 Bus and Bus Facilities;

The following sections describe the various funding sources for FTA programs.

Urbanized Area Formula Grants (Section 5307)

The Urbanized Area Formula Funding program (49 U.S.C. § 5307) provide funds to urbanized areas for transit capital and operating assistance and for transportation-related planning, although operating assistance is generally not an eligible expense for UZAs with populations of 200,000.

Eligible activities include: planning, engineering, design, and evaluation of transit projects and other technical transportation-related studies; capital investments in bus and bus-related activities such as replacement, overhaul and rebuilding of buses, crime prevention and security equipment, and construction of maintenance and passenger facilities; and capital investments in new and existing fixed guideway systems including rolling stock, overhaul and rebuilding of vehicles, track, signals, communications, and computer hardware and software. In addition, associated transit improvements and certain expenses associated with mobility management programs are eligible under the program. All preventive maintenance and some Americans with Disabilities Act complementary paratransit service costs are considered capital costs.

Funding is apportioned on the basis of legislative formulas. For areas of 50,000 to 199,999 in population, the formula is based on population and population density. For areas with populations of 200,000 and more, the formula is based on a combination of bus revenue vehicle miles, bus passenger miles, fixed guideway revenue vehicle miles, and fixed guideway route miles, as well as population and population density.

FTA also apportions funds to urbanized areas under Section 5340 Growing States and High-Density States formula factors based on State population forecasts for 15 years beyond the most recent Census. FTA consolidates the Section 5307 and Section 5340 amounts and identifies a single apportionment amount for each UZA.

Growing States and High-Density States Formula, 49 U.S.C. §5340

Growing States and High--Density States Formula funding was established by SAFETEA-LU to supplement Urban Area Formula, pursuant to certain thresholds established by the FTA.

Capital Investment Grants Program (Section 5309) – "New Starts"

The Capital Investment Program is a discretionary grant program usually allocated by Congress. The program provides funds for transit capital investments, including heavy rail, commuter rail, light rail, streetcars, and bus rapid transit. Federal transit law requires transit agencies seeking Capital Investment Grants Program funding to complete a series of steps over several years. The New Starts funds may be used for construction of new fixed guideway systems or extensions to existing fixed guideway systems. For New Starts the law requires completion of two phases in advance of receipt of a construction grant agreement – Project Development and Engineering. These funds are programmed for the Honolulu Rail Transit Project.

Enhanced Mobility of Seniors and Individuals with Disabilities, (Section 5310)

This program (49 U.S.C. §5310) aims to improve mobility for seniors and individuals with disabilities by removing barriers to

transportation service and expanding transportation mobility options. This program supports transportation services planned, designed, and carried out to meet the special transportation needs of seniors and individuals with disabilities. Eligible capital costs include buses, vans, radios, computers, engines, and transmissions.

Eligible projects include both "traditional" capital investment such as buses, vans, radios, computers, engines, and transmissions, as well as "non-traditional" investment beyond the Americans with Disabilities Act (ADA) complementary paratransit services.

Funds are apportioned based on each state's share of the population for these two groups. Formula funds are apportioned to direct recipients; for rural and small urban areas, this is the state Department of Transportation, while in large urban areas, a designated recipient is chosen by the governor. Direct recipients have flexibility in how they select subrecipient projects for funding, but their decision process must be clearly noted in a state/program management plan. The selection process may be formula-based, competitive or discretionary, and sub-recipients can include states or local government authorities, private non-profit organizations, and/or operators of public transportation.

State Safety Oversight Program, (Section 5329)

The State Safety Oversight Program, 49 U.S.C. §5310(e), provides monies for the safety compliance of federally-funded public transit projects, and facilitates safety improvements for said projects. This program ensures compliance by separating safety oversight from the rail agencies that are being reviewed.

State of Good Repair Program, (Section 5337)

The State of Good Repair (SOGR) formula funds, 49 U.S.C. §5337, provide capital assistance for maintenance, replacement, and rehabilitation projects of existing high-intensity fixed guideway and high-intensity motorbus systems to maintain a state of good repair, including projects to replace and rehabilitate:

- Rolling stock
- Tack
- Line equipment and structures
- Signals and communications
- Power equipment and substations
- Passenger stations and terminals
- Security equipment and systems
- Maintenance facilities and equipment
- Operational support equipment, including computer hardware and software.

Additionally, SGR grants are eligible for developing and implementing Transit Asset Management plans. The State of Good Repair program currently funds maintenance of the Bus and Handi-van on Oʻahu. The State of Good Repair (SGR) funds exist to upkeep bus and rail transit systems.

Bus & Bus-Related Facilities Program (Section 5339)

This program, 49 U.S.C. 5339, provides funding to states and transit agencies through a statutory formula to replace, rehabilitate and

purchase buses, vans, and related equipment, and to construct bus-related facilities including technological changes or innovations to modify low or no emission vehicles or facilities. In addition to the formula allocation, the Grants for Buses and Bus Facilities program includes two discretionary components: the Bus and Bus Facilities Discretionary Program and the Low or No Emissions Bus Discretionary Program. the Low- or No-Emission Vehicle Program, 49 U.S.C. 5339(c), provides competitive grants to state and local governmental authorities for the purchase or lease of zero-emission and low-emission transit buses as well as acquisition, construction, and leasing of required supporting facilities.

"Flexible" Funds

The Federal Highway and Transit Laws authorize certain funds to be "flexible." For example, FHWA Surface Transportation Program funds can be transferred from FHWA to FTA for use in transit projects, while FTA Urbanized Area Formula funds may be available for highway projects.

Advance Construction

Advanced construction is a technique that allows a state to initiate a project using non-federal funds in the absence of sufficient federal-aid obligation authority for the federal match of funding³. This heightened eligibility means that FHWA has greatened the ability of transportation agencies to undertake concurrent

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³³ 23 U.S.C. 115

projects. After an advance construction project is authorized, the State may convert the project to regular federal-aid funding, provided federal funds are made available for the project.

Local Funds

State of Hawaii Funds

The State of Hawaii imposes taxes, fees, and charges relating to the operation and use of motor vehicles on public highways. These revenues from charges such as vehicle weight tax, vehicle registration fees, liquid fuel tax, rental motor vehicle surcharge tax, licenses and fees, and fines, forfeitures, and penalties are deposited into special funds in treasury of State (Hawaii Revised Statutes Section 248-8). The non-tax revenues to the State's governmental funds include intergovernmental revenues, charges for current services, revenues from private sources, interest and investment income, rentals, and other revenues.

Monies deposited in the State Highway Fund section of the State Special Funds are used for acquisition, planning, design, construction, repair, and maintenance of the State Highway System.

The current taxes, fees, and charges deposited into the State Highway Fund consist of:

• Liquid Fuel Tax—The Highway Fund portion only of a tax on distributors for each gallon of liquid fuel refined, manufactured,

produced, or compounded by the distributor and sold or used by the distributor in the state. Most commonly, distributors pass this tax on to the customers (HRS §243). Highway fuel taxes;

- Vehicle Weight and Registration Tax—This category is composed of vehicle weight tax and vehicle registration fees (HRS §249).
- Rental Motor, Tour Vehicle, and Car-Sharing Vehicle Surcharge Tax—This tax is composed of daily surcharge fees imposed on rental vehicles and tour vehicles and a surcharge tax per every half-hour that a motor vehicle is rented or leased by a carsharing organization (HRS §251).

Other miscellaneous sources of revenue include interest earnings on monies previously credited to the State Highway Fund, vehicle weight tax penalties, certain rental income from State Highway System properties, passenger motor vehicle inspection charges, overweight permits, sales of surplus lands, license fees - Primarily drivers' licensing fees, fines for illegal parking on bikeways, fines for parking violations on

State Highways known as the State Highway Enforcement Program, fines for use of mobile electronic devise while driving, and other miscellaneous revenue.

Every other year, the Governor submits to the State Legislature the Administration's biennium budget. The Legislature reviews the biennium budget in detail and authorizes all or a portion of the biennium budget and the individual capital improvement projects.

Authorization of the operating and capital improvement budgets by the Legislature, as part of the biennium budget, includes the appropriation of monies from designated sources. These appropriations authorize the funding for the local match for the State's federal-aid projects in the TIP.

City and County of Honolulu Funds

The City's ground transportation revenue comes primarily from the Highway Fund (not to be confused with the State Highway Fund) and the Public Transportation System. The Highway Fund includes special revenue proceeds that have been earmarked by law for highway and related activities. Typically, they include the City's fuel tax, motor vehicle weight tax, and public utility franchise tax. The Hawaii Revised Statutes authorizes the City to fix the fees and charges for all public services not otherwise provided for by the State and to issue general obligation bonds to finance its public improvement projects. Funding from the public transportation system capital project being constructed by the Honolulu Authority for Rapid Transportation include charges for services, capital grants/contributions, investment earnings. and intergovernmental transfers (that is, GET). Revenue sources for public transportation system operations include charges services and operating grants/contributions, with the predominant contributions coming from grants from the City and County of Honolulu, Highway Fund, and General Fund which predominately fund wages and fringe benefits, fuel and energy, materials and services, and risk and insurance.

Where local funding is identified in the FFYs 2022-2025 TIP for

City projects, City funds from existing revenue sources are programmed. While it is anticipated that local funding will be available at the levels programmed in this document, enactment of the City's annual budget ordinances is still required.

Honolulu Authority for Rapid Transportation Funds

The Honolulu Authority for Rapid Transportation (HART) is a semi-autonomous public agency that is building the Honolulu Rail Transit Project. The local share of project costs is currently funded through a dedicated ½-percent surcharge on the-State General Excise and Use Tax (GET) and a 1 percent surcharge on the Transient Accommodation Tax (TAX) until 2030.

6.2 ANNUAL FINANCIAL PLANS FOR MAJOR PROJECTS

Title 23 United States Code Section 106 requires recipients of federal financial assistance for projects to develop an annual Financial Plan for those projects that fall into either of the following two tiers:

- Projects with an estimated total project cost of \$500 million or more (Major Projects: 23 U.S.C. 106(h)); or
- Projects with an estimated total project cost between \$100 million and \$500 million (Major Projects Other- 23 USC 106(i)).

At the FHWA Hawaii Division Administrator's discretion, projects within the State of Hawaii that fall in the range of \$90-\$100 million may also be required to prepare a Financial Plan.

Projects meeting these thresholds shall have Financial Plans and Annual Updates prepared by the Project Owner. The Project Owner can determine the effective date of the Annual Update submission. It could be on the anniversary of the initial financial plan or coincide with the State's fiscal year.

The FHWA Hawaii Division may provide assistance in developing Financial Plans and obtaining a Financial Plan template for Major Projects. For more information about Major Project requirements and Major Project financial plans, see the FHWA websites⁴:

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⁴ https://www.fhwa.dot.gov/majorprojects/ and https://www.fhwa.dot.gov/majorprojects/financial_plans/index.cfm

6.3 FINANCIAL CONSTRAINT TABLES

The TIP is required to be financially constrained by year and include a financial plan that demonstrates which projects can be implemented using current revenue sources and which projects are to be implemented using proposed revenue sources. The tables demonstrate the financial constraint of each of the funding sources for each fiscal year. The tables show the amount of federal funds proposed to be obligated during each program year (funds programmed). For the first year, this includes the proposed category of federal funds and source(s) of non-federal funds. For the second, third, and fourth years, this includes the likely category or possible categories of federal funds and sources of non-federal funds.

FHWA Financial Constraint

The FHWA program is financially constrained, as demonstrated in the following tables (Tables 7.1-7.4). The amount of FHWA funds estimated to be available for projects on Oʻahu is based on federal apportionment and determined through cooperative agreement between OahuMPO, HDOT, DTS, and HART. Information on the obligation authority estimated to be available for the entire State of Hawaii is available in the HDOT's FFYs 2022-2025 STIP, as revised.

FHWA Financial Constraint - FFY 2022

Funding Category	Federal Funds Available for Oahu (x\$1000)	Local Funds (x\$1000)	Total Sources (x\$1000)	Total Funds Programmed (x\$1000)	Funds Balance (x\$1000)
Earmark HP	3,457	(3,457)	-	-	-
FLAP	-	-	-	-	-
HSIP	15,007	943	15,950	15,950	-
Locally Funded	-	52,520	52,520	52,520	-
NHPP	116,024	(10,509)	105,515	105,515	-
Railway Highway Crossings Program	-	-	-	-	-
OS BRIDGE	1,200	580	1,780	1,780	-
SRTS	-	-	-	-	-
STBG	24,566	31,163	55,729	55,729	-
TA Set-Aside	-	-	-	-	-
TA Set-Aside Urban	-	-	-	-	-
CMAQ	-	-	-	-	-
Total	160,254	71,240	231,494	231,494	-

FHWA Financial Constraint – FFY 2023

Funding Category	Federal Funds Available for Oahu (x\$1000)	Local Funds (x\$1000)	Total Sources (x\$1000)	Total Funds Programmed (x\$1000)	Funds Balance (x\$1000)
Earmark HP	-	-	-	-	-
FLAP	1,100	275	1,375	1,375	-
HSIP	3,630	(1,595)	2,035	2,035	-
Locally Funded	-	23,031	23,031	23,031	-
NHPP	127,279	(15,124)	112,155	112,155	-
Railway Highway Crossings Program	2,070	230	2,300	2,300	-
OS BRIDGE	2,400	1,240	3,640	3,640	-
SRTS	-	-	-	-	-
STBG	25,786	(7,177)	18,609	18,609	-
TA Set-Aside	-	-	-	-	-
TA Set-Aside Urban	1,000	250	1,250	1,250	-
CMAQ	-	-	-	-	-
Total	163,265	1,130	164,395	164,395	

FHWA Financial Constraint - FFY 2024

Funding Category	Federal Funds Available for Oahu (x\$1000)	Local Funds (x\$1000)	Total Sources (x\$1000)	Total Funds Programmed (x\$1000)	Funds Balance (x\$1000)
Earmark HP	-	-	-	-	-
FLAP	-	-	-	-	-
HSIP	496	224	720	720	-
Locally Funded	-	21,000	21,000	21,000	-
NHPP	132,155	12,323	144,478	144,478	-
Railway Highway Crossings Program	-	-	-	-	-
OS BRIDGE	1,952	961	2,913	2,913	-
SRTS	-	-	-	-	-
STBG	23,435	(1,641)	21,794	21,794	-
TA Set-Aside	167	42	209	209	-
TA Set-Aside Urban	1,000	250	1,250	1,250	-
CMAQ	-	-	-	-	-
Total	159,205	33,159	192,364	192,364	-

FHWA Financial Constraint - FFY 2025

Funding Category	Federal Funds Available for Oahu (x\$1000)	Local Funds (x\$1000)	Total Sources (x\$1000)	Total Funds Programmed (x\$1000)	Funds Balance (x\$1000)
Earmark HP	-	-	-	-	-
FLAP	-	-	-	-	-
HSIP	1,600	400	2,000	2,000	-
Locally Funded	-	93,000	93,000	93,000	-
NHPP	121,832	(21,129)	100,703	100,703	-
Railway Highway Crossings Program	-	-	-	-	-
OS BRIDGE	1,930	950	2,880	2,880	-
SRTS	-	-	-	-	-
STBG	17,063	(733)	16,330	16,330	-
TA Set-Aside	1,346	337	1,683	1,683	-
TA Set-Aside Urban	1,000	250	1,250	1,250	-
CMAQ	-	-	-	-	-
Total	144,771	73,075	217,846	217,846	-

FTA Financial Constraint

The FTA program is likewise financially constrained, as demonstrated in these financial constraint tables (Tables 7.5-7.8). The amount of FTA funds estimated to be available for projects on Oahu is determined through a cooperative agreement between OahuMPO, DTS, and HART. Information on the revenues estimated to be available for the entire State of Hawaii is available in the HDOT's FFYs 2022-2025 STIP.

FTA Fiscal Constraint - FFY 2022

	A	В	С	F	G
FTA Section Funds	FTA Apportionments and Allocations - Current Year (x \$1000)	FTA Funds Carryover - Previous Years (x \$1000)	Total Available FTA Funds A+B=C (x \$1000)	Total FTA Funds Programmed (x \$1000)	FTA Funds Balance C-F=G (x \$1000)
FTA §5307/§5340	33,881	112	33,993	12993	21,000
FTA §5309 New Starts	-	-	-	0	-
FTA §5309 ARPA	70,000	-	70,000	70000	-
FTA §5310	809	-	809	809	-
FTA §5310 ARPA & CRRSAA	119	-	119	119	-
FTA §5329	537	-	537	537	-
FTA §5337	1,480	-	1,480	1480	-
FTA §5339	3,078	-	3,078	3078	-
Totals	109,904	112	110,016	89,016	21,000

FTA Fiscal Constraint - FFY 2023

	Α	В	С	F	G
FTA Section Funds	FTA Apportionments and Allocations - Current Year (x \$1000)	FTA Funds Carryover - Previous Years (x \$1000)	Total Available FTA Funds A+B=C (x \$1000)	Total FTA Funds Programmed (x \$1000)	FTA Funds Balance C-F=G (x \$1000)
FTA §5307/§5340	31,540	21,000	52,540	52540	-
FTA §5309 New Starts	250,000	-	250,000	250000	-
FTA §5309 ARPA	-	-	-	-	-
FTA §5310	831	-	831	831	-
FTA §5329	285	-	285	285	-
FTA §5337	1,509	-	1,509	1509	-
FTA §5339	3,140	-	3,140	3140	-
Totals	287,305	21,000	308,305	308,305	-

FTA Fiscal Constraint - FFY 2024

	A	В	С	F	G
FTA Section Funds	FTA Apportionments and Allocations - Current Year (x \$1000)	FTA Funds Carryover - Previous Years (x \$1000)	Total Available FTA Funds A+B=C (x \$1000)	Total FTA Funds Programmed (x \$1000)	FTA Funds Balance C-F=G (x \$1000)
FTA §5307/§5340	31,559	-	31,559	31559	
FTA §5309 New Starts	494,000	-	494,000	494000	-
FTA §5309 ARPA	-	-	-	-	-
FTA §5310	853	-	853	853	-
FTA §5329	299	-	299	299	-
FTA §5337	1,539	-	1,539	1539	-
FTA §5339	3,203	-	3,203	3203	-
Totals	531,453	-	531,453	531,453	-

FTA Fiscal Constraint - FFY 2025

	А	В	С	F	G
FTA Section Funds	FTA Apportionments and Allocations - Current Year (x \$1000)	FTA Funds Carryover - Previous Years (x \$1000)	Total Available FTA Funds A+B=C (x \$1000)	Total FTA Funds Programmed (x \$1000)	FTA Funds Balance C-F=G (x \$1000)
FTA §5307/§5340	32,190	-	32,190	32190	
FTA §5309 New Starts	-	-	-	-	-
FTA §5309 ARPA	-	-	-	-	-
FTA §5310	876	-	876	876	-
FTA §5329	314	-	314	314	-
FTA §5337	1,570	-	1,570	1570	-
FTA §5339	3,267	-	3,267	3267	
Totals	38,217	-	38,217	38,217	-

7 CONGESTION MANAGEMENT

Congestion Management is the application of strategies to improve transportation system performance and reliability by reducing the adverse impacts of congestion on the movement of people and goods. It is a systematic, cyclical, and regionally accepted approach for managing congestion that provides accurate and up-to-date information on transportation system performance and identifies strategies for mitigating congestion and achieving regional transportation goals and objectives.

These mitigation strategies include:

- Transportation Demand Management (TDM);
- Transportation System Management and Operations (TSMO);
- Intelligent Transportation Systems (ITS);
- Transit operations improvements; and
- Roadway capacity improvements (when necessary).

As a part of Congestion Management, OahuMPO uses the National Performance Management Research Data Set (NPMRDS) to develop the Congestion Management Process, which shows where and when congestion is occurring in the region. The latest report is available online^{5.} This information helps OahuMPO and its member agencies prioritize projects for congested areas and

select which types of congestion mitigation strategies to apply. However, the data are limited and not available for every corridor. Figure 2 shows a map of 2019 congested locations where NPMRDS data are provided.

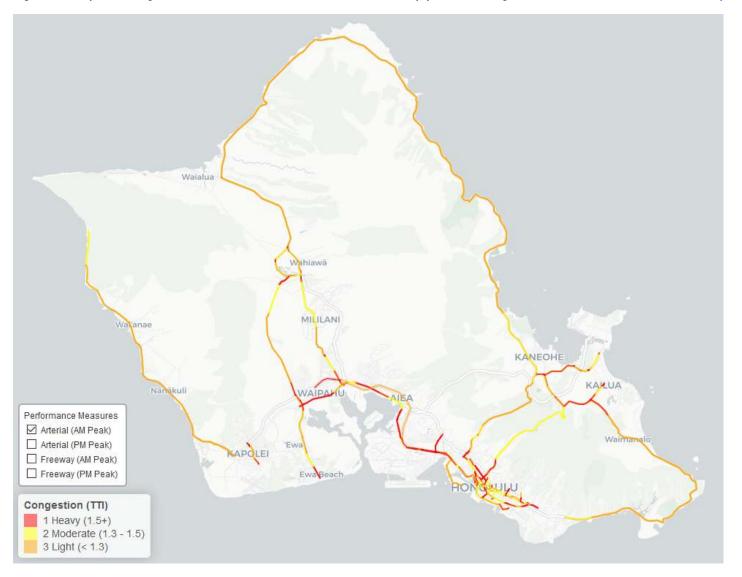
The Travel Demand Forecast Model was used to compare the congestion of the existing road network and committed projects, and congestion, if the TIP projects are implemented. If none of the TIP projects were to be implemented 16.3% of the VMT would be congested. The results in Table 7.1 indicate that if the FFY 2022-2025 TIP projects were implemented, there would be a 0.7% decrease in relative congestion, overall, a small change.

Table 7.1 Percentage of Congested Vehicle Miles Traveled (VMT) with and Without FFY 2022-2025 TIP Projects

	Without TIP	With TIP	Percent Difference
VMT	13,884,129	13,620,778	-1.9
Congested VMT	2,262,034	2,118,982	-6.3
Percent of VMT Congested	16.3%	15.6%	-0.7%

 $^{^{5} \, \}underline{https://histategis.maps.arcgis.com/apps/Cascade/index.html?appid=9fcaf282558e47c7bd2d7becb23847a2}$

Figure 2 Sample of Congested Locations (2019). For the interactive map please see Figure 6 of the OahuMPO's 2020 CMP Report.



CURRENT PROJECTS IN THE FFY 2022-2025 TIP AS OF REVISION #6

Several projects with wide-ranging congestion mitigation strategies, as identified in the Congestion Management Process (CMP) Report, are budgeted for implementation in the FFY 2022–2025 TIP. The total cost of projects that are on congested roadways (identified in the OahuMPO's CMP report) and that are expected to improve congestion is a little over \$12.65 billion. The total cost of projects that are expected to improve congestion but are not on congested roadways as identified in the OahuMPO's CMP report is a little over \$309 million. Table 7.2, below, highlights projects in the TIP that are expected to mitigate congestion.

Table 7.2 Congestion-Related Projects in the revised FY2022- 2025 TIP.

Project ID	Project Name	Congested Roadway	Estimated Total Cost
OC16	Honolulu Rail Transit Project	Υ	\$11,359,000,000
OS5	Freeway Management System, Interstate H-1, H-2, and Moanalua Freeway (Routes H-201 and 78)	Y	\$200,000,000
OS-21-46	Kunia Interchange Improvements	Υ	\$160,000,000
OS-21-49	Harbor Access Road (Route 9400)	Υ	\$142,000,000
OS17	Interstate Route H-1, Kapolei Interchange Complex	Υ	\$139,000,000
OS67	Interstate Route H-1, Reconstruction and Repair, Eastbound, Waimalu Interchange to Halawa	Υ	\$93,000,000
OC23	Salt Lake Boulevard Widening, Phase 3	Υ	\$80,000,000
OS82	Interstate Route H-1 Improvements, Eastbound, Ola Lane Overpass to Vineyard Boulevard	Y	\$75,000,000
OS61	Kamehameha Highway (Route 83) Realignment, Vicinity of Kawailoa Beach	Υ	\$19,000,000
OS-21-53	Farrington Highway Widening, Helelua to Mohihi	Υ	\$34,500,000
OS-22-62	Farrington Highway Sidewalk Improvements, Hakimo Road to Nanakuli Avenue	Υ	\$17,000,000
OS52	Sand Island Access Road (Route 64), Truck Weigh Station, Kapalama Container Terminal	Y	\$11,000,000
OS84	Kamehameha Highway (Route 83) Intersection Improvements at Kahekili Highway	Υ	\$6,400,000
OS-22-64	Whitmore Ave (RTE 7012) Sidewalk Improvements, Phase 2, Ihiihi Ave to Whitmore Community Center	Y	\$3,100,000
OC-21-54	Kalaeloa Boulevard Railroad Improvements	Υ	\$805,000

Project ID	Project Name	Congested Roadway	Estimated Total Cost
OC13	Bus and Handi-Van Acquisition Program	N	146,528,000
OS-22-60	Adaptive Traffic Signal Control Technology & Traffic Signal Controller Installation at Various Locations, Oahu	N	41,000,000
OC25	Transportation Alternatives Program (MPO) at Various Locations	N	46,600,000
OC10	Traffic Signals at Various Locations	N	19,849,000
OC-21-55	Oahu Traffic Signal Controller Modernization, Phase 2	N	11,876,000
OC4	Computerized Traffic Control System	N	9,275,000
OS80	Traffic signal Modernization at Various Locations, Ph1	N	6,250,000
OC14	Bus Stop ADA Access and Site Improvements	N	3,815,000
OC2	Bikeway Improvements Program	N	3,393,000
OS50	Transportation Assistance for Elderly and Disabled	N	3,853,000
OC8	Traffic Improvements at Various Locations	N	7,919,000
OS11	ITS Operation and Maintenance	N	3,000,000
OC26	Transportation Alternative Program (State)	N	1,892,000
OS57	Freeway Management System, Joint Traffic Managament Center Operations (State)	N	2,100,000
OC1	Alapai Transportation Management Center Operations	N	1,889,000
TOTAL			\$12,649,044,000

8 PERFORMANCE MANAGEMENT

The two most recent federal transportation bills—Moving Ahead for Progress in the 21st Century Act (MAP-21) and the Fixing America's Surface Transportation (FAST) Act—established new requirements to promote the efficient investment of federal transportation funds by measuring performance of the transportation system through an increasingly data-driven approach to funding projects. These bills mandated that States and MPOs establish performance management into the transportation and transit planning process.

Performance-based planning will ensure that the O'ahu Metropolitan Planning Organization (OahuMPO), in collaboration with its partner agencies, the Hawaii Department of Transportation, the City and County of Honolulu Department of Transportation Services, and the Honolulu Authority for Rapid Transportation, collectively invest federal transportation funds towards achieving national goals.

The FHWA defined Transportation Performance Management (TPM) as "strategic approach that uses system information to make investment and policy decisions to achieve national performance goals". Title 23 Part 490 of the Code of Federal Regulations (23 CFR 490) outlines the national performance goal areas for the Federal-aid program. It establishes the seven goal areas: safety, infrastructure condition, congestion reduction, system reliability, freight, environmental sustainability and reduced project delivery delay.

Goal Area	Objective
Safety	To achieve a significant reduction in traffic fatalities and serious injuries on all public roads
Infrastructure Condition	To maintain highways infrastructure asset system in a state of good repair
Congestion Reduction	To achieve a significant reduction in congestion on the National Highway System
System Reliability	To improve the efficiency of the surface transportation system
Freight Movement and Economic Vitality	To improve the national freight network, strengthen the ability of rural communities to access national and international trade markets, and support regional economic development
Environmental Sustainability	To enhance the performance of the transportations system while protecting and enhancing the natural environment
Reduced Project Delivery Delays	To reduce project costs, promote jobs and the economy, and expedite the movement of people and goods by accelerating project completion through eliminating delays in the project development delivery process, including reducing regulatory burdens and improving agencies' work practices

8.1 FEDERAL REQUIREMENTS

Under the most recent federal transportation bills, State departments of transportation (DOTs) and metropolitan planning organizations (MPOs) are required to do the following:

State Departments of Transportation:

- Set targets for each performance measure
- Report performance and targets to the United States
 Department of Transportation
- Incorporate national goals, objectives, performance measures and targets into long-range statewide transportation plans (LRSTP) and statewide improvement programs (STIP)
- Develop performance plans in other program areas
- Ensure cooperative and collaborative transportation performance management

Metropolitan Planning Organizations:

- Set targets for each performance measure (or adopt the state's)
- Report performance and targets to State departments of transportation
- Incorporate national goals, objectives, performance measures and targets into metropolitan transportation plans (MTP) and transportation improvement programs (TIP)

Both state DOTs and MPOs are required to set targets for the following performance measures:

Performance Measure	Effective Date	States/City Set Targets By	MPOs Set Targets By	LRSTP, MTP, STIP, and TIP Inclusion
Safety (PM1)	April 14, 2016	August 31, 2017	Up to 180 days after the State sets targets, but not later than February 27, 2018	Updates or amendments on or after May 27, 2018
Pavement and Bridge Condition (PM2)	May 20, 2017	May 20, 2018	No later than 180 days after the State sets targets	Updates or amendments on or after May 20, 2019
System Performance (PM3)	May 20, 2017	May 20, 2018	No later than 180 days after the State sets the targets	Updates or amendments on or after May 20, 2019
Transit Asset Management	October 1, 2016	October 31, 2018	No later than 180 days after the Transit Operator sets the targets	Updates or amendments after the targets are adopted
Transit Safety	July 19, 2019	December 31, 2020*	No later than 180 days after the Transit Operator sets the targets	Updates or amendments after the targets are adopted

^{*} FTA published a Notice of Enforcement Discretion on April 22, 2020 effectively extending the transit safety compliance deadline from July 20, 2020 to December 31, 2020.

8.2 PERFORMANCE BASED PLANNING AND PROGRAMMING

Performance-based planning and programming is a strategic approach that uses performance data to inform decision-making and evaluate outcomes. New federal regulations on transportation performance measures are in effect, and OahuMPO must respond to targets set by the Hawaii Department of Transportation (HDOT) for Highway Safety (PM1), Pavement and Bridge Condition (PM2), and System Performance (PM3), as well as targets set by the City and County of Honolulu Department of Transportation Services for Transit Safety and Transit Asset Management.

The following sections provide an overview of the federal performance measures, established targets, and how the OahuMPO's FFYs 2022-2025 TIP will support target achievement.

Highway Performance Targets

Highway Safety Targets (PM1)

The FHWA rules for the National Performance Management Measures: Highway Safety Improvement Program (Safety PM) and Highway Safety Improvement Program (HSIP) were published in the Federal Register (81 FR 13881 and 81 FR 13722) on March 15, 2016 and became effective on April 14, 2016. These rules established five safety performance measures (commonly known as PM1). Targets for the safety measures are established on an annual basis. The Hawaii Department of Transportation (HDOT) established safety targets based on the planning process that resulted in the 2013-2018 Hawaii Strategic Highway Safety Plan (HSHSP).

Table 8.1 shows the performance targets that have been established by HDOT.

OahuMPO is required to set safety targets in coordination with HDOT, measure progress toward achieving those targets with each update of the Oʻahu Regional Transportation Plan (ORTP), and describe how implementation of the Transportation Improvement Program (TIP) is anticipated to make progress towards achievement of targets.

On November 28th, 2017, the Policy Board voted to direct OahuMPO staff to respond to the 2018 safety performance target statement to "Agree to plan and program projects that support and contribute toward the accomplishment of the State's HSIP targets" and integrate the targets into OahuMPO's planning process.

Table 8.1 Hawaii Safety Performance Targets

Performance Measure	2014-2018 Target	Basis for Established Target
Number of Fatalities (persons)	97.6/year	Based on the 5-year average of fatalities.
Fatality Rate (fatalities/100 million VMT)	0.946	Calculated based on the fatality target and historical VMT.
Number of Serious Injuries (persons)	517.4/year	Based on past historical data with an HSHSP goal of reducing the number of severe accidents for future years.
Serious Injury Rate (Serious injuries/100 million VMT)	4.978	Calculated based on the serious injury target and historical VMT.
Number of Non-Motorized Fatalities and Serious Injuries (persons)	119.4/year	Based on past historical data with an HSHSP of reducing the number of fatal and severe accidents for future years. Bicycle and pedestrian safety is an emphasis area in the HSHSP.

Progress Towards Target Reporting

The Federal Highway Administration (FHWA) has completed the target achievement assessment for the 2018 safety performance targets, based on the 5-year averages for 2014 to 2018. As per 23 CFR 490.211(c)(2), a State Department of Transportation (DOT) has met or made significant progress towards meeting its safety performance targets when at least four of the safety performance targets established under 23 CFR 490.209(a) have been met or the actual outcome is better than the baseline performance. The baseline performance is the 5-year average ending with the year prior to the establishment of the target, which is 2012 to 2016.

Although Hawaii did not meet its number of fatalities and fatality rate targets, based on FHWA's review of HDOT and OahuMPO's safety performance targets and data, it has been determined that it has met or made significant progress towards achieving its safety performance targets. Table 8.2a below provides a summary of the target achievement determination.

Table 8.2a Hawaii Safety Performance Targets Achievement Determination Summary

Performance Measure (for Hawaii)	2014-2018 Target	2014-2018 Outcome	2012-2016 Baseline	Met Target?	Better than Baseline?	Met or Made Significant Progress?
Number of Fatalities (persons)	97.6/year	106.4/year	107.0/year	No	Yes	
Fatality Rate (fatalities/100 million VMT)	0.946	1.006	1.042	No	Yes	
Number of Serious Injuries (persons)	517.4/year	437.0/year	462.2/year	Yes	N/A	Yes
Serious Injury Rate (Serious injuries/100 million VMT)	4.978	4.156	4.514	Yes	N/A	
Number of Non-Motorized Fatalities & Serious Injuries (persons)	119.4/year	112.6/year	121.0/year	Yes	N/A	

On January 25, 2022, the OahuMPO adopted Oahu-specific safety targets for the 2018-2022 period. The Oahu specific baseline values (a 5-year average from 2016 to 2020) as well as the newly adopted targets are shown in Table 8.2b. The 2022 fatalities and injuries are needed to calculate the 2018-2022 outcome and thus reports on whether the targets were met will not be available until 2023.

Table 8.2b Oahu Safety Performance Targets Achievement Determination Summary

Performance Measure (for Oahu)	2018-2022 Target	2018-2022 Outcome	2016-2020 Baseline	Met Target?	Better than Baseline?	Met or Made Significant Progress?
Number of Fatalities (persons)	52.5/year	pending	55/year	NA	NA	
Fatality Rate (fatalities/100 million VMT)	0.885	pending	0.885	NA	NA	
Number of Serious Injuries (persons)	255/year	pending	267/year	NA	NA	NA
Serious Injury Rate (Serious injuries/100 million VMT)	4.312	pending	4.312	NA	NA	
Number of Non-Motorized Fatalities & Serious Injuries persons)	90/year	pending	94/year	NA	NA	
Speed-Related Serious Injuries	333/year	pending	339.2/year	NA	NA	
Fatalities and Hospitalization	498/year	pending	502.6/year	NA	NA	NΙΔ
Senior Pedestrian Fatalities and Hospitalizations	26.8/year	pending	27/year	NA	NA	NA

Progress Towards Target Achievement

Safety is one of the most important factors of project selection at the OahuMPO. This is evidenced by the MPO's metropolitan transportation plan, called the O'ahu Regional Transportation Plan (ORTP) Project Prioritization Criteria, with projects and programs that intend on improving safety being awarded 20 out of 100 points. This is the most points awarded to any criteria, apart from projects and programs that intend on improving the maintenance of the transportation system, which also receives 20 of 100 points.

The following projects and programs in Table 8.3 and Table 8.4 are expected to help us achieve our highway safety targets:

Table 8.3 Highway Safety State of Hawaii - FHWA Funded Projects and Programs

TIP ID#	Project Name	Project Description	Lead Agency	Total Request	Federal	Local
0S69	Farrington Highway (Route 93), Safety Improvements, H-1 Freeway to Pohakunui Avenue	Scope includes, but is not limited to, the installation of milled rumble strips or rumble edge stripes on shoulders/median; installation of milled rumble strips on centerline; widening shoulders where possible; installation of speed feedback sign; concrete median barrier at U-turn; pavement markings; signing.	HDOT	\$7,000,000	\$5,600,000	\$1,400,000
0S-22-62*	Farrington Highway (RTE 93) Sidewalk Improvements, Hakimo Rd to Nanakuli Ave, MP 6.89 to MP 5.06	Construct new PCC sidewalk and ramps, drainage facilities, utility relocations and adjustments, driveway adjustments, grade adjustment walls, modifications/adjustments to existing traffic appurtenances (signs, traffic signals, etc.)	HDOT	\$15,300,000	\$12,200,000	\$3,100,000
0S-21-57	Fort Barrette Road Railroad Crossing Improvements	The project includes upgrading the existing railroad crossing from asphalt to concrete, replacing the existing wooden tracks and ties, and installing new automated crossing gates and signals which will be synced with the new traffic signal at Roosevelt Av	HDOT	\$2,300,000	\$2,070,000	\$230,000

059	Freeway Service Patrol	Operate roving service patrols along the Interstate H-1, Moanalua Freeway, and Interstate H-2. Services include towing of disabled vehicles; removing debris; providing basic fire extinguisher use; deploying traffic control devices; assisting the HPD, HFD, and EMS at crash scenes & other incidents, assisting sick or injured motorists with basic first aid, & notifying 911 of incidents.	HDOT	\$16,000,000	\$14,400,000	\$1,600,000
OS10	Guardrail and Shoulder Improvements, Various Locations	Install and upgrade guardrails to bridge end post connections, bridge railing, guardrail end terminals, crash attenuators, miscellaneous drainage, and other appurtenant improvements.	HDOT	\$4,700,000	\$3,600,000	\$1,100,000
OS-22-58	High Friction Surface Treatment on Highway Ramps, Oahu	Installation of high friction surface treatments on 8 ramps at various locations on Oahu.	HDOT	\$2,200,000	\$1,980,000	\$220,000
0S-21-47	Interstate Route H-1 Highway Lighting Improvements, Kaimakani Overpass to Gulick Avenue, Phase 1, MP 12.83 to MP 16	Installation of new highway lighting system consist of new light poles and conduits, LED fixtures, trenching for conduits, conducts, foundations/barriers, power equipment, erosion control, and traffic control.	HDOT	\$30,000,000	\$18,000,000	\$12,000,000
0S20	Interstate Route H-1 Safety Improvements, Beginning of H-1 (Palailai Interchange) to Waiawa Overpass	Scope includes but is not limited to: Installation of milled rumble strips on shoulders; reconstruction of paved shoulders; pavement markings; and signing.	HDOT	\$0	\$4,107,000	- \$4,107,000
0S14	Interstate Route H-1, Guardrail and Shoulder Improvements, Kapiolani Interchange to Ainakoa Avenue	Install and/or upgrade existing guardrails, crash cushions, and concrete barriers to meet current standards. Upgrade lighting and make bike improvements near the beginning of the H-1 on ramp in the vicinity of Ainakoa Avenue to fill a gap in the bike system.	HDOT	\$6,120,000	\$5,946,000	\$174,000
0S84	Kamehameha Highway (Route 83) Intersection Improvements at Kahekili Highway	Modify existing intersection and roadway approaches to a roundabout configuration. Improvement also includes drainage system, curb and gutter, sidewalks, pavement markings and signing.	HDOT	\$5,900,000	\$4,720,000	\$1,180,000

0S-21-48	Kamehameha Highway Safety Improvements, Kukuna Road to Kahana Valley Road	Scope includes but is not limited to: installation of centerline milled rumble strips, shoulder milled rumble strips, widen shoulders to accommodate milled rumble strips where appropriate, apply safety edge, installation of HFST at sharp horizontal curves, intersection improvements at various locations, pavement markings, and signing.	НДОТ	\$ 0	\$0	\$0
0S73	Likelike Highway (Route 63), Safety Improvements, Emmeline Place to Kahekili Highway	Includes, but is not limited to the installation of milled rumble strips or rumble edge stripes on shoulders where possible, high friction surface treatment, speed feedback sign, guardrail end treatment, in-lane pavement markers, LED speed limit signs ands and chevrons; widen paved shoulders where possible; pavement markings; signing.	НДОТ	\$24,000,000	\$19,200,000	\$4,800,000
0S44	Moanalua Freeway (Route 78) and Interstate Route H-2, Guardrail and Shoulder Improvements, Phase 2	Install and/or upgrade the existing guardrails. Reconstruct and pave road shoulders.	HDOT	\$0	\$7,700,000	- \$7,700,000
0S45	Moanalua Freeway (Route H-201), Highway Lighting Improvements, Halawa Heights Off- Ramp to Middle Street Overpass	Upgrade/replace existing freeway lighting on Moanalua Freeway, from the Halawa Heights westbound off-ramp (milepost 1.12) to the Moanalua/H-1 Freeway merge at Middle Street (milepost 4.09).	НДОТ	\$0	\$13,000,000	- \$13,000,000
0546	Moanalua Freeway (Route H-201), Highway Lighting Improvements, Halawa to H-3 Freeway Overpass	Installation of new highway lighting system consist of new light poles and conduits, LED fixtures, trenching for conduits, conducts, foundations/barriers, power equipment, erosion control, and traffic control.	HDOT	\$0	\$7,000,000	- \$7,000,000
0S-22-64*	Whitmore Avenue (RTE 7012) Sidewalk Improvements, Phase 2, Ihiihi Ave to Whitmore Community Center	Construct new PCC sidewalk and ramps, drainage facilities, utility relocations and adjustments.	HDOT	\$2,800,000	\$2,240,000	\$560,000
Total				\$118,520,000	\$123,743,000	-\$5,223,000

Table 8.4 Highway Safety City and County of Honolulu – FHWA Funded Projects and Programs

TIP ID#	Project Name	Project Description	Lead Agency	Total Request	Federal	Local
OC2	Bikeway Improvements Program	An on-going island wide program for the implementation of the Oahu Bicycle Master Plan improvements, the development of new projects, and the upgrade of existing bicycle projects.	DTS	\$818,000	\$653,000	\$165,000
0C-21-54*	Kalaeloa Boulevard Railroad Improvements	Design and install a Railroad traffic signal (and traffic camera) located at Kalaeloa Boulevard and Railroad Crossing.	DTS	\$805,000	\$646,000	\$159,000
OC28	Safe Routes to School (SRTS) Program	The Safe Routes to School (SRTS) Program has the following goals: enable and encourage children, including those with disabilities, to walk and bicycle to school; make bicycling and walking to school a safer and more appealing transportation alternative, thereby encouraging a healthy and active lifestyle from an early age; and facilitate the planning, development, and implementation of projects and activities that will improve safety and reduce traffic, fuel consumption, and air pollution in the vicinity of schools.	DTS	\$0	\$0	\$0
0C8	Traffic Improvements at Various Locations	Provide traffic congestion relief and improve traffic safety at various locations, including but not limited to Mahoe/Waipahu Streets and Manager's Drive/Hiapo Street Intersection.	DTS	\$7,919,000	\$6,335,000	\$1,584,000
OC26	Transportation Alternative Program (State)	The Transportation Alternatives Program (TAP) is a competitive grant program that provides funding for programs and projects defined as transportation alternatives, including on- and off-road pedestrian and bicycle facilities, infrastructure projects for improving non-driver access to public transportation and enhanced mobility, and community improvement activities. Locations to be determined by the OahuMPO TAP Project Evaluation and Ranking process. Projects may be flexed from FHWA to FTA.	DTS	\$1,892,000	\$1,513,000	\$379,000

OC25	Transportation Alternatives Program (MPO) at Various Locations	The Transportation Alternatives Program (TAP) is a competitive grant program that provides funding for programs and projects defined as transportation alternatives, including on- and o-road pedestrian and bicycle facilities, infrastructure projects for improving non-driver access to public transportation and enhanced mobility, and community improvement activities. Locations to be determined by the OahuMPO TAP Project Evaluation and Ranking process. Projects may be flexed from FHWA to FTA.	DTS	\$29,067,000	\$23,254,000	\$5,813,000
TOTAL				\$40,501,000	\$32,401,000	\$8,100,000

^{*}Indicates that the project or program is new

Projects and Programs that intend on improving highway safety total \$159,021,000, or 4.63% of total FFYs 2022-2025 TIP expenditures. Some projects and/or programs are reported in multiple target achievement categories; therefore, the sum and percent of total expenditures may be skewed.

Pavement and Bridge Condition Targets (PM2)

The FHWA published the Pavement and Bridge Condition (PM2) final rule on January 18, 2017, with an effective date of May 20, 2017. This rule established six measures related to the condition of the infrastructure on the National Highway System (NHS). Targets are established biennially for these measures as part of a four-year performance period, the first of which began in 2018.

State DOTs must establish a four-year target for Interstate System pavement condition measures and 2-year and 4-year targets for non-Interstate National Highway System pavement condition measures and NHS Bridge Condition measures for the first performance period. The Hawaii Department of Transportation (HDOT) established pavement and bridge condition targets based on the planning process that resulted in the *Hawaii Statewide Transportation Asset Management Plan (TAMP)*.

Pavement Condition

Federal regulations require that no more than 5 percent of Hawaii's NHS Interstate lane miles be in poor pavement condition. If that requirement is not met, restrictions are placed on how HDOT can allocate federal National Highway Performance Program (NHPP) and Surface Transportation Program (STP) funds. HDOT's targets for NHS Interstate roadways reflect the federal regulation: no more than 5 percent of Hawaii's NHS Interstate pavements shall be rated in poor condition. Table 8.5 shows the distress components which must be reported as part of the pavement performance measures.

Table 8.5 Pavement Condition Performance Targets Distress Components

Distress Component	Description
International Roughness Index (IRI)	Quantifies how rough the pavement is by measuring the longitudinal profile of a traveled wheel track and generating a standardized roughness value in inches per mile
Cracking	Measures the percentage of pavement surface that is cracked
Rutting	Measures the depth of ruts (surface depression) in bituminous pavement in inches
Faulting	Quantifies the difference in elevation across transverse concrete pavement joints in inches

These distress measurements translate to a composite score of good, fair, or poor. The Table 8.6 below show the percentage of lane miles in both poor and good condition (baseline), as well as HDOT's Statewide Pavement Performance Targets.

Table 8.6 Pavement Condition Performance Targets (PM2)

Performance Measure	2016 Conditions	2-Year Target	4-Year Target
Percentage of pavements on the Interstate classified in good condition	6%	n/a	7%
Percentage of pavements on the Interstate classified in poor condition	4%	n/a	4%
Percentage of non-Interstate NHS pavements classified in good condition	16%	15%	15%
Percentage of non-Interstate NHS pavements classified in poor condition	3%	4%	4%

Progress Towards Target Reporting

The Hawaii Department of Transportation has evaluated its progress thus far for the pavement condition targets in its first two years.

It was determined that for Non-Interstate Pavement, HDOT has made significant progress in pavement in good condition, and no significant progress for pavement in poor condition. Because no significant progress has been made for the 2-year target for Non-Interstate pavement in poor condition, HDOT must conduct additional reporting to FHWA. Table 8.7 below provides a summary of the progress for pavement condition target achievement.

Table 8.7 Hawaii Pavement Condition Performance Targets Achievement Progress Summary

Performance Measure	4-year Target	2-year Target	2-year Actual	Made Significant Progress in First 2 Years?	Consequences
Interstate Pavement in Good Condition	7.00%	-	-	N/A	-
Interstate Pavement in Poor Condition	4.00%	-	-	N/A	-
Non-Interstate Pavement in Good Condition	15.00%	15.00%	20.40%	Yes	N/A
Non-Interstate Pavement in Poor Condition	4.00%	4.00%	4.40%	No	Additional reporting

Progress Towards Target Achievement

Pavement condition is one of the most important factors of project selection at the OahuMPO. This is evidenced by the MPO's metropolitan transportation plan, called the O'ahu Regional Transportation Plan (ORTP) Project Prioritization Criteria, with projects and programs that intend on improving pavement condition, under the criteria of maintenance, being awarded 20 out of 100 points. This is the most points awarded to any criteria, apart from projects and programs that intend on improving safety, which also receives 20 of 100 points. The following projects and programs in Table 8.8 are expected to help us achieve our pavement condition targets:

Table 8.8 Pavement Condition State of Hawaii – FHWA Funded Projects and Programs

TIP ID#	Project Name	Project Description	Lead Agency	Total Request	Federal	Local
0S1	Bridge and Pavement Improvement Program, Oahu	This is an ongoing island wide program for the system maintenance of highway bridges and pavements. Work may include bridge and/or pavement reconstruction, resurfacing, restoration, rehabilitation and/or preservation.	HDOT	\$84,000,000	\$73,044,000	\$10,956,000

0S67	Interstate Route H-1, Reconstruction and Repair, Eastbound, Waimalu Interchange to Halawa	Rehabilitate or reconstruct Portland concrete pavement. Widen to improve shoulders and travelway.	HDOT	\$0	\$300,000	-\$300,000
0S26	Kalanianaole Highway (Route 72) Resurfacing, Poalima Street to Vicinity of Makai Pier	Roadway resurfacing of Kalanianaole Highway from Poalima Street to Vicinity of Makai Pier.	HDOT	\$0	\$9,000,000	-\$9,000,000
0562	Pali Highway (Route 61) Resurfacing & Lighting Improvements, Vineyard Blvd (Route 98) Kamehameha Highway (Route 83)	Scope of work includes but is not limited to cold planing, resurfacing, reconstruction of weakened pavement, installation of new highway lighting, construction of concrete median barriers, replacement of guardrails in-kind and end treatments, installation of new guardrails, installing bridge rails, and installation of signs and pavement markings.	HDOT	\$0	\$29,150,000	-\$29,150,000
0579	Shoreline Protection/Mitigation Program	Develop and construct shoreline protection measures to better protect roadways from flooding and erosion as identified and prioritized in the Statewide Shoreline Protection Program. This funding is for the Oahu District Sub-Program.	HDOT	\$49,660,000	\$27,928,000	\$21,732,000
0S63	Traffic Counting Stations at Various Locations, Oahu	Construction of traffic counting stations for traffic data gathering and planning purposes. There is a separate phase shown for the rest of the islands in Statewide section of the STIP. This is a part of phase 2 of the Statewide project. The project will collect required Highway Performance Monitoring System (HPMS) data.	НДОТ	\$2,809,000	\$2,247,000	\$562,000
Total		J - J		\$136,469,000	\$141,669,000	-\$5,200,000

Projects and Programs that intend on improving pavement condition total \$136,469,000, or 3.98% of total FFYs 2022-2025 TIP expenditures. Some projects and/or programs are reported in multiple target achievement categories; therefore, the sum and percent of total expenditures may be skewed.

Bridge Condition

The FHWA final rulemaking also established performance measures for all mainline Interstate Highway System and non-Interstate NHS bridges regardless of ownership or maintenance responsibility. FHWA's performance measures aim to assess bridge condition by deriving the percentage of NHS bridges rated in good and poor condition by deck area on the NHS. Separate bridge structure condition ratings are collected for deck, superstructure, and substructure components during regular inspections using the National Bridge Inventory (NBI) Standards. For culvert structures, only one condition rating is collected (the culvert rating).

A rating of 9 to 0 on the FHWA condition scale is assigned to each component. Based on its score, a component is given a good (value of 7-9), fair (5-6), or poor (0-4) condition score rating.

A structure's overall condition rating is determined by the lowest rating of its deck, superstructure, substructure, and/or culvert. If any of the components of a structure qualify as poor, the structure is rated as poor. 23 CFR 490.411(a) requires that no more than 10 percent of a state's total NHS bridges by deck area are in poor condition. As was done with pavement condition, statewide performance targets (Table 8.9) were adopted by the OahuMPO in November of 2018.

Table 8.9 Bridge Condition Performance Targets (PM2)

Performance Measure	2016 Conditions	2-Year Target	4-Year Target
Percentage of NHS bridges classified in good condition	23%	20%	20%
Percentage of NHS bridges classified in poor condition	2%	2%	2%

Progress Towards Target Achievement

Bridge condition is one of the most important factors of project selection at the OahuMPO. This is evidenced by the MPO's metropolitan transportation plan, called the O'ahu Regional Transportation Plan (ORTP) Project Prioritization Criteria, with projects and programs that intend on improving bridge condition, under the criteria of maintenance, being awarded 20 out of 100 points. This is the most points awarded to any criteria, apart from projects and programs that intend on improving safety, which also receives 20 of 100 points. The following projects and programs in Table 8.10 and Table 8.11 are expected to help us achieve our bridge condition targets.

Table 8.10 Bridge Condition State of Hawaii – FHWA Funded Projects and Programs

TIP ID#	Project Name	Project Description	Lead Agency	Total Request	Federal	Local
0S1	Bridge and Pavement Improvement Program, Oahu	This is an ongoing islandwide program for the system maintenance of highway bridges and pavements. Work may include bridge and/or pavement reconstruction, resurfacing, restoration, rehabilitation and/or preservation.	HDOT	\$84,000,000	\$73,044,000	\$10,956,000
0576	Bridge Rehabilitation Program, Various Locations	This program will fund projects generated from the priorities identified in the Bridge Management System (BRM).	HDOT	\$4,500,000	\$1,600,000	\$2,900,000
0S77	Bridge Replacement Program, Various Locations	This program will fund projects based on priorities generated from the Bridge Management System (BRM).	HDOT	\$3,400,000	\$960,000	\$2,440,000
0S78	Bridge Seismic Retrofit Program, Various Locations	This program will fund projects based on priorities generated from the Seismic Retrofit program.	HDOT	\$7,400,000	\$4,960,000	\$2,440,000
OS-22-61*	Farrington Highway (Route 93) Bridge Rehabilitation, Ulehawa Stream Bridge	Rehabilitate the existing bridge.	HDOT	\$22,000,000	\$12,000,000	\$10,000,000
054	Farrington Highway (Route 93), Bridge Replacement, Makaha Bridges #3 & #3A	Replace two timber bridges in the vicinity of Makaha Beach Park. For both bridges, the scope incudes widening the paved shoulders on the makai side from 3 feet to 10 feet; and, widening the mauka side from 1 foot to 10 feet. This is to accommodate bicyclists and pedestrians.	HDOT	\$0	\$10,000,000	-\$10,000,000
0574	Interstate Route H-1, Seismic Retrofit, McCully Street Separation	Retrofit interchange structures to meet current seismic standards.	HDOT	\$875,000	\$700,000	\$175,000
0S70	Interstate Route H-1, Seismic Retrofit, Waialae Viaduct	Retrofit interchange structures to meet current seismic standards.	HDOT	\$7,245,000	\$5,796,000	\$1,449,000

OS28	Kamehameha Highway (Route 83), Bridge Replacement, Kaipapau Stream Bridge	Replace the existing bridge on Kamehameha Highway.	НДОТ	\$0	\$11,400,000	-\$11,400,000
0S29	Kamehameha Highway (Route 83), Bridge Replacement, Kaluanui Stream Bridge	Replace the existing bridge on Kamehameha Highway.	НДОТ	\$18,360,000	\$14,688,000	\$3,672,000
0 S31	Kamehameha Highway (Route 83), Bridge Replacement, Laieloa Stream Bridge	Replace the existing concrete slab bridge on Kamehameha Highway in the vicinity of Laie.	НДОТ	\$14,980,000	\$11,984,000	\$2,996,000
0S71	Kamehameha Highway (Route 83), Bridge Replacement, Paumalu Bridge	Rehabilitate the existing bridge on Kamehameha Highway.	НДОТ	\$1,450,000	\$1,160,000	\$290,000
0S34	Kamehameha Highway (Route 83), Bridge Replacement, Waiahole Stream Bridge	Replace the existing concrete structure on Kamehameha Highway. Bicycle and pedestrian facilities will be included when feasible.	НДОТ	\$16,422,000	\$13,138,000	\$3,284,000
0S72	Kamehameha Highway (Route 83), Bridge Replacement, Waimanana Bridge	Replace the existing bridge on Kamehameha Highway.	НДОТ	\$2,370,000	\$1,896,000	\$474,000
OS36	Kamehameha Highway (Route 83), Bridge Replacement, Waipilopilo Stream Bridge	Replace the existing concrete T-bridge on Kamehameha Highway in the vicinity of Hauula.	HDOT	\$11,000,000	\$8,800,000	\$2,200,000
0S-21-43	Kamehameha Highway (Route 99) Seismic Retrofit, Pearl Harbor Interchange, Structure #2	need to be analyzed and designed for retrofitting strategies to prevent their collapse		\$1,180,000	\$944,000	\$236,000

OS-21-52	Likelike Highway (Route 63) Seismic Retrofit, Kalihi Stream Bridges	All bridges identified to be potentially vulnerable to earthquake damage/collapse need to be analyzed and designed for retrofitting strategies to prevent their collapse during a credible earthquake. The type and scope of the retrofit work can only be determined through the analysis.	НДОТ	\$710,000	\$568,000	\$142,000
OS-21-51	Moanalua Freeway, (Interstate Route H-201) Seismic Retrofit, Puuloa Interchange (Five Structures)	All bridges identified to be potentially vulnerable to earthquake damage/collapse need to be analyzed and designed for retrofitting strategies to prevent their collapse during a credible earthquake. The type and scope of the retrofit work can only be determined through the analysis.	HDOT	\$2,500,000	\$2,000,000	\$500,000
0S52	Sand Island Access Road (Route 64), Truck Weigh Station, Kapalama Container Terminal	The description of work would be to design, construct and operate a truck weigh station to perform truck inspections and driver credential checks at the egress of the container terminal on Sand Island Access Road. accommodate trucks, traffic controls, truck weighing infrastructure, and computer hardware/software, operator kiosk/office.	НДОТ	\$0	\$3,000,000	-\$3,000,000
0S79	Shoreline Protection/Mitigation Program	Develop and construct shoreline protection measures to better protect roadways from flooding and erosion as identified and prioritized in the Statewide Shoreline Protection Program. This funding is for the Oahu District Sub-Program.	HDOT	\$49,660,000	\$27,928,000	\$21,732,000
Total				\$248,052,000	\$206,566,000	\$41,486,000

 Table 8.11 Bridge Condition City and County of Honolulu – FHWA Funded Projects and Programs

TIP ID#	Project Name	Project Description	Lead Agency	Total Request	Federal	Local
0C3	Bridge Inspection, Inventory, and Appraisal	Inventory, inspect, and appraise City bridges, including underwater inspection and scour survey.	DDC	\$11,213,000	\$7,482,000	\$3,731,000
7	TOTAL .			\$11,213,000	\$7,482,000	\$3,731,000

Projects and Programs that intend on improving bridge condition total \$259,265,000, or 7.55% of total FFYs 2022-2025 TIP expenditures. Some projects and/or programs are reported in multiple target achievement categories; therefore, the sum and percent of total expenditures may be skewed.

Progress Towards Target Reporting

The Hawaii Department of Transportation has evaluated its progress thus far for the bridge condition targets in its first two years. It was determined that for NHS bridges, HDOT has not made significant progress for bridges classified in both good and poor condition. Because no significant progress has been made for the 2-year targets, HDOT must conduct additional reporting to FHWA. Table 8.12 below provides a summary of the progress for bridge condition target achievement.

Table 8.12 Hawaii Bridge Condition Performance Targets Achievement Progress Summary

	2016	4-Year	2-Year	2-Year	Made Significant Progress in	
Performance Measure	Conditions	Target	Target	Actual	First 2 Years?	Consequences
Percentage of NHS bridges classified in						
good condition	23%	20%	20%	19.30%	No	Additional
Percentage of NHS bridges classified in						Reporting
poor condition	2%	2%	2%	2.30%	No	

System Performance Targets (PM3)

The FHWA published the third and final rule on performance measures of the National Highway System and freight movement on the Interstate System (PM3) on January 18, 2017, with an effective date of May 20, 2017. This rule covers requirements to establish targets related to level of travel time reliability and truck travel time reliability.

Level of Travel Time Reliability

FHWA established two performance measures to assess the reliability of the NHS: (1) percent of Person-Miles Traveled on the Interstate System That Are Reliable, and (2) percent of Person-Miles Traveled on the Non-Interstate NHS That Are Reliable. As was done with pavement and bridge condition, statewide performance targets (Table 8.13) were adopted by the OahuMPO in November of 2018.

Table 8.13 National Highway System Reliability (Level of Travel Time Reliability) Performance Targets (PM3)

Performance Measure	2017 Conditions	2-Year Target	4-Year Target
Percent of Person-Miles Traveled on the Interstate that are Reliable	67.5	70	74
Percent of Person-Miles Traveled on the non-Interstate NHS that are Reliable	64.2	n/a	70

Progress Towards Target Reporting

The Hawaii Department of Transportation has evaluated its progress thus far for the level of travel time reliability targets in its first two years. It was determined that HDOT has not made significant progress for the percent of person-miles traveled on the interstate that are reliable. Because no significant progress has been made for the 2-year target, HDOT must conduct additional reporting to FHWA. Table 8.14 below provides a summary of the progress for level of travel time reliability target achievement.

Table 8.14 Hawaii Level of Travel Time Reliability Performance Targets Achievement Progress Summary

Performance Measure	2017 Conditions	4-Year Target	2-Year Target	2-Year Actual	Made Significant Progress in First 2 years?	Consequences
Percent of Person-Miles Traveled on the Interstate that are Reliable	67.50%	74%	70%	65.30%	No	Additional Reporting
Percent of Person-Miles Traveled on the non- Interstate NHS that are Reliable	64.20%	70%	-	-	N/A	- -

Progress Towards Target Achievement

Level of travel time reliability is considered in the project selection process at the OahuMPO. This is evidenced by the MPO's metropolitan transportation plan, called the O'ahu Regional Transportation Plan (ORTP) Project Prioritization Criteria, with projects and programs that intend on improving level of travel time reliability being awarded 4 out of 100 points, under the reliability criteria.

The following projects and programs (Tables 8.15 and 8.16) are expected to help us achieve our level of travel time reliability targets.

 Table 8.15 Level of Travel Time Reliability State of Hawaii – FHWA Funded Projects and Programs

TIP ID#	Project Name	Project Description	Lead Agency	Total Request	Federal	Local
OS-22-60	Adaptive Traffic Signal Control Technology & Traffic Signal Controller Installation at Various Locations, Oahu	Implement Adaptive Traffic Control Systems (ATCS) at various locations on Oahu. ATCS are a potential method of dealing with congestion, which adjusts signal timing to accommodate changing traffic patterns. Work may include providing and installing hardware, software, vehicle detection, and staff training.	HDOT	\$41,000,000	\$32,800,000	\$8,200,000
0S12	Destination Sign, Upgrade and Replacement	Replace and/or upgrade the existing destination signs and sign support structures.	HDOT	\$35,289,000	\$21,232,000	\$14,057,000
0S5	Freeway Management System, Interstate H- 1, H-2, and Moanalua Freeway (Routes H- 201 and 78)	The program consists of installation of closed-circuit television (CCTV) cameras, vehicle detectors, cabinets, and communication equipment. Minor interior modifications of the H-3 Control Center will be done to accommodate system improvements. This program will be implemented in phases.	HDOT	\$24,712,000	\$20,309,000	\$4,403,000
OS57	Freeway Management System, Joint Traffic Managament Center Operations (State)	These funds will be required for the State share of the annual operating expenses for the JTMC which includes normal building operations and a JTMC Manager. The State share has been calculated based on methodology that involves the estimated square footage that the State will occupy.	HDOT	\$1,400,000	\$1,120,000	\$280,000

059	Freeway Service Patrol	Operate roving service patrols. Services include towing of disabled vehicles, removing debris, providing basic fire extinguisher use, deploying traffic control devices, assisting the HPD, HFD, and EMS at crash scenes & other incidents, assisting sick or injured motorists with basic first aid, & notifying 911 of incidents.	HDOT	\$16,000,000	\$14,400,000	\$1,600,000
OS11	ITS Operation and Maintenance	Annual costs to operate and maintain the ongoing and existing ITS program. This includes costs for the operation and maintenance of CCTVs and vehicle detection equipment. This also includes costs for telecommunication and server hosting services.	HDOT	\$2,000,000	\$1,800,000	\$200,000
0S84	Kamehameha Highway (Route 83) Intersection Improvements at Kahekili Highway	Modify existing intersection and roadway approaches to a roundabout configuration. Improvement also include drainage system, curb and gutter, sidewalks, pavement markings and signing.	HDOT	\$5,900,000	\$4,720,000	\$1,180,000
0S61	Kamehameha Highway (Route 83) Realignment, Vicinity of Kawailoa Beach	Realign a portion of Kamehameha Highway, on the North Shore. The project proposes to construct a realignment of Kamehameha Highway, from Haleiwa to the vicinity of Waimea Bay to address safety issues that revolve around use of the beach.	HDOT	\$1,020,000	\$ 0	\$1,020,000
0S75	Kamehameha Highway (Route 83), Rockfall Protection, Waimea Bay	Construct various rockfall/slope protection and slope stabilization mitigation measures.	НДОТ	\$29,326,000	\$19,461,000	\$9,865,000
0S-21-	Pali Highway, Rockfall	Rockfall protection/mitigation to be determined following an EA.	HDOT	\$635,000	\$508,000	\$127,000
0S-21-	Pali Highway, Rockfall 44 Mitigation, Vicinity of MP 6.10 to MP 6.55	Rockfall protection/mitigation to be determined following an EA.	HDOT	\$1,695,000	\$1,356,000	\$339,000

0579	Shoreline Protection/Mitigation Program	Develop and construct shoreline protection measures to better protect roadways from flooding and erosion as identified and prioritized in the Statewide Shoreline Protection Program. This funding is for the Oahu District Sub-Program.	ндот	\$49,660,000	\$27,928,000	\$21,732,000
0 S63	Traffic Counting Stations at Various Locations, Oahu	Construction of traffic counting stations for traffic data gathering and planning purposes. There is a separate phase shown for the rest of the islands in Statewide section of the STIP. This is a part of phase 2 of the Statewide project. The project will collect required Highway Performance Monitoring System (HPMS) data.	HDOT	\$2,809,000	\$2,247,000	\$562,000
OS80	Traffic signal Modernization at Various Locations, Ph1	Upgrade signal equipment to improve programming and optimization, to help improve traffic flow, reduce congestion, and prevent failures & downtime. Upgrades include replace old/damaged signal poles, underground conduits & wiring, signal controllers, and other equipment, as determined by the HDOT signal maintenance/modernization study. Phase 2 continues what was started in phase 1 with next 5 priority intersections.	HDOT	\$5,000,000	\$4,000,000	\$1,000,000
TOTAL				\$257,446,000	\$184,681,000	\$72,765,000

Table 8.16 Level of Travel Time Reliability City and County of Honolulu - FHWA Funded Projects and Programs

TIP ID#	Project Name	Project Description	Lead Agency	Total Request	Federal	Local
OC1	Alapai Transportation Management Center	Operations for the joint communications center behind the Alapai Transit Center. The communications center holds City, State & emergency response agencies.	DTS	\$1,139,000	\$910,000	\$229,000
004	Computerized Traffic Control System	Upgrade and expand fiber optic lines, CCTV cameras, data collection, and signal control in urban and rural areas for connection to the Traffic Control Center.	DTS	\$1,086,000	\$869,000	\$217,000
OC-21-55*	Oahu Traffic Signal Controller Modernization, Phase 2	To construct and inspect related equipment for approximately 150 traffic signalized intersections.	DTS	\$10,696,000	\$8,557,000	\$2,139,000
TOTAL				\$12,921,000	\$10,336,000	\$2,585,000

Projects and Programs that intend on improving level of travel time reliability total \$270,367,000, or 7.88% of total FFYs 2022-2025 TIP expenditures. Some projects and/or programs are reported in multiple target achievement categories; therefore, the sum and percent of total expenditures may be skewed.

Truck Travel Time Reliability

The freight movement performance measure is assessed by the Truck Travel Time Reliability (TTTR) Index. State DOTs must establish 4-year targets. HDOT established freight performance targets based on the planning process from the *Hawaii Statewide Freight Plan*. As was done with pavement and bridge condition and level of travel time reliability, statewide performance targets (Table 8.17) were adopted by the OahuMPO in November of 2018.

Table 8.17 Freight Reliability (Truck Travel Time Reliability) Performance Targets (PM3)

Performance Measure	2017 Conditions	2-Year Target	4-Year Target
Weekdays, Morning Peak (6 am – 10 am)	1.8	1.8	1.8
Weekdays, Mid-Day (10 am – 4 pm)	1.6	1.6	1.6
Weekdays, Afternoon Peak (4 pm – 8 pm)	1.7	1.7	1.7
Weekends (6 am - 8 pm)	1.4	1.4	1.4
Overnight (8 pm - 6 am)	1.3	1.3	1.3

Performance Measure	2017 Conditions	2-Year Target	4-Year Target
Weekdays, Morning Peak (6 am – 10 am)	1.80	1.80	1.80
Weekdays, Mid-Day (10 am – 4 pm)	1.60	1.60	1.60
Weekdays, Afternoon Peak (4 pm – 8 pm)	1.70	1.70	1.70
Weekends (6 am – 8 pm)	1.40	1.40	1.40
Overnight (8 pm – 6 am)	1.30	1.30	1.30

Progress Towards Target Reporting

The Hawaii Department of Transportation has evaluated its progress thus far for the truck travel time reliability targets in its first two years. It was determined that HDOT has made significant progress for the freight reliability measure. Table 8.18 below provides a summary of the progress for truck travel time reliability target achievement.

Table 8.18 Hawaii Truck Travel Time Reliability Performance Targets Achievement Progress Summary

Performance Measure	2-Year Target	2-Year Actual	Made Significant Progress in First 2 Years	Consequences
Freight Reliability measure (Truck Travel Time Reliability Index)	2.75	2.54	Yes	N/A

Progress Towards Target Achievement

Truck travel time reliability is considered in the project selection process at the OahuMPO. This is evidenced by the MPO's metropolitan transportation plan, called the O'ahu Regional Transportation Plan (ORTP) Project Prioritization Criteria, with projects and programs that intend on improving truck travel time reliability being awarded 4 out of 100 points, under the freight reliability criteria. The following projects and programs (Tables 8.19 and 8.20) are expected to help us achieve our truck travel time reliability targets.

Table 8.19 Truck Travel Time Reliability State of Hawaii – FHWA Funded Projects and Programs

TIP ID#	Project Name	Project Description	Lead Agency	Total Request	Federal	Local
OS-21-49	Harbor Access Road (Route 9400)	Scope could include, but is not limited to the design and construction of new 4 lane divided concrete roadway, auxiliary lanes, sidewalks, bike lanes, traffic signals, intersections, associated utilities, grading, landscaping, and connections to future City roadways and drainage canal bridge crossing.	НДОТ	\$7,000,000	\$0	\$7,000,000
TOTAL				\$7,000,000	\$0	\$7,000,000

Table 8.20 Truck Travel Time Reliability City and County of Honolulu – FHWA Funded Projects and Programs

TIP ID#	Project Name	Project Description	Lead Agency	Total Request	Federal	Local
OC1	Alapai Transportation Management Center	Operations and management for the joint communications center behind the Alapai Transit Center which holds City, State & emergency response agencies.	DTS	\$1,139,000	\$910,000	\$229,000
0C4	Computerized Traffic Control System	Upgrade and expand fiber optic lines, CCTV cameras, data collection, and signal control in urban and rural areas for connection to the Traffic Control Center.	DTS	\$1,086,000	\$869,000	\$217,000
OC-21-55	Oahu Traffic Signal Controller Modernization, Phase 2	To construct and inspect related equipment for approximately 150 traffic signalized intersections.	DTS	\$10,696,000	\$8,557,000	\$2,139,000
TOTAL				\$12,921,000	\$10,336,000	\$2,585,000

Projects and Programs that intend on improving truck travel time reliability total \$19,921,000, or 0.58% of total FFYs 2022-2025 TIP expenditures. Some projects and/or programs are reported in multiple target achievement categories; therefore, the sum and percent of total expenditures may be skewed.

Transit Performance Targets

Transit Safety Performance Targets

The Federal Transit Administration (FTA) published the Public Transportation Agency Safety Plan (PTASP) Final Rule, which requires certain operators of public transportation systems that receive federal funds under FTA's Urbanized Area Formula Grants to develop safety plans that include the processes and procedures to implement Safety Management Systems (SMS).

The plan must include safety performance targets based upon the safety performance measures in the National Public Transportation Safety Plan:

- Fatalities:
- Injuries;
- Safety Events; and
- System Reliability

The Department of Transportation Services (DTS) shared with OahuMPO their Bus and Paratransit Agency Safety Plan (TASP) Safety Performance Targets, according to 49 CFR 673, which requires agencies to coordinate with metropolitan planning organizations' planning process. The TASP is a required comprehensive and collaborative approach to managing safety for all qualified eligible transit agencies. The purpose of setting these targets is to reduce fatalities, injuries, and safety events and improve system reliability.

The Safety Performance Targets (SPT) in the Department of Transportation Services' Bus and Paratransit Agency Safety Plan were established by averaging five years of reportable data National Transit Database (NTD) incident data by mode for each safety performance measure category for the calendar years 2015 through 2019.

OahuMPO is required to set transit safety targets in coordination with DTS, measure progress toward achieving those targets with each update of the Oʻahu Regional Transportation Plan (ORTP) and describe how implementation of the Transportation Improvement Program (TIP) is anticipated to make progress towards achievement of the targets.

On October 27, 2020, the Policy Board voted to adopt the following DTS' Transit Safety targets (Table 8.21) and direct OahuMPO staff to incorporate the targets into OahuMPO work products.

Table 8.21 Transit Safety Performance Targets

Mode of Transit Service	Fatalities (Total)	Fatalities (per 1M VRM)	Injuries (Total)	Injuries (per 100K VRM)	Safety Events (Total)	Safety Events (per 100K VRM)	System Reliability (VRM/Mechanical Road Calls)
Bus	0	0	109	0.5	122	0.56	10,556
Paratransit	0	0	12	0.155	15	0.196	18,846

Progress Towards Target Achievement

Transit safety is one of the most important factors of project selection at the OahuMPO. This is evidenced by the MPO's metropolitan transportation plan, called the O'ahu Regional Transportation Plan (ORTP) Project Prioritization Criteria, with projects and programs that intend on improving transit safety being awarded 20 out of 100 points. This is the most points awarded to any criteria, apart from projects and programs that intend on improving the maintenance of the transportation system, which also receives 20 of 100 points. The following program (Table 8.22) is expected to help us achieve our transit safety targets:

Table 8.22 Transit Safety City and County of Honolulu - FTA Funded Project

TIP ID#	Project Name	Project Description	Lead Agency	Total Request	Federal Share	Local Share
OC21	Transit Safety and Security Projects	Capital projects at various transit locations to improve safety and security.	DTS	\$2,177,000	\$1,737,000	\$440,000
TOTAL				\$2,177,000	\$1,737,000	\$440,000

Projects and Programs that intend on improving transit safety total \$2,177,000, or 0.1% of total FFYs 2022-2025 TIP expenditures. Some projects and/or programs are reported in multiple target achievement categories; therefore, the sum and percent of total expenditures may be skewed.

Progress Towards Target Reporting

There is currently nothing to report for these targets as they were set prior to the reporting period for this TIP. Future TIPs and metropolitan transportation plans will include reporting on the progress of target achievement for transit safety.

Transit Asset Management Targets

In July 2016, FTA issued a final rule requiring transit agencies to maintain and document minimum Transit Asset Management (TAM) standards, policies, procedures, and performance targets. The TAM rule applies to all recipients of Chapter 53 funds that either own, operate, or manage federally-funded capital assets used in providing public transportation services.

The purpose of the TAM Final Rule is to help achieve and maintain a state of good repair for the nation's public transportation assets. Transit asset management is a business model that uses transit asset condition to guide the optimal prioritization of funding. As the sole transit agency on O'ahu, the City and County of Honolulu Department of Transportation Services (DTS) has established the TAM targets.

OahuMPO is required to set TAM targets in coordination with DTS, measure progress toward achieving those targets with each update of the Oʻahu Regional Transportation Plan (ORTP) and describe how implementation of the Transportation Improvement Program (TIP) is anticipated to make progress towards achievement of targets. The following performance measures (Table 8.23) have been established by DTS and adopted by the OahuMPO Policy Board in November 2018.

Table 8.23 Transit Asset Management Performance Targets

Performance Measure	Annual Target
Percentage of revenue vehicles that have met Or exceeded their useful life benchmark	20%
Articulated bus	20%
Bus	20%
Cutaway bus	20%
Van	20%
Percentage of service vehicles that have either met or exceeded their useful life benchmark	30%
Automobiles	25%
Truck and other rubber tire vehicles	40%
Percentage of passenger and maintenance facilities rated below condition 3 on the condition scale	10%
Passenger facilities	10%
Passenger parking facilities	10%
Maintenance facilities	10%
Administrative facilities	10%

Progress Towards Target Reporting

The City and County of Honolulu Department of Transportation Services (DTS) has evaluated its progress on meeting its annual targets for transit asset management. It was determined that DTS has met its targets for the percentage of revenue vans, service automobiles, service trucks and other rubber tire vehicles, passenger and parking facilities, and administrative and maintenance facilities that have met or exceed their useful life benchmark in FY 2018, FY 2019, and FY 2020. However, targets for revenue articulated buses, revenue buses, and revenue cutaways, were not met in FY 2018, FY 2019, and FY 2020. Table 8.24 below provides a summary of the progress towards Transit Asset Management Performance Target Achievement.

Table 8.24 Transit Asset Management Performance Targets Achievement Progress Summary

Doufoumonoo	FY 2018			FY 2019			FY 2020					
Performance Measure	Target (%)	Actual (%)	Difference (%)	Met Target?	Target (%)	Actual (%)	Difference (%)	Met Target?	Target (%)	Actual (%)	Difference (%)	Met Target?
Percentage of reve	Percentage of revenue vehicles that have met or exceeded their useful life benchmark											
Articulated Bus	20	36.52	-16.52	No	20	36.84	-16.84	No	20	36.28	-16.28	No
Bus	20	40.79	-20.79	No	20	39.3	-19.3	No	20	39.3	-19.3	No
Cutaway	20	27.59	-7.59	No	20	27.59	-7.59	No	20	66.85	-46.85	No
Van	20	0	20	Yes	20	0	20	Yes	20	0	20	Yes
Percentage of serv	ice vehicl	es that h	ave met or ex	ceeded the	eir useful	life bench	nmark					
Automobiles	25	16.13	8.87	Yes	25	20.97	4.03	Yes	25	23.73	1.27	Yes
Trucks and Other Rubber Tire Vehicles	40	18.75	21.25	Yes	40	18.75	21.25	Yes	40	18.75	21.25	Yes
Percentage of facilities rated below 3 on the condition scale												
Passenger and Parking Facilities	10	0	10	Yes	10	0	10	Yes	10	0	10	Yes
Administrative and Maintenance Facilities	10	0	10	Yes	10	0	10	Yes	10	0	10	Yes

Progress Towards Target Achievement

Transit Asset Management is one of the most important factors of project selection at the OahuMPO. This is evidenced by the MPO's metropolitan transportation plan, called the Oahu Regional Transportation Plan (ORTP) Project Prioritization Criteria, with projects and programs that intend on improving transit asset management, under the criteria of maintenance, being awarded 20 out of 100 points. This is the most points awarded to any criteria, apart from projects and programs that intend on improving safety, which also receives 20 of 100 points. The programs in Table 8.25 is expected to help us achieve our transit asset management targets.

Table 8.25 Transit Asset Management City and County of Honolulu - FTA Funded Project

Projects and Programs that intend on improving transit asset management total \$181,644,000, or 5.3% of total FFYs 2022-2025 TIP expenditures. Some projects and/or programs are reported in multiple target achievement categories; therefore, the sum and percent of total expenditures may be skewed.

TIP ID#	Project Name	Project Description	Lead Agency	Total Request	Federal	Local
OC13	Bus and Handi-Van Acquisition Program	Purchase replacement transit buses and handi-van vehicles.	DTS	\$98,199,000	\$78,556,000	\$19,643,000
OC14	Bus Stop ADA Access and Site Improvements	The project plans and constructs new bus shelters, shelter pads, improves sidewalks, modifies existing bus stop shelters and bus stop sites at various locations in accordance with the plans and contract documents to make them compliant with the American with Disabilities Act (ADA).	DTS	\$2,583,000	\$2,091,000	\$492,000
OC31	Middle Street Transit Center	Acquire property located at the Middle Street Transit Center, plan, and design the entire transit campus.	DTS	\$2,112,000	\$0	\$2,112,000
OC20	Preventive Maintenance	Preventive maintenance of FTA-funded rolling stock (buses and handi-vans) to include parts, labor, and other related costs.	DTS	\$78,750,000	\$63,000,000	\$15,750,000
TOTAL				\$181,644,000	\$143,647,000	\$37,997,000

8.3 SUMMARY OF PROJECTS AND TARGETS

Table 8.26 below is a summary of the projects and programs in the TIP, and which targets they aim to help achieve.

Table 8.26 Summary of FFYs 2022-2025 TIP Projects, Programs, and Targets

TIP ID#	Highway Safety	Pavement Condition	Bridge Condition	Level of Travel Time Reliability	Truck Travel Time Reliability	Transit Safety	Transit Asset Management
OC1				Х	Х		
OC10							
OC13							X
OC14							X
OC16							
OC2	X						
OC20							Х
OC21						X	
OC-21-54	X						
OC-21-55				Χ	X		
OC23							
OC24							
OC25	Х						
OC26	X						
OC28	Х						
OC29							
0C3			Х				
0C31							X
0C4				Х	Х		
830	X						
0S1		X	X				
OS10	X						

TIP ID#	Highway Safety	Pavement Condition	Bridge Condition	Level of Travel Time Reliability	Truck Travel Time Reliability	Transit Safety	Transit Asset Management
OS11				Χ			
OS12				Х			
0S14	Χ						
OS17							
OS20	Χ						
OS-21-43			X				
OS-21-44				Χ			
OS-21-45				Χ			
OS-21-46							
OS-21-47	Х						
OS-21-48	Х						
OS-21-49					Х		
OS-21-50							
OS-21-51			Х				
OS-21-52			Χ				
OS-21-53							
OS-21-56							
OS-21-57	Х						
OS-21-59							
OS-22-58	Х						
OS-22-59							
OS-22-60				Χ			
OS-22-61*			Х				
OS-22-62*	Х						
OS-22-63*							
OS-22-64*	Х						
OS26		Χ					

TIP ID#	Highway Safety	Pavement Condition	Bridge Condition	Level of Travel Time Reliability	Truck Travel Time Reliability	Transit Safety	Transit Asset Management
OS28			Х				
OS29			X				
OS31			Х				
OS34			X				
0S36			Х				
0S4			X				
OS43							
0S44	X						
OS45	Х						
0S46	X						
OS5				Χ			
OS50							
OS52			Х				
OS57				X			
OS59							
OS61				X			
0S62		Χ					
OS63		Χ		X			
OS67		Χ					
0S68							
OS69	Χ						
0S70			X				
OS71			Х				
OS72			X				
OS73	Х						
)S74			X				
DS75				Χ			

TIP ID#	Highway Safety	Pavement Condition	Bridge Condition	Level of Travel Time Reliability	Truck Travel Time Reliability	Transit Safety	Transit Asset Management
OS76			Χ				
0S77			Χ				
OS78			Χ				
OS79		Х	Χ	Χ			
OS80				Χ			
0S82							
0S84	Χ			Χ			
OS9	X			X			

8.4 FUTURE TRANSPORTATION IMPROVEMENT PROGRAMS & PERFORMANCE MEASURES

OahuMPO will plan to respond to any future federally required performance targets, and document them in future TIP documents. The MPO also hopes to establish non-federally required performance targets focused on things like public health, active transportation, climate change, etc.

OahuMPO also hopes to conduct more in-depth analyses to inform prioritization about project and program selection. Rather than stating the assumption that a project or program will help the MPO to meet its targets, staff hope to employ strategies that quantify system performance of the projects, for each of the targets.

APPENDICES

All appendices may be found on the TIP webpage here:

https://www.oahumpo.org/plans-and-programs/transportation-improvement-program-tip/

APPENDIX A PROJECT AND PROGRAM PRIORITIZATION PROCESS

APPENDIX B: SCORING OF NEW PROJECTS AND PROGRAMS

APPENDIX C: TITLE VI AND ENVIRONMENTAL JUSTICE ANALYSIS

APPENDIX D: INTERGOVERNMENTAL AND PUBLIC REVIEW COMMENTS

APPENDIX E: SELF CERTIFICATION

APPENDIX A

PROJECT AND PROGRAM PRIORITIZATION PROCESS

Planning efforts on Oʻahu have yielded a sizable list of projects and programs to make it safer, easier, and more comfortable to get around the island. However, transportation funds and staff resources are limited, compelling a process to prioritize investments that will best achieve the ORTP's vision and goals.

OahuMPO has created a prioritization process to evaluate potential transportation projects and programs using measurable criteria based on the goals of our long-range plan. It provides a quantitative method to compare projects and programs proposed for our Oʻahu Regional Transportation Plan and our Transportation Improvement Program.

STEP 1: Project and Program Consistency with the O'ahu Regional Transportation Plan

Is the project or program consistent with the Oʻahu Regional Transportation Plan vision and goals? If yes, continue to step 2, if no, the project should not be evaluated, or amendments should be made prior to evaluation.

STEP 2: Project and Program Evaluation

OahuMPO Staff and the ORTP working group reviews the technical score for each project or program based on the goals and objectives of the Oʻahu Regional Transportation Plan.

STEP 3: Project and Program Scoring Review by OahuMPO's O'ahu Regional Transportation Plan working group, Technical Advisory Committee, Citizen Advisory Committee, and Policy Board

OahuMPO's committees, and Policy Board will review the scoring for fairness and provides comments about project ranking.

STEP 1:

IS THE PROJECT OR PROGRAM CONSISTENT WITH THE ORTP VISION? *

Consistent?	ORTP Vision
Yes	In 2045, Oʻahu's path forward is multimodal and safe. All people on Oʻahu can reach their destinations through a variety of transportation choices, which are reliable, equitable,
No	healthy, environmentally sustainable, and resilient in the face of climate change.

Which ORTP goals is the project or program consistent with (must be consistent with at least one goal)? *

Consistent?	ORTP Goals
	Goal #1: Improve the safety of the transportation system
	Goal #2: Support active and public transportation
	Goal #3: Promote an equitable transportation system
	Goal #4: Improve the resiliency of the transportation system
	Goal #5: Preserve and maintain the transportation system
	Goal #6: Support a reliable and efficient transportation system
	Goal #7: Improve air quality and protect environmental and cultural assets

^{*}If the project or program is not consistent with the ORTP vision and at least one ORTP goal, the project or program should not be evaluated, or amendments should be made prior to evaluation.

STEP 2:

Goal 1: Improve the Safety of the Transportation System (Maximum 20 points)

This section prioritizes projects and programs that improve the safety of our roads, bridges, and paths. Examples of projects that might improve safety include:

- Guardrail and shoulder improvements
- Seismic retrofit projects
- Rockfall and slope stabilization projects
- · Bridge replacement projects and programs
- Emergency telephone projects
- Complete streets projects
- Lighting Improvements
- Safe Routes to School projects

Objective 1.1 Reduce the deaths and serious injuries on our roads, bridges, and paths & Objective 1.2 Reduce the rate of deaths and serious injuries of people walking and biking

Scoring is based on a 20-point maximum scale with 20 being the highest priority and zero being the lowest. Projects scoring the highest fall in to one of two categories:

- 1. Project intends on improving the safety of the transportation system and is located in a high crash zone.
- 2. Project intends on improving the safety of the transportation system and the project type has no impact on crashes, for example, a seismic retrofit project, rockfall protection project, bridge replacement project, or bicycle and pedestrian path not located on a roadway.

Evaluation Criteria 1.1.1: Increase safety by investing in safety improvements in high crash areas and projects and programs that intend on improving safety (0 - 20 points)

POINTS	PROJECT CRITERIA	PROGRAM CRITERIA
	The project's primary or secondary intent is to improve the safety of the transportation system.	
	AND	
	Project location is in a high crash zone.	
	OR	The <u>primary intent</u> of the program is to improve
20 Points	The project's primary or secondary intent is to improve safety, but its location will not have a large impact on crashes, for example:	the safety of the transportation system.
	 Seismic retrofit projects Rockfall protection projects Bridge replacement projects Bicycle and pedestrian paths (not located on a roadway) 	
10 Points	The project's <u>primary or secondary intent</u> is to improve safety, BUT the project location is <u>not in a high crash</u> <u>zone</u> .	The <u>secondary intent</u> of the program is to improve the safety of the transportation system.
0 Points	The project has <u>no intention</u> to improve the safety of the transportation system.	The program has <u>no intent</u> to improve the safety of the transportation system.

POINTS	Project Location and Proximity to Concentration of Mobility Constrained Populations
1 Point	Project's primary or secondary intent is to improve the safety of people walking and biking and is located in an area with a high concentration of Environmental Justice populations.
1 Point	Project's primary or secondary intent is to improve the safety of people walking and biking and is located in an area with a high concentration of persons with disabilities.
1 Point	Project's primary or secondary intent is to improve the safety of people walking and biking and is located in an area with a high concentration of zero car households.
1 Point	Project's primary or secondary intent is to improve the safety of people walking and biking and is located in an area with a high concentration of kūpuna.
1 Point	Project's primary or secondary intent is to improve the safety of people walking and biking and is located in an area with a high concentration of keiki.

Bonus Points 1.1.2: Safety Project is Located in a High Crash Pedestrian Zone

POINTS	Project Location and High Crash Pedestrian Zone
5 Points	The project's primary or secondary intent is to improve pedestrian safety and the project location is in a high crash zone for people walking.

Bonus Points 1.1.3: Safety Project is Located in a High Crash Bicycle Zone

POINTS	Project Location and High Crash Bicycle Zone
5 Points	The project's primary or secondary intent is to improve bicycle safety and the project location is in a high crash zone for people biking.

Goal 2: Support Active and Public Transportation (Maximum 24 points)

This section prioritizes projects and programs that may help to increase the number of people walking, biking, and taking transit, and decrease the number of people driving alone.

Objective 2.1 Increase commute mode share of people using active transportation

Projects and programs that increase the miles of pedestrian and bicycling infrastructure and/or maintains existing pedestrian and bicycle infrastructure, and therefore increase opportunities for people to commute using active transportation will receive points. Scoring is based on a 14-point maximum scale, with 8 points assigned to projects and programs that add and/or maintain pedestrian facilities and 6 points assigned to projects and programs that add protected bicycle facilities or maintains existing bicycle facilities, with 14 being the highest priority and zero being the lowest.

Evaluation Criteria 2.1.1: Increase the share of people using active transportation by investing in projects and programs that add miles of pedestrian facilities or improve existing pedestrian facilities (-8 – 8 points)

POINTS	PROJECT CRITERIA	PROGRAM CRITERIA
	Project adds pedestrian facilities, for example: • New sidewalks • Shared-Use Paths OR	The <u>primary intent</u> of the program is to increase the miles of pedestrian facilities and/or improve/maintain existing pedestrian facilities.
	Project <u>improves existing pedestrian facilities</u> , for example:	
8 Points	 Corrections to existing sidewalk deficiencies Widening existing sidewalks Reconstruction of curb ramps ADA improvements Pedestrian hybrid beacons Pedestrian refuge island Raised crosswalks Crosswalk visibility enhancements Rectangular Rapid Flashing Beacons 	OR The program's intent is to provide or maintain recreational trails.

4 Points		The <u>secondary intent</u> of the program is to increase the miles of pedestrian facilities and/or improve/maintain existing pedestrian facilities.
0 Points	Project does not add pedestrian facilities or improve existing pedestrian facilities.	The program has <u>no inten</u> t on increasing the miles of pedestrian facilities and/or improve/maintain existing pedestrian facilities.
-8 Points	Project removes existing pedestrian facilities or makes it impossible to access pedestrian facilities.	

Evaluation Criteria 2.1.2: Increase the share of people using active transportation by investing in projects and programs that add miles of bicycle facilities or improve existing bicycle facilities (-6 – 6 points)

POINTS	PROJECT CRITERIA	PROGRAM CRITERIA
6 Points	Project adds protected bicycle facilities, such as: • Shared Use Path • Protected Bike Lane • Buffered Bike Lane OR Project improves existing bicycle facilities.	The <u>primary intent</u> of the program is to increase the miles of bicycle facilities and/or improve/maintain existing bicycle facilities.
3 Points	 Project <u>adds conventional bicycle facilities</u>, such as: Conventional Bike Lane Climbing Bike Lane Shoulder Bikeway 	The <u>secondary intent</u> of the program is to increase the miles of bicycle facilities and/or improve/maintain existing bicycle facilities.

0 Points	Project does not add bicycle facilities or project adds a shared traffic lane.	The program has <u>no intent</u> to increase the miles of bicycle facilities and/or improve/maintain existing bicycle facilities.
-6 Points	Project removes existing bicycle facilities or makes it impossible to access bicycle facilities.	

Bonus Points: Pedestrian and/or Bicycle Project is Within Close Proximity to Schools

POINTS	Project Location and Proximity to Schools
3 Points	Project adds pedestrian and/or bicycle facilities within 1 mile of an elementary, middle school, and/or high school.

Bonus Points: Pedestrian and/or Bicycle Project is Within Close Proximity to Planned Rail Stations

POINTS	Project Location and Proximity to Schools
3 Points	Project adds pedestrian and/or bicycle facilities within 1/2 mile of a planned rail station.

Bonus Points: Protected Bicycle Facilities on High Stress Connections

Bonds Forms. Frotected Bicycle Facilities on ringh offess Confidentials		
POINTS	Project Location and Proximity to Schools	
3 Points	Project adds protected bicycle facilities on high stress connections. ⁶	

⁶ High stress connections are defined by the Hawai'i Bicycling League's Oʻahu Bike Map, which can be found here: https://www.hbl.org/OahuBikeMap/

Objective 2.2 Increase commute mode share of people taking transit

Highest scoring projects and programs support increasing the mode share of people taking transit. Scoring is based on an 8-point maximum scale with 8 being the highest priority and zero being the lowest.

Evaluation Criteria 2.2.1: Increase the share of people taking transit by investing in projects and programs that support TheBus, Handi-Van, and Rail (0 - 8 points)

POINTS	PROJECT CRITERIA	PROGRAM CRITERIA
8 Points	Project is expected to moderately or significantly improve transit quality. Project types include: • Fixed-route bus and rail expansions • Public transit technology improvements • Acquisition of buses or paratransit vehicles • Transportation assistance for elderly and disabled • Transit ADA access and site improvements • Construction of a transit center • Transit safety and security projects • Transit Signal Priority projects • Bus stop improvements • High priority bus corridors	The <u>primary intent</u> of the program is to support TheBus, Handi-Van, and/or Rail.
4 Points		The <u>secondary intent</u> of the program is to support TheBus, Handi-Van, and/or Rail.
0 Points	Project is <u>not expected to have any impact</u> on transit quality.	The program has <u>no intent</u> to support TheBus, Handi-Van, and/or Rail.

Bonus Points: Transit Project is Within Close Proximity to Schools

POINTS	Project Location and Proximity to Schools
4 Points	Transit project is located within 1 mile of an elementary, middle school, and/or high school

Objective 2.3 Decrease commute mode share of people driving alone

Highest scoring projects and programs support decreasing the mode share of people driving alone. Scoring is based on a 4-point maximum scale with 4 being the highest priority and –4 being the lowest.

Evaluation Criteria 2.3.1: Decrease the share of people driving alone by investing in projects and programs that encourage people not to drive alone (-2 – 2 points)

POINTS	PROJECT CRITERIA	PROGRAM CRITERIA
2 Points 1 Point	Project expected to moderately or significantly decrease the share of people driving alone. Project types include: a. High Occupancy Vehicle lanes	The primary intent of the program is to support decreasing the mode share of people driving alone, for example: a. Emergency Ride Home Program b. Ridesharing Program c. Other Transportation Demand Management Programs The secondary intent of the program is to support decreasing the mode share of people driving alone.
0 Points	Project is <u>not expected to have a significant impact</u> on the share of people driving alone.	The program has <u>no intent</u> to support decreasing the mode share of people driving alone.
-2 Points	Project expected to moderately or significantly increase the share of people driving alone. Project types include: a. Projects that add vehicle capacity (does not include those projects that add transit only capacity)	

Goal 3: Promote an Equitable Transportation System (Maximum 5 Points)

This section prioritizes projects and programs that promote an equitable transportation system by serving mobility constrained populations. For the purposes of this prioritization process, mobility constrained populations include:

- Environmental Justice populations (low income and racial minority)
- Persons with disabilities
- Zero car households
- Kūpuna (65 years of age and older)
- Keiki (below 18 years of age)

Examples of projects and programs that might promote an equitable transportation system include:

- Elderly and persons with disabilities vehicle acquisition program
- Job access and reverse commute program
- New freedom program
- Ways to work program

Objective 3.1 Increase access to pedestrian, bicycle, and transit options for mobility constrained populations

Scoring is based on a 5-point maximum scale with 5 being the highest priority and zero being the lowest.

Evaluation Criteria 3.1.1: Increase pedestrian, bicycle, and transit options for mobility constrained populations by investing in pedestrian, bicycle, and transit projects and programs that serve those populations (0 – 5 points)

POINTS	PROJECT CRITERIA	PROGRAM CRITERIA
5 Points	Pedestrian, bicycle, and/or transit project located in an area with a concentration of all five mobility constrained populations.	The <u>primary intent</u> of the program is to increase access to pedestrian, bicycle, and transit options for at least one mobility constrained populations.
4 Points	Pedestrian, bicycle, and/or transit project located in an area with a concentration of <u>four of five mobility</u> <u>constrained populations</u> .	

3 Points	Pedestrian, bicycle, and/or transit project located in an area with a concentration of three of five mobility constrained populations.	The <u>secondary intent</u> of the program is to increase access to pedestrian, bicycle, and transit options for at least one mobility constrained populations.
2 Deinte	Pedestrian, bicycle, and/or transit project located in an area with a concentration of two of five mobility	
Points	constrained populations.	
1 Points	Pedestrian, bicycle, and/or transit project located in an area with a concentration of one of five mobility constrained populations.	
0 Points	Pedestrian, bicycle, and/or transit project is located in an area with no mobility constrained populations.	The program has <u>no intent</u> to increase access to pedestrian, bicycle, and transit options for mobility constrained populations.

Goal 4: Improve the Resiliency of the Transportation System (Maximum 10 Points)

Objective 4.1 Provide redundant emergency access to all parts of Oʻahu, especially for people and emergency responders in singular access communities

Scoring is based on a 4-point maximum scale, with 4 being the highest priority and zero being the lowest.

Evaluation Criteria 4.1.1: Increase redundant access by investing in projects and programs that help to provide redundant emergency access (0 - 4 points)

POINTS	PROJECT CRITERIA	PROGRAM CRITERIA
4 Points	The project's <u>primary intent</u> is to provide redundant access for singular access communities.	The program's <u>primary intent</u> is to support increasing redundant access for singular access communities.

2 Points	The project's <u>secondary intent</u> is to provide redundant access for singular access communities.	The program's <u>secondary intent</u> is to support increasing redundant access for singular access communities.
0 Points	The project has <u>no intent</u> to provide redundant access for singular access communities.	The program has <u>no intent</u> on supporting the increase of redundant access for communities for singular access communities.

Objective 4.2 Reduce the long-term vulnerability of Oʻahu's transportation facilities, particularly flooding and sea level rise caused by climate change and disaster risks, while being conscious of environmental and cultural impacts

Scoring is based on a 6-point maximum scale with 6 being the highest priority and zero being the lowest. Projects scoring the highest fall in to one of two categories:

- 1. Project intends on reducing the long-term vulnerability of transportation facilities and is located in the 6ft sea level rise exposure area.⁷
- 2. Project intends on reducing the long-term vulnerability of transportation facilities and its location does not determine its risk to sea level rise, passive flooding, annual high wave flooding, and coastal erosion, for example, a seismic retrofit or rockfall protection project.

Due to the uncertainty in the timing and magnitude of sea level rise projections globally and for Hawai'i, the projections will be updated as more information becomes available. Any new projects added to the ORTP will be subject to evaluation using the most up to date climate change predictions and data. DLNR and UH Sea Grant will be consulted on which predictions and data to use for evaluation.

Sea level rise exposure area includes risk of passive flooding, annual high wave flooding, and coastal erosion.

⁷ The sea level rise projections were originally based on the 5th Assessment Report (AR5) of the Intergovernmental Panel on Climate Change (IPCC), "business as usual" greenhouse gas emissions scenario for 2100. This scenario is consistent with more recent reports on sea level rise including a NOAA 2017 report, which compiled the latest and best available projections on sea level rise and finds that 3 feet or more of sea level rise could occur in an "intermediate" scenario by 2100 and as soon as 2060 in an "extreme" scenario. These scientific projections will continue to evolve as understanding regarding the contribution from ice melt develops (particularly regarding contributions from Greenland and Antarctica), and as it becomes apparent which greenhouse gas emissions pathway ultimately emerges.

Evaluation Criteria 4.2.1: Reduce long-term vulnerability of transportation facilities by investing in projects in areas most vulnerable to the impacts of climate change and disasters and programs that intend on reducing the long-term vulnerability of transportation facilities (0 - 6 points)

POINTS	PROJECT CRITERIA	PROGRAM CRITERIA
	The project's <u>primary or secondary intent</u> is to reduce the long-term vulnerability of transportation facilities.	
	AND	
6 Points	Project location is in the 6ft sea level rise exposure area.	The program's <u>primary intent</u> is to reduce the long-term vulnerability of transportation facilities.
	OR	
	Project is a seismic retrofit or rockfall protection project.	
	The project's <u>primary or secondary intent</u> is to reduce the long-term vulnerability of transportation facilities.	
3 Points	AND	The program's <u>secondary intent</u> is to reduce the long-term vulnerability of transportation facilities.
	Project location is not in the 6ft sea level rise exposure area.	
0 Points	The project has <u>no intent</u> to reduce the long-term vulnerability of transportation facilities.	The program has <u>no intent</u> on reducing the long- term vulnerability of transportation facilities.

Bonus Points: Project is in the Top 20 Projects in the Statewide Coastal Highway Program Report

POINTS	Project Prioritized in the Statewide Coastal Highway Program Report
3 Points	Project is in the top 20 projects in the Statewide Coastal Highway Program Report.

Bonus Points: Project is in Singular Access Community

POINTS	Project is Located in a Singular Access Community
3 Points	The project's primary or secondary intent is to reduce the long-term vulnerability of transportation facilities and is located in a singular access community.

Bonus Points: Project intends to reduce the long-term vulnerability of transportation facilities and is Located in Census Block Group of Mobility Constrained Populations

POINTS	Project Location and Proximity to Concentration of Mobility Constrained Populations
1 Point	Project's primary or secondary intent is to reduce the long-term vulnerability of transportation facilities and located in an area with a high concentration of Environmental Justice populations.
1 Point	Project's primary or secondary intent is to reduce the long-term vulnerability of transportation facilities and located in an area with a high concentration of persons with disabilities.
1 Point	Project's primary or secondary intent is to reduce the long-term vulnerability of transportation facilities and located in an area with a high concentration of zero car households.
1 Point	Project's primary or secondary intent is to reduce the long-term vulnerability of transportation facilities and located in an area with a high concentration of kūpuna.
1 Point	Project's primary or secondary intent is to reduce the long-term vulnerability of transportation facilities and located in an area with a high concentration of keiki.

Goal 5: Preserve and Maintain the Transportation System (Maximum 20 Points)

This section prioritizes projects and programs that preserve and maintain the transportation system. Examples of projects and programs that might preserve and maintain the transportation system include:

- Pavement/resurfacing projects and programs
- Bridge improvement, rehabilitation, and programs
- Drainage projects and programs
- Streetlight pole replacement projects and programs
- Traffic sign projects and programs
- Improvement projects that do not add additional capacity
- Intelligent Transportation System (ITS) projects
- Bikeway improvement projects and programs
- · Recreational trails projects and programs
- Transit vehicles and facilities maintenance programs

Objective 5.1 Maintain and improve the condition of roadways, bridges, transit vehicles and facilities, and pathways

Scoring is based on a 20-point maximum scale with 20 being the highest priority and zero being the lowest. Projects scoring the highest fall in to one of three categories:

- 1. Project intends on improving the condition of roadways, bridges, and/or paths and is consistent with the priorities and recommendations in the HDOT's Transportation Asset Management">HDOT's Transportation Asset Management
- 2. The project's primary or secondary intent is to maintain and/or improve existing pedestrian and/or bicycling infrastructure.
- 3. The project's primary or secondary intent is to maintain and/or improve existing transit vehicles and/or facilities.

Evaluation Criteria 5.1.1: Improve the condition of roadways, bridges, pathways, transit vehicles and facilities by

investing in roadway and bridge projects prioritized by HDOT's Transportation Asset Management Plan, projects that aim to improve the condition of pathways and transit vehicles and facilities, and programs that intend on maintaining and improving roadways, bridges, transit vehicles and facilities, and pathways. (0 – 20 Points)

POINTS	PROJECT CRITERIA	PROGRAM CRITERIA	
	The project's <u>primary or secondary intent</u> is to improve the condition of roadways, bridges, transit vehicles and facilities, and/or pathways.		
20 Points	Roadway and Bridge Projects: Roadway and bridge project is consistent with the priorities and recommendations in the HDOT's Transportation Asset Management Plan ⁸ for pavement and bridge projects OR Transit Reductrian and Rievels Prejects:	The <u>primary intent</u> of the program is to maintain and improve the condition of roadways, bridges, transit vehicles and facilities, and/or pathways.	
	Transit, Pedestrian, and Bicycle Projects: The project's <u>primary intent</u> is to maintain and/or improve the condition of existing transit vehicles, facilities, pedestrian, or bicycle infrastructure.		
10 Points	The project's <u>primary or secondary intent</u> is to improve the condition of roadways, bridges, transit vehicles and facilities, and/or pathways. AND Roadway and Bridge Projects: Project is not consistent with recommendations in the HDOT's Transportation Asset Management for priority pavement and bridge projects.	The secondary intent of the program is to maintain and improve the condition of roadways, bridges, transit vehicles and facilities, and/or pathways.	

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⁸ The condition of a road or bridge is determined by the Hawaii Department of Transportation (HDOT). For more information about how HDOT prioritizes pavement and bridge projects, please read the <u>HDOT Transportation Asset Management Plan</u>.

	OR	
	Transit, Pedestrian, and Bicycle Projects:	
	The project's <u>secondary intent</u> is to maintain and/or improve the condition of existing transit vehicles, facilities, pedestrian, or bicycle infrastructure.	
0 Points	The project has <u>no intent</u> on improving and/or maintaining roadways, bridges, transit vehicles and facilities, and/or pathways.	The program has no intent to maintain and improve the condition of roadways, bridges, transit vehicles and facilities, and/or pathways.

Goal 6: Support a Reliable and Efficient Transportation System (Maximum 12 Points)

This section prioritizes projects and programs that support a reliable and efficient transportation system. Examples of projects and programs that might support a reliable and efficient transportation system include:

- Traffic signal modernization projects
- Operational improvement projects
- Freeway management system
- Freeway service patrol
- ITS
- Bus-only lanes
- Bus queue jumpers
- Bus pull-outs

Objective 6.1 Improve the reliability of Interstate and Non-Interstate highways, freight networks, and transit

Scoring is based on a 8-point maximum scale, with 4 points assigned to projects located on a designated freight route and programs with the intent of improving freight reliability, and 4 points assigned to projects and programs that improve the reliability of Interstate and Non-Interstate highways, freight networks, and/or transit, with 8 being the highest priority and zero being the lowest.

Evaluation Criteria 6.1.1: Improve freight reliability by investing in projects on designated freight routes and programs that intend on improving freight reliability (0 – 4 points)

POINTS	PROJECT CRITERIA	PROGRAM CRITERIA
4 Points	Project location is on a designated freight route.	The program's <u>primary intent</u> is to improve freight reliability.
2 Points		The program's <u>secondary intent</u> is to improve freight reliability.
0 Points	Project location is not on a designated freight route.	The program has <u>no intent</u> to improve freight reliability.

Evaluation Criteria 6.1.2: Improve reliability of Interstate and Non-Interstate highways, freight networks, and transit by investing in projects and programs with the intent of reducing and/or managing non-recurring congestion and transit delays (0 – 4 points)

POINTS	PROJECT CRITERIA	PROGRAM CRITERIA
4 Points	The <u>primary intent</u> of the project is to improve the reliability of Interstate and Non-Interstate highways, freight networks, and/or transit.	The program's <u>primary intent</u> is to improve the reliability of Interstate and Non-Interstate highways, freight networks, and/or transit.
2 Points	The <u>secondary intent</u> of the project is to improve the reliability of Interstate and Non-Interstate highways, freight networks, and/or transit.	The program's <u>secondary intent</u> is to improve the reliability of Interstate and Non-Interstate highways, freight networks, and/or transit.
0 Points	The project has <u>no intent</u> to improve the reliability of Interstate and Non-Interstate highways, freight networks, and/or transit.	The program has <u>no intent</u> to improve the reliability of Interstate and Non-Interstate highways, freight networks, and/or transit.

Objective 6.2 Improve the efficiency of Interstate and Non-Interstate highways, freight networks, and transit

Scoring is based on a 4-point maximum scale with 4 being the highest priority and zero being the lowest.

Evaluation Criteria 6.2.1: Improve efficiency by investing in projects on congested corridors, and corridors with high numbers of transit trips per hour, projects that improve the efficiency of transit, and programs that intend on improving the efficiency of the transportation system (0 - 4 points)

POINTS	PROJECT CRITERIA	PROGRAM CRITERIA
	Project identified in the Congestion Management Process (CMP).	
4 Points	The primary or secondary intent of the project is to improve the efficiency of transit, for example: Bus-only lanes Bus pullouts Queue jumpers OR Project not identified in the CMP but is on a roadway where there is an average of at least two bus trips per hour.	The <u>primary intent</u> of the program is to improve efficiency of the transportation system.
2 Points	Project is not identified in the CMP OR Project does not intend on improving transit efficiency OR Project location does not have on average at least two bus trips per hour	The <u>secondary intent</u> of the program is to improve the efficiency of the transportation system.

	BUT	
	Project's <u>primary or secondary intent</u> is to improve the efficiency of the transportation system.	
0 Points	Project has <u>no intent</u> to improve the efficiency of the transportation system.	The program has <u>no intent</u> to improve the efficiency of the transportation system.

Goal 7: Improve Air Quality and Protect Environmental and Cultural Assets (Maximum 9 points)

This section prioritizes projects and programs that may help to reduce ground transportation emissions and enhance and protect cultural and natural resources.

Objective 7.1 Reduce ground transportation greenhouse gas emissions

The highest scoring projects and programs are expected to improve air quality by reducing emissions, reducing VMT, not adding capacity, and increasing access to non-vehicular modes. Scoring is based on a 5-point maximum scale with 5 being the highest priority and -5 being the lowest.

Evaluation Criteria 7.1.1: Improve air quality by investing in projects and programs that reduce emissions, reduce VMT, do not add capacity, and increase access to non-auto modes (-5 - 5 points)

POINTS	PROJECT CRITERIA	PROGRAM CRITERIA
5 Points	Project expected to improve air quality. Project types include: a. Fixed-route bus and rail expansions b. Public transit technology improvements c. Diesel bus engine replacements d. Alternative bus fueling stations e. Transit Center construction f. Transportation demand management programs g. Fixed-route bus and rail service replacements h. Minor non-recreational non-motorized system expansion (not tied to a roadway project which would increase	The <u>primary intent</u> of the program is to improve air quality by reducing emissions, reducing VMT, not adding capacity, and/or increase access to non-auto modes.
	vehicle capacity)	

	 i. Major non-recreational non-motorized system maintenance (not tied to a roadway project which would increase vehicle capacity) j. Alternative vehicle fueling stations k. Park-and-Ride lot expansion l. Operations and transportation systems management improvements that do not add capacity, for example traffic signal timing projects 	
2.5 Points		The <u>secondary intent</u> of the program is to improve air quality by reducing emissions, reducing VMT, not adding capacity, and/or increase access to non-auto modes.
0 Points	Project not expected to impact air quality. Project types include: a. Roadway projects which do not add capacity b. Park-and-Ride lot maintenance c. Recreational non-motorized system expansion/maintenance d. Minor non-recreational non-motorized system maintenance (not tied to a roadway project which would increase vehicle capacity)	The program has <u>no intent</u> to improve air quality by reducing emissions, reducing VMT, not adding capacity, and/or increase access to non-auto modes.
-5 Points	Project expected to moderately or significantly worsen air quality. Project types include: a. Roadway projects which add capacity, including those with a non-recreational non-motorized system expansion component	

Bonus Points: Project expected to improve air quality and is located in census block group of mobility constrained

populations

POINTS	Project Location and Proximity to Concentration of Mobility Constrained Populations		
1 Point	Project expected to improve air quality and is located in an area with a high concentration of Environmental Justice populations.		
1 Point	Project expected to improve air quality and is located in an area with a high concentration of persons with disabilities.		
1 Point	Project expected to improve air quality and is located in an area with a high concentration of zero car households.		
1 Point	Project expected to improve air quality and is located in an area with a high concentration of kūpuna.		
1 Point	Project expected to improve air quality and is located in an area with a high concentration of keiki.		

Objective 7.2 Enhance and protect cultural and natural resources

The highest scoring projects are located away from cultural and natural resources, including:

- Project is located outside of a 150ft buffer of Hawai'i Department of Land Natural Resources (DLNR), Division of Forestry and Wildlife (DOFAW) Conservation Resource Management Areas, C1 (High Conservation Resources) and C2 (Medium Conservation Resources)
- Project is located outside of a 150ft buffer of DLNR-DOFAW Watershed Protection Priority Areas
- Project is located outside of a 150ft buffer of DLNR-DOFAW Natural Resources Areas⁹
- Project is located outside of a 50ft buffer of historic sites¹⁰

Scoring is based on a 4-point maximum scale with 4 being the highest priority and -4 being the lowest.

⁹ References: Division of Forestry and Wildlife; Oahu Plant Extinction Prevention Program; Oahu Army Natural Resource Program; U.S. Fish and Wildlife Services; Hawaii Biodiversity and Mapping Program (HBMP), 2008.

¹⁰ The State Historic Preservation Division will make final determinations of any project's impact to sites as projects advance through planning, design, and environmental review.

Evaluation Criteria 7.2.1: Enhance and protect cultural and natural resources by investing in projects located away from environmentally and culturally sensitive areas and programs that intend on enhancing and protecting these resources (-4 – 4 points)

POINTS	PROJECT CRITERIA	PROGRAM CRITERIA
4 Points	Project location does not overlap with buffer areas for Conservation Resource Management Areas, Watershed Protection Priority Areas, Natural Resources Areas, or historic sites. OR Project's primary or secondary intent is to enhance and/or protect cultural and/or natural resources.	The <u>primary intent</u> of the program is to enhance and/or protect cultural and/or natural resources.
2 Points		The <u>secondary intent</u> of the program is to enhance and/or protect cultural and/or natural resources.
O Points		The program has <u>no intent</u> to enhance and/or protect cultural and/or natural resources.
-4 Points	Project location overlaps with buffer areas for Conservation Resource Management Areas, Watershed Protection Priority Areas, Natural Resources Areas, or historic sites.	

APPENDIX B

SCORING OF NEW PROJECTS AND PROGRAMS

The new projects and programs received for the TIP were scored according to the prioritization process described in Appendix A. More information about the projects can be found in Chapter 6. Table B.1 shows the results of the scoring process.

Table B.1. Scoring of New Projects and Programs submitted for the FFY 2022-2025 TIP.

Rank	Project ID	Project Name	Lead Agency	Estimated Total Cost	Evaluation Score
1	OS-21-43	Kamehameha Highway (Route 99) Seismic Retrofit, Pearl Harbor Interchange, Structure #2	HDOT	\$5,000,000	58
1	OS-21-52	Likelike Highway (Route 63) Seismic Retrofit, Kalihi Stream Bridges	HDOT	\$11,000,000	58
1	OS-21-51	Moanalua Freeway, (Interstate Route H-201) Seismic Retrofit, Puuloa Interchange (Five Structures)	HDOT	\$15,000,000	58
2	0S-22-62*	Farrington Highway (RTE 93) Sidewalk Improvements, Hakimo Rd to Nanakuli Ave, MP 6.89 to MP 5.06	HDOT	\$16,810,000	48
3	0S-21-52	Kalaeloa Boulevard Railroad Improvements	DTS	\$694,000	45
3	0S-22-64*	Whitmore Avenue (RTE 7012) Sidewalk Improvements, Phase 2, Ihiihi Ave to Whitmore Community Center, MP 0.72 to MP 1.04	HDOT	\$16,810,000	45
4	OS-21-45	Pali Highway, Rockfall Mitigation, Vicinity of MP 5.90 to MP 6.10	HDOT	\$5,000,000	40
4	0S-21-44	Pali Highway, Rockfall Mitigation, Vicinity of MP 6.10 to MP 6.55	HDOT	\$13,000,000	40
5	OS-21-57	Fort Barrette Road Railroad Crossing Improvements	HDOT	\$2,750,000	36
5	OS-22-61*	Farrington Highway (Route 93), Bridge Rehabilitation, Ulehawa Stream Bridge	HDOT	\$25,000,000	36
6	OS-21-59	Intermodal Connectivity OC-21-59 TA Set-Aside (OahuMPO)	DTS	\$43,250,000	35.5
7	OS-21-55	Oahu Traffic Signal Controller Modernization, Phase 2	DTS	\$11,876,000	33
8	0S-21-47	Interstate Route H-1 Highway Lighting Improvements, Kaimakani Overpass to Gulick Avenue, Phase 1, MP 12.83 to MP 16	HDOT	\$40,000,000	30
9	OS-22-59	Interstate Route H-3, H-3 Finish, Unit VIIC	HDOT	\$3,000,000	14
10	OS-21-49	Harbor Access Road (Route 9400)	HDOT	\$142,000,000	13
11	OS-21-48	Kamehameha Highway Safety Improvements, Kukuna Road to Kahana Valley Road	HDOT	\$4,530,000	12

12	0S-22-58	High Friction Surface Treatment Installation at Various Locations on Oahu	HDOT	\$2,700,000	10
13	OS-21-46	Kunia Interchange Improvements	HDOT	\$160,000,000	7
14	0S-22-63*	Kamehameha Highway Wetland Enhancement at James Campbell National Wildlife Refuge	HDOT	\$2,500,000	4
14	OS-21-56	Interstate Route H-3, Halawa Valley Mitigation, Phase 2, Native Species Area to Tunnel Portal	HDOT	\$5,500,000	4
14	OS-21-50	Interstate Route H-3, Halawa Valley Mitigation, Phase 3, Gate 3 to Native Species Area	HDOT	\$5,500,000	4
14	0S-22-60	Adaptive Traffic Signal Control Technology & Traffic Signal Controller Installation at Various Locations, Oahu	HDOT	\$40,000,000	4
15	OS-21-53	Farrington Highway Widening, Helelua to Mohihi	HDOT	\$34,500,000	-1

^{*}Indicates new project added during TIP revision #6

APPENDIX C

TITLE VI AND ENVIRONMENTAL JUSTICE ANALYSIS FOR FFYS 2022 - 2025 TIP - REVISION #6

To evaluate the equity of the planned spending in FFYs 2022-2025, OahuMPO analyzed planned investments in T6/EJ population areas. Census Block Groups (BG) are used as the geographical unit for the analysis. Block groups are then classified as either T6/EJ or non-T6/EJ areas according to the racial minority and income of the population in the given area. Then based on all the planned project's locations and cost estimates, the analysis calculates the total investment, and average per capita investment, by Census block group (BG). The per capita investment in T6/EJ BGs is compared to the per capita investment in non-T6/EJ BGs to make sure that there is no significant difference in investments. The results of the analysis show that 23% of the block groups are designated as T6/EJ BGs and about 34% of the plan's investments would occur in these BGs. The average per capita investment is \$3,383 and \$2,866 in T6/EJ and non-T6/EJ areas, respectively, meaning that 18% more funds (\$517 per capita) are being spent in T6/EJ areas.

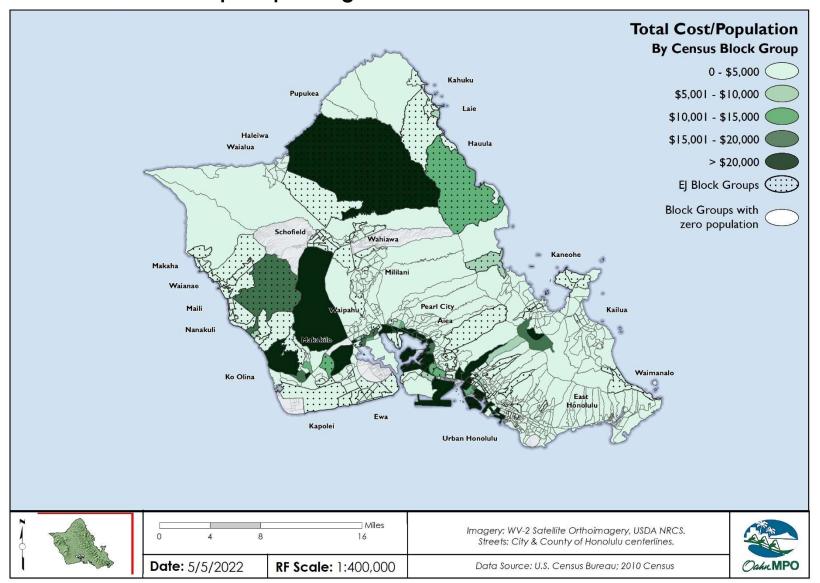
ANALYSIS RESULTS:

	T6/EJ	Non-T6/EJ
	Block Groups	Block Groups
Average Investment by Block Group	7.3 M	4.2 M
Total Cost of Projects	978.9 M	1902.5 M
% Project Investment	34.0%	66.0%
Total Population	289,321	663,886
Average Per Capita Investment	\$3,383	\$2,866
Total Difference (Non-T6/EJ vs T6/EJ)	\$5	17
% Difference (Non-T6/EJ vs T6/EJ)	18	3%

NUMBER OF T6/EJ AND NON-T6/EJ BLOCK GROUPS:

		# of Block Groups	%
Non-T6/EJ Block Groups	S	480	77
T6/EJ Block Groups		135	23
T6/EJ Breakdown:	Based on race (minority)	105	
	Based on low income	60	
	Double counted (counted as both minority & low income)	-30	

Total Per Capita Spending - As of FFY 2022-2025 TIP Revision #6



APPENDIX D

INTERGOVERNMENTAL AND PUBLIC REVIEW COMMENTS

The public and intergovernmental review period for the #6 Revision of the draft FFY 2022-2025 Transportation Improvement Program started May 10 and ended May 24, 2022.

The list of comments and responses can be viewed here: www.oahumpo.org/?wpfb_dl=2384

