

# TRANSPORTATION IMPROVEMENT PROGRAM

FEDERAL FISCAL YEARS 2022 – 2025

## **REVISION #3**

## **REVISED PROJECTS**



*Oahu* MPO

## **AMENDMENTS**

# TRANSPORTATION IMPROVEMENT PROGRAM

FEDERAL FISCAL YEARS 2022 - 2025

## REVISION #3 -AMENDMENTS

### LIST OF REVISED PROJECTS

February 2022



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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 <sup>st</sup> Century [P.L. 112-141, 2012]
ADA	Americans with Disabilities Act	MOA	Memorandum of Agreement
APE	Area of Potential Effects	NEPA	National Environmental Policy Act NHPA
CAC	OahuMPO Citizen Advisory Committee	NHPA	National Historic Preservation Act
CATEX	Categorical Exclusion	NTD	National Transit Database
CFR	Code of Federal Regulations	OahuMPO	Oahu Metropolitan Planning Organization
CCTV	Closed-circuit television	ORTP	OahuMPO Oahu Regional Transportation Plan
CMP	OahuMPO Congestion Management Process	OWP	OahuMPO Overall Work Plan
DTS	City and County of Honolulu Department of Transportation Services	PB	OahuMPO Policy Board (formerly Committee)
EJ	Environmental Justice	SAFETEA-LU	Safe, Accountable, Flexible, Efficient Transportation Equity Act – A Legacy for Users [P.L. 109-59, 2005]
FAST	Fixing America's Surface Transportation Act [P.L. 114-96, 2015]	SMP	Special Maintenance Program
FMCSA	USDOT Federal Motor Carrier Safety 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
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### 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 (FFYs 2022-2025) 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;<sup>1</sup>
- 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.**

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<sup>1</sup> 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

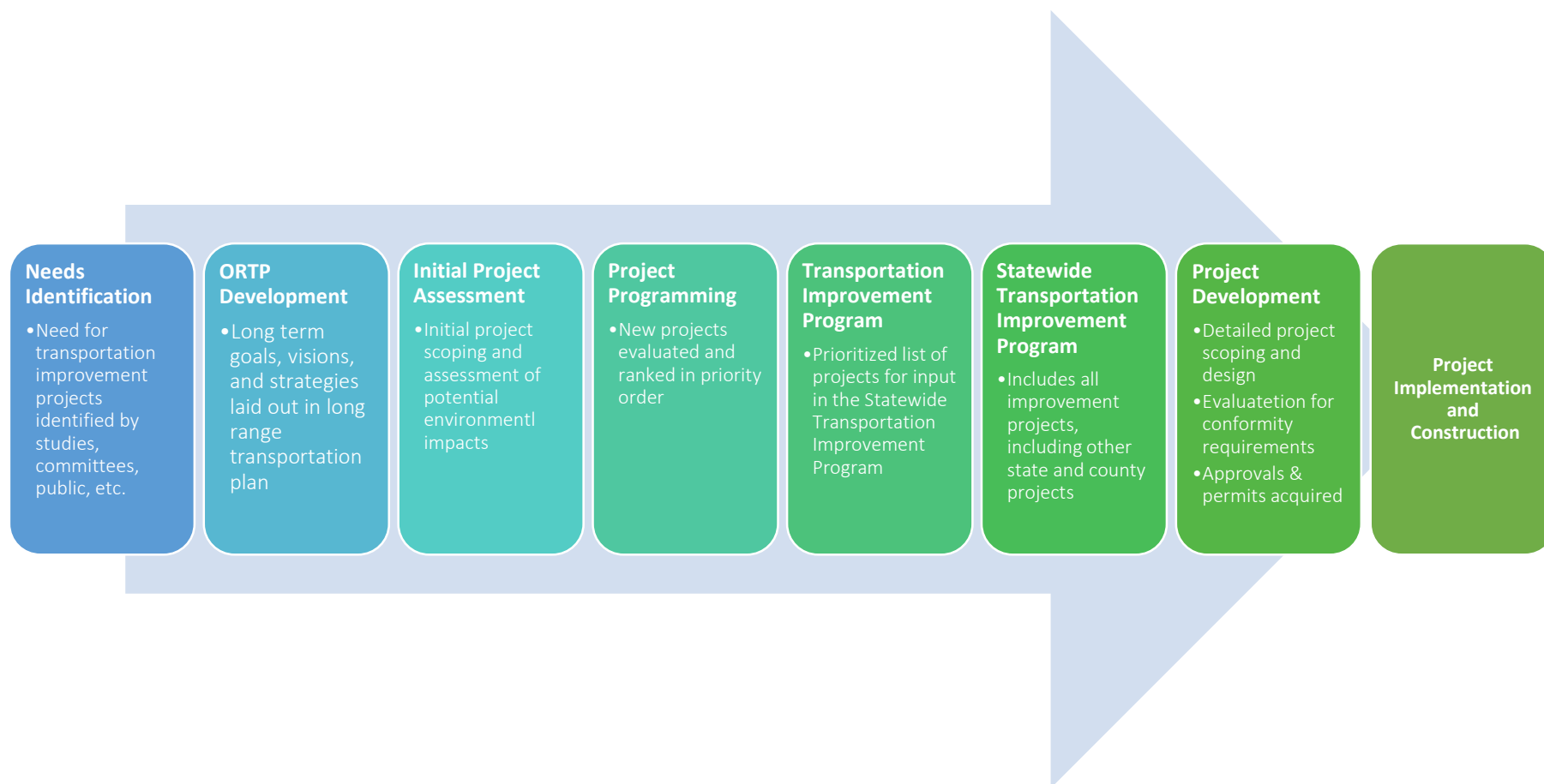
The OahuMPO is responsible for the development of the Oahu Transportation Improvement Program (TIP), however close coordination with HDOT and the City and County of Honolulu is required through the metropolitan transportation planning process. Because the update to the Oahu Regional Transportation Plan (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.**



## 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 planning activities....” Document consistency is found in 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.

#### Virtual Open House and Community Meetings

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

### TIP Open Houses

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 Advisory 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)
<b>Step 1: IDENTIFY REVISIONS</b> Notify implementing agencies that the TIP revision process is underway so that they may begin to prepare their list of changes 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
<b>Step 2: DRAFT TIP REVISION(S)</b> 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
<b>Step 3: IGR AND PUBLIC COMMENTS</b> 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)
<b>Step 4: PRESENTATION TO OMPO COMMITTEES</b> 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
OahuMPO 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
<b>Step 5: FINALIZE</b> Approval of Amendment and creation of a final "As-Of" TIP document including all the modifications and amendment		
TIP/STIP Amendment jointly approved by FHWA and FTA (anticipated)	Early-Mid Mar	Early-Mid Aug
OahuMPO 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 3 times through February 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 January 2022

### PRE-APPROVED ADMINISTRATIVE MODIFICATIONS

REVISION NUMBER	DETAILS
1	January 2022: Deferred/advanced projects; refined project phasing; revised cost estimates

### EXPEDITED ADMINISTRATIVE MODIFICATIONS

REVISION NUMBER	DETAILS
2	February 2022: Changes to the size of revenue rolling stock; federalizing phases/projects; added new project phases

### AMENDMENTS

REVISION NUMBER	DETAILS
3	February 2022: Added new projects; 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
OS-22-60	Adaptive Traffic Signal Control Technology & Traffic Signal Controller Installation at Various Locations, Oahu	Request to add new traffic control project (C.1).	27
OS12	Destination Sign, Upgrade/Replacement	Request to update Estimated Total Project Cost from 29 million to 32.346 million dollars over 6 years (A.11).	28
OS12	Destination Sign, Upgrade/Replacement - Phase III	Request to add CON phase since it was not obligated in 2021 due to a delay during PE2 due to contract amendment (C.5).	28
OS12	Destination Sign, Upgrade/Replacement - Phase III	Request to revise ADVCON funding in FFY 2022, 2024, and 2025 (A.2).	28
OS12	Destination Sign, Upgrade/Replacement - Phase IV	Request to defer/inflate PE1, PE2, and CON by one year - waiting on inspection report to determine scope/locations (A.2).	28
OS12	Destination Sign, Upgrade/Replacement - Phase IV	Request to defer ADVCON to outside the current TIP - waiting on inspection report to determine scope/locations (A.7).	28
OS12	Destination Sign, Upgrade/Replacement - Phase V	Request to defer/inflate PE1 and PE2 by one year - waiting on inspection report to determine scope/locations (A.2).	29
OS12	Destination Sign, Upgrade/Replacement - Phase V	Request to defer/inflate CON by one year - waiting on inspection report to determine scope/locations (A.6).	29
OS12	Destination Sign, Upgrade/Replacement - Phase V	Request to defer/inflate ADVCON by one year - waiting on inspection report to determine scope/locations (A.6).	29
OS12	Destination Sign, Upgrade/Replacement - Phase VI	Request to defer PE1 to outside the current TIP - waiting on inspection report to determine scope/locations (A.7).	29

OS12	Destination Sign, Upgrade/Replacement - Phase VI	Request to defer/inflate PE2 and CON by one year - waiting on inspection report to determine scope/locations (A.6).	29
OS69	Farrington Highway (Route 93), Safety Improvements, H-1 Freeway to Pohakunui Avenue	Request to add CON phase to FFY 2022 since it wasn't obligated in 2021 due to redefined scope to fit the budget and Section 106 delays (C.5).	30
OS69	Farrington Highway (Route 93), Safety Improvements, H-1 Freeway to Pohakunui Avenue	Request to defer ADVCON funds from FFY 2022 to 2023 since CON will be obligated in FFY 2022 (A.2).	30
OS5	Freeway Management System, Interstate H-1, H-2, H-3, and Moanalua Freeway (Route H-201 & 78) - Phase 3	Request to update ADVCON in FFY 2022 from 1242 (federal) and -1242 (local) to 2438 (federal) and -2438 (local) based on actual obligated amount (A.11).	31
OS5	Freeway Management System, Interstate H-1, H-2, H-3, and Moanalua Freeway (Route H-201 & 78) - Phase 4	Request to defer PE2 from FFY 2022 to 2023 and reduce estimate (A.2 and A.11).	32
OS5	Freeway Management System, Interstate H-1, H-2, H-3, and Moanalua Freeway (Route H-201 & 78) - Phase 4	Request to decrease CON funds in FFY 2024 (A.11).	32
OS5	Freeway Management System, Interstate H-1, H-2, H-3, and Moanalua Freeway (Route H-201 & 78) - Phase 4	Request to decrease ADVCON funds in FFY 2026 to zero (A.11).	32
OS5	Freeway Management System, Interstate H-1, H-2, H-3, and Moanalua Freeway (Route H-201 & 78) - Phase 5	Request to decrease PE1 funds in FFY 2022 (A.11).	32
OS5	Freeway Management System, Interstate H-1, H-2, H-3, and Moanalua Freeway (Route H-201 & 78) - Phase 5	Request to advance/increase PE2 from FFY 2024 to 2023 (A.1 and A.11).	32
OS5	Freeway Management System, Interstate H-1, H-2, H-3, and Moanalua Freeway (Route H-201 & 78) - Phase 5	Request to add CON phase (C.5).	32
OS5	Freeway Management System, Interstate H-1, H-2, H-3, and Moanalua Freeway (Route H-201 & 78) - Phase 5	Request to add ADVCON phase (C.5).	32
OS-22-58	High Friction Surface Treatment on Highway Ramps, Oahu	Request to add new project (C.1).	33

OS59	Interstate Route H-1, Eastbound Improvements, Waikele to Halawa Interchange	Request to delete locally funded (rental car surcharge funded) project, since this project is no longer a priority (C.2).	34
OS20	Interstate Route H-1 Safety Improvement, Beginning of H-1 (Palailai IC) to Waiawa Overpass	Request to add project from previous FFY 2019-2022 TIP to new FFY 2022-2025 TIP (C.1).	35
OS-22-59	Interstate Route H-3, Unit 7C	Request to add new project (C.1).	36
OS29	Kamehameha Highway (Route 83), Bridge Replacement, Kaluanui Stream Bridge	Request to add CON phase in FFY 2022 - it was not obligated in FFY 2021 due to redesigning bridge from concrete to steel to account for sea level rise (C.5).	37
OS29	Kamehameha Highway (Route 83), Bridge Replacement, Kaluanui Stream Bridge	Request to defer ADVCON by one year - CON is delayed due to redesign of the bridge from concrete to steel to account for sea level rise (A.2).	37
OS29	Kamehameha Highway (Route 83), Bridge Replacement, Kaluanui Stream Bridge	Request to update Estimated Total Project Cost from 11 million to 20 million dollars (A.11).	37
OS84	Kamehameha Highway (Route 83) Intersection Improvements at Kahekili Highway	Request to add project from previous FFY 2019-2022 TIP to new FFY 2022-2025 TIP (C.1).	38
OS43	Leeward Bikeway - Philippine Sea Road to Waipahu Depot Street	Request to add project from previous FFY 2019-2022 TIP to new FFY 2022-2025 TIP with ADVCON in FFY 2022 - unable to fully fund in FFY 2021 (C.1).	39
OS73	Likelike Highway (Route 63), Rehabilitation and Safety Improvements, Emmeline Place to Kahekili Highway	Request to increase CON from 430 (federal) and 2270 (local), and revise title for added resurfacing scope (C.8 and C.3).	40
OS73	Likelike Highway (Route 63), Rehabilitation and Safety Improvements, Emmeline Place to Kahekili Highway	Request to adjust AC conversion from 2000 (federal) and -2000 (local) to balance new cost (A.11).	40
OS73	Likelike Highway (Route 63), Rehabilitation and Safety Improvements, Emmeline Place to Kahekili Highway	Request to change CON and ADVON funding source from HSIP to NHPP (A.8) and add another CON phase with HSIP funds in FF 2022 (C.5)	40
OS73	Likelike Highway (Route 63), Rehabilitation and Safety Improvements, Emmeline Place to Kahekili Highway	Request to update Estimated Total Project Cost from 3 million to 25 million dollars (A.11).	40

**FTA FUNDED PROJECTS:****CITY AND COUNTY OF HONOLULU**

PROJECT NUMBER	PROJECT NAME (ALPHABETICAL ORDER)	REVISION DETAILS	PAGE
OC16	Honolulu Rail Transit Project	Request to transfer New Starts funds (\$400 million federal and \$849.94 million local) from FFY 2019-2022 TIP to the new FFY 2022-2025 TIP and defer to 2023, 2024, and 2025 (A.2 and C.1).	42
OC16	Honolulu Rail Transit Project	Request to update Estimated Total Project Cost from 8.299 to 11.359 billion dollars (C.8).	42
OC16	Honolulu Rail Transit Project	Request to advance New Starts funds from FFY 2025 to 2024 (A.11).	42
OC16	Honolulu Rail Transit Project	Request to defer New Starts funds from FFY 2022 to 2023 (A.2).	42
OC16	Honolulu Rail Transit Project	Request to add new type of funding (\$5309 American Rescue Plan Act) in FFY 2022 which will replace a portion of the local funds (A.10).	42
OC16	Honolulu Rail Transit Project - Phase 1 TAP MPO - HART Secure Bike Storage Units	Request to transfer the CON phase from the FFY 2019-2022 TIP to the FFY 2022-2025 and defer from FFY 2021 to 2023 (A.2).	42
OC16	Honolulu Rail Transit Project - Phase 1 TAP State - HART Chinatown Bike Facility	Request to transfer the PE2/CON phase from the FFY 2019-2022 TIP to the FFY 2022-2025 and defer from FFY 2022 to 2023 (A.2).	42
OC16	Honolulu Rail Transit Project - Phase 2 TAP MPO - HART Middle Loch Connector	Request to transfer the CON phase from the FFY 2019-2022 TIP to the FFY 2022-2025 (A.2).	42

NUMBER OF PROJECTS BEING REVISED IN REVISION # 3:	PERCENTAGE OF TOTAL TIP PROJECTS REVISED IN REVISION # 3:
13	16 %

## **5 PROJECT INFORMATION SHEETS**

### **FHWA-Funded Projects**

#### **O'ahu State (OS) Projects**

## OS-22-60 Adaptive Traffic Signal Control Technology & Traffic Signal Controller Installation at Various Locations, Oahu



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

### Project Description:

The project will install, operate, and maintain new controllers at 268 traffic signal locations on Oahu and 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.

### Mile Post/s:

### Complete Streets (CS):

Project will implement: NA

Existing Feature/s: NA

Project Website: None

Neighborhood(s): Various Locations

Estimated Total Project Cost: \$41,000,000

(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:

Hawaii Department of Transportation

### FOR INFORMATION ONLY

Phase	FFY 2022			FFY 2023			FFY 2024			FFY 2025			FFY 2026			FFY 2027			Funding Category
	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)	
Phase I																			
CON	11,000	8,800	2,200	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	STBG
Phase II																			
CON	30,000	4,000	26,000	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	STBG
ADVCON	0	0	0	0	10,000	-10,000	0	10,000	-10,000	0	0	0	0	0	0	0	0	0	STBG
Total	41,000	12,800	28,200	0	10,000	-10,000	0	10,000	-10,000	0	0	0	0	0	0	0	0	0	

# OS12 Destination Sign, Upgrade and Replacement



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:** \$32,346,000  
(over 6 years)

**Project Sponsor:** State of Hawaii (FHWA Funded)

**Agency Responsible for Carrying Out Project/Phase:**  
Hawaii Department of Transportation

## FOR INFORMATION ONLY

Phase	FFY 2022			FFY 2023			FFY 2024			FFY 2025			FFY 2026			FFY 2027			Funding Category
	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)	
INSP	3,000	2,400	600	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	NHPP
<i>Phase 3</i>																			
CON	0	0	0	9,700	2,000	7,700	0	0	0	0	0	0	0	0	0	0	0	0	NHPP
ADVCON	0	0	0	0	0	0	0	2,000	-2,000	0	3,760	-3,760	0	0	0	0	0	0	NHPP
<i>Phase 4</i>																			
PE1	0	0	0	572	458	114	0	0	0	0	0	0	0	0	0	0	0	0	NHPP
PE2	0	0	0	0	0	0	832	666	166	0	0	0	0	0	0	0	0	0	NHPP
CON	0	0	0	0	0	0	0	0	0	10,404	4,323	6,081	0	0	0	0	0	0	NHPP
ADVCON	0	0	0	0	0	0	0	0	0	0	0	0	0	4,000	-4,000	0	0	0	NHPP
<i>Phase 5</i>																			
PE1	0	0	0	0	0	0	312	250	62	0	0	0	0	0	0	0	0	0	NHPP
PE2	0	0	0	0	0	0	0	0	0	469	375	94	0	0	0	0	0	0	NHPP
CON	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	8,160	6,324	1,836	NHPP



**OS12 Destination Sign, Upgrade and Replacement**

Phase	FOR INFORMATION ONLY																		Funding Category
	FFY 2022			FFY 2023			FFY 2024			FFY 2025			FFY 2026			FFY 2027			
	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)	
Phase 5																			
ADVCON	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	NHPP
Phase 6																			
PE1	0	0	0	0	0	0	0	0	0	0	0	0	877	789	88	0	0	0	NHPP
PE2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1,020	918	102	NHPP
CON	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	NHPP
Total	3,000	2,400	600	10,272	2,458	7,814	1,144	2,916	-1,772	10,873	8,458	2,415	877	4,789	-3,912	9,180	7,242	1,938	



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:**

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; installation of concrete median barrier at U-turn; and installation of pavement markings and signage.

**Mile Post/s:** MP 0 to MP 4.4

**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):** Waianae Coast

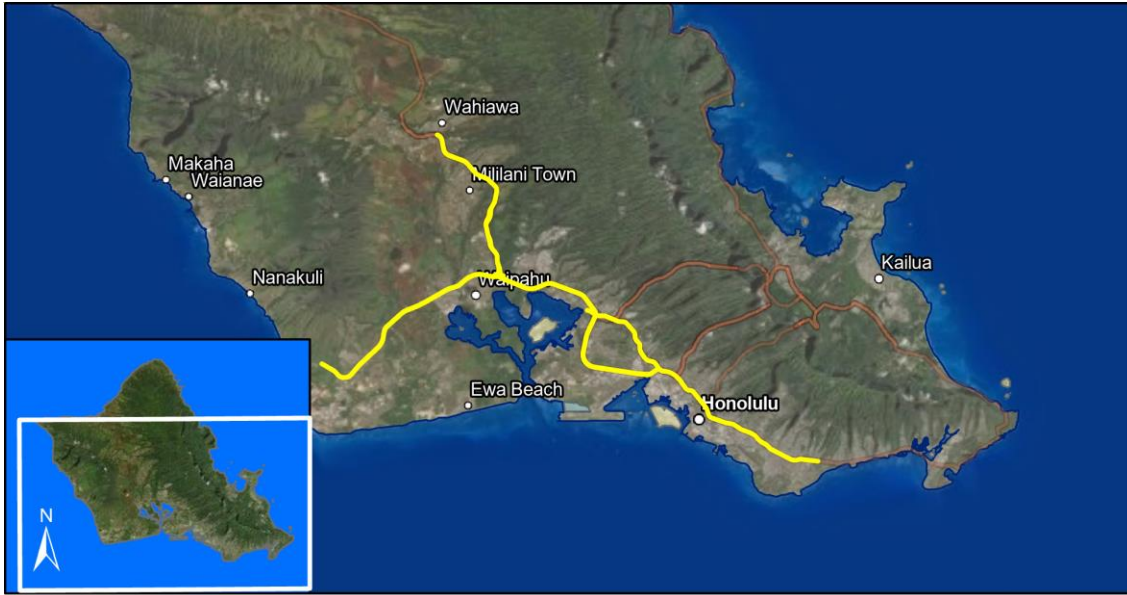
**Estimated Total Project Cost:** \$7,200,000

(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:**  
Hawaii Department of Transportation

													FOR INFORMATION ONLY						
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	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
CON	7,000	3,600	3,400	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	HSIP
ADVCON	0	0	0	0	2,000	-2,000	0	0	0	0	0	0	0	0	0	0	0	0	HSIP
Total	7,000	3,600	3,400	0	2,000	-2,000	0	0	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, Sources: Esri, HERE, Garmin, FAO, NOAA, USGS, © OpenStreetMap contributors, and the GIS User Community

#### Project Description:

The project consists of the installation of closed-circuit television (CCTV) cameras, vehicle detectors, cabinets, and communication equipment on the Interstate H-1, H-2, and Moanalua Freeway. Minor interior modifications of the Interstate Route H-3 Control Center will also be done to accommodate system improvements. This project will be implemented in phases.

The Freeway Management System's System Manager will assist the State with managing and guiding the Intelligent Transportation System (ITS) program. This includes software development, equipment procurement assistance, acceptance testing, performance monitoring, and strategic planning.

**Mile Post/s:** Queen Liliuokalani Freeway: MP 0.00 to MP 27.16, Veterans Memorial Freeway: MP 0.00 to MP 8.33, John A. Burns Freeway: MP 0.00 to MP 15.32

#### 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:** \$200,000,000

(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:**

Hawaii Department of Transportation

#### FOR INFORMATION ONLY

Phase	FFY 2022			FFY 2023			FFY 2024			FFY 2025			FFY 2026			FFY 2027			Funding Category
	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)	
Phase 3																			
ADVCON	0	2,438	-2,438	0	3,000	-3,000	0	0	0	0	0	0	0	0	0	0	0	0	NHPP
Phase 3A																			
CON	2,500	1,000	1,500	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	NHPP

**OS5 Freeway Management System, Interstate H-1, H-2, and Moanalua Freeway (Routes H-201 and 78)**

														FOR INFORMATION ONLY						
FFY 2022			FFY 2023			FFY 2024			FFY 2025			FFY 2026			FFY 2027			Funding Category		
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)	
Phase 3A																				
ADVCON	0	0	0	0	1,000	-1,000	0	0	0	0	0	0	0	0	0	0	0	0	NHPP	
Phase 4																				
PE2	0	0	0	600	540	60	0	0	0	0	0	0	0	0	0	0	0	0	NHPP	
CON	0	0	0	0	0	0	10,000	3,000	7,000	0	0	0	0	0	0	0	0	0	NHPP	
ADVCON	0	0	0	0	0	0	0	0	0	0	5,000	-5,000	0	0	0	0	0	0	NHPP	
Phase 5																				
PE1	800	720	80	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	NHPP	
PE2	0	0	0	600	540	60	0	0	0	0	0	0	0	0	0	0	0	0	NHPP	
CON	0	0	0	0	0	0	10,000	3,000	7,000	0	0	0	0	0	0	0	0	0	NHPP	
ADVCON	0	0	0	0	0	0	0	0	0	0	5,000	-5,000	0	0	0	0	0	0	NHPP	
Total	3,300	4,158	-858	1,200	5,080	-3,880	20,000	6,000	14,000	0	10,000	-10,000	0	0	0	0	0	0		

## OS-22-58 High Friction Surface Treatment on Highway Ramps, Oahu



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

### Project Description:

Installation of high friction surface treatments on 8 ramps at various locations on Oahu.

### Mile Post/s:

### Complete Streets (CS):

Project will implement:

### Existing Feature/s:

**Project Website:** None

**Neighborhood(s):** Aiea, Mokapu, Makakilo-Kapolei-Honokai Hale

**Estimated Total Project Cost:** \$2,700,000

(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:**

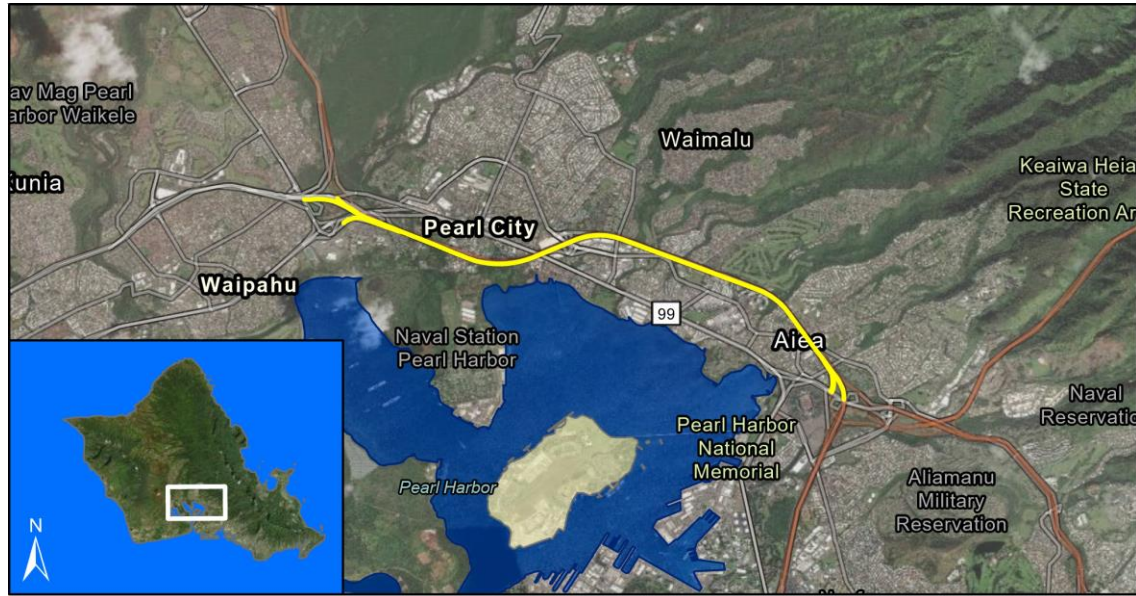
Hawaii Department of Transportation

### FOR INFORMATION ONLY

Phase	FFY 2022			FFY 2023			FFY 2024			FFY 2025			FFY 2026			FFY 2027			Funding Category
	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)	
CON	2,200	1,980	220	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	HSIP
Total	2,200	1,980	220	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	



**OS59 Interstate Route H-1, Eastbound Improvements, Waikale to Halawa Interchange**



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:**

Capacity/congestion improvements through the most well-travelled section of the primary urban corridor. Improvements could include adding a through lane and/or improving ramps, shoulders, and geometrics.

**Mile Post/s:** MP 8.68 to MP 13.03

**Complete Streets (CS):**

**Project will implement:** Not applicable

**Existing Feature/s:** No information available.

**Project Website:** None

**Neighborhood(s):** H-1 Travel Corridor

**Estimated Total Project Cost:** \$105,000,000

(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:**  
Hawaii Department of Transportation

**FOR INFORMATION ONLY**

Phase	FFY 2022			FFY 2023			FFY 2024			FFY 2025			FFY 2026						Funding Category
	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)	
CON	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	Local Only
Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	

**OS20 Interstate Route H-1 Safety Improvements, Beginning of H-1 (Palailai Interchange) to Waiawa Overpass**



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

**Project Description:**

Scope includes, but is not limited to: Installation of milled rumble strips on shoulders; reconstruction of paved shoulders; pavement markings; and signing.

**Mile Post/s:** Queen Liliuokalani Freeway: MP 0.00 to MP 9.00

**Complete Streets (CS):**

**Project will implement:** Not applicable

**Existing Feature/s:** No information available.

**Project Website:** None

**Neighborhood(s):** Waipahu, Ewa, Makakilo-Kapolei-Honokai Hale

**Estimated Total Project Cost:** \$9,700,000

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

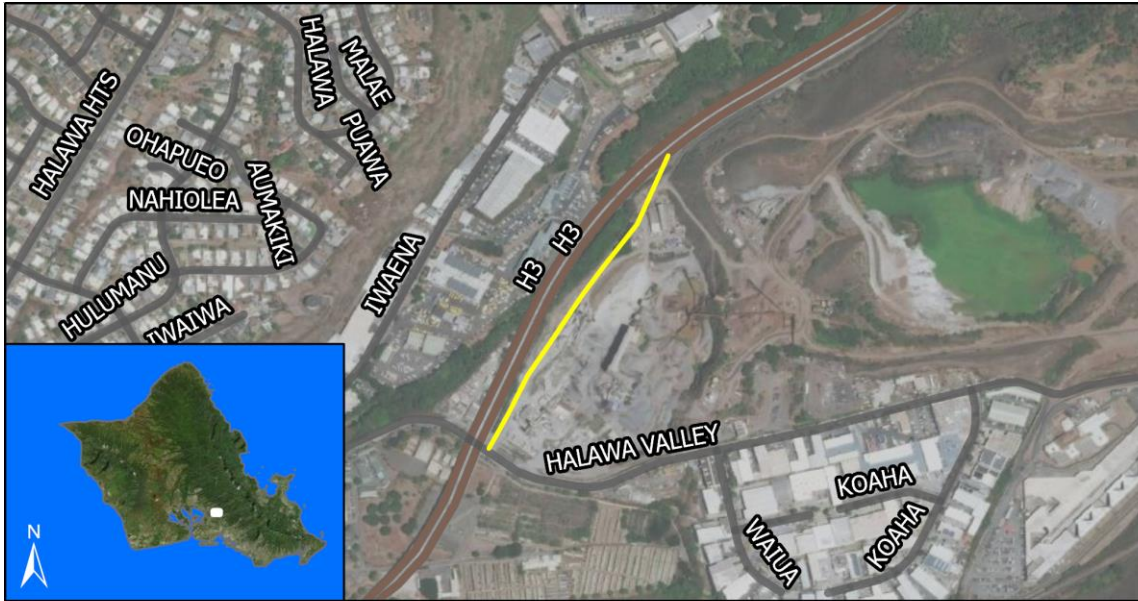
**Project Sponsor:** State of Hawaii (FHWA Funded)

**Agency Responsible for Carrying Out Project/Phase:**

Hawaii Department of Transportation

**FOR INFORMATION ONLY**

Phase	FFY 2022			FFY 2023			FFY 2024			FFY 2025			FFY 2026			FFY 2027			Funding Category
	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)	
ADVCON	0	4,107	-4,107	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	HSIP
Total	0	4,107	-4,107	0	0	0	0	0	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:**

Complete H-3 Unit 7C. Improve access road from Halawa Valley Road to Gate 1 (next to Hawaiian Cement). The scope of work include the relocation of Halawa Access Road in the vicinity of the Mauka section of the Halawa Quarry Viaduct; the relocation of a HECO guy wire stub pole; and the placement of riprap revetment in the vicinity of pier 26 of the Halawa Quarry Viaduct. This work periferal to the ultimate completion of the H-3 Freeway.

**Mile Post/s:**

**Complete Streets (CS):**

**Project will implement:** No Information Available

**Existing Feature/s:** No Information Available

**Project Website:**

**Neighborhood(s):** Aiea

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

*(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:**

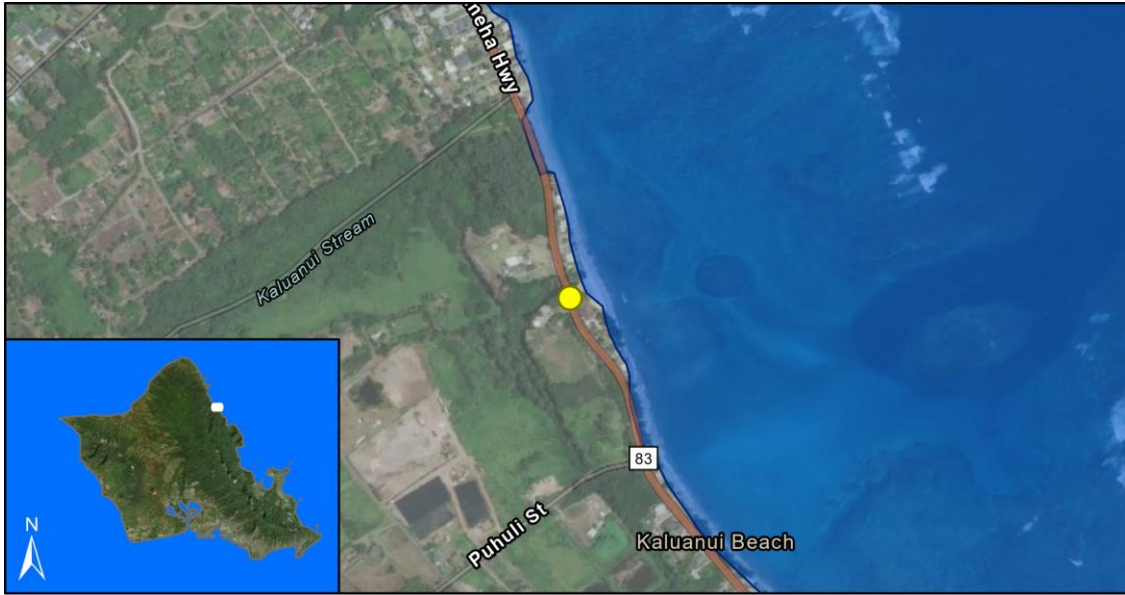
Hawaii Department of Transportation

**FOR INFORMATION ONLY**

Phase	FFY 2022			FFY 2023			FFY 2024			FFY 2025			FFY 2026			FFY 2027			Funding Category
	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)	
CON	2,700	2,160	540	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	NHPP
Total	2,700	2,160	540	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	



**OS29 Kamehameha Highway (Route 83), Bridge Replacement, Kaluanui 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, USGS, © OpenStreetMap contributors, and the GIS User Community

**Project Description:**

Replace the existing bridge on Kamehameha Highway.

**Mile Post/s:** Kamehameha Highway: MP 22.50 to 22.70

**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):** Koolauloa

**Estimated Total Project Cost:** \$20,000,000

(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:**

Hawaii Department of Transportation

**FOR INFORMATION ONLY**

Phase	FFY 2022			FFY 2023			FFY 2024			FFY 2025			FFY 2026			FFY 2027			Funding Category
	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)	
CON	18,000	8,400	9,600	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	NHPP
ADVCON	0	0	0	0	3,000	-3,000	0	3,000	-3,000	0	0	0	0	0	0	0	0	0	NHPP
Total	18,000	8,400	9,600	0	3,000	-3,000	0	3,000	-3,000	0	0	0	0	0	0	0	0	0	

**OS84 Kamehameha Highway (Route 83) Intersection Improvements at Kahekili Highway**



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

**Project Description:**

Modify existing intersection and roadway approaches to a roundabout configuration. Improvement also include drainage system, curb and gutter, sidewalks, pavement markings and signing.

**Mile Post/s:** 36.19 to 36.41

**Complete Streets (CS):**

**Project will implement:** Improvements will also include drainage system, curb, and sidewalks.

**Existing Feature/s:** No information available.

**Project Website:**

**Neighborhood(s):** Kahaluu

**Estimated Total Project Cost:** \$5,500,000

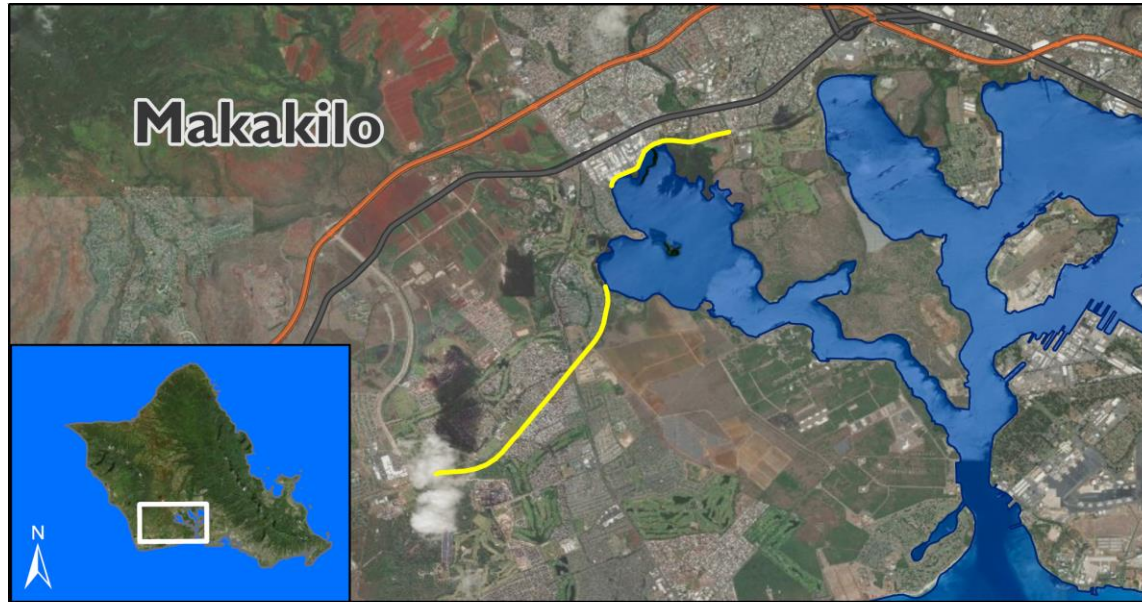
(May include project costs outside of the 4-year TIP and 2 informational years.)

**Project Sponsor:** State of Hawaii (FHWA Funded)

**Agency Responsible for Carrying Out Project/Phase:**  
Hawaii Department of Transportation

**FOR INFORMATION ONLY**

Phase	FFY 2022			FFY 2023			FFY 2024			FFY 2025			FFY 2026			FFY 2027			Funding Category
	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)	
CON	5,000	4,000	1,000	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	NHPP
Total	5,000	4,000	1,000	0	0	0	0	0	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:**

Improve the bikeway/bike path from Philippine Sea Road to Waipahu Depot Street.

**Mile Post/s:**      Not applicable.

**Complete Streets (CS):**

**Project will implement:** Bicycling facilities.

**Existing Feature/s:**      No information available.

**Project Website:** None

**Neighborhood(s):** Waipahu, Ewa, Makakilo-Kapolei-Honokai Hale

**Estimated Total Project Cost:** \$11,000,000

*(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:**

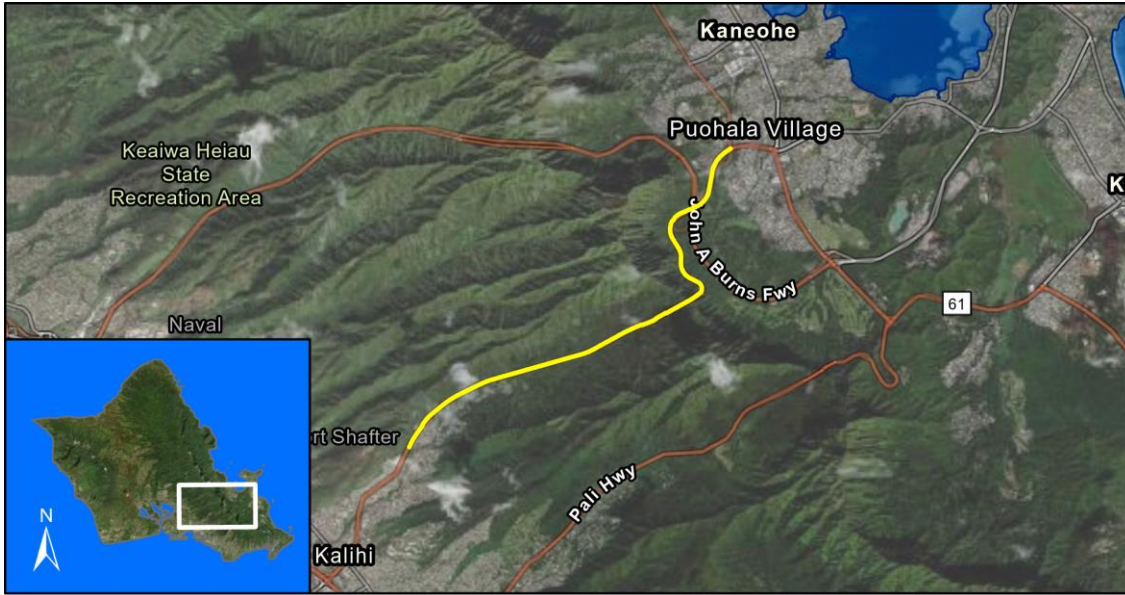
Hawaii Department of Transportation

**FOR INFORMATION ONLY**

Phase	FFY 2022			FFY 2023			FFY 2024			FFY 2025			FFY 2026			FFY 2027			Funding Category
	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)	
ADVCON	0	3,457	-3,457	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	Enhance
Total	0	3,457	-3,457	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	



**OS73      Likelike Highway (Route 63), Rehabilitation and Safety Improvements, Emmeline Place to Kahekili Highway**



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:**

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 and chevrons, widen paved shoulders where possible, pavement markings, and signing.

**Mile Post/s:** MP 2.70 to MP 8.30

**Complete Streets (CS):**

**Project will implement:** Not applicable

**Existing Feature/s:** Not applicable

**Project Website:** None

**Neighborhood(s):** Kalihi Valley, Kaneohe

**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:**

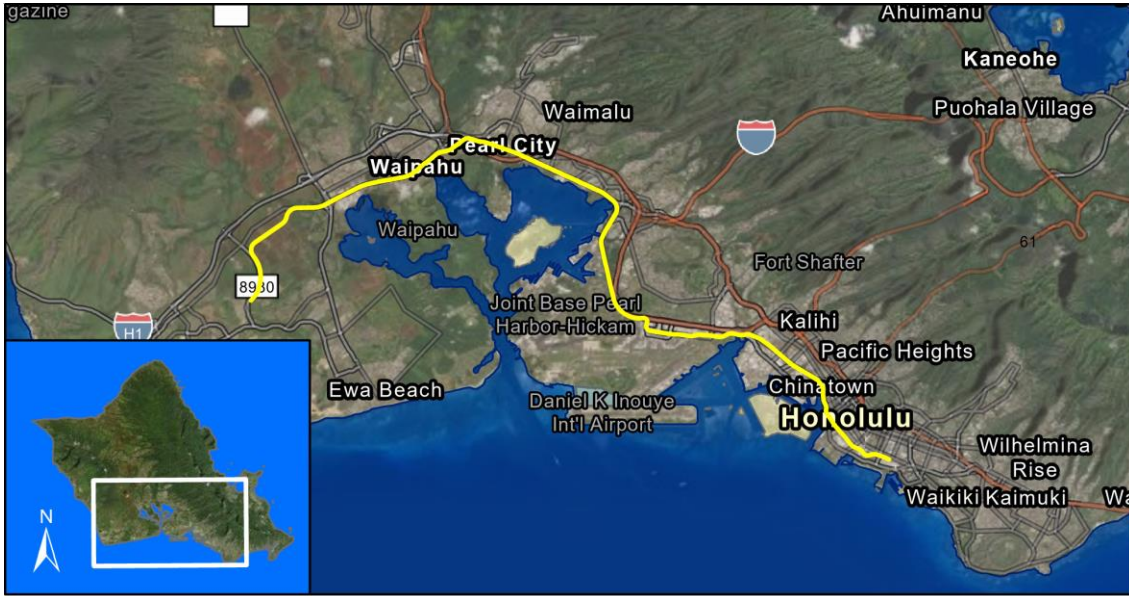
Hawaii Department of Transportation

**FOR INFORMATION ONLY**

Phase	FFY 2022			FFY 2023			FFY 2024			FFY 2025			FFY 2026			FFY 2027			Funding Category
	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)	
CON	6,000	4,800	1,200	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	HSIP
CON	18,000	7,400	10,600	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	NHPP
ADVCON	0	0	0	0	7,000	-7,000	0	0	0	0	0	0	0	0	0	0	0	0	NHPP
<b>Total</b>	<b>24,000</b>	<b>12,200</b>	<b>11,800</b>	<b>0</b>	<b>7,000</b>	<b>-7,000</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	

# **FTA-Funded Projects**

## **O'ahu City (OC) Projects**



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:**

Plan, design, and construct a fixed guideway system between East Kapolei and Ala Moana Center. The system includes stations and related appurtenances, park-and-ride facilities, a maintenance and storage facility, light metro vehicles, and associated core systems.

**Mile Post/s:** Not applicable

**Complete Streets (CS):**

**Project will implement:** Not applicable

**Existing Feature/s:** Not applicable

**Project Website:** <http://www.honolulutransit.org>

**Neighborhood(s):** Ala Moana-Kakaako, Downtown, Kalihi-Palama, Airport, Pearl City, Waipahu, Ewa, Makakilo-Kapolei-Honokai Hale

**Estimated Total Project Cost:** \$11,359,000,000

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

**Project Sponsor:** City and County of Honolulu

**Agency Responsible for Carrying Out Project/Phase:**

Honolulu Authority for Rapid Transportation

**FOR INFORMATION ONLY**

Phase	FFY 2022			FFY 2023			FFY 2024			FFY 2025			FFY 2026			FFY 2027			Funding Category
	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)	
§5309 American Rescue Plan Act																			
H RTP	70,000	70,000	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	§5309 ARPA
§5309 New Starts																			
H RTP	0	0	0	781,250	250,000	531,250	1,543,750	494,000	1,049,750	0	0	0	0	0	0	0	0	0	§5309 NS
Phase 1 TAP MPO - HART Secure Bike Storage Units (FHWA to FTA Flexed Funds)																			
CON	0	0	0	500	400	100	0	0	0	0	0	0	0	0	0	0	0	0	§5307/§5340
Phase 1 TAP State - HART Chinatown Bike Facility (FHWA to FTA Flexed Funds)																			
PE2/CON	0	0	0	250	200	50	0	0	0	0	0	0	0	0	0	0	0	0	§5307/§5340
Phase 2 TAP MPO - HART Middle Loch Connector (FHWA to FTA Flexed Funds)																			
CON	500	400	100	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	§5307/§5340
Total	70,500	70,400	100	782,000	250,600	531,400	1,543,750	494,000	1,049,750	0	0	0	0	0	0	0	0	0	

## 5.1 FUNDING SUMMARY

### FFY 2022-2025 TRANSPORTATION IMPROVEMENT PROGRAM (TIP)

ILLUSTRATIVE YEARS  
FOR INFORMATION ONLY

#### F H W A

	FFY 2022			FFY 2023			FFY 2024			FFY 2025			FFY 2026			FFY 2027		
<b>Oahu State (OS)</b>	TOTAL	FEDERAL	LOCAL	TOTAL	FEDERAL	LOCAL	TOTAL	FEDERAL	LOCAL	TOTAL	FEDERAL	LOCAL	TOTAL	FEDERAL	LOCAL	TOTAL	FEDERAL	LOCAL
<i>Original TIP</i>	187,032	79,303	107,729	71,966	79,067	(7,101)	231,545	78,196	153,349	145,480	77,880	67,600	106,840	77,102	29,738	145,590	80,282	65,308
<i>As of Rev 3 Changes</i>	19,629	77,042	(57,413)	26,312	61,640	(35,328)	(46,091)	63,498	(109,589)	26,013	39,684	(13,671)	(8,123)	(3,311)	(4,812)	1,180	(958)	2,138
<b>Total as of Revision # 3</b>	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
<b>Oahu City (OC)</b>	TOTAL	FEDERAL	LOCAL	TOTAL	FEDERAL	LOCAL	TOTAL	FEDERAL	LOCAL	TOTAL	FEDERAL	LOCAL	TOTAL	FEDERAL	LOCAL	TOTAL	FEDERAL	LOCAL
<i>Original TIP</i>	25,146	18,035	7,111	50,159	19,124	31,035	42,790	18,496	24,294	20,829	17,000	3,829	13,791	11,370	2,421	12,454	10,300	2,154
<i>As of Rev 3 Changes</i>	26,532	(615)	27,147	(35,757)	(9,737)	(26,020)	(19,717)	(496)	(19,221)	2,140	1,000	1,140	15,961	12,903	3,058	(8,429)	(7,600)	(829)
<b>Total as of Revision # 3</b>	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
<b>TOTAL FHWA</b>	258,339	173,765	84,574	112,680	150,094	(37,414)	208,527	159,694	48,833	194,462	135,564	58,898	128,469	98,064	30,405	150,795	82,024	68,771

#### F T A

	FFY 2022			FFY 2023			FFY 2024			FFY 2025			FFY 2026			FFY 2027		
<b>Oahu State (OS)</b>	TOTAL	FEDERAL	LOCAL	TOTAL	FEDERAL	LOCAL	TOTAL	FEDERAL	LOCAL	TOTAL	FEDERAL	LOCAL	TOTAL	FEDERAL	LOCAL	TOTAL	FEDERAL	LOCAL
<i>Original TIP</i>	884	707	177	912	729	183	939	751	188	967	774	193	1,017	814	203	1,048	839	209
<i>As of Rev 3 Changes</i>	(382)	(305)	(77)	(58)	(46)	(12)	(67)	(53)	(14)	(77)	(61)	(16)	(47)	(37)	(10)	(37)	(29)	(8)
<b>Total as of Revision # 3</b>	1,266	1,012	254	970	775	195	1,006	804	202	1,044	835	209	1,064	851	213	1,085	868	217
<b>Oahu City (OC)</b>	TOTAL	FEDERAL	LOCAL	TOTAL	FEDERAL	LOCAL	TOTAL	FEDERAL	LOCAL	TOTAL	FEDERAL	LOCAL	TOTAL	FEDERAL	LOCAL	TOTAL	FEDERAL	LOCAL
<i>Original TIP</i>	519,036	188,538	330,498	357,415	135,930	221,485	240,064	117,049	123,015	184,291	81,382	102,909	51,008	40,804	10,204	52,027	41,620	10,407
<i>As of Rev 3 Changes</i>	(398,456)	(79,765)	(318,691)	469,500	150,600	318,900	1,387,500	413,600	973,900	(137,560)	(44,000)	(93,560)	0	0	0	0	0	0
<b>Total as of Revision # 3</b>	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
<b>TOTAL FTA</b>	121,846	109,785	12,061	827,885	287,305	540,580	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

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

## 5.2 FHWA REGULAR FORMULA FUNDS PROGRAMMED

	TRANSPORTATION IMPROVEMENT PROGRAM				FOR INFORMATION ONLY	
	FFY 2022	FFY 2023	FFY 2024	FFY 2025	FFY 2026	FFY 2027
<b>Oahu State (OS)</b>						
Highway Safety Improvement Program	14,887	7,200	0	1,600	0	1,600
Railway Highway Crossings Program	0	2,070	0	0	0	0
National Highway Performance Program	125,201	121,234	127,694	113,964	73,791	77,724
Surface Transportation Block Grant Program	12,800	10,203	14,000	2,000	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
<b>State - FHWA Total</b>	<b>156,345</b>	<b>140,707</b>	<b>141,694</b>	<b>117,564</b>	<b>73,791</b>	<b>79,324</b>
<b>Oahu City (OC)</b>						
Highway Safety Improvement Program	120	30	496	0	0	0
Surface Transportation Block Grant Program	15,100	5,857	14,385	13,724	20,873	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	1,000	0	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
<b>City - FHWA Total</b>	<b>17,420</b>	<b>9,387</b>	<b>18,000</b>	<b>18,000</b>	<b>24,273</b>	<b>2,700</b>
<b>FHWA TOTAL</b>	<b>173,765</b>	<b>150,094</b>	<b>159,694</b>	<b>135,564</b>	<b>98,064</b>	<b>82,024</b>

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 O'ahu 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 O'ahu 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 O'ahu. 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 O'ahu - 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.<sup>2</sup>

## 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 federal-aid 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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<sup>2</sup> 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 go 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 O'ahu. 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 funding<sup>3</sup>. This heightened eligibility means that FHWA has greatedened the ability of transportation agencies to undertake concurrent

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<sup>33</sup> 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 car-sharing 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 device 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 websites<sup>4</sup>:

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<sup>4</sup> <https://www.fhwa.dot.gov/majorprojects/> and [https://www.fhwa.dot.gov/majorprojects/financial\\_plans/index.cfm](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 O‘ahu 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**

<b>Funding Category</b>	<b>Federal Funds Available for Oahu (x\$1000)</b>	<b>Local Funds (x\$1000)</b>	<b>Total Sources (x\$1000)</b>	<b>Total Funds Programmed (x\$1000)</b>	<b>Funds Balance (x\$1000)</b>
STP (TE) Enhancement	3,457	(3,457)	-	-	-
FLAP	-	-	-	-	-
HSIP	15,007	943	15,950	15,950	-
Locally Funded	-	52,521	52,521	52,521	-
NHPP	125,201	2,160	127,361	127,361	-
Railway Highway Crossings Program,	-	-	-	-	-
OS BRIDGE	1,200	580	1,780	1,780	-
SRTS	-	-	-	-	-
STBG	27,900	31,577	59,477	59,477	-
TA Set-Aside	-	-	-	-	-
TA Set-Aside Urban	1,000	250	1,250	1,250	-
CMAQ	-	-	-	-	-
<b>Total</b>	<b>173,765</b>	<b>84,574</b>	<b>258,339</b>	<b>258,339</b>	<b>-</b>

### **FHWA Financial Constraint – FFY 2023**

<b>Funding Category</b>	<b>Federal Funds Available for Oahu (x\$1000)</b>	<b>Local Funds (x\$1000)</b>	<b>Total Sources (x\$1000)</b>	<b>Total Funds Programmed (x\$1000)</b>	<b>Funds Balance (x\$1000)</b>
STP (TE) Enhancement	-	-	-	-	-
FLAP	1,100	275	1,375	1,375	-
HSIP	7,230	(1,195)	6,035	6,035	-
Locally Funded	-	23,030	23,030	23,030	-
NHPP	121,234	(55,010)	66,224	66,224	-
Railway Highway Crossings Program,	2,070	230	2,300	2,300	-
OS BRIDGE	2,400	1,240	3,640	3,640	-
SRTS	-	-	-	-	-
STBG	16,060	(5,984)	10,076	10,076	-
TA Set-Aside	-	-	-	-	-
TA Set-Aside Urban	-	-	-	-	-
CMAQ	-	-	-	-	-
<b>Total</b>	<b>150,094</b>	<b>(37,414)</b>	<b>112,680</b>	<b>112,680</b>	<b>-</b>

### **FHWA Financial Constraint – FFY 2024**

<b>Funding Category</b>	<b>Federal Funds Available for Oahu (x\$1000)</b>	<b>Local Funds (x\$1000)</b>	<b>Total Sources (x\$1000)</b>	<b>Total Funds Programmed (x\$1000)</b>	<b>Funds Balance (x\$1000)</b>
STP (TE) Enhancement	-	-	-	-	-
FLAP	-	-	-	-	-
HSIP	496	224	720	720	-
Locally Funded	-	21,000	21,000	21,000	-
NHPP	127,694	31,660	159,354	159,354	-
Railway Highway Crossings Program,	-	-	-	-	-
OS BRIDGE	1,952	961	2,913	2,913	-
SRTS	-	-	-	-	-
STBG	28,385	(5,304)	23,081	23,081	-
TA Set-Aside	167	42	209	209	-
TA Set-Aside Urban	1,000	250	1,250	1,250	-
CMAQ	-	-	-	-	-
<b>Total</b>	<b>159,694</b>	<b>48,833</b>	<b>208,527</b>	<b>208,527</b>	<b>-</b>

### **FHWA Financial Constraint – FFY 2025**

<b>Funding Category</b>	<b>Federal Funds Available for Oahu (x\$1000)</b>	<b>Local Funds (x\$1000)</b>	<b>Total Sources (x\$1000)</b>	<b>Total Funds Programmed (x\$1000)</b>	<b>Funds Balance (x\$1000)</b>
STP (TE) Enhancement	-	-	-	-	-
FLAP	-	-	-	-	-
HSIP	1,600	400	2,000	2,000	-
Locally Funded	-	93,000	93,000	93,000	-
NHPP	113,964	(37,471)	76,493	76,493	-
Railway Highway Crossings Program,	-	-	-	-	-
OS BRIDGE	1,930	950	2,880	2,880	-
SRTS	-	-	-	-	-
STBG	15,724	1,432	17,156	17,156	-
TA Set-Aside	1,346	337	1,683	1,683	-
TA Set-Aside Urban	1,000	250	1,250	1,250	-
CMAQ	-	-	-	-	-
<b>Total</b>	<b>135,564</b>	<b>58,898</b>	<b>194,462</b>	<b>194,462</b>	<b>-</b>

## 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	B	C	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	-	33,881	33881	-
FTA §5309 New Starts	-	-	-	0	-
FTA §5309 ARPA	70,000	-	70,000	70000	-
FTA §5310	809	-	809	809	-
FTA §5329	537	-	537	537	-
FTA §5337	1,480	-	1,480	1480	-
FTA §5339	3,078	-	3,078	3078	-
Totals	109,785	-	109,785	109,785	-

### FTA Fiscal Constraint - FFY 2023

	A	B	C	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	-	31,540	31540	-
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	-	287,305	287,305	-



### FTA Fiscal Constraint - FFY 2024

	A	B	C	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

	A	B	C	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<sup>55</sup>. 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.

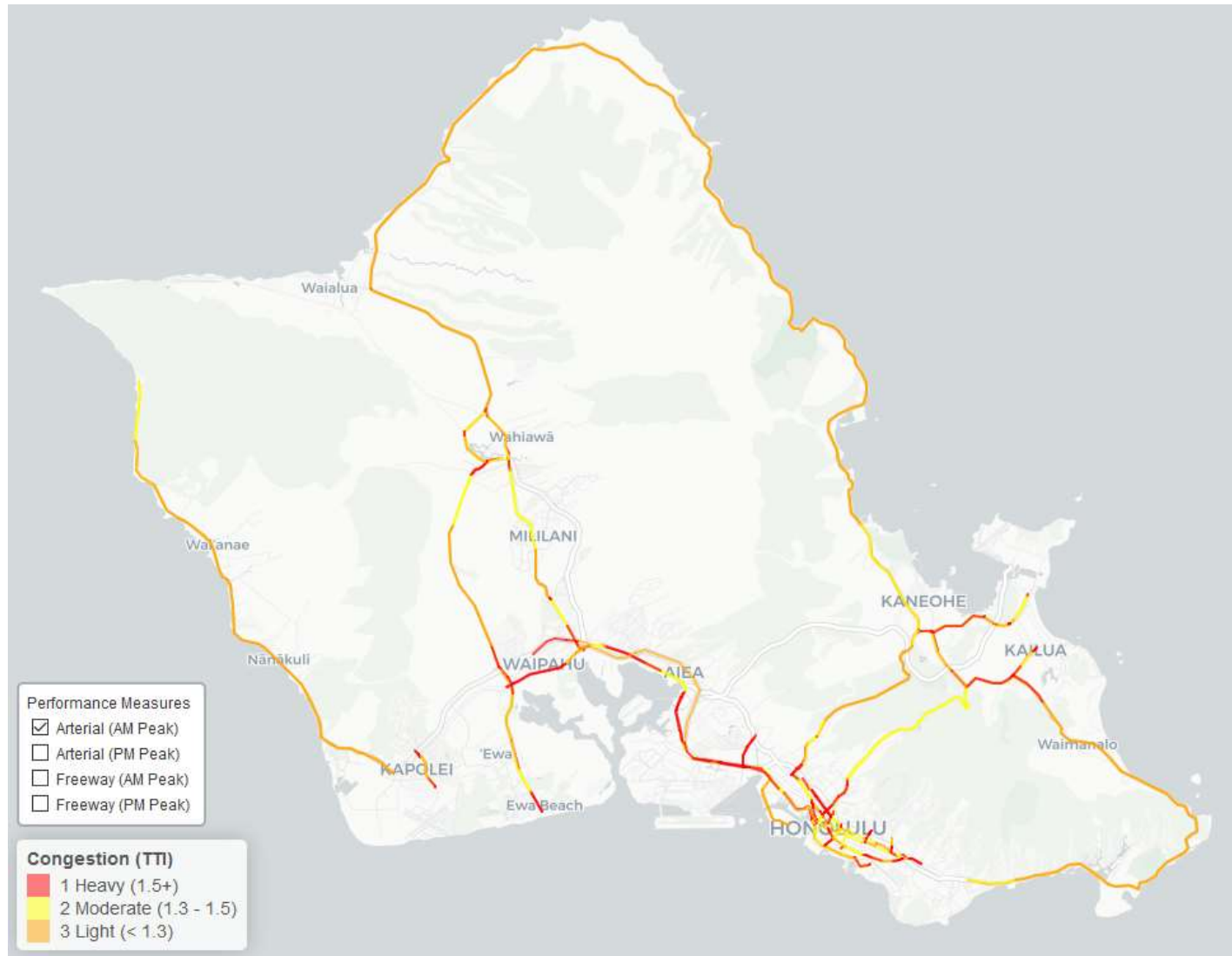
The Travel Demand Forecast Model was used to compare the congestion of the existing road network and committed projects, and congestion, if the TIP projects are implemented. If none of the TIP projects were to be implemented 16.3% of the VMT would be congested. Table 7.1 shows the difference between the original non-revised FFY 2022-2025 TIP and the TIP as of revision #3. It indicates that if the projects in the revised FFY 2022-2025 TIP were implemented, there would be 0.7% percent decrease and 0.4% increase in relative congestion compared to the “no TIP” and “original” non-revised TIP scenarios, respectively; overall small changes.

**Table 7.1 Percentage of Congested Vehicle Miles Traveled (VMT) - with and without revised FFY 2022-2025 TIP projects**

	Without TIP	With TIP		Percent Difference	
		Original	Revised	Revised vs No TIP	Revised vs Original TIP
VMT	13,884,129	13,603,647	13,620,778	-1.90	0.13
Congested VMT	2,262,034	2,058,651	2,118,982	-6.32	2.93
<b>Percent of VMT Congested</b>	<b>16.29%</b>	<b>15.13%</b>	<b>15.56%</b>	<b>-0.73%</b>	<b>0.43%</b>

<sup>55</sup> <https://hlistategis.maps.arcgis.com/apps/Cascade/index.html?appid=9fcdf282558e47c7bd2d7becb23847a2>

**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 #3

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 \$9.27 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 \$271 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	Y	\$8,299,000,000
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	Y	\$160,000,000
OS-21-49	Harbor Access Road (Route 9400)	Y	\$142,000,000
OS17	Interstate Route H-1, Kapolei Interchange Complex	Y	\$139,000,000
OS67	Interstate Route H-1, Reconstruction and Repair, Eastbound, Waimalu Interchange to Halawa	Y	\$93,000,000
OC23	Salt Lake Boulevard Widening, Phase 3	Y	\$80,000,000
OS82	Interstate Route H-1 Improvements, Eastbound, Ola Lane Overpass to Vineyard Boulevard	Y	\$65,000,000
OS61	Kamehameha Highway (Route 83) Realignment, Vicinity of Kawaihoa Beach	Y	\$39,000,000
OS-21-53	Farrington Highway Widening, Helelua to Mohihi	Y	\$34,500,000
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	Y	5,500,000
OC-21-54	Kalaehoa Boulevard Railroad Improvements	Y	\$805,000
OC13	Bus and Handi-Van Acquisition Program	N	120,138,000
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	39,000,000

Project ID	Project Name	Congested Roadway	Estimated Total Cost
OC10	Traffic Signals at Various Locations	N	17,018,000
OC-21-55	Oahu Traffic Signal Controller Modernization, Phase 2	N	11,876,000
OC4	Computerized Traffic Control System	N	8,861,000
OS80	Traffic signal Modernization at Various Locations, Ph1	N	6,250,000
OC14	Bus Stop ADA Access and Site Improvements	N	3,696,000
OC2	Bikeway Improvements Program	N	3,301,000
OS50	Transportation Assistance for Elderly and Disabled	N	3,519,000
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 Management Center Operations (State)	N	2,100,000
OC1	Alapai Transportation Management Center Operations	N	1,889,000
<b>TOTAL</b>			<b>\$9,540,264,000</b>

## 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
<b>Safety</b>	To achieve a significant reduction in traffic fatalities and serious injuries on all public roads
<b>Infrastructure Condition</b>	To maintain highways infrastructure asset system in a state of good repair
<b>Congestion Reduction</b>	To achieve a significant reduction in congestion on the National Highway System
<b>System Reliability</b>	To improve the efficiency of the surface transportation system
<b>Freight Movement and Economic Vitality</b>	To improve the national freight network, strengthen the ability of rural communities to access national and international trade markets, and support regional economic development
<b>Environmental Sustainability</b>	To enhance the performance of the transportations system while protecting and enhancing the natural environment
<b>Reduced Project Delivery Delays</b>	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 O'ahu 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 8.2 below provides a summary of the target achievement determination.

**Table 8.2 Hawaii Safety Performance Targets Achievement Determination Summary**

Performance Measure	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	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	
Serious Injury Rate (Serious injuries/100 million VMT)	4.978	4.156	4.514	Yes	N/A	
Number of Non-Motorized Fatalities and Serious Injuries (persons)	119.4/year	112.6/year	121.0/year	Yes	N/A	

### 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**

<b>TIP ID#</b>	<b>Project Name</b>	<b>Project Description</b>	<b>Lead Agency</b>	<b>Total Request</b>	<b>Federal</b>	<b>Local</b>
OS69	Farrington Highway (Route 93), Safety Improvements, H-1 Freeway to Pohakunui Avenue	Scope includes, but is not limited to: Installation of milled rumble strips or rumble edge stripes on shoulders/median; installation of milled rumble strips on centerline; widen shoulders where possible; speed feedback sign; concrete median barrier at U-turn; pavement markings; signing.	HDOT	\$7,000,000	\$5,600,000	\$1,400,000
OS-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 Avenue.	HDOT	\$2,300,000	\$2,070,000	\$230,000
OS9	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
OS10	Guardrail and Shoulder Improvements, Various Locations	Upgrade guardrail end treatments and shoulders. Work also may include installation of signs, pavement markings, and traffic control.	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
OS-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, conduits, foundations/barriers, power equipment, erosion control, and traffic control.	HDOT	\$30,000,000	\$18,000,000	\$12,000,000

OS20	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
OS14	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
OS84	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	\$5,000,000	\$4,000,000	\$1,000,000
OS-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.	HDOT	\$4,000,000	\$3,600,000	\$400,000
OS73	Likelike Highway (Route 63), Safety Improvements, Emmeline Place to Kahekili Highway	Scope includes, but is not limited to: 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 and chevrons; widen paved shoulders where possible; pavement markings; signing.	HDOT	\$24,000,000	\$19,200,000	\$4,800,000
OS44	Moanalua Freeway (Route 78) and Interstate Route H-2, Guardrail and Shoulder Improvements, Phase 2	Install /upgrade existing Guardrails, Improve drainage, stabilize embankments, reconstruct/pave shoulders where needed, and install signs and pavement markings.	HDOT	\$0	\$7,700,000	-\$7,700,000

OS45	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).	HDOT	\$0	\$13,000,000	-\$13,000,000
OS46	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, conduits, foundations/barriers, power equipment, erosion control, and traffic control.	HDOT	\$0	\$7,000,000	-\$7,000,000
<b>TOTAL</b>				<b>\$101,320,000</b>	<b>\$110,203,000</b>	<b>-\$8,883,000</b>

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

<b>TIP ID#</b>	<b>Project Name</b>	<b>Project Description</b>	<b>Lead Agency</b>	<b>Total Request</b>	<b>Federal</b>	<b>Local</b>
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	\$3,301,000	\$2,640,000	\$661,000
OC-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
OC8	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 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	\$28,574,000	\$22,860,000	\$5,714,000
<b>TOTAL</b>				<b>\$42,491,000</b>	<b>\$33,994,000</b>	<b>\$8,497,000</b>

Projects and Programs that intend on improving highway safety total \$143,811,000, or 4.23% 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**

<b>Distress Component</b>	<b>Description</b>
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)**

<b>Performance Measure</b>	<b>2016 Conditions</b>	<b>2-Year Target</b>	<b>4-Year Target</b>
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
OS1	Bridge and Pavement Improvement Program, Oahu	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
OS67	Interstate Route H-1, Reconstruction and Repair, Eastbound,	Rehabilitate or Reconstruct Portland Concrete pavement. Widen to improve shoulders and travelway.	HDOT	\$0	\$300,000	-\$300,000

Waimalu Interchange to Halawa						
OS26	Kalanianaʻole Hwy (Route 72) Resurfacing, Poalima Street to Vicinity of Makai Pier	Roadway resurfacing of Kalanianaʻole Highway from Poalima Street to Makai Pier.	HDOT	\$0	\$9,000,000	-\$9,000,000
OS62	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
OS79	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	\$45,970,000	\$28,776,000	\$17,194,000
OS63	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	\$2,754,000	\$2,203,000	\$551,000
<b>TOTAL</b>				<b>\$132,724,000</b>	<b>\$142,473,000</b>	<b>-\$9,749,000</b>

Projects and Programs that intend on improving pavement condition total \$132,724,000, or 3.9.0% 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**

<b>TIP ID#</b>	<b>Project Name</b>	<b>Project Description</b>	<b>Lead Agency</b>	<b>Total Request</b>	<b>Federal</b>	<b>Local</b>
OS1	Bridge and Pavement Improvement Program, Oahu	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
OS76	Bridge Rehabilitation Program, Various Locations	Priority Rehabilitation of Oahu of bridges. Bridges to be rehabilitated are determined by HDOT's Bridge Management System (BrM). These funds have been programmed to a level that meets HDOT's TAMP expenditure plan	HDOT	\$19,500,000	\$13,600,000	\$5,900,000
OS77	Bridge Replacement Program, Various Locations	Priority replacement of Oahu of bridges. Bridges to be replaced are determined by HDOT's Bridge Management System (BrM). These funds have been programmed to a level that meets HDOT's TAMP expenditure plan	HDOT	\$13,400,000	\$8,960,000	\$4,440,000
OS78	Bridge Seismic Retrofit Program, Various Locations	Seismic Retrofit of bridges. Bridges to be retrofit are determined by HDOT's Seismic Retrofit Management Program. These funds have been programmed to a level that meets HDOT's TAMP expenditure plan	HDOT	\$7,400,000	\$4,960,000	\$2,440,000
OS4	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 includes 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
OS74	Interstate Route H-1, Seismic Retrofit, McCully Street Separation	Retrofit interchange structures to meet current seismic standards.	HDOT	\$3,155,000	\$2,524,000	\$631,000
OS70	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	Replace the existing bridge.	HDOT	\$0	\$11,400,000	-\$11,400,000

	Replacement, Kaipapau Stream Bridge					
OS29	Kamehameha Highway (Route 83), Bridge Replacement, Kaluanui Stream Bridge	Replace the existing bridge	HDOT	\$18,000,000	\$14,400,000	\$3,600,000
OS31	Kamehameha Highway (Route 83), Bridge Replacement, Laieloa Stream Bridge	Replace the existing concrete slab bridge on Kamehameha Highway in the vicinity of Laie.	HDOT	\$14,700,000	\$11,760,000	\$2,940,000
OS71	Kamehameha Highway (Route 83), Bridge Replacement, Paumalu Bridge	Rehabilitate the existing bridge.	HDOT	\$1,450,000	\$1,160,000	\$290,000
OS34	Kamehameha Highway (Route 83), Bridge Replacement, Waiahole Stream Bridge	Replace the existing bridge.	HDOT	\$16,422,000	\$13,138,000	\$3,284,000
OS72	Kamehameha Highway (Route 83), Bridge Replacement, Waimanana Bridge	Replace the existing bridge.	HDOT	\$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
OS-21-43	Kamehameha Highway (Route 99) Seismic Retrofit, Pearl Harbor Interchange, Structure #2	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	\$4,755,000	\$3,804,000	\$951,000
OS-21-52	Likeli 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.	HDOT	\$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
OS52	Sand Island Access Road (Route 64), Truck Weigh Station, Kapalama Container Terminal	Design, construct & operate a truck weigh station to perform truck inspections & driver credential checks @ the egress of the container terminal on Sand Island Acc Rd. This includes aux. lanes to accommodate trucks, traffic controls, truck weighing infrastructure & computer hardware/software, operator kiosk/office.	HDOT	\$0	\$3,000,000	-\$3,000,000
OS79	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	\$45,970,000	\$28,776,000	\$17,194,000
<b>TOTAL</b>				<b>\$252,577,000</b>	<b>\$219,586,000</b>	<b>\$32,991,000</b>

**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
OC3	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
<b>TOTAL</b>				<b>\$11,213,000</b>	<b>\$7,482,000</b>	<b>\$3,731,000</b>

Projects and Programs that intend on improving bridge condition total \$239,584,000, or 10.1% 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

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

Performance Measure	2016 Conditions	4-Year Target	2-Year Target	2-Year Actual	Made Significant Progress in First 2 Years?	Consequences
Percentage of NHS bridges classified in good condition	23%	20%	20%	19.30%	No	Additional Reporting
Percentage of NHS bridges classified in 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	The project will install, operate, and maintain new controllers at 268 traffic signal locations on Oahu and 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
OS12	Destination Sign, Upgrade and Replacement	Replace and/or upgrade the existing destination signs and sign support structures.	HDOT	\$25,289,000	\$16,232,000	\$9,057,000
OS5	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	\$24,500,000	\$25,238,000	-\$738,000
OS57	Freeway Management System, Joint Traffic Management 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	HDOT	\$1,400,000	\$1,120,000	\$280,000

		methodology that involves the estimated square footage that the State will occupy.				
OS9	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
OS84	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	\$5,000,000	\$4,000,000	\$1,000,000
OS61	Kamehameha Highway (Route 83) Realignment, Vicinity of Kawaihoa 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
OS75	Kamehameha Highway (Route 83), Rockfall Protection, Waimea Bay	Construct various rockfall/slope protection and slope stabilization mitigation measures.	HDOT	\$29,326,000	\$19,461,000	\$9,865,000
OS-21-45	Pali Highway, Rockfall Mitigation, Vicinity of MP 5.90 to MP 6.10	Rockfall protection/mitigation to be determined following an EA.	HDOT	\$625,000	\$500,000	\$125,000
OS-21-44	Pali Highway, Rockfall Mitigation, Vicinity of MP 6.10 to MP 6.55	Rockfall protection/mitigation to be determined following an EA.	HDOT	\$1,675,000	\$1,340,000	\$335,000

OS79	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	\$45,970,000	\$28,776,000	\$17,194,000
OS63	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	\$2,754,000	\$2,203,000	\$551,000
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
<b>TOTAL</b>				<b>\$201,559,000</b>	<b>\$151,870,000</b>	<b>\$49,689,000</b>

**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
OC4	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	\$4,110,000	\$3,208,000	\$902,000
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
<b>TOTAL</b>				<b>\$15,945,000</b>	<b>\$12,675,000</b>	<b>\$3,270,000</b>

Projects and Programs that intend on improving level of travel time reliability total \$217,504,000, or 6.4% 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.	HDOT	\$7,000,000	\$0	\$7,000,000
<b>TOTAL</b>				<b>\$7,000,000</b>	<b>\$0</b>	<b>\$7,000,000</b>

**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
OC4	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	\$4,110,000	\$3,208,000	\$902,000
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
<b>TOTAL</b>				<b>\$15,945,000</b>	<b>\$12,675,000</b>	<b>\$3,270,000</b>

Projects and Programs that intend on improving truck travel time reliability total \$22,945,000, or 0.7% 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 O'ahu 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
<b>TOTAL</b>				<b>\$2,177,000</b>	<b>\$1,737,000</b>	<b>\$440,000</b>

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 O'ahu 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**

<b>Performance Measure</b>	<b>Annual Target</b>
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**

Performance Measure	FY 2018				FY 2019				FY 2020			
	Target (%)	Actual (%)	Difference (%)	Met Target?	Target (%)	Actual (%)	Difference (%)	Met Target?	Target (%)	Actual (%)	Difference (%)	Met Target?
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 service vehicles that have met or exceeded their useful life benchmark												
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 \$181,385,000, 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.

<b>TIP ID#</b>	<b>Project Name</b>	<b>Project Description</b>	<b>Lead Agency</b>	<b>Total Request</b>	<b>Federal</b>	<b>Local</b>
OC13	Bus and Handi-Van Acquisition Program	Purchase replacement transit buses and handi-van vehicles.	DTS	\$71,809,000	\$57,444,000	\$14,365,000
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	\$2,464,000	\$1,972,000	\$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	\$105,000,000	\$84,000,000	\$21,000,000
<b>TOTAL</b>				<b>\$181,385,000</b>	<b>\$143,416,000</b>	<b>\$37,969,000</b>

## 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				X	X		
OC10							
OC13							X
OC14							X
OC16							
OC2	X						
OC20							X
OC21						X	
OC-21-54	X						
OC-21-55				X	X		
OC23							
OC24							
OC25	X						
OC26	X						
OC28	X						
OC29							
OC3			X				
OC31							X
OC4				X	X		
OC8	X						
OS1		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				X			
OS12				X			
OS14	X						
OS17							
OS20	X						
OS-21-43			X				
OS-21-44				X			
OS-21-45				X			
OS-21-46							
OS-21-47	X						
OS-21-48	X						
OS-21-49					X		
OS-21-50							
OS-21-51			X				
OS-21-52			X				
OS-21-53							
OS-21-56							
OS-21-57	X						
OS-21-59							
OS-22-58	X						
OS-22-59							
OS-22-60				X			
OS26		X					
OS28			X				
OS29			X				
OS31			X				
OS34			X				

TIP ID#	Highway Safety	Pavement Condition	Bridge Condition	Level of Travel Time Reliability	Truck Travel Time Reliability	Transit Safety	Transit Asset Management
OS36			X				
OS4			X				
OS43							
OS44	X						
OS45	X						
OS46	X						
OS5				X			
OS50							
OS52			X				
OS57				X			
OS59							
OS61				X			
OS62		X					
OS63		X		X			
OS67		X					
OS68							
OS69	X						
OS70			X				
OS71			X				
OS72			X				
OS73	X						
OS74			X				
OS75				X			
OS76			X				
OS77			X				
OS78			X				
OS79		X	X	X			

TIP ID#	Highway Safety	Pavement Condition	Bridge Condition	Level of Travel Time Reliability	Truck Travel Time Reliability	Transit Safety	Transit Asset Management
OS80				X			
OS82							
OS84	X			X			
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**

# APPENDIX A

## PROJECT AND PROGRAM PRIORITIZATION PROCESS

Planning efforts on O'ahu 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 O'ahu 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 O'ahu 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 O'ahu 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? \**

<b>Consistent?</b>	<b>ORTP Vision</b>
Yes	In 2045, O'ahu's path forward is multimodal and safe. All people on O'ahu 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.
No	

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

<b>Consistent?</b>	<b>ORTP Goals</b>
	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
20 Points	<p>The project's primary or secondary intent is to improve the safety of the transportation system.</p> <p><b>AND</b></p> <p>Project location is in a high crash zone.</p> <p><b>OR</b></p> <p>The project's primary or secondary intent is to improve safety, but its location will not have a large impact on crashes, for example:</p> <ul style="list-style-type: none"> <li>• Seismic retrofit projects</li> <li>• Rockfall protection projects</li> <li>• Bridge replacement projects</li> <li>• Bicycle and pedestrian paths (not located on a roadway)</li> </ul>	<p>The <u>primary intent</u> of the program is to improve the safety of the transportation system.</p>
10 Points	<p>The project's <u>primary or secondary intent</u> is to improve safety, BUT the project location is <u>not in a high crash zone</u>.</p>	<p>The <u>secondary intent</u> of the program is to improve the safety of the transportation system.</p>
0 Points	<p>The project has <u>no intention</u> to improve the safety of the transportation system.</p>	<p>The program has <u>no intent</u> to improve the safety of the transportation system.</p>

***Bonus Points 1.1.1: Safety Project is Located in Census Block Group of Mobility Constrained Populations***

<b>POINTS</b>	<b>Project Location and Proximity to Concentration of Mobility Constrained Populations</b>
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***

<b>POINTS</b>	<b>Project Location and High Crash Pedestrian Zone</b>
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***

<b>POINTS</b>	<b>Project Location and High Crash Bicycle Zone</b>
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
8 Points	<p>Project <u>adds pedestrian facilities</u>, for example:</p> <ul style="list-style-type: none"><li>• New sidewalks</li><li>• Shared-Use Paths</li></ul> <p><b>OR</b></p> <p>Project <u>improves existing pedestrian facilities</u>, for example:</p> <ul style="list-style-type: none"><li>• Corrections to existing sidewalk deficiencies</li><li>• Widening existing sidewalks</li><li>• Reconstruction of curb ramps</li><li>• ADA improvements</li><li>• Pedestrian hybrid beacons</li><li>• Pedestrian refuge island</li><li>• Raised crosswalks</li><li>• Crosswalk visibility enhancements</li><li>• Rectangular Rapid Flashing Beacons</li></ul>	<p>The <u>primary intent</u> of the program is to increase the miles of pedestrian facilities and/or improve/maintain existing pedestrian facilities.</p> <p><b>OR</b></p> <p>The program's intent is to provide or maintain recreational trails.</p>

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 <u>add pedestrian facilities or improve existing pedestrian facilities.</u>	The program has <u>no intent</u> 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	<p>Project <u>adds protected bicycle facilities</u>, such as:</p> <ul style="list-style-type: none"> <li>• Shared Use Path</li> <li>• Protected Bike Lane</li> <li>• Buffered Bike Lane</li> </ul> <p><b>OR</b></p> <p>Project improves existing bicycle facilities.</p>	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	<p>Project <u>adds conventional bicycle facilities</u>, such as:</p> <ul style="list-style-type: none"> <li>• Conventional Bike Lane</li> <li>• Climbing Bike Lane</li> <li>• Shoulder Bikeway</li> </ul>	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 <u>does not add bicycle facilities or project adds a shared traffic lane.</u>	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***

POINTS	Project Location and Proximity to Schools
3 Points	Project adds protected bicycle facilities on high stress connections. <sup>6</sup>

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<sup>6</sup> High stress connections are defined by the Hawai'i Bicycling League's O'ahu 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 <u>moderately or significantly improve</u> transit quality. Project types include: <ul style="list-style-type: none"><li>• Fixed-route bus and rail expansions</li><li>• Public transit technology improvements</li><li>• Acquisition of buses or paratransit vehicles</li><li>• Transportation assistance for elderly and disabled</li><li>• Transit ADA access and site improvements</li><li>• Construction of a transit center</li><li>• Transit safety and security projects</li><li>• Transit Signal Priority projects</li><li>• Bus stop improvements</li><li>• High priority bus corridors</li></ul>	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	Project expected to <u>moderately or significantly decrease</u> the share of people driving alone. Project types include:  a. High Occupancy Vehicle lanes	The <u>primary intent</u> 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
1 Point		The <u>secondary intent</u> 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 <u>moderately or significantly increase</u> 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 <u>all five mobility constrained populations</u> .	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 constrained populations</u> .	

3 Points	Pedestrian, bicycle, and/or transit project located in an area with a concentration of <u>three of five mobility constrained populations</u> .	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 Points	Pedestrian, bicycle, and/or transit project located in an area with a concentration of <u>two of five mobility constrained populations</u> .	
1 Points	Pedestrian, bicycle, and/or transit project located in an area with a concentration of <u>one of five mobility constrained populations</u> .	
0 Points	Pedestrian, bicycle, and/or transit project is located in an area with <u>no mobility constrained populations</u> .	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 O‘ahu, 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 O‘ahu'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.<sup>7</sup>
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.

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<sup>7</sup> 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.

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.

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

***Bonus Points: Project is in the Top 20 Projects in the [Statewide Coastal Highway Program Report](#)***

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

***Bonus Points: Project is in Singular Access Community***

<b>POINTS</b>	<b>Project is Located in a Singular Access Community</b>
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***

<b>POINTS</b>	<b>Project Location and Proximity to Concentration of Mobility Constrained Populations</b>
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](#)
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
20 Points	<p>The project's <u>primary or secondary intent</u> is to improve the condition of roadways, bridges, transit vehicles and facilities, and/or pathways.</p> <p><b>AND</b></p> <p><u>Roadway and Bridge Projects:</u></p> <p>Roadway and bridge project is consistent with the priorities and recommendations in the HDOT's Transportation Asset Management Plan<sup>8</sup> for pavement and bridge projects</p> <p><b>OR</b></p> <p><u>Transit, Pedestrian, and Bicycle Projects:</u></p> <p>The project's <u>primary intent</u> is to maintain and/or improve the condition of existing transit vehicles, facilities, pedestrian, or bicycle infrastructure.</p>	<p>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.</p>
10 Points	<p>The project's <u>primary or secondary intent</u> is to improve the condition of roadways, bridges, transit vehicles and facilities, and/or pathways.</p> <p><b>AND</b></p> <p><u>Roadway and Bridge Projects:</u></p> <p>Project is not consistent with recommendations in the HDOT's Transportation Asset Management for priority pavement and bridge projects.</p>	<p>The <u>secondary intent</u> of the program is to maintain and improve the condition of roadways, bridges, transit vehicles and facilities, and/or pathways.</p>

<sup>8</sup> 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 [HDOT Transportation Asset Management Plan](#).



	<p><b>OR</b></p> <p><u>Transit, Pedestrian, and Bicycle Projects:</u></p> <p>The project's <u>secondary intent</u> is to maintain and/or improve the condition of existing transit vehicles, facilities, pedestrian, or bicycle infrastructure.</p>	
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 <u>no intent</u> 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 <u>on a designated freight route</u> .	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 <u>not on a designated freight route</u> .	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
4 Points	<p>Project <u>identified in the Congestion Management Process (CMP)</u>.</p> <p><b>OR</b></p> <p>The primary or secondary intent of the project is to <u>improve the efficiency of transit</u>, for example:</p> <ul style="list-style-type: none"><li>• Bus-only lanes</li><li>• Bus pullouts</li><li>• Queue jumpers</li></ul> <p><b>OR</b></p> <p>Project <u>not identified in the CMP but is on a roadway where there is an average of at least two bus trips per hour</u>.</p>	<p>The <u>primary intent</u> of the program is to improve efficiency of the transportation system.</p>
2 Points	<p>Project is <u>not identified in the CMP</u></p> <p><b>OR</b></p> <p>Project <u>does not intend on improving transit efficiency</u></p> <p><b>OR</b></p> <p>Project location <u>does not have on average at least two bus trips per hour</u></p>	<p>The <u>secondary intent</u> of the program is to improve the efficiency of the transportation system.</p>

	<b>BUT</b>  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	<p>Project expected to improve air quality. Project types include:</p> <ul style="list-style-type: none"> <li>a. Fixed-route bus and rail expansions</li> <li>b. Public transit technology improvements</li> <li>c. Diesel bus engine replacements</li> <li>d. Alternative bus fueling stations</li> <li>e. Transit Center construction</li> <li>f. Transportation demand management programs</li> <li>g. Fixed-route bus and rail service replacements</li> <li>h. Minor non-recreational non-motorized system expansion (not tied to a roadway project which would increase vehicle capacity)</li> </ul>	<p>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.</p>

	<ul style="list-style-type: none"> <li>i. Major non-recreational non-motorized system maintenance (not tied to a roadway project which would increase vehicle capacity)</li> <li>j. Alternative vehicle fueling stations</li> <li>k. Park-and-Ride lot expansion</li> <li>l. Operations and transportation systems management improvements that do not add capacity, for example traffic signal timing projects</li> </ul>	
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	<p>Project not expected to impact air quality. Project types include:</p> <ul style="list-style-type: none"> <li>a. Roadway projects which do not add capacity</li> <li>b. Park-and-Ride lot maintenance</li> <li>c. Recreational non-motorized system expansion/maintenance</li> <li>d. Minor non-recreational non-motorized system maintenance (not tied to a roadway project which would increase vehicle capacity)</li> </ul>	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	<p>Project expected to moderately or significantly worsen air quality. Project types include:</p> <ul style="list-style-type: none"> <li>a. Roadway projects which add capacity, including those with a non-recreational non-motorized system expansion component</li> </ul>	

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

<b>POINTS</b>	<b>Project Location and Proximity to Concentration of Mobility Constrained Populations</b>
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 Areas<sup>9</sup>
- Project is located outside of a 50ft buffer of historic sites<sup>10</sup>

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

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<sup>9</sup> 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.

<sup>10</sup> 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	<p>Project location does not overlap with buffer areas for Conservation Resource Management Areas, Watershed Protection Priority Areas, Natural Resources Areas, or historic sites.</p> <p><b>OR</b></p> <p>Project's <u>primary or secondary intent</u> is to enhance and/or protect cultural and/or natural resources.</p>	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.
0 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	OS-21-52	Kalaeloa Boulevard Railroad Improvements	DTS	\$694,000	45
3	OS-21-45	Pali Highway, Rockfall Mitigation, Vicinity of MP 5.90 to MP 6.10	HDOT	\$5,000,000	40
3	OS-21-44	Pali Highway, Rockfall Mitigation, Vicinity of MP 6.10 to MP 6.55	HDOT	\$13,000,000	40
4	OS-21-57	Fort Barrette Road Railroad Crossing Improvements	HDOT	\$2,750,000	36
5	OS-21-59	Intermodal Connectivity OC-21-59 TA Set-Aside (OahuMPO)	DTS	\$43,250,000	35.5
6	OS-21-55	Oahu Traffic Signal Controller Modernization, Phase 2	DTS	\$11,876,000	33
7	OS-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
8	OS-22-59*	Interstate Route H-3, H-3 Finish, Unit VIIC	HDOT	\$3,000,000	14
9	OS-21-49	Harbor Access Road (Route 9400)	HDOT	\$142,000,000	13
10	OS-21-48	Kamehameha Highway Safety Improvements, Kukuna Road to Kahana Valley Road	HDOT	\$4,530,000	12
11	OS-22-58*	High Friction Surface Treatment Installation at Various Locations on Oahu	HDOT	\$2,700,000	10
12	OS-21-46	Kunia Interchange Improvements	HDOT	\$160,000,000	7
13	OS-21-56	Interstate Route H-3, Halawa Valley Mitigation, Phase 2, Native Species Area to Tunnel Portal	HDOT	\$5,500,000	4
13	OS-21-50	Interstate Route H-3, Halawa Valley Mitigation, Phase 3, Gate 3 to Native Species Area	HDOT	\$5,500,000	4
13	OS-22-60*	Adaptive Traffic Signal Control Technology & Traffic Signal Controller Installation at Various Locations, Oahu	HDOT	\$40,000,000	4
14	OS-21-53	Farrington Highway Widening, Helelua to Mohihi	HDOT	\$34,500,000	-1

\*indicates new project added during TIP revision #3



## APPENDIX C

### TITLE VI AND ENVIRONMENTAL JUSTICE ANALYSIS FOR FFYS 2022 - 2025 TIP - REVISION #3

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 33% of the plan's investments would occur in these BGs. The average per capita investment is \$3,253 and \$2,859 in T6/EJ and non-T6/EJ areas, respectively, meaning that 14% more funds (\$394 per capita) are being spent in T6/EJ areas.

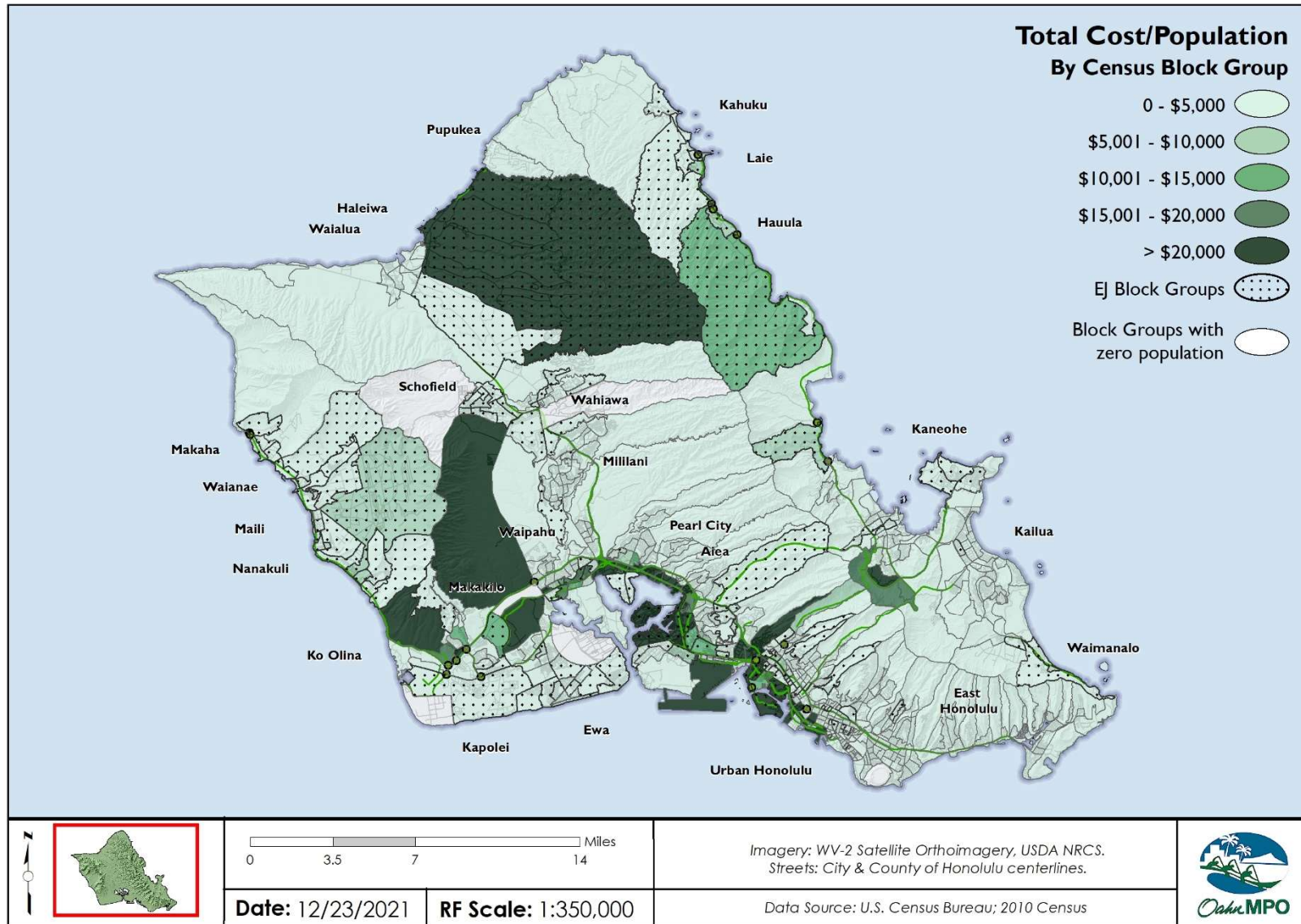
#### ANALYSIS RESULTS:

	T6/EJ Block Groups	Non-T6/EJ Block Groups
Average Investment by Block Group	7 M	4.2 M
Total Cost of Projects	941 M	1897.9 M
% Project Investment	33.1%	66.9%
Total Population	289,321	663,886
Average Per Capita Investment	\$3,253	\$2,859
Total Difference (Non-T6/EJ vs T6/EJ)	\$394	
% Difference (Non-T6/EJ vs T6/EJ)	14%	

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

		Number of Block Groups	%
Non-T6/EJ Block Groups		454	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	
	Sum	135	

## Total Per Capita Spending - As of FFY 2022-2025 TIP Revision #3



## APPENDIX D

### INTERGOVERNMENTAL AND PUBLIC REVIEW COMMENTS

The public and intergovernmental review period for the #3 Revision of the draft FFY 2022-2025 Transportation Improvement Program occurred from January 12- January 28, 2022.

The list of comments and responses can be viewed here: [www.oahumpo.org/?wpfb\\_dl=2384](http://www.oahumpo.org/?wpfb_dl=2384)

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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.