Oahu MPO

Oahu Regional Transportation Plan 2030

The Policy Committee of the Oahu Metropolitan Planning Organization approved Amendment #1 to the Oahu Regional Transportation Plan 2030 in May 2007. The Oahu Regional Transportation Plan 2030 was first approved in April 2006.

WHAT IS THE ORTP?

TABLE OF CONTENTS

The Policy Committee of the Oahu Metropolitan Planning Organization (OahuMPO) approved the Oahu Regional Transportation Plan (ORTP) 2030 in April 2006 and modified it through Amendment #1 in May 2007. This document reflects the official plan as of Amendment #1.

The ORTP 2030 is a blueprint that guides us in putting together pieces of the transportation puzzle to address the mobility issues and transportation needs of our community. It is a multifaceted plan that integrates planned growth patterns and reflects available financial resources over the next 25 years. It includes a vision and goals, identifies projects, and provides an implementation program for mid- and long-range investment of the available transportation funds across Oahu in a fair and equitable manner.

The development of the plan helps decision-makers understand the options that are available for improving the transportation system and how they address our mobility needs. Any future transportation improvement for Oahu that receives federal transportation funds must be consistent with the ORTP in order to be eligible for these funds.

This regional planning document is required by a number of state and federal mandates and requirements, which include the Safe, Accountable, Flexible, Efficient Transportation Equity Act – A Legacy for Users ("SAFETEA-LU"). These requirements are mandated by the U.S. Department of Transportation as a means of verifying the eligibility of metropolitan areas for federal funds earmarked for surface transportation systems.

The ORTP is updated at least every five years to ensure that transportation decisions are based on current information and community priorities. As part of each update, future population and employment are projected and corresponding changes in travel patterns, revenue, and construction costs are forecast to validate and test past and new directions for transportation development on Oahu.

FIGURE 1

POPULATION AND EMPLOYMENT GROWTH BY DEVELOPMENT PLAN AREA

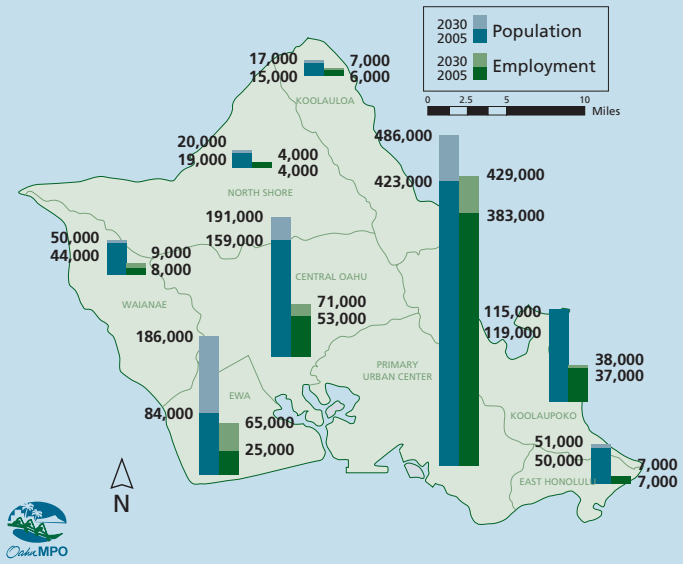
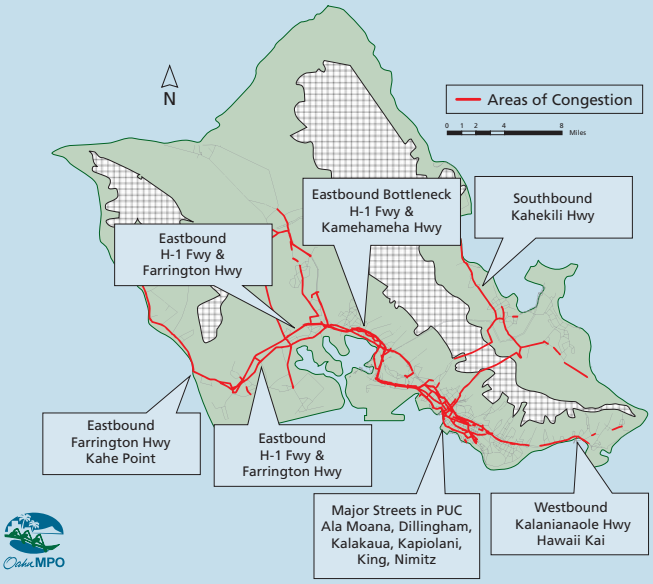


FIGURE 2

LOCATIONS OF SIGNIFICANT AM PEAK HOUR CONGESTION (BASELINE 2030)



LOOKING AT THE FUTURE OF OAHU

The Primary Urban Center (PUC) in Honolulu and the Secondary Urban Center in Kapolei have been designated by the City & County of Honolulu as the projected areas where growth in residential development and employment shall occur over the next 25 years. Additional growth is encouraged in Central Oahu to relieve pressure on the rest of the island.

Figure 1 graphically shows the amount of future growth in residential development and employment expected in each of the eight development plan areas of Oahu. Of the 203,000 new residents and 107,000 new jobs expected on Oahu by 2030, about 80% will be located in the PUC and Ewa.

Transportation and New Growth

As we continue to grow, more people and more employment opportunities mean more and more traffic – more clogged roads and more delays getting to work, school, stores, and the beach. As an illustration of how congested the transportation system could become, a "Baseline 2030" analysis was conducted to estimate future traffic conditions if growth is allowed to occur, but no new transportation facilities are built. Figure 2 shows significantly congested locations on Oahu during the morning peak hour in the Baseline 2030 analysis.

The impact of congested roadways corresponds to an increase in travel time for all Oahu residents; some increases are huge, depending upon where people live and work. Figure 3 shows the morning peak period travel time from each area on Oahu to downtown in the Year 2005. Figure 4 shows the projected morning peak period travel time from each area on Oahu to downtown Honolulu for the Baseline 2030 if nothing is done. Travel times in excess of 80 minutes are projected from the western and some northern portions of the island to downtown Honolulu during the morning peak period.

Challenges Facing Oahu

To solve the transportation puzzle, we must address several challenges that Oahu will face over the next 25 years:

- We will have more people - more people who want to go to work, to school, to shop, and to play - resulting in about 27% more travel.
- Many of our major roadways are congested, especially those within the H-1 travel corridor between Manoa/Waikiki and Kapolei. As a result, residents on the Waianae Coast, on the North Shore, in Ewa, and in Central Oahu are experiencing some of the worst morning commute travel times to downtown.
- Established communities want additional access for times of emergency as well as congestion relief.

FIGURE 3

AM PEAK PERIOD TRAVEL TIME TO DOWNTOWN (YEAR 2005)

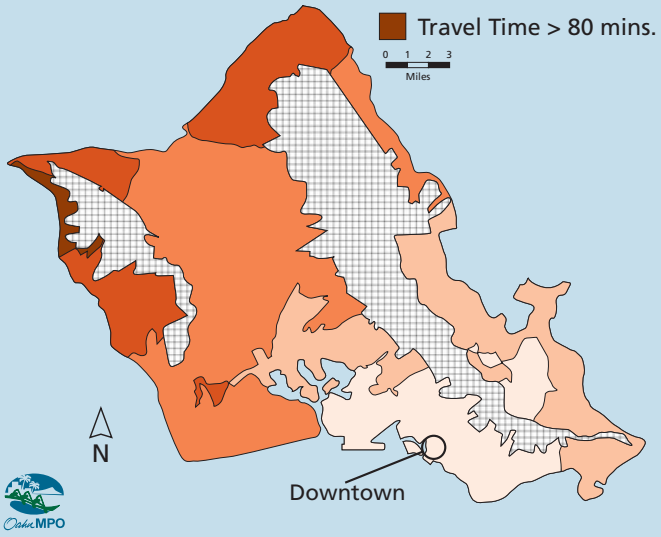
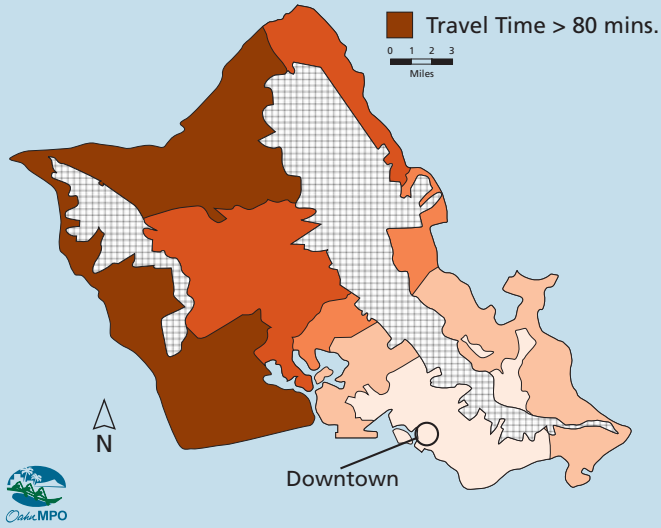


FIGURE 4

AM PEAK PERIOD TRAVEL TIME TO DOWNTOWN (BASELINE 2030)



- Many of our existing roadways need to be maintained, repaired, and rehabilitated.
- Our numerous transportation needs are constrained by our limited resources.

Our ultimate challenge is to decide how to distribute our limited resources to our various needs. There is only so much money available to fund transportation projects. How much money should be spent to reduce congestion on our roads, make our streets safer, provide more bikeways, create alternate accesses to communities, and maintain our roadways?

VISION FOR OAHU IN 2030

OAHU

ORTP VISION

In 2030, Oahu is a place where transportation choices are available and the importance of the H-1 travel corridor is recognized.

The vision for the ORTP 2030 is:

In 2030, Oahu is a place where transportation choices are available and the importance of the H-1 travel corridor is recognized.

The first part of our vision focuses on increasing our mobility options. We recognize that we cannot afford to eliminate congestion. To improve mobility, the ORTP 2030 provides a number of strategies and programs to address the island's future transportation needs. These include major capital improvement projects that add to the system's person-carrying and vehicular capacities; projects that expand on the existing systems and services to optimize their use; increased focus on operational, management, and preservation strategies; and programs that help integrate the transportation system into the land uses of each community.

This vision also acknowledges the importance of the H-1 travel corridor. Projects included in the transportation plan propose numerous ways to address the increased traffic congestion expected along this travel corridor:

- A major component of the ORTP 2030 is a fixed guideway between East Kapolei and Ala Moana.
- Also included in the plan are projects to increase the capacity of H-1 itself with new interchanges, additional High Occupancy Vehicle (HOV) lanes, freeway widenings, and operational improvements at key locations. These major H-1 travel corridor projects are supplemented with projects that provide alternatives to H-1, such as the intra-island commuter ferry from Ewa to downtown Honolulu and the Nimitz flyover HOV facility.
- The ORTP 2030 implements the island's bikeway plan; expands the bus system; and includes several second access/emergency access roadways and projects to maximize the use of existing facilities, and other measures to reduce the need for auto travel.

H-1

GOALS

The ORTP 2030 will advance us toward the vision for addressing future growth and traffic on Oahu. To meet our vision, the island-wide transportation plan for Oahu is defined by three overarching goals.

Transportation Services System:

Develop and maintain Oahu's island-wide transportation system to ensure efficient, safe, convenient, and economical movement of people and goods.

The objectives guiding this goal include increasing capacity of the system; providing an efficient and convenient transit system; providing access to all important destinations; serving all intermodal terminals; ensuring that projects are distributed equitably; ensuring that safety and security are provided; integrating the entire system; supporting economic development; and providing for system preservation.

Environment and Quality of Life:

Develop and maintain Oahu's transportation system in a manner that maintains environmental quality and community cohesiveness.

The objectives associated with this goal are directed at developing a plan that satisfies noise, air, and water quality standards; encouraging energy conservation; preserving cultural integrity and natural resources; developing alternative transportation modes that are environmentally friendly, including pedestrian walkways and bicycle routes; optimizing use of transportation resources; minimizing disruption of neighborhoods; ensuring compatibility with the physical and social character of existing development; incorporating landscaping and public safety; and planning for emergencies.

Land Use and Transportation Integration System Goal:

Develop and maintain Oahu's transportation system in a manner that integrates land uses and transportation.

The objectives that support this goal include reinforcing planned population distribution and land use development policies; encouraging innovation; and encouraging implementation of land use policies that support efficient use of transportation systems.

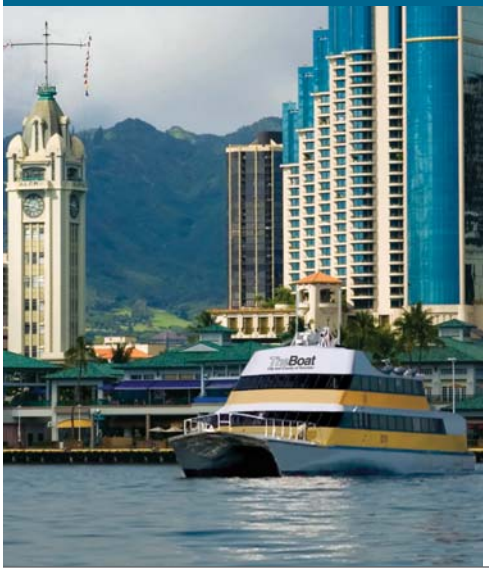
PALI HIGHWAY

OVERVIEW OF ORTP 2030 PROJECTS

FIXED GUIDEWAY

THEBUS

THEBOAT



The ORTP 2030 is a financially constrained plan that provides $7.61 billion for capital projects and $7.64 billion to operate, maintain, and preserve the highway and transit systems. The projects contained in the ORTP 2030 attempt to balance our need for mobility options, congestion relief, safety, second access, and bicycling and pedestrian facilities.

To improve mobility, a number of strategies and programs are proposed. These include new travel options, such as fixed guideway and ferry systems that add to the system's person-carrying capacities; projects that expand upon the existing systems and services to optimize their use; increased focus on operational, management, and preservation strategies; and programs that help integrate the transportation system into the land uses of each community.

With regard to congestion relief, the technical analysis and public input received during this effort highlighted the need to focus on the H-1 travel corridor and the Ewa and Central Oahu areas. Preliminary analysis indicated that island-wide congestion could be significantly addressed by focusing on the H-1 travel corridor. The need for transportation infrastructure in the Ewa area is already apparent and will increase in the future as population and employment are projected to grow substantially. Additional population and employment increases are also projected in Central Oahu.

The following provides descriptions of specific elements of the plan. Individual projects are listed on pages 18 through 22

Fixed Guideway

A key component of the ORTP 2030 is a fixed guideway that will serve the H-1 travel corridor. It is important to note that building a fixed guideway will not eliminate congestion. We will also not be able to eliminate congestion by building more highways, for we do not have the resources to keep up with the demand. The fixed guideway will give priority to moving people rather than cars, will be a major factor in providing mobility options, and will work together with our land use policies in shaping our city.

The proposed fixed guideway from East Kapolei to Ala Moana will become the backbone of the transit system – connecting major employment and residential centers to each other and to downtown Honolulu. This project also includes associated feeder bus services for each station and access ramps and other freeway improvements to facilitate the flow of buses that supplement the fixed guideway.

Transit System Expansion

While fixed guideway is the backbone of the transit system in the ORTP 2030, the existing bus system will continue to be an important element of public transportation. Many fixed guideway passengers are expected to access the system using City buses. Expansion of the bus system will be focused primarily in Ewa, with moderate increases in other parts of Oahu, including express bus service to rural areas. Purchasing and replacing new buses to support service increases are included in the plan.

An additional element of future transit service includes an intra-island express ferry service from Ewa to Honolulu Harbor.

Congestion Relief

The ORTP 2030 acknowledges that auto travel is, and will continue to be, a dominate travel mode and, subsequently, increases in roadway capacity will be required. This is especially true in the H-1 travel corridor and where congestion is forecast to increase significantly if new projects are not constructed. This plan provides an additional 280 lane-miles to Oahu's roadways.

As part of the ORTP 2030, new and expanded roadway projects are proposed for the Ewa area, Central Oahu, and PUC, where the majority of the residential and employment growth is projected. For the Ewa area, these projects include expansion of several roadways like the North-South Road and Kapolei Parkway; new or modified freeway interchanges in Kapolei and Makakilo; and the widening of existing roadways such as Farrington Highway, Fort Barrette Road, and Kunia Road. Examples of roadway projects in the Central Oahu area include expansion of Kamehameha Highway and H-1 between the Waiau and Waiawa Interchanges; and widening and improvements at the H-1 and H-2 Waiawa Interchange. Several capacity enhancement projects to various sections of H-1 from Pearl City to downtown Honolulu are also programmed.

H-1

BIKE LANE

Bicycle Facilities

One hallmark of a livable city is that its public spaces are actively used and the outdoors can be enjoyed. Honolulu is a great city for bicycles with its physical beauty, mild year-round climate, relatively flat coastal plain, and compact form. Enhancing the appealing qualities of Oahu can be achieved in part by integrating bicycle facilities as a key component of the transportation system. The ORTP 2030 incorporates the Oahu elements of Bike Plan Hawaii and the "Priority One" projects identified in the Honolulu Bicycle Master Plan. This provides Honolulu with an integrated network of on-road bike lanes and off-road shared-use paths to link people with their favorite destinations.

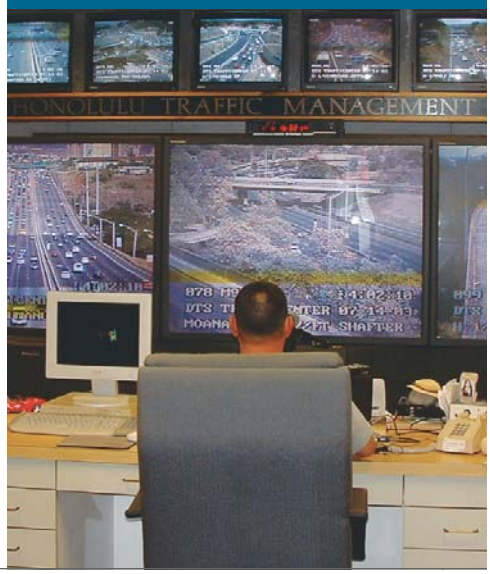
ITS

Pedestrian Facilities

The majority of us walk to get to our cars, catch a bus, and run errands on our lunch breaks. Some of us walk for exercise as well as to get to work and to shop. In past plans, pedestrian facilities were combined with bicycle facilities. We recognize that the needs of pedestrians are, in many cases, different from those of bicyclists. To address this difference, the ORTP 2030 includes the development of a pedestrian plan for Oahu.

Intelligent Transportation Systems

The ORTP 2030 contains an intelligent transportation system (ITS) line item. ITS is a collection of technologies that enable multiple agencies to work together to manage the transportation network better. ITS can include services for highways, transit services, commercial vehicle operations, and emergency service providers. ITS technologies can be used for emergency response and incident management. ITS technologies are effective in lessening the amount of time it takes to clear an accident on the freeway as well as providing travelers with information on traffic conditions and transit schedules.



OVERVIEW OF ORTP 2030 PROJECTS *(continued)*

HANDI-VAN

BUS SYSTEM

ROAD RESURFACING

TDM and TSM

Transportation Demand Management (TDM) and Transportation System Management (TSM) programs consist of measures that are designed to reduce demand and increase the efficiency of the transportation system. The TDM and TSM programs for Oahu include facilities to enhance flow, such as HOV lanes on freeways, park-and-ride lots, bus-only lanes on city streets, and even separate HOV facilities. Also included are programs to help form and maintain carpools and vanpools, as well as programs to give people incentives to rideshare.

Second Access Highways

While the coastal plains are relatively flat, Oahu's interior terrain is divided by two primary mountain ranges that can make access between communities difficult. Many of the established communities on the island have only one roadway into and out of the area. Providing a second means of access to these communities serves to increase the capacity to these areas and to provide needed emergency access. Four "second access" projects are included in the ORTP 2030 for Makakilo, Mililani Mauka, Wahiawa, and the Waianae Coast.

Operations, Maintenance, and System Preservation

The ORTP 2030 recognizes the importance of the existing and future roadways and transit systems from the perspective of operations, maintenance, and preservation. The plan includes the allocation of funding for these categories totaling $7.64 billion, or approximately half of the plan cost. This funding covers both City and State facilities.

City operations and maintenance funding includes operating the public transit system (TheBus, paratransit, the proposed fixed guideway, and the proposed commuter ferry system), and roadway system maintenance and operations. A total of approximately $5.79 billion is estimated for City operations and maintenance over the 25-year life of the plan – consisting of about $5.26 billion for transit operations and maintenance and $532 million for roadway system maintenance and operations.

Maintenance and operation of the State's existing and future highway operations and routine maintenance includes, but is not limited to, pavement repair; guardrail and shoulder improvements; lighting improvements; drainage improvements; sign upgrades and replacement; and traffic signal upgrade and retrofit. About $850 million is allocated in the plan for State maintenance and operations.

The ORTP 2030 allocates $1.0 billion, over the life of the plan, to preserving the highway system through projects including, but not limited to, bridge replacement and seismic retrofit, pavement preventative maintenance, erosion control, viaduct improvements, and road resurfacing and rehabilitation projects.

Illustrative Projects

The ORTP 2030 planning process identified many potential projects that could prove beneficial as transportation improvements for the island of Oahu; however, 2030 revenue projections could not support inclusion of these projects in the ORTP 2030 at this time. As part of the endorsement of the ORTP 2030, the OahuMPO Policy Committee identified a subset of those projects as "illustrative projects".Illustrative projects are identified in Figure 5 and Table 2.

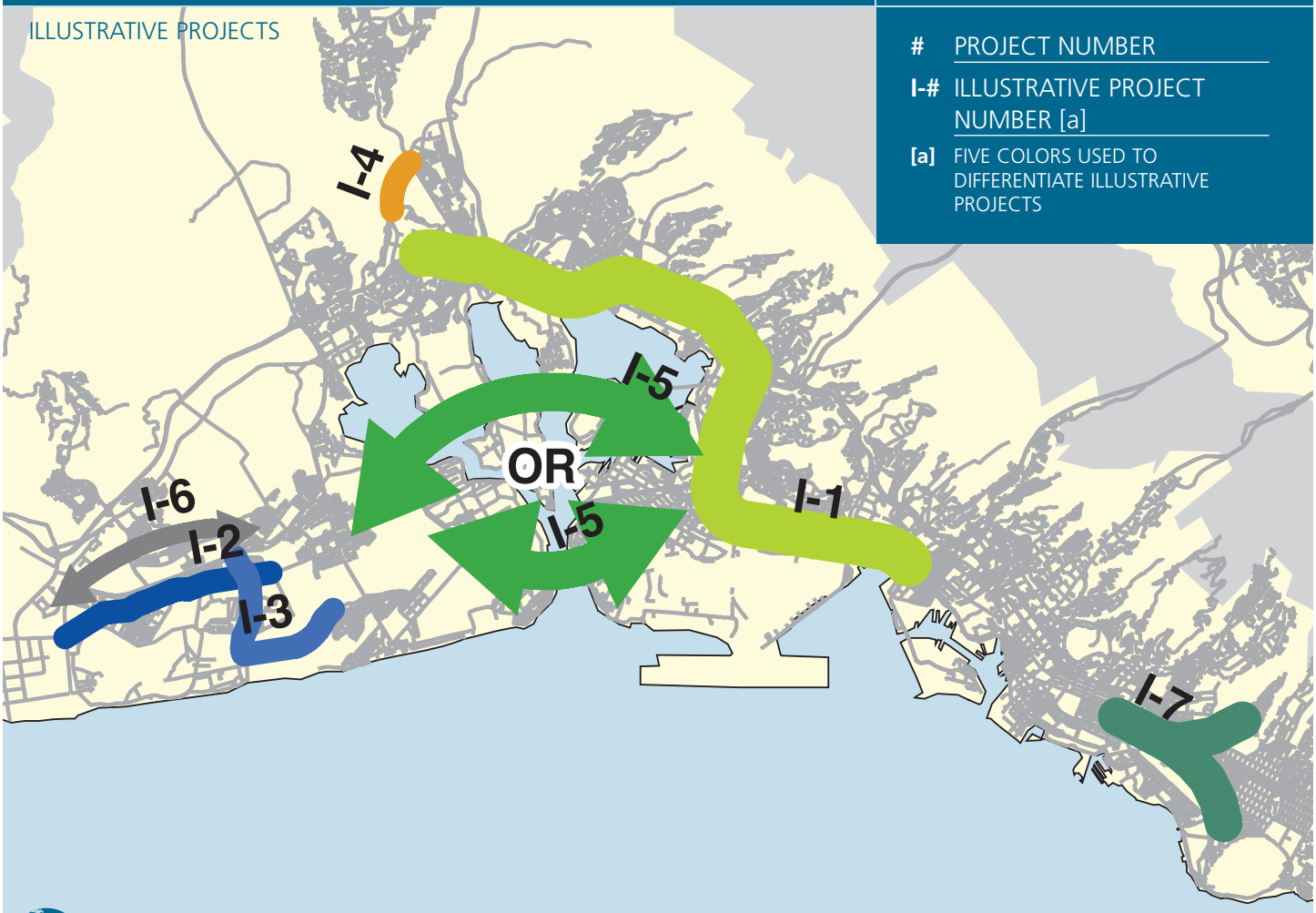
Illustrative projects are those projects that are considered high-priority for inclusion into the regional transportation plan should additional, firmly-established funding revenue sources become available. Illustrative projects are not considered to be a part of the officially endorsed regional transportation plan. Projects considered in the plan development and included on the ORTP 2030 illustrative projects list include fixed guideway segments from West Kapolei to East Kapolei and Ala Moana to Manoa/Waikiki, the concept of a Pearl Harbor crossing (tunnel or bridge), and elevated reversible high occupancy toll ("HOT") lanes within the H-1 travel corridor.

ILLUSTRATIVE PROJECTS

Illustrative projects are those projects that are considered high-priority for inclusion into the regional transportation plan should additional, firmly-established funding revenue sources become available.

FIGURE 5

ILLUSTRATIVE PROJECTS



LEGEND

#	PROJECT NUMBER
I-#	ILLUSTRATIVE PROJECT NUMBER [a]
[a]	FIVE COLORS USED TO DIFFERENTIATE ILLUSTRATIVE PROJECTS

Note: Project I-5 will provide an alternative route through the Pearl Harbor Corridor. Options include a bridge or a tunnel.

HOW THE PROJECTS WORK TOGETHER

FIGURE 6

YEAR 2005 DAILY RESIDENT PERSON TRIPS

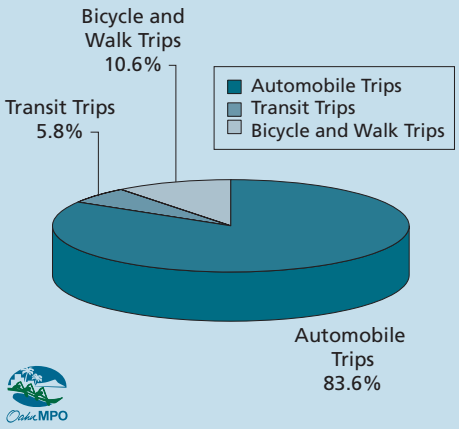


FIGURE 7

BASELINE 2030 DAILY RESIDENT PERSON TRIPS

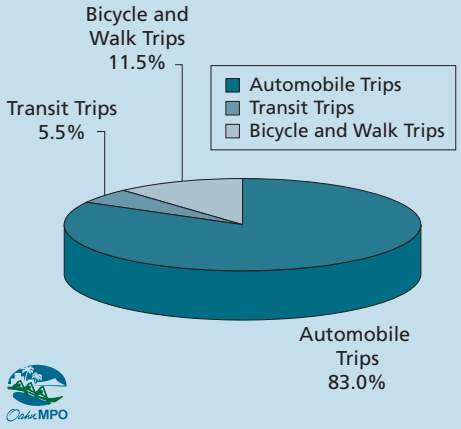
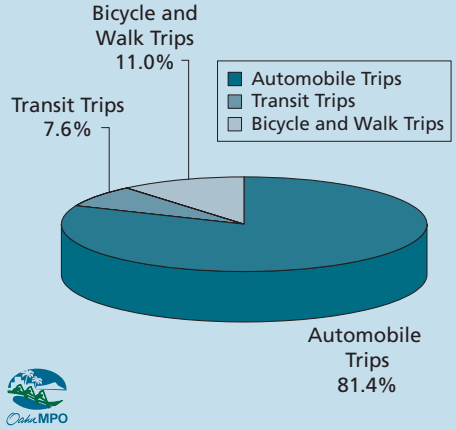


FIGURE 8

ORTP 2030 DAILY RESIDENT PERSON TRIPS



Between 2005 and 2030, we project that the number of trips people will make will increase by about 27%. This means about a fourth more people wanting to go to work, school, stores, beaches, and other places. Travel forecasting models were used to estimate how projects contained in the ORTP 2030 would collectively handle this demand. To help evaluate the quality of our future transportation system, comparisons were made between the ORTP 2030 and the following: 1) Year 2005 conditions and 2) Baseline 2030 conditions.

Comparing the Year 2005 to the ORTP 2030 conditions:

- The percentage of people making trips by auto decreases from 83.6% in 2005 to 81.4% in the ORTP 2030 (Figures 6 & 8). This decrease is offset primarily from an increase in transit trips from 5.8% to 7.6% due to the increase in transit services. This translates to 105,000 additional transit trips (with visitors) as shown in Figure 16. The percentage of people biking or walking increases slightly from 10.6% to 11%. Although the percentage of people making auto trips decreased, there is still projected to be over 540,000 additional auto trips.
- The added population growth in the ORTP 2030 will generate more travel during the day, resulting in a 22% increase in both vehicle miles traveled (VMT) and vehicles hours traveled (VHT), as seen in Figures 13 and 14, respectively. Daily vehicle hours of delay also increases 18% from 50,000 to 59,000 hours, as seen in Figure 15.
- Compared against 2005 conditions, the added transportation improvements in the ORTP 2030 are forecasted to slightly reduce the average travel time per vehicle trip from 12.3 minutes to 12.1 minutes.
- Indicators for traffic congestion during the morning peak period are somewhat poorer.
    - From an island-wide perspective, auto drivers can expect more "bottlenecks".
    - Average travel times from various areas on Oahu to downtown vary slightly between the Year 2005 and the ORTP 2030 when comparing Figure 3 with Figure 10, with the differences highlighted in Figure 11.
    - Average travel time is projected to increase from 23.8 minutes to 26.4 minutes.

Comparing the Baseline 2030 to the ORTP 2030 conditions:

- The percentage of people making trips by auto decreases from 83.0% in Baseline 2030 to 81.4% in the ORTP 2030, resulting in about 44,000 less auto trips. The percentage of people biking or walking also decreases slightly from 11.5% to 11% (Figures 7 & 8). These decreases are offset with an increase in transit trips from 5.5% to 7.6% due to the increase in transit services and reduced levels of congestion. This translates into about 72,000 additional transit trips (with visitors) as shown in Figure 16.

- By providing more roadway capacity for our projected population growth, a 5% decrease in VMT, 22% decrease in VHT, and 62% decrease in daily vehicle hours of delay are projected.
- Indicators for traffic congestion during the morning peak period are positive, suggesting that the ORTP 2030 will alleviate the substantially increased delays and travel times projected in the Baseline 2030.
  - From an island-wide perspective, auto drivers can expect fewer "bottlenecks", as can be seen in comparing Figure 2 with Figure 9.
  - Average travel times from the various areas on Oahu to downtown decrease by 13.9 minutes, from 40.3 minutes to 26.4 minutes. As seen in Figure 12, Waianae Coast and Ewa residents realize the greatest travel time savings.

FIGURE 9

LOCATIONS OF SIGNIFICANT AM PEAK HOUR CONGESTION (ORTP 2030)

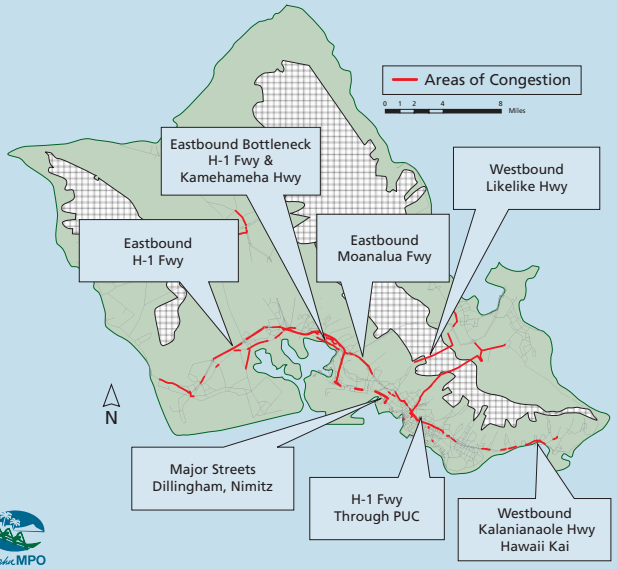


FIGURE 10

AM PEAK PERIOD TRAVEL TIME TO DOWNTOWN (ORTP 2030)

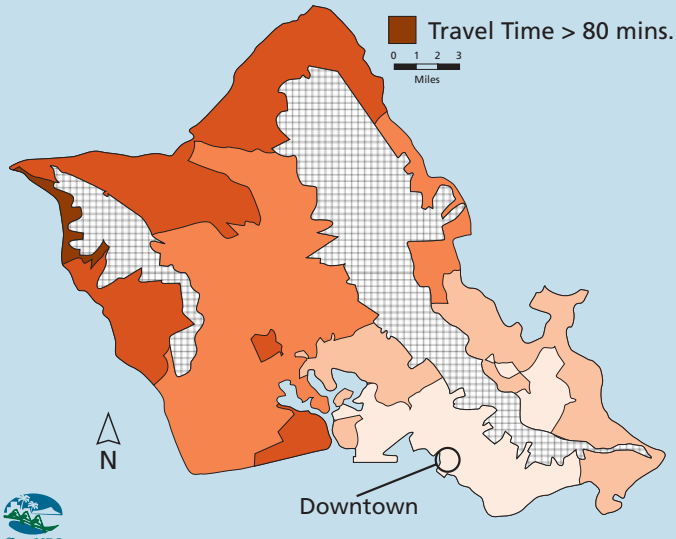


FIGURE 11

CHANGE IN AM PEAK PERIOD TRAVEL TIME TO DOWNTOWN (YEAR 2005 TO ORTP 2030)

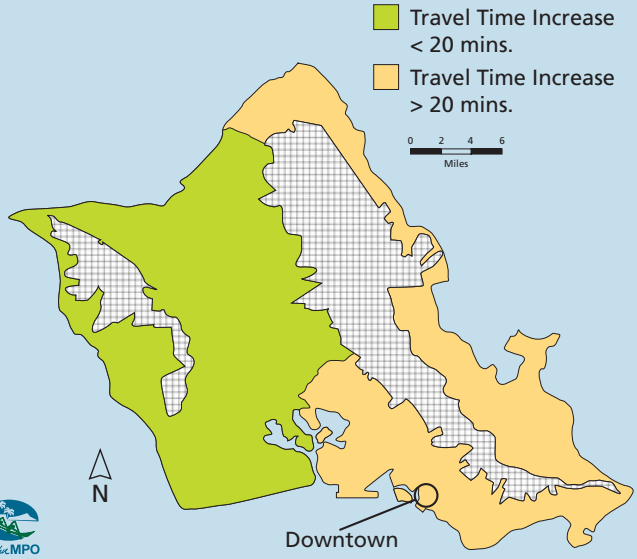
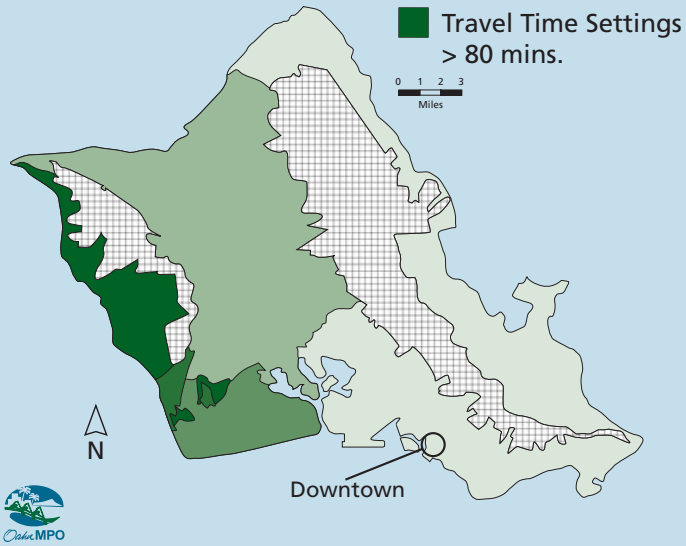


FIGURE 12

CHANGE IN AM PEAK PERIOD TRAVEL TIME TO DOWNTOWN (BASELINE 2030 TO ORTP 2030)



PAYING FOR THE PLAN

The ORTP 2030 is a financially balanced plan that optimizes projected costs with anticipated revenues. All costs are in Year 2005 dollars.

Sources of Revenue for the ORTP 2030

Primary sources of revenues used to support the surface transportation system for Oahu have been, and will continue to be, the Federal, State, and City governments. We estimate that about $15.25 billion will be available over the next 25 years for transportation on Oahu as shown in Figure 17.

The federal portion of these funds, which represents about 23% of the total, is provided through highway funds from the Federal Highway Administration (FHWA) and transit funds from the Federal Transit Administration (FTA).

The State portion, which represents about 17% of the total, comes from the Highway Special Fund and the State Capital Improvement Program (CIP). The Highway Special Fund receives its money from the State liquid fuel tax, registration fees, motor vehicle weight tax, and car rental/tour vehicle tax.

Revenues from the City & County of Honolulu will pay for about 48% of the transportation system costs from 2006 to 2030. Figure 18 identifies the various sources of City funds, including the General Fund as well as County fuel tax, County motor vehicle weight tax, and public utility franchise tax. The County's 0.5% general excise tax (GET) 15-year surcharge (beginning in 2007) to fund the fixed guideway component of the Plan is assumed.

FIGURE 13

DAILY VEHICLE MILES TRAVELED

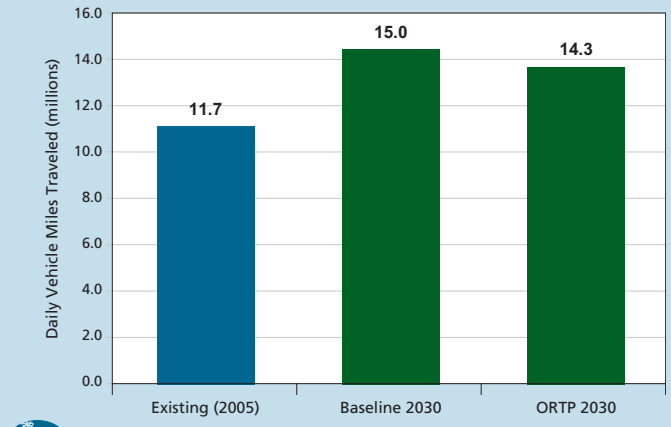


FIGURE 14

DAILY VEHICLE HOURS TRAVELED

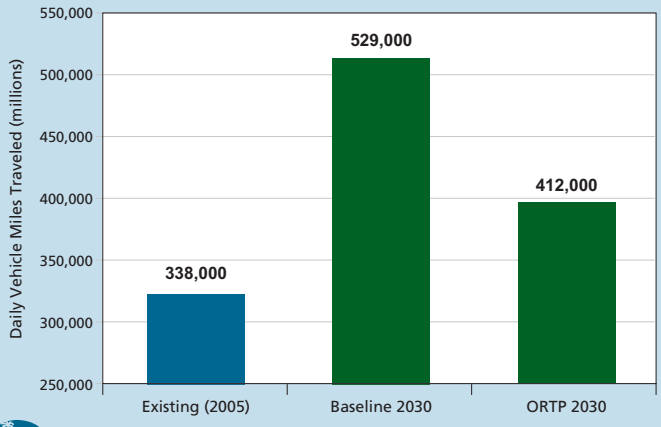


FIGURE 15

DAILY VEHICLE HOURS OF DELAY

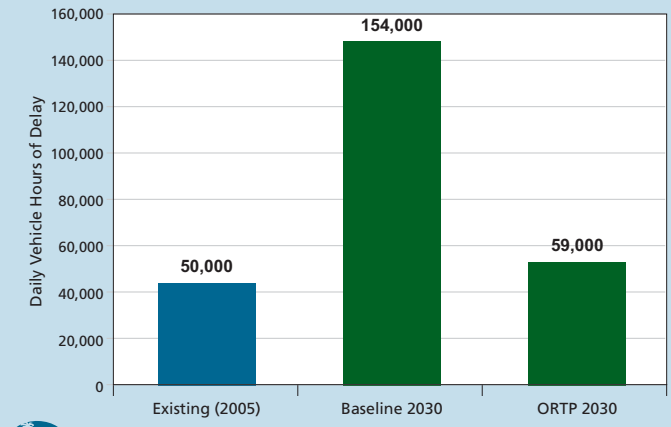
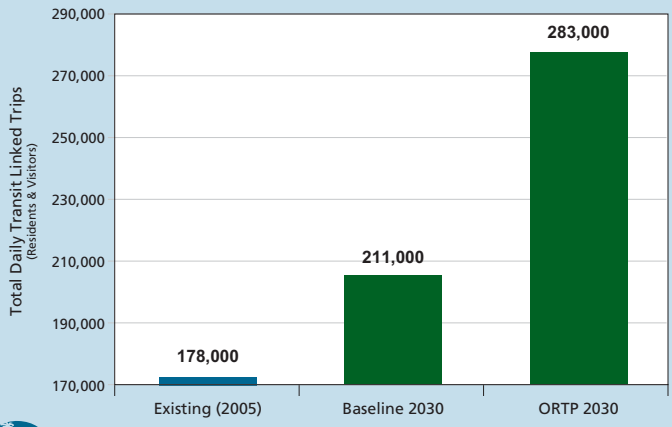


FIGURE 16

DAILY TRANSIT TRIPS (LINKED TRIPS)



The City & County of Honolulu also collects transit fares that cover 27% to 33% of the cost to operate the bus system.

For planning purposes, a portion of the plan is expected to be funded by the private sector to cover some highway projects costs and a portion of the TDM element of the ORTP 2030. Although this source is labeled "developer funding", it is not limited to impact fees and includes other options allowed by State law or County ordinances.

The assumed level of revenues from developer contributions is not intended to establish any developer funding obligations, commitments, or guidelines. Actual funding obligations and commitments will be determined through other planning efforts of the City & County of Honolulu and/or the State.

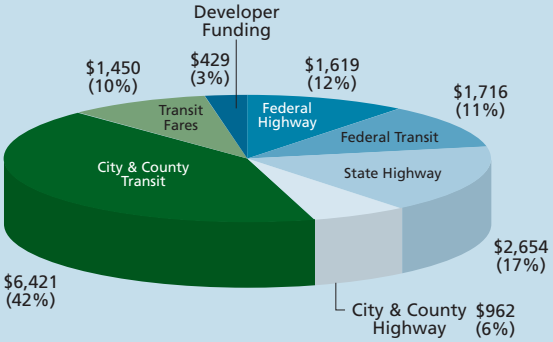
Revenue Projections

The amount of money that will be available to pay for the capital improvement projects included in the plan and the cost to operate and maintain the system over the 25-year life of the plan were projected using historical trends and future expectations.

Total revenues of approximately $15.25 billion are anticipated over the 25-year life of the plan. The $15.25 billion includes $3.34 billion in Federal funds, $2.65 billion in State funds, $7.38 billion in City & County of Honolulu funds, $1.45 billion in transit fares, and $0.43 billion in developer funding.

FIGURE 17

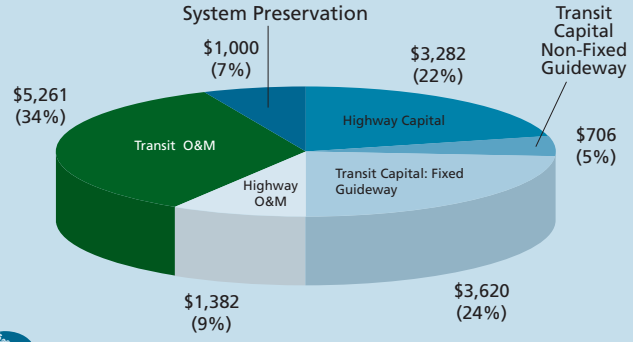
ESTIMATED TRANSPORTATION REVENUES: 2006-2030
(MILLIONS OF CONSTANT 2005 DOLLARS)



$15,251 Million Total

FIGURE 19

ESTIMATED PLAN COSTS: 2006-2030
(MILLIONS OF CONSTANT 2005 DOLLARS)

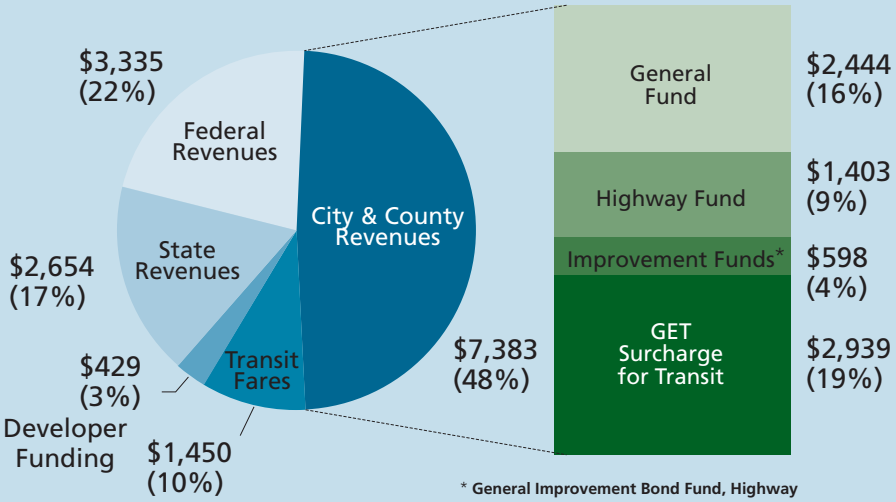


$15,251 Million Total

* O&M = Operations and Maintenance

FIGURE 18

BREAKOUT OF CITY & COUNTY CONTRIBUTION TO TOTAL REVENUES: 2006-2030
(MILLIONS OF CONSTANT 2005 DOLLARS)



* **General Improvement Bond Fund, Highway Improvement Bond Fund & Capital Projects Fund**

$15,251 Million Total

Note: Individual numbers may not sum to totals due to rounding

PAYING FOR THE PLAN *(continued)*

FIGURE 20

PROJECT CAPITAL COSTS BY TYPE (MILLIONS OF CONSTANT 2005 DOLLARS)

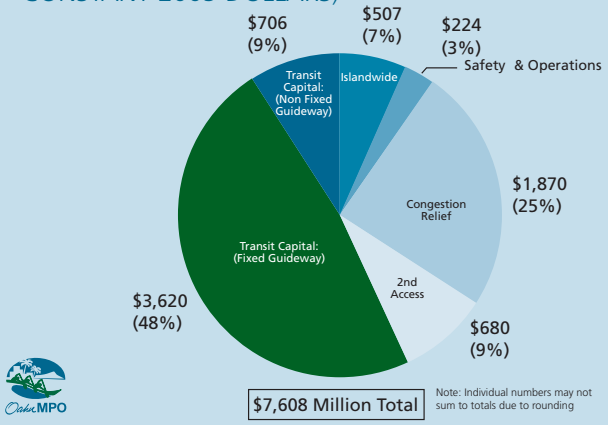
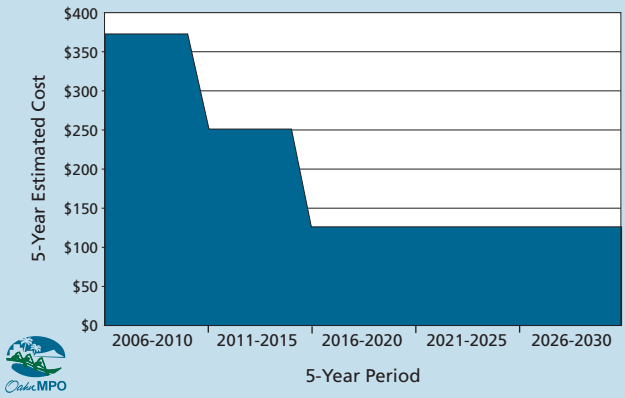


FIGURE 21

SYSTEM PRESERVATION COSTS (MILLIONS OF CONSTANT 2005 DOLLARS)



For the ORTP 2030 planning purposes, the following assumptions were made:

- Recent trends for Federal highway and transit funds allocated to Hawaii will continue.
- The City & County of Honolulu will obtain $681 million in federal funds to assist in the construction costs for the fixed guideway.
- 60% of the State's CIP funds will be spent on Oahu.
- 54% of the federal funds apportioned to the State will be spent on Oahu.

Revenue projections are used to estimate the level of transportation "supply" Oahu can reasonably afford and are based on the best available information. The primary purpose of these projections is to ensure the financial viability of the ORTP 2030 from a regional perspective. As projects move from the ORTP 2030 to implementation, funding assumptions (e.g., sources of funds, level of funding, etc.) may be modified. Generally, these modifications should not substantially affect the ORTP 2030 financial plan. Revisions to the ORTP 2030 and its financial plan can be made during its regular five-year update cycle or when an action triggers the need for such an adjustment. Amendments to the ORTP 2030 financial plan may be made if major changes are made to the funding assumptions that would affect the plan's financial viability.

Cost of the Plan

The ORTP 2030 is a financially balanced plan; the total cost for the 25-year plan is limited to $15.25 billion. The cost estimates for the plan include capital improvement projects, costs to operate and maintain the current and expanded transit system, and costs to maintain and preserve the highway system, as identified in Figure 19.

The plan provides $1.0 billion for highway system preservation. Maintenance and preservation of the transportation system is important because it provides a safe and efficient system for Oahu's roadway users. Without timely maintenance, the life of the transportation system would be shortened, leading to more expensive replacement costs as the system fails prematurely. The plan also sets aside $1.38 billion for highway operations and routine maintenance ($0.85 billion for State and $0.53 billion for the City & County of Honolulu), and $5.26 billion to operate the transit system (bus, paratransit, ferry, and fixed guideway), of which $144 million is to operate and maintain the commuter ferry.

The ORTP 2030 includes $7.61 billion in capital costs, as seen in Figure 20: $3.28 billion for highway construction; $0.71 billion to implement a ferry system, purchase new buses, and construct transit centers; and $3.62 billion to build the fixed guideway.

In order to counter some of the neglect of the past, the plan increases spending for system preservation in the early years, then reduces the amount of spending in later years back to traditional levels, as shown in Figure 21.

The financial plan for the ORTP 2030 is balanced, with projected revenues and estimated costs matched at $15.25 billion over the 25-year period of the plan.

SUMMARY

The ORTP 2030 provides a multi-prong approach to achieve our vision and address our future travel needs. Forecasted congestion is reduced and mobility options increased. Specifically:

- The H-1 travel corridor is identified as our priority corridor.
- A fixed guideway that will serve the H-1 travel corridor is a key component of the ORTP 2030.
- Capital projects that serve those who do not or choose not to drive, those who require another access to their community, and those who seek some relief from congestion are planned.
- Half of the plan dedicates funding for system preservation projects and operations and maintenance projects.

Although the ORTP 2030 provides significant improvements over the Baseline 2030, we should still expect more bottlenecks in the future and some decrease in average overall travel time to downtown Honolulu during the morning peak period when compared to 2005.

The ORTP 2030 fulfills the Transportation Services System Goal through developing and maintaining Oahu's islandwide transportation system to ensure efficient, safe, convenient, and economical movement of people and goods. The plan increases the capacity of the system, providing an efficient and convenient transit system serving many destinations across the island. The planned projects are distributed across Oahu, supporting economic development and providing funds to support system preservation.

The ORTP 2030 fulfills the Environment and Quality of Life Goal by developing and maintaining Oahu's transportation system in a manner that maintains environmental quality and community cohesiveness. The plan strives to achieve this goal by improving air quality and encouraging energy conservation through the reduction of VMT; and developing alternative modes of transportation that are environmentally friendly – including transit, pedestrian walkways, and bicycle routes – while optimizing use of transportation resources and minimizing impacts on cultural and natural resources and disruption of neighborhoods. The plan considers compatibility with the physical and social character of existing development, incorporates transportation system enhancements, and includes improvements that address public safety and emergency planning.

The ORTP 2030 fulfills the Land Use and Transportation Integration System Goal by developing and maintaining Oahu's transportation system in a manner that integrates transportation with the City's land use policies. The plan reinforces planned population distribution and land use development policies, encourages innovation, and encourages implementation of land use policies that support efficient use of transportation systems.

HONOLULU

ORTP 2030 PROJECT LIST

FARRINGTON HIGHWAY

THE ZIPPER

KAPOLEI PARKWAY EXTENSION

Each project in the ORTP 2030 is listed in Table 1 and shown on Figure 22. They are prioritized into a "Mid-Range Plan" to be implemented over the next 10 years; and a "Long-Range Plan" to be implemented over the final 15 years of the plan. Projects were placed within each time period based on anticipated funding and the following guidelines:

- Projects of different categories (e.g., island-wide, congestion relief, second access, transit) are placed in both the mid-range and long-range plans. An exception is the placement of all safety projects into the mid-range plan.
- Projects on the FYs 2004-2006 TIP are placed in the mid-range plan.
- Basic elements of projects in the Ewa/Kapolei area are placed in the mid-range plan.

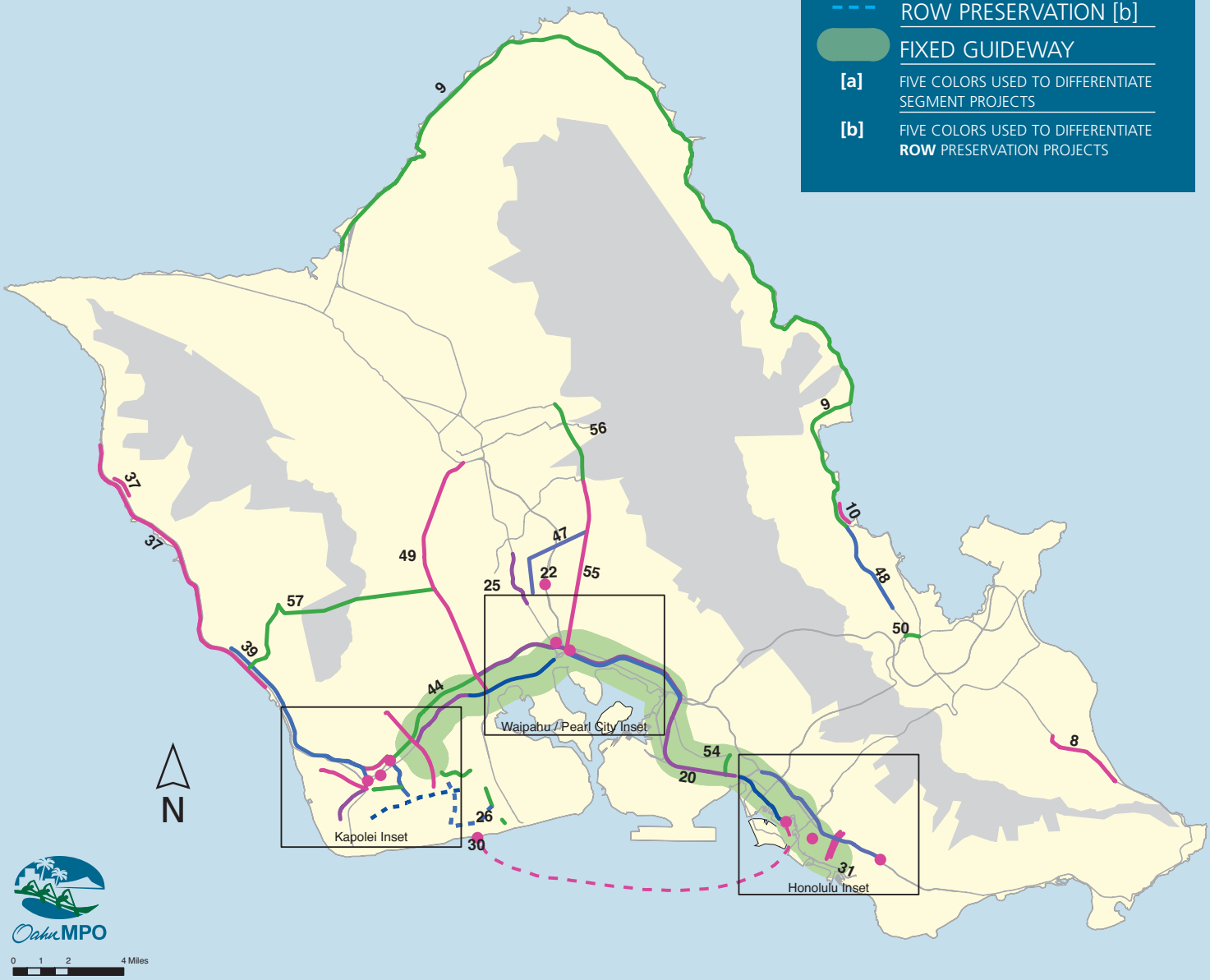
In addition, each project has been given a City and County of Honolulu ("C") or State of Hawaii ("S") designation. While the ORTP 2030 identifies projects as falling under the jurisdiction of either the City or the State, it is done so for reasons of financially balancing the project revenues with the order-of-magnitude cost estimates. This designation does not preclude an entity other than the City or the State from constructing the roadway partially or in its entirety.

FIGURE 22

ORTP 2030 PROJECT LOCATION MAP

LEGEND

- # PROJECT NUMBER
- SPOT PROJECTS
- SEGMENT PROJECTS [a]
- FERRY
- ROW PRESERVATION [b]
- FIXED GUIDEWAY
- [a] FIVE COLORS USED TO DIFFERENTIATE SEGMENT PROJECTS
- [b] FIVE COLORS USED TO DIFFERENTIATE **ROW** PRESERVATION PROJECTS



Disclaimer: The location of second-access projects will be determined by the implementing agency as part of the planning and design stages of the project implementation.

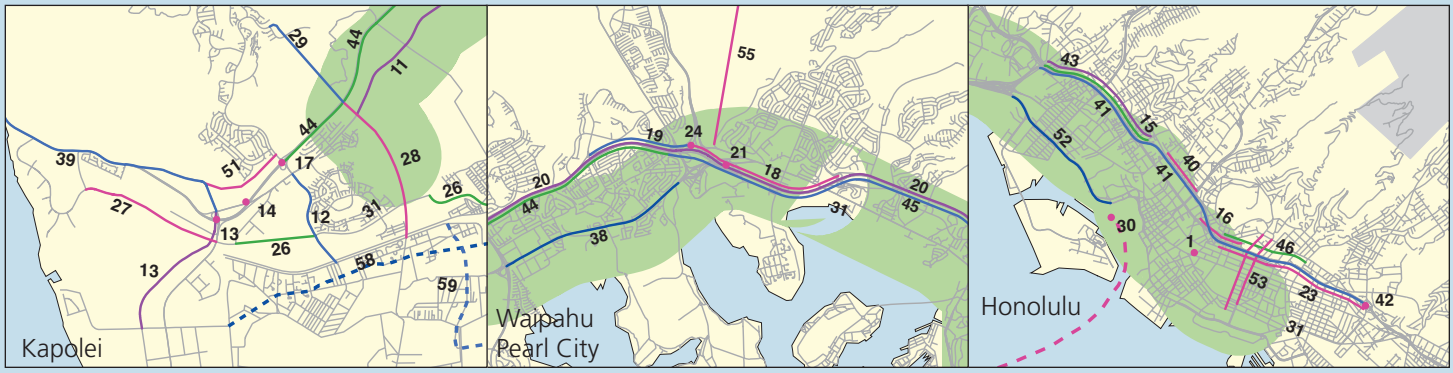


TABLE 1 OAHU REGIONAL TRANSPORTATION PLAN 2030

MID-RANGE PLAN (2006 TO 2015)

PROJECT NO.	CITY/ STATE	FACILITY/PROJECT TITLE	PROJECT DESCRIPTION	ESTIMATED COST (Millions of Year 2005 $)
ISLANDWIDE PROJECTS - 2006 TO 2015				
1	C/S*	Alapai Transit Center & Joint Transportation Management Center	Construct a multi-use facility at Alapai Street to include a transit center, City-State transportation management center, and other operations.	$30.0
2	C/S*	Bike Plan Hawaii - Oahu	Implement Oahu elements of the State of Hawaii's Bike Plan Hawaii. (Bike Plan Hawaii includes only "Priority One" projects as identified in the Honolulu Bicycle Master Plan.)	$40.6 of $101.6 total in 1st 10 years
3	C/S*	Enhancement Projects	Implement enhancement projects, including, but not limited to, projects from the Transportation Enhancement Program for Oahu. Includes development of a pedestrian plan for Oahu.	$20.0 of $50.0 total in 1st 10 years
4	C/S*	Intelligent Transportation Systems (ITS)	Implement ITS projects including, but not limited to, those identified in the Oahu Regional ITS Architecture.	$60.0 of $150.0 total in 1st 10 years
5	S	Rockfall Protection, Various Locations	Install rockfall protection or mitigation measures along various state highways at various locations.	$22.5
6	C/S*	Transportation Demand Management (TDM) Program	Develop an aggressive TDM program that could include, but is not limited to: 1. Free real-time online carpool matching, 2. Outreach promotion and marketing of alternative transportation, 3. Emergency ride home program, 4. Major special events, 5. Employer based commuter programs, 6. Emerging and innovative strategies (i.e., car sharing).	$62.9 of $152.9 total in 1st 10 years
7	S	Van Pool Program	Continue implementation and expansion of the State's Van Pool Program.	Included as part of project # 6
SAFETY & OPERATIONAL IMPROVEMENT PROJECTS - 2006 TO 2015				
8	S	Kalanianaole Highway, Safety & Operational Improvements, Olomana Golf Course to Waimanalo Beach Park	Construct safety and operational improvements along Kalanianaole Highway between the Olomana Golf Course and Waimanalo Beach Park. Specific safety and operational improvements include construction of turning lanes, sidewalks, wheelchair ramps, bike paths or bike lanes, traffic signal upgrades, utility relocation, and drainage improvements.	$19.7
9	S	Kamehameha Highway, Safety Improvements, Haleiwa to Kahaluu	Construct safety improvements along Kamehameha Highway, from Haleiwa to Kahaluu. Safety improvements include turn lanes, guardrails, signage, crosswalks, etc. to improve safety. Widening of Kamehameha Highway will only be in areas where needed for storage/turn lanes safety improvements.	$115.9
10	S	Kamehameha Highway, Safety & Operational Improvements, Kaalaea Stream to Hygienic Store	Construct safety and operational improvements along Kamehameha Highway, between Kaalaea Stream and Hygienic Store. Safety and operational improvements include passing and turning lanes, modification of signals, installation of signs, flashers, and other warning devices. This project also includes replacement of Kaalaea Stream Bridge and Haiamoa Stream Bridge with structures that meet current design standards.	$18.9
CONGESTION RELIEF PROJECTS - 2006 TO 2015				
11	C	Farrington Highway, Widening, Golf Course Road to west of Fort Weaver Road	Widen Farrington Highway from 2 to 4 lanes, from Golf Course Road to just west of Fort Weaver Road.	$36.6
12	C	Fort Barrette Road, Widening, Farrington Highway to Franklin D. Roosevelt Avenue	Widen Fort Barrette Road from 2 to 4 lanes, from Farrington Highway to Franklin D Roosevelt Avenue.	$24.9
13	C	Hanua Street, Extension, Farrington Highway to Malakole Street; Interstate Route H-1, New On- & Off-Ramps, Palailai Interchange	**Hanua Street:** • Extend Hanua Street from Malakole Street to Farrington Highway. This new 4-lane roadway will provide access to Kalaeloa Harbor. **Interstate Route H-1, Palailai Interchange:** • Construct new on- and off-ramps at Interstate Route H-1 Palailai Interchange to Hanua Street extension.	$61.1
14	S	Interstate Route H-1, New Interchange, Kapolei Interchange	Construct new Interstate Route H-1 Kapolei Interchange for Kapolei between the Palailai Interchange and Makakilo Interchange.	$45.5
15	S	Interstate Route H-1, Widening, Middle Street to Vineyard Boulevard	Widen the Interstate Route H-1 by 1 lane, in the eastbound direction, from Middle Street to Vineyard Boulevard, as identified below: • From 2 to 3 lanes from Middle Street to Likelike Highway off-ramp • From 3 to 4 lanes from Likelike Highway off-ramp to Vineyard Boulevard This project also includes the widening of: • Gulick Avenue overpass to allow 5 lanes to pass under it • Kalihi Interchange overcrossings to allow 4 lanes to pass under it	$34.8
16	S	Interstate Route H-1, Operational Improvements, Lunalilo Street to Vineyard Boulevard	Modify the weaving movements on the Interstate Route H-1, in the westbound direction, between the Lunalilo Street on-ramp and the Vineyard Boulevard off-ramp.	$24.3

TABLE 1 OAHU REGIONAL TRANSPORTATION PLAN 2030

PROJECT NO.	CITY/ STATE	FACILITY/PROJECT TITLE	PROJECT DESCRIPTION	ESTIMATED COST (Millions of Year 2005 $)
CONGESTION RELIEF PROJECTS - 2006 TO 2015 *(continued)*				
17	S	Interstate Route H-1, New On- & Off-Ramps, Makakilo Interchange	Construct a new eastbound off-ramp and a new westbound on-ramp to the Interstate Route H-1 at the Makakilo Interchange.	$9.9
18	S	Interstate Route H-1, Widening, Waiau Interchange to Waiawa Interchange	Widen Interstate Route H-1 in the westbound direction by 1 lane from the Waiau Interchange to the Waiawa Interchange.	$137.5
19	S	Interstate Route H-1, Widening, Waiawa Interchange	Widen the Interstate Route H-1 by 1 lane, in the westbound direction, through the Waiawa Interchange. This project will begin in the vicinity of the Waiawa Interchange and end at the Paiwa Interchange. • From 2 to 3 lanes in AM peak • From 4 to 5 lanes in PM peak	$6.9
20	S	Interstate Route H-1, Zipper Lane (PM), Keehi Interchange to Kunia Interchange	Construct a Zipper lane on the Interstate Route H-1, in the westbound direction, from Keehi Interchange to Kunia Interchange. This project would be in use during the PM peak.	$19.9
21	S	Interstate Route H-1, Widening, Waipahu Off-Ramp	Widen the Interstate Route H-1 Waipahu Street off-ramp from 1 to 2 lanes, in the westbound direction, at the Waiawa Interchange.	$11.7
22	S	Interstate Route H-2, Widening, Waipio Interchange	Widen both on- and off-ramps on Interstate Route H-2, at the Waipio Interchange. This project includes the widening of the Ka Uka Boulevard overpass and intersection improvements to facilitate movement to and from the on- and off-ramps.	$20.7
23	S	Interstate Route H-1, Operational Improvements, Ward Avenue On-Ramp to University Avenue Interchange	Improve traffic flow on the Interstate Route H-1, in the eastbound direction, from the Ward Avenue on-ramp to the University Avenue Interchange through operational improvements.	$13.7
24	S	Interstate Routes H-1 & H-2, Operational Improvements, Waiawa Interchange	Modify the Interstate Routes H-1 and H-2 Waiawa Interchange, to improve merging characteristics through operational improvements (e.g., additional transition lanes).	$45.5
25	S	Kamehameha Highway, Widening, Lanikuhana Avenue to Ka Uka Boulevard	Widen Kamehameha Highway from a 3-lane to a 4-lane divided facility between Lanikuhana Avenue and Ka Uka Boulevard. This project includes shoulders for bicycles and disabled vehicles, bridge crossing replacement, bikeways, etc.	$78.9
26	C	Kapolei Parkway, Extension, Kamokila Boulevard to Papipi Road	Extend the existing 4-lane Kapolei Parkway by constructing the segments in each of the following areas: • Kamokila Boulevard to Fort Barrette Road • Ewa Village boundary to Renton Road • Geiger Road to Papipi Road	$78.9
27	C	Kapolei Parkway, Extension & Widening, Aliinui Drive to Kalaeloa Boulevard	Extend the existing 4-lane Kapolei Parkway, from Aliinui Drive to Hanua Street. This project includes widening of Kapolei Parkway from 4 to 6 lanes from Hanua Street to Kalaeloa Boulevard.	$46.9
28	S	North-South Road, Widening & Extension, Interstate Route H-1 to Franklin D Roosevelt Avenue	Widen and extend North-South Road as follows: • From 3 to 6 lanes from Kapolei Parkway to Interstate Route H-1 • Extend from Kapolei Parkway to Franklin D Roosevelt Avenue (6 lanes)	$35.3
SECOND ACCESS PROJECTS - 2006 TO 2015				
29	C	Makakilo Drive, Second Access, Makakilo Drive to North-South Road/Interstate Route H-1 Interchange	Extend Makakilo Drive (vicinity Pueonani Street) south to the Interstate Route H-1 Freeway Interchange as 4-lane roadway, connecting Makakilo Drive to North-South Road.	$32.8
TRANSIT PROJECTS - 2006 TO 2015				
30	C	Ferry, Intra-Island Express Commuter, in the vicinity of Ocean Pointe Marina to Honolulu Harbor	Implement intra-island passenger ferry in the vicinity of the Ocean Pointe Marina in Ewa and Honolulu Harbor.	$23.2
31	C	Fixed Guideway, East Kapolei to Ala Moana	Plan, design, and construct a fixed guideway system between East Kapolei and Ala Moana. This project includes intermodal connections with TheBus system to provide feeder services to fixed guideway stations. Note that the alignment, system technology, and location of transit stations may be refined during the preliminary engineering, Environmental Impact Statement and subsequent processes.	$2,644.3 of $3,620.3 in 1st 10 years
32	C	TheBus Service, Expansion, Islandwide	Expand the bus service through increase of capacity of the existing system to accommodate population growth. Expanded service will be ADA-compliant. This includes: • Expansion to and within Ewa, Kapolei, and Central Oahu • mplementation of the Hub and Spoke bus system with transit centers and circuitous routes • Expansion through increase of Express service to the North Shore, Waianae, and Windward Oahu	$199.3 of $606.5 total in 1st 10 years

TABLE 1 OAHU REGIONAL TRANSPORTATION PLAN 2030

MID-RANGE PLAN (2006 TO 2015)

LONG-RANGE PLAN (2016 TO 2030)

PROJECT NO.	CITY/ STATE	FACILITY/PROJECT TITLE	PROJECT DESCRIPTION	ESTIMATED COST (Millions of Year 2005 $)
TRANSIT PROJECTS - 2006 TO 2015 *(continued)*				
33	C	Transit Centers, Various Locations	Construct transit centers at various locations islandwide to support the Fixed Guideway and TheBus systems.	$49.1 of $76.7 total in 1st 10 years
OPERATIONS, MAINTENANCE & SYSTEM PRESERVATION - 2006 TO 2015				
34	C	City Operations and Maintenance (O&M)	Maintain and operate the City's existing and future roadway, transit and paratransit operations and routine maintenance. Includes, but is not limited to, operation of the transit system (including bus, paratransit, fixed guideway, and ferry), resurfacing, guardrail and shoulder improvements, lighting improvements, drainage improvements, sign upgrades and replacement, etc.	$1,918.3 in 1st 10 years ($1,690.3 transit O&M, $228 roadway O&M)
35	S	State Operations and Maintenance	Maintain and operate the State's existing and future highway operations and routine maintenance. Includes, but is not limited to, pavement repair, guardrail and shoulder improvements, lighting improvements, drainage improvements, sign upgrades and replacement, traffic signal upgrade and retrofit, etc.	$340 in 1st 10 years
36	S	System Preservation	Preserve the highway system through projects including, but not limited to, bridge replacement and seismic retrofit, pavement preventative maintenance, resurfacing and rehabilitation, etc.	$625 in 1st 10 years
COST SUBTOTALS: MID-RANGE PLAN (2006 TO 2015)			CATAGORIES	SUBTOTALS
			Islandwide Projects	$236.0
			Safety & Operational Improvement Projects	$154.5
			Congestion Relief Projects	$733.0
			Second Access Projects	$32.8
			Transit Projects	$2,915.9
			Operations, Maintenance, & System Preservation	$2,883.3
			All Categories	**$6,955.5**
SUBTOTALS BY JURISDICTION				
			City & County of Honolulu Share of Project Costs *	$5,220.8
			State of Hawaii Share of Project Costs *	$1,734.7
			Total: All Shares	**$6,955.5**
ISLANDWIDE PROJECTS - 2016 TO 2030				
2	C/S*	Bike Plan Hawaii - Oahu	See description in Mid-Range Plan	$61.0 in 2nd 15 years
3	C/S*	Enhancement Projects	See description in Mid-Range Plan	$30.0 in 2nd 15 years
4	C/S*	Intelligent Transportation Systems	See description in Mid-Range Plan	$90.0 in 2nd 15 years
6	C/S*	Transportation Demand Management Program	See description in Mid-Range Plan	$90.0 in 2nd 15 years
SAFETY & OPERATIONAL IMPROVEMENT PROJECTS - 2016 TO 2030				
37	S	Farrington Highway, Safety Improvements, Makua Valley Road to Aliinui Drive	Construct safety improvements on Farrington Highway along the Waianae Coast, from Makua Valley Road (Kaena Point) to Aliinui Drive (Kahe Point). This project includes realignment around Makaha Beach Park, between Makau Street and Water Street.	$69.7
CONGESTION RELIEF PROJECTS - 2016 TO 2030				
38	S	Farrington Highway, Widening, west of Fort Weaver Road to Waiawa Interchange	Widen Farrington Highway from Kunia to Waiawa by 1 lane in each direction, from west of Fort Weaver Road to Waiawa Interchange.	$67.1
39	S	Farrington Highway, Widening, Hakimo Road to Kalaeloa Boulevard	Widen Farrington Highway from 4 to 6 lanes, from Hakimo Road to Kalaeloa Boulevard, including intersection of Lualualei Naval Road.	$108.4
40	S	Interstate Route H-1, Widening, Liliha Street to Pali Highway	Widen the Interstate Route H-1 by 1 lane, from 3 to 4 lanes in the eastbound direction, from the Liliha Street on-ramp to Pali Highway off-ramp.	$3.4
41	S	Interstate Route H-1, On- & Off-Ramp Modifications, Various Locations	Modify and/or close various on- and off- ramps on the Interstate Route H-1 from Middle Street to University Avenue. This project includes modification of auxiliary lanes at various exits and other operational changes to Interstate Route H-1. The identification of the precise improvements to be made will require a separate detailed corridor study.	$60.0
42	S	Interstate Route H-1, On- & Off-Ramp Modifications, University Avenue Interchange	Modify on- and off-ramps at the University Avenue Interchange on Interstate Route H-1. This project includes the construction of new ramps to allow all movements, safety improvements, including the closure of the eastbound on-ramp at University Avenue Interchange to Interstate Route H-1 and the construction of a new makai-bound off-ramp to University Avenue from Interstate Route H-1.	$24.0
43	S	Interstate Route H-1, Widening, Vineyard Boulevard to Middle Street	Widen the Interstate Route H-1 by 1 lane in the westbound direction, from Vineyard Boulevard to Middle Street.	$60.0

TABLE 1 OAHU REGIONAL TRANSPORTATION PLAN 2030

PROJECT NO.	CITY/ STATE	FACILITY/PROJECT TITLE	PROJECT DESCRIPTION	ESTIMATED COST (Millions of Year 2005 $)
CONGESTION RELIEF PROJECTS - 2016 TO 2030				
44	S	Interstate Route H-1, HOV Lanes, Waiawa Interchange to Makakilo Interchange	Construct 2 new lanes in the freeway median for HOV use, 1 in the westbound direction and 1 in the eastbound direction, on Interstate Route H-1, from the Waiawa Interchange to the Makakilo Interchange.	$52.5
45	S	Interstate Route H-1, Widening, Waiawa Interchange to Halawa Interchange	Widen the Interstate Route H-1 by 1 lane in the eastbound direction, from the Waiawa Interchange to the Halawa Interchange.	$251.3
46	S	Interstate Route H-1, Widening, Ward Avenue to Punahou Street	Widen the existing Interstate Route H-1 by 1 lane in the eastbound direction, from Ward Avenue to Punahou Street.	$24.3
47	S	Interstate Route H-2, New Interchange, Pineapple Road Overpass	Construct a new full-service freeway interchange on Interstate Route H-2, between Meheula Parkway and Ka Uka Boulevard, to accommodate future developments in Central Oahu. This project includes the widening of the existing Pineapple Road Overpass from 2 lanes to 4 lanes; and addition of new on- and off-ramps to and from Interstate Route H-2 at Pineapple Road Overpass.	$50.0
48	S	Kahekili Highway, Widening, Kamehameha Highway to Haiku Road	Widen Kahekili Highway from 2 to 4 lanes, from Kamehameha Highway to Haiku Road. This project also includes the following improvements: • Contraflow in existing right-of-way between Hui Iwa Street and Haiku Road • Intersection improvements at Hui Iwa Street and Kamehameha Highway	$30.0
49	S	Kunia Road, Widening and Interchange Improvement, Wilikina Drive to Farrington Highway	Widen Kunia Road as follows: • From 2 to 4 lanes, from Wilikina Drive to Anonui Street. • From 2 to 4 lanes, Anonui Street to Kupuna Loop. • From 4 to 6 lanes, Kupuna Loop to Farrington Highway. • Add 1 lane eastbound loop on-ramp at Kunia Road & Interstate Route H-1.	$116.3
50	S	Likelike Highway, Widening, Kamehameha Highway to Kahekili Highway	Widen Likelike Highway from 4 to 6 lanes, from Kamehameha Highway to Kahekili Highway.	$14.6
51	C	Makakilo Mauka Frontage Road, New Roadway, Kalaeloa Boulevard to Makakilo Drive	Construct a new 2-lane Makakilo Mauka Frontage Road, mauka of Interstate Route H-1, from Kalaeloa Boulevard to Makakilo Drive.	$11.1
52	S	Nimitz Highway, High Occupancy Vehicle (HOV) Flyover, Keehi Interchange to Pacific Street	Construct a new 2-lane elevated and reversible HOV flyover above Nimitz Highway, from the Keehi Interchange to Pacific Street. This project includes the removal of the existing eastbound contraflow lane in the AM peak and restoration of all turning movements on the at-grade portion of Nimitz highway.	$250.0
53	C	Piikoi-Pensacola Couplet Reversal	Reverse the direction of the existing one-way Piikoi Street and Pensacola Street couplet.	$4.2
54	C	Puuloa Road, Widening, Pukuloa Road to Nimitz Highway	Widen Puuloa Road, from Pukuloa Road to Nimitz Highway: • From 3 lanes (1 lane southbound and 2 lane northbound) to 5 lanes (2 lanes-southbound and 3 lanes northbound), from Pukuloa Road to Kamehameha Highway.	$10.0
SECOND ACCESS PROJECTS - 2016 TO 2030				
55	C	Central Mauka Road, Second Access, Mililani Mauka to Waiawa	Construct Central Mauka Road, a new 4-lane road from Mililani Mauka to Waiawa. Road connects Meheula Parkway to Kamehameha Highway in Pearl City; parallel to & mauka of Interstate Route H-2. The new 4-lane north-south road includes connections to Interstate Route H-2 interchanges.	$160.0
56	C	Wahiawa, Second Access, Whitmore Avenue to Meheula Parkway	Construct a new 2-lane second access road between Whitmore Village and Wahiawa, from Whitmore Avenue to California Avenue. Continue the new 2-lane second access road to Mililani Mauka, from California Avenue to Meheula Parkway.	$64.4
57	S	Waianae, Second Access, Farrington Highway to Kunia Road	Construct a new 2-lane second access road to Waianae from Farrington Highway in the vicinity of Maili, over the Waianae Mountain Range, to Kunia Road.	$423.0
TRANSIT PROJECTS - 2016 TO 2030				
31	C	Fixed Guideway, East Kapolei to Ala Moana	Plan, design, and construct a fixed guideway system between East Kapolei and Ala Moana. This project includes intermodal connections with TheBus system to provide feeder services to fixed guideway stations. Note that the alignment, system technology, and location of transit stations may be refined during the preliminary engineering, Environmental Impact Statement and subsequent processes.	$976.0
32	C	TheBus Service, Expansion, Islandwide	See description in Mid-Range Plan	$407.2 in 2nd 15 years
33	C	Transit Centers, Various Locations	See description in Mid-Range Plan	$27.6 in 2nd 15 years

TABLE 1 OAHU REGIONAL TRANSPORTATION PLAN 2030

LONG-RANGE PLAN (2016 TO 2030)

RIGHT-OF-WAY PRESERVATION

PROJECT NO.	CITY/ STATE	FACILITY/PROJECT TITLE	PROJECT DESCRIPTION	ESTIMATED COST (Millions of Year 2005 $)
OPERATIONS, MAINTENANCE & SYSTEM PRESERVATION - 2016 TO 2030				
34	C	City Operations and Maintenance (O&M)	See description in Mid-Range Plan	$3,874.3 in 2nd 15 years ($3,570.3 transit O&M, $304 roadway O&M)
35	S	State Operations and Maintenance	See description in Mid-Range Plan	$510 in 2nd 15 years
36	S	System Preservation	See description in Mid-Range Plan	$375 in 2nd 15 years
COST SUBTOTALS: LONG-RANGE PLAN (2016 TO 2030)			CATAGORIES	SUBTOTALS
			Islandwide Projects	$271.0
			Safety & Operational Improvement Projects	$69.7
			Congestion Relief Projects	$1,137.2
			Second Access Projects	$647.4
			Transit Projects	$1,410.8
			Operations, Maintenance, & System Preservation	$4,759.3
			All Categories	**$8,295.4**
SUBTOTALS BY JURISDICTION				
			City & County of Honolulu Share of Project Costs *	$5,670.3
			State of Hawaii Share of Project Costs *	$2,625.1
			Total: All Shares	**$8,295.4**
CONGESTION RELIEF PROJECTS - ROW PRESERVATION				
58	C	Kalaeloa East-West Spine Road, New Roadway, Kalaeloa Boulevard to Geiger Road	Establish and preserve right-of-way (ROW) for Kalaeloa East-West Spine Road (new 4-lane east-west spine road within Kalaeloa by realigning and connecting portions of the existing Saratoga Avenue from Kalaeloa Boulevard in the west and to Geiger Road in the east.)	n/a
59	C	Keoneula Boulevard,	Establish and preserve right-of-way (ROW) for Keoneula Boulevard Extension	n/a
ORTP 2030 COST TOTALS: 2006-2030			CATAGORIES	SUBTOTALS
			Islandwide Projects	$507.0
			Safety & Operational Improvement Projects	$224.2
			Congestion Relief Projects	$1,870.2
			Second Access Projects	$680.2
			Transit Projects	$4,326.7
			Operations, Maintenance, & System Preservation	$7,642.6
			All Categories	**$15,250.9**
SUBTOTALS BY JURISDICTION				
			City & County of Honolulu Share of Project Costs *	$10,891.1
			State of Hawaii Share of Project Costs *	$4,359.8
			Total: All Shares	**$15,250.9**

Note: * Costs for projects shared by City and State (c/s) allocated equally between the two jurisdictions. The designation is done for reasons of financially balancing projected revenues with the order of magnitude cost estimates.

TABLE 2 **OAHU 2030 ILLUSTRATIVE PROJECTS**

PROJECT NO.	FACILITY/PROJECT TITLE	PROJECT DESCRIPTION	ESTIMATED CAPITAL COST (Millions of Year 2005 $)
CONGESTION RELIEF PROJECTS			
I-1	H-1 Corridor, Reversible Highway, Waiawa Interchange to Keehi Interchange	Construct a new, elevated, reversible two-lane highway from west of the Waiawa Interchange to the Keehi Interchange. The new facility could be used for high occupancy vehicles; and a toll could be charged.	$2,500
I-2	Kalaeloa East-West Spine Road, New Roadway, Kalaeloa Boulevard to Geiger Road	Construct a new 4-lane east-west spine road within Kalaeloa by realigning and connecting portions of the existing Saratoga Avenue from Kalaeloa Boulevard in the west and to Geiger Road in the east.	$110
I-3	Keoneula Boulevard, Extension, Kapolei Parkway to Franklin D. Roosevelt Avenue	Extend Keoneula Boulevard from Kapolei Parkway to Franklin D. Roosevelt Avenue.	$85
I-4	Paiwa Street, Extension, Ka Uka Boulevard to Lumiauau Street	Extend Paiwa Street from north of Lumiauau Street, to the intersection of Kamehameha Highway and Ka Uka Boulevard.	$15
I-5	Pearl Harbor Corridor	Construct an alternative route through the Pearl Harbor corridor to provide direct connection between Honolulu and the Ewa Plain. A new tunnel beneath the mouth of Pearl Harbor and a seriesof bridges spanning Pearl Harbor are potential options for this route. This project could operate as a toll facility.	$7,000
I-6	Fixed Guideway, West Kapolei to East Kapolei	Plan, design, and construct a fixed guideway system between West Kapolei to East Kapolei	$500
I-7	Fixed Guideway, Ala Moana to Manoa/Waikiki	Plan, design, and construct a fixed guideway system between Ala Moana and Manoa/Waikiki	$1,150
		Total (with Pearl Harbor Corridor as Tunnel)	**$11,360**

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