

DON MEDEIROS Director

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RECEMED. TAKAMORI

2017 FEB 13 PP 2: 58 (808) 270-7511

OFFICE OF THE MAYOR

DEPARTMENT OF TRANSPORTATION

COUNTY OF MAUI 2145 Kaohu Street, Suite 102 Wailuku, Hawaii, USA 96793

February 13, 2017

Honorable Alan M. Arakawa Mayor, County of Maui 200 South High Street Wailuku, Hawaii 96793

For Transmittal to:

Honorable Stacey Crivello Chair, Housing, Human Services, and Transportation Committee 200 South High Street Wailuku, Hawaii 96793

Dear Chair Crivello:

SUBJECT: MAUI SHORT-RANGE TRANSIT PLAN (HHT-37)

The Department of Transportation (DOT) hereby transmits four (4) copies of the Maui Short Range Transit Plan presentation.

Please let me know if you have any questions, or require additional information.

Sincerely,

Don Medeiros

Director of Transportation

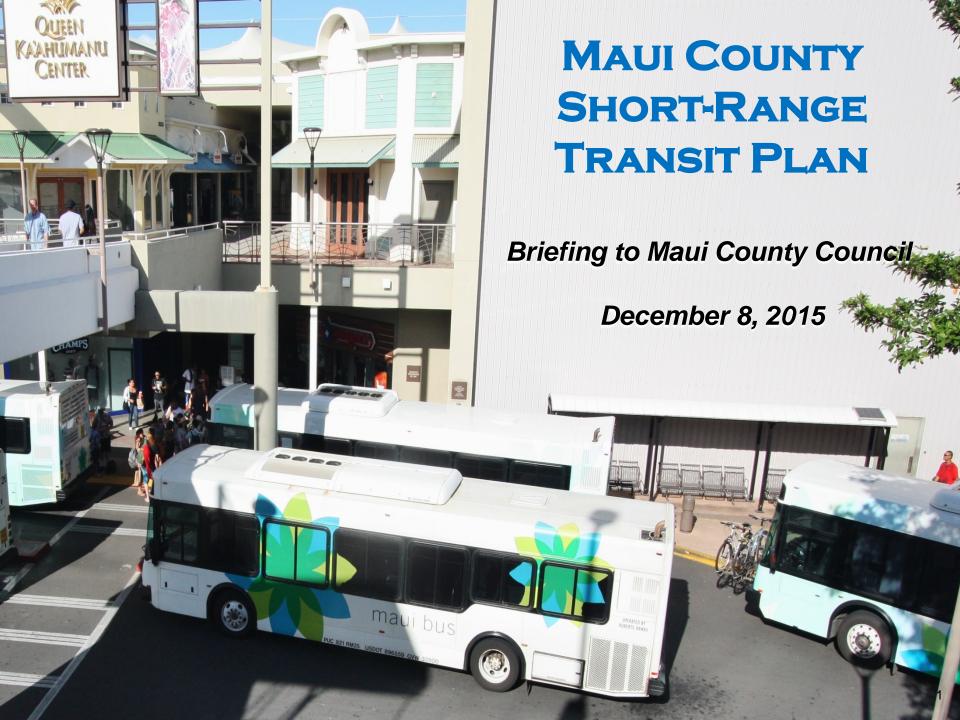
Cc: Mayor Alan M. Arakawa

Maui County Short Range Transit Plan

Department of Transportation February 21, 2017







Presenters

Jo Anne Johnson Winer and Marc Takamori Maui Department of Transportation

SSFM International Cheryl Soon, Ph.D. with

Weslin Consulting Services
Linda Frysztacki and Wes Frysztacki, PE

Project Description

Maui Contract No. 5561

Funded 80% from FTA Sec 5305 Planning and 20% County match

18 months duration, started June 2014

Study Objectives

- Describe the existing system
- Develop a service plan for 2015-2020.
 - Geographic coverage
 - Ridership potential
 - Routes and frequency of service
 - Vehicles required
 - Schedules
- Develop a Capital Program for vehicles, facilities and passenger amenities.
- Develop a Financial Plan including fares, revenue and sources of funding.

Important Findings

- Maui Bus is important to Maui's economy because it connects workers to jobs. Over 75% of riders are using the bus to get to work.
- Maui Bus provides options to low income people to get to work and appointments.
- Maui Bus connects important population centers, attractions and business centers.
- Maui Bus is an amenity used by visitors. About 8% of riders are visitors.
- Maui Bus, now ten years old, has been a phenomenal success!!
 Ridership currently exceeds 2.5 million riders per year.
- Maui County Council should be extremely proud of its role. With their leadership and investment, the County has been able to leverage just over \$39 Million in federal funds in the past six years.

Presentation Outline

- System History
- Current Services
- Rider Feedback & Community Input
- Recommendations for Service
- Recommendations for Capital Investments
- Recommendations for a Financial Plan

DEPARTMENT OF TRANSPORTATION

System History

2005 County of Maui **Short Range Plan**

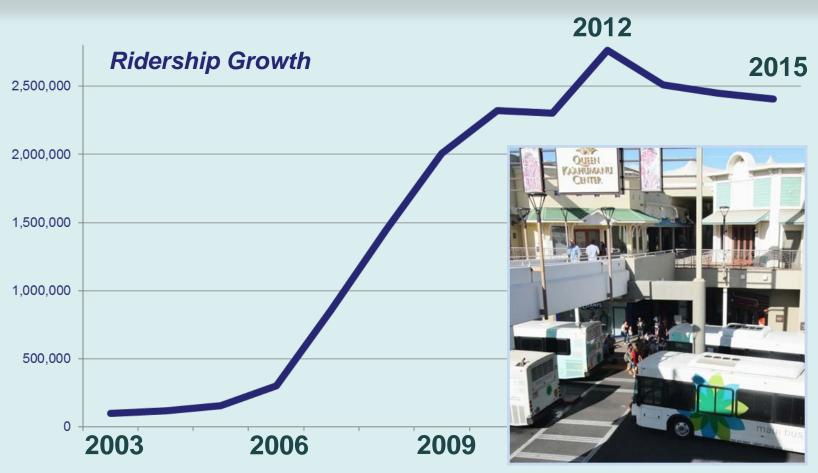
- Service Administration
- **Organizational Structure**
- Fixed Route & **Paratransit Services**
- Capital Investments







System History



System History

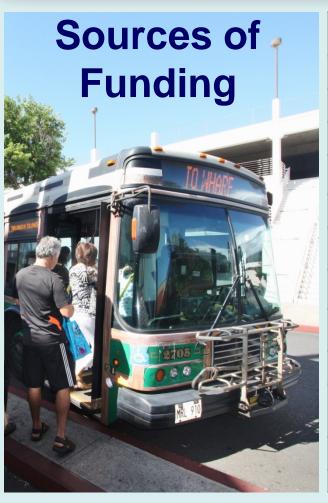
Ridership Growth



Fiscal Year	Number of Served Passengers	Operations Budget	Capital Improvement Program	Number of Added Buses
2003	101,508	\$350,000	\$0	7
2004	117,490	\$545,000	\$0	7
2005	154,616	\$792,135	\$0	9
2006	301,000	\$1,172,219	\$0	4
2007	864,788	\$3,958,975	\$0	6
2008	1,450,615	\$4,995,700	\$100,000	7
2009	2,006,539	\$6,550,000	\$250,000	0
2010	2,320,434	\$7,377,500	\$425,000	5
2011	2,303,831	\$7,792,500	\$200,000	0
2012	2,764,358	\$8,477,500	\$200,000	14
2013	2,511,197	\$10,675,500	\$200,000	4
2014	2,448,129	\$10,675,500	\$1,000,000	11
2015	2,405,163	\$9,885,500	\$1,000,000	16

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System History



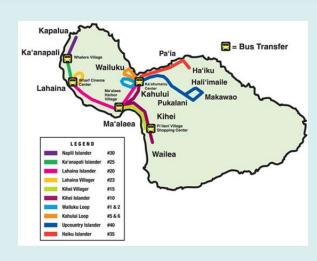
Grant	Required County Match	FY2010 Adopted	FY2011 Adopted	FY 2012 Adopted	FY2013 Adopted	FY 2014 Adopted	FY2015 Adopted
Statewide Transportation Planning Program 5305 e	Yes - 50%	\$0	\$0	\$0	\$0	\$170,000	\$0
Urbanized Area Formula Program 5307	Yes - 50%	\$0	\$0	\$0	\$0	\$1,100,000	\$1,100,000
FTA Section Rural/5339 Formula Funds Program	Yes - 20%	\$0	\$0	\$2,000,000	\$2,000,000	\$600,000	\$600,000
FTA Section Small Urban/5339 Formula Funds Program	Yes - 20%	\$0	\$0	\$0	\$0	\$0	\$400,000
FTA Section 5309 State of Good Repair Program	Yes - 20%	\$8,000,000	\$8,000,000	\$0	\$3,200,000	\$1,800,000	\$0
FTA Section 5311 Non- urbanized Area Formula Program	Yes - 50%	\$1,500,000	\$1,500,000	\$600,000	\$1,700,000	\$1,200,000	\$500,000
FTA Section 5311 Rural Transit Assistance (RTAP) Program	No	\$250,000	\$250,000	\$20,000	\$20,000	\$20,000	\$20,000
FTA Section 5316 Job Access and Reverse Commute (JARC) Program	Yes - 50%	\$0	\$0	\$0	\$100,000	\$0	\$0
FTA Section 5317 New Freedom Program	Yes - 50%	\$0	\$0	\$0	\$100,000	\$30,000	\$0
FTA Veterans Transportation and Community Living Initiative (VTCLI) Program	Yes - 20%	\$0	\$0	\$0	\$233,129	\$0	\$0
FTA Livability Initiative Grant Yes - Program 20%		\$0	\$0	\$0	\$1,000,000	\$1,000,000	\$0
TOTAL		\$9,750,000	\$9,750,000	\$2,620,000	\$8,353,129	\$5,920,000	\$2,620,000

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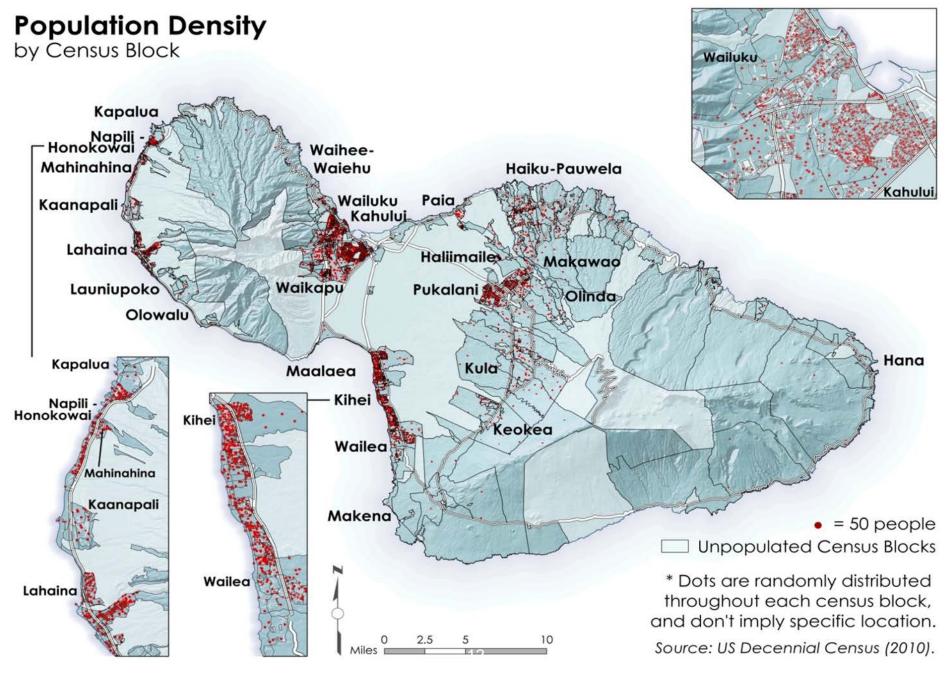
Current Services

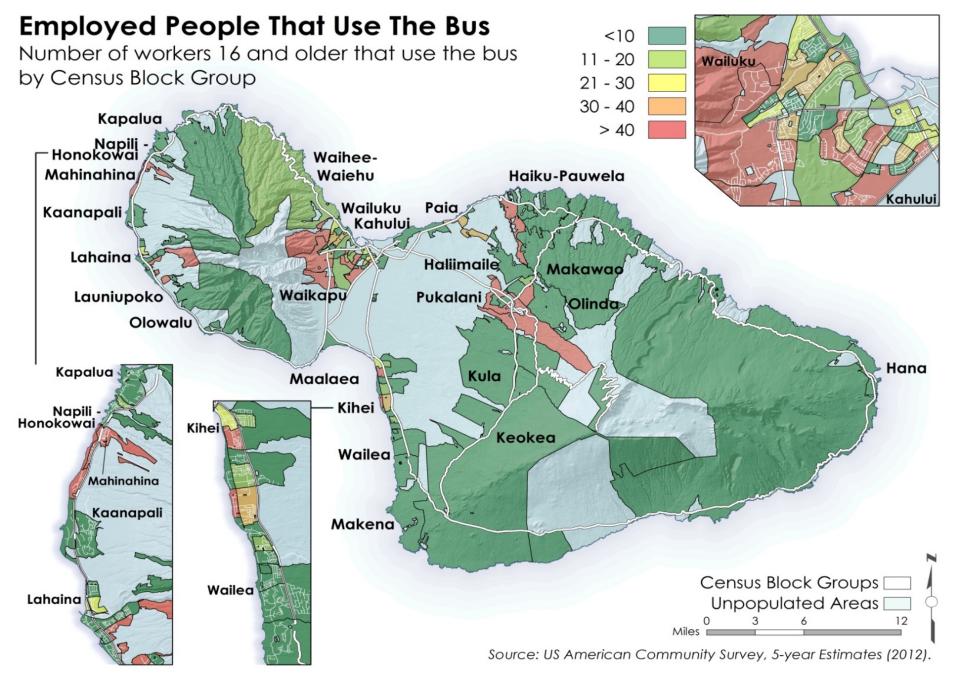
17 Routes:

- 4 Central Routes
- 6 Islander Routes
- 3 Villager Routes
- 4 Commuter Routes









Rider Feedback

On Board Rider Survey

- Conducted: Sept. Oct., 2014
- 1,039 usable surveys returned
- 41% of surveys distributed
- 20% of total ridership



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Rider Feedback

Maui Bus Passenger Survey

	Your survey will be used to help improve your service. Ple	ase help us by answering all of the following questions.	
	2 #5 or #6-Kahului Loop 6 #23-Lahaina Villager 10 #10-Kihei Islander 7 #25-Ka'anapali Islander 11	#35-Haiku Islander Haiku-Wailea Commuter #39-Kula Villager Makawao-Kapalua Commuter #40-Upcountry Islander Makawao-Kapalua Commuter #40-Upcountry Islander #40-Upcountry #40-U	
STEP UP	#15-Kihei Villager#30-Napili slander COMING FROM? 2 Where did you get on this bus? (Please specify nearest intersection or location)	GOING TO? 6 Where will you get off this bus? (Please specify nearest intersection or location)	13 How often do you use MAUI BUS?10 or more times a week5 to 9 times a week3 to 4 times a week1 to 2 times a week1 This is my first trip or day using MAUI BUS 14 How do you get information about Maui Bus routes?hiternet Frone Brochure System Representative Cher 15 Would you use a phone or intermet app to get information about Maui Bus routes? 1 Yes 2 No
	3 How did you get to this bus? (Please check one) Walked: Blocks? (please fill in number of blocks) Wheelchair: z Please fill in number of blocks. Aporther the subhiels and parked.	7 Will you take another bus to get to where you you are going? No Yes: To Route:	16 Are you a licensed driver and able to drive?1 Yes2 No 17 If bus service had not been available today, how would you have made this trip?1 Drive2 Ride with someone _3 Wak4 Bloycle5 Taxi6 Would not make this trip7 Other:
	Another bus Drove vehicle and parked Vehicle passenger/was dropped off Bicycle-about how far? miles Other: 4 Did you take another bus to get here? Did you transfer?	8 Where are you going to now? (please check one) _ Your Home	19 Doyou have a disability that limits your mobility?i Yes? No 20 Are you: _i Female? Male 21 Are you a Veteran?i Yes? No 22 Are you a Veteran?i Yes? No 23 Are you a visitor or tourist to Maui? Day
	No	Medical / Dental visit Social / Recreation / Sightseeing / Visiting Friends Personal Business (bank, post office) How will you get to your destination after you get off this bus? (Please check one)	23 What is your age?Years old 24 Including YOU, how many people live in your household?People 25 How many vehicles in Working condition are available to your household?Vehicles 26 Are you: (check the one response that BEST describes you)
	Your Home Blotel room Your Workplace Shopping School (grades K-12) College College (students only) Airport (air passenger) Medical / Dental visit Social / Recreation / Sightseeing / Visiting Friends	Walk: Blocks? (please fill in number of blocks) Wheelchair: Please fill in number of blocks Another bus Drive vehicle Vehicle passenger/be picked up by someone Bicycle-about how far? miles Other:	Employed full-line (at least 35 hours per week)
	Personal Business (bank, post office) 10 How did you pay your fare? (Please check one) \$2.00 Cash Daily Pass (\$4.00) Adult Monthly Pass \$45.00 Persons with Disabilities	\$30,00 25.00 for fixed route only	Convenience 1 2 3 4 Appearance 1 2 3 4 Driver courtesy 1 2 3 4 Safety 1 2 3 4 Schedule readability 1 2 3 4 Service fequency 1 2 3 4
	11 How many buses will you board today including all trips 12 How long have you been riding MAUI BUS?YeThis is my first tripLess than one weekLes	ars. Enter number of years or check one of the following:	Area served 1 2 3 4 Transfer Connections 1 2 3 4 Week end service 1 2 3 4 Evening service 1 2 3 4 On-Time performance 1 2 3 4 Overall service quality 1 2 3 4
	PLEASE CONTINUE O	N THE OTHER SIDE	Ease of getting information 1 2 3 4 28 How can we improve service? 29 Which of the following categories best de scribe syour TOTAL ANNUAL HOUSEHOLD INCOME? 1 Less than \$10,000

MAHALO!

Characteristics of Respondents

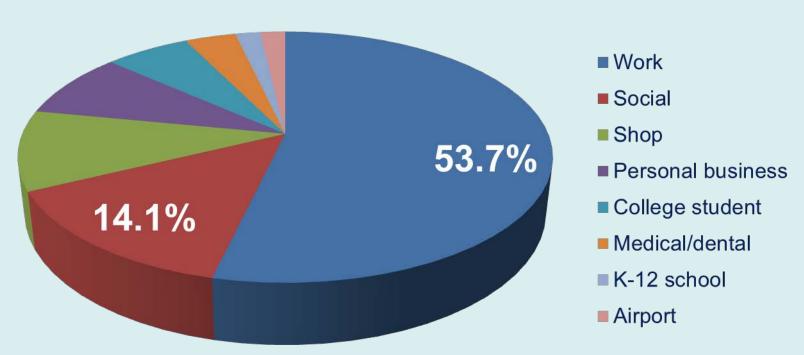
- 45% of respondents have been riding 3 or more years.
- 10% are first time riders or riding less than a week.
- 92% are Maui residents.
- 9% are disabled.
- 5% are students.
- 75% are employed full or part time.

Rider Feedback



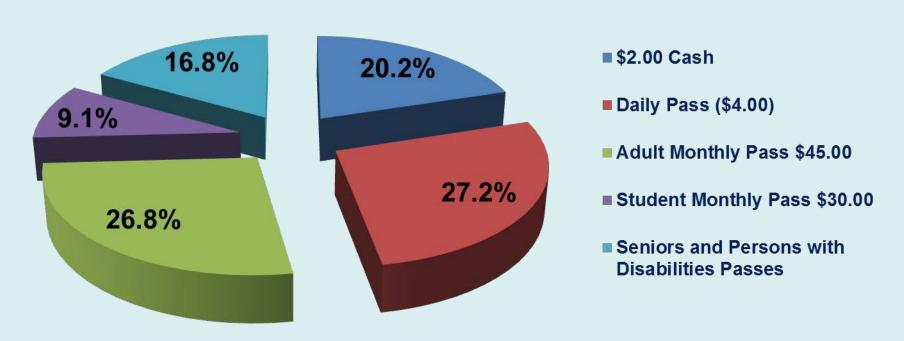
Rider Feedback

Trip Purpose



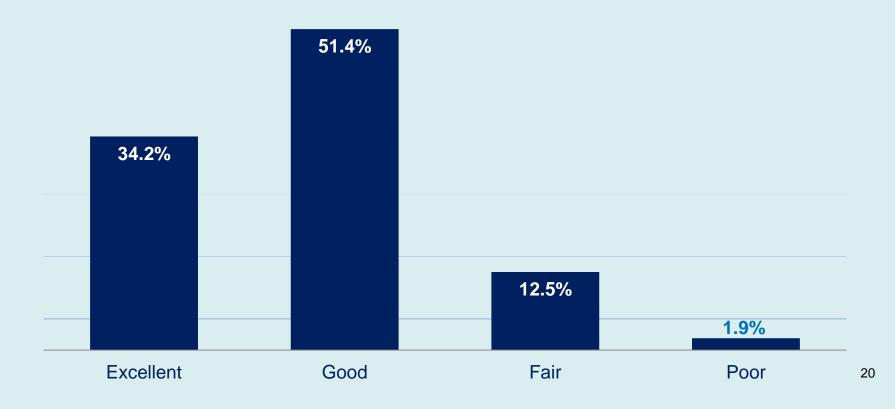
Rider Feedback

Fare Payment



Rider Feedback

Rating of Overall Service Quality



Rider Feedback



Community Information Meetings

- 11/09/2015 Kīhei Community Center
- 11/10/2015 West Maui Senior Center
- 11/17/2015 Mayor Hannibal Tavares
 Community Center
- 11/18/2015 Kahului Community Center

Major Themes from Community Meetings

- More frequent bus service
- Expand service to new areas
- Later evening service (to at least 10 PM on all routes; later on major employment routes)
- Add bus stops so they are not too far apart
- Add shelters and amenities (schedules)
- Make routes work as a system
- Paratransit requests for outside ¾ mile
- High appreciation for Maui Bus service!

Rider Feedback

Route 10 Rider Survey Comments

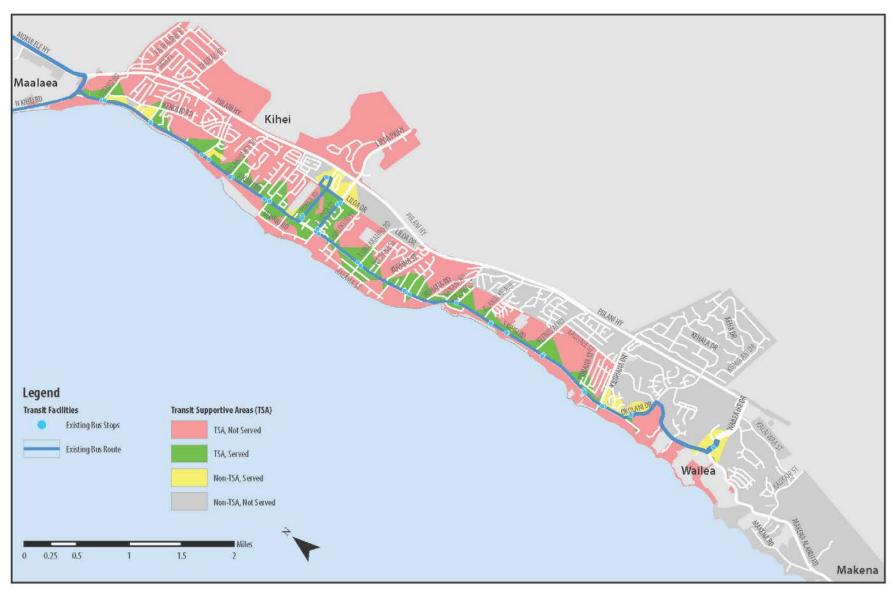
- Extend night service for workers
- More frequent buses
- Use larger buses with more seats
- Clean the seats

Current Conditions

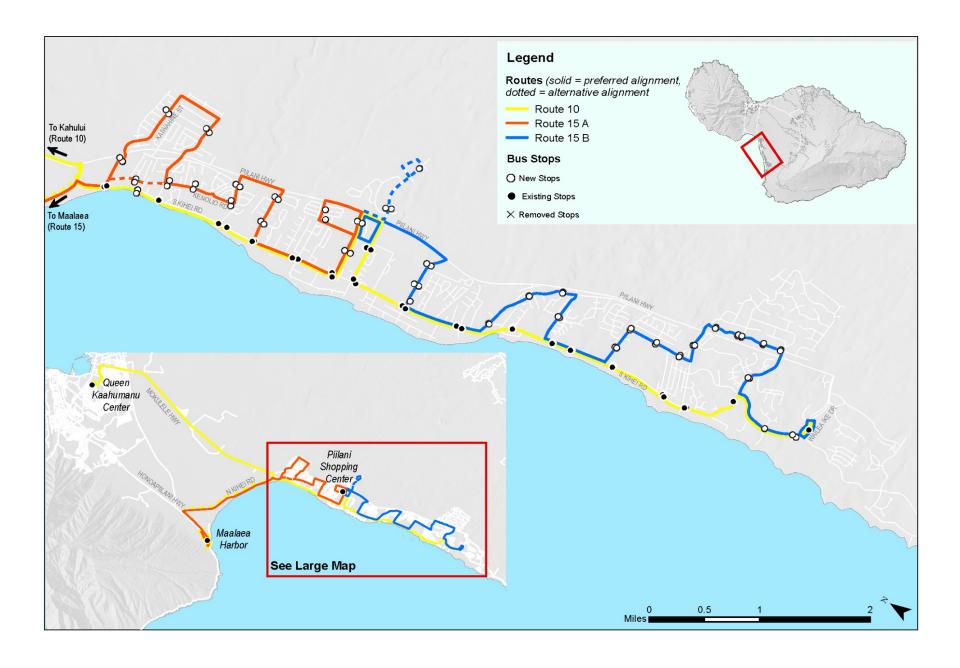


Current Conditions





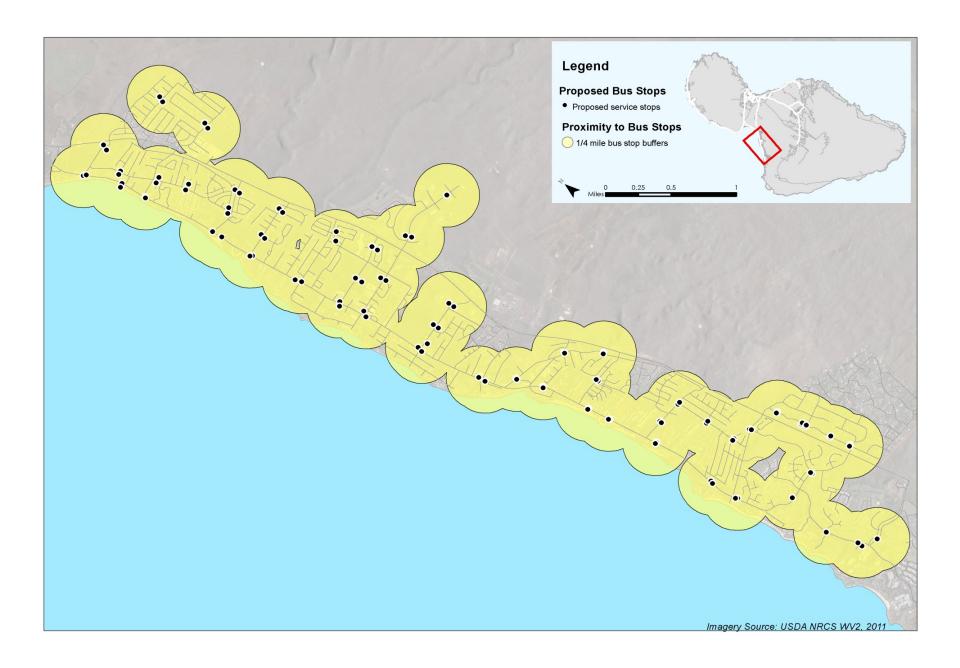
Kihei-Makena Transit Supportive Areas

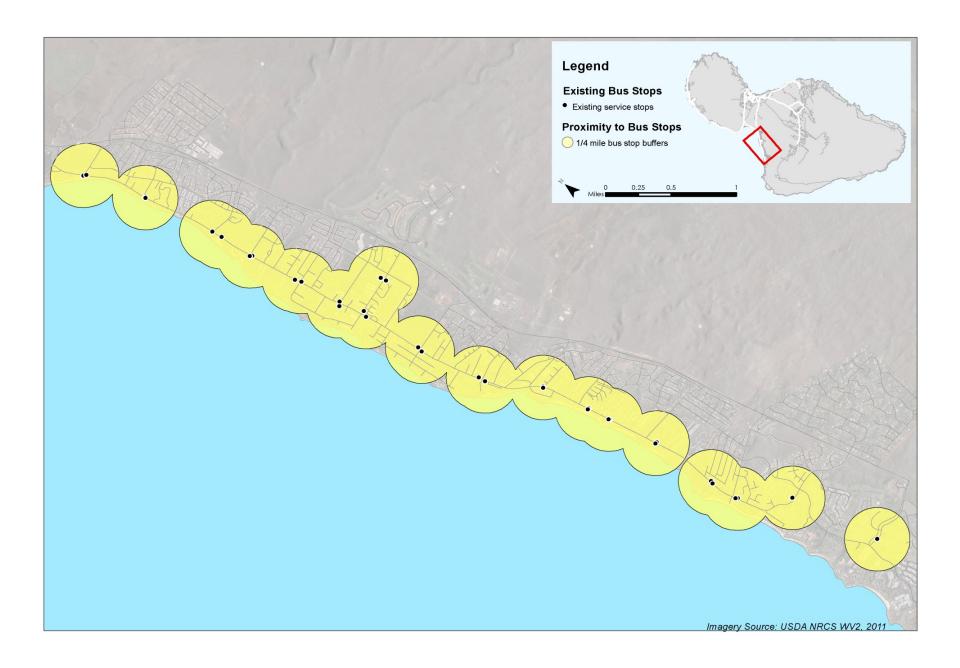


Service Improvement Program

Kīhei Service Area Improvements:

- New North Kihei Villager Route.
- New South Kīhei Villager Route.
- Routes all serve Pi'ilani Shopping Center area for connections.
- Later evening service to 11:30 PM on Kihei Islander with two trips also serving Ma'alaea Harbor.
- 3 additional AM and 3 additional PM peak period trips on Islander.
- Added bus stops for easier access to routes.





Service Improvement Program

Service Area	Expanded Service Hours	Trips Added	Bus Stops Added	New Route or Service Area	% Increase in Served Population
Kīhei		\			145%
Lahaina					10%
Upcountry					150%
Central Maui					50%

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Rider Feedback

Routes 20, 23, 25 and 30 Rider Comments

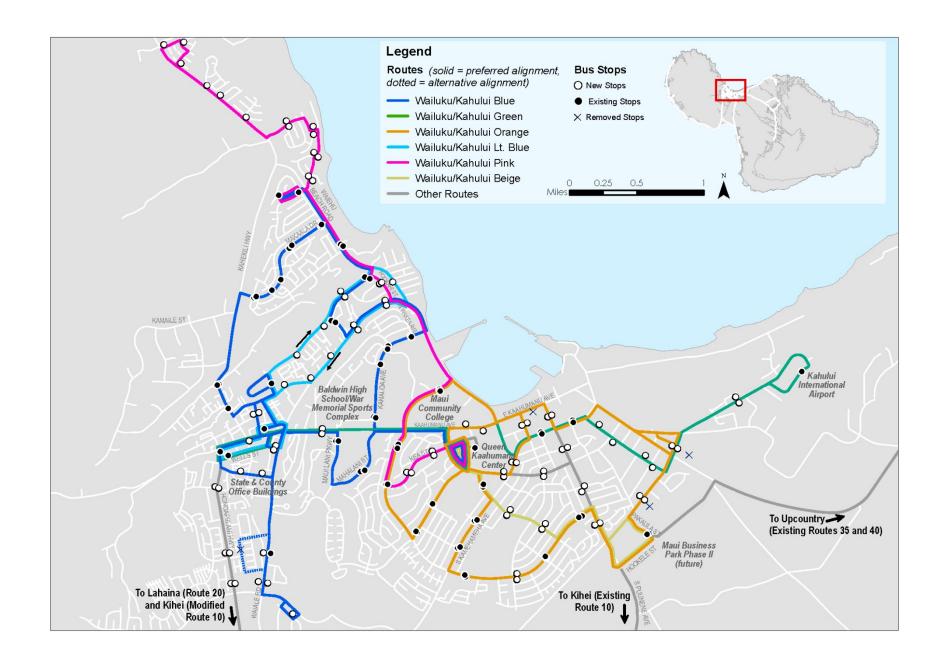
- Provide Late Evening Service
- Offer More Frequent Service
- Have More Bus Stops
- Be On Time
- Provide More Shelters



Service Improvement Program

Lahaina to Napili Service Area Improvements:

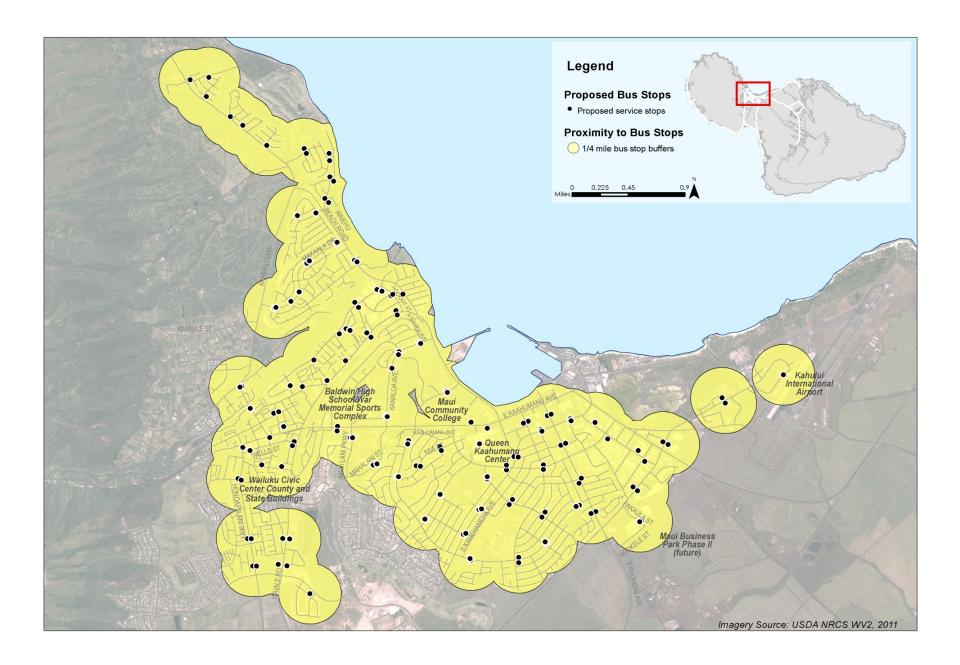
- Lahaina Villager split into two routes: 23A and 23B (no more having to travel entire route to reach Wharf Cinema Center).
- Lahaina Villager 23A and 23B start one hour earlier.
- Later evening service on Lahaina Islander,
 Ka'anapali Islander and Napili Islander Routes.
- Interlining Napili Islander Route 30 with Ka'anapali Islander Route 25.
- Added bus stops for easier access to route

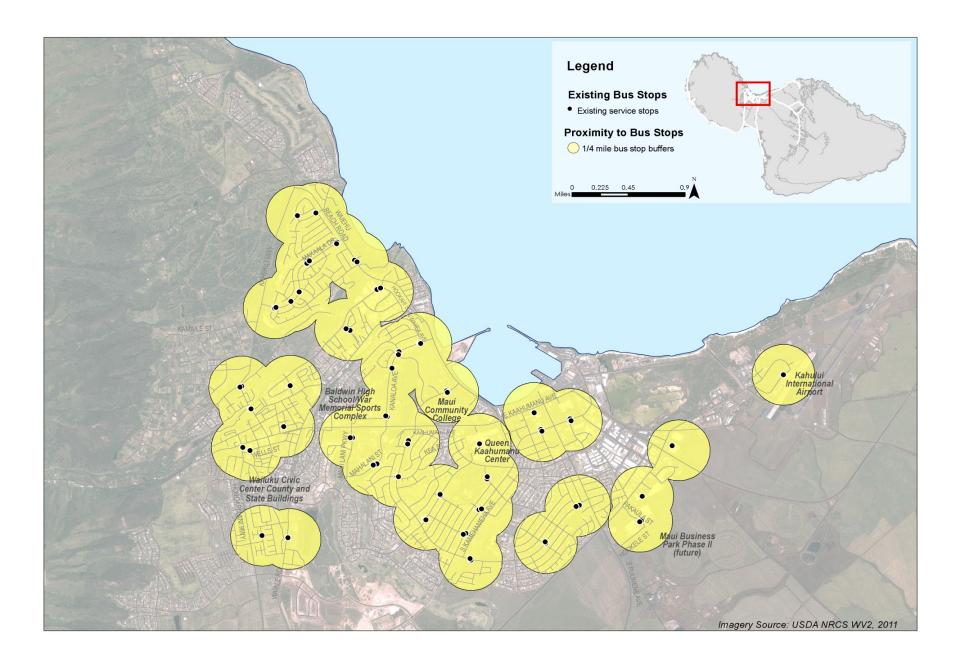


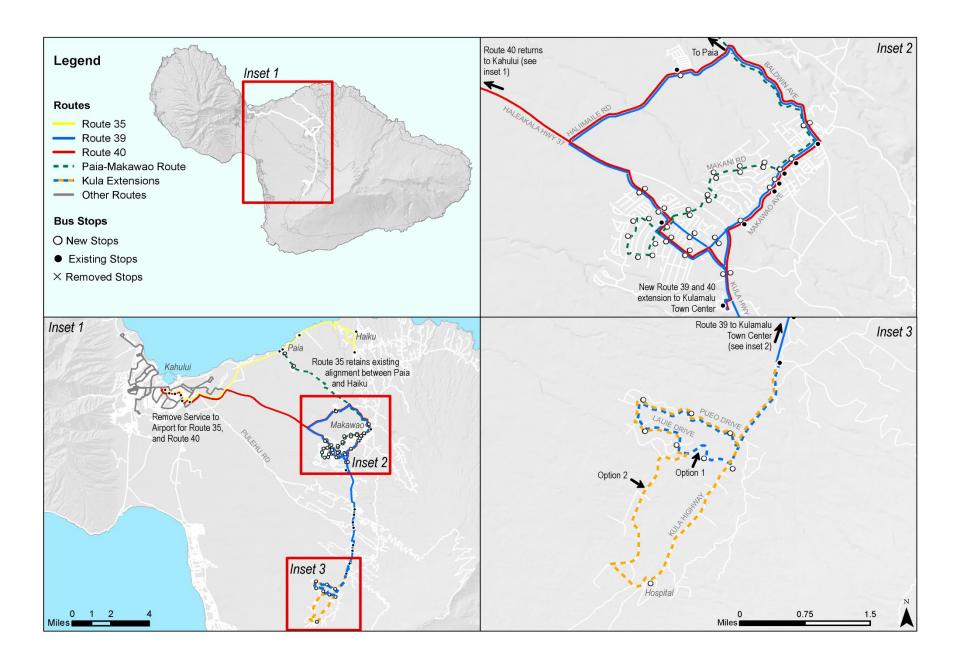
Service Improvement Program

Central Maui Service Area Improvements:

- 5 new routes.
- 30-minute service frequency to Airport.
- 30-minute service frequency to County & State Buildings/Civic Center.
- Added bus stops for easier access to route.



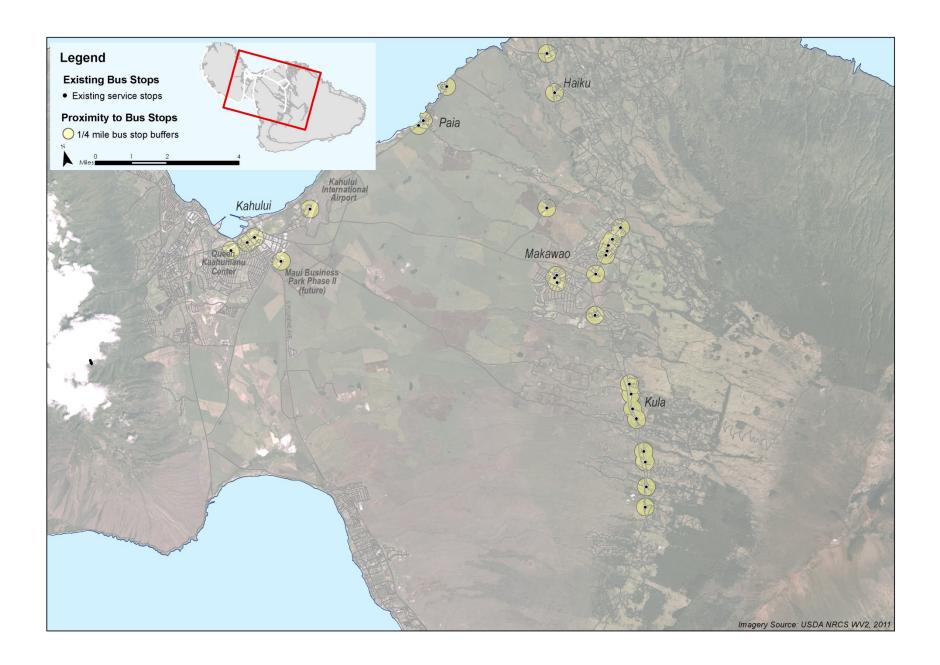


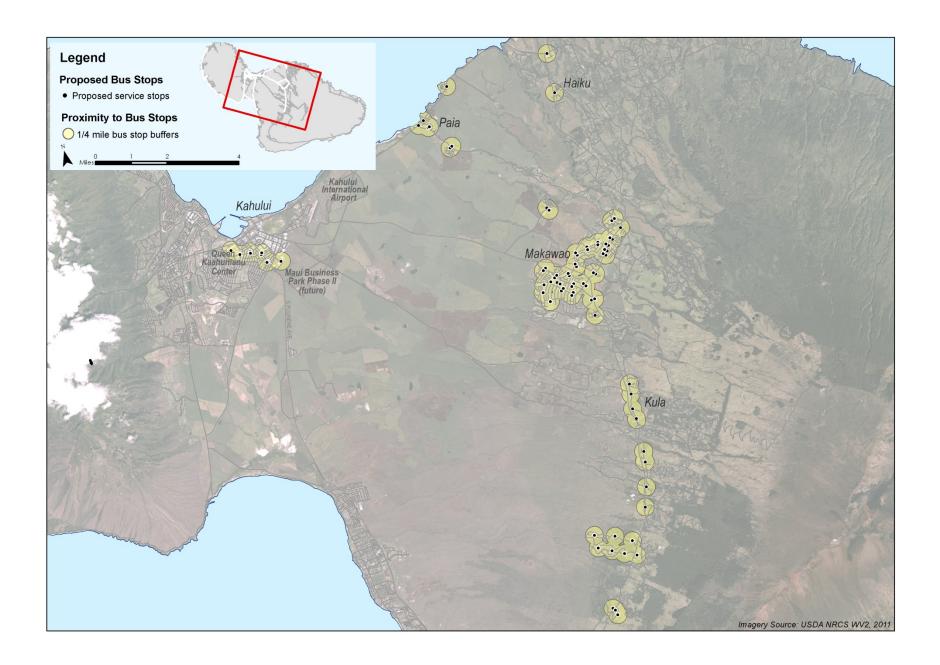


Service Improvement Program

Upcountry Service Area Improvements:

- New Pā'ia to Makawao Route.
- Transfer point in Pā'ia to connect Haiku Islander with new route to Makawao.
- Kula Villager starts one hour earlier.
- Upcountry and Haiku Routes travel to Queen Ka'ahumanu Center via Walmart instead of Airport.
- Haiku Islander has 1 additional trip with new alignment.
- Added bus stops for easier access to route.





Cost of the Service Improvement Plan

	FIXED ROUTE AND COMMUTER ROUTE OPERATING COST BY YEAR						
SERVICE	2016	2017	2018	2019	2020	2021	2022
EXISTING SERVICE							
Current Routes	\$7,949,319	\$7,981,799	\$8,221,253	\$8,467,891	\$8,721,927	\$8,983,585	\$9,253,093
Additions to Current Routes		\$88,759	\$418,681	\$679,910	\$700,307	\$721,316	\$742,956
NEW ROUTES							
Route 3 Wailuku Civic Center Route 4 Kahului Airport Route 7 Wailuku Post Office Route 8 Wailuku Waihee Route 9 Kahului WalMart Route 15B S. Kihei Villager Route 38 Paia-Makawao		\$426,859	\$439,664 \$0 \$0 \$0 \$0 \$0	\$452,854 \$0 \$0 \$0 \$514,578 \$0	\$241,440 \$466,440 \$420,573 \$0 \$118,665 \$530,015 \$0	\$248,683 \$480,433 \$433,190 \$448,154 \$122,225 \$545,916 \$0	\$256,144 \$494,846 \$446,186 \$461,599 \$125,892 \$562,293 \$506,178
Subtotals	\$7,949,319	\$8,497,416	\$9,079,598	\$10,115,232	\$11,199,367	\$11,983,502	\$12,849,186
ADA PARATRANSIT Current Service	\$2,000,711	\$2,060,732	\$2,122,554	\$2,186,231	\$2,251,818	\$2,319,372	\$2,388,953
Totals	\$9,950,030	\$10,558,148	\$11,202,153	\$12,301,463	\$13,451,185	\$14,302,875	\$15,238,139

\$78.7M for the period from 2017 to 2022.

Cost of the Service Improvement Plan

For The Six Year Period 2017 to 2022

Current Routes:	\$ 51.6 million
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- Additions to Routes: \$ 3.4 million
- New Routes: \$ 8.7 million
- ADA Paratransit \$ 13.3 million
- Admin. & Marketing \$ 1.7 million

TOTAL \$ 78.7 million

Capital Investment Program Summary

Bus Stops and Passenger Shelters

Requires Availability of Space or land acquisition

- ADA Compliant Access
- Avoid Traffic Conflicts







Capital Investment Program Summary

Maintenance Facility

Need A Facility

- Provides Asset Control
- Maintenance
- Operations Center











Capital Investment Program Summary

Existing Transit Centers

Transfer Between Lines

- Bus Space Capacity
- Passenger Holding Capacity
- Include Amenities







	COST BY BUDGET YEAR						
ITEM	2017	2018	2019	2020	2021	2022	SUBTOTALS
FACILITIES							
Bus Stops							
current program	\$1,000,000	\$1,000,000	\$1,000,000	\$1,000,000	\$0	\$0	\$4,000,000
planning & design		\$200,000	\$100,000	\$40,000	\$20,000	\$20,000	\$380,000
procurement			\$100,000	\$100,000	\$100,000	\$100,000	\$400,000
land acquisition			\$50,000	\$50,000	\$50,000		\$150,000
construction					\$2,000,000	\$2,000,000	\$4,000,000
Transit Centers							
planning	\$100,000	\$500,000	\$200,000				\$800,000
design			\$200,000	\$300,000	\$400,000		\$900,000
land acquisition			\$2,000,000		\$2,000,000		\$4,000,000
construction			\$500,000	\$1,000,000	\$3,000,000	\$5,000,000	\$9,500,000
Maintanace Facility							
planning	\$100,000	\$500,000	\$200,000				\$800,000
design			\$200,000	\$300,000	\$500,000		\$1,000,000
land acquisition		\$5,000,000	\$5,000,000				\$10,000,000
construction			\$2,000,000	\$6,000,000	\$2,000,000		\$10,000,000
equipment					\$1,000,000		\$1,000,000
installation & related						\$300,000	\$300,000
Signs & Wayfinding							
planning & design	\$50,000	\$20,000			\$60,000		\$130,000
procurement		\$100,000	\$100,000		\$200,000	\$200,000	\$600,000
installation			\$100,000			\$200,000	\$300,000
ASSENGER SYSTEMS							
Fare Collection System							
planning	\$50,000	\$50,000	\$20,000				\$120,000
specifications			\$60,000				\$60,000
procurement			\$2,000,000	\$2,000,000			\$4,000,000
installation			\$100,000	\$300,000			\$400,000
Electronic Information							
planning	\$50,000	\$50,000					\$100,000
specifications		\$50,000					\$50,000
procurement			\$200,000			\$250,000	\$450,000
installation			\$100,000	\$50,000		\$50,000	\$200,000
LEET							
Fixed Route							
specifcations		\$20,000		\$25,000		\$30,000	\$75,000
procurement		\$4,200,000		\$4,000,000		\$3,000,000	\$11,200,000
ancilliary equipment		\$200,000		\$400,000		\$300,000	\$900,000
Paratransit							
specifcations		\$10,000	\$20,000		\$20,000	\$30,000	\$80,000
procurement		\$200,000	\$960,000		\$250,000	\$1,680,000	\$3,090,000
ancilliary equipment			\$100,000			\$200,000	\$300,000
Totals	\$1,350,000	\$12,100,000	\$15,310,000	\$15,565,000	\$11,600,000	\$13,360,000	\$69,285,000

Cost of the Capital Investment Program

\$ 69.3M for the period from 2017 to 2022.

Cost of the Capital Investment Program

For The Six Year Period 2017 to 2022

Transit Facilities: \$ 48.3 million

Passenger Systems: \$ 5.4 million

Fleet Replacements: \$ 15.6 million

TOTAL \$69.3 million

Funding Sources

Options To Fund Short Range Plan

- Raise single ride cash fare
- Raise cost of passes
- Advertising Revenue
- County General Fund
- County Highway Fund (gas tax increase)
- General Excise Tax increase
- **??**

Fare Considerations

- Consistent with Industry Practices
- Align Pass Fares with Single Cash Fare
- Fares Set to Reflect Quality of Service (i.e., Commuter Services)
- Farebox Recovery Ratio
- Fare Increases are Kept to a Minimum and Coincide with Service Enhancements

Fare Recommendations

	Fare Structure Phases				
				Longer Term	
Fixed Pouto Fare Type	Current	Target	Target	Target	
Fixed Route Fare Type	Current	Aujustinents	Adjustments	Adjustments	
Cash Fares:					
Fixed route only	\$2.00	\$2.00	\$2.50	\$3.00	
Senior/Disabled/Medicare		\$1.00	\$1.25	\$1.50	
Daily Pass					
Fixed route only	\$4.00	\$5.00	\$8.00	\$10.00	
Monthly Passes:					
Fixed route, commuter & ADA paratransit	\$45.00				
Fixed route only		\$50.00	\$60.00	\$70.00	
Student (valid school ID)	\$30.00	\$30.00	\$40.00	\$50.00	
Senior (55 years & older) fixed route only	\$25.00				
Senior (65 years & older) fixed route only		\$30.00	\$40.00	\$50.00	
Person with Disability (fixed route only)	\$30.00	\$30.00	\$40.00	\$50.00	
Annual Pass:					
Fixed route only				\$770.00	
Infants under two (2) years old, riding on the lap of an accompanying adult travel free.					

Fare Recommendations

	Fare Structure Phases				
	Short Term Mid-Term Longe			Longer Term	
		Target	Target	Target	
Commuter Bus Fare Type	Current	Adjustments	Adjustments	Adjustments	
Cash Fare:					
Commuter	\$2.00	\$2.00	\$3.00	\$3.00	
Monthly Pass:					
Fixed route, commuter & ADA paratransit	\$45.00				
Commuter and fixed route		\$65.00	\$70.00	\$80.00	
Annual Pass:					
Commuter and fixed route				\$880.00	

	Fare Structure Phases				
		Short Term Mid-Term Long			
		Target	Target	Target	
ADA Paratransit Fare Type	Current	Adjustments	Adjustments	Adjustments	
Cash Fare:					
ADA eligible (paratransit only)	\$2.00	\$2.00	\$2.50	\$3.00	
Daily Pass	\$4.00				
Monthly Pass:					
Fixed route, commuter & ADA paratransit	\$45.00				
Senior (55 years & older) paratransit only	\$30.00				
Student (valid school ID)	\$30.00				

\$3 to \$4 M per year for the period from 2017 to 2022.

MAUI COUNTY SHORT-RANGE TRANSIT PLAN

DEPARTMENT OF TRANSPORTATION

Financial Plan (Operations and Capital Combined) Based On Current Sources

	MAUI BUS FINANCIAL PLAN BY YEAR					
ITEM	2017	2018	2019	2020	2021	2022
Expenses						
Administration & Marketing	\$246,000	\$258,300	\$271,215	\$284,776	\$299,015	\$313,965
Operations	\$10,558,148	\$11,202,153	\$12,301,463	\$13,451,185	\$14,302,875	\$15,238,139
Capital Investments	\$12,030,000	\$14,000,000	\$12,650,000	\$13,545,000	\$8,700,000	\$8,360,000
Total Expense	\$22,834,148	\$25,460,453	\$25,222,678	\$27,280,961	\$23,301,889	\$23,912,104
Operating Revenue						
Fare Revenue & related	\$3,113,967	\$3,220,413	\$3,485,602	\$4,097,358	\$4,306,790	\$5,068,213
Farebox Recovery Ratio	28.8%	28.1%	27.7%	29.8%	29.5%	32.6%
County General Fund	\$7,690,181	\$8,240,039	\$9,087,076	\$9,638,603	\$10,295,099	\$10,483,892
Capital Funding						
Federal Grants by formula	\$2,620,000	\$2,698,600	\$2,779,558	\$2,862,945	\$2,948,833	\$3,037,298
Federal Grants Discretionary	\$3,360,000	\$0	\$768,000	\$3,200,000	\$200,000	\$3,744,000
County CIP	\$6,050,000	\$11,301,400	\$9,102,442	\$7,482,055	\$5,551,167	\$1,578,702

Financial Plan (Operations and Capital Combined) Based On Current Sources

For The Six Year Period 2017 to 2022

Operating Revenue:	\$ 23.3 million
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County General Fund: \$55.4 million

Federal Grants: \$ 28.2 million

County CIP: \$41.1 million

TOTAL

\$148.0 million

Financial Plan (Operations and Capital Combined) Using Excise Tax

For The Six Year Period 2017 to 2022

Operating Revenue:	\$ 23.3 million
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- County General Fund: \$15.9 million
- Federal Grants: \$ 28.2 million
- County CIP: \$ 6.1 million
- Excise Tax: \$74.5 million

TOTAL

\$148.0 million

Excise Tax Balance

For The Six Year Period 2017 to 2022

GET Collected: \$157.2 million

Short Range Plan: - \$ 74.9 million

Balance \$ 82.7 million

