



**PREFERRED PLAN**  
**Kahului Airport Master  
Plan and Noise  
Compatibility Program  
Update**

**AIRPORTS DIVISION  
DEPARTMENT OF TRANSPORTATION**

March 13, 2012



# AGENDA

- Introduction
- Purpose and Meeting Objectives
- Kahului Airport – Aviation and Passenger Forecast
- Noise Compatibility Findings
- Presentation of Preferred Plan
- Comment Period



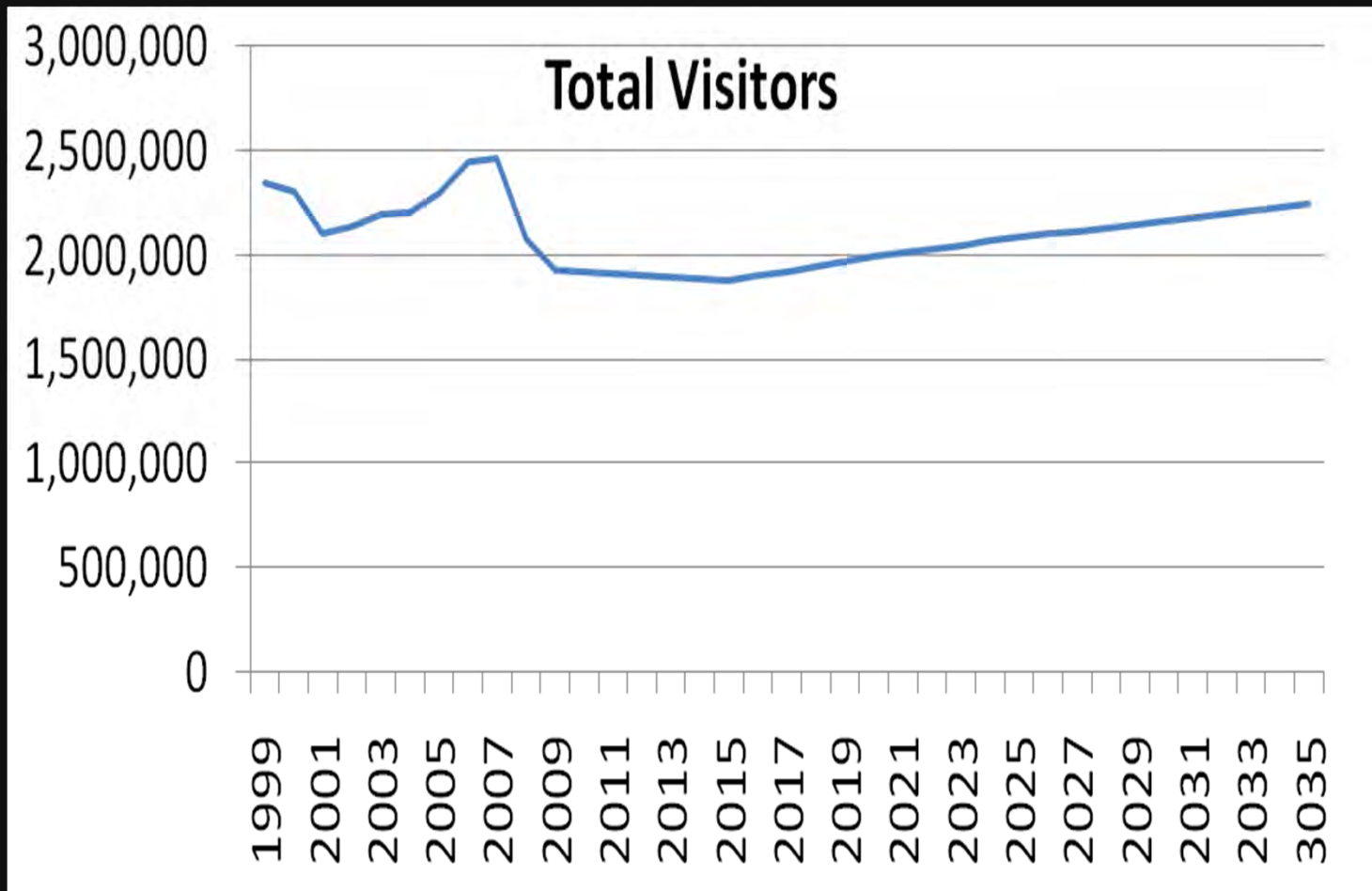
# PURPOSE AND MEETING OBJECTIVES

## Purpose and Objectives of Meeting

- Report on Aviation Demand Forecasts
- Noise Contours - 2010
- Report on Preferred Plan
- Receive Comments



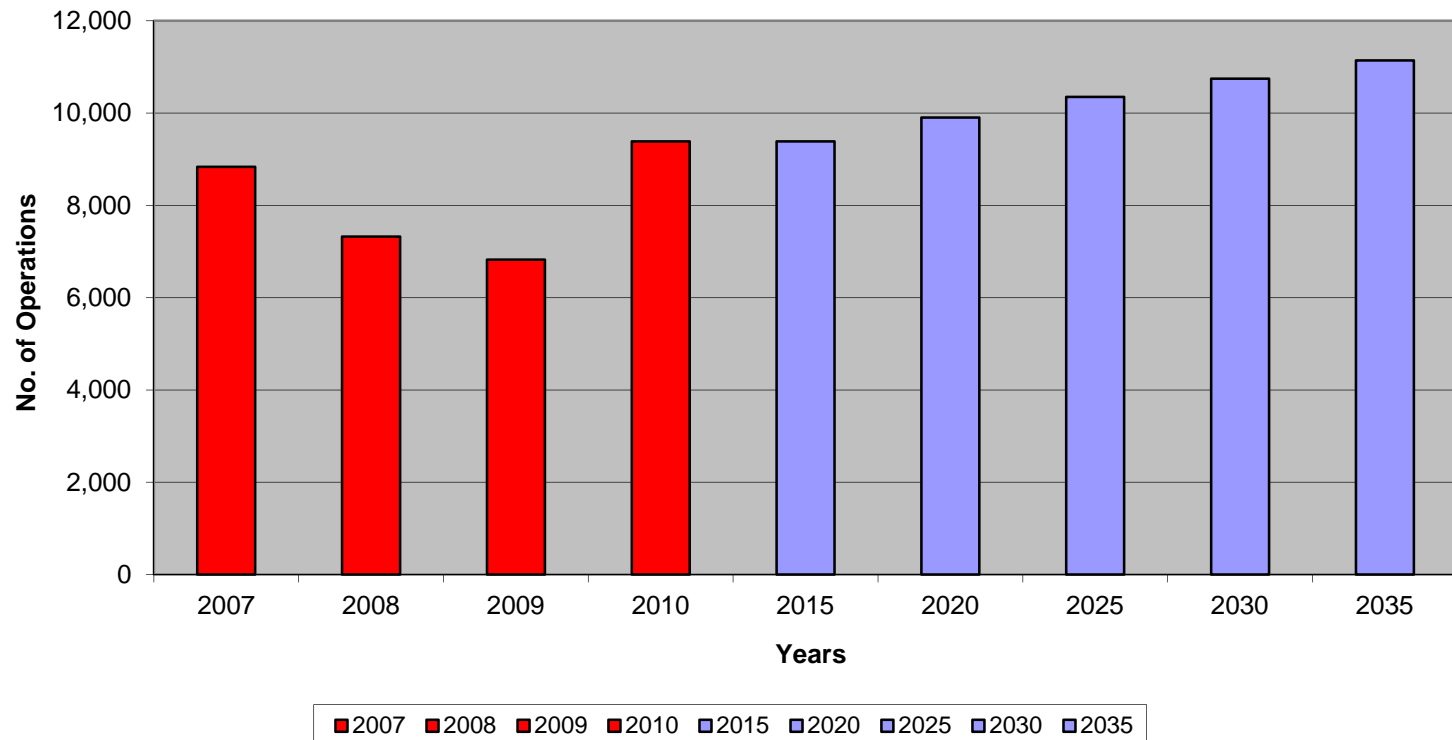
# Maui County Visitor Forecasts 2011-2035





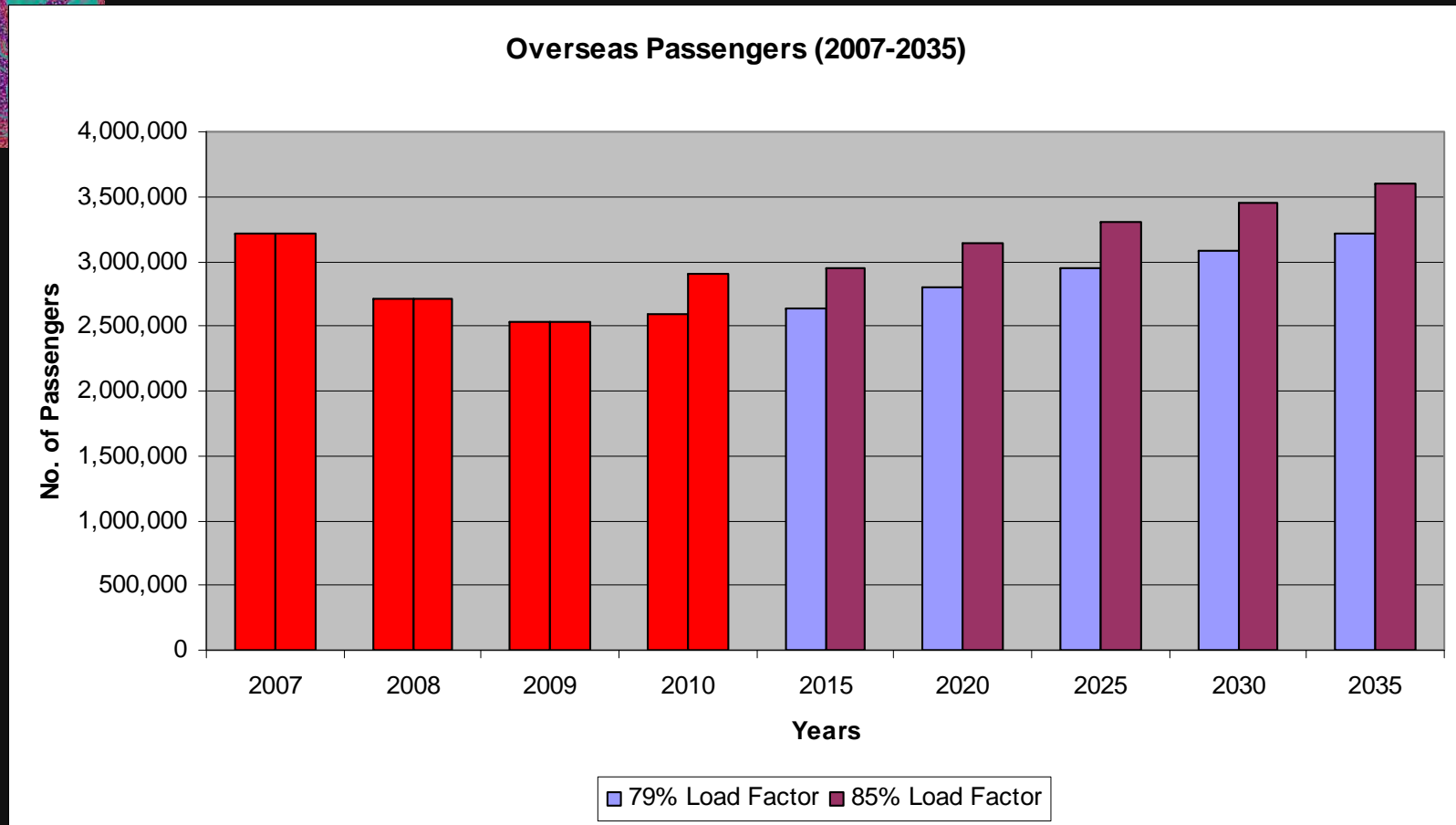
# Overseas Operations 2007-2035 @79% Load Factor

Overseas Operations (2007-2035)



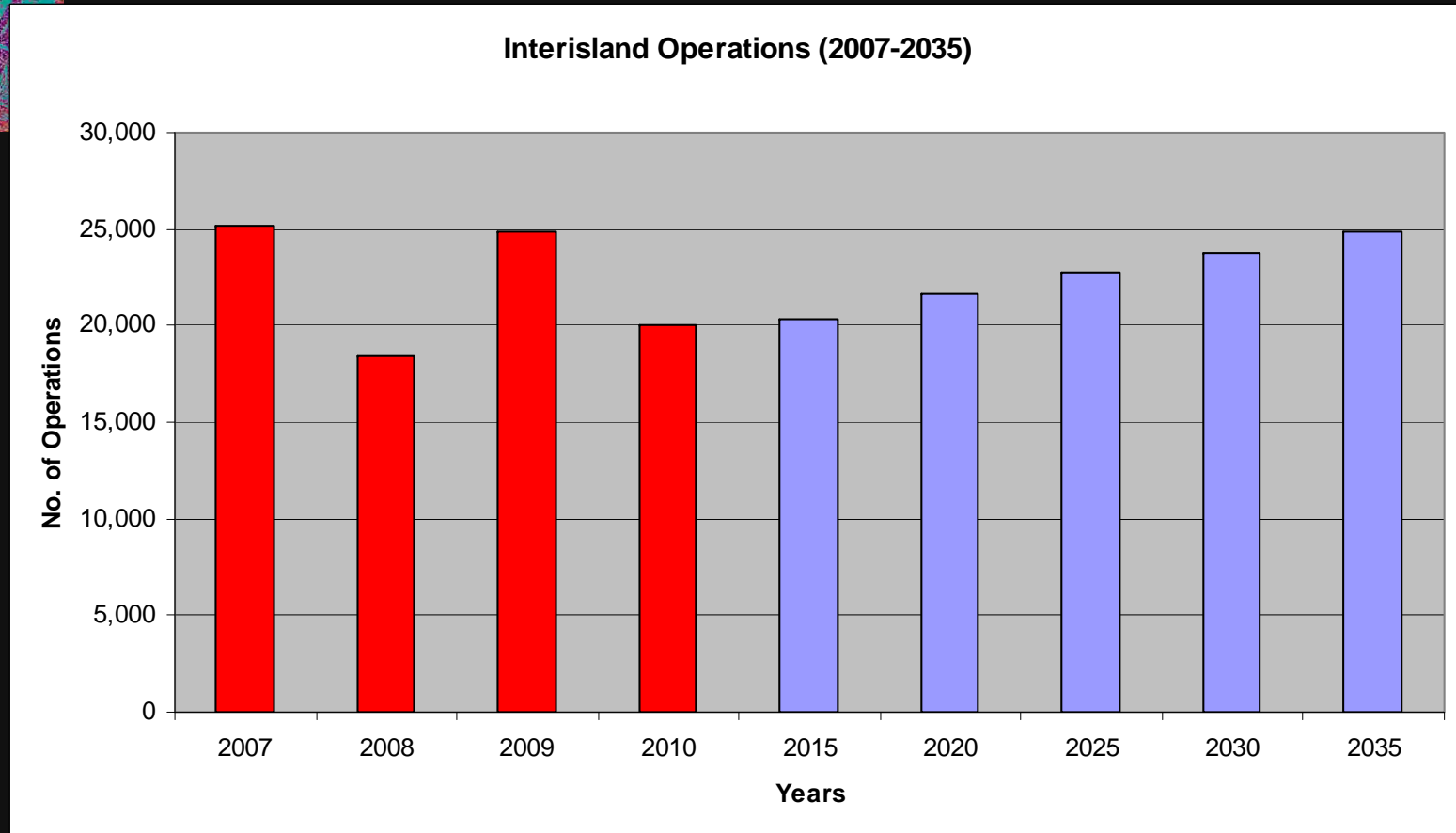


# Overseas Passenger Forecast 2007-2035 @ 79% & 85% Load Factor





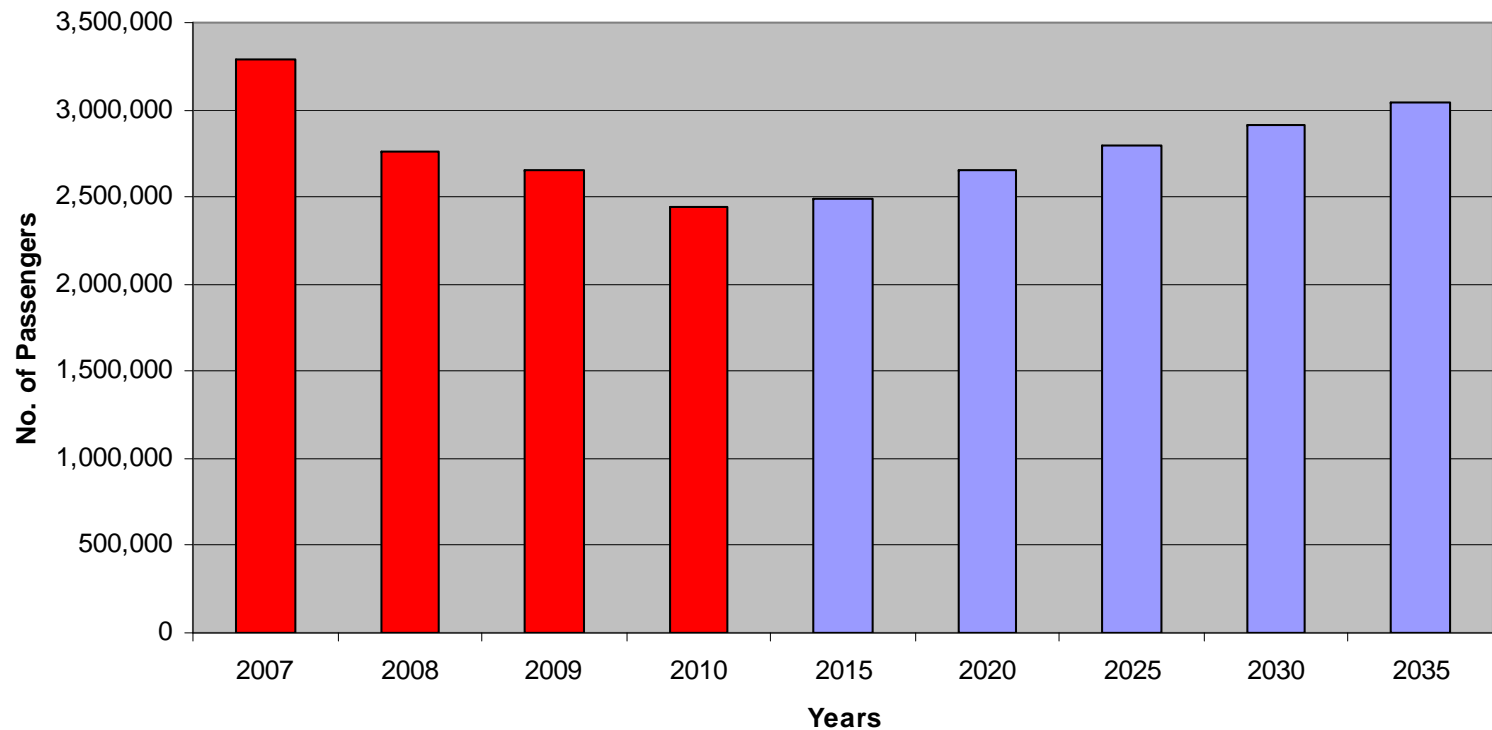
# Interisland Operations Forecast 2007-2035 @ 77% Load Factor





# Interisland Passenger Forecast 2007-2035 @77% Load Factor

Interisland Passengers (2007-2035)

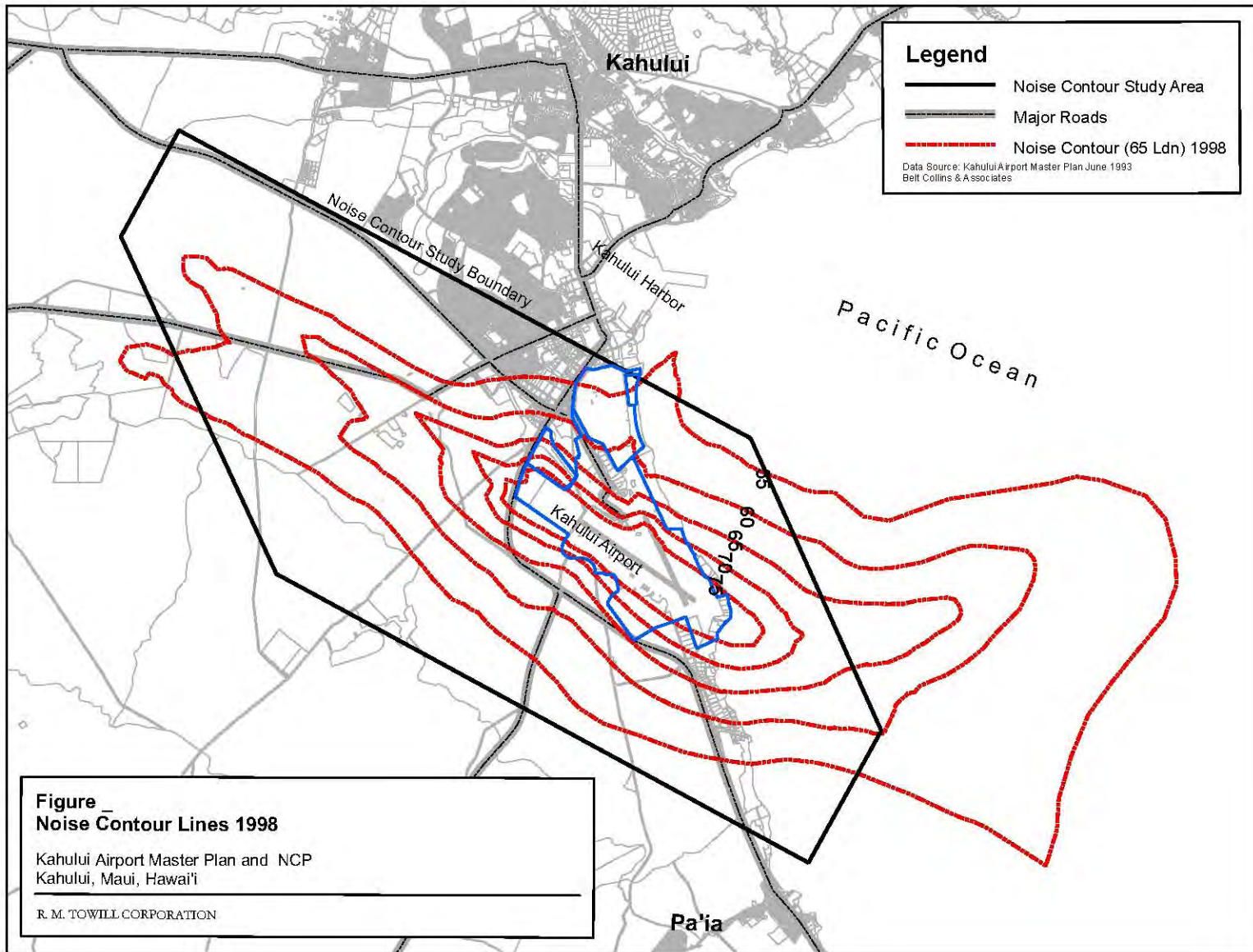




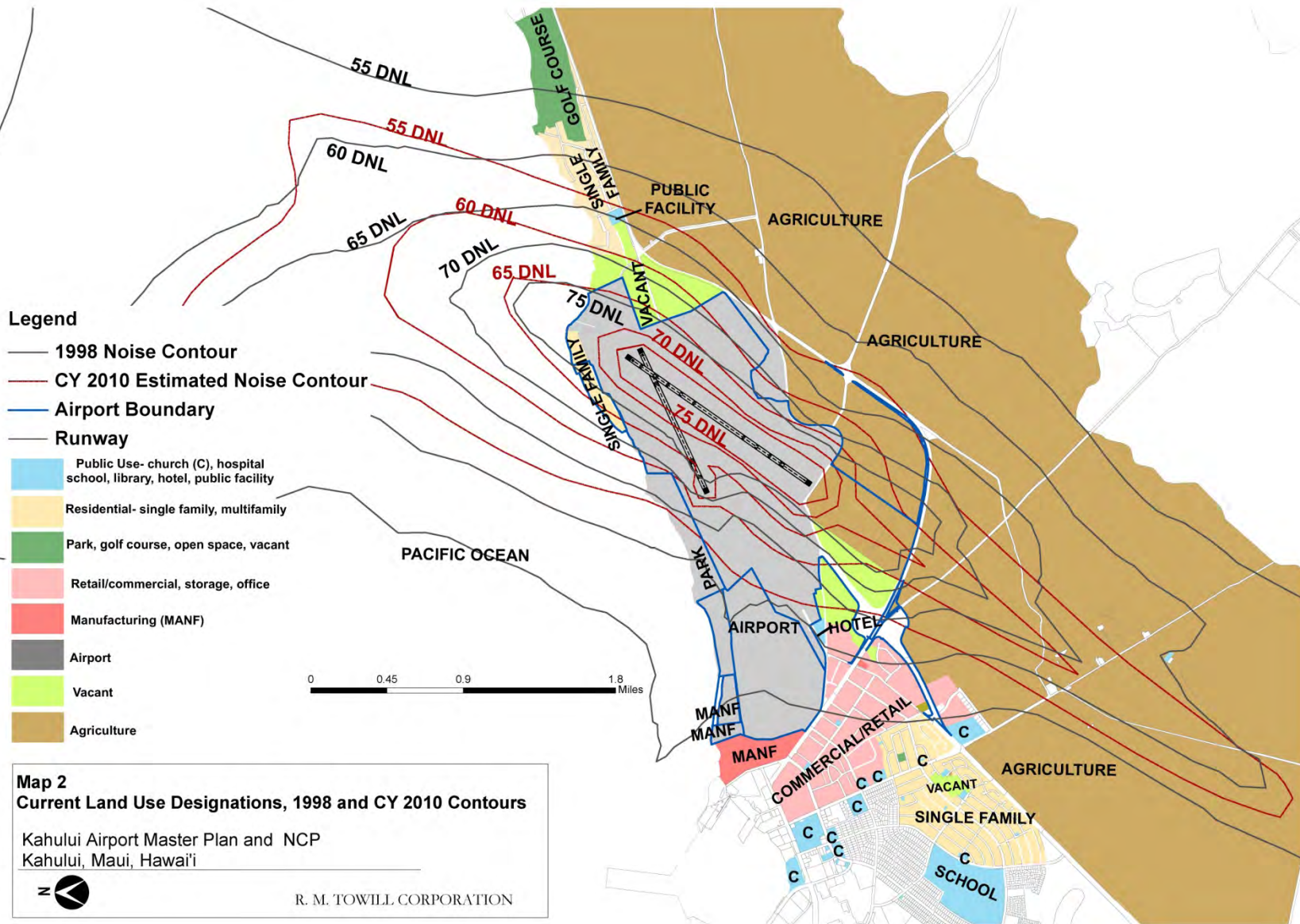


# Noise Compatibility Program

- NCP is a 5-year Plan
- Objectives
  - Establish Program Base Year – 2010
  - Prepare noise exposure map (2010 & 2020)
  - Identify land use impacts & noise exposure
- Prepare NCP recommendations
- ❖ Federal Aviation Regulations (FAR Part 150, “Airport Noise Compatibility Planning”)







**Legend**

- 1998 Noise Contour
- CY 2010 Estimated Noise Contour
- Airport Boundary
- Runway

- Public Use- church (C), hospital school, library, hotel, public facility
- Residential- single family, multifamily
- Park, golf course, open space, vacant
- Retail/commercial, storage, office
- Manufacturing (MANF)
- Airport
- Vacant
- Agriculture

**Map 2**  
**Current Land Use Designations, 1998 and CY 2010 Contours**

Kahului Airport Master Plan and NCP  
 Kahului, Maui, Hawai'i



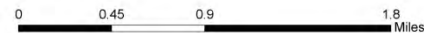
R. M. TOWILL CORPORATION



**Legend**

- CY 2010 Estimated Noise Contour
- 2020 Forecasted Noise Contour
- Airport Boundary
- Runway

- Public Use- church (C), hospital, school, library, hotel, public facility
- Residential- single family, multifamily
- Park, golf course, open space, vacant
- Retail/commercial, storage, office
- Manufacturing (MANF)
- Airport
- Vacant
- Agriculture

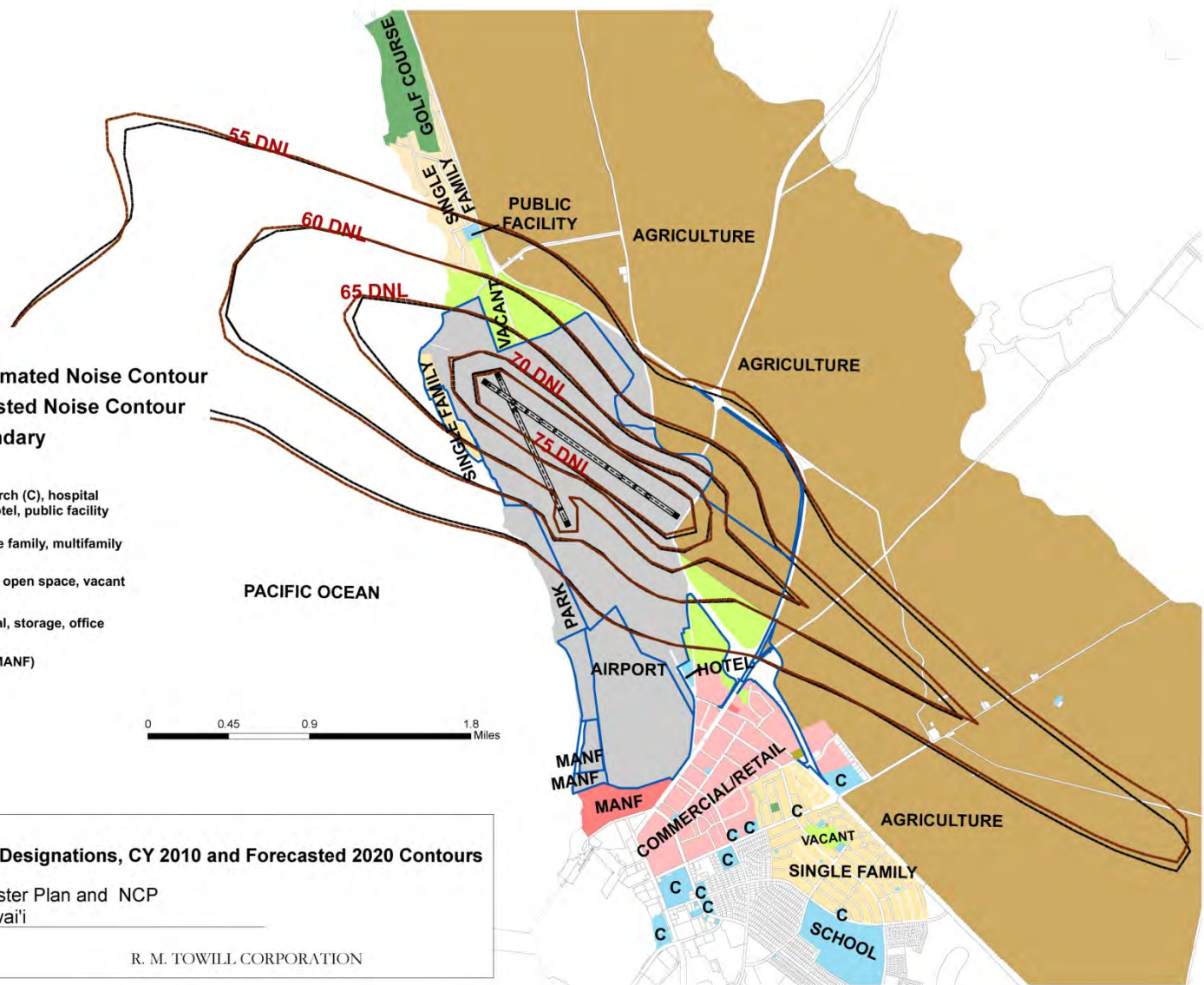


**Map 2**  
**Current Land Use Designations, CY 2010 and Forecasted 2020 Contours**

Kahului Airport Master Plan and NCP  
 Kahului, Maui, Hawai'i



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# MASTER PLANNING PROCESS

- ✓ Data Collection and Inventory
- ✓ Operation and Passenger Forecast
- ✓ Evaluation of Alternatives
- ✓ Selection of Preferred Plan





## DATA COLLECTION & INVENTORY

- Topographic Mapping of Existing Airport Property
- Inventory of Existing Facilities + Condition Analysis
- Review of Existing Development Plans
- Catalog of Existing Needs (long and short term)



# AIRPORT ALTERNATIVES

- Proposed Improvements
  - Review/Reconfirm 1993 Projects
  - Proposed Projects
- AIRFIELD
- TERMINAL
- ACCESS AND SUPPORT FACILITIES



# 1993 MP PROJECTS

## □ RECONFIRMING PROJECT

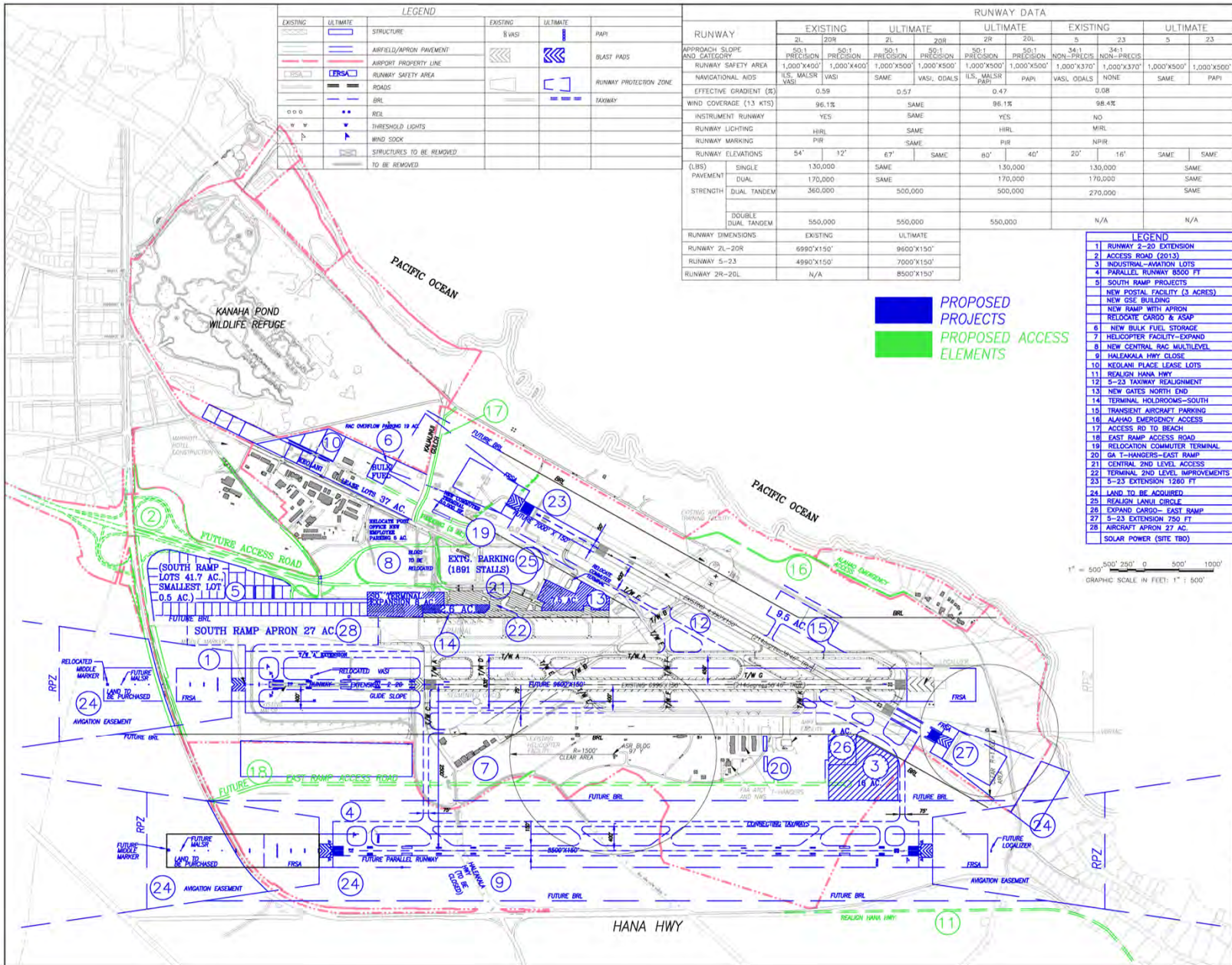
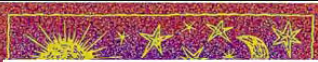
- Runway 2-20 to 9,600 Ft. Extension
- Helicopter Expansion
- Cargo Expansion
- Itinerant Aircraft Parking
- Land Acquisition for Future Airport Needs
- Relocate GSE Building
- Demolish Cargo Building
- Alahao Access Road
- Parallel Runway (8,500 ft)
- General Aviation Hangars
- East Ramp Access Road





# Proposed MP Projects (2015-2035)

- Airfield+Terminal Projects
  - Runway 5-23 extension to 7,000 ft.
  - Relocate Commuter Terminal
  - Aviation Lease Lots + South Ramp
  - Terminal Expansion to North
  - Consolidated Rent-A-Car and Parking
  - Lanui (Loop Road) Reconfiguration
  - Expand Parking (public and employees)
  - Expanded Security Road Network
  - Expand Terminal Holdrooms (south end)
  - Overall Landscape Plan



EXISTING		ULTIMATE		LEGEND		EXISTING		ULTIMATE	
SYMBOL	DESCRIPTION	SYMBOL	DESCRIPTION	SYMBOL	DESCRIPTION	SYMBOL	DESCRIPTION	SYMBOL	DESCRIPTION
[Symbol]	STRUCTURE	[Symbol]	PAR	[Symbol]	BLAST PADS	[Symbol]	BLAST PADS	[Symbol]	BLAST PADS
[Symbol]	APPROACH SLOPE	[Symbol]	APPROACH SLOPE	[Symbol]	BLAST PADS	[Symbol]	BLAST PADS	[Symbol]	BLAST PADS
[Symbol]	AIRFIELD/APRON PAVEMENT	[Symbol]	AIRFIELD/APRON PAVEMENT	[Symbol]	BLAST PADS	[Symbol]	BLAST PADS	[Symbol]	BLAST PADS
[Symbol]	AIRPORT PROPERTY LINE	[Symbol]	AIRPORT PROPERTY LINE	[Symbol]	BLAST PADS	[Symbol]	BLAST PADS	[Symbol]	BLAST PADS
[Symbol]	RUNWAY SAFETY AREA	[Symbol]	RUNWAY SAFETY AREA	[Symbol]	BLAST PADS	[Symbol]	BLAST PADS	[Symbol]	BLAST PADS
[Symbol]	ROADS	[Symbol]	ROADS	[Symbol]	BLAST PADS	[Symbol]	BLAST PADS	[Symbol]	BLAST PADS
[Symbol]	BRL	[Symbol]	BRL	[Symbol]	BLAST PADS	[Symbol]	BLAST PADS	[Symbol]	BLAST PADS
[Symbol]	REL	[Symbol]	REL	[Symbol]	BLAST PADS	[Symbol]	BLAST PADS	[Symbol]	BLAST PADS
[Symbol]	THRESHOLD LIGHTS	[Symbol]	THRESHOLD LIGHTS	[Symbol]	BLAST PADS	[Symbol]	BLAST PADS	[Symbol]	BLAST PADS
[Symbol]	WIND SOCK	[Symbol]	WIND SOCK	[Symbol]	BLAST PADS	[Symbol]	BLAST PADS	[Symbol]	BLAST PADS
[Symbol]	STRUCTURES TO BE REMOVED	[Symbol]	STRUCTURES TO BE REMOVED	[Symbol]	BLAST PADS	[Symbol]	BLAST PADS	[Symbol]	BLAST PADS
[Symbol]	TO BE REMOVED	[Symbol]	TO BE REMOVED	[Symbol]	BLAST PADS	[Symbol]	BLAST PADS	[Symbol]	BLAST PADS

RUNWAY	EXISTING		ULTIMATE		EXISTING		ULTIMATE	
	ZL	ZR	ZL	ZR	ZL	ZR	ZL	ZR
APPROACH SLOPE AND CATEGORY	50-1 PRECISION	50-1 PRECISION	50-1 PRECISION	50-1 PRECISION	50-1 PRECISION	50-1 PRECISION	50-1 PRECISION	50-1 PRECISION
RUNWAY SAFETY AREA	1,000'X450'	1,000'X400'	1,000'X500'	1,000'X500'	1,000'X500'	1,000'X500'	1,000'X500'	1,000'X500'
NAVIGATIONAL AIDS	1LS, VALSR, VASI	1LS, VALSR, VASI	SAME	VASI, ODALS	1LS, VALSR, PAPI	PAPI	VASI, ODALS	SAME
EFFECTIVE GRADIENT (%)	0.59	0.57	0.47	0.08	0.08	0.08	0.08	0.08
WIND COVERAGE (13 KTS)	96.1%	SAME	96.1%	98.4%	98.4%	98.4%	98.4%	98.4%
INSTRUMENT RUNWAY	YES	SAME	YES	NO	NO	NO	NO	NO
RUNWAY LIGHTING	HIRL	SAME	HIRL	MIRL	MIRL	MIRL	MIRL	MIRL
RUNWAY MARKING	PIR	SAME	PIR	NPIR	NPIR	NPIR	NPIR	NPIR
RUNWAY ELEVATIONS	54'	12'	67'	SAME	80'	40'	20'	16'
(LHS) SINGLE PAVEMENT	130,000	SAME	130,000	170,000	170,000	170,000	170,000	170,000
DUAL TANDEM	360,000	SAME	360,000	500,000	500,000	500,000	500,000	500,000
STRENGTH								
DOUBLE TANDEM	550,000	SAME	550,000	550,000	550,000	550,000	550,000	550,000
RUNWAY DIMENSIONS	EXISTING	ULTIMATE	EXISTING	ULTIMATE	EXISTING	ULTIMATE	EXISTING	ULTIMATE
RUNWAY 2L-20R	6990'X150'	9600'X150'	6990'X150'	9600'X150'	6990'X150'	9600'X150'	6990'X150'	9600'X150'
RUNWAY 5-23	4990'X150'	7000'X150'	4990'X150'	7000'X150'	4990'X150'	7000'X150'	4990'X150'	7000'X150'
RUNWAY 2R-20L	N/A	8500'X150'	N/A	8500'X150'	N/A	8500'X150'	N/A	8500'X150'

■ PROPOSED PROJECTS  
■ PROPOSED ACCESS ELEMENTS

- LEGEND**
- 1 RUNWAY 2-20 EXTENSION
  - 2 ACCESS ROAD (2013)
  - 3 INDUSTRIAL-AVIATION LOTS
  - 4 PARALLEL RUNWAY 8500 FT
  - 5 SOUTH RAMP PROJECTS
  - 6 NEW POSTAL FACILITY (3 ACRES)
  - 7 NEW GSE BUILDING
  - 8 NEW RAMP WITH APRON
  - 9 RELOCATE CARDO & ASAP
  - 10 NEW BULK FUEL STORAGE
  - 11 HELICOPTER FACILITY-EXPAND
  - 12 NEW CENTRAL IAC MULTILEVEL
  - 13 HALEKALUA HWY CLOSE
  - 14 KEOLANI PLACE LEASE LOTS
  - 15 REALIGN HANA HWY
  - 16 5-23 TAXIWAY REALIGNMENT
  - 17 NEW GATES NORTH END
  - 18 TERMINAL HOLDROOMS-SOUTH
  - 19 TRANSIENT AIRCRAFT-PARKING
  - 20 ALIHOI EMERGENCY ACCESS
  - 21 ACCESS RD TO BEACH
  - 22 EAST RAMP ACCESS ROAD
  - 23 RELOCATION COMMUTER TERMINAL
  - 24 CA T-HANGERS-EAST RAMP
  - 25 CENTRAL 2ND LEVEL ACCESS
  - 26 TERMINAL 2ND LEVEL IMPROVEMENTS
  - 27 5-23 EXTENSION 1260 FT
  - 28 LAND TO BE ACQUIRED
  - 29 REALIGN LANUI CIRCLE
  - 30 EXPAND CARDO-EAST RAMP
  - 31 5-23 EXTENSION 750 FT
  - 32 AIRCRAFT APRON 27 AC
  - 33 SOLAR POWER (SITE TBD)

1" = 500' 250' 0 500' 1000'  
 GRAPHIC SCALE IN FEET: 1" = 500'

State of Hawaii  
Airports Division

STATE OF HAWAII  
LOCATION MAP

TRUE NORTH  
MAGNETIC NORTH  
SUR W.P. E.

JANUARY 2010  
ANNUAL RATE OF CHANGE  
0.1" W

NO.	DATE	REVISIONS

PROJECT TITLE :  
KAHULUI AIRPORT  
KAHULUI, MAUI, HAWAII  
MASTER PLAN

PROJECT NO.: 3-15-0006-44  
STATE PROJECT NO. AM1011-09

SHEET TITLE :  
**PREFERRED PLAN**

DATE:  
MAR. 1, 2012



## Airfield Focus Areas

- Extend Runway 2-20 to 9600 ft to South
- Runway 5-23 Lengthening (7,000 ft)
- East Ramp Access Road
- Upgrade Existing Taxiways
- Land Acquisition for Runway Safety Areas
- Land Acquisition for Parallel 2-20 Runway



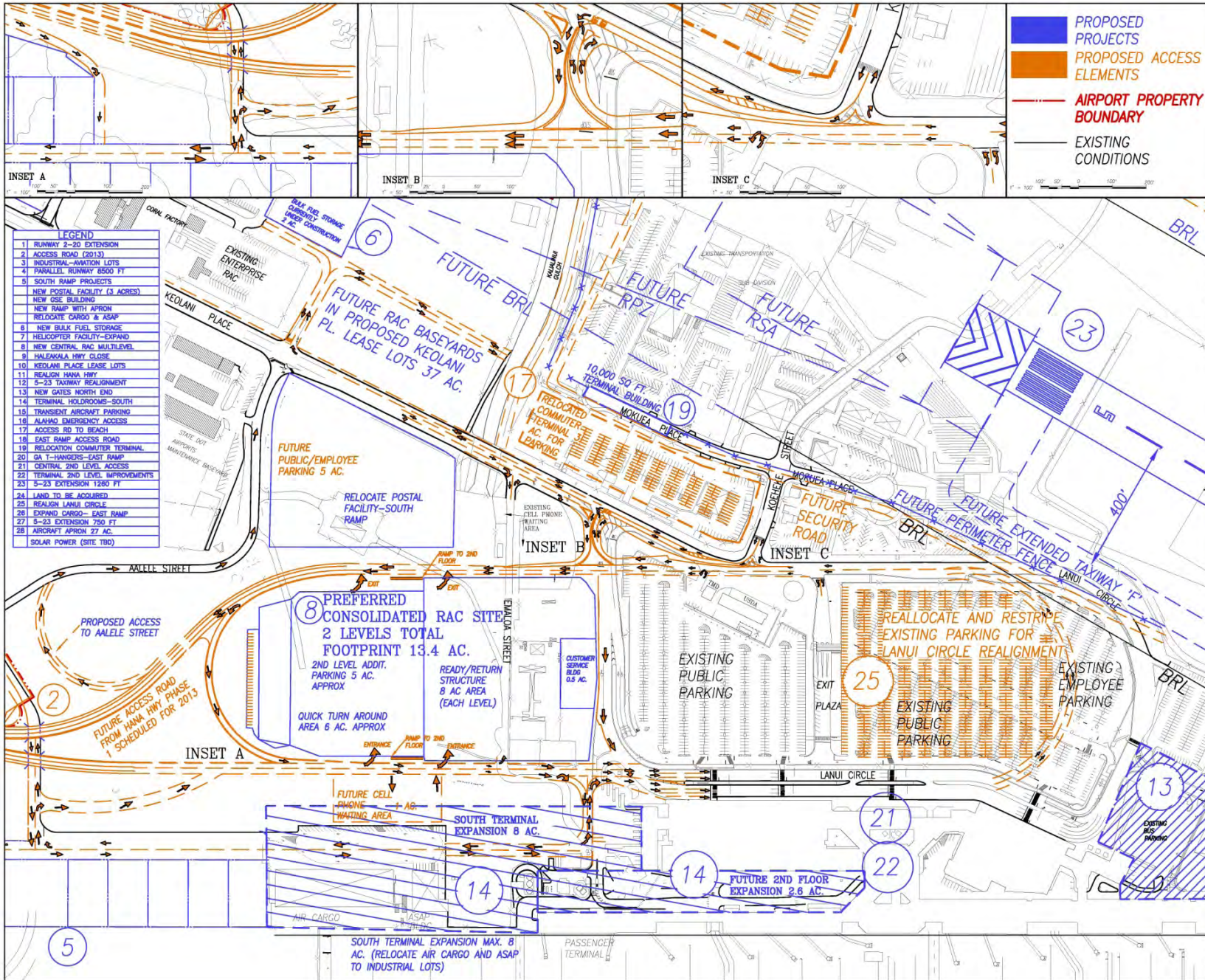




# Terminal Focus Areas

- ❑ Terminal Expansion - North
- ❑ Holding Area Expansion (south end)
- ❑ Additional Customer Parking
- ❑ Consolidated Rent-A-Car
- ❑ Realign Lanui Circle
- ❑ Relocate Commuter Facilities
- ❑ Relocate Existing RAC to South





PROPOSED PROJECTS  
 PROPOSED ACCESS ELEMENTS  
 AIRPORT PROPERTY BOUNDARY  
 EXISTING CONDITIONS

STATE OF HAWAII

LOCATION MAP

- LEGEND**
1. RUNWAY 2-20 EXTENSION
  2. ACCESS ROAD (2013)
  3. INDUSTRIAL-AVIATION LOTS
  4. PARALLEL RUNWAY 8500 FT
  5. SOUTH RAMP PROJECTS
  6. NEW POSTAL FACILITY (3 ACROSS)
  7. NEW GSE BUILDING
  8. NEW RAMP WITH APRON
  9. RELOCATE CARGO & ASAP
  10. NEW BULK FUEL STORAGE
  11. HELICOPTER FACILITY-EXPAND
  12. NEW CENTRAL RAC MULTILEVEL
  13. HALEKALA HWY CLOSE
  14. KEOLANI PLACE LEASE LOTS
  15. REALIGN HANA HWY
  16. 5-23 TAXIWAY REALIGNMENT
  17. NEW GATES NORTH END
  18. TERMINAL HOLDROOMS-SOUTH
  19. TRANSIENT AIRCRAFT PARKING
  20. ALIAPA EMERGENCY ACCESS
  21. ACCESS RD TO BEACH
  22. EAST RAMP ACCESS ROAD
  23. RELOCATION COMMUTER TERMINAL
  24. GA 1-HANGARS-EAST RAMP
  25. CENTRAL 2ND LEVEL ACCESS
  26. 5-23 EXTENSION 1280 FT
  27. LAND TO BE ACQUIRED
  28. REALIGN LANUI CIRCLE
  29. EXPAND CARGO- EAST RAMP
  30. 5-23 EXTENSION 750 FT
  31. AIRCRAFT APRON 27 AC.
  32. SOLAR POWER (SITE TBD)

KEY PLAN / NOTES:

TRUE NORTH  
 MAGNETIC NORTH  
 JANUARY 2010  
 ANNUAL RATE OF CHANGE  
 6.0"

NO.	DATE	REVISIONS

PROJECT TITLE :  
 KAHULUI AIRPORT  
 KAHULUI, MAUI, HAWAII  
 MASTER PLAN  
 PROJECT NO.: 3-15-0006-44  
 STATE PROJECT NO. AM1011-09  
 SHEET TITLE :

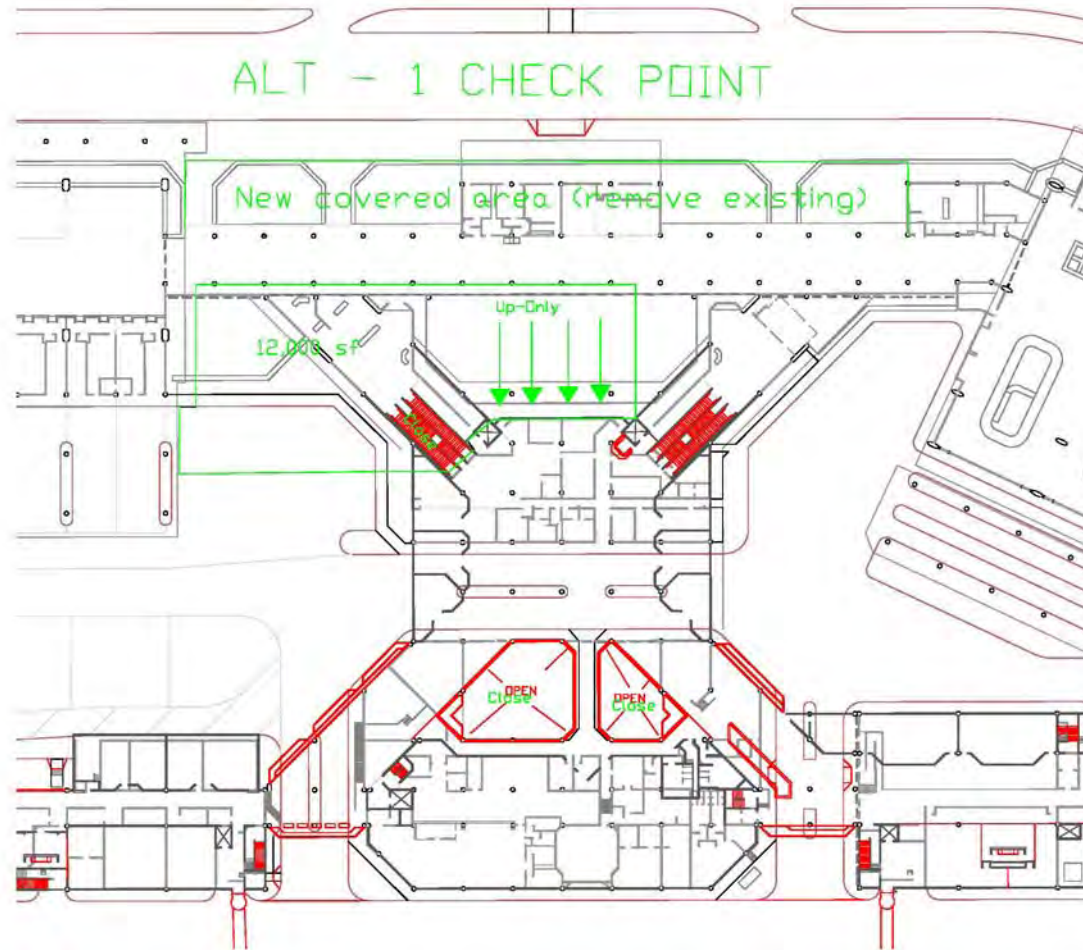
**PREFERRED PLAN  
TERMINAL AND ACCESS**

DATE:  
 MAR. 1, 2012



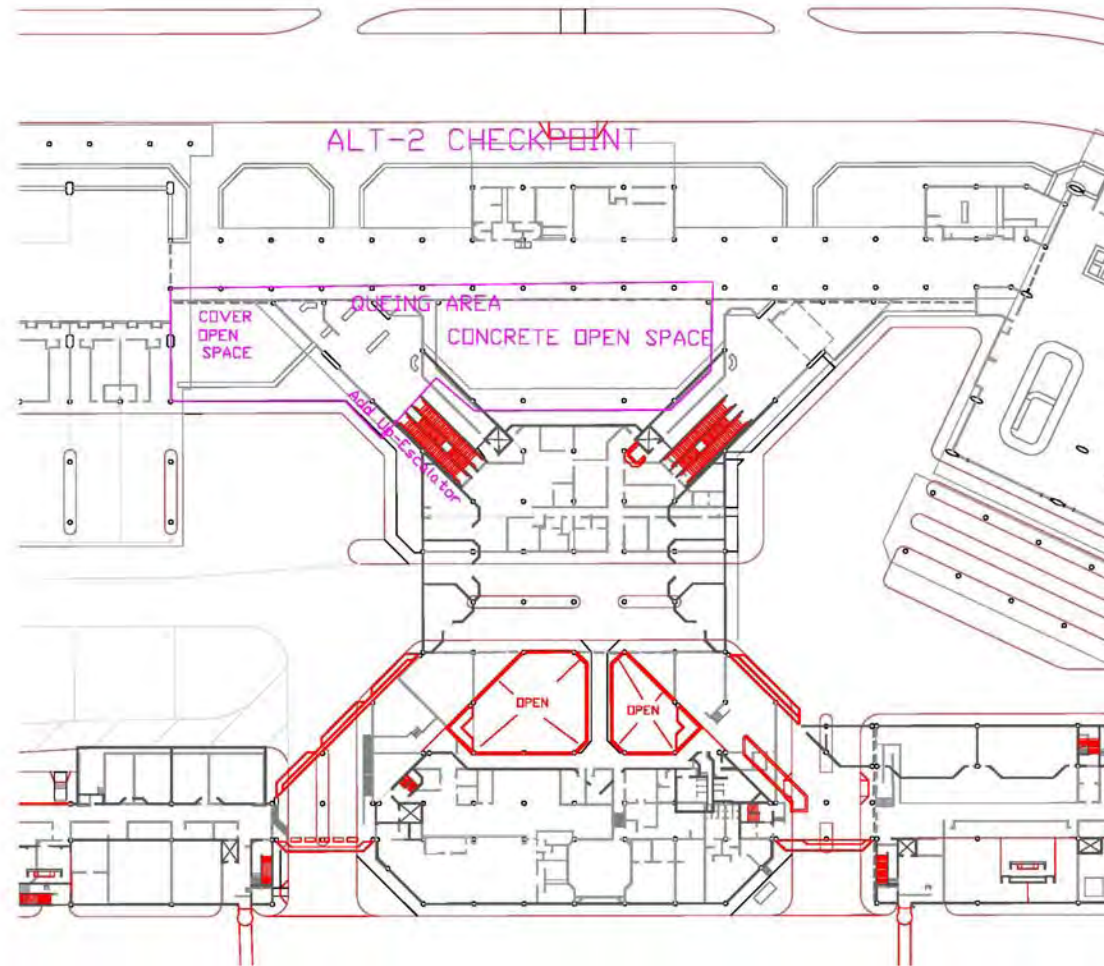


# Check Point Alternative





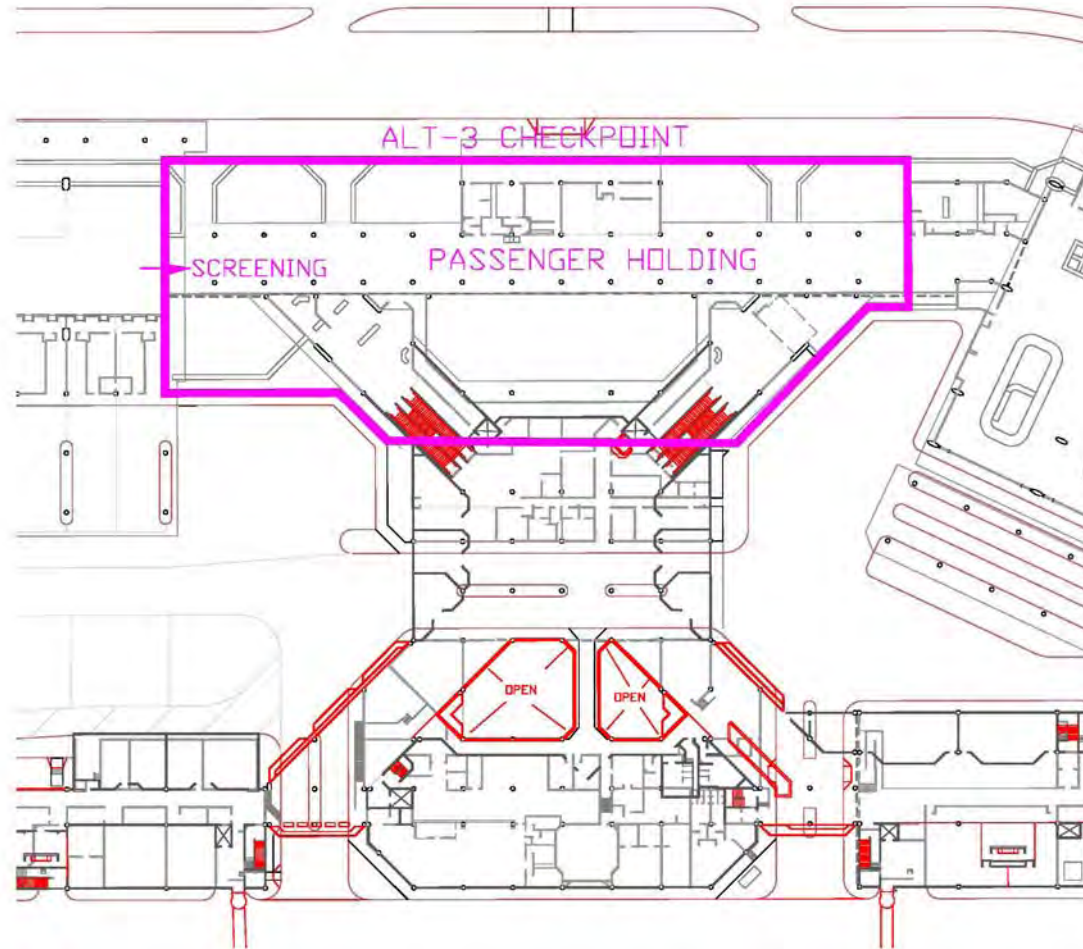
# Check Point Alternative







# Check Point Alternative

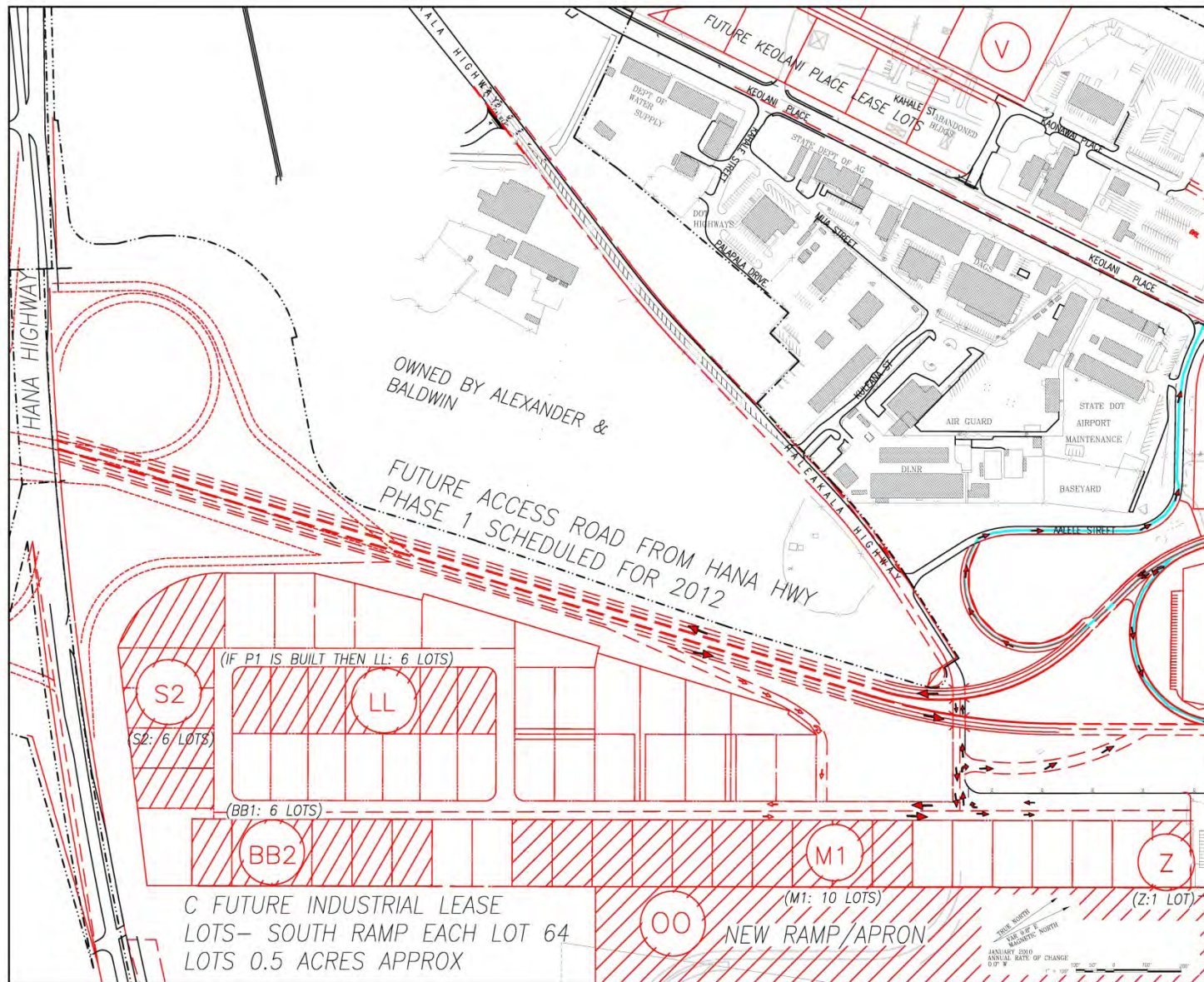




# Access and Support Facilities

- ❑ New South Ramp Industrial Lease Lots (along new access road)
- ❑ Future – New East Ramp Access Road
- ❑ Future land acquisition (east side)
- ❑ New Beach Access Road







STATE OF HAWAII



LOCATION MAP

SECTION	DATE	BY	APP'D

**KEY PLAN / NOTES :**

- 1. HANA HWY 200 EXTENSION TO AIRPORT
- 2. ACCESS ROAD
- 3. INDUSTRIAL LEASE
- 4. KEOLANI 100 EXTENSION TO AIRPORT
- 5. HANA HWY 200 EXTENSION TO AIRPORT
- 6. HANA HWY 200 EXTENSION TO AIRPORT
- 7. HANA HWY 200 EXTENSION TO AIRPORT
- 8. HANA HWY 200 EXTENSION TO AIRPORT
- 9. HANA HWY 200 EXTENSION TO AIRPORT
- 10. HANA HWY 200 EXTENSION TO AIRPORT
- 11. HANA HWY 200 EXTENSION TO AIRPORT
- 12. HANA HWY 200 EXTENSION TO AIRPORT
- 13. HANA HWY 200 EXTENSION TO AIRPORT
- 14. HANA HWY 200 EXTENSION TO AIRPORT
- 15. HANA HWY 200 EXTENSION TO AIRPORT
- 16. HANA HWY 200 EXTENSION TO AIRPORT
- 17. HANA HWY 200 EXTENSION TO AIRPORT
- 18. HANA HWY 200 EXTENSION TO AIRPORT
- 19. HANA HWY 200 EXTENSION TO AIRPORT
- 20. HANA HWY 200 EXTENSION TO AIRPORT

NO.	DATE	BY	REVISION

**PROJECT TITLE :**  
KAHULUI AIRPORT  
MASTER PLAN  
AND NOISE COMPATIBILITY  
UPDATE  
KAHULUI MAUI, HAWAII

**PROJECT NO.:** 3-15-10006-44

**STATE PROJECT NO.:** AM1011-09

**SHEET TITLE :**

**ALTERNATIVE DEVELOPMENT INDUSTRIAL LOTS**

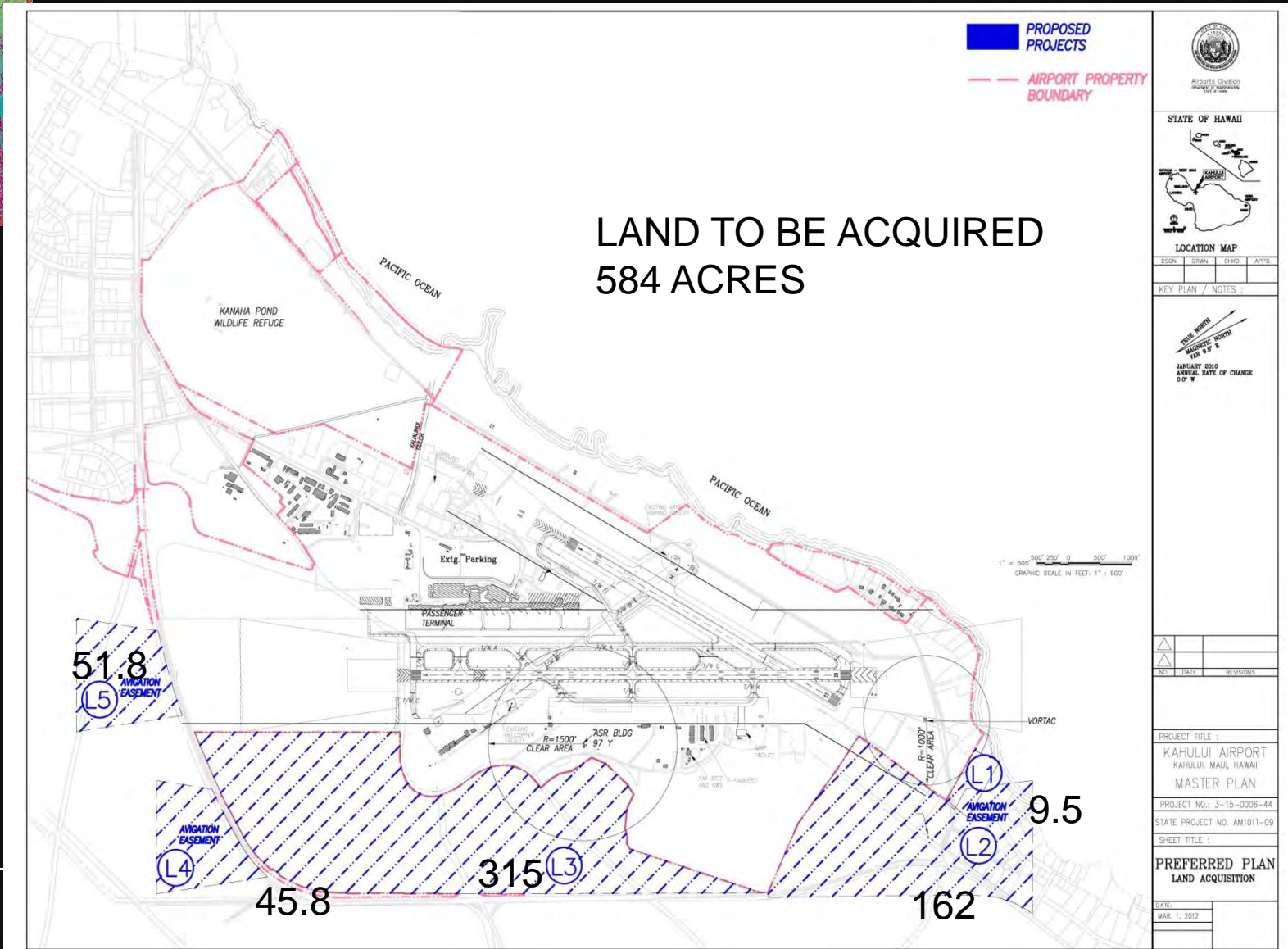
1/2/21

6 OF 12





# Land Acquisition





# Project Implementation

## □ Phasing Plan

- Phase 1 (2015 -2020)
- Phase 2 (2021 -2030)
- Phase 3 (2031 +)



# Cost Estimate

Item	Project	Total	PHASE 1	PHASE 2	PHASE 3
			2015-2025	2026-2035	2035 +
1	Runway 2-20 Extension	\$15,444,000	\$15,444,000		
2	Access Road to Hāna Highway (by others)	\$1,600,000			\$1,600,000
3	Aviation Lease Lot	\$4,181,730		\$4,181,730	
4	Parallel Runway 8500 ft.	\$62,370,000			\$62,370,000
	Parallel Taxiway	\$50,490,000			\$50,490,000
5	South Ramp Projects (grade and pave)	\$625,500	\$625,500		
6	Helicopter Facility Expand (Grade and Pave)	\$30,000		\$30,000	
7	New Central RAC (by others)	\$178,000,000			
8	Haleakalā (to be closed)	\$1,200,000	\$1,200,000		
9	Keolani Lease Lots (Clear and Grade)	\$555,000	\$555,000		
10	Realign Hāna Highway (Grade and Pave)	\$2,310,000			\$2,310,000
11	5-23 Taxiway Realignment (Twy B, F, and G)	\$11,745,000	\$11,745,000		
12	New Gates North-end	\$163,348,750		\$163,348,750	
13	Terminal Holdrooms - South	\$43,559,665		\$43,559,665	
14	Transient Aircraft Parking	\$11,173,054			\$11,173,054
15	Alahao Emergency Access Road	\$950,400		\$950,400	
16	Access Road to Beach	\$475,200	\$475,200		
17	East Ramp Access Road	\$3,240,000			\$3,240,000
17a	East Ramp Access Road Tunnel	\$900,000			
18	Relocate Commuter Terminal	\$5,000,000		\$5,000,000	
18A	Relocated Commuter Parking	\$784,080		\$784,080	
18B	Relocated Commuter Apron	\$5,292,500		\$5,292,500	
19	GA T-Hangars	\$4,800,000			\$4,800,000
20	Central 2nd Level Access	\$7,500,000		\$7,500,000	
21	Terminal 2nd Level Improvements	\$1,000,000		\$1,000,000	
22	Rwy 5 Extension 1250 ft.	\$14,850,000	\$14,850,000		
23	Rwy 23 Extension 750 ft.	\$2,970,000	\$2,970,000		
24	Land to be acquired	\$12,981,759	\$12,981,759		
25	Realign Lanui Circle	\$560,000	\$560,000		
26	Expand Cargo - East Ramp	\$4,116,420			\$4,116,420
27	South Ramp Apron	\$31,755,240		\$31,755,240	
28	Terminal Expansion to South	#####		\$174,238,650.00	
	SUBTOTAL	\$818,046,947	\$61,406,459	\$437,641,015	\$140,099,474
	Design @ 8%	\$65,443,756	\$4,912,517	\$35,011,281	\$11,207,958
	Subtotal	\$883,490,703	\$66,318,976	\$472,652,296	\$151,307,431
	Contingency 15%	\$132,523,605	\$9,947,846	\$70,897,844	\$22,696,115
	TOTAL	\$1,016,014,308	\$76,266,822	\$543,550,140	\$174,003,546





# PROPOSED MP PROJECTS

PROJECT LIST	COMMENTS
1 RUNWAY 2-20 EXTENSION 2600 FT	
2 HANA HWY ACCESS ROAD (2013)	
3 INDUSTRIAL – AVIATION LOTS EAST RAMP	
4 PARALLEL RUNWAY 2-20 8500 FT	
5 SOUTH RAMP PROJECTS	
NEW POSTAL FACILITY	
NEW GSE BUILDING	
NEW RAMP WITH APRON	
RELOCATE CARGO AND ASAP	
6 NEW BULK FUEL STORAGE	
7 HELICOPTER FACILITY - EXPANSION	
8 NEW CENTRAL RENT-A-CAR FACILITY	
9 HALEAKALA HIGHWAY CLOSURE	
10 KEOLANI LEASE LOTS	
11 REALIGN HANA HIGHWAY	
12 RUNWAY 5-23 EXTENSION	
13 NEW GATES NORTH-END	
14 TERMINAL HOLDROOM - SOUTH	



PROJECT LIST	COMMENTS
15 TRANSIENT AIRCRAFT PARKING	
16 ALA HAO EMERGENCY ACCESS	
17 ACCESS ROAD TO BEACH	
18 EAST RAMP ACCESS ROAD	
19 RELOCATION OF COMMUTER TERMINAL	
20 GA T-HANGER – EAST RAMP	
21 CENTRAL TERMINAL 2 <sup>ND</sup> LEVEL ACCESS	
22 TERMINAL 2 <sup>ND</sup> LEVEL IMPROVEMENTS	
23 RUNWAY 5-23 EXTENSION 1250 FT	
24 LANDS TO BE ACQUIRED	
25 REALIGN LANUI CIRCLE	
26 EXPAND CARGO – EAST RAMP	
27 RUNWAY 5-23 EXTENSION 750 FT	
28 AIRCRAFT APRON 27 AC – SOUTH RAMP	
SOLAR (PV) FACILITY – CONRAC ROOF	





# CONTACT US

## □ Dept of Transportation

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- Honolulu, Hawai'i 96818
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- Tel. 808-842-1133

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□ Web Site: <http://kahuluiairport.rmtowill.com>