







Reapportionment and Redistricting in Hawaii



11 April 2011



One Person, One Vote

equal representation





04/11/2011

Topics

- Background Three C's
- Reapportionment and Redistricting Guidelines
- Federal House of Representatives
- State Senate and House

Background – U.S. Constitution



- Article 1, Section 2, Clause 3
 - Representatives "shall be apportioned among the several States which may be included within this Union, according to their respective Numbers, which shall be determined by adding to the whole Number of free Persons, including those bound to Service for a Term of Years, and excluding Indians not taxed, three fifths of all other Persons".

14th Amendment, Section 2

- Representatives shall be apportioned among the several States according to their respective numbers, counting the whole number of persons in each State, excluding Indians not taxed.
- 1940 Attorney General Opinion
 - In 1940, it was determined that there were no longer any American Indians who should be classed as "not taxed ".

Background – U.S. Congress

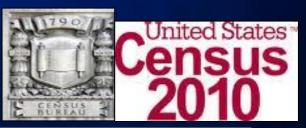
Senate

- 100 members: two from each state
- No reapportionment or redistricting
- House of Representatives
 - 435 members: apportioned every ten years based on population
 - Every state gets at least one member
 - Wyoming, Vermont, Alaska, North Dakota
 - States with larger populations get more members
 - California 53, Texas 36, New York 27, Florida 27 (2010 apportionment)



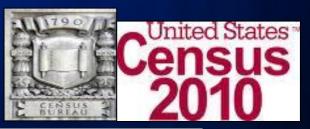


Census Blocks PL 94-171 counts





Census Blocks PL 94-171 counts

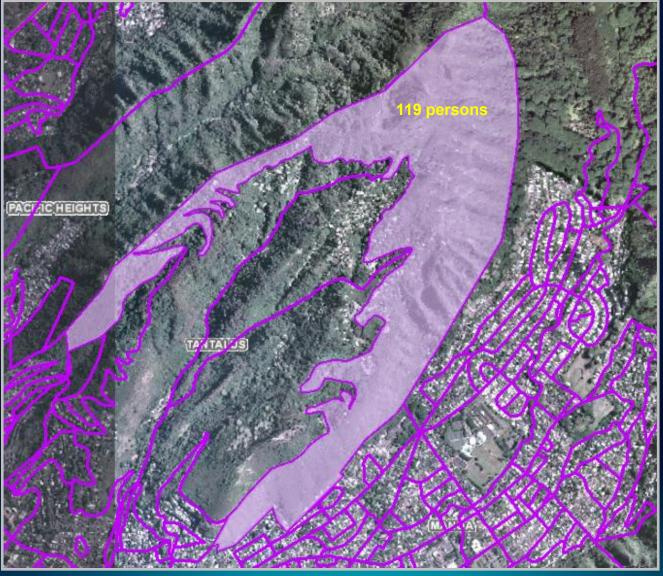




04/11/2011

Census Blocks PL 94-171 counts

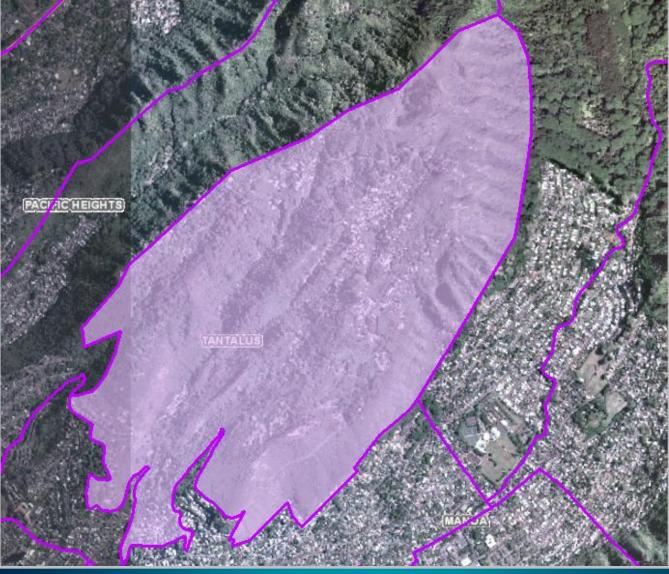




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Census Tracts PL 94-171 counts





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Census County PL 94-171 counts



Census State PL 94-171 counts





Census National PL 94-171 counts



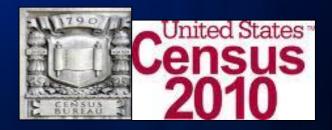


Background – U.S	S. Census	Genssus Burkesus	United States ensus 2010
 First U.S. Census in 	n 1790		
- Population:		3,929,214	
- Largest city:	New York City	33,131	0.8%
 U.S. Census in 190 	0		
- Population:		76,212,168	
- Largest city:	New York City	3,437,202	4.5%
∙ U.S. Census in 201	0		
- Population:		308,745,538	
 Largest city: 	New York City	8,175,133	2.6%
	#2 Los Angeles	3,792,621	1.2%
A Carton			





1/20TT



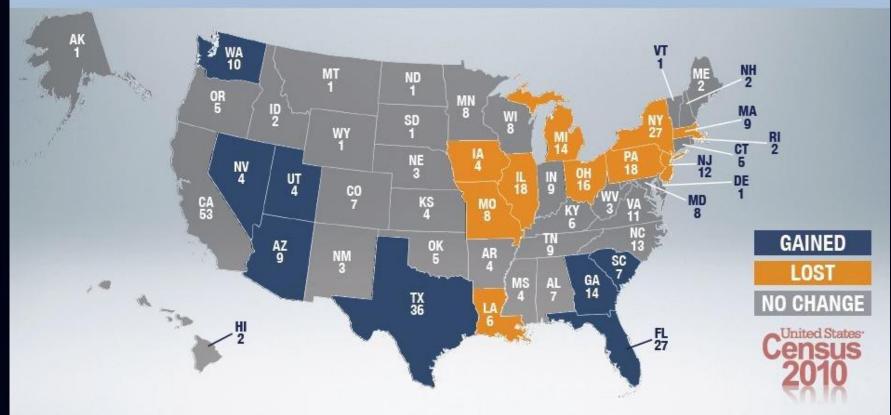
Mean Center of Population for the United States: 1790 to 2010



435 seats according to population

CONGRESSIONAL SEATS

2010 OFFICIAL RESULTS



Hawaii 2010 population: 1,360,301 U.S. House of Representatives: 2 members from Hawaii

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- 7 states: only one representative
- 35 states: state legislature
- 2 states: commission, leg approves
- 6 states: independent/bipartisan





Bipartisan Reapportionment Commission

Nine members

- 2 appointed by the President of the Senate
 - Shan Tsutsui Lorrie Lee Stone, Anthony Takitani
- 2 appointed by the Speaker of the House
 - Calvin Say Clarice Hashimoto, Harold Masumoto
- 2 appointed by the Senate Minority Leader
 - Sam Slom Calvert Chipchase, Elizabeth Moore
- 2 appointed by the House Minority Leader
 Gene Ward Dylan Nonaka, Terry Thomason



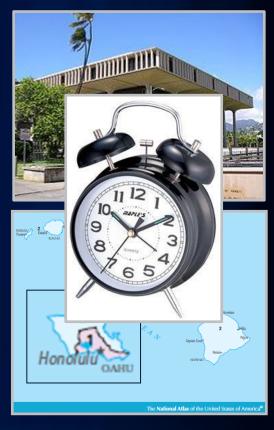


- Ninth member, the Chair, is selected by these eight ???

Bipartisan Reapportionment Commission

- 9 members on Commission
- 16 members on Advisory Council
- 100 days to generate the plan
 - Federal House of Representatives
 - State Senate
 - State House
- Then 50 days for public comments
- 150 total days

3 months



Topics

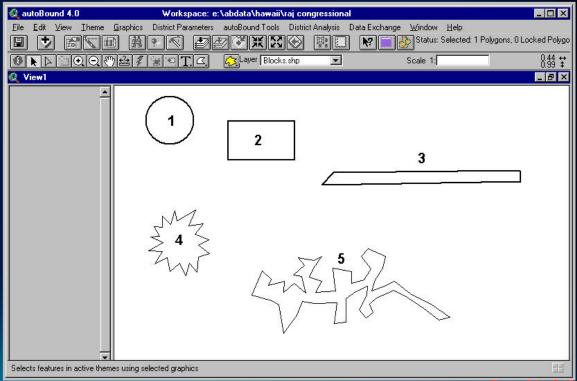
- Background Three C's
- Reapportionment and Redistricting Guidelines
- Federal House of Representatives
- State Senate and House

Topics

- Background Three C's
- Reapportionment and Redistricting Guidelines
 - 1) Determine population base
 - 2) Apportion representatives (reapportionment)
 - 3) Draw district boundary lines (redistricting)
- Federal House of Representatives
- State Senate and House

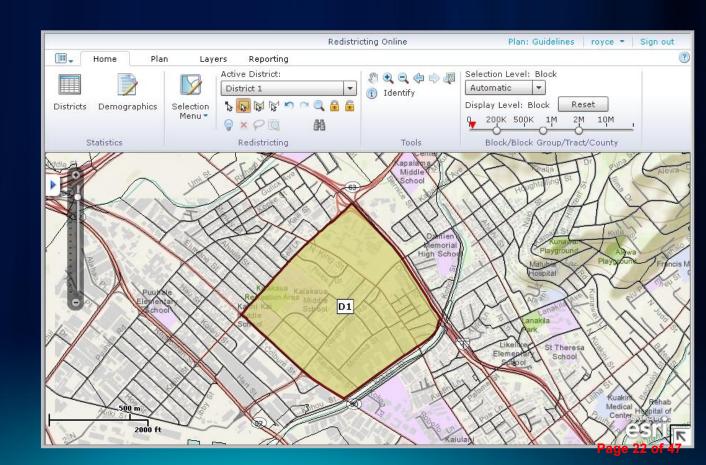
Guidelines

Compact



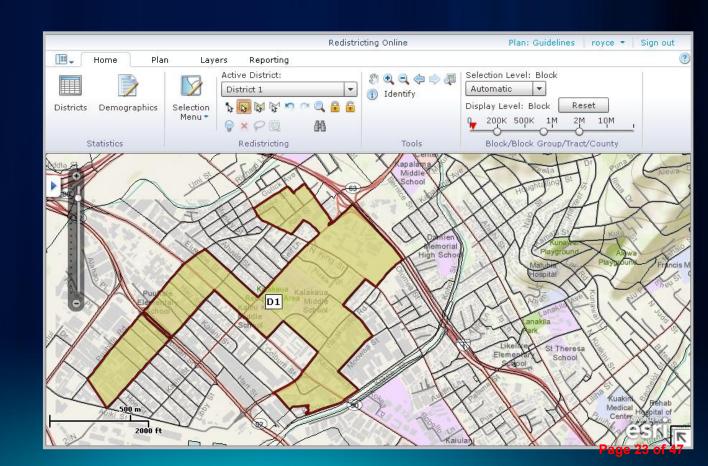
Guidelines

Compact



Guidelines

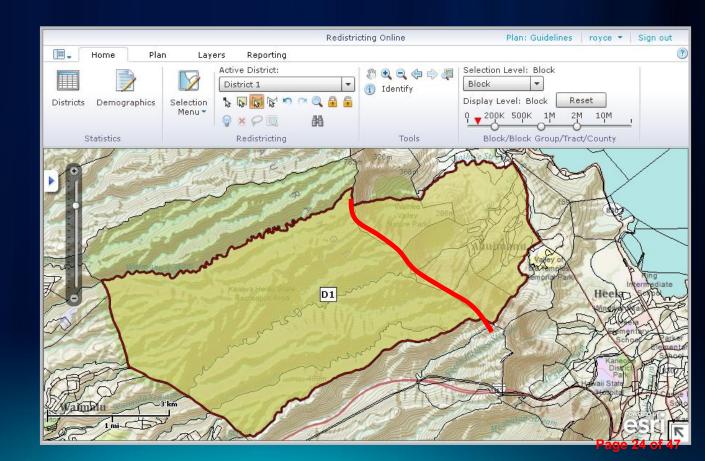
Compact



Guidelines

Compact

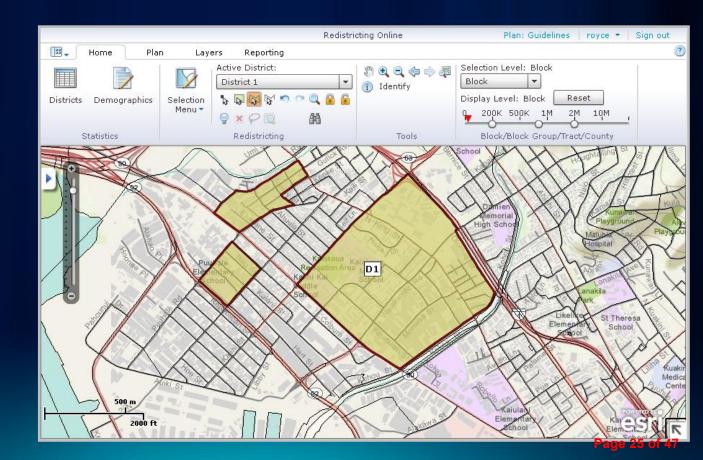
geometrically
 geographically



Guidelines

- Compact
- Contiguous

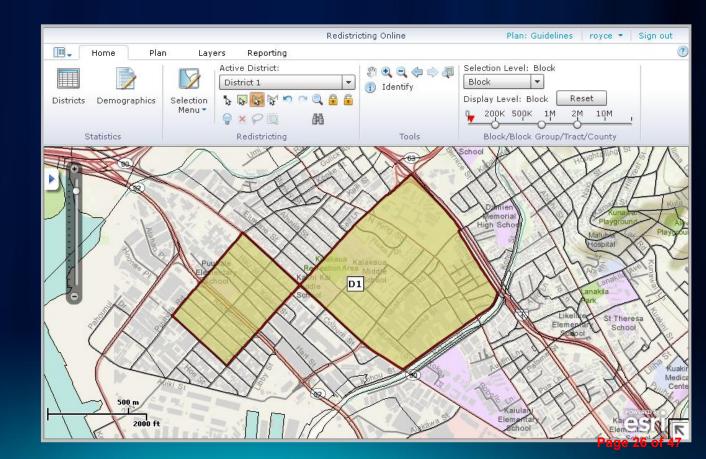
- geometrically
- geographically
- no disconnects



Guidelines

- Compact
- Contiguous

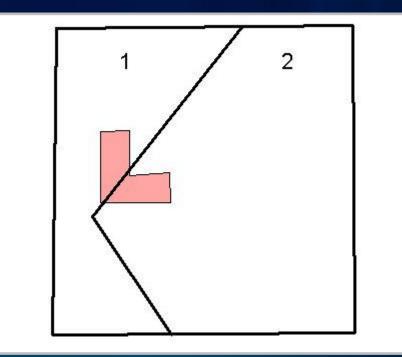
- geometrically
- geographically
- no disconnects
- no "one point" connections



Guidelines

- Compact
- Contiguous
- No submergence

- geometrically
- geographically
- no disconnects
- no "one point" connections
- preserve socio-economic communities



Guidelines

- Compact
- Contiguous
- No submergence

- geometrically
- geographically
- no disconnects
- no "one point" connections
- preserve socio-economic communities

"where practicable"

Topics

- Background Three C's
- Reapportionment and Redistricting Guidelines
- Federal House of Representatives
- State Senate and House





- 1) population base
- 2) apportion representatives (reapportionment)
- 3) draw district boundaries (redistricting)









District Stat	tistics					-
Current	Propo	sed	Assig	ned		
District	Hide	Lock	Color	TOTAL	TOTAL_DEV	TOTAL_DEV_P
Unassigned			R	0	0	0.00
District 1			R	658,672	-21,478	-3.16
District 2			F	701,629	21,479	3.16
A Othue						
0 Number of Dist	ricts: [2	 < 1ⁱ 	Rename	nce in po	pulation
Number of Dist HonoHarra Population base: 0,301 total		2 WAII			nce in po	pulatior

Guidelines

- Compact
- Contiguous
- No submergence
- Total deviation within 1%

	Una
NIIHAU 2 Kababa Kapas	Dist
Putowa KAUAI	Dist
Honolulu OAHU Muunalui. MOLOKAI	Numt
LANAI Lano Ch*	
P KAHOOLAWE MAU	
PACIE KAHOOLAWE CHARACTER Herekas	
C Warner, Henolas	
2 Hijo	
Captain Cook*	2
Pahala+ HAWAII	
The National Atlas of the United States of Ar	nerica®

- geometrically
- geographically
- no disconnects
- no "one point" connections
- preserve socio-economic communities

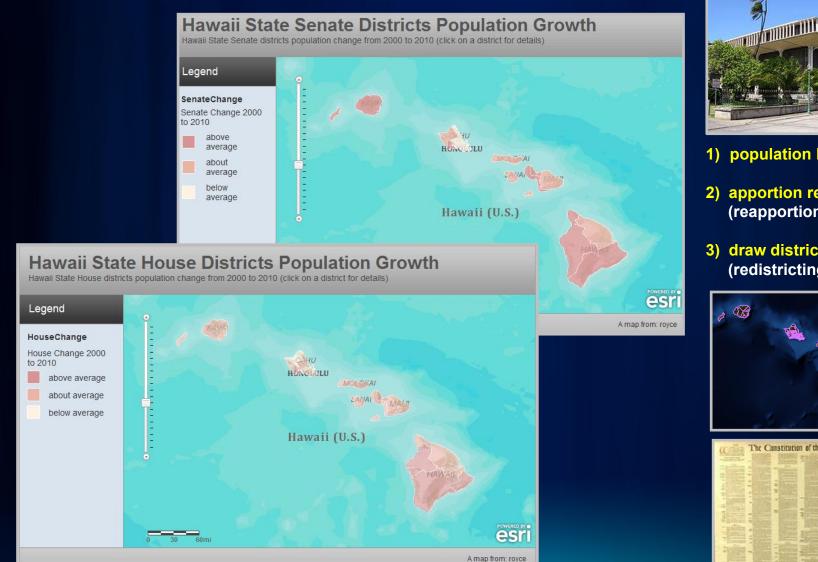
District Statistics _ ×								
Current	Proposed Assign		Ined					
District	Hide	Lock	Color	TOTAL	TOTAL_DEV	TOTAL_DEV_P		
Unassigned			F	0	0	0.00		
District 1			F	658,672	-21,478	-3.16		
District 2			F	701,629	21,479	3.16		
Number of Districts: 2 A Rename								

2010 Population base: 1,360,301 total 680,150 each

Topics

- Background Three C's
- Reapportionment and Redistricting Guidelines
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State Senate and House



- population base
- 2) apportion representatives (reapportionment)
- 3) draw district boundaries (redistricting)





Hawaii Population Base

Federal census





Hawaii Population Base



Population base: 1,360,301 total



State population base:

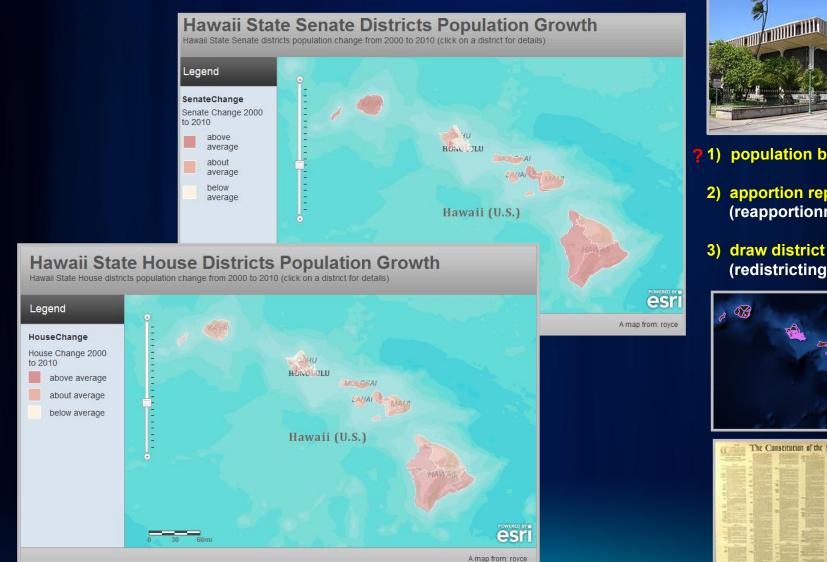
- Permanent residents of Hawaii
- What about:
 - Sentenced felons?
 - Non-resident students?
 - Non-resident military? and their dependents?



The Constitution of the State of Hawan

Redistricting

State Senate and House



population base 2) apportion representatives (reapportionment)

3) draw district boundaries (redistricting)



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Apportion Representatives

Permanent Residents of Hawaii



Population base: 1,360,301 total

State population base: 1,360,301 total

State Senate (25 seats): 54,412 per district ideal target

State House (51 seats): 26,673 per district ideal target





Guidelines

- Compact
- Contiguous
- No submergence
- Balance within 10%

State House (51 seats): 26,673 per district



Guidelines

- Compact
- Contiguous
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- Balance within 10%

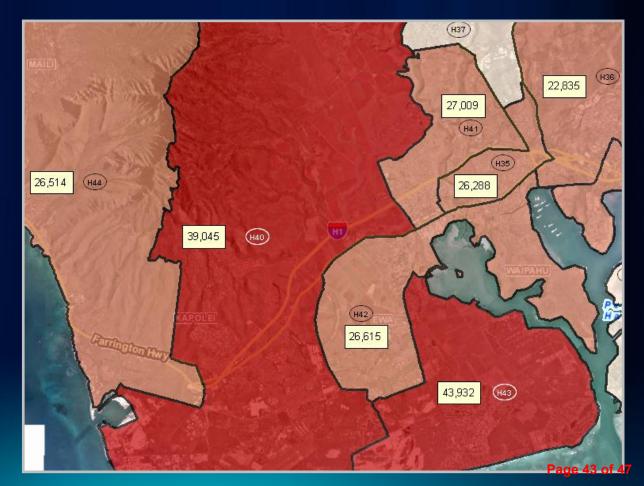
State House (51 seats): 26,673 per district



Guidelines

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State House (51 seats): 26,673 per district

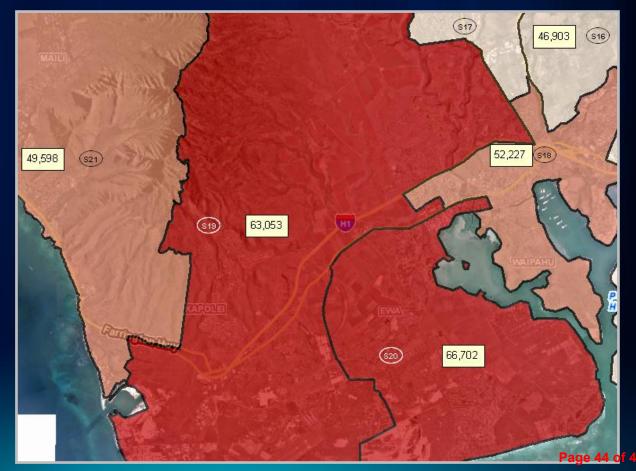


Guidelines

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State Senate (25 seats): 54,412 per district

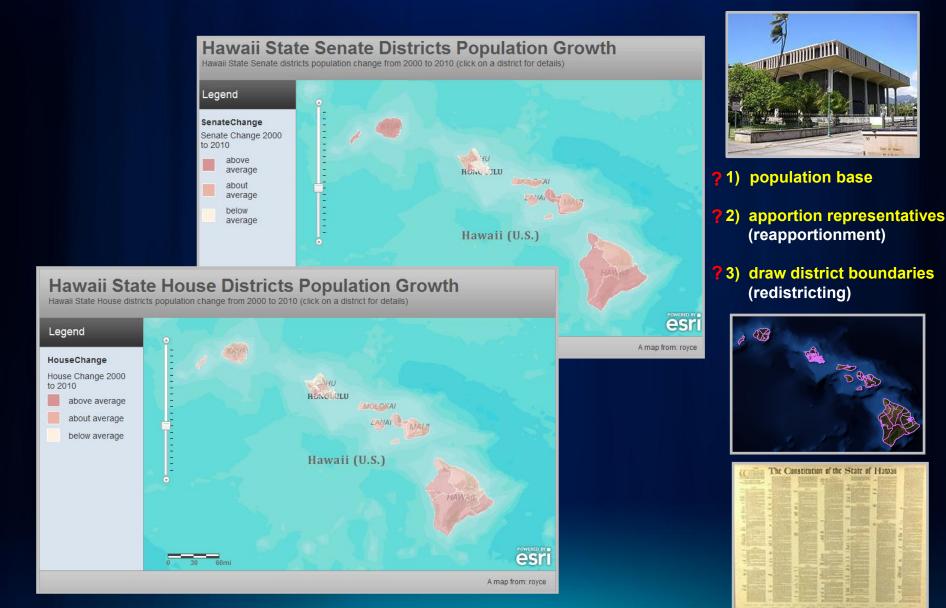
State House (51 seats): 26,673 per district



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Redistricting

State Senate and House



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Reapportionment and Redistricting in Hawaii



11 April 2011



04/11/2011

04/11/2011









Hawaii Reapportionment Commission 3 August 2011

Reapportionment Project Office: Contact Information

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State Capitol	Toll Fre
415 South Beretania Street, Rm #445	Fax:
Honolulu, HI 96813	Email: 🗉

 Telephone:
 (808) 586-4100

 Toll Free:
 (877) 854-6749

 Fax:
 (808) 586-4105

 Email:
 ⊡reapportionment@hawaii.gov

^BBuild Redistricting Plans Online!

https://redistricting.hawaii.gov/

✓Create District Plans ✓Share Plans ✓Review Plans ✓Submit Plans



Topics

- State Population Base
- Reapportionment Among Basic Island Units
- Redistricting Within Basic Island Units
- Proposed Plans: Findings and Recommendations of the Technical Committee
 - Congress
 - Senate
 - House
- Commission Schedule Public Hearings

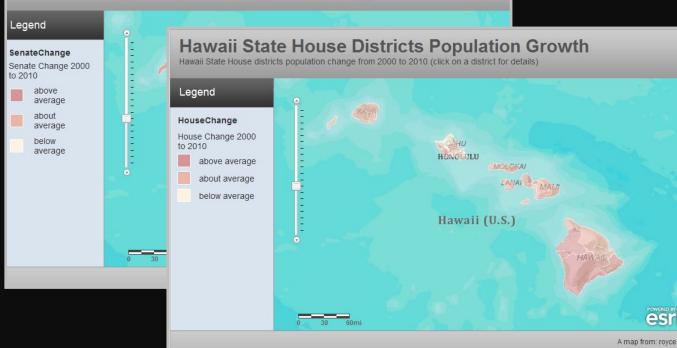
State Population Base

Ten Year Population Growth by Basic Island Unit (U.S. Census PL 94-171 data)

<u>State</u>	1,360,301	12%	<u>+148,764</u>
Oahu	953,207	9%	+77,051
Hawaii	185,079	24%	+36,402
Maui	154,924	21%	+26,683
Kauai	67,091	15%	+8,628

Hawaii State Senate Districts Population Growth

Hawaii State Senate districts population change from 2000 to 2010 (click on a district for details)





- 1) population base
- 2) apportion representatives (reapportionment)
- 3) draw district boundaries (redistricting)



Reapportionment Among Basic Island Units

Ten Year Population Growth by Basic Island Unit (U.S. Census PL 94-171 data)

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08/03/2011

Redistricting Within Basic Island Units

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Oahu	953,207	9%	+77,051
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Maui	154,924	21%	+26,683
Kauai	67,091	15%	+8,628

Senate Seats by Basic Island Unit

<u>State</u>	1,360,301	25	target
Oahu	953,207	18	52,956
Hawaii	185,079	3	61,693
Maui	154,924	3	51,641
Kauai	67,091	1	67,091

House Seats by Basic Island Unit

<u>State</u>	1,360,301	51	target
Oahu	953,207	35	27,234
Hawaii	185,079	7	26,440
Maui	154,924	6	25,821
Kauai	67,091	3	22,364



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Redistricting Within Basic Island Units

Ten Year Population Growth by Basic Island Unit (U.S. Census PL 94-171 data)

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Hawaii	185,079	24%	+36,402
Maui	154,924	21%	+26,683
Kauai	67,091	15%	+8,628



1,360,301

680,151

2



- 1) population base
- 2) apportion representatives (reapportionment)
- 3) draw district boundaries (redistricting)



08/03/2011

State

Proposed Plans: Findings and Recommendations of the Technical Committee



HAWAII REAPPORTIONMENT COMMISSION

Welcome to the Hawai'i Redistricting Online Application!

-lawai'i Redistricting Online assists the Hawai'i State Reapportionment Commission, State Reapportionment Advisory Councils, advocacy groups, and the general Irawing legislative and congressional redistricting plans following the 2010 U.S. Census. This ArcGIS software platform and pertinent dataset components provi comprehensive features and functionality for plan management, visualization, editing, and community collaboration.

In establishing the boundaries of the districts, the Hawai'i Reapportionment Commission will give consideration to the following factors: (a) population deviation deal district targets (b) cohesiveness, contiguity, integrity, and compactness of territory, and (c) socio-economic interests of the districts.

Plans submitted by Advisory Councils or the public prior to July 26, 2011 will be reviewed by the Commission before their proposed plan is published. There will ime for the Commission to receive and review additional plans while the proposed plan is being reviewed in the public hearing phase. Plans submitted by Adviso Councils or the public on or after July 26, 2011 and prior to the last public hearing date (no later than September 16, 2011), will be reviewed by the Commission the final plan is published.

HAWAI'I COUNTY COUNCIL NOTICE: You may use this application to create a plan for Hawai'i County Council, HOWEVER, you must follow the directions provide Hawai'i County Redistricting Commission for submitting plans. DO NOT USE THE "SUBMIT" BUTTON. The State of Hawai'i Reapportionment Commission is not responsible for Hawai'i County Council plans.

How to use this tool:



https://redistricting.hawaii.gov/

Proposed Plans: Findings and Recommendations of the Technical Committee

HAWAII REAPPORTIONMENT COMMISSION

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Welcome to the Hawai'i Redistricting Online Application!

176 accounts created 14 public plans submitted by July 26th

Congress	1 plan
Honolulu Senate Honolulu House	2 plans 2 plans
Hawaii Senate	7 plans

Hawaii House 2 plans

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Existing Congress

HAWAII REAPPORTIONMENT COMMISSION

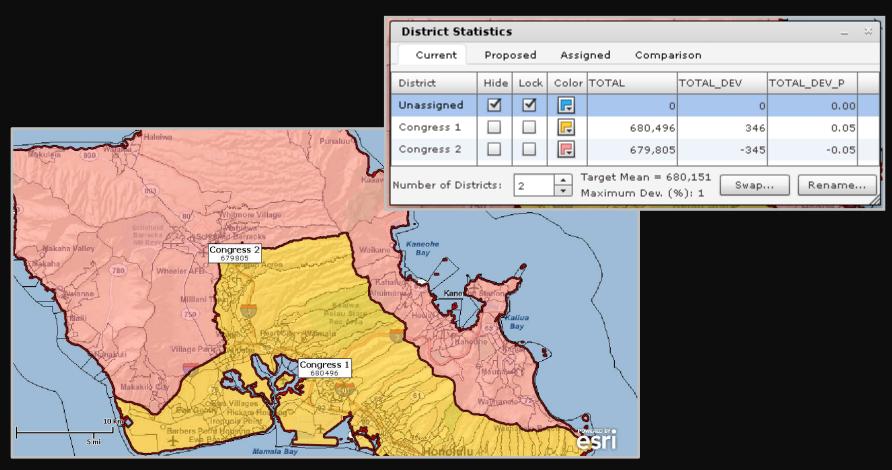
Plan:	Existing Congress
Districts:	two (Congress 1 - 2)
Target Population:	680,151 per district

EXISTING CONGRESS

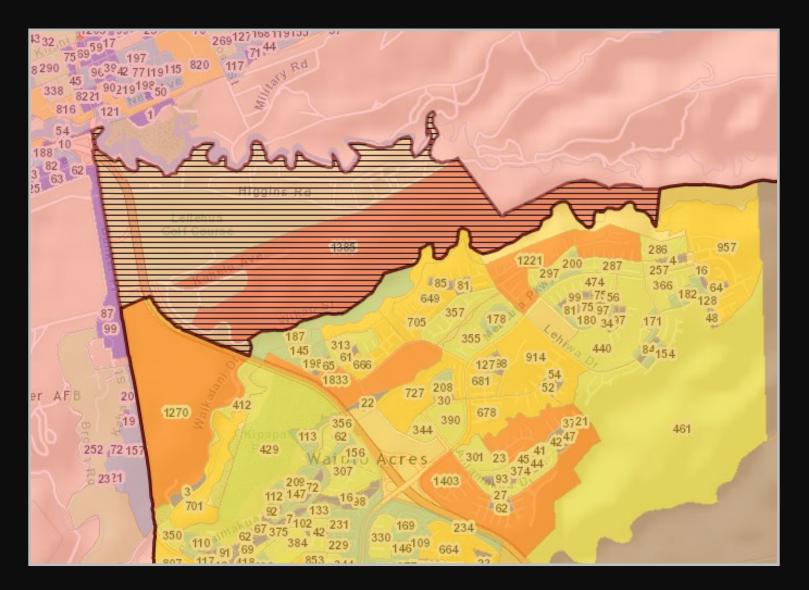
Plan Deviation:	6.32%
highest deviation:	3.16%
lowest deviation:	-3.16%

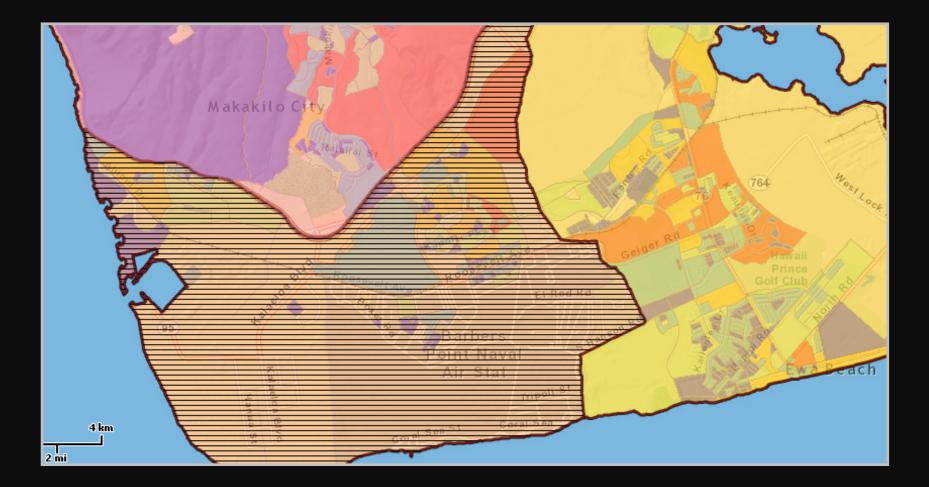
	District Stat	istics					_	×
	Current Proposed Assigned				ined Com	parison		
	District	Hide	Lock	Color	TOTAL	TOTAL_DEV	TOTAL_DEV_P	
	Unassigned			-		0	0.00	
Bennie	District 1			F	658,6	72 -21,478	8 -3.16	
Mitkulgia (930) Punaluu Pun	District 2			R	701,6	29 21,479	9 3.16	
	Number of Distr	icts:	2		arget Mean = 1aximum Dev	L Swan	Rename	
B Barracks B Schotleid Barracks Milless	Kaneohe	~~						
Makaha Valley Nakaha 54 780 Wheeler AFB Wheeler AFB	Bay		1					
	manuer Kanet e	Bigtion	7		<			
Maili Rec Afea Beerly City - Rec Afea	Heala		ailua Bay					
Nanakuli Village Parka Vatrante Se	- Change	he	D	D				
Makakile dy	and a	Maupaw	S (
Bold State Control Villages		Wajmana	15th					
10 km Barbers Print Housing	Buthal	Vilain	mare	To				
10 million Mamala Bay	Honoitulu		hall	Sle				

HAWAII REAPPORTIONMENT COMMISSION		PROPOSED PLAN: CO	NGRESS H-1
Plan:	Congress H-1	Plan Deviation:	0.10%
Districts:	two (Congress 1 - 2)	highest deviation:	0.05%
Target Population:	680,151 per district	lowest deviation:	-0.05%







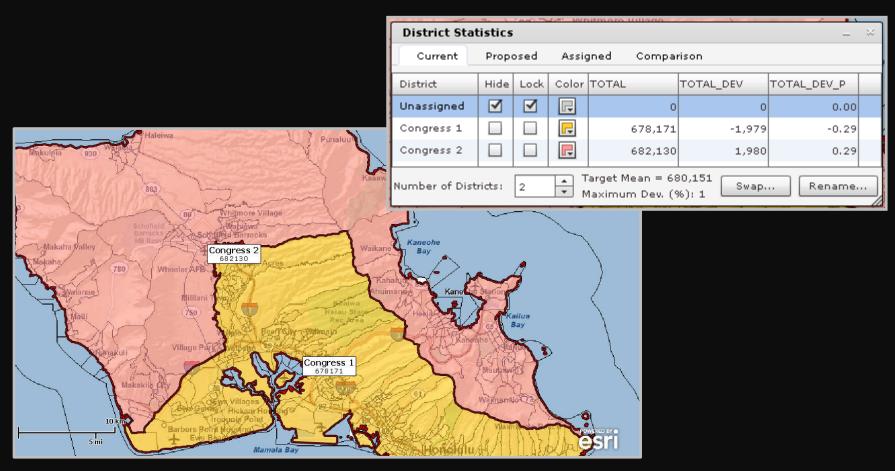


HAWAII REAPPORTIONMENT COMMISSION

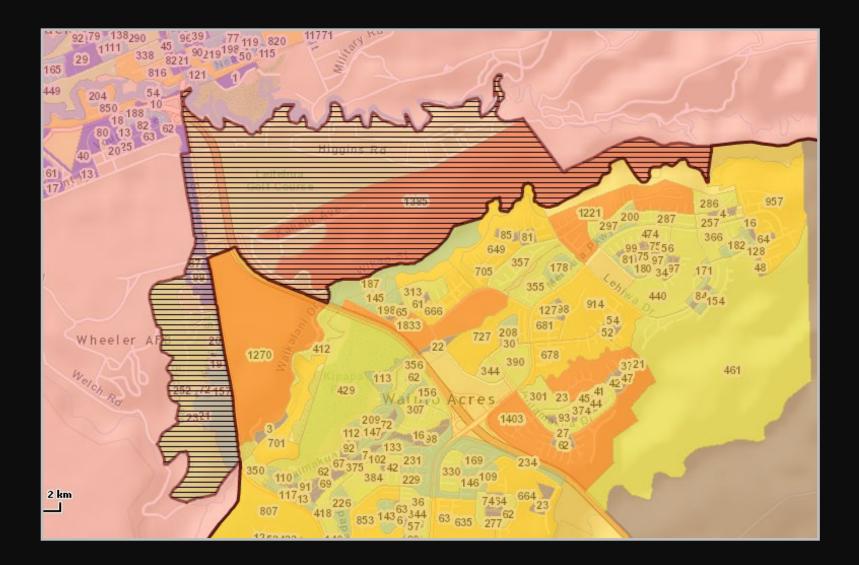
PROPOSED PLAN: CONGRESS WHEELER

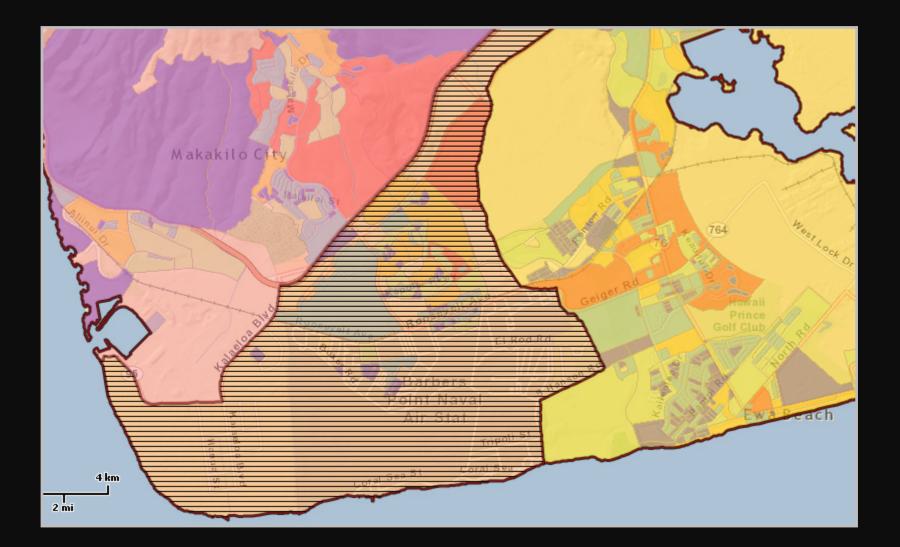
Plan:	Congress Wheeler
Districts:	two (Congress 1 - 2)
Target Population:	680,151 per district

Plan Deviation:	0.58%
highest deviation:	0.29%
lowest deviation:	-0.29%



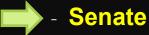






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- House
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Existing Senate Hawaii

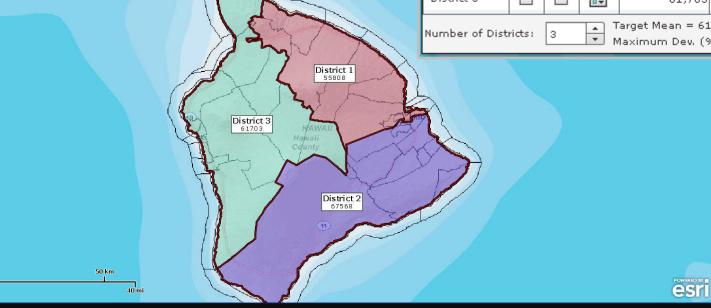
HAWAII REAPPORTIONMENT COMMISSION

EXISTING SENATE HAWAII

Plan:	Existing Senate Hawaii
Districts:	three (Senate 1 - 3)
Target Population:	61,693 per district

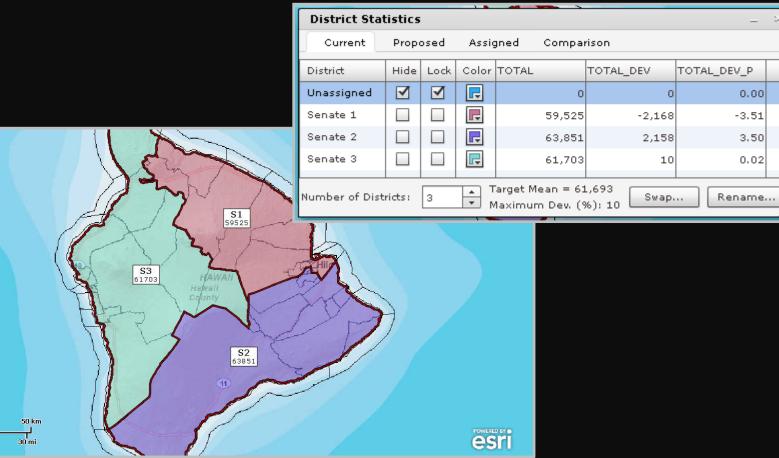
Plan Deviation:	19.06%
highest deviation:	9.52%
lowest deviation:	-9.54%

							1 2	
District Sta	tistics						-	**
Current	Propo	sed	Assig	ined	Compar	rison		
District	Hide	Lock	Color	TOTAL		TOTAL_DEV	TOTAL_DEV_P	
Unassigned			F		0	0	0.00	
District 1			F		55,808	-5,885	-9.54	
District 2			F		67,568	5,875	9.52	
District 3			R		61,703	10	0.02	
Number of Districts: 3 Target Mean = 61,693 Waximum Dev. (%): 10 Swap Rename								

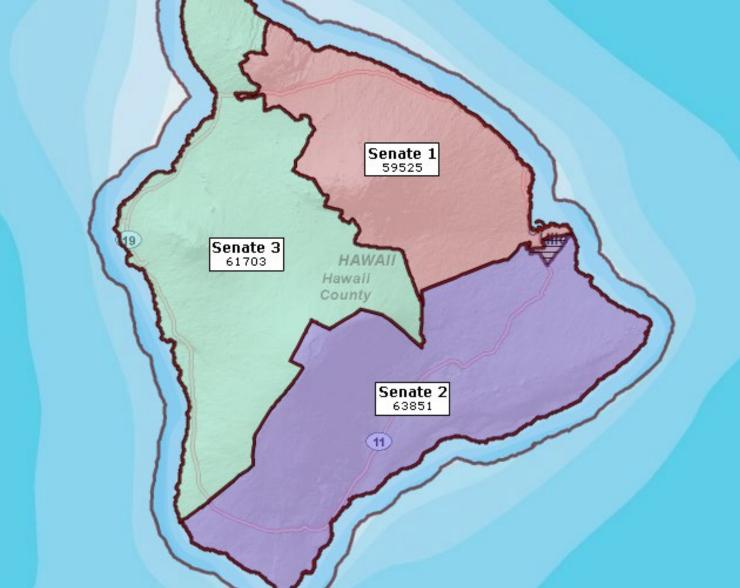


Proposed Plans – Senate Hawaii

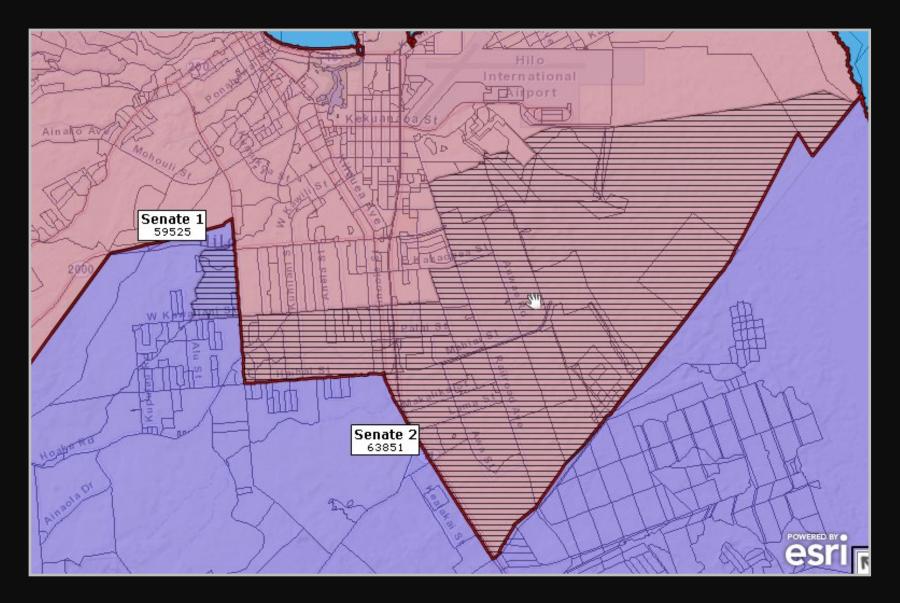
HAWAII REAPPORTION	MENT COMMISSION	PROPOSED PLAN: SENATE HAWAII			
Plan:	Senate Hawaii	Plan Deviation:	7.01%		
Districts:	three (Senate 1 - 3)	highest deviation:	3.50%		
Target Population:	61,693 per district	lowest deviation:	-3.51%		



Proposed Plans – Senate Hawaii



Proposed Plans – Senate Hawaii



Existing Senate Maui

HAWAII REAPPORTIONMENT COMMISSION

EXISTING SENATE MAUI

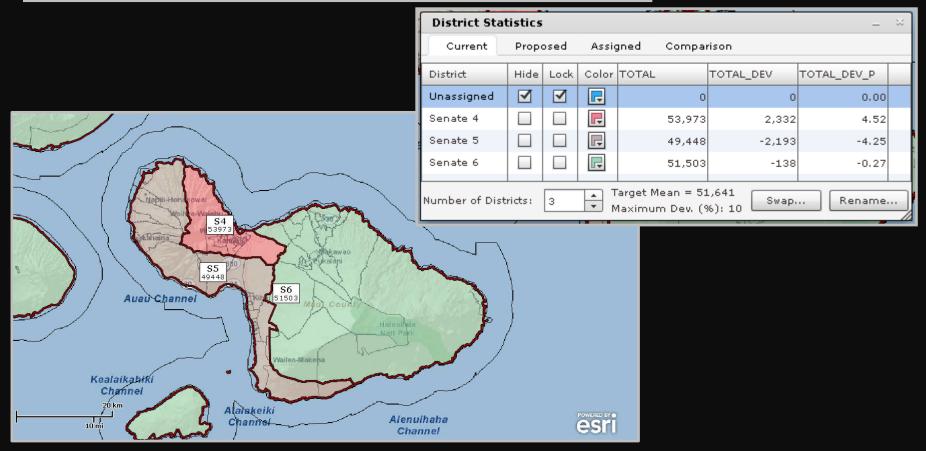
Plan:	Existing Senate Maui
Districts:	three (Senate 4 - 6)
Target Population:	51,641 per district

Plan Deviation:	11.80%
highest deviation:	7.66%
lowest deviation:	-4.14%

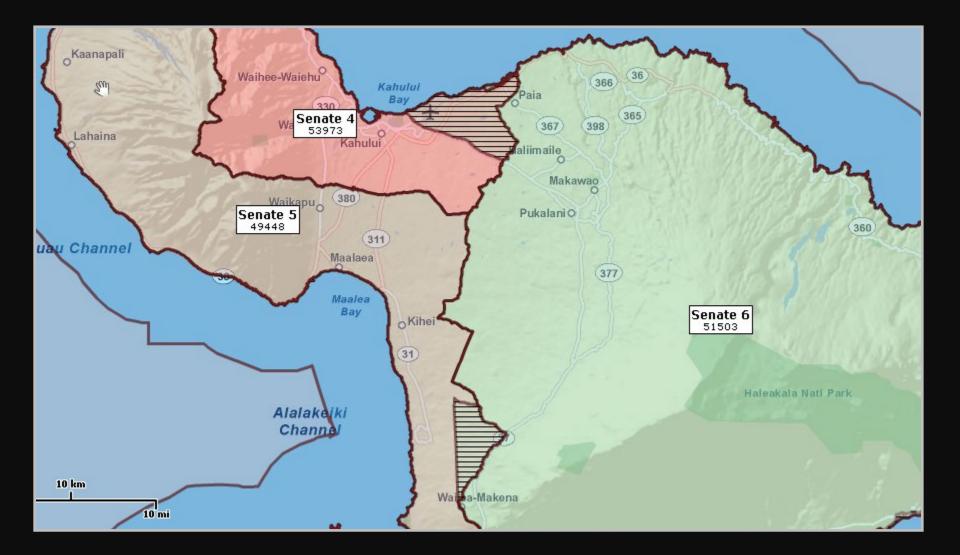
	District Stat	istics						
	Current	Propo		Assig	jned Compai	ʻison		
	District	Hide	Lock	Color	TOTAL	TOTAL_DEV	TOTAL_DEV_P	
	Unassigned			Ŗ	0	0	0.00	
	Senate 4			F	55,599	3,958	7.66	
	Senate 5			F	49,501	-2,140	-4.14	ľ
	Senate 6			F	49,824	-1,817	-3.52	
Waither Waldhur Senate 4 55599	Number of Dist	ricts :	3		arget Mean = 51 Maximum Dev. (9	L Swan.	Rename.	
	enuihaha Channel							

Proposed Plans – Senate Maui

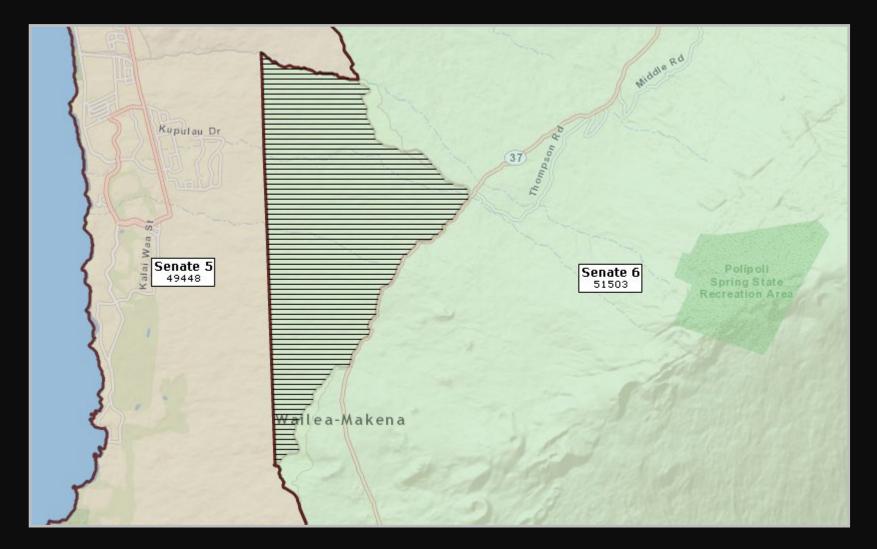
HAWAII REAPPORTIO	NMENT COMMISSION	PROPOSED PLAN: SEI	PROPOSED PLAN: SENATE MAUI			
Plan:	Senate Maui	Plan Deviation:	8.77%			
Districts:	three (Senate 4 - 6)	highest deviation:	4.52%			
Target Population:	51,641 per district	lowest deviation:	-4.25%			



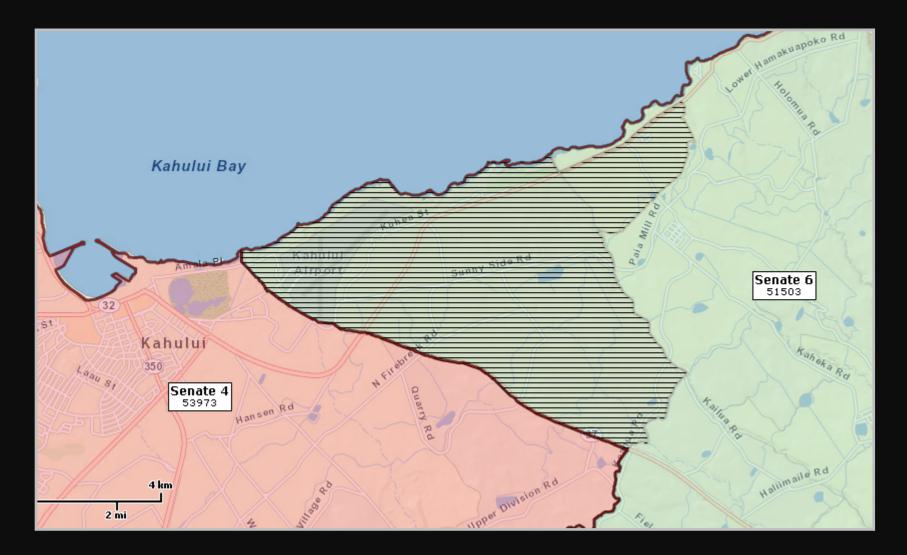
Proposed Plans – Senate Maui



Proposed Plans – Senate Maui



Proposed Plans – Senate Maui

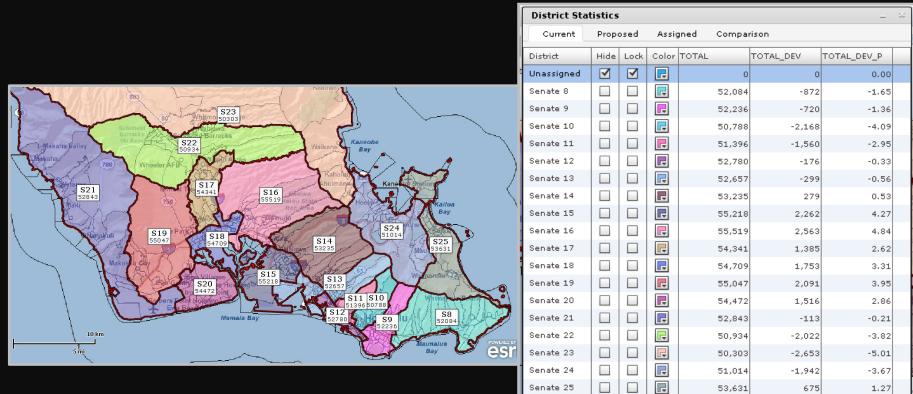


Existing Senate Honolulu

HAWAII REAPPORTIONMENT COMMISSIONEXISTING SENATE HONOLULUPlan:Existing Senate HonoluluPlan Deviation:48.27%Districts:eighteen (Senate 8 - 25)highest deviation:33.94%Target Population:52,956 per districtlowest deviation:-14.33%

	District Statistics _ ×							×	
	Current	Propo	osed	Assi	gned (Compar	ison		
	District	Hide	Lock	Color	TOTAL		TOTAL_DEV	TOTAL_DEV_P	
	Unassigned			R		0	0	0.00	
Pacific Ocean	Senate 8			F		47,053	-5,903	-11.15	i l
nnel	Senate 9			R		47,987	-4,969	-9.38	
	Senate 10			R		47,726	-5,230	-9.88	
S22 Honolu S23 47610	Senate 11			Ę		49,981	-2,975	-5.62	
522 70929 County 47610	Senate 12			Ę		54,195	1,239	2.34	
	Senate 13			F		47,661	-5,295	-10.00	
Schofferd Schofferd	Senate 14			Ļ		48,022	-4,934	-9.32	
S21 S21 S17 49919	Senate 15			F		67,013	14,057	26.54	
49598 S16 S16	Senate 16			F		46,903	-6,053	-11.43	
46903 Haili	Senate 17			Ę		49,919	-3,037	-5.73	
S19 S18 52227 S14 S14 51259	Senate 18			Ę		52,227	-729	-1.38	
63053 48022	Senate 19			Ę		63,053	10,097	19.07	
S20 66702 S15 67013 S13 47661 10 45369	Senate 20			Ę		66,702	13,746	25.96	
S12 S9 S8	Senate 21			Ę		49,598	-3,358	-6.34	
Mamala Bay 54195 47987 47053	Senate 22			F		70,929	17,973	33.94	
	Senate 23			Ę		47,610	-5,346	-10.10	
	Senate 24			Ę		51,259	-1,697	-3.20	
	Senate 25			R		45,369	-7,587	-14.33	
08/03/2011 (Number of Dist	ricts:	18		Farget Me Maximum		Swap.	Page 29 of 61	

HAWAII REAPPORTION	IMENT COMMISSION	PROPOSED PLAN: SENATE HONOLULU					
Plan:	Senate Honolulu	Plan Deviation:	9.85%				
Districts:	eighteen (Senate 8 - 25)	highest deviation:	4.84%				
Target Population:	52,956 per district	lowest deviation:	-5.01%				



Page 30 of 61

Swap...

Rename...

Target Mean = 52,956

Maximum Dev. (%): 10

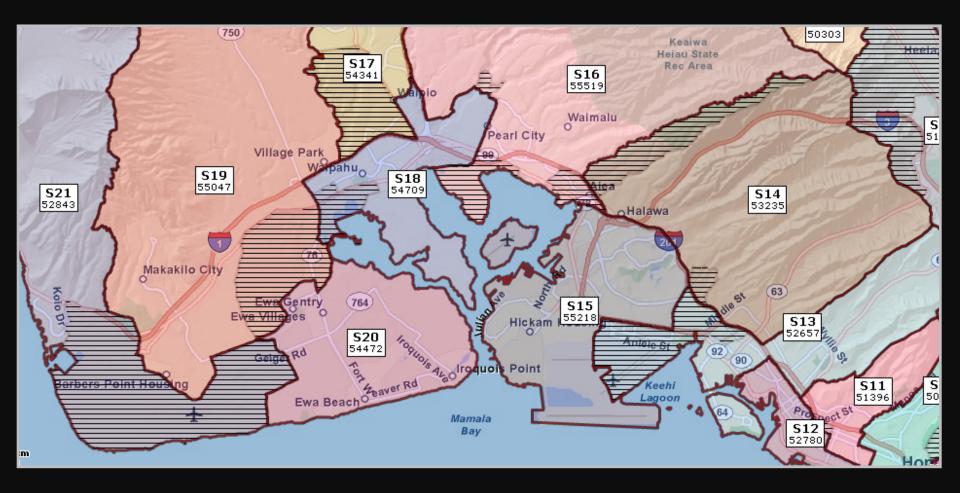
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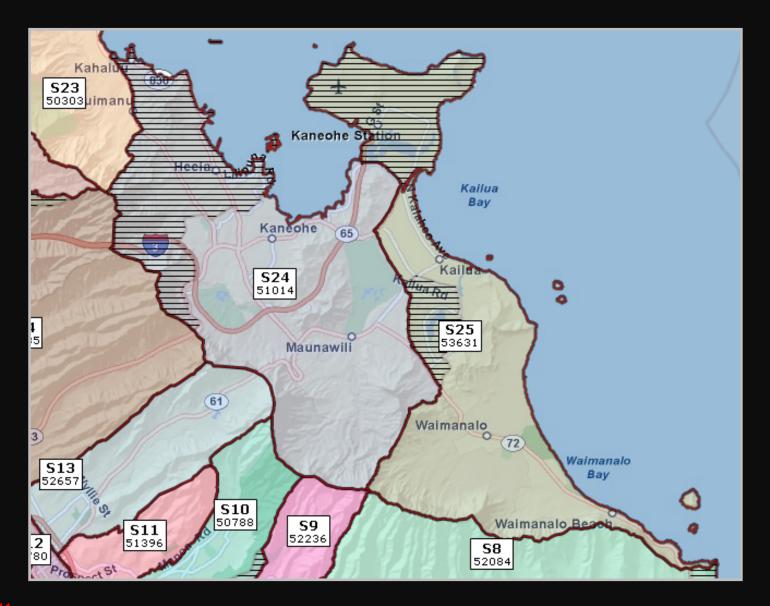
18

Number of Districts:









Topics

- State Population Base
- Reapportionment Among Basic Island Units
- Redistricting Within Basic Island Units
- Proposed Plans: Findings and Recommendations of the Technical Committee
 - Congress
 - Senate
- 🔶 House
- Commission Schedule Public Hearings

Existing House Hawaii

Existing House Hawaii

seven (House 1 - 7)

26,440 per district

HAWAII REAPPORTIONMENT COMMISSION

Plan:

Districts:

Target Population:

EXISTING HOUSE HAWAII

Plan Deviation:	37.89%
highest deviation:	25.85%
lowest deviation:	-12.04%

D:-----

	District Sta	tistics					
	Current	Propo	sed	Assiç	gned Co	mpai	ison
	District	Hide	Lock	Color	TOTAL		TOTAL_DEV
	Unassigned			-		0	
	House 1			F	23	3,257	-3,1
	House 2			F	2:	3,279	-3,1
H1 23257	House 3			F	2:	3,425	-3,0
H7 27674	House 4			•	3:	3,276	6,8
	House 5			F	2	7,586	1,1
H2 23279	House 6			F	20	5,582	1
H6 26582 Hawaii H3 23425	House 7			F	23	7,674	1,2
County H5 27586 11	Number of Dist	tricts :	7		Target Mear Aaximum D		<u> </u>
08/03/2011							

22

0.00

-12.04

-11.96

-11.40

25.85

4.33

0.54

4.67

Rename...

TOTAL_DEV_P

0

-3,183

-3,161

-3,015

6,836

1,146

1,234

142

Swap...

HAWAII REAPPORTIONMENT COMMISSION

PROPOSED PLAN: HOUSE HAWAII

Plan Deviation:	3.94%
highest deviation:	2.40%
lowest deviation:	-1.54%

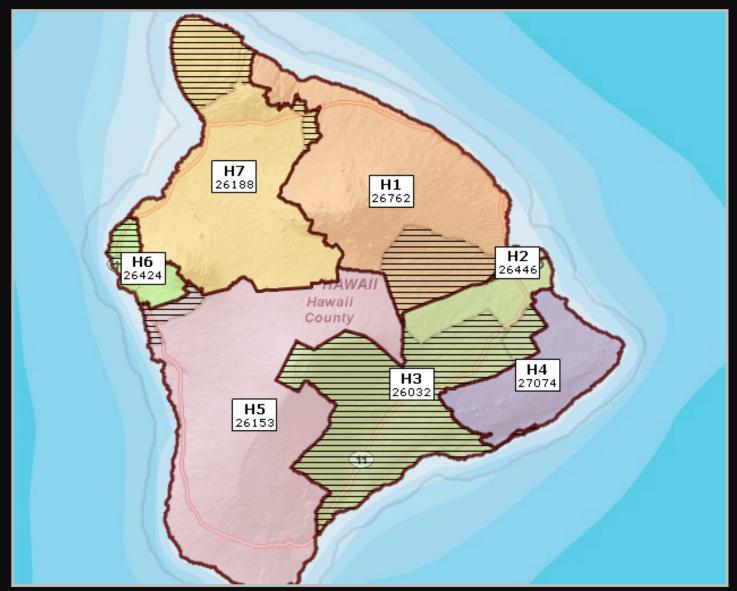


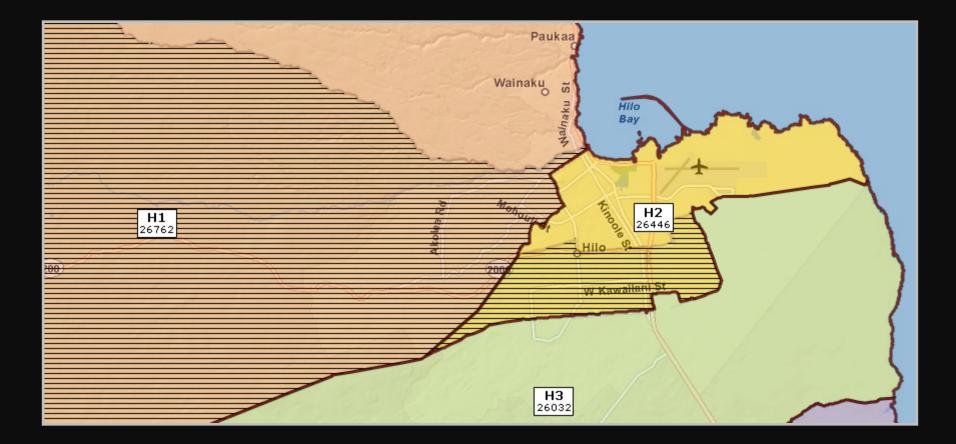
House Hawaii seven (House 1 - 7) 26,440 per district

	District Statistics _ 🛛										
	Current	Prop	osed	Assig	ned	Compa	rison				
	District	Hide	Lock	Color	TOTAL		TOTAL_DEV	TOTAL_DEV_P			
	Unassigned			F		0	0	0.00			
	House 1			 		26,762	322	1.22			
	House 2			Ŗ		26,446	6	0.02			
	House 3			F		26,032	-408	-1.54			
)	House 4			 		27,074	634	2.40			
5	House 5			F		26,153	-287	-1.09			
	House 6			F		26,424	-16	-0.06			
	House 7			 		26,188	-252	-0.95			
I S	Number of Districts: 7 Target Mean = 26,440 Maximum Dev. (%): 10 Swap Rename										
H4 2074	/										















Existing House Maui

HAWAII REAPPORTIONMENT COMMISSION

Existing House Maui six (House 8 - 13)

25,821 per district

Plan:

Districts:

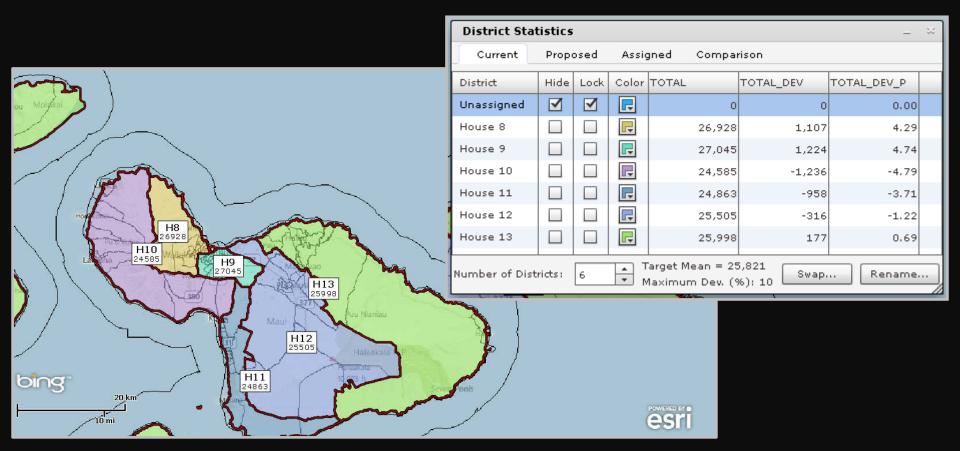
Target Population:

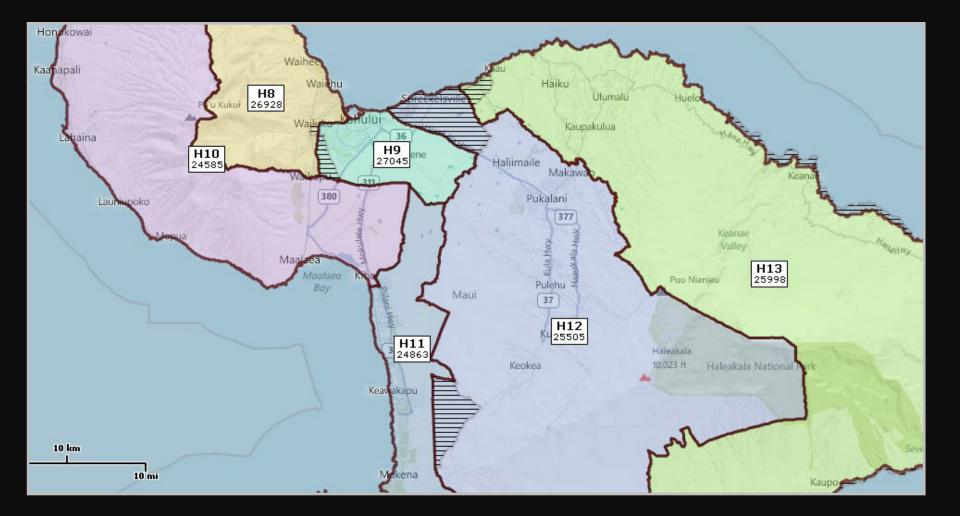
EXISTING HOUSE MAUI

Plan Deviation:	12.82%
highest deviation:	8.03%
lowest deviation:	-4.79%

	District Sta	tistics	ì				_	~
	Current	Propo	osed	Assiç	jned Compa	rison		
	District	Hide	Lock	Color	TOTAL	TOTAL_DEV	TOTAL_DEV_P	
	Unassigned			F	0	0	0.00	
	House 8			F	27,894	2,073	8.03	3
	House 9			R	27,705	1,884	7.30	
	House 10			F	24,585	-1,236	-4.79	
	House 11			F	24,916	-905	-3.50	
Naphi-Honorowal	House 12			F	24,992	-829	-3.21	-
H 827894	House 13			F	24,832	-989	-3.83	8
H10 Wallup Control Con	Number of Dist	ricts:	6		arget Mean = 25 Maximum Dev. (*	I Swan.	Rename	
Auau Channel								
Kealaikabiki 08/03/2011 20 mi							Page 43 of	F 61

HAWAII REAPPORTIO	NMENT COMMISSION	PROPOSED PLAN: HO	PROPOSED PLAN: HOUSE MAUI				
Plan:	House Maui	Plan Deviation:	9.53%				
Districts:	six (House 8 - 13)	highest deviation:	4.74%				
Target Population:	25,821 per district	lowest deviation:	-4.79%				





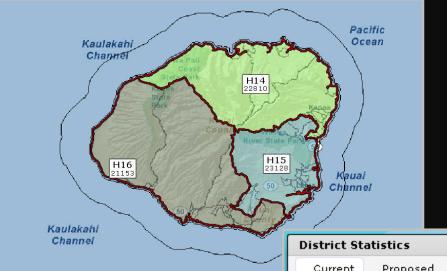






Existing House Kauai

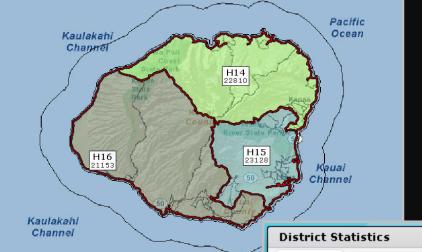
HAWAII REAPPORTION	EXISTING HOUSE KAUAI				
Plan:	Existing House Kauai	Plan Deviation:	8.83%		
Districts:	three (House 14 - 16)	highest deviation:	3.42%		
Target Population:	22,364 per district	lowest deviation:	-5.41%		



1.	/ /
~	
	Pacific Ocean
10 mi	

District Stat								
District stat	usues						-	~
Current	Proposed		Assig	ned	Compa			
District	Hide	Lock	Color	TOTAL		TOTAL_DEV	TOTAL_DEV_P	
Unassigned			F		0	0	0.00	
House 14			F		22,810	446	1.99	
House 15			R		23,128	764	3.42	
House 16			Ŗ		21,153	-1,211	-5.41	
Number of Districts: 3 Target Mean = 22,364 Maximum Dev. (%): 10 Rename								

HAWAII REAPPORTIO	NMENT COMMISSION	PROPOSED PLAN: H	PROPOSED PLAN: HOUSE KAUAI			
Plan: Districts: Target Population:	House Kauai three (House 14 - 16) 22,364 per district	Plan Deviation: highest deviation: lowest deviation:	8.83 % 3.42% -5.41%			
		\sim				



District Statistics _ 👋									
Current	Proposed		sed Assigned		Comparison				
District	Hide	Lock	Color	TOTAL		TOTAL_DEV	TOTAL_DEV_P		
Unassigned			F		0	0	0.00		
House 14			Ŗ		22,810	446	1.99		
House 15			R		23,128	764	3.42		
House 16			Ŗ		21,153	-1,211	-5.41		
Number of Districts: 3 Target Mean = 22,364 Maximum Dev. (%): 10 Rename									



Page 50 of 61

Existing House Honolulu

HAWAII REAPPORTIONMENT COMMISSION

EXISTING HOUSE HONOLULU

Plan:
Districts:

08/03/2011

Target Population:

Existing House Honolulu thirtyfive (House 17 - 51) 27,234 per district

Plan Deviation:	89.23%
highest deviation:	68.62%
lowest deviation:	-20.61%

District Statistics _ ×											
Current	Proposed Assigned		Comparison								
District	Hide	Lock	Color	TOTAL		TOTAL_DEV	TOTAL_DEV_P				
Unassigned			-		0	0	0.00				
House 17			F		24,650	-2,584	-9.49				
House 18			F		22,281	-4,953	-18.19				
House 19			F		22,819	-4,415	-16.21				
House 20			F		22,303	-4,931	-18.11				
House 21			-		25,009	-2,225	-8.17				
House 22			F		25,101	-2,133	-7.83				
House 23			F		27,871	637	2.34				
House 24			F		24,566	-2,668	-9.80				
House 25			F		24,157	-3,077	-11.30				
House 26			F		23,988	-3,246	-11.92				
House 27			F		22,609	-4,625	-16.98				
House 28					28,739	1,505	5.53				
House 29			F		24,867	-2,367	-8.69				

House 30			R	23,965	-3,269	-12.00			
House 31			R	24,482	-2,752	-10.11			
House 32			R	45,921	18,687	68.62	L		
House 33			R	23,738	-3,496	-12.84			
House 34			R	26,009	-1,225	-4.50	L		
House 35			R	26,288	-946	-3,47	L		
House 36			R	22,835	-4,399	-16.15	L		
House 37			R	23,503	-3,731	-13.70	Π		
House 38			R	34,181	6,947	25.51			
House 39			F	26,961	-273	-1.00			
House 40			Ę	39,045	11,811	43.37			
House 41			R	27,009	-225	-0.83			
House 42			R	26,615	-619	-2.27			
House 43			F	43,932	16,698	61.31			
House 44			R	26,514	-720	-2.64			
House 45			F	25,150	-2,084	-7.65			
House 46			F	42,821	15,587	57.23			
House 47			F	26,644	-590	-2.17			
House 48			R	23,747	-3,487	-12.80			
House 49			₽	22,323	-4,911	-18.03			
House 50			R	30,943	3,709	13.62			
House 51			R	21,621	-5,613	-20.61			
•						•			
Number of Districts: 35 Target Mean = 27,234 Maximum Dev. (%): 10 SPage 51 rof.61e									

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House 21

House 22

House 23

House 24

House 25

House 26

House 27

House 28

House 29

08/03/2011

HAWAII REAPPOR	PRO	PROPOSED PLAN: HOUSE HONOLULU									
Plan:							Deviation:	9.70%			
Districts:	thi	rtyfi	ve (F	lous	e 17 - 51)	high	est deviation	: 4.	88%		
Target Population:	27,	234	per	distr	rict	lowe	est deviation:	-4.8	-4.82%		
	District Statistics Current Proposed Assigned Comparison						_ ×				
	istrict	Hide	Lock	Color	TOTAL	TOTAL_DEV	TOTAL_DEV_P	House 30			R
U	nassigned			R	0	0	0.00	House 31			
С	ouse 17			R	27,853	619	2.27	House 32			R
н	ouse 18			R	26,947	-287	-1.05	House 33			R
H	louse 19			R	26,610	-624	-2,29	House 34			R
н	louse 20			R	26,933	-301	-1.11	House 35			

27,855

26,111

26,620

27,276

26,400

26,303

26,858

27,917

27,613

621

-1,123

-614

-834

-931

-376

683

379

42

EV_P	-	House 30			R	26,864	-370	-1.36	
0.00		House 31			R	27,360	126	0.46	
2.27		House 32			R	28,127	893	3.28	
-1.05		House 33			R	27,421	187	0.69	
-2,29		House 34			R	27,763	529	1.94	
-1.11		House 35			R	27,291	57	0.21	
2.28		House 36			R	26,798	-436	-1.60	
-4.12		House 37			R	28,172	938	3.44	
-2,25		House 38			R	28,562	1,328	4.88	
0.15		House 39			R	28,439	1,205	4.42	
-3.06		House 40			R	28,502	1,268	4.66	
-3,42		House 41			R	27,942	708	2.60	
-1.38		House 42			R	27,118	-116	-0.43	
2,51		House 43			R	27,675	441	1.62	
1.39		House 44			R	26,194	-1,040	-3.82	
		House 45			R	27,610	376	1.38	
		House 46			R	28,177	943	3,46	
		House 47				26,483	-751	-2.76	
		House 48			R	25,922	-1,312	-4.82	
		House 49			R	26,284	-950	-3,49	
		House 50			R	26,452	-782	-2.87	
		House 51			R	26,755	-479	-1.76	
		4			1.053 7.8				
		Number of Dis	stricts :	35		arget Mean = 27,234 Maximum Dev. (%): 1	SPado	52 10fh 61 e	

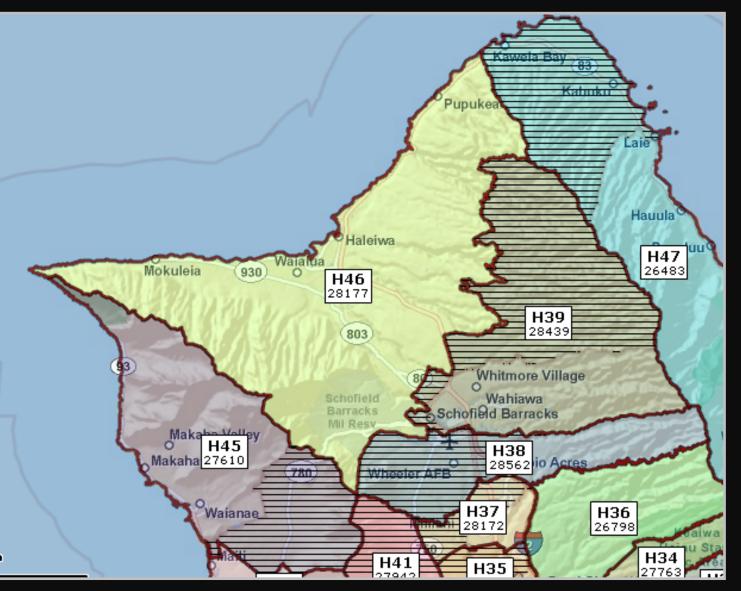


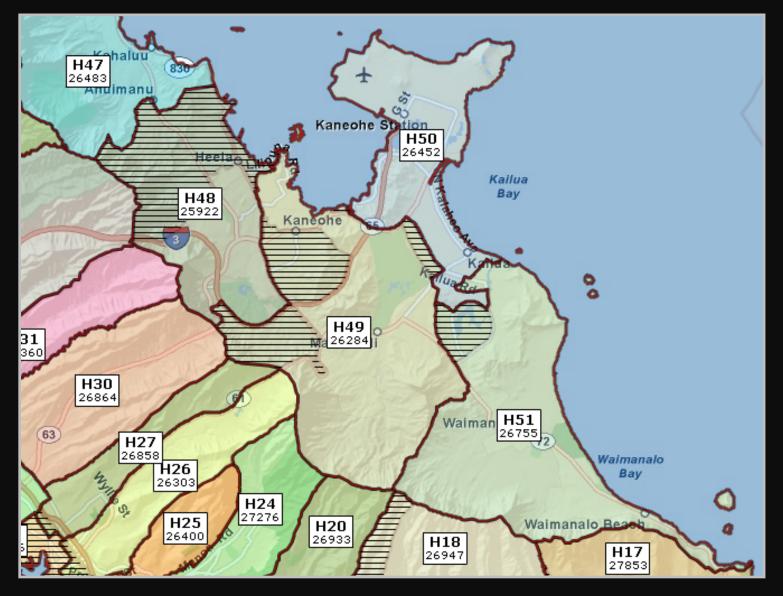


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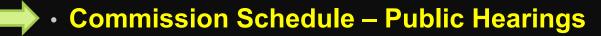






Topics

- State Population Base
- Reapportionment Among Basic Island Units
- Redistricting Within Basic Island Units
- Proposed Plans: Findings and Recommendations of the Technical Committee
 - Congress
 - Senate
 - House



Commission Schedule

Aug 5	Commission Meeting: Adopt proposed plan
Aug 30 – Sep 16	Public Hearings and Comment Period
Sep 26	Statutory deadline to adopt final plans
Oct 10	Statutory deadline to publish final plans
Dec 29	Statutory deadline to submit final report to State Legislature

Commission Schedule – Public Hearings

Aug 30	West Oahu	6:00 pm	Kapolei High School Cafeteria
	Central Maui West Maui		Maui Waena Intermediate School Cafeteria Lahaina Civic Center
Sep 2	Kauai	5:30 pm	Kauai Council Chamber
Sep 7	Windward Oahu Honolulu Central Oahu	6:00 pm	Aikahi Elementary School Cafeteria State Capitol Auditorium Mililani High School Cafeteria
Sep 9	Lanai	5:00 pm	Lanai High School
Sep 12	Molokai	5:00 pm	Kaunakakai School Cafeteria
	East Hawaii West Hawaii		Hilo Council Chamber Kona Council Chamber
	Leeward Oahu East Oahu		Waipahu High School Cafeteria Kalani High School Cafeteria









Hawaii Reapportionment Commission 17 August 2011

Reapportionment Project Office: Contact Information

http://hawaii.gov/elections/reapportionment Address:

State Capitol 415 South Beretania Street, Rm #445 Honolulu, HI 96813

Telephone: (808) 586-4100 Toll Free: (877) 854-6749 (808) 586-4105 Fax: Email: reapportionment@hawaii.gov

^BBuild Redistricting Plans Online! https://redistricting.hawaii.gov/

✓Create District Plans ✓Share Plans ✓Review Plans ✓Submit Plans



Commission Proposed Plans – All Online

- Large Scale Maps for Public Inspection
- Online Maps
 - Static PDFs
 - Online Map for Viewing
 - Online Map for Editing Hawaii Redistricting Online

Proposed Plans – Reapportionment Website

http://hawaii.gov/elections/reapportionment

REDISTRICTING AND REAPPORTIONMENT

Redistricting and reapportionment are the processes used to ensure each political district has been created equally.

State of Hawaii 2011 Legislative Reapportionment Plan

- View State of Hawaii 2011 Legislative Reapportionment Plan
- Hawaii Reapportionment Proposed Senate and House Districts
- Proposed Plan Maps Locations for Public Inspection

Reapportionment Project Office: Contact Information

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 Toll Free:
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http://hawaii.gov/elections/reapportionment

CENTRAL HONOLULU Hawaii State Library, 478 S. King St. City & County of Honolulu Clerk's Office, Honolulu Hale, 530 S. King St. Kaimuki Public Library, 1041 Koko Head Ave.

LEEWARD/CENTRAL OAHU Office of Elections, 802 Lehua Ave., Pearl City Kapolei Public Library, 1020 Manawai St. Mililani Public Library, 95-450 Makaimoimo St. Pearl City Public Library, 1138 Waimano Home Rd.

WINDWARD OAHU Kahuku Public & School Library, 56-490 Kamehameha Hwy. Kaneohe Public Library, 45-829 Kamehameha Hwy.

http://hawaii.gov/elections/reapportionment

HAWAII

Hawaii County Clerk's Office-Hilo, 25 Aupuni St. Hawaii County Clerk's Office-Kona Civic Center, 74-5044 Ane Keohokalohe Hwy. Hilo Public Library, 300 Waianuenue Ave. University of Hawaii at Hilo Library, 200 W. Kawili St. Kailua-Kona Public Library, 75-138 Hualalai Rd. Kealakekua Public Library, 81-6300 Mamalahoa Hwy. Keaau Public School & Library, 16-571 Keaau-Pahoa Rd. Laupahoehoe Public & School Library, 35-2065 Old Mamalahoa Hwy. Naalehu Public Library, 95-5669 Mamalahoa Hwy. Pahoa Community & School Library, 15-3038 Puna Rd. Parker Public & School Library, 67-1209 Mamalahoa Hwy., Kamuela

http://hawaii.gov/elections/reapportionment

MAUI, MOLOKAI & LANAI Maui County Clerk's Office, 200 S. High St., Wailuku Hana Public School & Library, 4111 Hana Hwy. Lahaina Public Library, 680 Wharf St. Maui Public Library, 90 School St., Kahului Molokai Library, 15 Alamalama St., Kaunakakai Lanai Public & School Library, 555 Fraser Ave., Lanai City

KAUAI Kauai County Clerk's Office, 4386 Rice St., Lihue Hanapepe Public Library, 4490 Kona Rd. Kapaa Public Library, 1464 Kuhio Hwy. Koloa Public Library, 3223 Poipu Rd. Princeville Public Library, 4343 Emmalani Dr.

http://hawaii.gov/elections/reapportionment

REDISTRICTING AND REAPPORTIONMENT

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STATE OF HAWAII 2011 PROPOSED LEGISLATIVE REAPPORTIONMENT PLAN

Hawaii Reapportionment - Proposed Senate and House Districts available here.

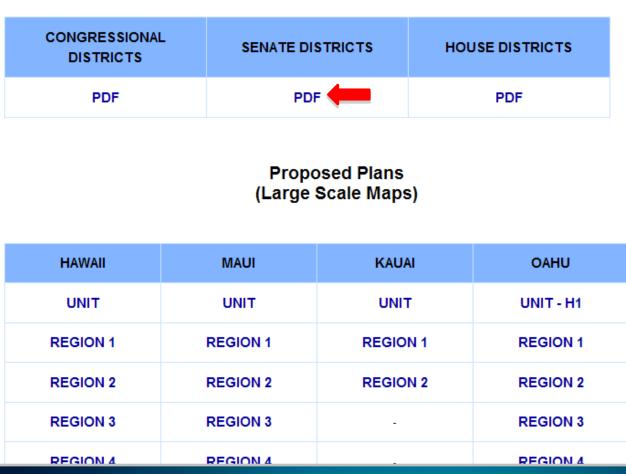
CONGRESSIONAL DISTRICTS	SENATE DISTRICTS	HOUSE DISTRICTS
PDF	PDF	PDF

Proposed Plans (Large Scale Maps)

HAWAII	MAUI	KAUAI	OAHU
UNIT	UNIT	UNIT	UNIT - H1
REGION 1	REGION 1	REGION 1	REGION 1
REGION 2	REGION 2	REGION 2	REGION 2
REGION 3	REGION 3	-	REGION 3
REGION 4	REGION 4	-	REGION 4

STATE OF HAWAII 2011 PROPOSED LEGISLATIVE REAPPORTIONMENT PLAN

Hawaii Reapportionment - Proposed Senate and House Districts available here.

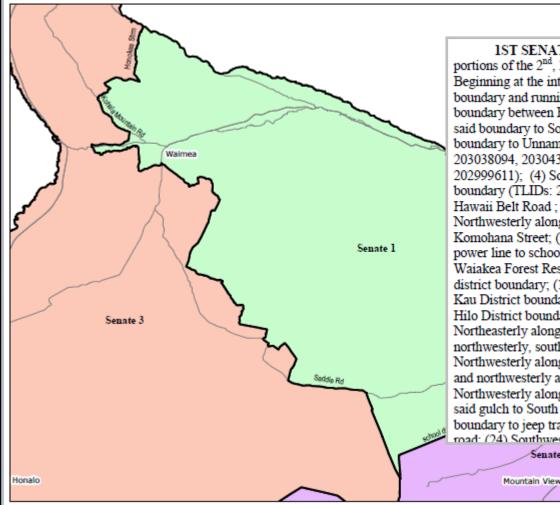


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2011 Hawaii State Reapportionment Commission

Proposed Plan for Senate 1



1ST SENATORIAL DISTRICT: This district is comprised of the 1st and portions of the 2nd, 3rd and 7th Representative Districts and described as follows: Beginning at the intersection of Hawaii shoreline and South Hilo - Puna District boundary and running (1) Southwesterly then northwesterly along said boundary to boundary between Hilo CCD and Keaau-Mountain View CCD; (2) Southwesterly along said boundary to South Hilo - Puna District boundary; (3) Southwesterly along said boundary to Unnamed Road Feature (TLIDs: 202999615, 202999997, 635086370, 203038094, 203043393, 635086218, 635086217, 203044158, 203000344, 203000351, 202999611); (4) Southwesterly along said unnamed feature to South Hilo - Puna District boundary (TLIDs: 202999609, 202998775); (5) Southwesterly along said boundary to Hawaii Belt Road ; (6) Northwesterly along said road to Kilauea Avenue; (7) Northwesterly along said avenue to Haihai Street; (8) Westerly along said street to Komohana Street; (9) Northerly along said street to Power line; (10) Westerly along said power line to school district boundary; (11) Southwesterly along said district boundary to Waiakea Forest Reserve boundary; (12) Southwesterly along said boundary to school district boundary; (13) Southwesterly and southerly along said boundary to South Hilo -Kau District boundary; (14) Northwesterly along said boundary to South Hilo - North Hilo District boundary; (15) Northwesterly along said boundary to Saddle Road; (16) Northeasterly along said road to Pohakuloa Training Area boundary; (17) Northeasterly, northwesterly, southwesterly and northwesterly along said boundary to Saddle Road; (18) Northwesterly along said road to Pohakuloa Training Area boundary; (19) Northeasterly and northwesterly along said boundary to Mauna Kea Forest Reserve boundary; (20) Northwesterly along said boundary to Auwaiakeakua Gulch; (21) Northwesterly along said gulch to South Kohala - Hamakua District boundary; (22) Northeasterly along said boundary to jeep trail; (23) Northwesterly and westerly along said jeep trail to unnamed road: (24) Southwesterly along said unnamed road to jeen trail: (25) Northwesterly along Senate 2

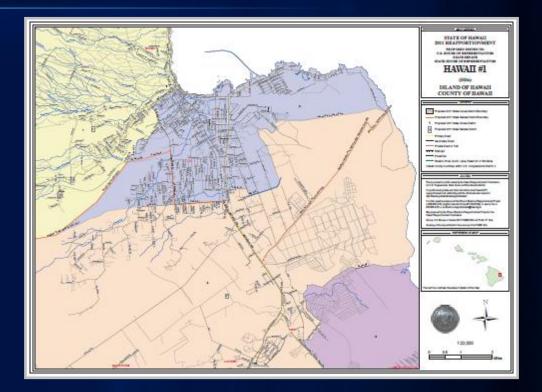
STATE OF HAWAII 2011 PROPOSED LEGISLATIVE REAPPORTIONMENT PLAN

Hawaii Reapportionment - Proposed Senate and House Districts available here.

CONGRESSIONAL DISTRICTS	SENATE DISTRICTS	HOUSE DISTRICTS
PDF	PDF	PDF

Proposed Plans (Large Scale Maps)

HAWAII	MAUI	KAUAI	OAHU
UNIT	UNIT	UNIT	UNIT - H1
	REGION 1	REGION 1	REGION 1
REGION 2	REGION 2	REGION 2	REGION 2
REGION 3	REGION 3	-	REGION 3
REGION 4	REGION 4	-	REGION 4





http://hawaii.gov/elections/reapportionment

REDISTRICTING AND REAPPORTIONMENT

Redistricting and reapportionment are the processes used to ensure each political district has been created equally.

State of Hawaii 2011 Legislative Reapportionment Plan

- View State of Hawaii 2011 Legislative Reapportionment Plan
- Hawaii Reapportionment Proposed Senate and House Districts
- Proposed Plan Maps Locations for Public Inspection

Reapportionment Project Office: Contact Information

Address:

State Capitol 415 South Beretania Street, Rm #445 Honolulu, HI 96813
 Telephone:
 (808) 586-4100

 Toll Free:
 (877) 854-6749

 Fax:
 (808) 586-4105

 Email:
 Image: Treapportionment@hawaii.gov

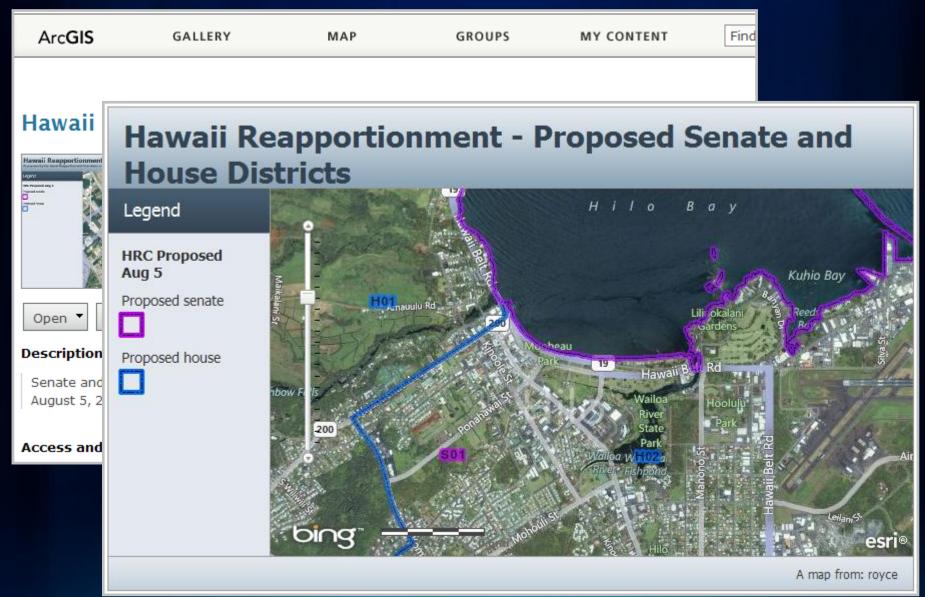






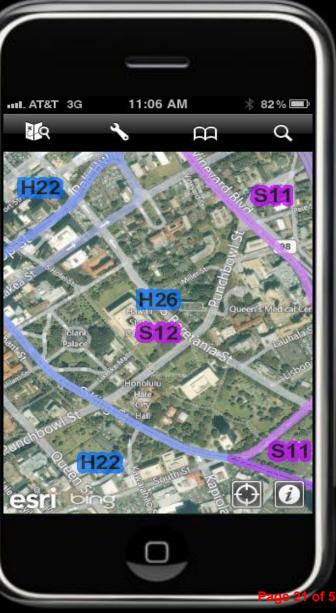
A map from: royce



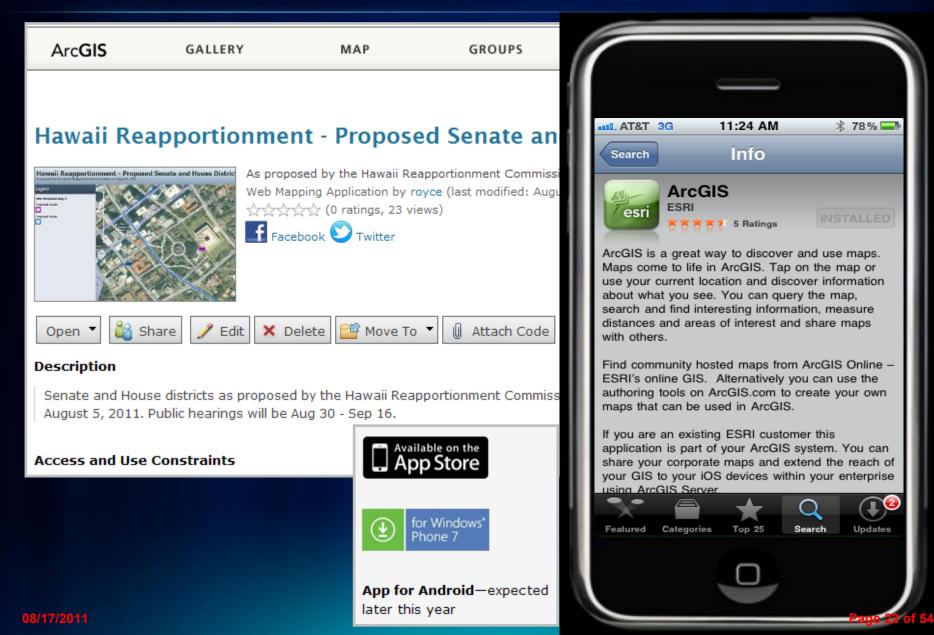


08/17/2011

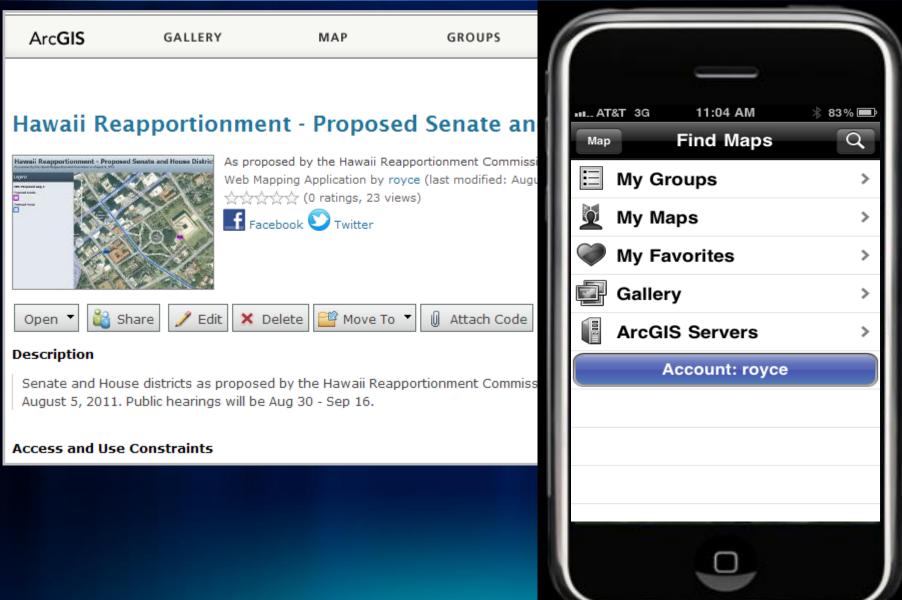




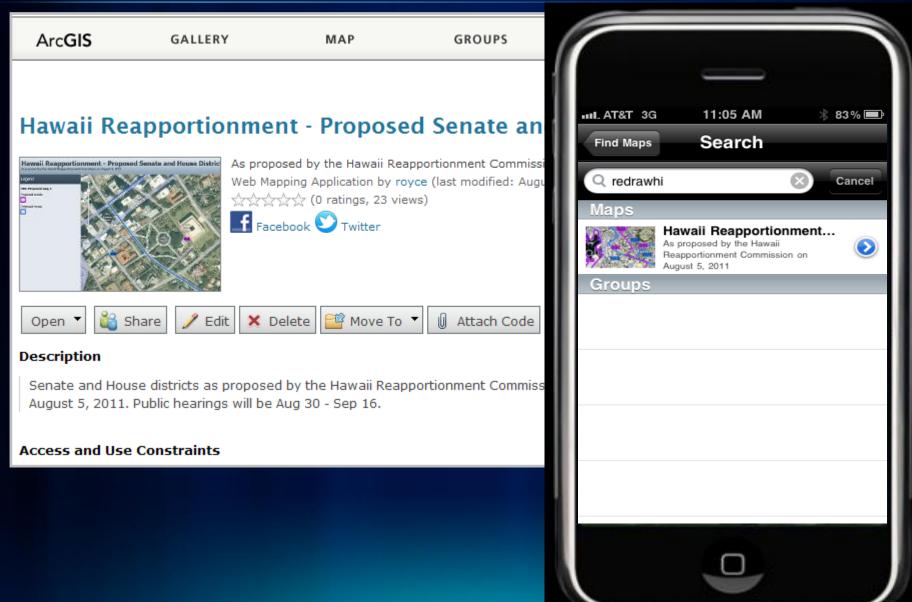
08/17/2011





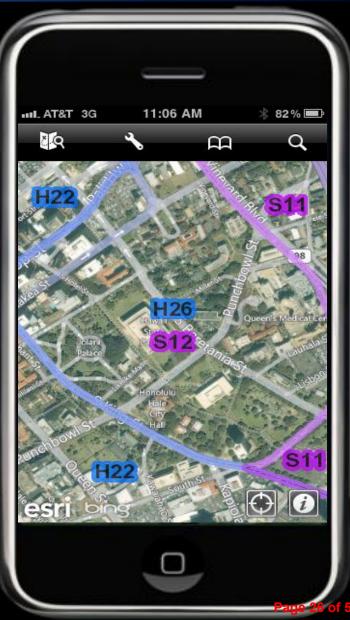


08/17/2011





Access and Use Constraints





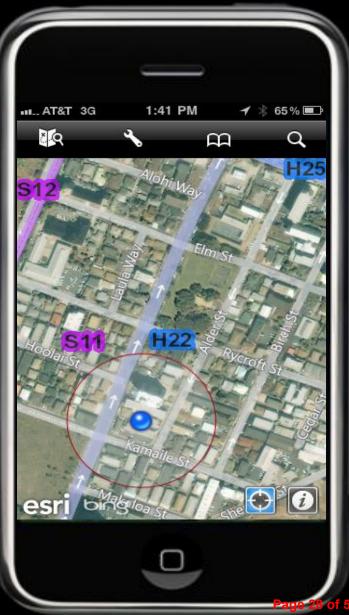
Access and Use Constraints





Senate and House districts as proposed by the Hawaii Reapportionment Commiss August 5, 2011. Public hearings will be Aug 30 - Sep 16.

Access and Use Constraints





HAWAII REAPPORTIONMENT COMMISSION

Welcome to the Hawai'i Redistricting Online Application!

-lawai'i Redistricting Online assists the Hawai'i State Reapportionment Commission, State Reapportionment Advisory Councils, advocacy groups, and the general Irawing legislative and congressional redistricting plans following the 2010 U.S. Census. This ArcGIS software platform and pertinent dataset components provi comprehensive features and functionality for plan management, visualization, editing, and community collaboration.

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How to use this tool:



https://redistricting.hawaii.gov/

62



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Welcome to the Hawai'i Redistricting Online Application!

Choose Template Plan

Choose a template plan:

Plan Name	Description		
Hawaii Congress (H-1) - Proposed	Proposed Hawaii Congress (H-1) plan as published by the Hawaii Reapportionment Comm		
Hawaii Congress (Wheeler) - Proposed	Proposed Hawaii Congress (Wheeler) plan as published by the Hawaii Reapportionment C		
Hawaii Senate - Proposed	Proposed Hawaii Senate plan as published by the Hawaii Reapportionment Commission.		
Hawaii House - Proposed	Proposed Hawaii House plan as published by the Hawaii Reapportionment Commission.		
Hawaii Council - Existing	County of Hawaii Council template using existing (2001-2010) district boundaries.		
Maui Senate - Proposed	Proposed Maui Senate plan as published by the Hawaii Reapportionment Commission.		
Maui House - Proposed	Proposed Maui House plan as published by the Hawaii Reapportionment Commission.		
Honolulu Senate - Proposed	Proposed Honolulu Senate plan as published by the Hawaii Reapportionment Commission		
Honolulu House - Proposed	Proposed Honolulu House plan as published by the Hawaii Reapportionment Commission.		
Kauai House - Proposed	Proposed Kauai House plan as published by the Hawaii Reapportionment Commission.		
•			
	OK Cancel		

Proposed Plans – Public Plans



Welcome to the Hawai'i Redistricting Online Application!

270 accounts created17 public plans submitted by Aug 16

Congress	1 plan
Honolulu Senate	2 plans
Honolulu House	4 plans
Hawaii Senate	7 plans
Hawaii House	2 plans
Kauai House	1 plan

Commission Schedule – Public Hearings

Aug 30	West Oahu	6:00 pm	Kapolei High School Cafeteria
	Central Maui West Maui		Maui Waena Intermediate School Cafeteria Lahaina Civic Center
Sep 2	Kauai	5:30 pm	Kauai Council Chamber
	Windward Oahu		Aikahi Elementary School Cafeteria
	Honolulu		State Capitol Auditorium
Sep 8	Central Oahu	6:00 pm	Mililani High School Cafeteria
Sep 9	Lanai	5:00 pm	Lanai High School
Sep 12	Molokai	5:00 pm	Kaunakakai School Cafeteria
Sep 13	East Hawaii	5:00 pm	Hilo Council Chamber
	West Hawaii		Kona Council Chamber
Sep 15	Leeward Oahu	6:00 pm	Waipahu High School Cafeteria
Sep 16	East Oahu	6:00 pm	Kalani High School Cafeteria









Hawaii Reapportionment Commission 17 August 2011

Reapportionment Project Office: Contact Information

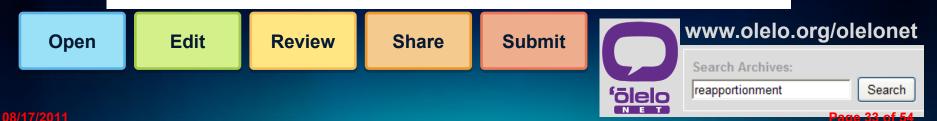
http://hawaii.gov/elections/reapportionment Address: Telephone: State Capitol 415 South Beretania Street, Rm #445

(808) 586-4100 Toll Free: (877) 854-6749 (808) 586-4105 Fax: Email: reapportionment@hawaii.gov

^BBuild Redistricting Plans Online! https://redistricting.hawaii.gov/

Honolulu, HI 96813

✓Create District Plans ✓Share Plans ✓Review Plans ✓Submit Plans



Permanent and Non-Permanent Military Residents

The non-permanent resident extraction model used in 1991 and 2001 relied on receiving location specific (address or ZIP Code) residence information for the specific non-permanent residents to be extracted.

In 2011, the data received from the Defense Manpower Data Center (DMDC) does not provide residence information for military sponsors nor does it provide specific breakdowns of permanent and non-permanent residents by location.

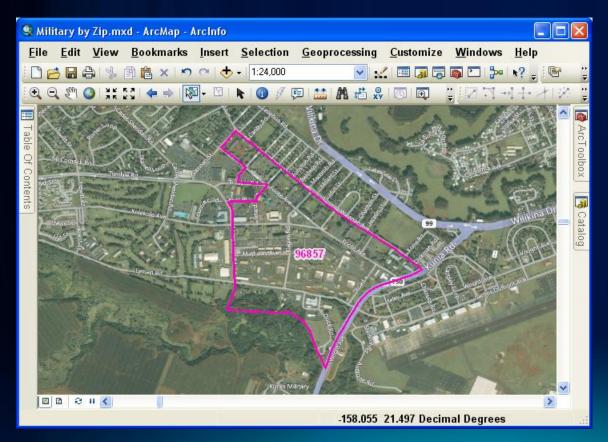
This lack of specific data from DMDC does not allow the model used previously to be used this time.

Examples from Schofield Barracks, Marine Corps Base Hawaii and Joint Base Pearl Harbor will help illustrate.

Permanent and Non-Permanent Military Residents

Data from DMDC for ZIP Code 96857 shows 17,004 sponsors and 968 dependents, for a total of 18,012 military residents.

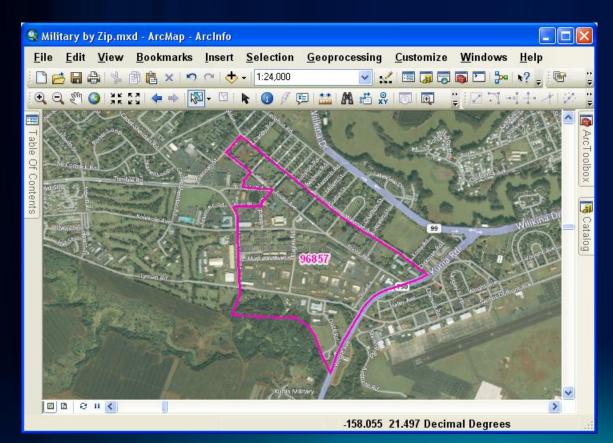
DMDC does not indicate what portion of the 18,012 are permanent residents and what portion are non-permanent residents.



Permanent and Non-Permanent Military Residents

Data from DMDC for ZIP Code 96857 shows 17,004 sponsors and 968 dependents, for a total of 18,012 military residents.

DMDC does not indicate what portion of the 18,012 are permanent residents and what portion are non-permanent residents.



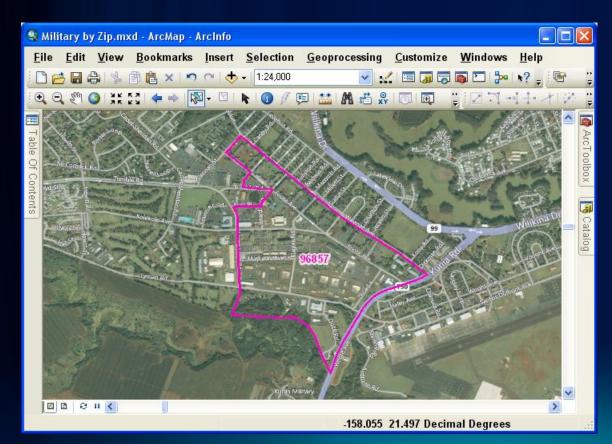
U.S. Census data for ZCTA 96857 shows a total population of 2,522.

DMDC only reports sponsor <u>duty</u> ZIP Codes and clearly 17,004 sponsors do not live in 96857.

We do not know where these sponsors live nor where they would have been counted by the U.S. Census.

Data from DMDC for ZIP Code 96857 shows 17,004 sponsors and 968 dependents, for a total of 18,012 military residents.

DMDC does not indicate what portion of the 18,012 are permanent residents and what portion are non-permanent residents.



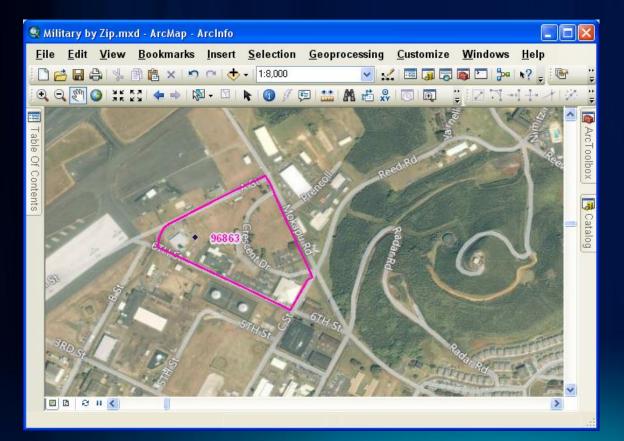
U.S. Census data for ZCTA 96857 shows a total population of 2,522.

U.S. Census data for ZCTA 96857 further shows that all 2,522 residents are living in group quarters.

There is a question whether dependents live in group quarters.

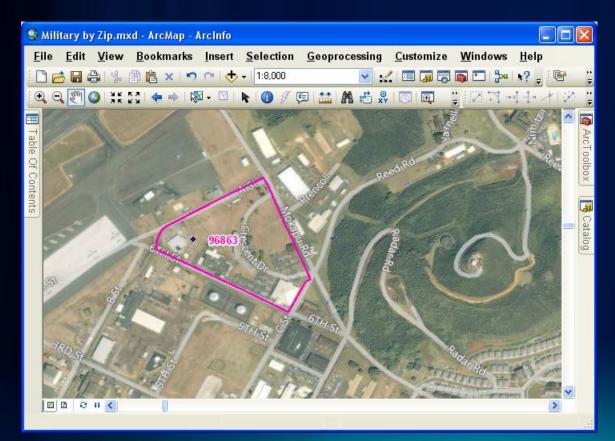
Data from DMDC for ZIP Code 96863 shows 7,019 sponsors and 627 dependents, for a total of 7,646 military residents.

DMDC does not indicate what portion of the 7,646 are permanent residents and what portion are non-permanent residents.



Data from DMDC for ZIP Code 96863 shows 7,019 sponsors and 627 dependents, for a total of 7,646 military residents.

DMDC does not indicate what portion of the 7,646 are permanent residents and what portion are non-permanent residents.



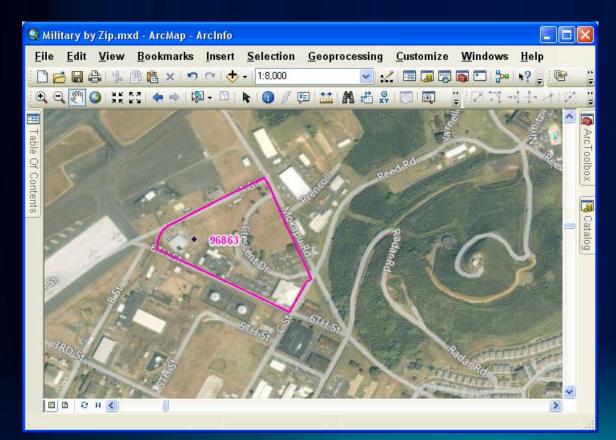
U.S. Census data for ZCTA 96863 shows a total population of 52.

DMDC only reports sponsor duty ZIP Codes and clearly 7,019 sponsors do not live in 96863.

We do not know where these sponsors live nor where they would have been counted by the U.S. Census.

Data from DMDC for ZIP Code 96863 shows 7,019 sponsors and 627 dependents, for a total of 7,646 military residents.

DMDC does not indicate what portion of the 7,646 are permanent residents and what portion are non-permanent residents.



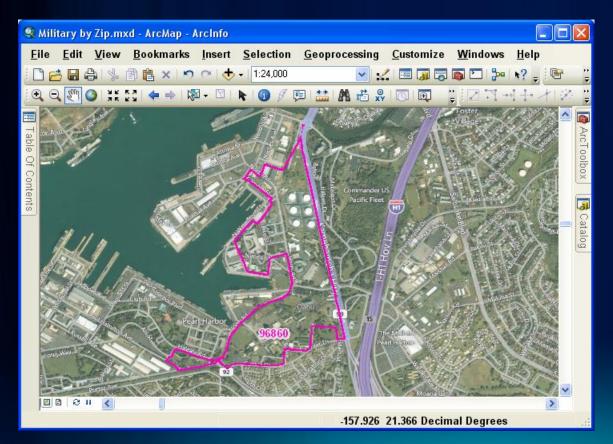
U.S. Census data for ZCTA 96863 shows a total population of 52.

U.S. Census data for ZCTA 96863 further shows that all 52 residents are living in group quarters.

There is a question whether dependents live in group quarters.

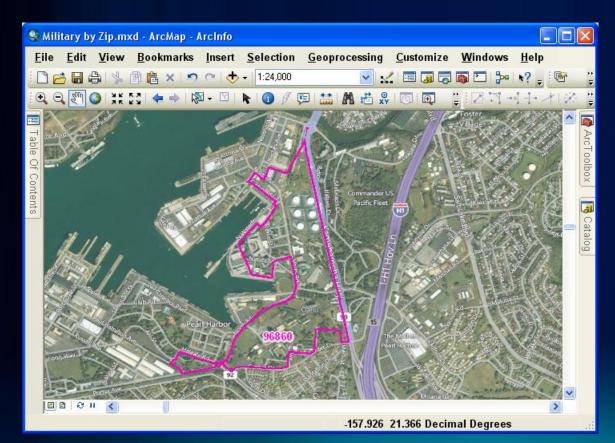
Data from DMDC for ZIP Code 96860 shows 3,358 sponsors and 178 dependents, for a total of 3,536 military residents.

DMDC does not indicate what portion of the 3,536 are permanent residents and what portion are non-permanent residents.



Data from DMDC for ZIP Code 96860 shows 3,358 sponsors and 178 dependents, for a total of 3,536 military residents.

DMDC does not indicate what portion of the 3,536 are permanent residents and what portion are non-permanent residents.



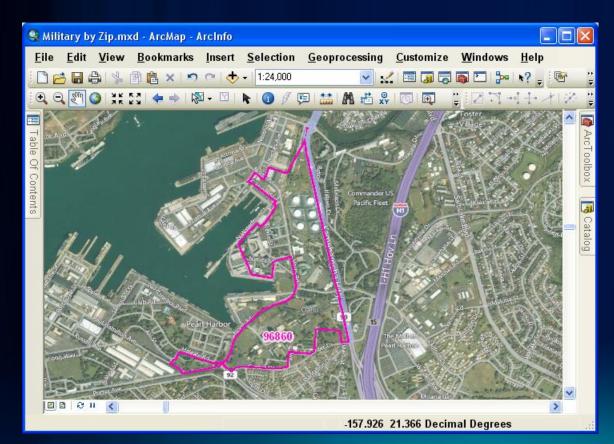
U.S. Census data for ZCTA 96860 shows a total population of 1,124.

DMDC only reports sponsor <u>duty</u> ZIP Codes and clearly 3,358 sponsors do not live in 96860.

We do not know where these sponsors live nor where they would have been counted by the U.S. Census.

Data from DMDC for ZIP Code 96860 shows 3,358 sponsors and 178 dependents, for a total of 3,536 military residents.

DMDC does not indicate what portion of the 3,536 are permanent residents and what portion are non-permanent residents.

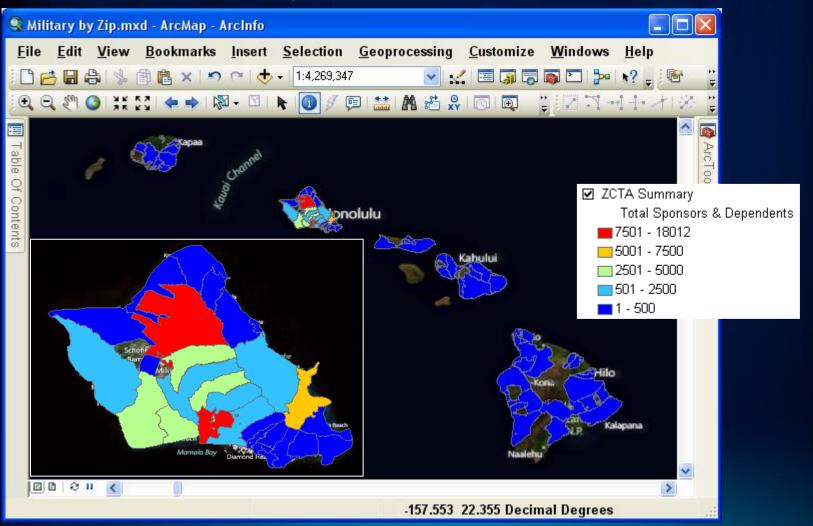


U.S. Census data for ZCTA 96860 shows a total population of 1,124.

U.S. Census data for ZCTA 96860 further shows that all 1,124 residents are living in group quarters.

There is a question whether dependents live in group quarters.

Data from DMDC shows sponsors and dependents spread statewide with the majority on Oahu, but does not distinguish between permanent and non-permanent residents.



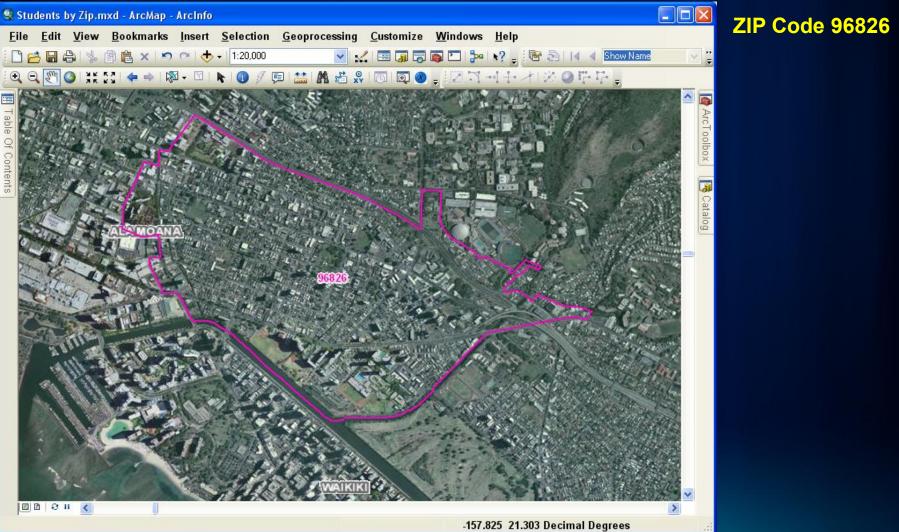
If extractions to the U.S. Census PL 94-171 census block counts are to be made for redistricting, data on the non-permanent populations to be extracted must also be known or estimated at the census block level.

For privacy reasons, data is often only provided at a ZIP Code level.

A disaggregation model is applied to assign ZIP Code-level non-permanent populations to individual census blocks in proportion to the total population of each census block.

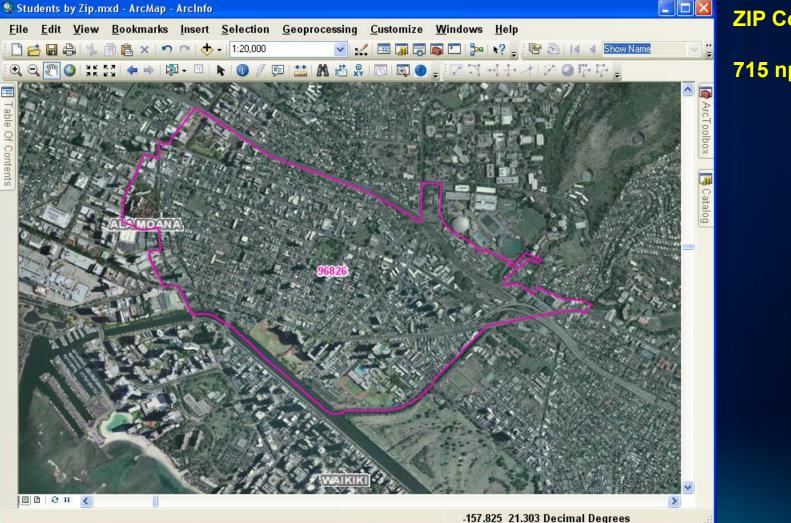
An example showing University of Hawaii non-resident student counts for ZIP Code 96826 being assigned to individual census blocks will help illustrate how this model works.

ZIP Code 96826 is just south of the University of Hawaii at Manoa campus.



8/17/2011

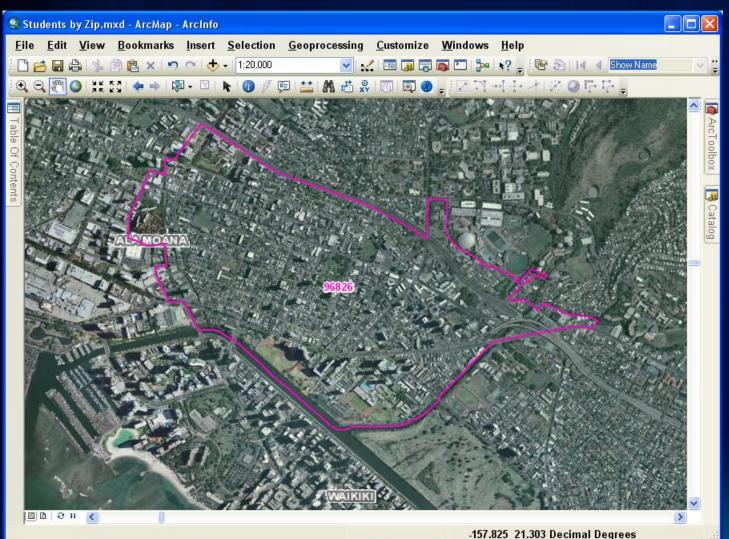
According to data received from the University of Hawaii, 715 non-permanent resident students live in ZIP Code 96826.



ZIP Code 96826 715 npr students

/17/2011

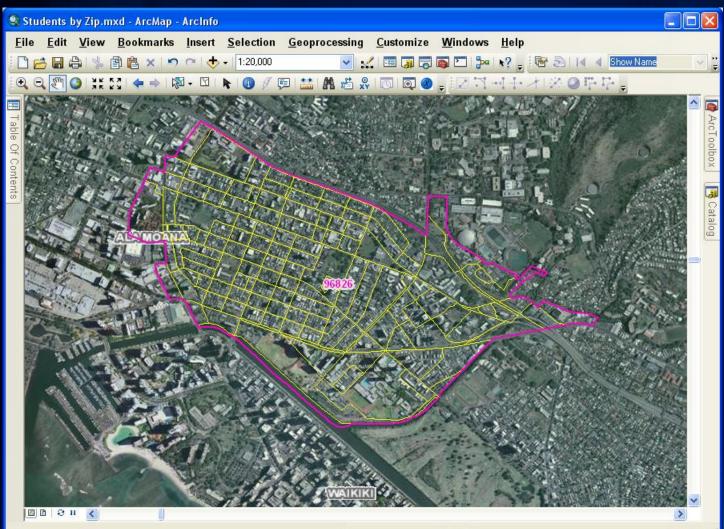
According to the U.S. Census Bureau PL 94-171 data, 30,842 residents live in ZIP Code Tabulation Area (ZCTA) 96826.



8/17/2011

ZIP Code 96826 715 npr students 30,842 population

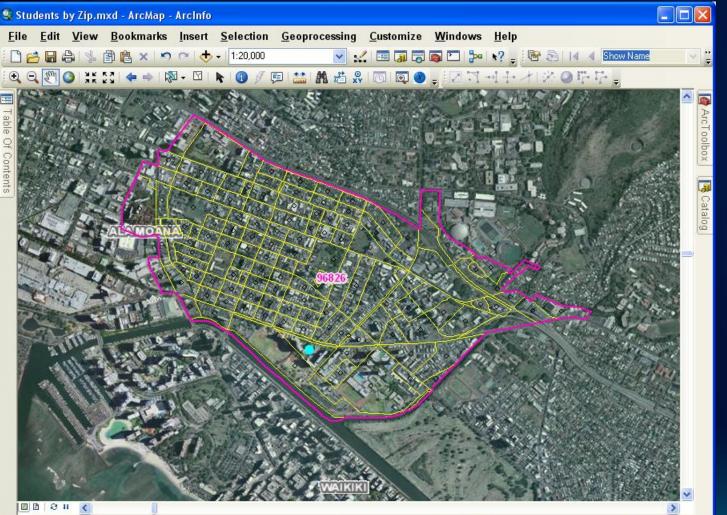
These 30,842 residents are spread across 121 census blocks.



/17/2011

ZIP Code 96826
715 npr students
30,842 population
121 census blocks

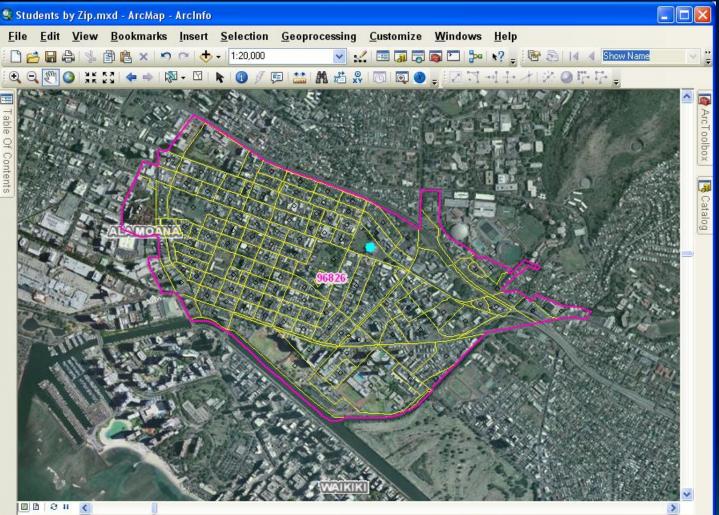
These 30,842 residents are spread across 121 census blocks with population. The largest block population is 1,841.



ZIP Code 96826 715 npr students 30,842 population 121 census blocks

-157.807 21.303 Decimal Degrees

These 30,842 residents are spread across 121 census blocks with population. The smallest block population is 2.



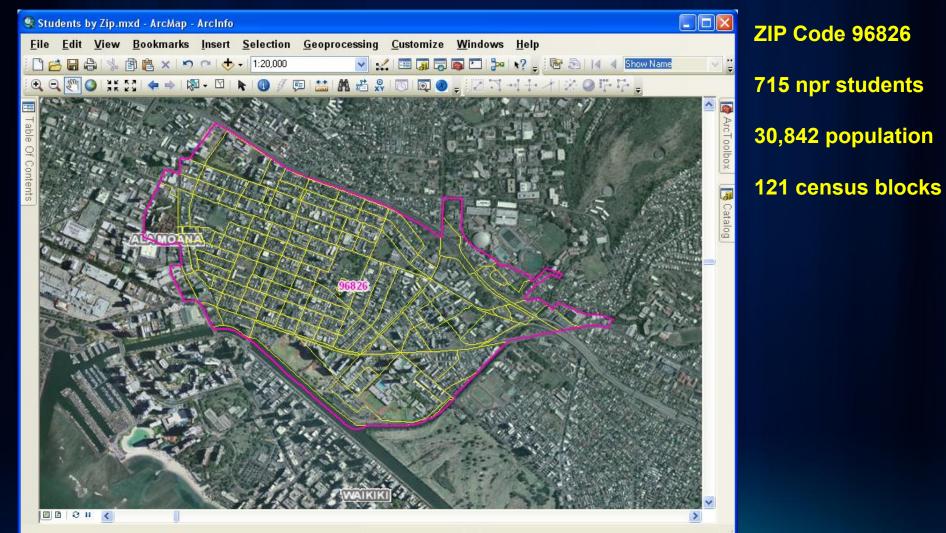
-157.84 21.302 Decimal Degrees

ZIP Code 96826
715 npr students
30,842 population
121 census blocks

08/17/2011

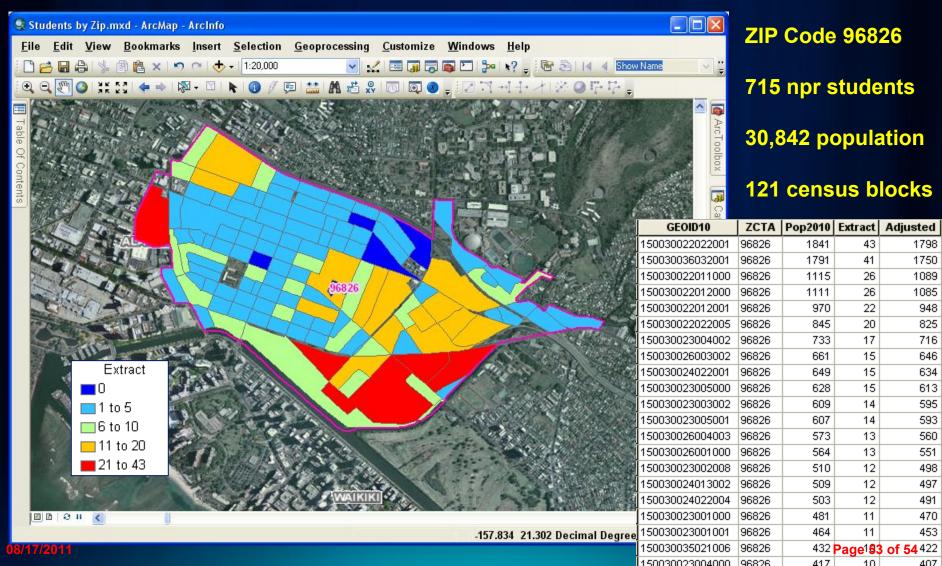
/17/2011

These 30,842 residents are spread across 121 census blocks with population. How do we spread 715 non-permanent students across the 121 census blocks?



Page 52 of 54

With 30,842 residents and 715 non-permanent residents, approximately 1 in every 43 residents is non-permanent, we use that proportion to extract from each census block.











Hawaii Reapportionment Commission 17 August 2011

Reapportionment Project Office: Contact Information

http://hawaii.gov/elections/reapportionment Address: Telephone: (808) 586-4100 State Capitol Toll Free: (877) 854-6749 415 South Beretania Street, Rm #445 (808) 586-4105 Fax: Honolulu, HI 96813 Email: reapportionment@hawaii.gov

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Hawaii Reapportionment Commission 19 September 2011

Commission Meeting

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 Telephone:
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Submit

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Review

Edit

09/19/2011

Page 1 of 56

Topics

- Public Plans and Public Hearings
- Population Base
 - Extraction of Non-Permanent Residents
 - DMDC Data on Military in Hawaii
 - Dissaggregation of ZIP Code Data
 - Possible Extractions
- Commission Schedule

Topics

• Public Plans and Public Hearings

Population Base

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Plans Submitted by the Public





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09/19/2011

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14 public plans submitted by July 25th

Congress	1 plan
Honolulu Senate	2 plans
Honolulu House	2 plans
Hawaii Senate	7 plans
Hawaii House	2 plans



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HAWAII REAPPORTIONMENT COMMISSION

Plans Submitted by the Public

310 accounts created 26 public plans submitted by September 18th

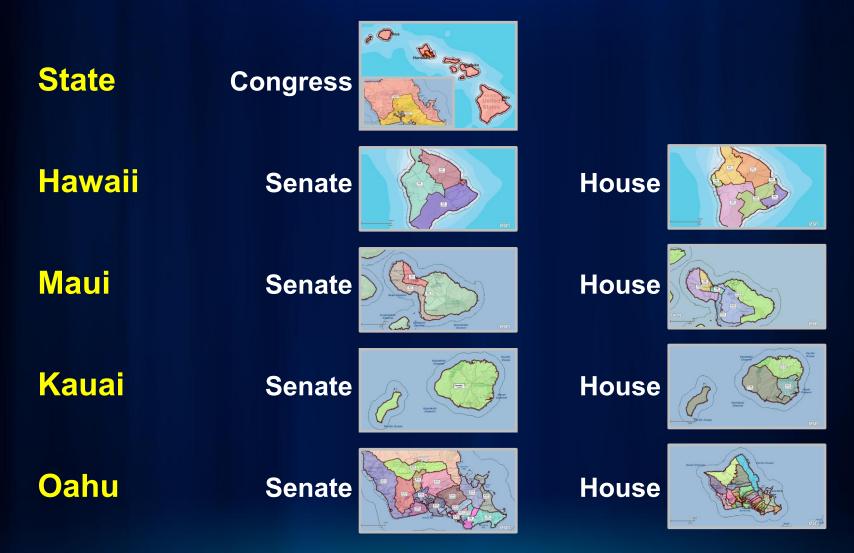
Welcome to the Hawai'i Redistricting Online Application!

Congress	1 plan	
Honolulu Senate Honolulu House	3 plans 8 plans	
Hawaii Senate Hawaii House	8 plans 5 plans	(3 plans received assume 4 Senate districts)
Kauai House	1 plan	

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Plan Proposed by the Commission on Aug 5, 2011

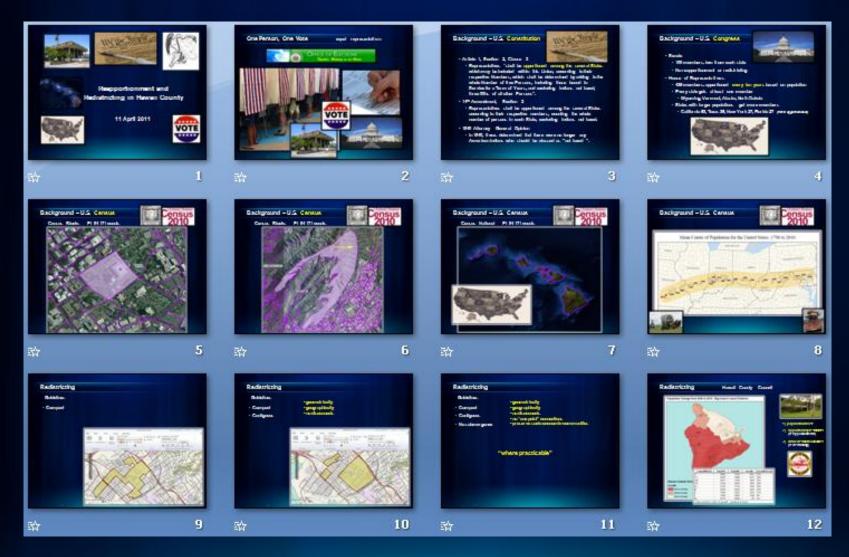


Completed 13 Public Hearings

186 attended63 testified51 emails and letters

Aug 30	West Oahu	6:00 pm	Kapolei High School Cafeteria
Aug 31	Central Maui	5:30 pm	Maui Waena Intermediate School Cafeteria
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Sep 16	East Oahu	6:00 pm	Kalani High School Cafeteria

Reapportionment and Redistricting



http://hawaii.gov/elections/reapportionment

U.S. Constitution



- Article 1, Section 2, Clause 3
 - Representatives "shall be apportioned among the several States which may be included within this Union, according to their respective Numbers, which shall be determined by adding to the whole Number of free Persons, including those bound to Service for a Term of Years, and excluding Indians not taxed, three fifths of all other Persons".

14th Amendment, Section 2

- Representatives shall be apportioned among the several States according to their respective numbers, counting the whole number of persons in each State, excluding Indians not taxed.
- 1940 Attorney General Opinion
 - In 1940, it was determined that there were no longer any American Indians who should be classed as "not taxed ".



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An Enumera ants of the to	wn o	of //	the	Inhabit ington	Nones of Heats of Families,	Free while Main, of 16	For white Males ander 16 years.	Free wêde Febraler.	All other free Perfeet.	Meren.	Hanes of Heads of Families.	Free white Make of 16 years and spearsts.	Free white Males, ander	Free white Freeder.	All ather from Perform.	Rieses.
Names of Heads of Families.	table I	addar A	-	4 4-	Sylvanus Blackma		12	1.			Benjamin Green	1	11	4		
	E.	Pro .	1	4	James Blackman	11	1 7	14	-	1	Tilas Barns	1		3		
Joseph Bentice 7	2	2	20		bli Medcall	1	1.3	6	1.0		brekil bushing	1	11	.5		
Auchel Prentice	1	1	2	:	Joth White Sylvester	1		5	1		Abel bushing	1	1	11	1	1.10
Jonathan Lutice	3	3	5	1	Sownand S. Gardnes	11	1	4.		1.3	Damiel Surague	1		3		
James Hany	1		1		Soriah Sates	11	2	2			Samuel Sover	2	2	2		
Frathanut Colling	1	1	.8		Stephen Gates	! ł	2	1.			Samuel Sources jun"		1	1		
Daniel Collons	1		1		Joseph Ring		14	4	1		James Rofs	1	1	1		
Calern Collins	1		1		Charas Ring	11	3	1	1		Somathan Bullak	1	1	1		
Somerer Williams	1	4	5	-	Somothan Fing	1	1	4			Thomas Rall	3	14	17		
John Woodward	1	1	1		Milliam Higgens	T	4	3			Amara Rofs	1	.2	2		
Chemin herrick	1	4	4		Thunas Medealf	2		2			Hours Sumbar	1	14	4		
Au Herick.	1	1	4		William Snew	K	2	3			bliche Shillips	1	4	.9		
Jenac Berick	2	4	4		· Tomas Sconards	r	2	2			Seconiale Shillips	1	1	2		
Thomas Wilber-	1	4	2		Joseph Marsh	2	1	4			kap der Spalding	2	4	2		
Fina Benjamin	1		2		Bu Jenathan Ancuster	4	1	2.	1		With Mileak Brown	1	1	1		
Auger Benjamin	1	2	2		Cat beman Mobber	2	2	4		1	Roger Dewey	1	-	1		
Ruben Hitchcock.	1		2		Sonathan Bustie	¥	1	3			Pouch Dawy	1		5		
John Settridge	2	2	2	2	Alexander Miant	k	2	2			Male Willie	1	2	3		100

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	e Males of 1 and upwards	r Males, under years.	Free white Females.	All other free Perfons	Slaves.	Menn.	Name of Heads of Families	white Male of 15	white Mailer, ander	Free subite Fernation.	ather from Perform.	Room.
Names of Heads of Families.	Free white years old,	Free white	Free sol	All other			Benjamin Green. Thes Barns	1	1	4	8	
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James Heeny	3	3	5	۴	1		Samuel Sover ju Sames Rofs Somathan Ballat Somathan Ball	1,	1.	1 1 1 1		
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An Enumerants of the to	ation wn o	of M	the	Inh	abit-
1	Males of 16 and upwards.	white Males, under 16 years.	sobjee Females.	All other free Perfons.	Slaves.
nes of Heads of Families.	Free white Males of years old, and upwa	Free white 16	Free sub	All other	ले
Joseph Lentice]	2	2	2		4
Jonathan Inentice	3	3	5	•	-
Nathaniel Golling	1	1	3		



1790 U.S. Census

White males 16+	20%
White males <16	20%
White females	40%
All other	2%
Slaves	18%

An Enumerants of the to					
1	Males of 16 and upwards.	Free white Males, under 16 years.	ce sobie Females.	All other free Perfons.	Slaves.
mes of Heads of Families.	Free white Males of years old, and upwa	Free white 16	Free sub	All other	0
Jereph Lentice	2	2	2		-
Somathan Inestice	3	3	5	•	
James Heeny	1	1	3		



1790 U.S. Census

20%
20%
40%
2%
18%

Q: Who could vote?

An Enumer ants of the to	ation wn (of M	the	Inh	abit
1	e Males of 16 and upwards.	white Males, under 16 years.	subite Females.	All other free Perfons.	Slaves.
nes of Heads of Families.	Free white years old,	Free white 16	Free sub	All other	0
Toreph Lentice]	2	2	2		
Sonathan Lentue	1 3	1 3	2 5	•	
James Heeny	1	-	1		
Nathaniel Golling	1	1	3		2.71



1790 U.S. Census

White males 16+	20%
White males <16	20%
White females	40%
All other	2%
Slaves	18%

Q: Who could vote?

A: White male property owners



Who was counted in Hawaii by the US Census?

	2010 Census He	ome	^p ress & Media	Pa	artners	> Students & Tea
2010 It's in our hands	ABOUT	DATA	BLOG	CONNE	CT MULTI	MEDIA Q Sear
About What is the Census Why It's Important How It Benefits You Community Interactive Timeline Explore the Form Census in the Con How We Count Am Protecting Your Ans	ur e Istitution Ierica	The ce	We Co nsus numb Share this pa	ers tell u		and what we need.



Who was counted in Hawaii by the US Census?



This is the official form fo It is quick and easy, and y

Use a blue or black pen.

Start here

The Census must count every person living in the United States on April 1, 2010.

Before you answer Question 1, count the people living in this house, apartment, or mobile home using our guidelines.

 Count all people, including babies, who live and sleep here most of the time.

The Census Bureau also conducts counts in institutions and other places, so:

- Do not count anyone living away either at college or in the Armed Forces.
- Do not count anyone in a nursing home, jail, prison, detention facility, etc., on April 1, 2010.
- Leave these people off your form, even if they will return to live here after they leave college, the nursing home, the military, jail, etc. Otherwise, they may be counted twice.

The Census must also include people without a permanent place to stay, so:

- If someone who has no permanent place to stay is staying here on April 1, 2010, count that person. Otherwise, he or she may be missed in the census.
- 1. How many people were living or staying in this house, apartment, or mobile home on April 1, 2010?

Number of people =

Where You Are Counted Is Important The Concept Of Usual Residence The Residence Rule People Away From Their Usual Residence On Census Day Visitors On Census Day People Who Live In More Than One Place People Without A Usual Residence Students Movers On Census Day People Who Are Born Or Die On Census Day Nonrelatives Of The Householder U.S. Military Personnel Merchant Marine Personnel On U.S. Flag Maritime/Merchant Vessels Foreign Citizens In The U.S. U.S. Citizens And Their Dependents Living Outside The U.S. People In Correctional Facilities For Adults People In Group Homes And Residential Treatment Centers For Adults People In Health Care Facilities People In Juvenile Facilities People In Residential School-Related Facilities People In Shelters People In Transitory Locations (e.g., RV parks, campgrounds, marinas) People In Religious-Related Residential Facilities

09/19/http://2010.census.gov/2010census/about/how-we-count.php

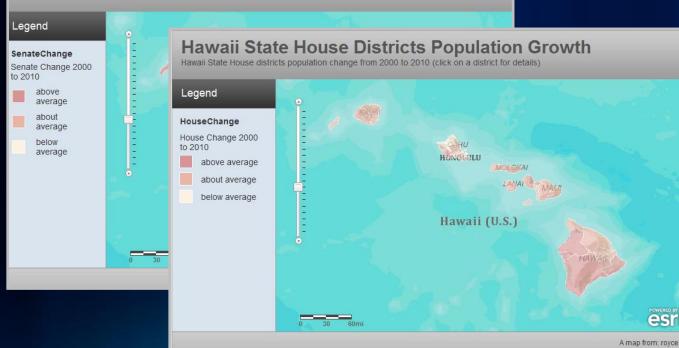
State Population Base

Ten Year Population Growth by Basic Island Unit (U.S. Census PL 94-171 data)

State	1,360,301	12%	<u>+148,764</u>
Oahu	953,207	9%	+77,051
Hawaii	185,079	24%	+36,402
Maui	154,924	21%	+26,683
Kauai	67,091	15%	+8,628

Hawaii State Senate Districts Population Growth

Hawaii State Senate districts population change from 2000 to 2010 (click on a district for details)



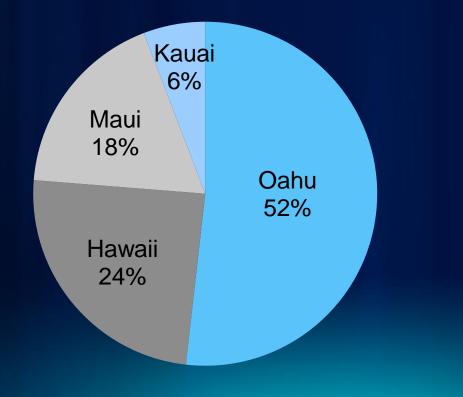


- 1) population base
- 2) apportion representatives (reapportionment)
- 3) draw district boundaries (redistricting)



Ten Year Population Growth by Basic Island Unit (U.S. Census PL 94-171 data)

State	1,360,301	12%	<u>+148,764</u>	
Oahu	953,207	9%	+77,051	(52%)
Hawaii	185,079	24%	+36,402	(24%)
Maui	154,924	21%	+26,683	(18%)
Kauai	67,091	15%	+8,628	(6%)





- 1) population base
- 2) apportion representatives (reapportionment)
- 3) draw district boundaries (redistricting)



Apportion Representatives

Hawaii Constitution Article IV Section 4

"The commission shall allocate the total number of members of each house of the state legislature being reapportioned among the four basic island units ... using the total number of permanent residents in each of the basic island units and computed by the method known as the method of equal proportions ..."

[Add Const Con 1978 and election Nov 7, 1978; am HB 2327 (1992) and election Nov 3, 1992]

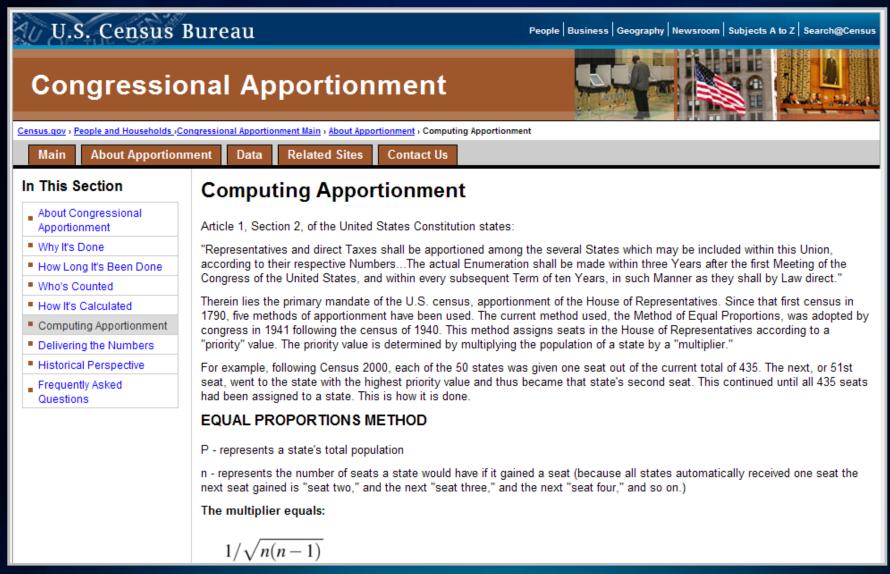
"This method... serves the rational state policies articulated in the Hawaii State Constitution, which recognizes the geographic insularity and unique political and socio-economic identities of the basic island units." [State of Hawaii 2001 Reapportionment Commission: Final Report and Reapportionment Plan, Dec 2001]



- 1) population base
- 2) apportion representatives (reapportionment)
- 3) draw district boundaries (redistricting)







http://www.census.gov/population/apportionment/about/computing.html 09/19/2011

🚖 Favorites 📴 http://w	www.census.g	ov/population/appo	rtion		
Apportionment: Tak	ole of Mult	ipliers using	the Method	of Equal	Proportions
Source: U.S. Censu Internet Release da		er 17, 2000			
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http://www.census.gov/population/apportionment/data/files/atable.txt

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total seats 18 35															26854			
															total se	eats	18	35

Senate Seats by Basic Island Unit

<u>State</u>	1,360,301	25
Oahu	953,207	18
Hawaii	185,079	3
Maui	154,924	3
Kauai	67,091	1

House Seats by Basic Island Unit

<u>State</u>	1,360,301	51
Oahu	953,207	35
Hawaii	185,079	7
Maui	154,924	6
Kauai	67,091	3

Reapportionment Within Basic Island Units

Redraw District Lines

Hawaii Constitution Article IV Section 6

"Upon the determination of the total number of members of each house of the state legislature to which each basic island unit is entitled, the commission shall... redraw district lines where necessary in such manner that for each house the average number of permanent residents... in each district is nearly equal to the average for the basic island unit as practicable.

[Add Const Con 1978 and election Nov 7, 1978; am HB 2327 (1992) and election Nov 3, 1992]



- 1) population base
- 2) apportion representatives (reapportionment)
- 3) draw district boundaries (redistricting)



Redistricting Within Basic Island Units

Ten Year Population Growth by Basic Island Unit (U.S. Census PL 94-171 data)

State	1,360,301	12%	+148,764
Oahu	953,207	9%	+77,051 (52%)
Hawaii	185,079	24%	+36,402 (24%)
Maui	154,924	21%	+26,683 (18%)
Kauai	67,091	15%	+8,628 (6%)

Senate Seats by Basic Island Unit

<u>State</u>	1,360,301	25	target
Oahu	953,207	18	52,956
Hawaii	185,079	3	61,693
Maui	154,924	3	51,641
Kauai	67,091	1	67,091

House Seats by Basic Island Unit

State	1,360,301	51	target
Oahu	953,207	35	27,234
Hawaii	185,079	7	26,440
Maui	154,924	6	25,821
Kauai	67,091	3	22,364



- 1) population base
- 2) apportion representatives (reapportionment)
- 3) draw district boundaries (redistricting)



Redistricting Within Basic Island Units

Ten Year Population Growth by Basic Island Unit (U.S. Census PL 94-171 data)

<u>State</u>	1,360,301	12%	+148,764	
Oahu	953,207	9%	+77,051	(52%)
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Maui	154,924	21%	+26,683	(18%)
Kauai	67,091	15%	+8,628	(6%)

2



Congress State 1,360,301 target 680,151

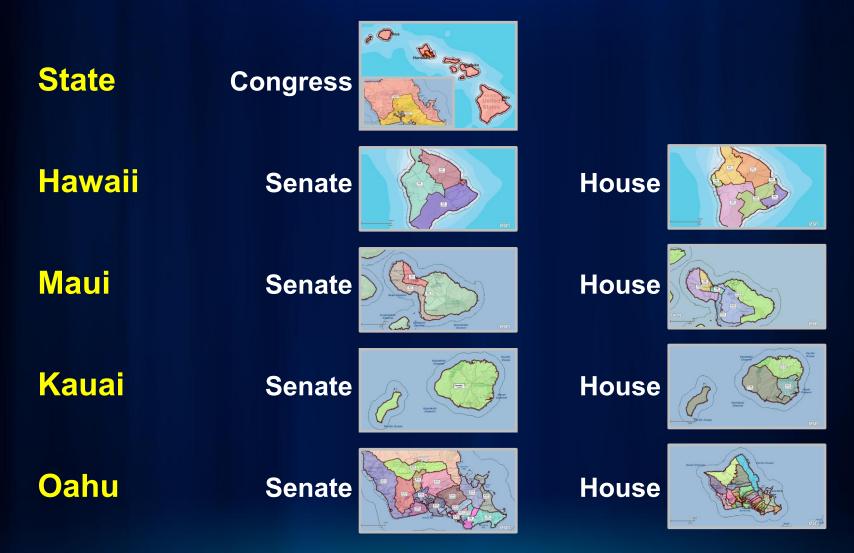


- 1) population base
- 2) apportion representatives (reapportionment)
- 3) draw district boundaries (redistricting)



09/19/2011

Plan Proposed by the Commission on Aug 5, 2011



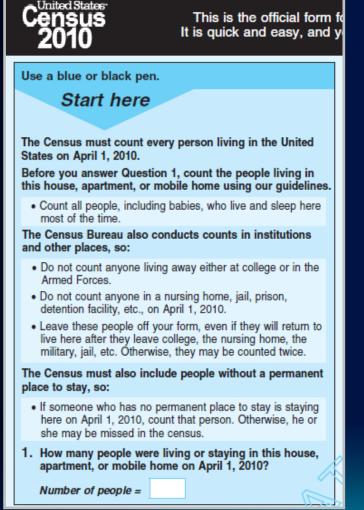
Topics

Public Plans and Public Hearings

Population Base

- Extraction of Non-Permanent Residents
- DMDC Data on Military in Hawaii
- Dissaggregation of ZIP Code Data
- Possible Extractions
- Commission Schedule

Who was counted in Hawaii by the US Census?



Where You Are Counted Is Important The Concept Of Usual Residence The Residence Rule People Away From Their Usual Residence On Census Day Visitors On Census Day People Who Live In More Than One Place People Without A Usual Residence Students Movers On Census Day People Who Are Born Or Die On Census Day Nonrelatives Of The Householder U.S. Military Personnel Merchant Marine Personnel On U.S. Flag Maritime/Merchant Vessels Foreign Citizens In The U.S. U.S. Citizens And Their Dependents Living Outside The U.S. People In Correctional Facilities For Adults People In Group Homes And Residential Treatment Centers For Adults People In Health Care Facilities People In Juvenile Facilities People In Residential School-Related Facilities People In Shelters People In Transitory Locations (e.g., RV parks, campgrounds, marinas) People In Religious-Related Residential Facilities

09/19/http://2010.census.gov/2010census/about/how-we-count.php

Three things we need to know:

- LOCATION:

- Where is the non-permanent resident's usual residence
- census block = more certain
- ZIP code = less certain

- TIMELINESS :

Was that their usual residence on April 1, 2010?

- Date of data extract
- Lag in reporting

- NON-PERMANENT STATUS:

- Is the person a non-permanent resident?
 - home, taxes, voting, community, ...

- August 17, 2001 Commission Meeting – DMDC Data



Topics

- Public Plans and Public Hearings
- Population Base
 - Extraction of Non-Permanent Residents
 - DMDC Data on Military in Hawaii
 - Dissaggregation of ZIP Code Data
 - Possible Extractions
- Commission Schedule

Permanent and Non-Permanent Military Residents

The non-permanent resident extraction model used in 1991 and 2001 relied on receiving location specific (address or ZIP Code) residence information for the specific non-permanent residents to be extracted.

In 2011, the data received from the Defense Manpower Data Center (DMDC) does not provide residence information for military sponsors nor does it provide specific breakdowns of permanent and non-permanent residents by location.

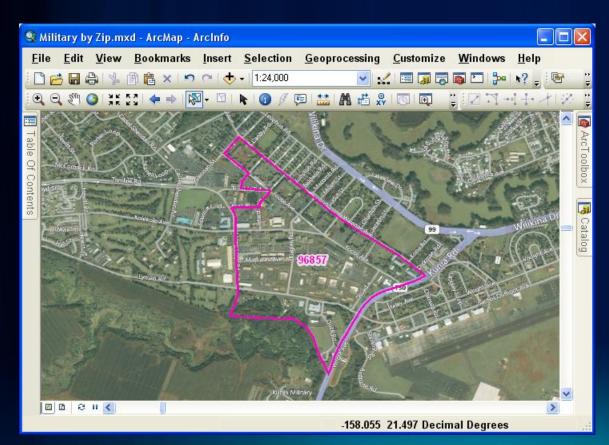
This lack of specific data from DMDC does not allow the model used previously to be used this time.

Examples from Schofield Barracks, Marine Corps Base Hawaii and Joint Base Pearl Harbor will help illustrate.

Permanent and Non-Permanent Military Residents

Data from DMDC for ZIP Code 96857 shows 17,004 sponsors and 968 dependents, for a total of 18,012 military residents.

DMDC does not indicate what portion of the 18,012 are permanent residents and what portion are non-permanent residents.



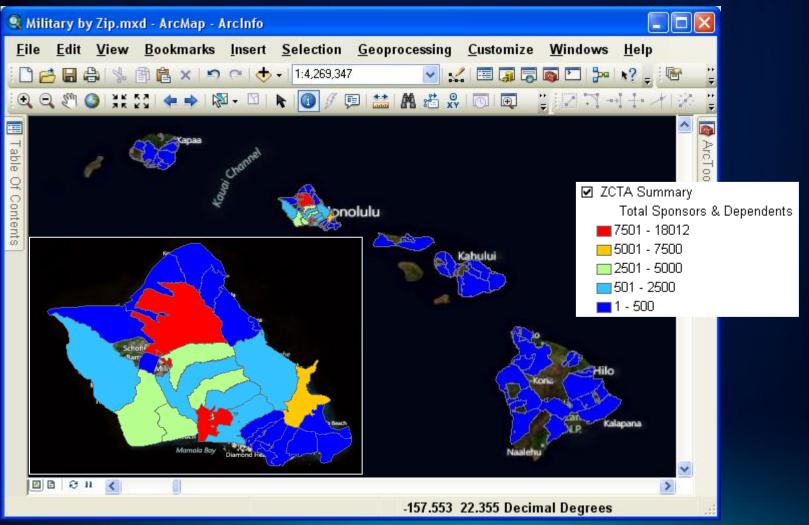
U.S. Census data for ZCTA 96857 shows a total population of 2,522.

DMDC only reports sponsor duty ZIP Codes and clearly 17,004 sponsors do not live in 96857.

We do not know where these sponsors live nor where they would have been counted by the U.S. Census.

Permanent and Non-Permanent Military Residents

Data from DMDC shows sponsors and dependents spread statewide with the majority on Oahu, but does not distinguish between permanent and non-permanent residents.



- Three things we need to know DMDC Military Data:
 - LOCATION: 🚫

Where is the non-permanent resident's usual residence

- Only duty station given for sponsors

- TIMELINESS : ✔

Was that their usual residence on April 1, 2010?

- March 31, 2010

- NON-PERMANENT STATUS:

- Is the person a non-permanent resident?
 - Not individually identified

Topics

- Public Plans and Public Hearings
- Population Base
 - Extraction of Non-Permanent Residents
 - DMDC Data on Military in Hawaii
 - Dissaggregation of ZIP Code Data
 - Possible Extractions
- Commission Schedule

Non-Permanent Student Residents Disaggregation

If extractions to the U.S. Census PL 94-171 census block counts are to be made for redistricting, data on the non-permanent populations to be extracted must also be known or estimated at the census block level.

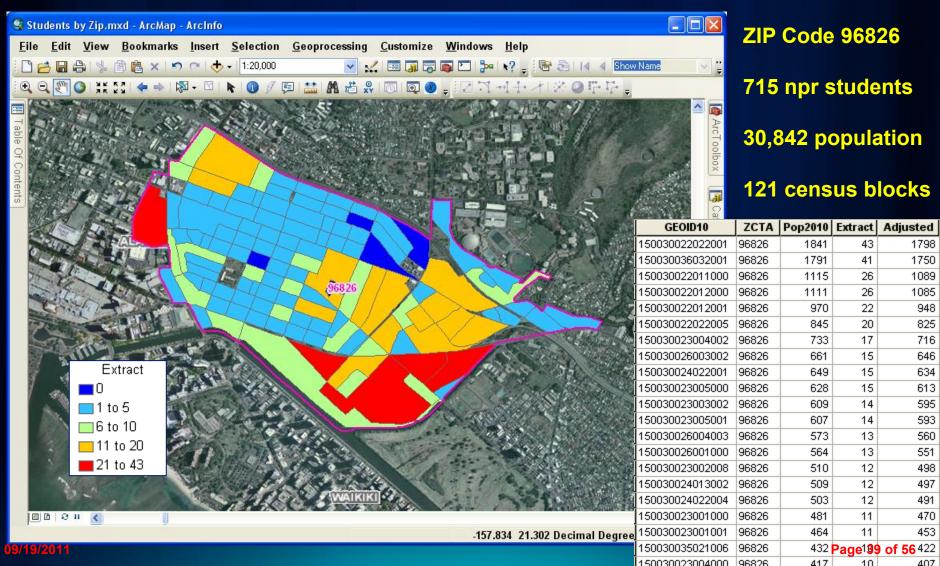
For privacy reasons, data is often only provided at a ZIP Code level.

A disaggregation model is applied to assign ZIP Code-level non-permanent populations to individual census blocks in proportion to the total population of each census block.

An example showing University of Hawaii non-resident student counts for ZIP Code 96826 being assigned to individual census blocks will help illustrate how this model works.

Non-Permanent Student Residents Disaggregation

With 30,842 residents and 715 non-permanent residents, approximately 1 in every 43 residents is non-permanent, we use that proportion to extract from each census block.



Three things we need to know – Students:

- LOCATION:

Where is the non-permanent resident's usual residence

Full Address 😽

ZIP Code Only **?**

- census block = more certain
- ZIP code = less certain

- TIMELINESS : 🗸

Was that their usual residence on April 1, 2010?

- Spring Semester 2010

- NON-PERMANENT STATUS: 🗸

- Is the person a non-permanent resident?
 - Identified by institution as non-resident

Topics

- Public Plans and Public Hearings
- Population Base
 - Extraction of Non-Permanent Residents
 - DMDC Data on Military in Hawaii
 - Dissaggregation of ZIP Code Data
 - Possible Extractions
- Commission Schedule

How are military sponsors and dependents in Hawaii counted by the US Census?

	2010 Census Ho	ome l	ome Press & Media Partners			> Students & Tea
2010 It's in our hands	ABOUT	DATA	BLOG	CONNECT	MULTIMEDIA	Q Sear
About What is the Census Why It's Important How It Benefits You Community Interactive Timeline	ır	The ce			Ca o we are and wha	t we need.
Explore the Form Census in the Cons How We Count Ame Protecting Your Ans	stitution erica					

How are military sponsors and dependents in Hawaii counted by the US Census?

- GROUP QUARTERS:

- Living in barracks
- Shorter-term
- Counts by census block

- MILITARY ON-BASE:

- Living in on-base housing
- Longer-term
- Families work and go to school here
- Counts by census block

- MILITARY OFF-BASE:

- No counts provided by U.S. Census

- Three things we need to know Military Group Quarters and On-Base:
 - LOCATION: 🗹
 - Where is the non-permanent resident's usual residence
 - Group quarters census block
 - On-base census block

- TIMELINESS : ✔

Was that their usual residence on April 1, 2010?

- Group quarters counted on Census Day
- On-base counted on Census Day

- NON-PERMANENT STATUS: **?**

- Is the person a non-permanent resident?
 - Group quarters unknown, barracks are transient housing
 - On-base unknown, on-base less transient than group quarters

Three Extractions:

- EXTRACTION A:

- Students with full addresses
- Military in Group Quarters
 - Census block location known, fairly certain non-permanent status

- EXTRACTION B :

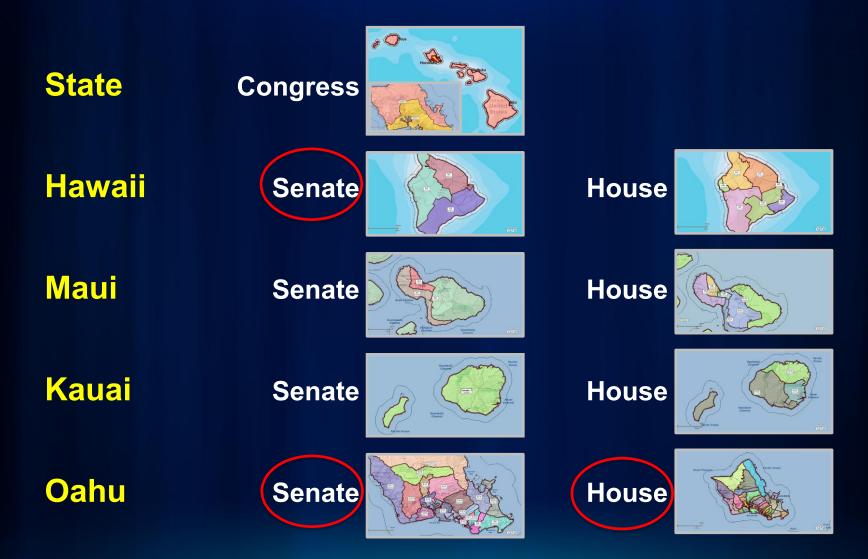
- All of Extraction A
- Military (and others) living On-base
 - Census block location known, less certain non-permanent status

- EXTRACTION C:

- All of Extractions A and B
- Students with only ZIP Codes
 - Census block location not known, fairly certain non-permanent status

- EXTRACTION A:	extraction	adjusted total
- Oahu	-15,660	937,547
- Hawaii	-793	184,286
- Maui	-4	154,920
- Kauai	-1	67,090
- EXTRACTION B (includes Extra	action A):	
- Oahu*	-72,609	880,598
- Hawaii*	-796	184,283
- Maui	-4	154,920
- Kauai	-143	66,948
- EXTRACTION C (includes Extra	ctions A and B):	
- Oahu*	-78,524	874,683
- Hawaii*	-921	184,158
- Maui	-178	154,746
- Kauai	-198	66,893

* Under Extractions B or C, Oahu receives 17 and Hawaii receives 4 senate seats



09/19/2011

- EXTRACTION A:	extraction	adjusted total
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Topics

- Public Plans and Public Hearings
- Population Base
 - Extraction of Non-Permanent Residents
 - DMDC Data on Military in Hawaii
 - Dissaggregation of ZIP Code Data
 - Possible Extractions



Commission Schedule

Aug 5	Commission Meeting: Adopt proposed plan
Aug 30 – Sep 16	Public Hearings and Comment Period
Sep 19	Commission Meeting
Sep 23	Commission Meeting
Sep 26	Commission Meeting to adopt final plan
Sep 26	Statutory deadline to file final plan with Chief Election Officer
Oct 10	Statutory deadline for Chief Election Officer to publish final plan
Dec 29	Statutory deadline to submit final report to State Legislature









Hawaii Reapportionment Commission 19 September 2011

Commission Meeting

Reapportionment Project Office: Contact Information

http://hawaii.gov/elections/reapportionment

Address: State Capitol 415 South Beretania Street, Rm #445 Honolulu, HI 96813

Telephone: (808) 586-4100 Toll Free: (877) 854-6749 Fax: (808) 586-4105 Email: Image: Treapportionment@hawaii.gov

Submit

Build Redistricting Plans Online!

Open

https://redistricting.hawaii.gov/

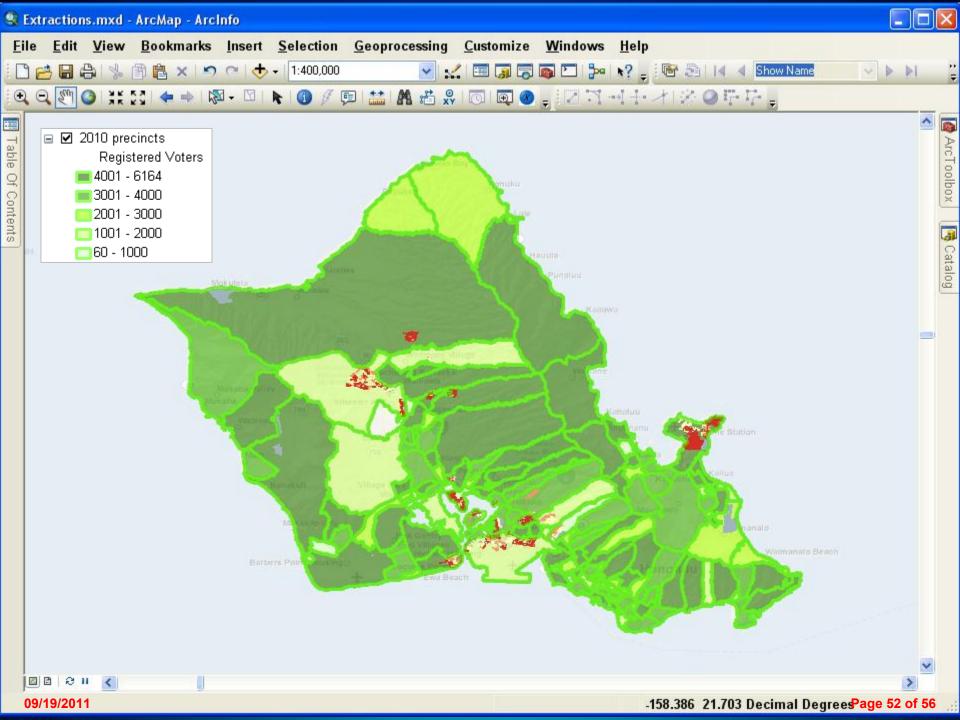
Share

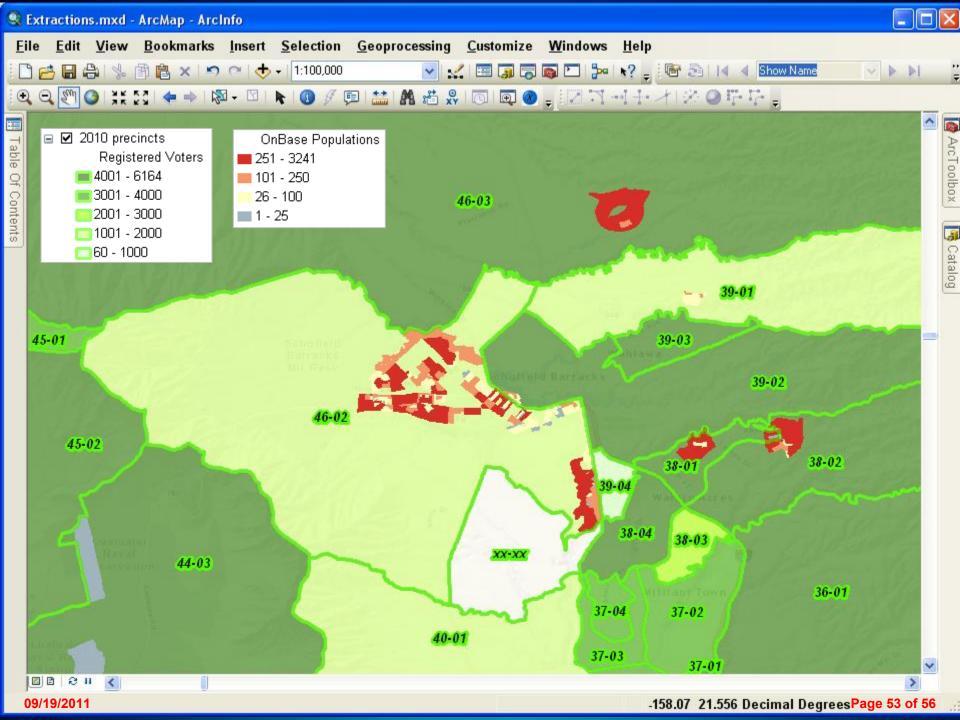
Review

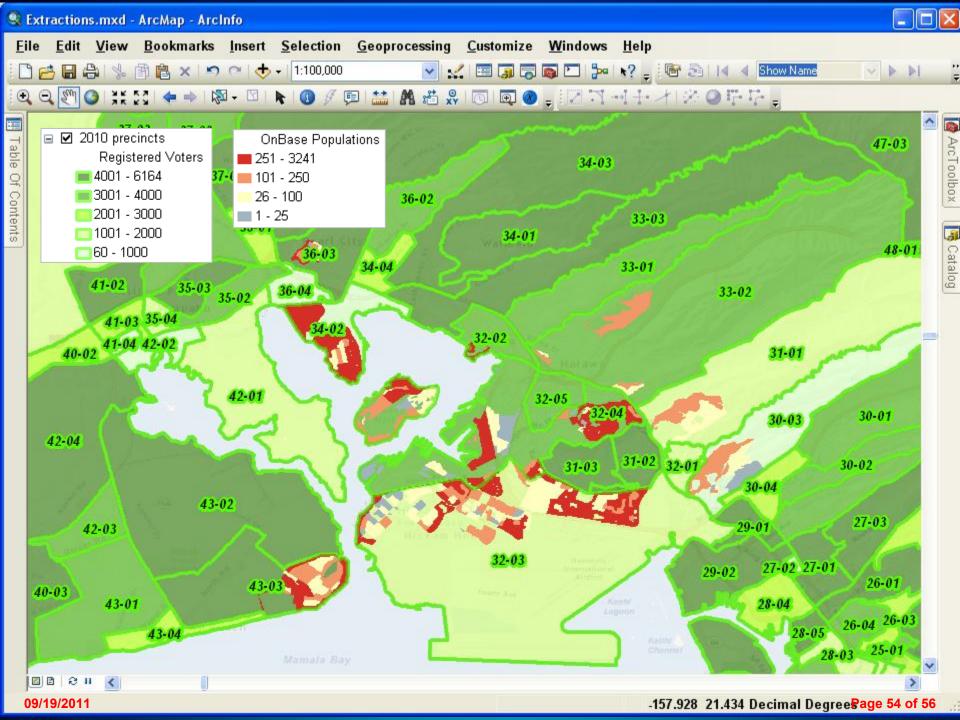
Edit

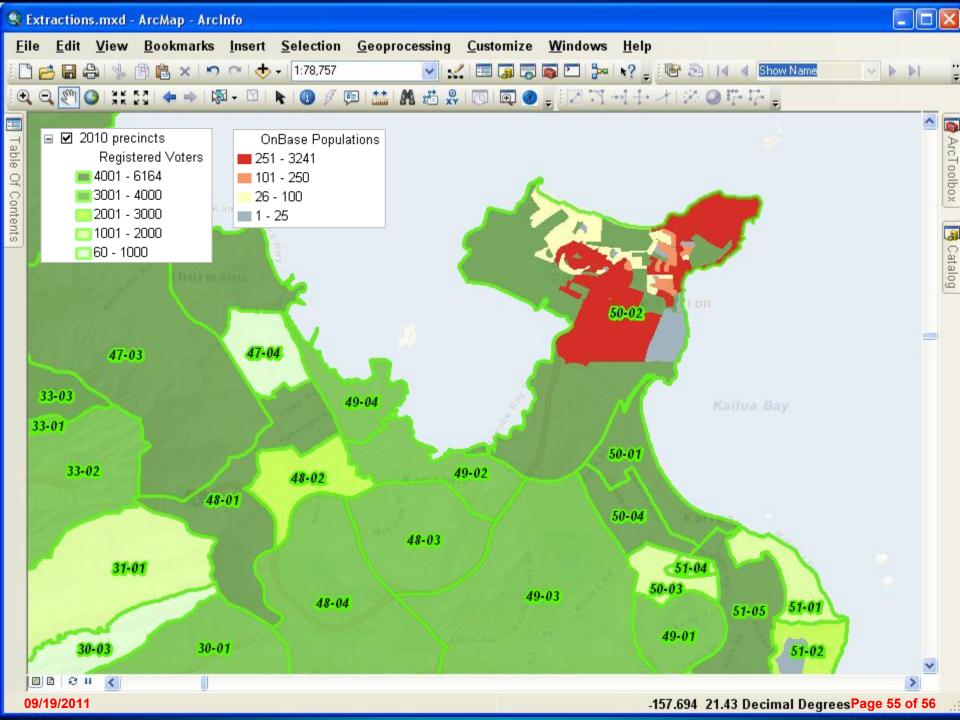
09/19/2011

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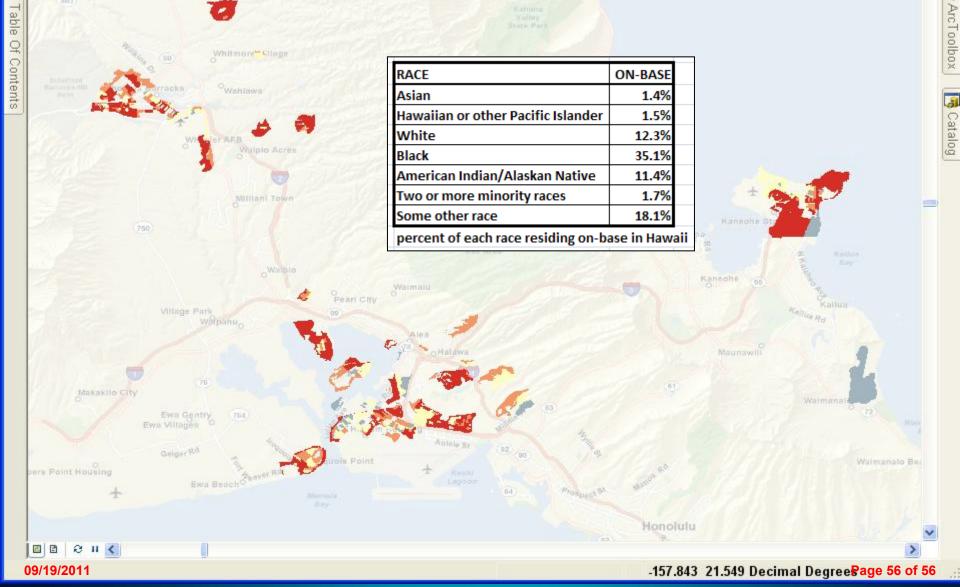






💐 Extractions.mxd - ArcMap - ArcInfo













Hawaii Reapportionment Commission

26 September 2011

Commission Meeting

Reapportionment Project Office: Contact Information

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Address: State Capitol 415 South Beretania Street, Rm #445 Honolulu, HI 96813

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Build Redistricting Plans Online!

https://redistricting.hawaii.gov/

Create District Plans
Share Plans
Review Plans
Submit Plans



Reapportionment using "Extraction A" population base

- Senate Staggered Terms for 2012
- Hawaii Reapportionment Commission Plan
 - Congress
 - Senate
 - House
- Commission Schedule

Extraction of Non-Permanent Residents

EXTRACTION A:	extraction	adjusted total
- Oahu	-15,660	937,547
- Hawaii	-793	184,286
- Maui	-4	154,920
- Kauai	-1	67,090

Adopted by the Hawaii Reapportionment Commission on September 19, 2011

Apportion Representatives

Hawaii Constitution Article IV Section 4

"The commission shall allocate the total number of members of each house of the state legislature being reapportioned among the four basic island units ... using the total number of permanent residents in each of the basic island units and computed by the method known as the method of equal proportions ..."

[Add Const Con 1978 and election Nov 7, 1978; am HB 2327 (1992) and election Nov 3, 1992]

"This method... serves the rational state policies articulated in the Hawaii State Constitution, which recognizes the geographic insularity and unique political and socio-economic identities of the basic island units." [State of Hawaii 2001 Reapportionment Commission: Final Report and Reapportionment Plan, Dec 2001]

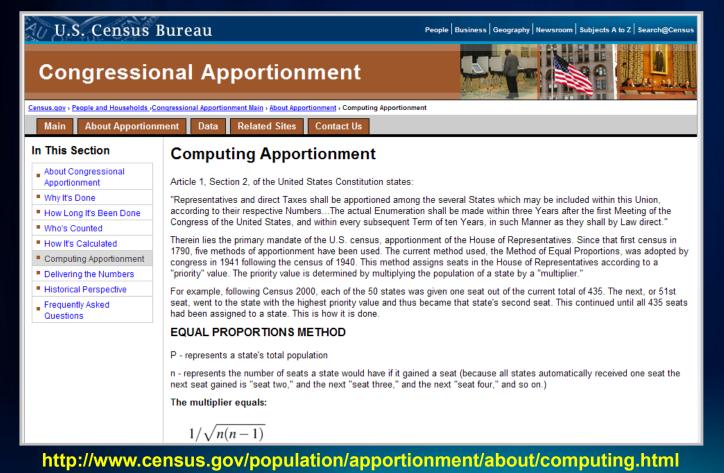


- 1) population base
- 2) apportion representatives (reapportionment)
- 3) draw district boundaries (redistricting)





The commission allocated the total number of members of each house of the state legislature among the four basic island units by the method of equal proportions. This is the same method used to apportion the U.S. Congress. To determine each basic island unit's share of seats the commission used the permanent resident population and the Table of Multipliers for the Method of Equal Proportions.



09/26/2011

The method of equal proportions computes "priority values" based on each basic island unit's apportionment population. The priority values are calculated by dividing the population of each basic island unit by the geometric mean of its current and next seats. The priority values are then ranked and used to assign members in the house and senate starting with the second seat.

🚖 Favorites 📴 http://v	www.census.g	ov/population/appo	rtion			
Apportionment: Tak	ole of Mult	ipliers using	the Me	thod of	Equal	Proportions
Source: U.S. Censu Internet Release da		per 17, 2000				
		-+	+			
		1	l.			
	n = Seat		l.			
	Number	 sqrt n(n-1)				
		+	+			
	2	0.7071067812				
	-	0.4082482905				
	4	0.2886751346				
	-	0.2236067977				
	-	0.1825741858				
	-	0.1543033500				
	8	0.1336306210				
	9	0.1178511302				
	10	0.1054092553				
	11	0.0953462589				
	12	0.0870388280				
	13	0.0800640769				
	14	0.0741249317				
	15	0.0690065559				
	1.6	0 0645407224				

http://www.census.gov/population/apportionment/data/files/atable.txt

RANKING OF PRIORITY VALUES						
Each Basic Islan	d Unit gets	one initial	seat in ea	ch branch, s	o start with seat #2	
RGM	BIUPop	Priority	Seat#	BIU Senate	BIU House BIU	
0.70710678 x	937547 =	662946	5	2	2 Oahu	
0.40824829 x	937547 =	382752	6	3	3 Oahu	
0.28867513 x	937547 =	270647	7	4	4 Oahu	
0.2236068 x	937547 =	209642	8	5	5 Oahu	
0.18257419 x	937547 =	171172	9	6	6 Oahu	
0.15430335 x	937547 =	144667	10	7	7 Oahu	
0.70710678 x	184286 =	130310	11	2	2 Hawaii	
0.13363062 x	937547 =	125285	12	8	8 Oahu	
0.11785113 x	937547 =	110491	13	9	9 Oahu	
0.70710678 x	154920 =	109545	14	2	2 Maui	
0.10540926 x	937547 =	98826.1	15	10	10 Oahu	
0.09534626 x	937547 =	89391.6	16	11	11 Oahu	
0.08703883 x	937547 =	81603	17	12	12 Oahu	
0.40824829 x	184286 =	75234.4	18	3	3 Hawaii	
0.08006408 x	937547 =	75063.8	19	13	13 Oahu	
0.07412493 x	937547 =	69495.6	20	14	14 Oahu	
0.06900656 x	937547 =	64696.9	21	15	15 Oahu	
0.40824829 x	154920 =	63245.8	22	3	3 Maui	
0.06454972 x	937547 =	60518.4	23	16	16 Oahu	
0.06063391 x	937547 =	56847.1	24	17	17 Oahu	
0.0571662 x	937547 =	53596	25	18	18 Oahu	
0.28867513 x	184286 =	53198.8	26		4 Hawaii	
0.05407381 x	937547 =	50696.7	27		19 Oahu	
0.05129892 x	937547 =	48095.1	28		20 Oahu	
0.70710678 x	67090 =	47439.8	29		2 Kauai	
0.0487950 x	937547 =	45747.6	30		21 Oahu	
0.28867513 x	154920 =	44721.6	31		4 Maui	
0.04652421 x	937547 =	43618.6	32		22 Oahu	
0.04445542 x	937547 =	41679	33		23 Oahu	
0.2236068 x	184286 =	41207.6	34		5 Hawaii	
0.04256283 x	937547 =	39904.7	35		24 Oahu	
0.04082483 x	937547 =	38275.2	36		25 Oahu	
0.03922323 x	937547 =	36773.6	37		26 Oahu	
0.03774257 x	937547 =	35385.4	38		27 Oahu	
0.2236068 x	154920 =	34641.2	39		5 Maui	
0.03636965 x	937547 =	34098.3	40		28 Oahu	
0.18257419 x	184286 =	33645.9	41		6 Hawaii	
0.03509312 x	937547 =	32901.4	42		29 Oahu	
0.03390318 x	937547 =	31785.8	43		30 Oahu	
0.03279129 x	937547 =	30743.4	44		31 Oahu	
0.0317500 x	937547 =	29767.1	45		32 Oahu	
0.03077287 x	937547 =	28851	46		33 Oahu	
0.15430335 x	184286 =	28435.9	47		7 Hawaii	
0.18257419 x	154920 =	28284.4	48		6 Maui	
0.02985407 x	937547 =	27989.6	49		34 Oahu	
0.40824829 x	67090 =	27389.4	50		3 Kauai	
0.02898855 x	937547 =	27178.1	51		35 Oahu	

Using "Extraction A" population base

Senate Seats by Basic Island Unit

<u>State</u>	1,360,301	25
Oahu	937,547	18
Hawaii	184,286	3
Maui	154,920	3
Kauai	67,090	1

House Seats by Basic Island Unit

<u>State</u>	1,360,301	51
Oahu	937,547	35
Hawaii	184,286	7
Maui	154,920	6
Kauai	67,090	3

Burns v Gill method of measuring total representation

Extraction A		S seats	H seats	Tot seats	Pop/seat	Deviation
State of Hawaii	1,343,843	25	51	76	17,682	
Oahu BIU	937,547	18	35	53	17,690	0.04%
Hawaii BIU	184,286	3	7	10	18,429	4.22%
Maui BIU	154,920	3	6	9	17,213	-2.65%
Kauai BIU	67,090	1	3	4	16,773	-5.14%
overall	1343843	25	51			9.37%

Topics

Reapportionment using "Extraction A" population base

Senate Staggered Terms for 2012

- Hawaii Reapportionment Commission Plan
 - Congress
 - Senate
 - House
- Commission Schedule

Senate Staggered Terms

Staggered Terms for the Senate

Hawaii Constitution Article IV Sections 7 and 8

"The reapportionment commission shall, as part of the reapportionment plan, assign two-year terms for twelve senate seats for the election immediately following the adoption of the reapportionment plan.

The remaining seats shall be assigned four-year terms.

Insofar as practicable, the commission shall assign the two-year terms to senate seats so that the resident population of each senate district shall have no more than two regular senate elections for a particular senate seat within the six-year period beginning in the even-numbered year prior to the reapportionment year."

[Add Const Con 1978 and election Nov 7, 1978; am HB 572 (1987) and election Nov 8, 1988; am SB 2234 (1992) and election Nov 3, 1992; am HB 1 (2000 2d) and election Nov 7, 2000]

Senate Staggered Terms for 2012

92.1% match rate

Senate 1 no 4,551 2 years Senate 2 YES 62,954 4 years Senate 3 no 0 2 years Senate 4 YES 53,971 4 years Senate 5 no 0 2 years Senate 6 no 1,626 2 years Senate 7 YES 67,090 4 years Senate 8 YES 52,038 4 years Senate 9 YES 52,162 4 years Senate 9 YES 50,370 4 years Senate 10 YES 50,370 4 years Senate 11 no 0 2 years Senate 12 no 0 2 years Senate 13 YES 52,582 4 years Senate 14 YES 53,440 4 years Senate 15 YES 53,440 4 years Senate 16 no 7,575 2 years Senate 17 no 8,230 2 years <th></th> <th>2010</th> <th>2010 SE Pop</th> <th>2012</th>		2010	2010 SE Pop	2012
Senate 2 YES 62,954 4 years Senate 3 no 0 2 years Senate 4 YES 53,971 4 years Senate 5 no 0 2 years Senate 6 no 1,626 2 years Senate 7 YES 67,090 4 years Senate 7 YES 52,038 4 years Senate 8 YES 52,038 4 years Senate 9 YES 52,162 4 years Senate 10 YES 50,370 4 years Senate 11 no 0 2 years Senate 12 no 0 2 years Senate 13 YES 52,582 4 years Senate 14 YES 46,702 4 years Senate 13 YES 53,440 4 years Senate 15 YES 51,591 4 years Senate 16 no 7,575 2 years Senate 19 YES 51,591 4 years	Senate 1	no	4,551	2 years
Senate 3 no 0 2 years Senate 4 YES 53,971 4 years Senate 5 no 0 2 years Senate 6 no 1,626 2 years Senate 7 YES 67,090 4 years Senate 8 YES 52,038 4 years Senate 9 YES 52,162 4 years Senate 10 YES 50,370 4 years Senate 11 no 0 2 years Senate 12 no 0 2 years Senate 13 YES 52,582 4 years Senate 14 YES 53,440 4 years Senate 15 YES 53,440 4 years Senate 16 no 7,575 2 years Senate 17 no 8,230 2 years Senate 18 no 12,096 2 years Senate 19 YES 51,591 4 years Senate 20 YES 54,332 4 years	Senate 2	YES	62,954	
Senate 4 YES 53,971 4 years Senate 5 no 0 2 years Senate 6 no 1,626 2 years Senate 7 YES 67,090 4 years Senate 8 YES 52,038 4 years Senate 9 YES 52,162 4 years Senate 9 YES 50,370 4 years Senate 10 YES 50,370 4 years Senate 11 no 0 2 years Senate 12 no 0 2 years Senate 13 YES 52,582 4 years Senate 14 YES 52,582 4 years Senate 14 YES 53,440 4 years Senate 15 YES 53,440 4 years Senate 17 no 8,230 2 years Senate 19 YES	Senate 3	no	0	
Senate 5 no 0 2 years Senate 6 no 1,626 2 years Senate 7 YES 67,090 4 years Senate 8 YES 52,038 4 years Senate 9 YES 52,162 4 years Senate 9 YES 50,370 4 years Senate 10 YES 50,370 4 years Senate 11 no 0 2 years Senate 12 no 0 2 years Senate 13 YES 52,582 4 years Senate 13 YES 52,582 4 years Senate 13 YES 52,582 4 years Senate 14 YES 52,582 4 years Senate 14 YES 53,440 4 years Senate 16 no 7,575 2 years Senate 19 YES	Senate 4	YES	53,971	
Senate 7 YES 67,090 4 years Senate 8 YES 52,038 4 years Senate 9 YES 52,162 4 years Senate 10 YES 50,370 4 years Senate 10 YES 50,370 4 years Senate 11 no 0 2 years Senate 12 no 0 2 years Senate 13 YES 52,582 4 years Senate 14 YES 46,702 4 years Senate 14 YES 53,440 4 years Senate 16 no 7,575 2 years Senate 17 no 8,230 2 years Senate 19 YES 51,591 4 years Senate 19 YES 54,332 4 years Senate 20 YES 54,332 4 years Senate 21 no<	Senate 5	no	0	
Senate 8 YES 52,038 4 years Senate 9 YES 52,162 4 years Senate 10 YES 50,370 4 years Senate 10 YES 50,370 4 years Senate 11 no 0 2 years Senate 12 no 0 2 years Senate 13 YES 52,582 4 years Senate 13 YES 52,582 4 years Senate 14 YES 52,582 4 years Senate 14 YES 52,582 4 years Senate 14 YES 52,582 4 years Senate 15 YES 53,440 4 years Senate 16 no 7,575 2 years Senate 17 no 8,230 2 years Senate 19 YES 51,591 4 years Senate 20 YE	Senate 6	no	1,626	2 years
Senate 8 YES 52,038 4 years Senate 9 YES 52,162 4 years Senate 10 YES 50,370 4 years Senate 10 YES 50,370 4 years Senate 11 no 0 2 years Senate 12 no 0 2 years Senate 13 YES 52,582 4 years Senate 14 YES 52,582 4 years Senate 15 YES 53,440 4 years Senate 16 no 7,575 2 years Senate 17 no 8,230 2 years Senate 19 YES 51,591 4 years Senate 20 YE	Senate 7	YES	67,090	4 years
Senate 10 YES 50,370 4 years Senate 11 no 0 2 years Senate 12 no 0 2 years Senate 13 YES 52,582 4 years Senate 13 YES 52,582 4 years Senate 13 YES 52,582 4 years Senate 14 YES 46,702 4 years Senate 15 YES 53,440 4 years Senate 16 no 7,575 2 years Senate 17 no 8,230 2 years Senate 18 no 12,096 2 years Senate 19 YES 51,591 4 years Senate 20 YES 54,332 4 years Senate 21 no 3,237 2 years Senate 22 YES 44,060 4 years Senate 23 no 22,505 2 years Senate 24 YES 30,542 2 years	Senate 8	YES	52,038	
Senate 11 no 0 2 years Senate 12 no 0 2 years Senate 13 YES 52,582 4 years Senate 14 YES 46,702 4 years Senate 15 YES 53,440 4 years Senate 16 no 7,575 2 years Senate 17 no 8,230 2 years Senate 18 no 12,096 2 years Senate 19 YES 51,591 4 years Senate 20 YES 54,332 4 years Senate 21 no 3,237 2 years Senate 23 no 22,505 2 years Senate 24 YES 30,542 2 years	Senate 9	YES	52,162	4 years
Senate 12 no 0 2 years Senate 13 YES 52,582 4 years Senate 14 YES 46,702 4 years Senate 15 YES 53,440 4 years Senate 16 no 7,575 2 years Senate 17 no 8,230 2 years Senate 18 no 12,096 2 years Senate 19 YES 51,591 4 years Senate 20 YES 54,332 4 years Senate 21 no 3,237 2 years Senate 22 YES 44,060 4 years Senate 23 no 22,505 2 years Senate 24 YES 30,542 2 years	Senate 10	YES	50,370	4 years
Senate 13 YES 52,582 4 years Senate 14 YES 46,702 4 years Senate 15 YES 53,440 4 years Senate 16 no 7,575 2 years Senate 17 no 8,230 2 years Senate 18 no 12,096 2 years Senate 19 YES 51,591 4 years Senate 20 YES 54,332 4 years Senate 21 no 3,237 2 years Senate 23 no 22,505 2 years Senate 23 no 22,505 2 years Senate 24 YES 30,542 2 years	Senate 11	no	0	2 years
Senate 14YES46,7024 yearsSenate 15YES53,4404 yearsSenate 16no7,5752 yearsSenate 17no8,2302 yearsSenate 18no12,0962 yearsSenate 19YES51,5914 yearsSenate 20YES54,3324 yearsSenate 21no3,2372 yearsSenate 22YES44,0604 yearsSenate 23no22,5052 yearsSenate 24YES30,5422 years	Senate 12	no	0	2 years
Senate 15 YES 53,440 4 years Senate 16 no 7,575 2 years Senate 17 no 8,230 2 years Senate 18 no 12,096 2 years Senate 19 YES 51,591 4 years Senate 20 YES 54,332 4 years Senate 21 no 3,237 2 years Senate 22 YES 44,060 4 years Senate 23 no 22,505 2 years Senate 24 YES 30,542 2 years	Senate 13	YES	52,582	4 years
Senate 16no7,5752 yearsSenate 17no8,2302 yearsSenate 18no12,0962 yearsSenate 19YES51,5914 yearsSenate 20YES54,3324 yearsSenate 21no3,2372 yearsSenate 22YES44,0604 yearsSenate 23no22,5052 yearsSenate 24YES30,5422 years	Senate 14	YES	46,702	4 years
Senate 17no8,2302 yearsSenate 18no12,0962 yearsSenate 19YES51,5914 yearsSenate 20YES54,3324 yearsSenate 21no3,2372 yearsSenate 22YES44,0604 yearsSenate 23no22,5052 yearsSenate 24YES30,5422 years	Senate 15	YES	53,440	4 years
Senate 18no12,0962 yearsSenate 19YES51,5914 yearsSenate 20YES54,3324 yearsSenate 21no3,2372 yearsSenate 22YES44,0604 yearsSenate 23no22,5052 yearsSenate 24YES30,5422 years	Senate 16	no	7,575	
Senate 19 YES 51,591 4 years Senate 20 YES 54,332 4 years Senate 21 no 3,237 2 years Senate 22 YES 44,060 4 years Senate 23 no 22,505 2 years Senate 24 YES 30,542 2 years	Senate 17	no	8,230	2 years
Senate 19 YES 51,591 4 years Senate 20 YES 54,332 4 years Senate 21 no 3,237 2 years Senate 22 YES 44,060 4 years Senate 23 no 22,505 2 years Senate 24 YES 30,542 2 years	Senate 18	no	12,096	
Senate 21no3,2372 yearsSenate 22YES44,0604 yearsSenate 23no22,5052 yearsSenate 24YES30,5422 years	Senate 19	YES	51,591	
Senate 22YES44,0604 yearsSenate 23no22,5052 yearsSenate 24YES30,5422 years	Senate 20	YES	54,332	4 years
Senate 23 no 22,505 2 years Senate 24 YES 30,542 2 years	Senate 21	no	3,237	2 years
Senate 24YES30,5422 years	Senate 22	YES	44,060	4 years
	Senate 23	no	22,505	
Senate 25YES50,4444 years	Senate 24	YES	30,542	2 years
	Senate 25	YES	50,444	4 years

2010 SE Pop = 2010 senate election population in each of the new senate districts

The commission staff has identified each census block with a designation that it did or did not participate in an election for state senator in the 2010 election.

The staff has determined the population of each census block in each new senate district that had an election for senate in the year 2010.

The staff has identified twelve new senate districts seats which had the smallest populations of participation in the 2010 senatorial elections. These twelve new senate districts will be designated by the commission to have two year terms in the 2012 election.

Topics

- Reapportionment using "Extraction A" population base
- Senate Staggered Terms for 2012
- Hawaii Reapportionment Commission Plan
 - Congress
 - Senate
 - House
 - Commission Schedule

Reapportionment Within Basic Island Units

Redraw District Lines

Hawaii Constitution Article IV Section 6

"Upon the determination of the total number of members of each house of the state legislature to which each basic island unit is entitled, the commission shall... redraw district lines where necessary in such manner that for each house the average number of permanent residents... in each district is nearly equal to the average for the basic island unit as practicable.

[Add Const Con 1978 and election Nov 7, 1978; am HB 2327 (1992) and election Nov 3, 1992]



- 1) population base
- 2) apportion representatives (reapportionment)
- 3) draw district boundaries (redistricting)



Redistricting Within Basic Island Units

Using "Extraction A" population base

Senate Seats by Basic Island Unit

<u>State</u>	1,360,301	25	target
Oahu	937,547	18	52,086
Hawaii	184,286	3	61,429
Maui	154,920	3	51,640
Kauai	67,090	1	67,090

House Seats by Basic Island Unit

State	1,360,301	51	target
Oahu	937,547	35	26,787
Hawaii	184,286	7	26,327
Maui	154,920	6	25,820
Kauai	67,090	3	22,363

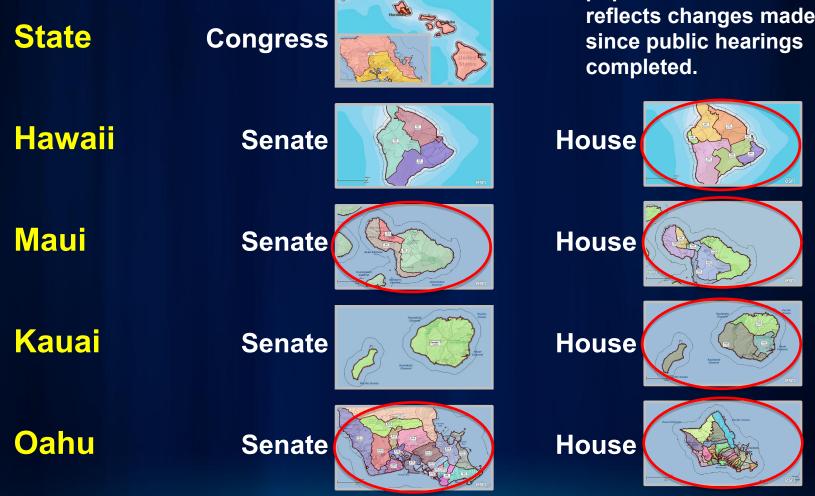


- 1) population base
- 2) apportion representatives (reapportionment)
- 3) draw district boundaries (redistricting)



Recommended Final Plan

Except for Congress, the Recommended Final Plan uses the "Extraction A" population base and reflects changes made since public hearings completed.



20

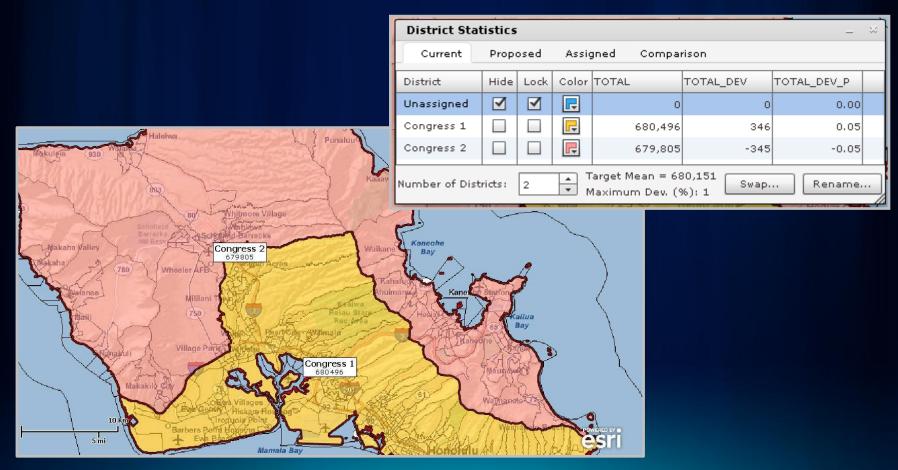
Aug 5 Proposed Plan – Congress

HAWAII REAPPORTIONMENT COMMISSION

PROPOSED I	PLAN: CONGRESS
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Plan:	Congress
Districts:	two (Congress 1 - 2)
Target Population:	680,151 per district

Plan Deviation:	0.10%
highest deviation:	0.05%
lowest deviation:	-0.05%



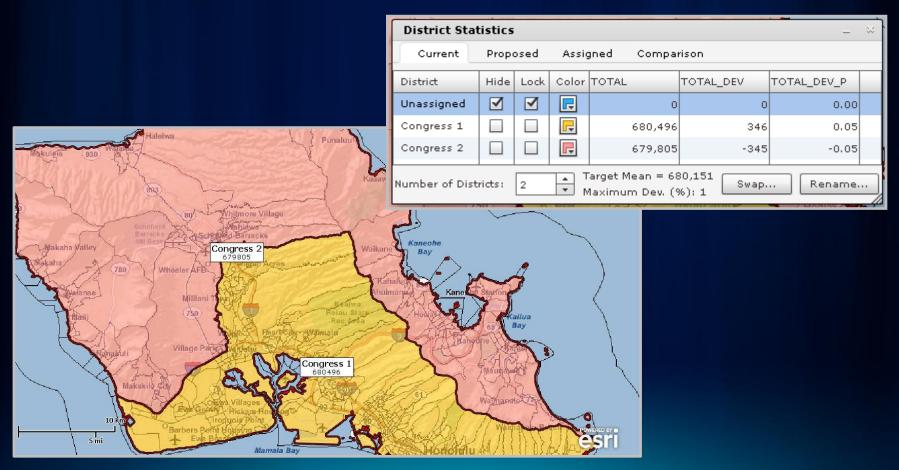
Recommended Final Plan – Congress

HAWAII REAPPORTIONMENT COMMISSION

FINAL PLAN: CONGRESS

Plan:	Statewide Congress
Districts:	two (Congress 1 - 2)
Target Population:	680,151 per district

Plan Deviation:	0.10%
highest deviation:	0.05%
lowest deviation:	-0.05%



Aug 5 Proposed Plan – Senate Hawaii

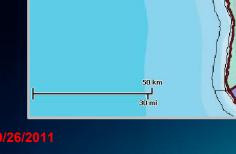
HAWAII REAPPORTIONMENT COMMISSION

PROPOSED PLAN: SENATE HAWAII

Plan:	Senate Hawaii
Districts:	three (Senate 1 - 3)
Target Population:	61,693 per district

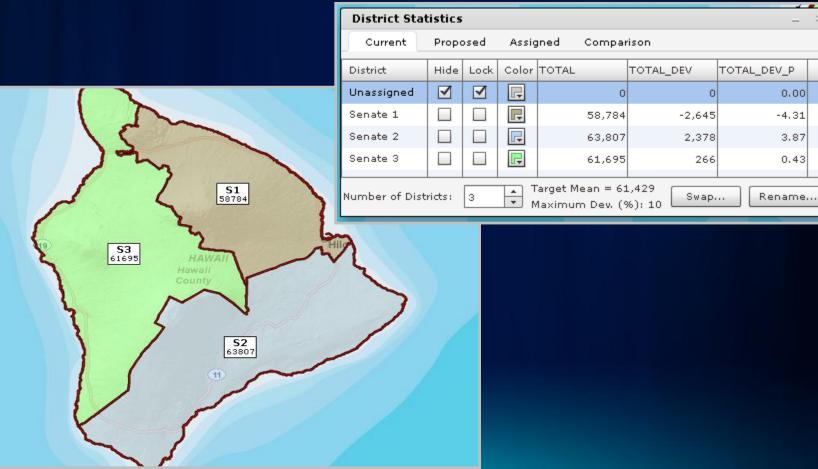
Plan Deviation:	7.01%
highest deviation:	3.50%
lowest deviation:	-3.51%

			_) 🖪		-			
	District Stat	istics						-	~
	Current	Propo	osed	Assiç	ned	Compa			
	District	Hide	Lock	Color	TOTAL		TOTAL_DEV	TOTAL_DEV_P	
	Unassigned			R		0	0	0.00	
	Senate 1			Ę		59,525	-2,168	-3.51	
X	Senate 2			F		63,851	2,158	3.50	
China I	Senate 3			F		61,703	10	0.02	
S1 59525	Number of Dist	icts:	3		-	ean = 61 n Dev. (9	Swan.	Rename]
S3 61703 Hawaii	K								
S2 63851	D)							
				es					



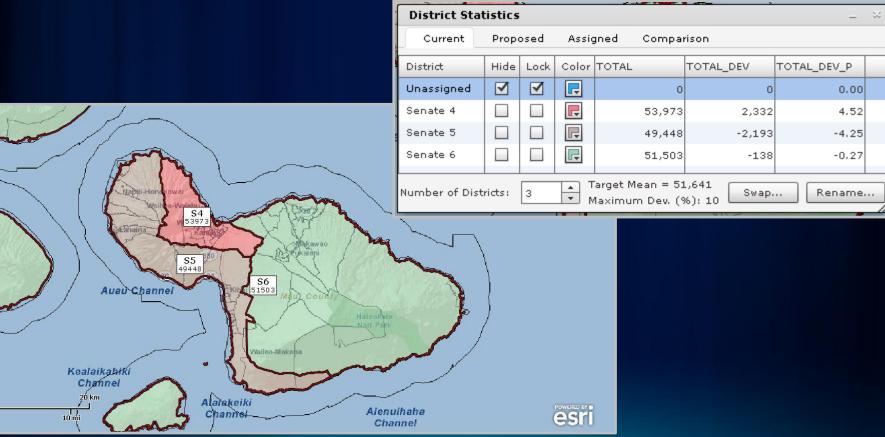
Recommended Final Plan – Senate Hawaii

HAWAII REAPPORTIONMENT COMMISSIONFINAL PLAN: HAWAII SENATEPlan:Hawaii SenatePlan Deviation:8.18%Districts:three (Senate 1 - 3)highest deviation:3.87%Target Population:61,429 per districtlowest deviation:-4.31%



Aug 5 Proposed Plan – Senate Maui

HAWAII REAPPORTIONMENT COMMISSIONPROPOSED PLAN: SENATE MAUIPlan:Senate MauiPlan Deviation:8.77%Districts:three (Senate 4 - 6)highest deviation:4.52%Target Population:51,641 per districtlowest deviation:-4.25%



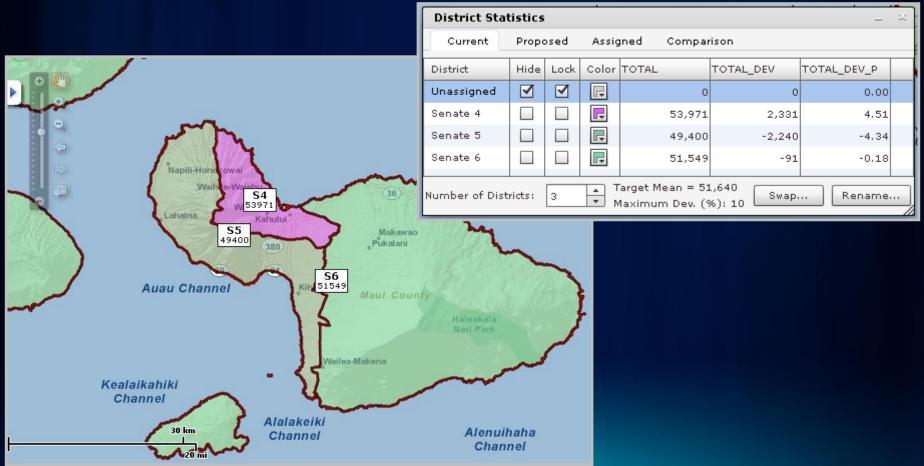
HAWAII REAPPORTIONMENT COMMISSION

FINAL PLAN: MAUI SENATE

Plan:	Maui Senate
Districts:	three (Senate 4 - 6)
Target Population:	51,640 per district

)9/26/2011

Plan Deviation:	8.85%
highest deviation:	4.51%
lowest deviation:	-4.34%







Aug 5 Proposed Plan – Senate Oahu

HAWAII REAPPORTIONMENT COMMISSION

PROPOSED PLAN: SENATE OAHU

Plan:	Senate Oahu	F
Districts:	eighteen (Senate <mark>8</mark> - 25)	ł
Target Population:	52,956 per district	

Plan Deviation:	9.85%
highest deviation:	4.84%
lowest deviation:	-5.01%

	District Stat	tistics					-	×
	Current	Prop	osed	Assi	gned Compa	rison		
	District	Hide	Lock	Color	TOTAL	TOTAL_DEV	TOTAL_DEV_P	
	Unassigned			R	C		0.00	þ
Nada Way	Senate 8			R	52,084	-87:	2 -1.65	5
S23	Senate 9			F	52,236	-720	-1.36	5
Scholleid Barracks	Senate 10			R	50,788	-2,168	3 -4.09	9
Milley S22 50934 Waikand Bay	Senate 11			R	51,396	-1,560	-2.95	5
Merkena 5 780 Whooler AFB	Senate 12			R	52,780	-176	-0.33	3
Standard Strong	Senate 13			R	52,657			
55519 man state Heading Kallua	Senate 14			F	53,235			
Bay Car Stands - Car Stand	Senate 15			R	55,218			
Sing Sing Sing Sing Sing Sing Sing Sing	Senate 16			R	55,519			
53235 Mat 33631	Senate 17			R	54,341			
	Senate 18			R	54,709			
54472	Senate 19			F	55,047			
	Senate 20			F	54,472			
Mamala Bay 5270 59 U 52084 52084	Senate 21			F	52,843			
	Senate 22			R	50,934			
	Senate 23			Ŗ	50,303			
	Senate 24			R	51,014			
	Senate 25			Ŗ	53,631	. 67:	5 1.27	
	Number of Dist	ricts:	18		i arget Mean = 5 1aximum Dev. (- Swar	Rename	2

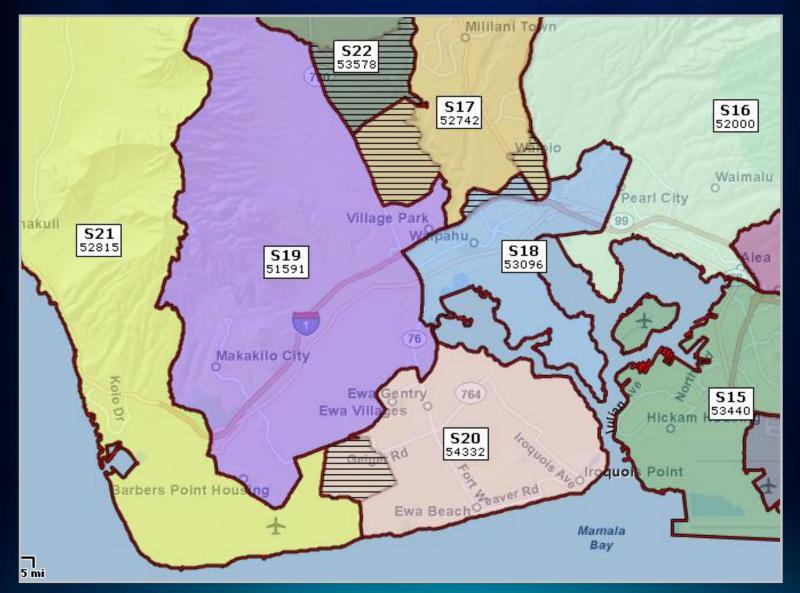
HAWAII REAPPORTIONMENT COMMISSION

FINAL PLAN: OAHU SENATE

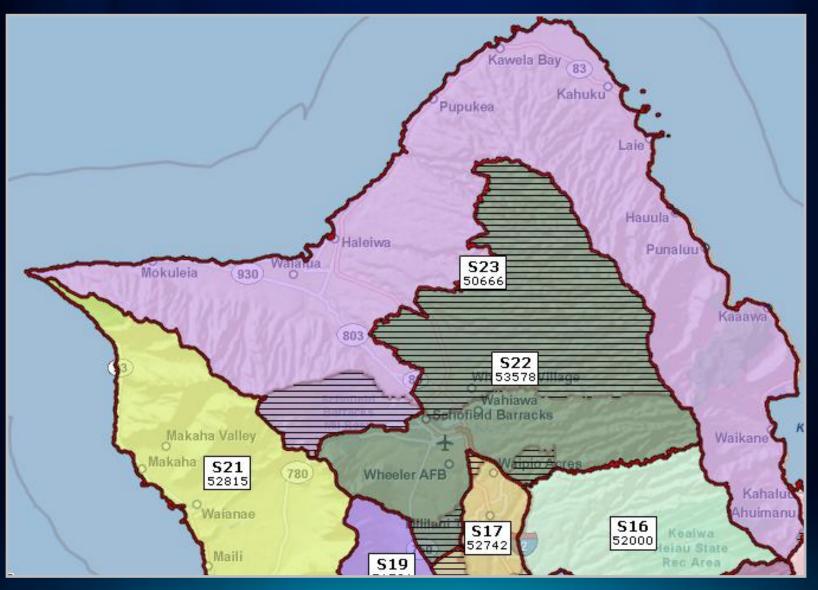
Plan:	Oahu Senate	Plan Deviation:	8.50%
Districts:	eighteen (Senate 8 - 25)	highest deviation:	4.31%
Target Population:	52,086 per district	lowest deviation:	-4.19%

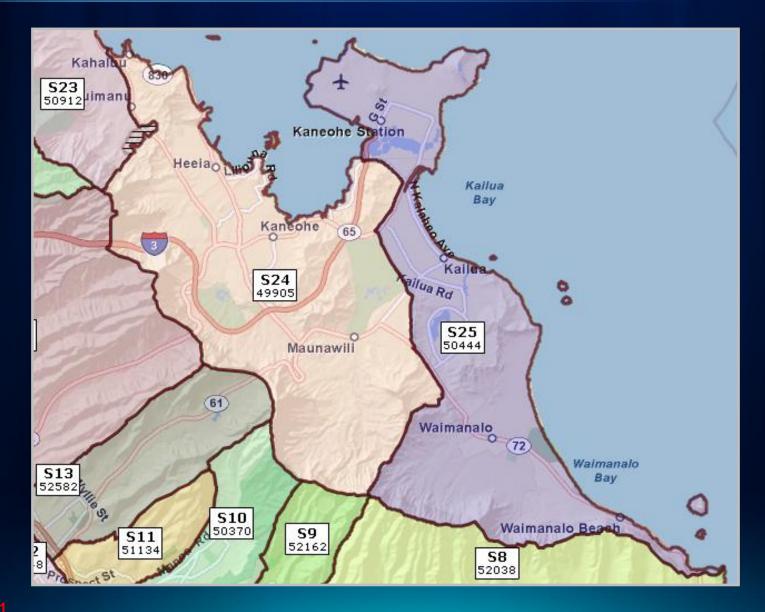
	District Sta	tistics				District Statistics					
	Current	Prop	osed	Assig	ned Comp	arison					
	District	Hide	Lock	Color	TOTAL	TOTAL_DEV	TOTAL_DEV_P				
	Unassigned			R		o c	0.00				
	Senate 8			F	52,03	8 -48	-0.09				
hannel Pacific Ocean	Senate 9			R	52,16	2 76	0.15				
	Senate 10			R	50,37	0 -1,716	-3.29				
	Senate 11			Ŗ	51,13	4 -952	-1.83				
County County	Senate 12			Ę	51,94	8 -138	-0.26				
	Senate 13			Ŗ	52,58	2 496	0.95				
Wahiawa	Senate 14			Ę	52,70	4 618	1.19				
Makaha Sarracks Walpio Asses	Senate 15			F	53,44	0 1,354	2.60				
Weianae White Town Town	Senate 16			Ę	52,00	0 -86	-0.17				
Maili Pearl Ahuranu Kineohe Station	Senate 17			F	52,74	2 656	1.26				
Nanaku Villaginto ity Waim Con Kanuna	Senate 18			Ę	53,09	6 1,010	1.94				
Maraking Part Avenue Hatawa	Senate 19			_	51,59	1 -495	-0.95				
	Senate 20			Ę	54,33	2 2,246	4.31				
P Carthours Carl	Senate 21			F	52,81	5 729	1.40				
Mamala Bay	Senate 22			Ę	53,57	8 1,492	2.86				
	Senate 23			R	50,66	6 -1,420	-2.73				
	Senate 24			F	49,90	5 -2,181	4.19				
	Senate 25			F	50,44	4 -1,642	-3.15				
09/26/2011	Number of Dist	:ricts :	18		arget Mean = ! laximum Dev.	l Swar	25°0f'49				





09/26/2011





Aug 5 Proposed Plan – House Hawaii

46

H4 27074

HAWAII REAPPORTIONMENT COMMISSION

House Hawaii

seven (House 1 - 7)

26,440 per district

H3 26032

11

Plan:

09/26/2011

Districts:

Target Population:

PROPOSED PLAN: HOUSE HAWAII

Plan Deviation:	3.94%
highest deviation:	2.40%
lowest deviation:	-1.54%

		No		
		Twy	X	\sim
	1	57	4 1	17
	A	H7 26188	H1 26762	~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~
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1	H6 26424	X	WAIT	H264
	Y -		awali yunty	X

H5 26153

Γ	District Stat	istics						-	×
ſ	Current	Proposed Assigned		Compa					
G	District	Hide	Lock	Color	TOTAL		TOTAL_DEV	TOTAL_DEV_P	
L	Unassigned			F		0	0	0.00	
ŀ	House 1			F		26,762	322	1.22	
ŀ	House 2			Ŗ		26,446	6	0.02	
ŀ	House 3			Ę		26,032	-408	-1.54	
ŀ	House 4			R		27,074	634	2.40	
ŀ	House 5			F		26,153	-287	-1.09	
ŀ	House 6			F		26,424	-16	-0.06	
ŀ	House 7			F		26,188	-252	-0.95	
Number of Districts: 7 Target Mean = 26,440 Swap Rename									
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Recommended Final Plan – House Hawaii

HAWAII REAPPORTIONMENT COMMISSION

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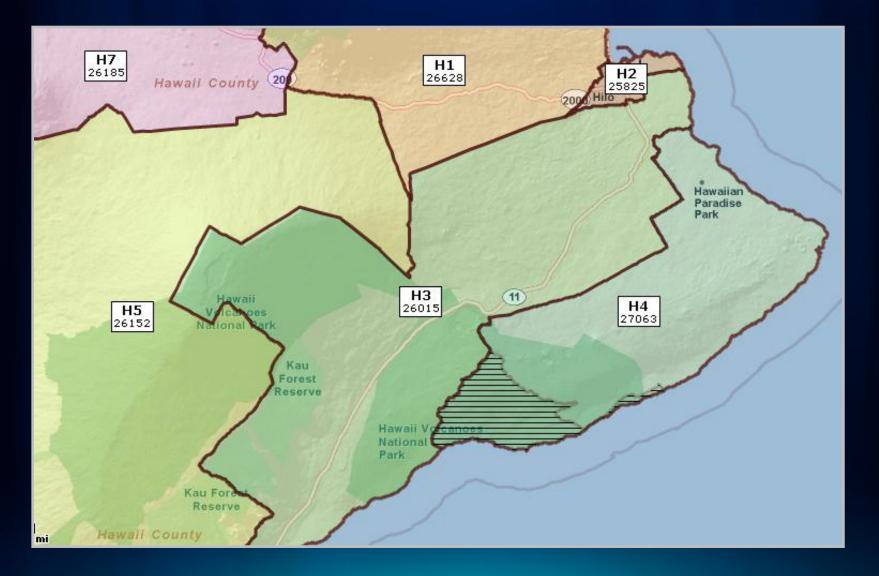
FINAL PLAN: HAWAII HOUSE

Plan:	Hawaii House	Pla
Districts:	seven (House 1 - 7)	hig
Target Population:	26,327 per district	lov

Plan Deviation:	4.71%	
highest deviation:	2.80%	
lowest deviation:	-1.91%	

	District Stat	istics					-	~
	Current	Propo	sed	Assigne	ed Compar	ison		
	District	Hide	Lock	Color T	OTAL	TOTAL_DEV	TOTAL_DEV_P	
1 Za	Unassigned			R	0	0	0.00	
77	House 1			F	26,628	301	. 1.14	
	House 2			Ę	25,825	-502	-1.91	
H7 26185 H1 26628	House 3			F	26,015	-312	-1.19	
26628	House 4			Ę	27,063	736	2.80	
	House 5			F	26,152	-175	-0.66	
H6 26418	House 6			Ę	26,418	91	0.35	
Hawaii	House 7			F	26,185	-142	-0.54	
County								
	lumber of Distr	icts:	7		·get Mean = 26 ximum Dev. (9	l Swan	Rename	
H3 H4 26015 H4 27063					xiindin bevi ()	0): 10		
H5 26152								
09/26/2011							Page 31 of	F 49

Recommended Final Plan – House Hawaii



Aug 5 Proposed Plan – House Maui

HAWAII REAPPORTIONMENT COMMISSION

PROPOSED PLAN: HOUSE MAUI

Plan:	House Maui
Districts:	six (House 8 - 13)
Target Population:	25,821 per district

Plan Deviation:	9.53%
highest deviation:	4.74%
lowest deviation:	-4.79%

	District Stat	istics						-	×
	Current	Prop	osed	Assiq	gned C	ompai	rison		
	District	Hide	Lock	Color	TOTAL		TOTAL_DEV	TOTAL_DEV_P	
ou Molykai	Unassigned			R		0	0	0.00	
	House 8			F	2	6,928	1,107	4.29	
	House 9			R	2	7,045	1,224	4.74	
	House 10			Ŗ	2	4,585	-1,236	-4.79	
	House 11			R	2	4,863	-958	-3.71	
	House 12			R	2	5,505	-316	-1.22	
H8 26928 H10	House 13			F	2	5,998	177	0.69	
L 24585 H9 H9	Number of Dist	ricts:	6		i Target Mea Maximum I		Swan.	Rename]
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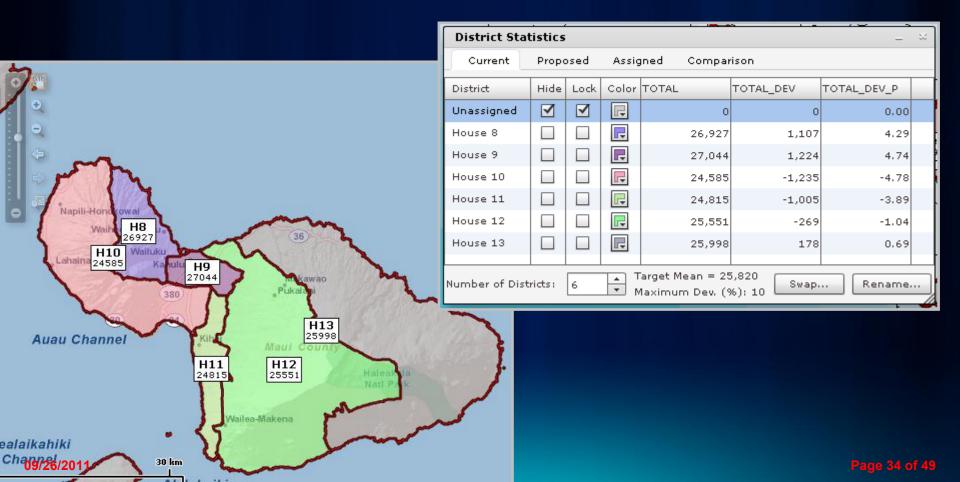
Recommended Final Plan – House Maui

HAWAII REAPPORTIONMENT COMMISSION

FINAL PLAN: MAUI HOUSE

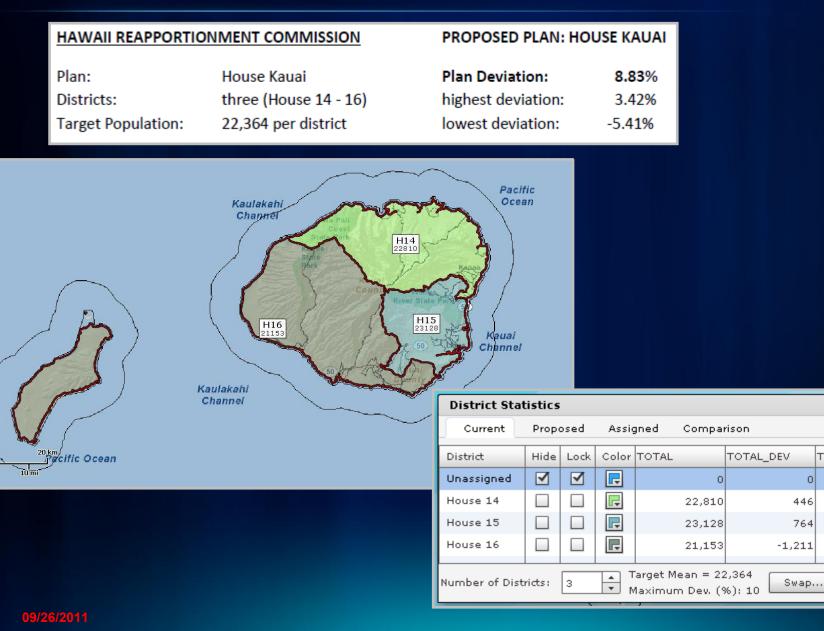
Plan:	Maui House
Districts:	six (House 8 - 13)
Target Population:	25,820 per district

Plan Deviation:	9.52%
highest deviation:	4.74%
lowest deviation:	-4.78%





Aug 5 Proposed Plan – House Kauai



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446

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TOTAL_DEV_P

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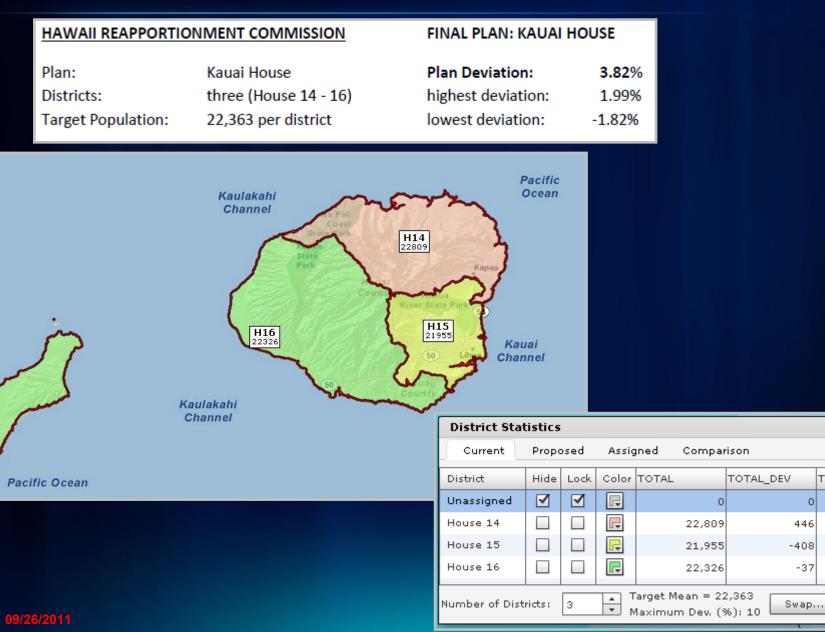
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Rename...

36 of



TOTAL_DEV_P

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-1.82

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Rename...

Page 37 of 49 //

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-37

Recommended Proposed Final Plan – House Kauai



Aug 5 Proposed Plan – House Oahu

HAWAII REAPPORTIONMENT COMMISSION

2

PROPOSED PLAN: HOUSE OAHU

Plan:
Districts:
Target Population:

09/26/2011

louse Oahu	
hirtyfive (House 17 - 51)	
7,234 per district	

Plan Deviation:	9.70%
highest deviation:	4.88%
lowest deviation:	-4.82%

							~							
Current	Prop	osed	Assig	ned Compar	rison		_							
District	Hide	Lock	Color	TOTAL	TOTAL_DEV	TOTAL_DEV_P		House 30				26,864	-370	
Unassigned			R	0	C	0.00		House 31				27,360	126	
House 17			R	27,853	619	2.27		House 32				28,127	893	
House 18			R	26,947	-287	-1.05		House 33				27,421	187	
House 19			R	26,610	-624	-2,29		House 34				27,763	529	
House 20			R	26,933	-301	-1.11		House 35				27,291	57	
House 21			F	27,855	621	. 2.28		House 36				26,798	-436	
House 22			R	26,111	-1,123	-4.12		House 37				28,172	938	
House 23			R	26,620	-614	-2,25		House 38				28,562	1,328	
House 24			R	27,276	42	0.15		House 39			R	28,439	1,205	
House 25			R	26,400	-834	-3,06		House 40			R	28,502	1,268	
House 26			R	26,303	-931	-3,42		House 41			R	27,942	708	
House 27			Ŗ	26,858	-376	-1.38		House 42			R	27,118	-116	
House 28			R	27,917	683	2.51		House 43			R	27,675	441	
House 29			R	27,613	379	1.39		House 44			R	26,194	-1,040	
								House 45			R	27,610	376	
								House 46			R	28,177	943	
	~							House 47				26,483	-751	
Le con	2	5						House 48			R	25,922	-1,312	
2 To ST	eohe Statil	er.						House 49			R	26,284	-950	
2July	ailua	1						House 50				26,452	-782	
(m)	1	1						House 51			R	26,755	-479	
SINT	2	1					1	4	-	-	1997 18 199			

HAWAII REAPPORTIONMENT COMMISSION

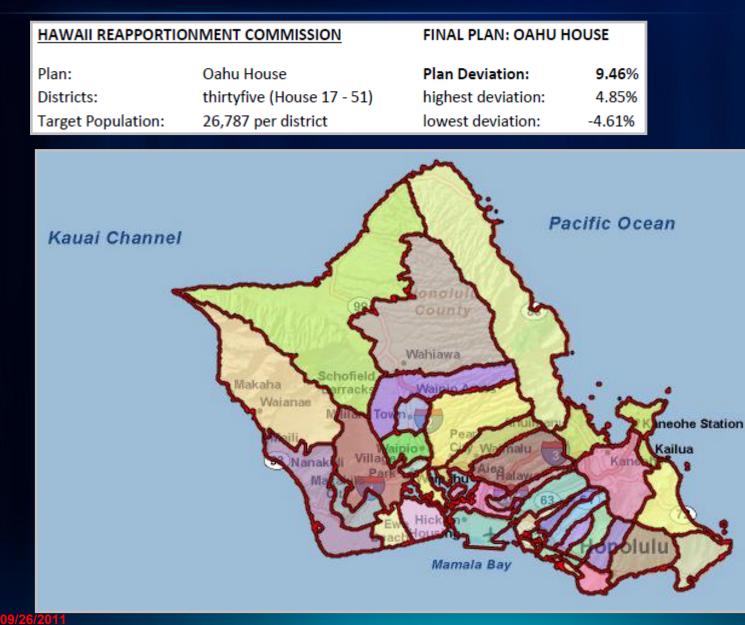
FINAL PLAN: OAHU HOUSE

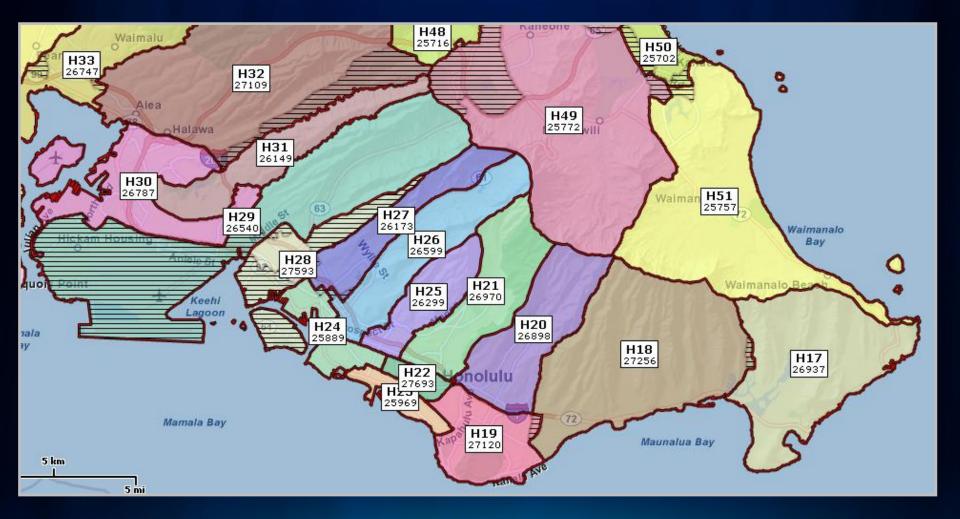
Plan:	Oahu House
Districts:	thirtyfive (House 17 - 51)
Target Population:	26,787 per district

Plan Deviation:	9.46%
highest deviation:	4.85%
lowest deviation:	-4.61%

District Stat	istics						_	**
Current	Propo	osed	Assig	gned	Compa	rison		
District	Hide	Lock	Color	TOTAL		TOTAL_DEV	TOTAL_DEV_P	4
Unassigned			Ŗ		0	0	0.00	
House 17			F		26,937	150	0.56	
House 18			F		27,256	469	1.75	
House 19			F		27,120	333	1.24	
House 20			-		26,898	111	0.41	
House 21			F		26,970	183	0.68	
House 22			R		27,693	906	3.38	
House 23			F		25,969	-818	-3.05	
House 24			F		25,889	-898	-3.35	
House 25			 		26,299	-488	-1.82	
House 26			 		26,599	-188	-0.70	
House 27			-		26,173	-614	-2.29	
House 28			F		27,593	806	3.01	
House 29			F		26,540	-247	-0.92	
House 30			F		26,787	0	0.00	
House 31			F		26,149	-638	-2.38	
House 32			F		27,109	322	1.20	

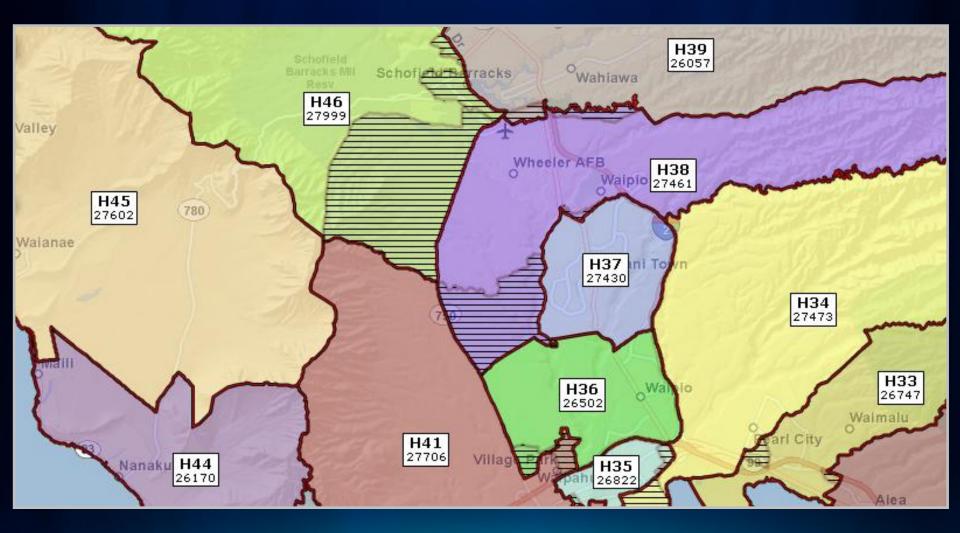
House 33			F	26,747	-40	-0.15	
House 34			F	27,473	686	2.56	
House 35			R	26,822	35	0.13	
House 36			R	26,502	-285	-1.06	
House 37			R	27,430	643	2.40	٦
House 38			R	27,461	674	2.52	
House 39			R	26,057	-730	-2.73	
House 40			R	27,590	803	3.00	
House 41			F	27,706	919	3.43	
House 42			F	27,421	634	2.37	
House 43			F	28,086	1,299	4.85	I
House 44			R	26,170	-617	-2.30	
House 45			Ę	27,602	815	3.04	I
House 46			R	27,999	1,212	4.52	I
House 47			F	25,553	-1,234	-4.61	I
House 48			F	25,716	-1,071	-4.00	l
House 49			R	25,772	-1,015	-3.79	I
House 50			F	25,702	-1,085	-4.05	
House 51			F	25,757	-1,030	-3.85	_
							•
-						•	_
Number of Dist	ricts :	35		Farget Mean = 26 Maximum Dev. (9	Swap,	Rename	

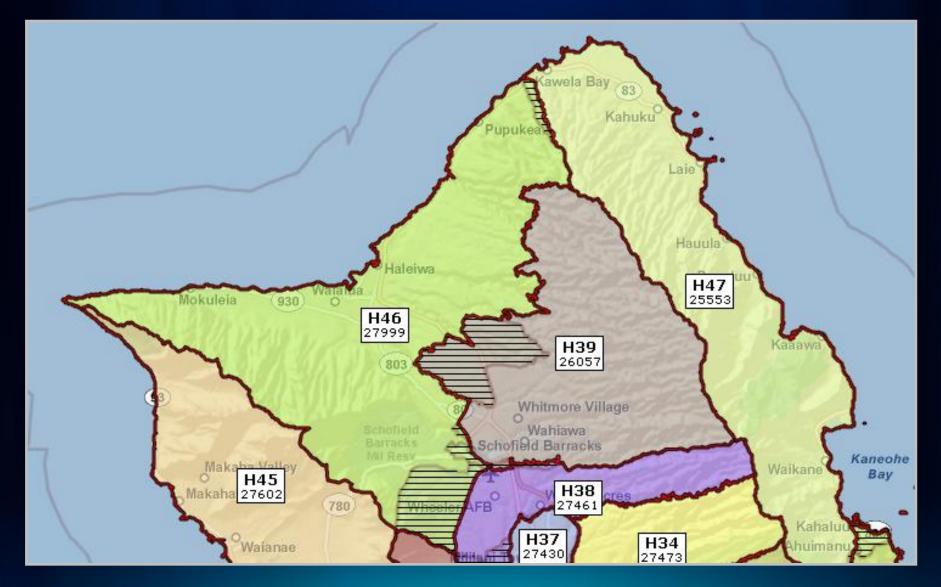


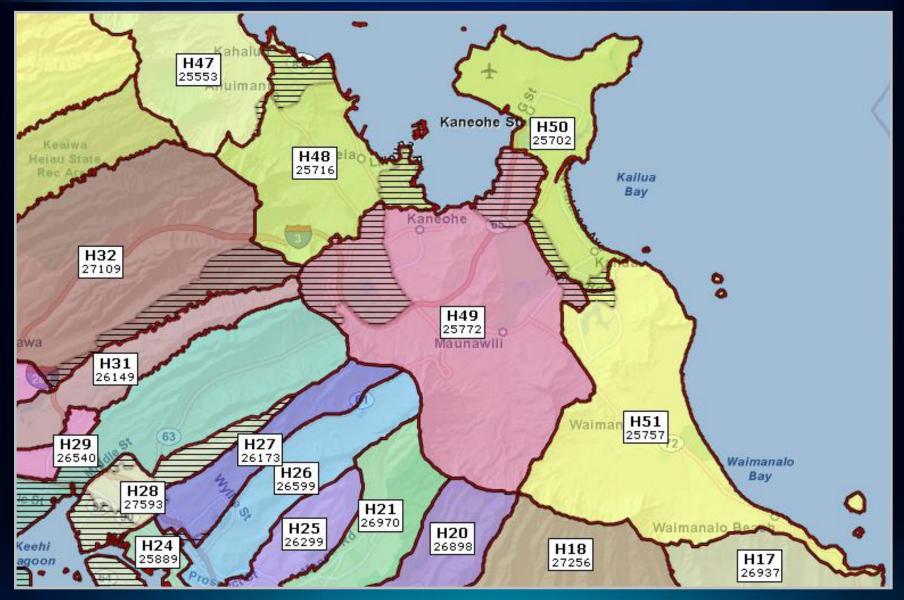


09/26/2011









Topics

- Reapportionment using "Extraction A" population base
- Senate Staggered Terms for 2012
- Hawaii Reapportionment Commission Plan
 - Congress
 - Senate
 - House
- Commission Schedule

Commission Schedule

Aug 5	Commission Meeting: Adopt proposed plan
Aug 30 – Sep 16	Public Hearings and Comment Period
Sep 26	Commission Meeting
Sep 26	Statutory deadline to file final plan with Chief Election Officer
Oct 10	Statutory deadline for Chief Election Officer to publish final plan
Dec 29	Statutory deadline to submit final report to State Legislature









Hawaii Reapportionment Commission

26 September 2011

Commission Meeting

Reapportionment Project Office: Contact Information

http://hawaii.gov/elections/reapportionment

Address: State Capitol 415 South Beretania Street, Rm #445 Honolulu, HI 96813

Telephone: (808) 586-4100 Toll Free: (877) 854-6749 (808) 586-4105 Fax: Email: reapportionment@hawaii.gov

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https://redistricting.hawaii.gov/

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