



MARK MUGIISHI, M.D.  
CHAIR

## STATE OF HAWAII REAPPORTIONMENT COMMISSION

### NOTICE OF REAPPORTIONMENT COMMISSION MEETING

Date: October 14, 2021  
Time: 12:00 P.M.  
Place: via Video Conference or Telephone\*

\*Pursuant to the Governor's Emergency Proclamation Related to the COVID-19 Response, dated October 1, 2021, the Reapportionment Commission will be meeting remotely using interactive conference technology. The public may view the video and audio of the meeting through the following video conferencing link:

Video: <https://zoom.us/j/97684788429>

Telephone: +1 253 215 8782  
+1 346 248 7799  
+1 669 900 6833  
+1 301 715 8592  
+1 312 626 6799  
+1 929 205 6099

Meeting ID: 976 8478 8429

## A G E N D A

- I. Call to Order
- II. Roll Call and Determination of a Quorum
- III. Public Testimony

Individuals may submit testimony in advance of the meeting via email to [reapportionment@hawaii.gov](mailto:reapportionment@hawaii.gov) or by mail addressed to the 2021 Reapportionment Commission, c/o Scott Nago, Secretary, 802 Lehua Avenue, Pearl City, Hawaii 96782. Individuals interested in signing up to provide oral testimony at the meeting may submit their name, email, and phone number to [reapportionment@hawaii.gov](mailto:reapportionment@hawaii.gov). Individuals may provide

oral testimony at the meeting via the above-listed video conferencing link or by calling in to the above-listed telephone number.

Testimony presented during the meeting will be limited to three minutes each.

- IV. Reports by the Apportionment Advisory Councils
- V. Approval of Minutes for the Meeting of September 9, 2021
- VI. Discussion and Action to Adopt a Proposed Congressional Redistricting Plan
- VII. Presentation of Proposed Legislative Redistricting Plans by the Technical Committee Permitted Interaction Group
- VIII. Adjournment

If audiovisual communication cannot be maintained with all Commissioners participating in the meeting, the meeting shall be automatically recessed for up to thirty (30) minutes to allow staff to attempt to restore communication.

If audiovisual communication with all participating Commissioners can be restored, the meeting will be reconvened. If, however, audiovisual communication cannot be restored, then the meeting may be reconvened with the audio-only communication using the above-listed telephone number. Any nonconfidential visual aids brought to the meeting by Commissioners or as part of a scheduled presentation will be made publicly available on the Office of Elections website within fifteen (15) minutes after audio-only communication is established.

If it is not possible to reconvene the meeting within thirty (30) minutes after an interruption of communication and the Commission has not provided reasonable notice to the public as to how the meeting will be continued at an alternative date and time, then the meeting shall be automatically terminated.

No Commission action shall be invalid if the Commission's good faith efforts to implement remote technology for public observations and comments do not work.

IF YOU REQUIRE SPECIAL ASSISTANCE OR AUXILIARY AIDS AND/OR SERVICES TO PARTICIPATE IN THE PUBLIC HEARING PROCESS OF THE REAPPORTIONMENT COMMISSION, PLEASE CONTACT THE OFFICE OF ELECTIONS AT LEAST 48 HOURS PRIOR TO THE HEARING SO ARRANGEMENTS CAN BE MADE. FOR FURTHER INFORMATION, PLEASE CALL THE OFFICE OF ELECTIONS AT 453-8683 OR 1-800-442-8683 FROM THE NEIGHBOR ISLANDS.

## **III. PUBLIC TESTIMONY**

## TESTIMONY TO THE HAWAII STATE REAPPORTIONMENT COMMISSION

TO: Members of the Commission  
From: Marilyn B. Lee  
Subject: suggested changes to the plan  
Date: October 9, 2021

Dear Chair and Members of the Commission,

I am a 40year resident of Mililani Town and a former Elected Official. The last reapportionment plans have given Mililani Mauka a huge district made up completely of Mililani, however Mauka is divided by the H2 Highway from the town. It is very much a separate place from the town in demographics and socioeconomic status. Launani Valley is part of the Mililani Neighborhood Board district and is more suited for inclusion in the Mauka district.

Therefore, the area around the Town Center and Mililani High school could again become a separate district with the addition of Waipio Acres and the area on the left side of Meheula Parkway which includes Makaunalau Street.

Waipio Acres is the very oldest part of Mililani, and it has been shamefully cut in half to form district 45. Waipio Acres has a Mililani address, and the children attend Kipapa School and Mililani High school. Imagine taking the smallest part of Mililani, cutting it in half with neighbors on the opposite of the Street in different Districts. This was cruel and unthinking.

In addition, the area taken away was put into a district including Waialua!

If these changes are made, district 37 could expand to include the new Koa Ridge development and become another Mililani district, eliminating district 45.

I sincerely hope you will consider what I have proposed and restore Waipio Acres to its rightful place.

Respectfully,  
Marilyn B. Lee  
95-170 Newe Place  
Mililani, Hawaii 96789  
808 623-6707  
808 542-4438

TESTIMONY TO THE COUNTY REAPPORTIONMENT COMMISSION  
Submitted by Steve Canales  
October 11, 2021

Support for Kaena-Makapuu Plans 1 & 2:

I support the mauka to makai configuration of the Kaena-Makapuu Plans 1 and 2. This plan works well for Pearl City.

Mahalo for your consideration,  
Steve Canales  
1315 Waimano Home Road  
Pearl City, Hawaii 96782  
(808) 455-4118  
stevecanales@hotmail.com

**V. APPROVAL OF MINUTES  
FOR THE MEETING OF  
SEPTEMBER 9, 2021**



MARK MUGIISHI, M.D.  
CHAIR

**STATE OF HAWAII  
2021 REAPPORTIONMENT COMMISSION**

**MINUTES OF THE REGULAR MEETING OF THE  
2021 REAPPORTIONMENT COMMISSION**

**SEPTEMBER 9, 2021  
1:00 PM**

Pursuant to the Governor's Emergency Proclamation Related to the COVID-19 Response, dated August 5, 2021, the Reapportionment Commission will be meeting remotely using interactive conference technology. This meeting was recorded and has been posted on the Office of Elections website at [elections.hawaii.gov](http://elections.hawaii.gov).

**Commissioners in Attendance:**

Mark Mugiishi, Chair  
Calvert Chipchase IV  
Grant Chun  
Robin Kennedy  
Charlotte Nekota  
Randall Nishimura  
Dylan Nonaka  
Diane Ono  
Kevin Rathbun

**Staff in Attendance:**

Royce Jones  
Scott Nago  
David Rosenbrock  
Lori Tanigawa

**Testifiers in Attendance:**

Laura Acasio  
Bart Dame  
Donovan Dela Cruz  
Becky Gardner  
Cory Harden  
Kainoa Kaumeheiwa-Rego  
Shannon Matson

## PROCEEDINGS

### I. Call to Order

Chair Mugiishi called the meeting to order at 1:00 p.m.

### II. Roll Call and Determination of Quorum

Reapportionment Commission Secretary, Scott Nago, conducted a roll call. All Commissioners were present, with the exceptions of Commissioner Nekota and Commissioner Nishimura. The Commission had a quorum.

### III. Public Testimony

Chair Mugiishi addressed housekeeping matters related to conducting the meeting by video and by telephone. He reminded testifiers that if technical issues arise, testifiers would be given a moment to resolve their issues and if the issues cannot be resolved, the Commission would move on to the next testifier. He asked that those wishing to testify raise their hand via the Zoom reactions feature or press \*9 if joining by phone. For the record, he asked testifiers to state their first and last names and the item they are testifying on.

**Bart Dame** testified for the proposed extraction numbers of non-permanent residents and the discrepancy in the data provided by the Department of Business, Economic Development, & Tourism (DBEDT) and the data collected by the Reapportionment Project Staff. Dame believes the numbers from DBEDT are credible and if this data is not used the Commission is in danger of not complying with the Solomon ruling.

Commissioner Nonaka asked for a proposal of how to extract non-permanent residents using the numbers reported by DBEDT.

Dame suggested that in addition to the approach Project Manager David Rosenbrock and GIS Project Support Royce Jones are using, numbers should be extracted from the top of the county and use the same standards as used in the past.

Commissioner Nonaka again asked specifically where they come out from and that taking them out of the county is not representative of where they are on the ground.



Dame stated that in following the Solomon decision you are obligated to extract them from the permanent resident population of apportionment between the basic island units.

Commissioner Nonaka asked how lines should be drawn based off the method of extracting from the top.

Dame explained that this was a separate problem and emphasized the issue of extracting numbers from the top as part of his testimony.

Commissioner Nonaka stated it doesn't solve the problem and asked if the testifier didn't believe the numbers provided by the military directly are credible.

Dame expressed that was not what he was saying, but did not know what was asked of the military to get the numbers and suggested requesting numbers by county.

Commissioner Nonaka stated that if the zip code is provided then that would identify the county.

Dame reiterated that the military should be asked for data by county and does not believe that the military population has declined by one third in ten years.

Chair Mugiishi stated that there would be a staff presentation regarding the military data questions asked.

Commissioner Nekota joined the meeting at 1:11 p.m.

**Cory Harden** testified for setting a precedent for future reapportionments in terms of transparency, public involvement, and methods of determining extractions. Harden also stated she did not understand how the Technical Committee Permitted Interaction Group would be able to complete any work without violating the Sunshine Law and suggested the use of public testimony after agenda items have been discussed. Harden shared Bart Dame's concerns regarding DBEDT and military numbers, believes incarcerated people should be counted at their home address, and an improvement in technology is necessary for those who need it.

**Shannon Matson** testified for consideration of agenda items to be presented before public testimony and for transparency. Matson also advocated for incarcerated people to be counted at their home addresses.

Chair Mugiishi stated that Project Manager Rosenbrock did contact the Department of Public Safety regarding incarcerated persons and that they are counted within the census at their home address. Project Manager Rosenbrock confirmed this statement.

**Kainoa Kaumeheiwa-Rego of Common Cause Hawaii** testified for greater public access to scheduled meeting information, allowing public testimony after each agenda item, information regarding incarcerated individuals and canoe districts, as well as concerns about permitted interaction groups.

Chair Mugiishi stated that information on canoe districts would be addressed later in the meeting. He also explained that for the Commission to complete its business, it would not consider having public testimony following each agenda item.

**Becky Gardner of Policy Matters LLC** testified for the relevance of the Solomon decision focused on agenda item V.

Commissioner Nonaka asked if the testifier was contending that the data used for apportionment among the basic island units does not have to be related to the data used to redistrict within the basic island units.

Gardner stated she believes the data is related and that having a good process for step two should not allow for the avoidance of responsibility for what is mandated in step one.

Commissioner Nonaka asked what data set should be used for step one.

Gardner stated that is up to the Commission to decide, but if pressed would use DBEDT's data.

Commissioner Nonaka stated that no matter what, the data is imperfect and arbitrary, and the number used for extraction cannot be verified with the data from the U.S. Census.

Gardner disagreed and stated that the process should reflect a more accurate number, especially with military extractions. She stated there needs to be a change to the process.

Commissioner Kennedy asked Chair Mugiishi if the Reapportionment Project Staff would be presenting on this matter to answer these questions.

Chair Mugiishi stated the presentation would address these discrepancies in military extraction numbers. He also stated that the Commission takes the Solomon law seriously and every time they go into Executive Session is to confer with their attorney regarding legal opinions on these issues.

**Senator Laura Acasio** testified for clarity and transparency on how the military non-permanent resident numbers are chosen and what justifies that data. Senator Acasio referred to the August 26 meeting that these matters were not addressed.

Commissioner Nonaka addressed that the data the military provided used the same process that was used in 2011, noting that there was no deviation. He asked for confirmation from Project Manager Rosenbrock, who confirmed they did not use a different process and it was the same as used in 2001 and 2011.

Commissioner Nonaka asked if there needed to be more energy focused on other non-permanent residents, such as students or second homeowners.

Senator Acasio agreed that these individuals should be focused on as well and stated that the due diligence of the Commission is to get the most accurate numbers and would like transparency, explanation, and proper process, and for the Commission to follow the Constitution and the mandate from Solomon.

Commissioner Nonaka asked if the testifier had a suggestion on process.

Senator Acasio stated that she agreed with Dame's statements regarding the two-step process and Gardner's description of this process.

Chair Mugiishi reiterated that the Reapportionment Project Staff would be going over the numbers of non-permanent residents for extraction and the cause of discrepancies between data sets.

Commissioner Nishimura joined the meeting at 1:44 p.m.

**Senator Donovan Dela Cruz** asked the Commission about the verification of non-permanent residents claiming another state for their home residency and whether there is any verification for over-extracting.

Project Manager Rosenbrock stated that the data received for redistricting is geography and counts that are assigned to each census block and there is no question on the census regarding whether the resident lives in another state.

Commissioner Nonaka reiterated that there is no way of knowing whether a military person was counted in the census or not.

Senator Dela Cruz asked if there was a possibility of over-extraction as it is not possible to know if those extracted were counted in the census.

Project Manager Rosenbrock confirmed it was possible as there is no way to know whether the non-permanent residents were here in Hawaii when the census was taken, or if they took the census at all.

Senator Dela Cruz asked if there was an assumption that the numbers received from the military and universities were recorded as permanent residents.

Project Manager Rosenbrock stated that there are no questions on the census regarding residents listing another place as their residence.

Chair Mugiishi stated that the Office of Elections asked for an opinion from the Attorney General regarding this issue and if the Commissioners would like to hear that opinion, they can go into Executive Session during that agenda item.

Commissioner Kennedy stated that the presentation should be presented to answer any concerns and questions being asked during public testimony. She also asked if non-permanent residents must be extracted.

Chair Mugiishi confirmed that non-permanent residents need to be extracted based on the Supreme Court decision in 2011.

Commissioner Kennedy asked if the Commission is bound by the Supreme Court ruling.

Chair Mugiishi explained they were bound by the Supreme Court ruling and they have to extract everyone they deem as a non-permanent resident and the Commission must use its best effort to remove these individuals.

Commissioner Nekota agreed with Commissioner Kennedy on the confusion of military extraction numbers.

Chair Mugiishi stated an Executive Session can be held to discuss these matters with the Attorney General.

**IV. Approval of Minutes for the Meeting of August 26, 2021**

Commissioner Kennedy made a motion to approve the minutes for the meeting of August 26, 2021, which was seconded by Commissioner Nonaka and approved by all Commissioners present, noting that Chair Mugiishi's vote was not taken.

**V. Discussion and Action to Establish the Permanent Resident Population Base**

Chair Mugiishi stated that the Commission is expecting legal advice from the Department of the Attorney General regarding the establishment of the permanent resident population base and the Commission may want to consult with its attorney before any action is taken. He asked for a motion to convene in Executive Session pursuant to HRS 92-5(a)(4) to consult with the board's attorney on questions and issues pertaining to the board's powers, duties, privileges, immunities, and liabilities.

Commissioner Rathbun made a motion to enter Executive Session for the purposes of Agenda Item V, which was seconded by Commissioner Nekota and approved unanimously by the Commission.

The Commission went into Executive Session at 2:09 p.m. and returned to regular session at 2:47 p.m.

Chair Mugiishi clarified that after confirming with the Attorney General in Executive Session, the Commission is following all rules under the Solomon Decision and Act 14 in processes. He then asked Project Manager Rosenbrock to explain how the data for the extraction of non-permanent residents was collected.

Project Manager Rosenbrock reiterated information from the August 26, 2021 presentation and discussed step one and step two in the process of extracting non-permanent residents for reapportionment among the four basic island units. He stated he again reached out to the military after questions were raised about the difference in numbers and is awaiting a response, but expects a similar response to what has been received in the past. He stated he believes the data that has been received is the most accurate data given the circumstances.

Commissioner Kennedy questioned if the Commission would be working off the same set of military numbers based on the Supreme Court ruling, which Project Manager Rosenbrock confirmed.

Commissioner Chun asked if the DBEDT military numbers include all personnel with no distinction between permanent and non-permanent, which Project Manager Rosenbrock confirmed.

Commissioner Nishimura asked if all the information from DBEDT also came from the military, which Project Manager Rosenbrock confirmed, with the caveat that different departments are responsible for reporting different numbers.

Commissioner Nonaka asked for clarification on whether the data set that was provided post-Solomon decision is the same data set that was requested this time, which Project Manager Rosenbrock confirmed.

Commissioner Rathbun asked if the military data provided post-Solomon is more accurate than the DBEDT data. Project Manager Rosenbrock explained that DBEDT has different needs in reporting these numbers and that the data used by the Commission is from the Defense Manpower Data Center and the Defense Enrollment Eligibility Reporting System file.

Chair Mugiishi stated that they would continue the discussion of apportionment and redistricting agenda items and then consider actions.

Following the discussion of Agenda item VII, at 3:46 p.m., the Commission considered a motion regarding Agenda Item V. Commissioner Nonaka made a motion to adopt the extraction of non-permanent residents from each basic island unit as presented by the Reapportionment Project Office on August 26, 2021, which was seconded by Commissioner Kennedy.

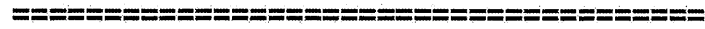
## Questions?

### Method of Extraction of Non-Permanent Residents

08/26/2021 Meeting Materials



P.L. 94-171 Resident Population Base  
 - Non-Permanent Residents by census block



Permanent Resident Population Base

1 within block

2 adjoining blocks

3 neighboring blocks



PERSONS	State	BIU-Oahu	BIU-Hawaii	BIU-Maui	BIU-Kauai
Fed population	1,455,271	1,016,508	200,629	164,836	73,298
NPR military	64,415	64,010	40	117	248
NPR students	7,250	6,589	499	109	53
NPR Total	71,665	70,599	539	226	301
HI population	1,383,606	945,909	200,090	164,610	72,997

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Table 1: Extraction of non-permanent residents displayed during decision-making.

Prior to the vote, Commissioner Nonaka explained that the process used in the last 10 years and being used now should be continued. Commissioner Nonaka stated that the data received is as accurate as it is going to be and that using any other data would open the Commission to legal challenge.

Commissioner Nekota agreed with the statements made by Commissioner Nonaka.

Commissioner Nishimura stated support that the Reapportionment Project Office acted appropriately and consistently regarding the data.

Commissioner Chun restated that the data used by the Commission, as stated by Project Manager Rosenbrock, reflects non-permanent military, while the DBEDT data reflects all military. Commissioner Chun also

reiterated that regarding Act 14, the information received by the Attorney General is sensible and expressed support for Commissioner Nonaka's motion.

Commissioner Ono echoed the fact of permanent residents are to be counted under the Solomon decision and that Act 14 must work in concert with the State Constitution.

Commissioner Chipchase stated that the process being followed is consistent with the final plan adopted and upheld and the information provided that is proposed in this motion is accurate.

Chair Mugiishi thanked the Commissioners for their discussion and due diligence and expressed his agreement that the Commission is taking the best solution that is true to the State Constitution, the Solomon decision, and Act 14.

The motion was approved unanimously by the Commission.

## **VI. Discussion and Action Regarding the Use of "Canoe Districts"**

Chair Mugiishi asked Project Manager Rosenbrock to provide an overview of "canoe districts" prior to the discussion.

Project Manager Rosenbrock explained the use and function of "canoe districts" in the use of the reapportionment process and that the State Constitution provides that no district shall extend beyond the boundaries of any basic island unit and that this can result in large deviations in the size of legislative districts. He then proceeded to reiterate the information provided during the August 26, 2021 presentation.

Chair Mugiishi clarified that if the Commission didn't use "canoe districts," they would likely fall under the 10% deviation threshold, which Project Manager Rosenbrock confirmed, adding that it would be statewide.

Commissioner Kennedy clarified that the Reapportionment Project Office is proposing that the Commission does not accept "canoe districts," which was confirmed by Project Manager Rosenbrock.

Following the discussion of Agenda Item IX, at 4:27 p.m., the Commission considered a motion regarding Agenda Item VI. Commissioner Rathbun made a motion to approve that the Commission would not use "canoe districts," which was seconded by Commissioner Chun and approved unanimously by the Commission.



**VII. Discussion and Action Regarding the Standards and Criteria Governing the Reapportionment and Redistricting Process**

Chair Mugiishi asked Project Manager Rosenbrock to provide a brief overview of the standards and criteria included in the meeting materials for consideration.

Project Manager Rosenbrock reiterated the information provided in the August 26, 2021 presentation.

Commissioner Chun asked if the standards and criteria clarify for the public the standards the Commission would be using, so that both the public and the Commission will be working within consistent guidelines, which Project Manager Rosenbrock confirmed.

Commissioner Nishimura asked if a public person would be able to submit a plan proposal if all the criteria were not met. Project Manager Rosenbrock clarified that Project Staff would alert the user to fix any issues with the plan and all plans submitted would be shared with the Technical Committee.

Commissioner Rathbun made a motion to adopt the standards and criteria included in the meeting materials, which was seconded by Commissioner Ono and approved unanimously by the Commission.

**VIII. Discussion and Action Regarding the Commission's Interaction with the Advisory Councils**

Chair Mugiishi summarized the discussion from the previous meeting when the Commission discussed how it would like to work with the Advisory Councils. He explained that one proposal was to form a Public Information permitted interaction group to work with the Advisory Councils. A second proposal was for the Commission to have a standing agenda item with a specific Commissioner from his/her home island as a liaison to the Advisory Council from that island. The liaison would assist them in preparing a report for the agenda item.

Commissioner Kennedy questioned if the liaison would be presenting that advisory council's information.

Chair Mugiishi stated the liaison would help represent the Advisory Council and present information however they would like.

Commissioner Chun stated that the Advisory Councils have local knowledge and insight and having a standing agenda item would provide them with a direct voice.

Commissioner Kennedy questioned the need for a liaison for these Advisory Councils. Chair Mugiishi stated that the liaison would serve as a connection to the Commission.

Commissioner Nekota asked if the Reapportionment Project Staff acted as liaisons in the past. Chair Mugiishi stated he believed the staff did do that in the past and they recommended that they not do it again.

Commissioner Nonaka stated the liaison can be a point of contact so the Commission can have a clear understanding of their thoughts, which can be relayed at the Commission meetings. Project Manager Rosenbrock stated that in 2001 the public information committee worked with the Advisory Councils to set up meetings, and in 2011 this was delegated to the Reapportionment Project Staff.

Commissioner Kennedy asked to confirm if these Advisory Councils have already been formed. Commissioner Nekota confirmed.

Commissioner Nekota stated a current member of the Technical Committee should be a liaison because they would have the most current information. Commissioner Nekota advised that the liaison would work closer with the Technical Committee rather than the entire Commission.

Commissioner Nishimura stated the Kauai Advisory Council reached out to him and it would be helpful to have a liaison in terms of passing information, but not directing how things would be done. Chair Mugiishi and Commissioner Nekota believed it made sense.

Commissioner Nonaka asked if there needed to be further action. Chair Mugiishi stated action would be needed to form a permitted interaction group, but if liaisons are accepted, Commissioners from their respective islands would be the liaison. He added that one person would need to be decided for Oahu as there are multiple Commissioners on Oahu.

Commissioner Kennedy asked if the liaison needed to be a Technical Committee member. Commissioner Nonaka stated it shouldn't be a requirement. Commissioner Chipchase agreed.

Commissioner Kennedy and Commissioner Nekota stated their previous offer to volunteer to be the liaison for Oahu. Commissioner Rathbun declined to be nominated.

Chair Mugiishi confirmed the neighbor island liaisons have already been chosen and asked for a vote to designate the liaison for the Oahu Advisory Council between Commissioner Nekota and Commissioner Kennedy.

Commissioner Nonaka was designated as the liaison to the Hawaii Advisory Council. Commissioner Chun was designated as the liaison to the Maui Advisory Council. Commissioner Nishimura was designated as the liaison to the Kauai Advisory Council. Commissioner Kennedy was designated as the liaison to the Oahu Advisory Council.

#### **IX. Presentation of Proposed Congressional Reapportionment Plans by the Technical Committee Permitted Interaction Group**

Chair Mugiishi introduced the Technical Committee to present their findings and recommendation regarding the Congressional Reapportionment plans it developed. He reminded the Commission that there would be no action taken today on this information pursuant to HRS § 92-2.5, which requires that any deliberation and decision making may only occur at a meeting subsequent to the one in which the findings and recommendations of the permitted interaction group were made.

Commissioner Ono stated that two proposed plans were composed and called upon GIS Project Support Jones to share these two plans.

GIS Project Support Jones presented the first plan as the existing plan, with a total deviation of 0.6%. The second plan had a total deviation of 0.34% and follows the guidelines.

Commissioner Kennedy asked if the Technical Committee members voted internally on which plan they prefer. Commissioner Nekota confirmed it was for all Commission members to vote on. Chair Mugiishi reiterated a vote would be conducted at the next meeting.

Commissioner Rathbun stated that both congressional plans fit the criteria and felt both should be presented. GIS Project Support Jones added that both plans seemed equally good and the Technical Committee wanted feedback from the other Commissioners and the public. GIS Project Support Jones stated both plans would be available on the redistricting online application.

Commissioner Nishimura asked that all the Advisory Councils chime in on their opinions and feedback at the next meeting. Chair Mugiishi agreed and asked for the liaisons to reach out to their Advisory Councils and ask for their input.

**X. Adjournment**

Commissioner Nonaka made a motion to adjourn the meeting, which was seconded by Commissioner Ono, and approved unanimously by the Commission. The meeting was adjourned at 4:30 p.m.

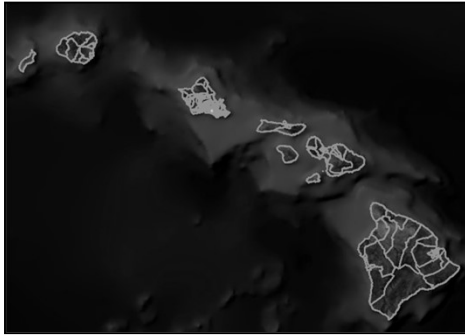
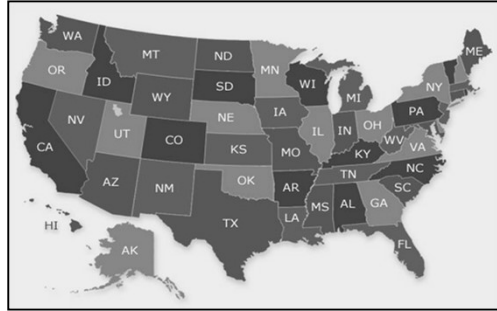
Respectfully submitted,



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SCOTT T. NAGO  
Secretary to the Reapportionment Commission

**VI. DISCUSSION AND ACTION  
TO ADOPT A PROPOSED  
CONGRESSIONAL  
REDISTRICTING PLAN**



# Reapportionment and Redistricting in Hawaii Proposed Congressional Plans (Review)

-

## Technical Permitted Interaction Group

Hawaii Reapportionment Commission  
October 14, 2021

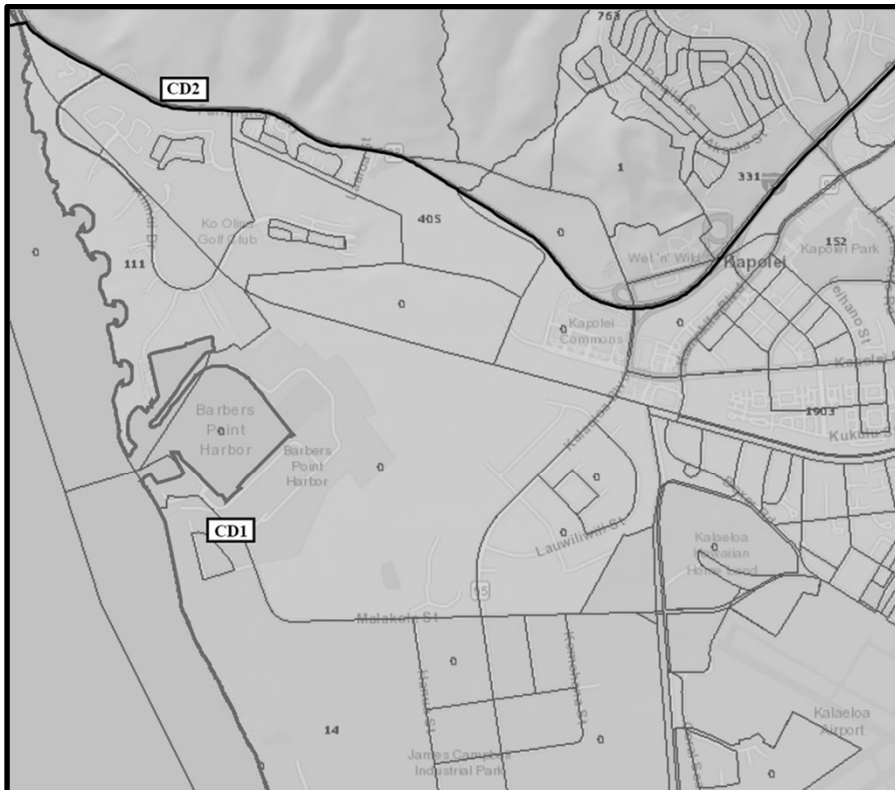


# Proposed Congressional Plans – Existing and Alternate

Courts have upheld: Total deviation less than 1% (Federal)

**Existing** total deviation 0.60%

**Alternate** total deviation 0.34%



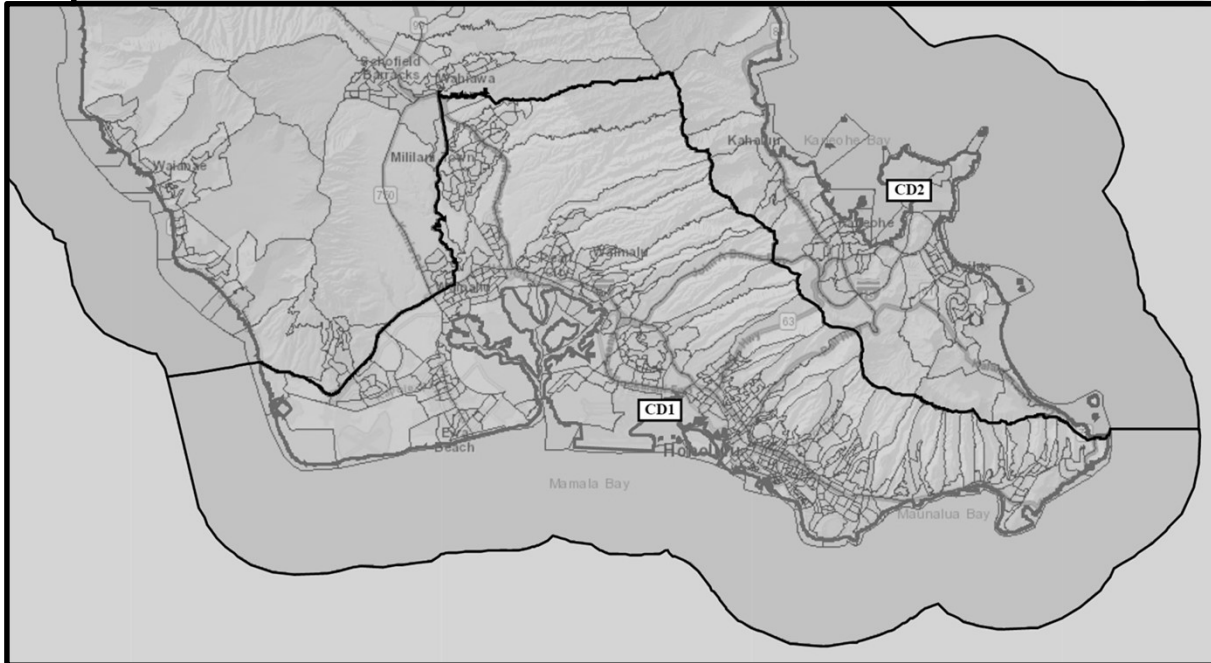
District	Color	Hide	Lock	TOTAL	TARGET	DEVIATION_PCT	DEVIATION
Unassigned	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	0	0	0	0
Congressional 1	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	729,831	727,636	0.3	2,195
Congressional 2	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	725,440	727,636	-0.3	-2,196

District	Color	Hide	Lock	TOTAL	TARGET	DEVIATION_PCT	DEVIATION
Unassigned	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	0	0	0	0
Congressional 1	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	726,395	727,636	-0.17	-1,241
Congressional 2	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	728,876	727,636	0.17	1,240

# Proposed Congressional Plans – Current Districts

**Ideal (Target) Population per District 727,636**

District	Color	Hide	Lock	TOTAL	TARGET	DEVIATION_PCT	DEVIATION
Unassigned		<input type="checkbox"/>	<input type="checkbox"/>	0	0	0	0
Congressional 1		<input type="checkbox"/>	<input type="checkbox"/>	729,831	727,636	0.3	2,195
Congressional 2		<input type="checkbox"/>	<input type="checkbox"/>	725,440	727,636	-0.3	-2,196



PERSONS	State
-----	-----
Fed population	1,455,271



# Proposed Congressional Plans – lower deviation?

## Ko Olina – Honokai Hale – Barbers Point

District	Color	Hide	Lock	TOTAL	TARGET	DEVIATION_PCT	DEVIATION
Unassigned	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	0	0	0	0
Congressional 1	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	729,831	727,636	0.3	2,195
Congressional 2	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	725,440	727,636	-0.3	-2,196

Existing

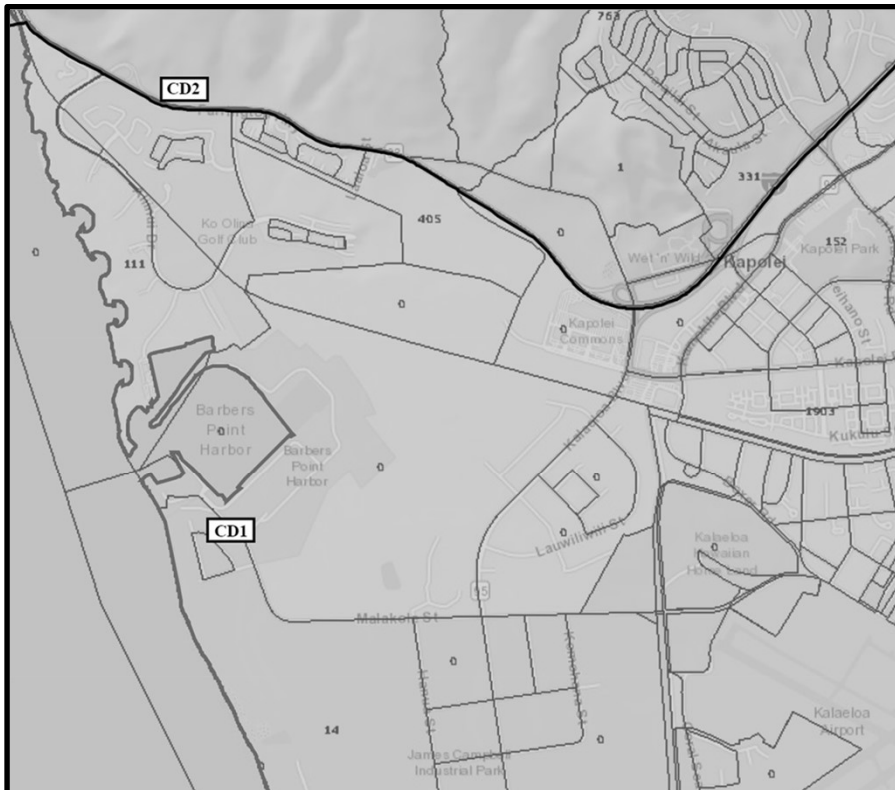


# Proposed Congressional Plans – Existing and Alternate

Courts have upheld: Total deviation less than 1% (Federal)

**Existing** total deviation 0.60%

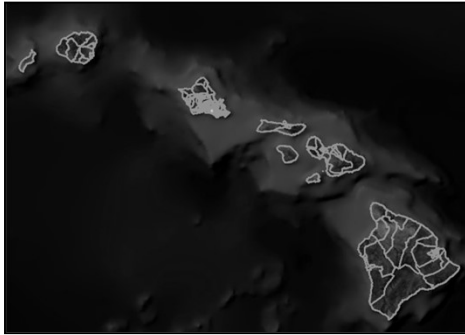
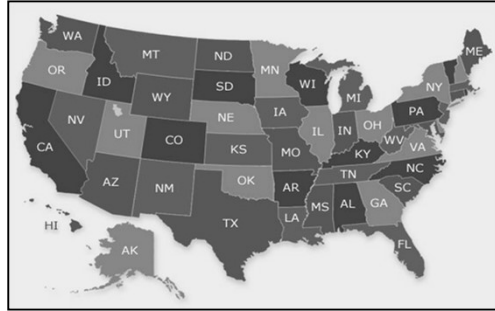
**Alternate** total deviation 0.34%



District	Color	Hide	Lock	TOTAL	TARGET	DEVIATION_PCT	DEVIATION
Unassigned	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	0	0	0	0
Congressional 1	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	729,831	727,636	0.3	2,195
Congressional 2	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	725,440	727,636	-0.3	-2,196

District	Color	Hide	Lock	TOTAL	TARGET	DEVIATION_PCT	DEVIATION
Unassigned	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	0	0	0	0
Congressional 1	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	726,395	727,636	-0.17	-1,241
Congressional 2	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	728,876	727,636	0.17	1,240

**VII. PRESENTATION OF  
PROPOSED LEGISLATIVE  
REDISTRICTING PLANS BY  
THE TECHNICAL COMMITTEE  
PERMITTED INTERACTION  
GROUP**



## Reapportionment and Redistricting in Hawaii

### Current Legislative Districts

-

2011 boundaries

2020 population data



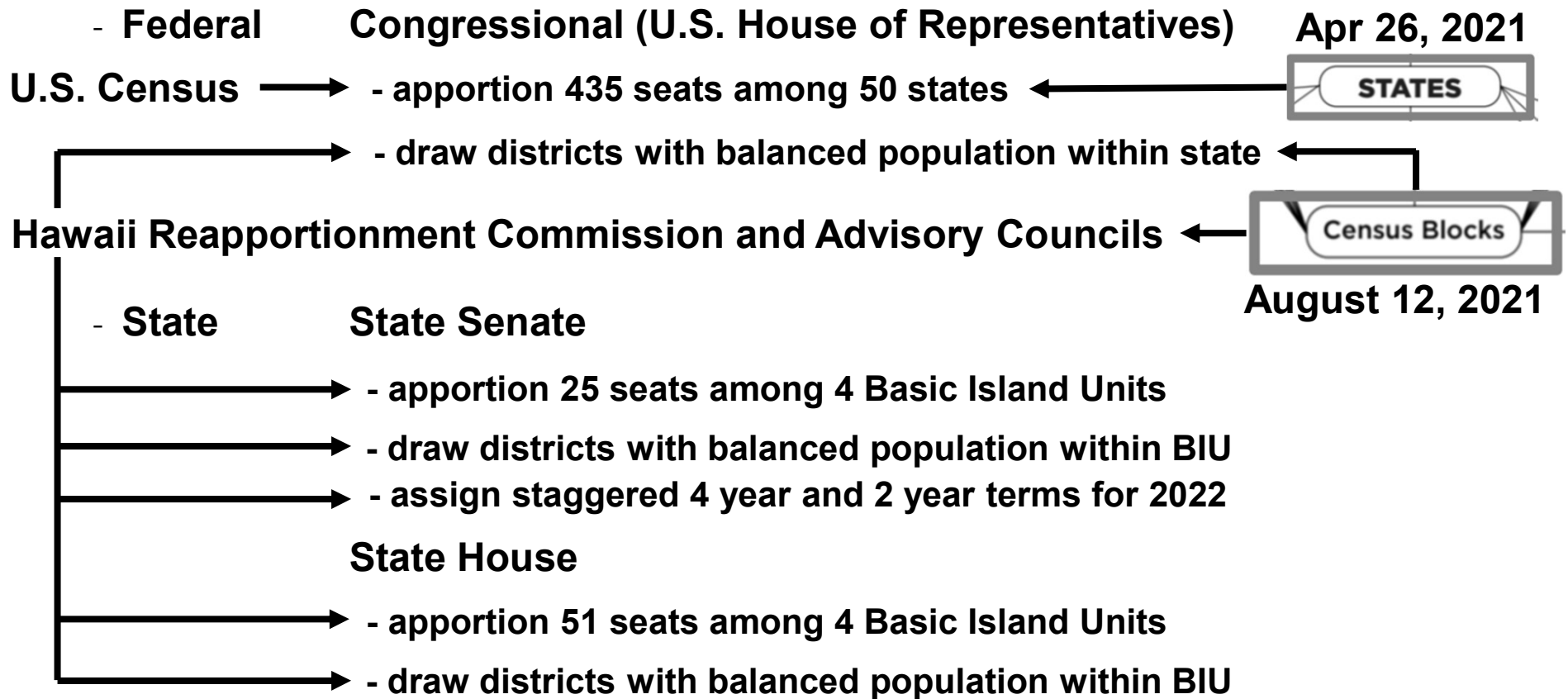
Hawaii Reapportionment Commission  
October 14, 2021

# Reapportionment and Redistricting - Overview



## 2020 Census Block Population

- Reapportionment
- Redistricting



# Proposed Legislative Plans – Step by Step

## Census

- ✓ FPB Federal Population Base (P.L. 94-171)
- ✓ HPB Hawaii Permanent Resident Population Base

## Reapportionment

- ✓ Federal FPB - Congressional (U.S. House)
- ✓ State HPB - State Senate and State House

## Redistricting

- ➡ Staff Prepare template plans for current (2011-2020) districts
- ➡ Technical Group Prepare proposed legislative plans
- Technical Group Present proposed legislative plans to Commission
- Commission Adopts proposed legislative plans
- Public Comments on proposed legislative plans
- Technical Group Revises legislative plans and presents to Commission
- Commission Adopts final legislative plans
- Office of Elections Final report and maps

## Reprecincting

- Office of Elections Ballot types – Congressional + State + County
- County Clerks New precincts, assign voters to new precincts

## Election

- Candidate Filing March 1, 2022
- Primary August 13, 2022
- General November 8, 2022

# Current Legislative Districts – Census Data

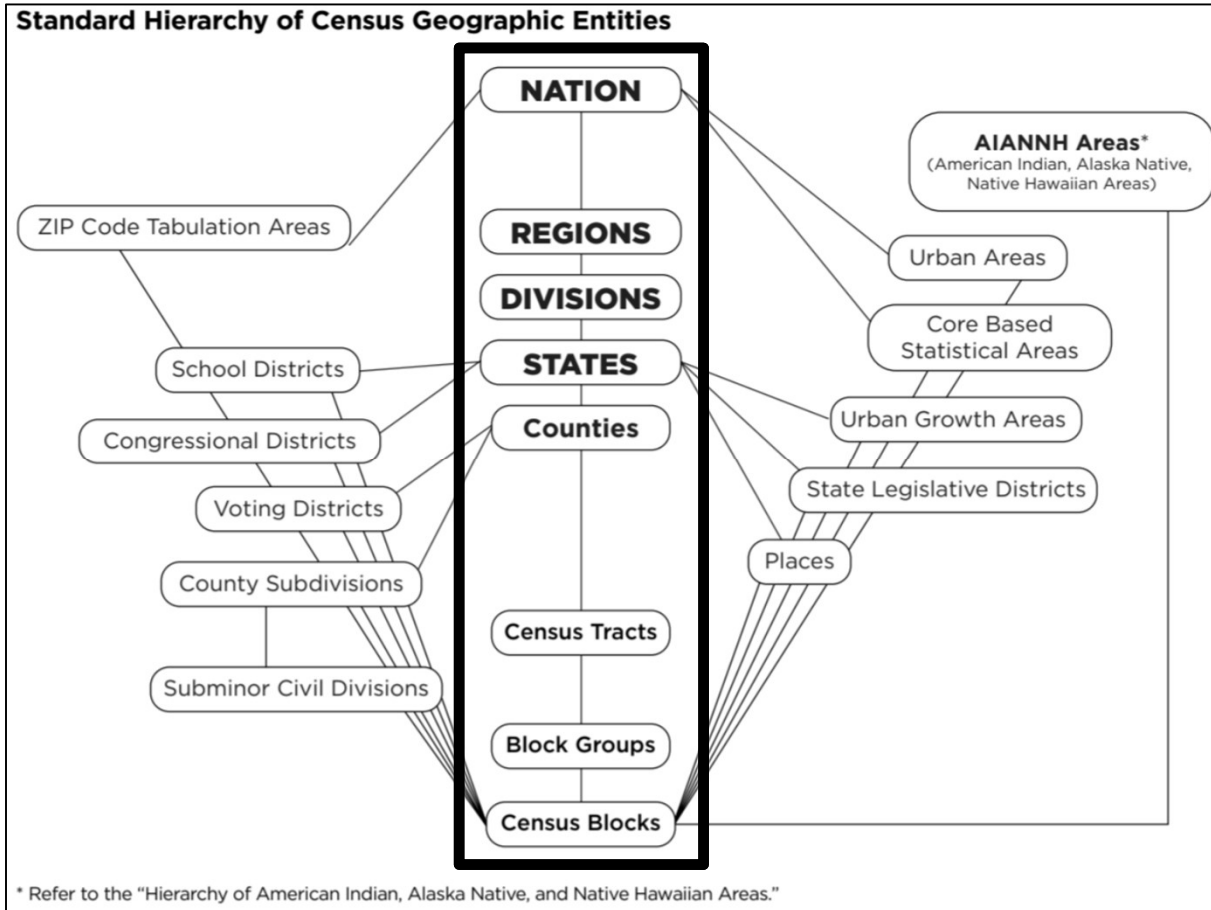
## Census

- ✓ FPB
- ✓ HPB

Federal Population Base (P.L. 94-171)  
Hawaii Permanent Resident Population Base



## U.S. Census Blocks



# Current Legislative Districts – Census Data

## Census

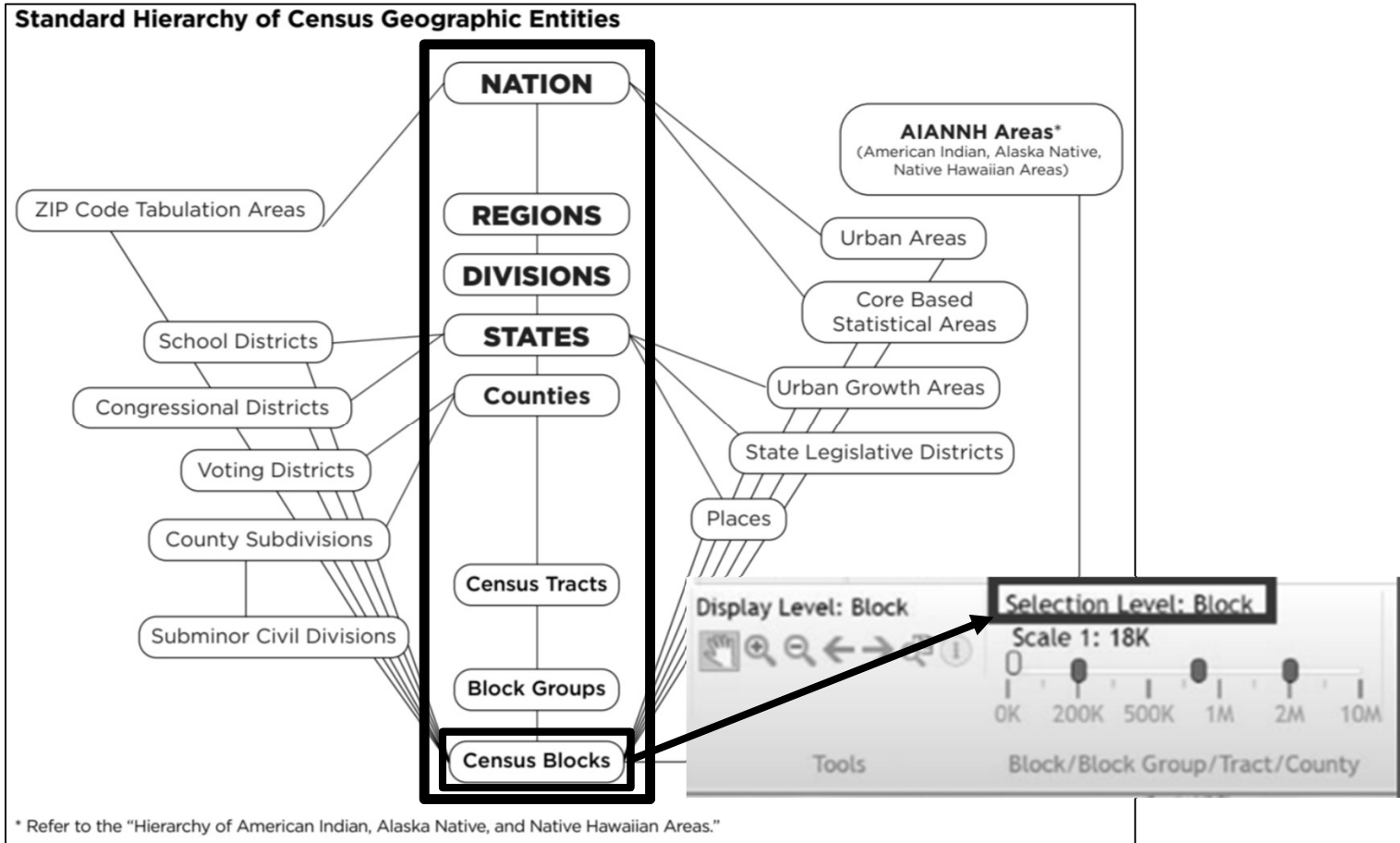
- ✓ FPB
- ✓ HPB

Federal Population Base (P.L. 94-171)

Hawaii Permanent Resident Population Base



## U.S. Census Blocks





# Current Legislative Districts – Census Data

## Census

- ✓ FPB
- ✓ HPB

Federal Population Base (P.L. 94-171)

Hawaii Permanent Resident Population Base



## U.S. Census Blocks



# Current Legislative Districts – Census Data

## Census

- ✓ FPB
- ✓ HPB

Federal Population Base (P.L. 94-171)

Hawaii Permanent Resident Population Base



## U.S. Census Blocks



# Current Legislative Districts - Reapportionment

## Reapportionment

- ✓ Federal                      FPB - Congressional (U.S. House)
- ✓ State                         HPB - State Senate and State House

## Method of Equal Proportions

### Equal Proportions Method

P - represents a state's total population

n - represents the number of seats a state would have if it gained a seat (because all states automatically received one seat the next seat gained is "seat two," and the next "seat three," and the next "seat four," and so on.)

The multiplier equals:

$$1/\sqrt{n(n-1)}$$

[which is called the reciprocal of the geometric mean]. Computing these values is quite easy using a computer with spreadsheet software (such as Excel).

Thus the formula for calculating the multiplier for the second seat is:

$$1/\sqrt{2(2-1)}$$

or 1/1.414213562 or 0.70710678

the multiplier for the third seat is:

$$1/\sqrt{3(3-1)}$$

1/2.449489743 or 0.40824829

the multiplier for the fourth seat is:

$$1/\sqrt{4(4-1)}$$

1/3.464101615 or 0.288675134

Continue until an appropriate number of multipliers have been calculated.

# Current Legislative Districts - Reapportionment

## Reapportionment

- ✓ Federal                      FPB - Congressional (U.S. House)
- ✓ State                         HPB - State Senate and State House

PERSONS	State
=====	=====
Fed population	1,455,271

<u>Hawaii</u>	<u>Congressional</u>
<b>Statewide</b>	<b>2</b>

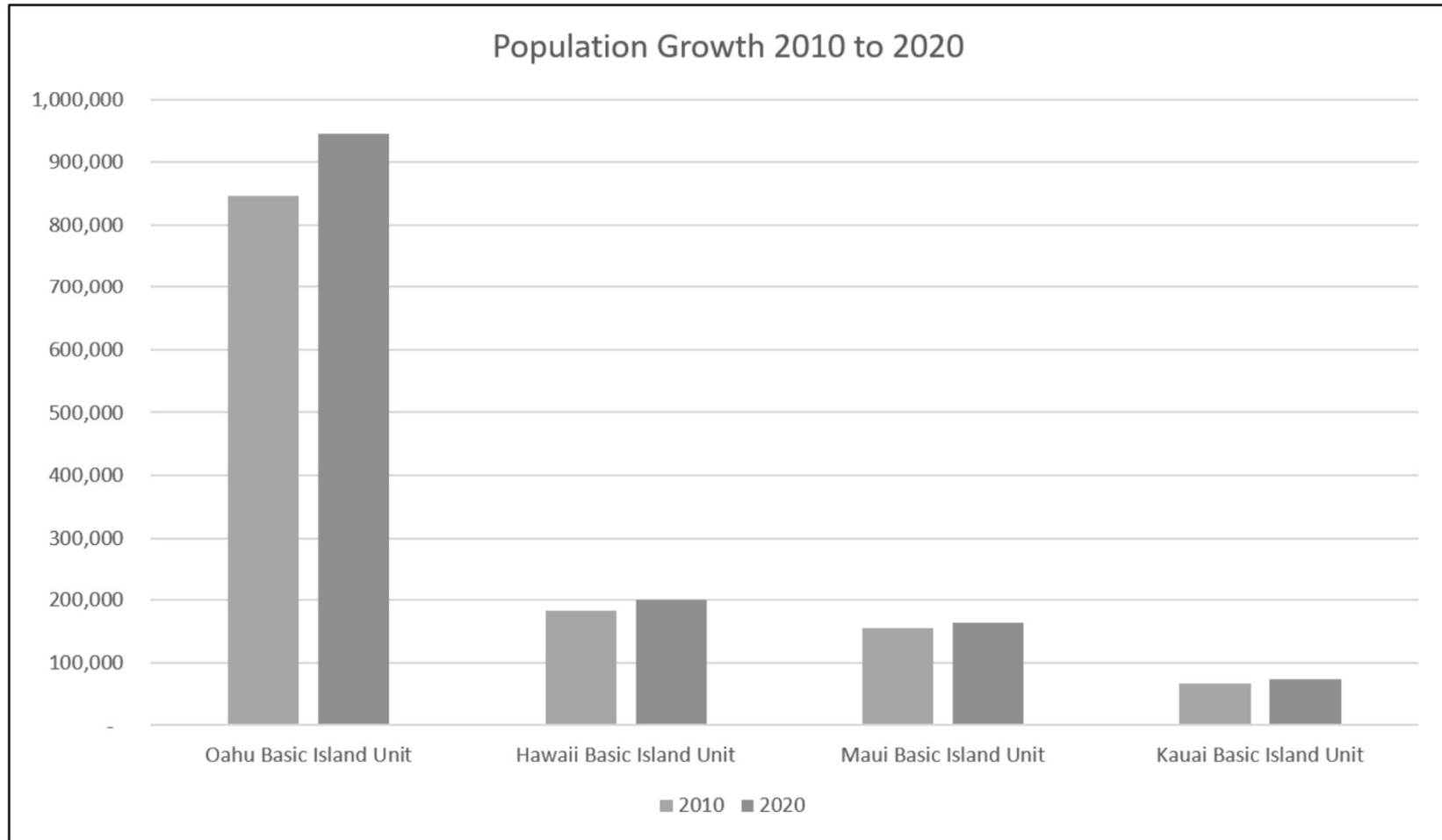
PERSONS	State	BIU-Oahu	BIU-Hawaii	BIU-Maui	BIU-Kauai
=====	=====	=====	=====	=====	=====
HI population	1,383,606	945,909	200,090	164,610	72,997

<u>Basic Island Unit</u>	<u>Senate</u>	<u>House</u>
BIU - Oahu	17	35
BIU - Hawaii	4	7
BIU - Maui	3	6
BIU - Kauai	1	3

# Current Legislative Districts – Population Growth

**Redistricting**  
➔ **Staff**

Prepare template plans for current (2011-2020) districts



# Current Legislative Districts – Population Growth

**Redistricting Staff**

Prepare template plans for current (2011-2020) districts

## Population Growth 2010 to 2020

2010							
Permanent Resident Population Base		Senate	Average	House	Average	Total	Average
State of Hawaii	1,251,534	25	50,061	51	24,540	76	16,468
Oahu Basic Island Unit	846,589	17	49,799	35	24,188	52	16,281
Hawaii Basic Island Unit	183,596	4	45,899	7	26,228	11	16,691
Maui Basic Island Unit	154,544	3	51,515	6	25,757	9	17,172
Kauai Basic Island Unit	66,805	1	66,805	3	22,268	4	16,701

5.41%

2020							
Permanent Resident Population Base		Senate	Average	House	Average	Total	Average
State of Hawaii	1,383,606	25	55,344	51	27,130	76	18,205
Oahu Basic Island Unit	945,909	17	55,642	35	27,026	52	18,191
Hawaii Basic Island Unit	200,090	4	50,023	7	28,584	11	18,190
Maui Basic Island Unit	164,610	3	54,870	6	27,435	9	18,290
Kauai Basic Island Unit	72,997	1	72,997	3	24,332	4	18,249

0.55%

# Current Legislative Districts – Population Growth

**Redistricting Staff**

Prepare template plans for current (2011-2020) districts

## Ideal (Target) Population – within each BIU

2010							
Permanent Resident Population Base	Senate	Average	House	Average	Total	Average	
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0.55%

**Average = Population / Number of Seats**

# Current Legislative Districts – Population Growth

**Redistricting Staff**

Prepare template plans for current (2011-2020) districts

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# Current Legislative Districts – Population Growth

**Redistricting Staff**

Prepare template plans for current (2011-2020) districts

## Ideal (Target) Population – in Totality

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# Current Legislative Districts – Population Growth

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Prepare template plans for current (2011-2020) districts

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0.55% 

**Average = Population / Number of Seats**

# Current Legislative Districts – Population Growth

## Redistricting Staff

Prepare template plans for current (2011-2020) districts

## Ideal (Target) Population – within each BIU

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0.55%

**Average = Population / Number of Seats**

# Current Legislative Districts – Population Growth

**Redistricting Staff**

Prepare template plans for current (2011-2020) districts

## District Population – 2010 to 2020 Growth

	2010		2020		Increase
	Population	Target	Population	Target	
<b>Kauai BIU</b>	<b>66,805</b>	<b>22,268</b>	<b>72,997</b>	<b>24,332</b>	<b>9.27%</b>
House 14	22,718	22,268	24,277	24,332	6.86%
House 15	21,835	22,268	24,924	24,332	14.15%
House 16	22,252	22,268	23,796	24,332	6.94%



# Current Legislative Districts – Population Growth

**Redistricting Staff**

Prepare template plans for current (2011-2020) districts

## District Population – 2010 to 2020 Growth

	2010		2020		
	Population	Target	Population	Target	Increase
<b>Kauai BIU</b>	<b>66,805</b>	<b>22,268</b>	<b>72,997</b>	<b>24,332</b>	<b>9.27%</b>
House 14	22,718	22,268	24,277	24,332	6.86%
<b>House 15</b>	21,835	22,268	24,924	24,332	<b>14.15%</b>
House 16	22,252	22,268	23,796	24,332	6.94%



# Current Legislative Districts – Deviation from Ideal

**Redistricting Staff**

Prepare template plans for current (2011-2020) districts

## District Population – Deviation from Ideal (Target)

	2010		2020			
	Population	Target	Population	Target	Deviation	Deviation%
<b>Kauai BIU</b>	<b>66,805</b>	<b>22,268</b>	<b>72,997</b>	<b>24,332</b>		<b>4.63%</b>
House 14	22,718	22,268	24,277	24,332	-55	-0.23%
<b>House 15</b>	21,835	22,268	24,924	24,332	592	<b>2.43%</b>
House 16	22,252	22,268	23,796	24,332	-536	-2.20%

**District Deviation % = (( Population - Target ) / Target ) \* 100**

# Current Legislative Districts – Deviation from Ideal

**Redistricting Staff**

Prepare template plans for current (2011-2020) districts

## Overall (Total) BIU Deviation from Ideal (Target)

	2010		2020			
	Population	Target	Population	Target	Deviation	Deviation%
<b>Kauai BIU</b>	<b>66,805</b>	<b>22,268</b>	<b>72,997</b>	<b>24,332</b>		<b>4.63%</b>
House 14	22,718	22,268	24,277	24,332	-55	-0.23%
House 15	21,835	22,268	24,924	24,332	592	➔ 2.43%
House 16	22,252	22,268	23,796	24,332	-536	➔ -2.20%

**Overall (Total) BIU Deviation % = Highest % Deviation - Lowest % Deviation**

# Current Legislative Districts – Deviation from Ideal

**Redistricting Staff**

Prepare template plans for current (2011-2020) districts

## Ideal (Target) Population – Kauai House

	2010		2020			
	Population	Target	Population	Target	Deviation	Deviation%
<b>Kauai BIU</b>	<b>66,805</b>	<b>22,268</b>	<b>72,997</b>	<b>24,332</b>		<b>4.63%</b>
House 14	22,718	22,268	24,277	24,332	-55	-0.23%
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House 16	22,252	22,268	23,796	24,332	-536	-2.20%

**District Deviation % = (( Population - Target ) / Target ) \* 100**

District	Color	Hide	Lock	TARGET	DEVIATION_PCT	DEVIATION	DISTRICT_POP
House 14	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	24,332	-0.23	-55	24,277
House 15	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	24,332	2.43	592	24,924
House 16	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	24,332	-2.2	-536	23,796



# Current Legislative Districts – Deviation from Ideal

**Redistricting Staff**

Prepare template plans for current (2011-2020) districts

## District Population (current districts)

	2010		2020			
	Population	Target	Population	Target	Deviation	Deviation%
<b>Kauai BIU</b>	<b>66,805</b>	<b>22,268</b>	<b>72,997</b>	<b>24,332</b>		<b>4.63%</b>
House 14	22,718	22,268	24,277	24,332	-55	-0.23%
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District	Color	Hide	Lock	TARGET	DEVIATION_PCT	DEVIATION	DISTRICT_POP
House 14	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	24,332	-0.23	-55	24,277
House 15	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	24,332	2.43	592	24,924
House 16	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	24,332	-2.2	-536	23,796

# Current Legislative Districts – Deviation from Ideal

**Redistricting Staff**

Prepare template plans for current (2011-2020) districts

## District Population – Deviation from Ideal (Target)

	2010		2020			
	Population	Target	Population	Target	Deviation	Deviation%
<b>Kauai BIU</b>	<b>66,805</b>	<b>22,268</b>	<b>72,997</b>	<b>24,332</b>		<b>4.63%</b>
House 14	22,718	22,268	24,277	24,332	-55	-0.23%
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**District Deviation % = (( Population - Target ) / Target ) \* 100**

District	Color	Hide	Lock	TARGET	DEVIATION_PCT	DEVIATION	DISTRICT_POP
House 14	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	24,332	-0.23	-55	24,277
House 15	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	24,332	2.43	592	24,924
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# Current Legislative Districts – Deviation from Ideal

**Redistricting Staff**

Prepare template plans for current (2011-2020) districts

## District Population – Deviation % from Ideal (Target)

	2010		2020			
	Population	Target	Population	Target	Deviation	Deviation%
<b>Kauai BIU</b>	<b>66,805</b>	<b>22,268</b>	<b>72,997</b>	<b>24,332</b>		<b>4.63%</b>
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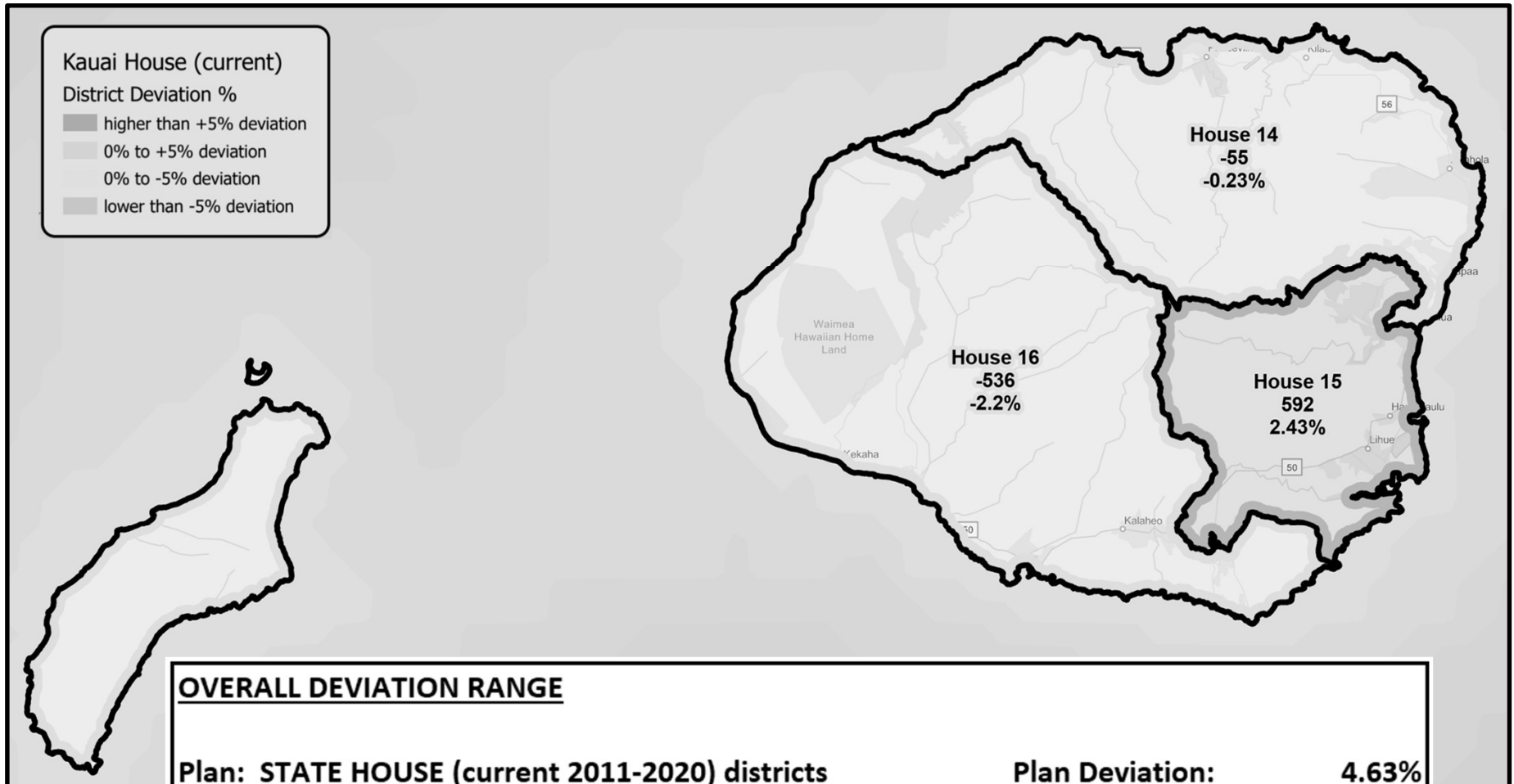
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District	Color	Hide	Lock	TARGET	DEVIATION_PCT	DEVIATION	DISTRICT_POP
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# Current Legislative Districts – Kauai House

## Redistricting Staff

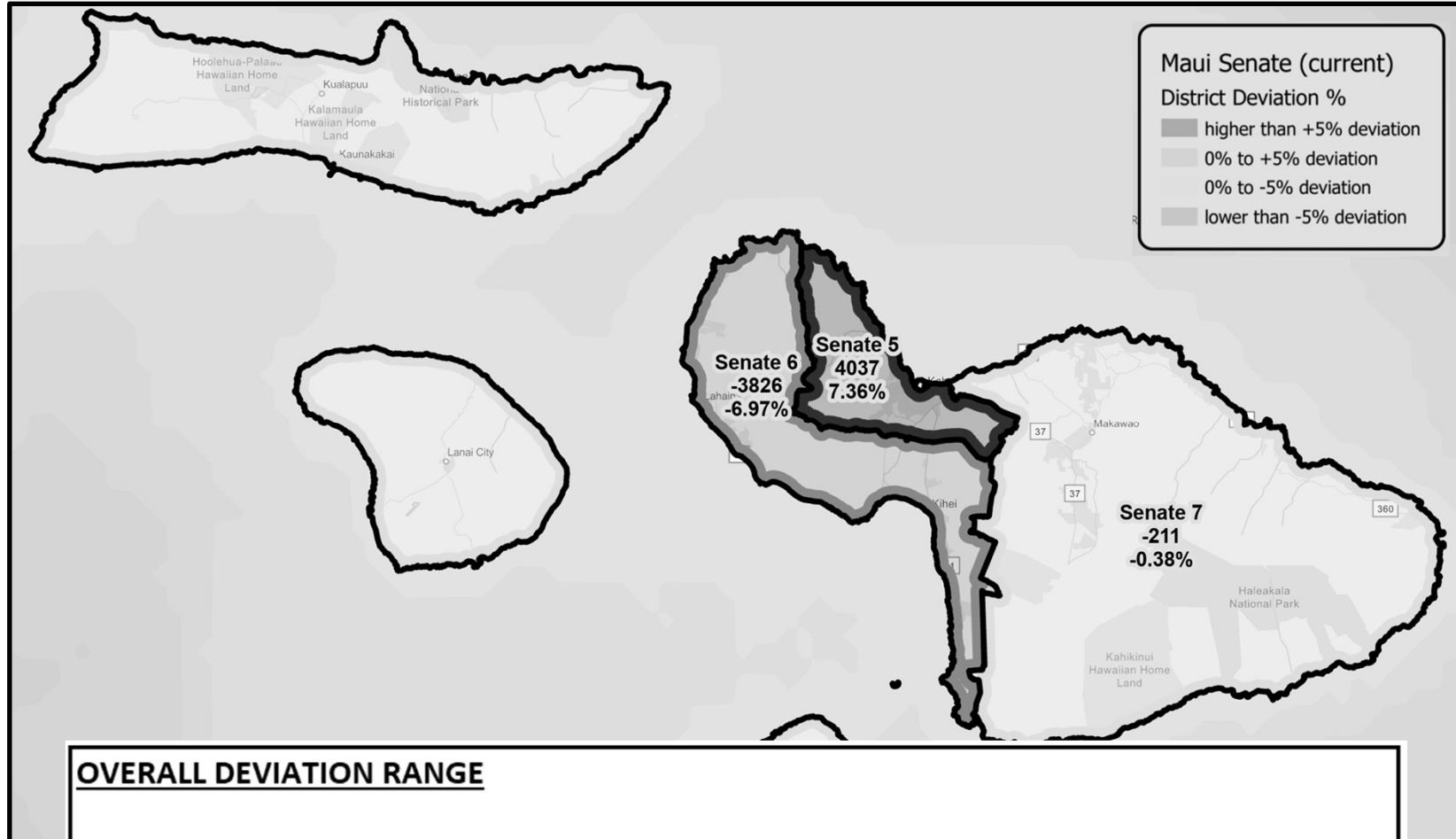
Prepare template plans for current (2011-2020) districts



# Current Legislative Districts – Maui Senate

**Redistricting Staff**

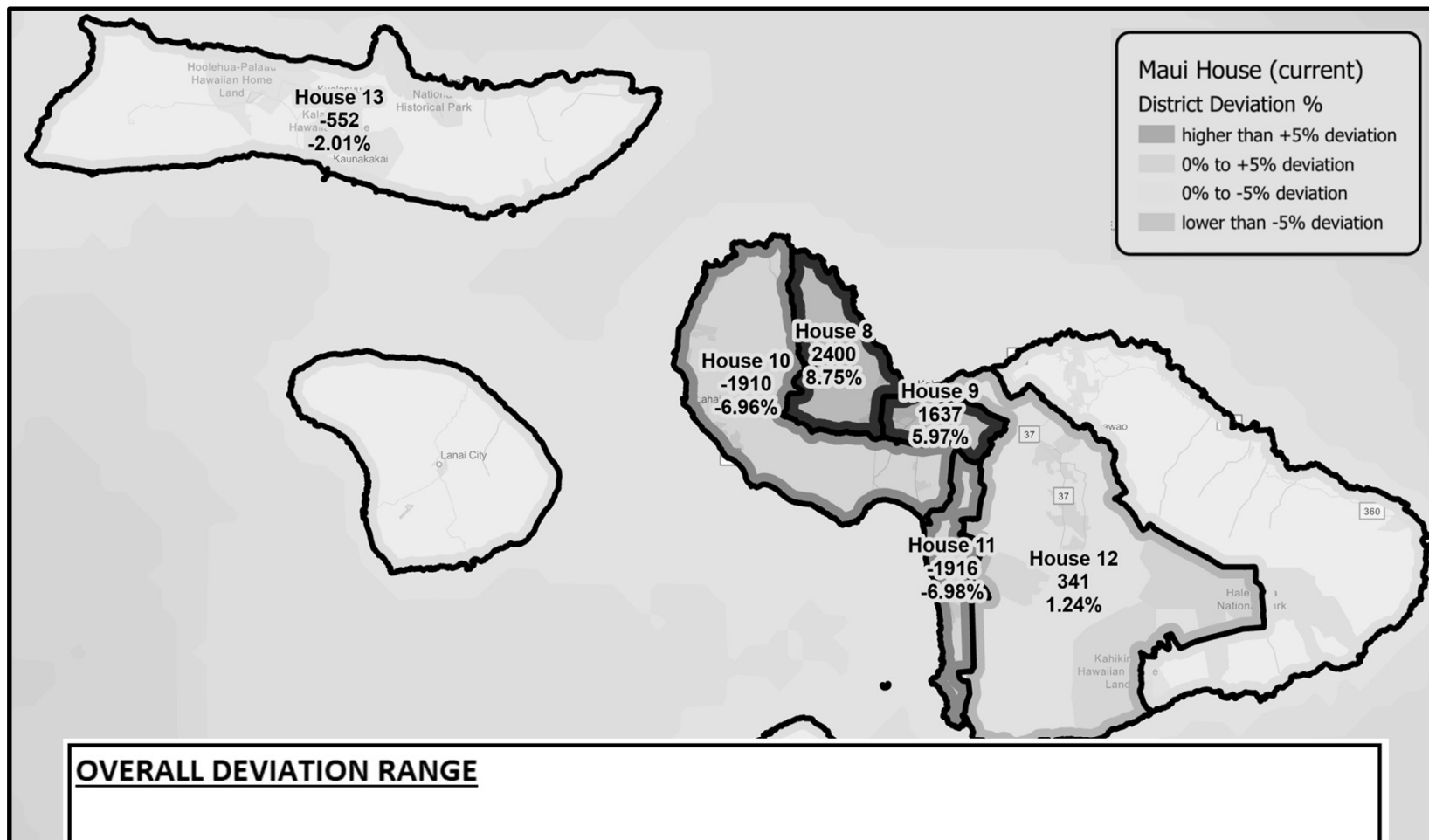
**Prepare template plans for current (2011-2020) districts**



# Current Legislative Districts – Maui House

**Redistricting Staff**

Prepare template plans for current (2011-2020) districts

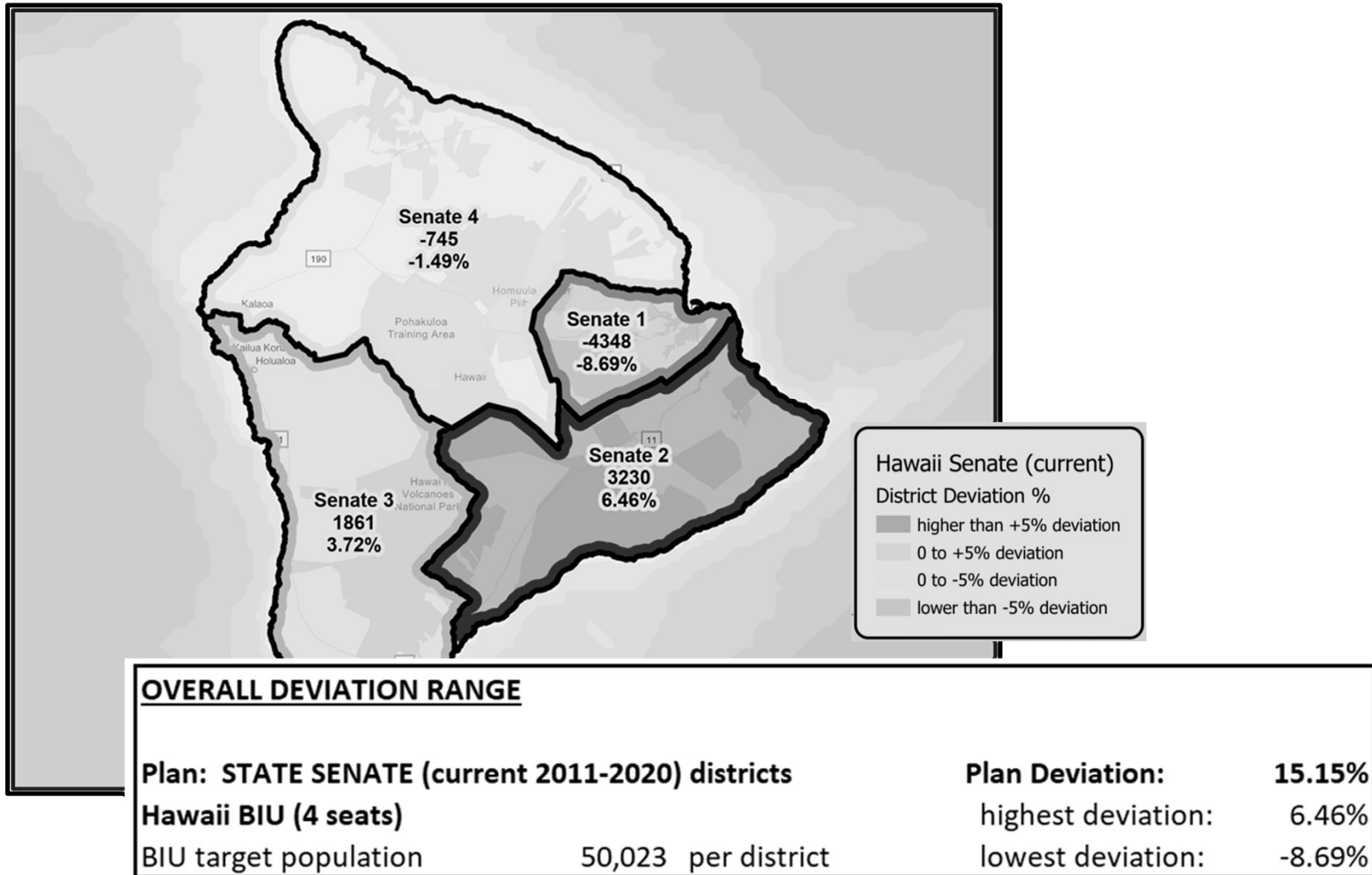


<b>OVERALL DEVIATION RANGE</b>			
<b>Plan: STATE HOUSE (current 2011-2020) districts</b>		<b>Plan Deviation:</b>	<b>15.73%</b>
<b>Maui BIU (6 seats)</b>		highest deviation:	8.75%
BIU target population	27,435 per district	lowest deviation:	-6.98%

# Current Legislative Districts – Hawaii Senate

**Redistricting Staff**

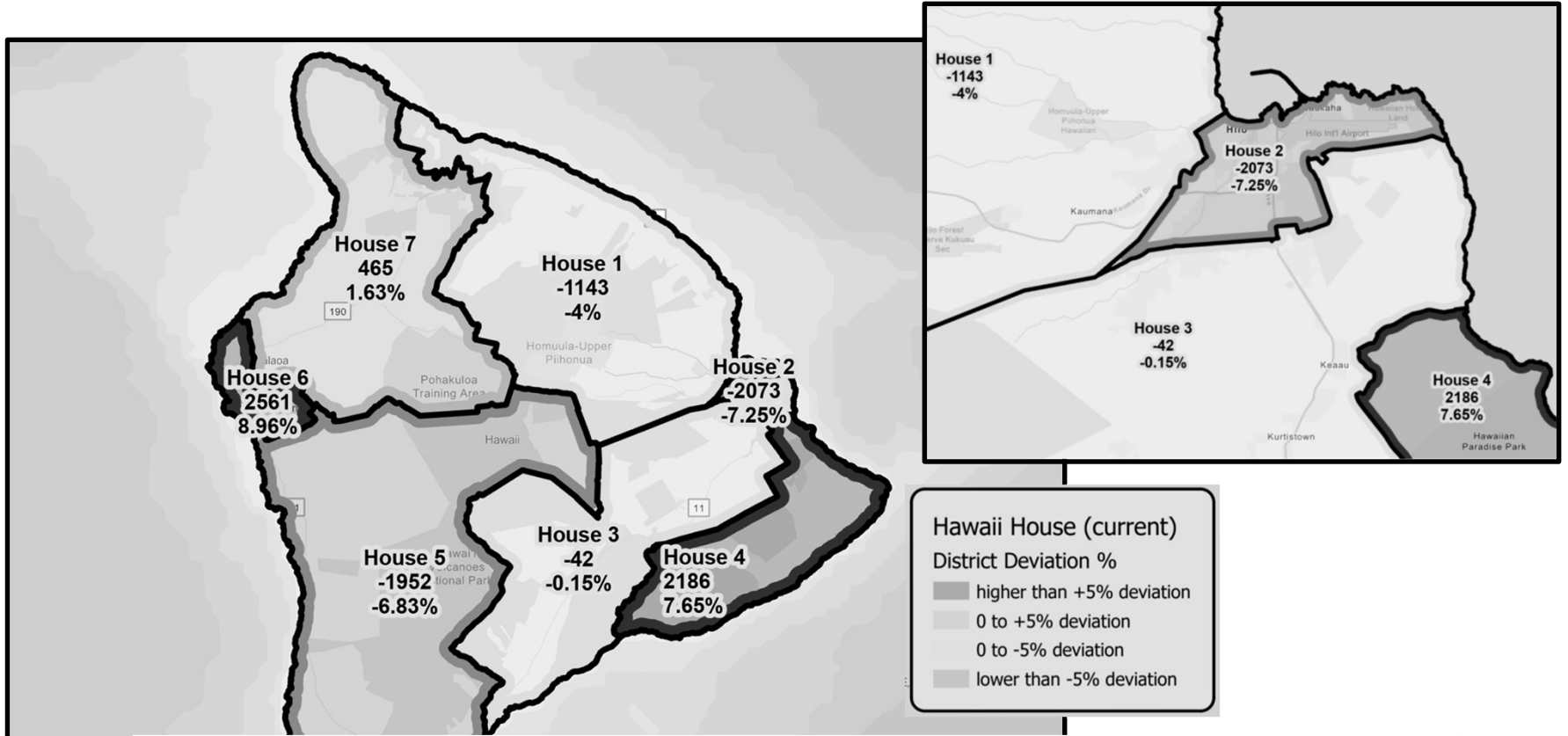
**Prepare template plans for current (2011-2020) districts**



# Current Legislative Districts – Hawaii House

**Redistricting Staff**

Prepare template plans for current (2011-2020) districts



**OVERALL DEVIATION RANGE**

Plan: STATE HOUSE (current 2011-2020) districts

Hawaii BIU (7 seats)

BIU target population 28,584 per district

Plan Deviation: 16.21%

highest deviation: 8.96%

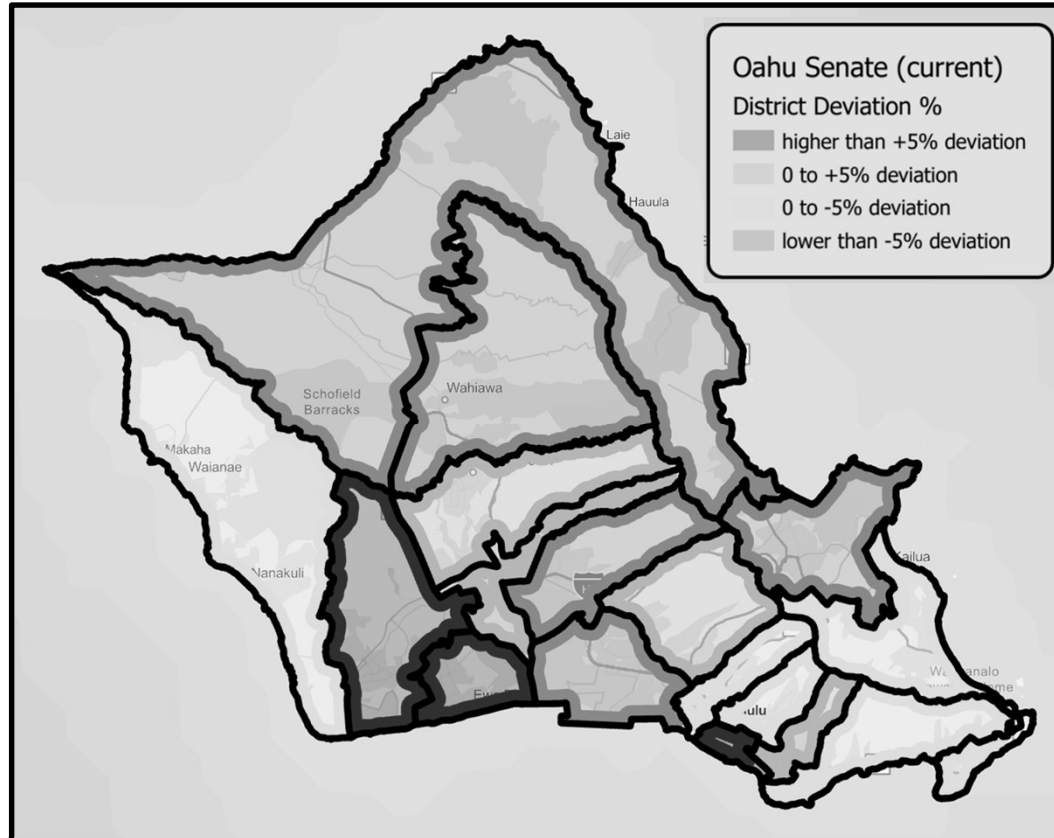
lowest deviation: -7.25%



# Current Legislative Districts – Oahu Senate

**Redistricting Staff**

**Prepare template plans for current (2011-2020) districts**

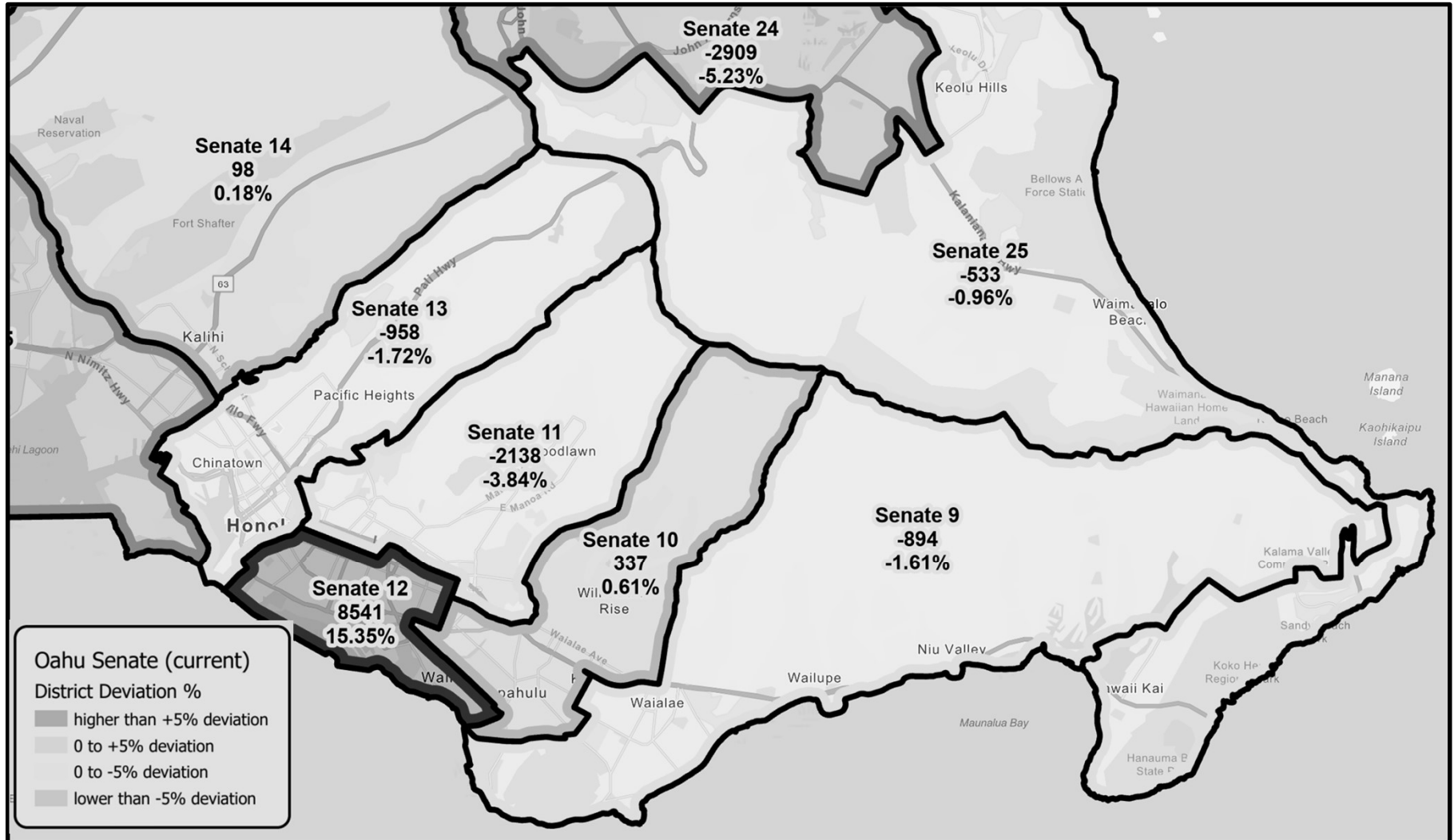


<b>OVERALL DEVIATION RANGE</b>			
<b>Plan: STATE SENATE (current 2011-2020) districts</b>		<b>Plan Deviation:</b>	<b>30.72%</b>
<b>Oahu BIU (17 seats)</b>		highest deviation:	15.35%
BIU target population	55,642 per district	lowest deviation:	-15.37%

# Current Legislative Districts – Oahu Senate

**Redistricting Staff**

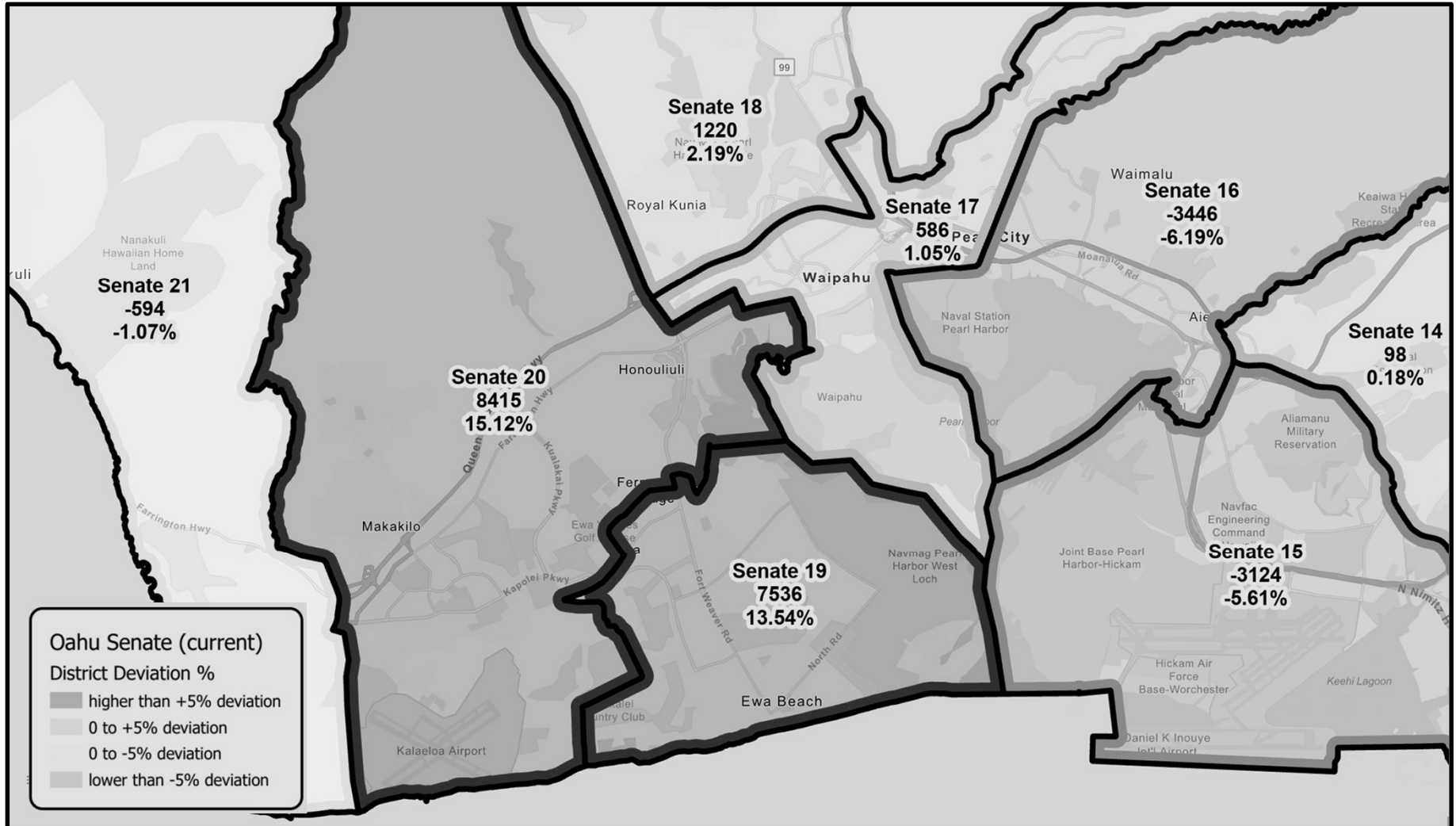
**Prepare template plans for current (2011-2020) districts**



# Current Legislative Districts – Oahu Senate

Redistricting Staff

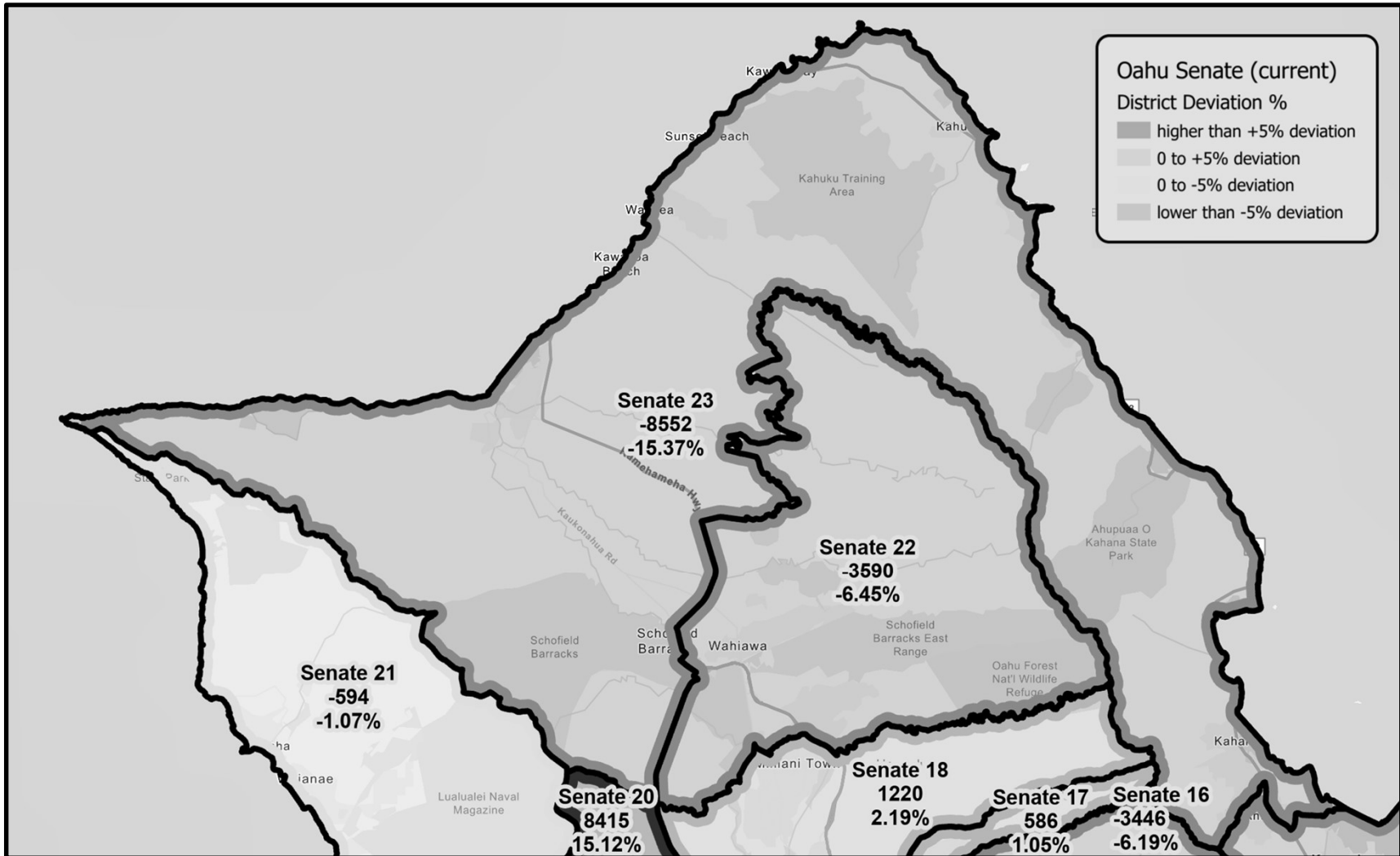
Prepare template plans for current (2011-2020) districts



# Current Legislative Districts – Oahu Senate

**Redistricting Staff**

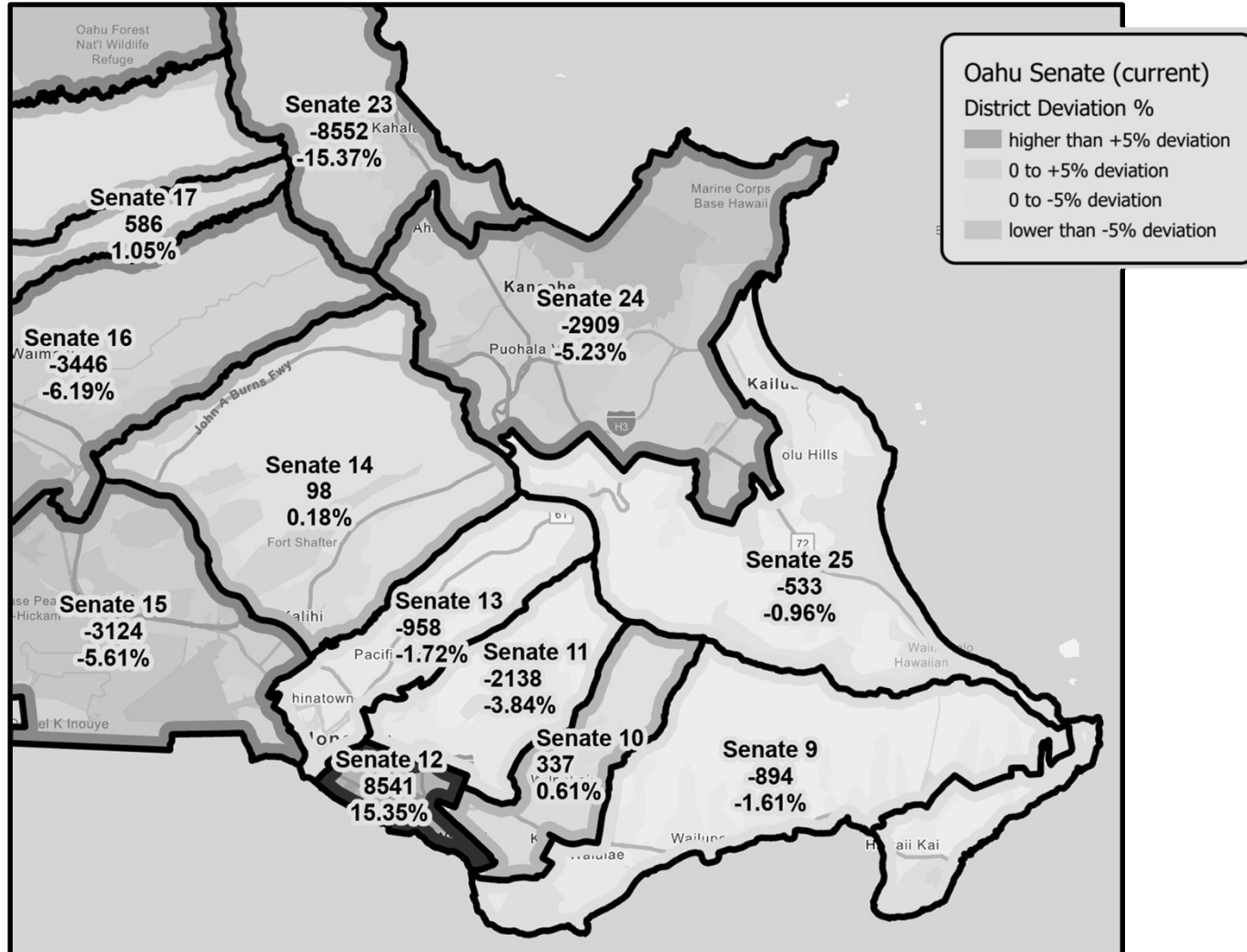
**Prepare template plans for current (2011-2020) districts**



# Current Legislative Districts – Oahu Senate

Redistricting Staff

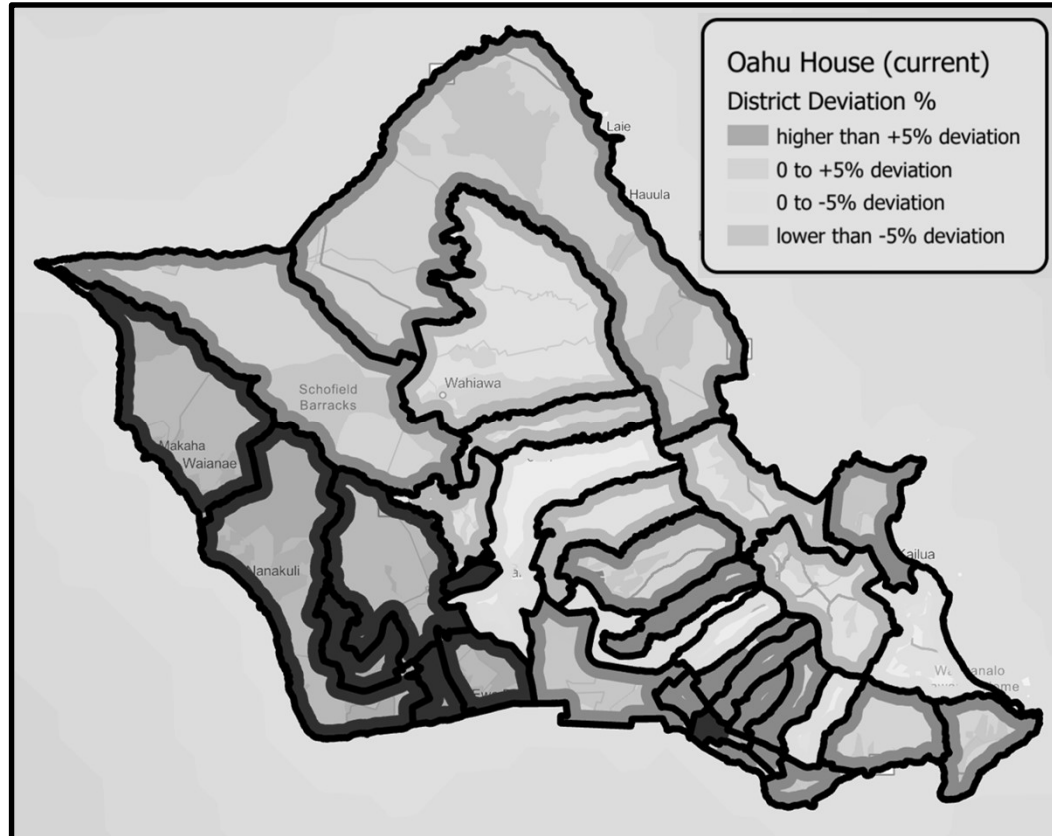
Prepare template plans for current (2011-2020) districts



# Current Legislative Districts – Oahu House

**Redistricting Staff**

**Prepare template plans for current (2011-2020) districts**



**OVERALL DEVIATION RANGE**

**Plan: STATE HOUSE (current 2011-2020) districts**

**Oahu BIU (35 seats)**

BIU target population 27,026 per district

**Plan Deviation: 56.17%**

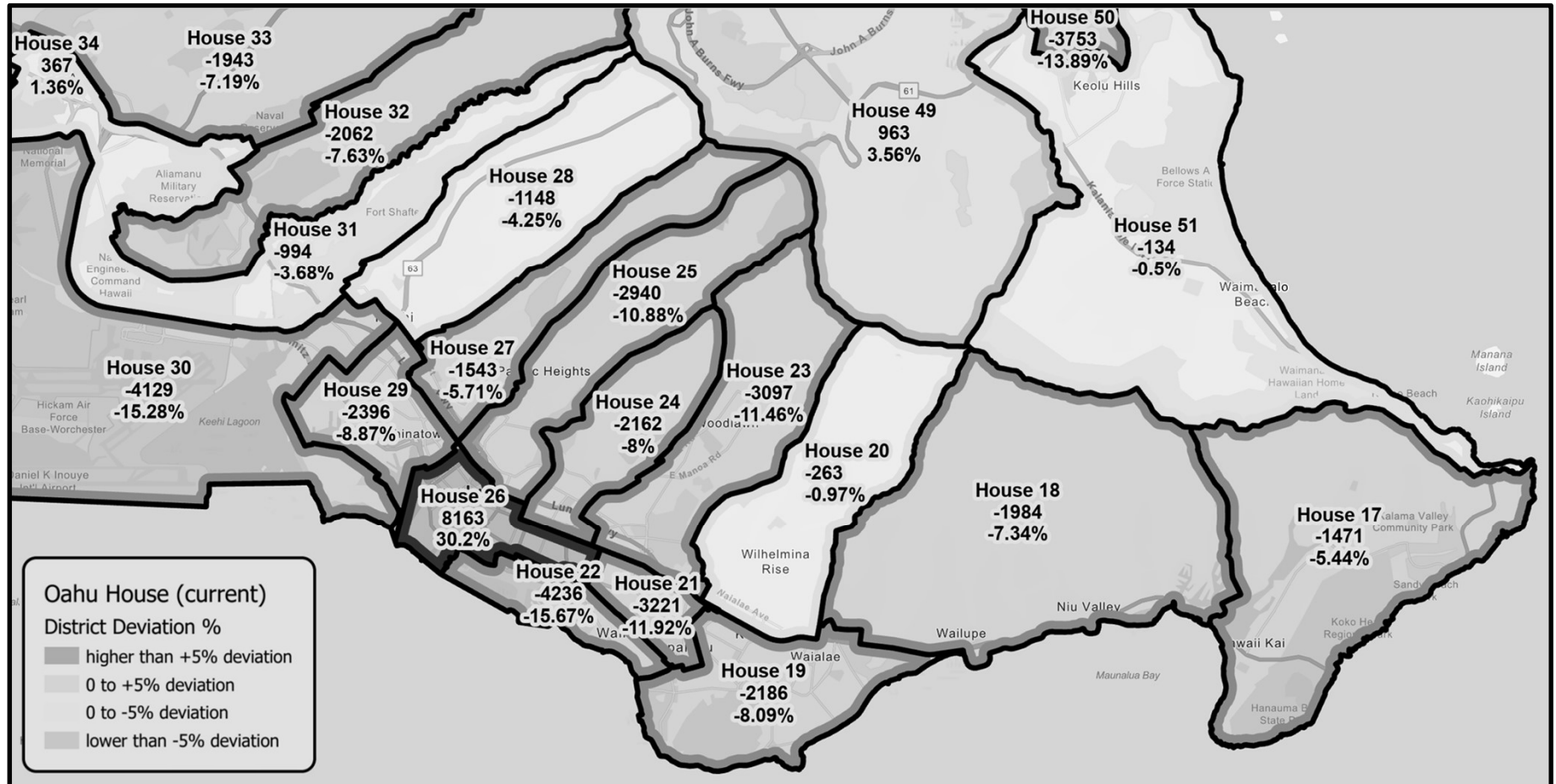
highest deviation: 39.60%

lowest deviation: -16.57%

# Current Legislative Districts – Oahu House

Redistricting Staff

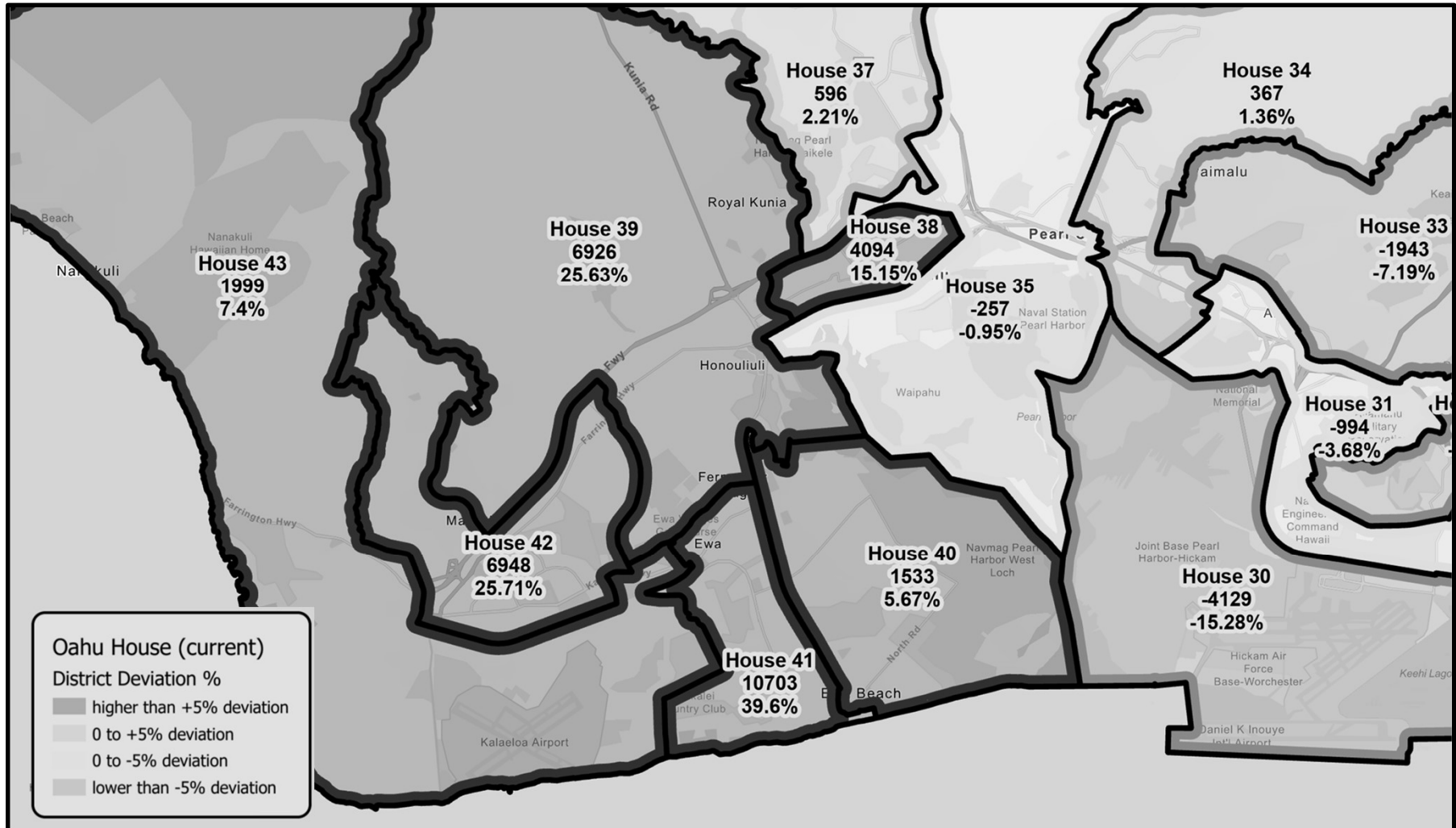
Prepare template plans for current (2011-2020) districts



# Current Legislative Districts – Oahu House

Redistricting Staff

Prepare template plans for current (2011-2020) districts

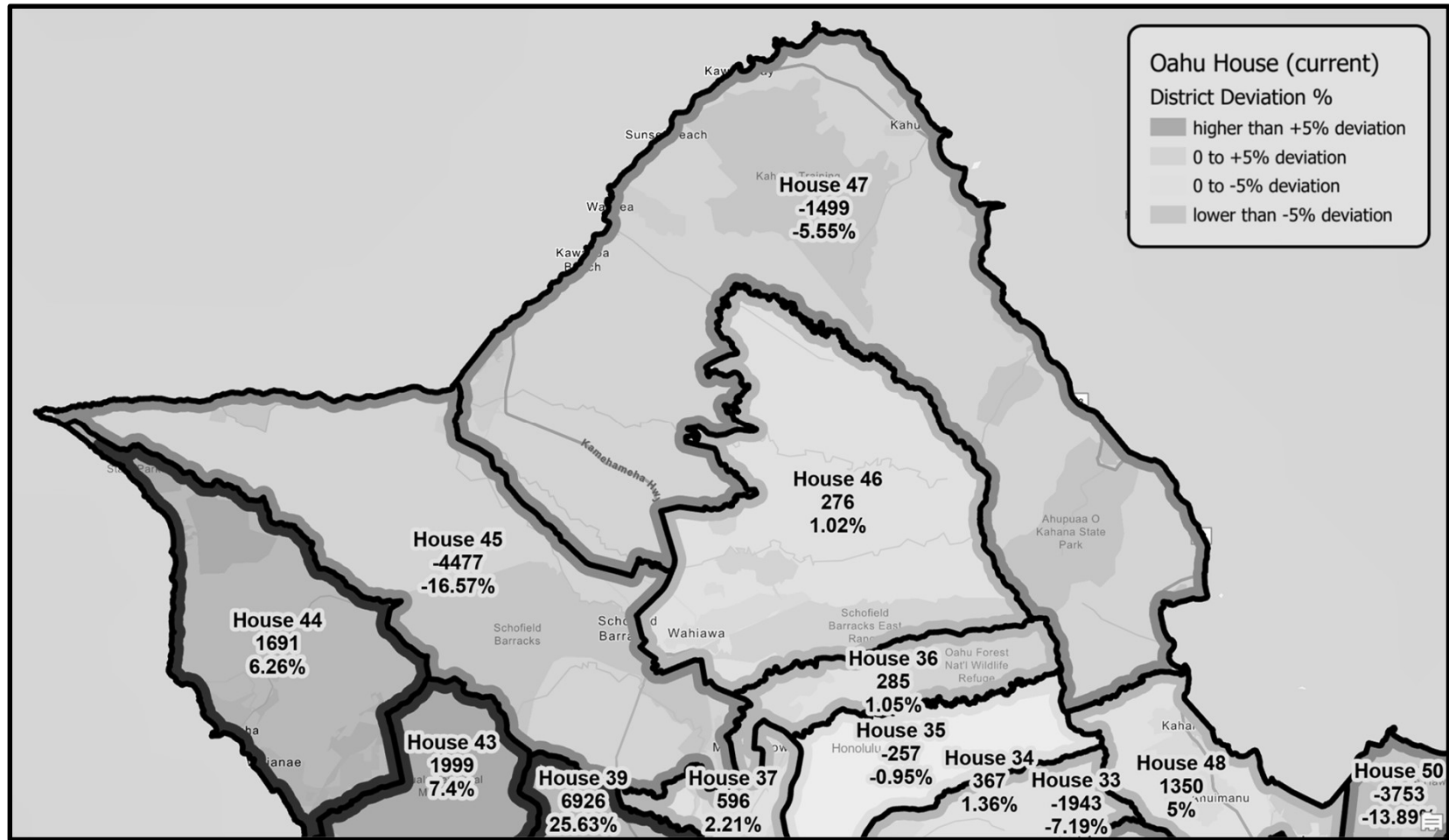




# Current Legislative Districts – Oahu House

Redistricting Staff

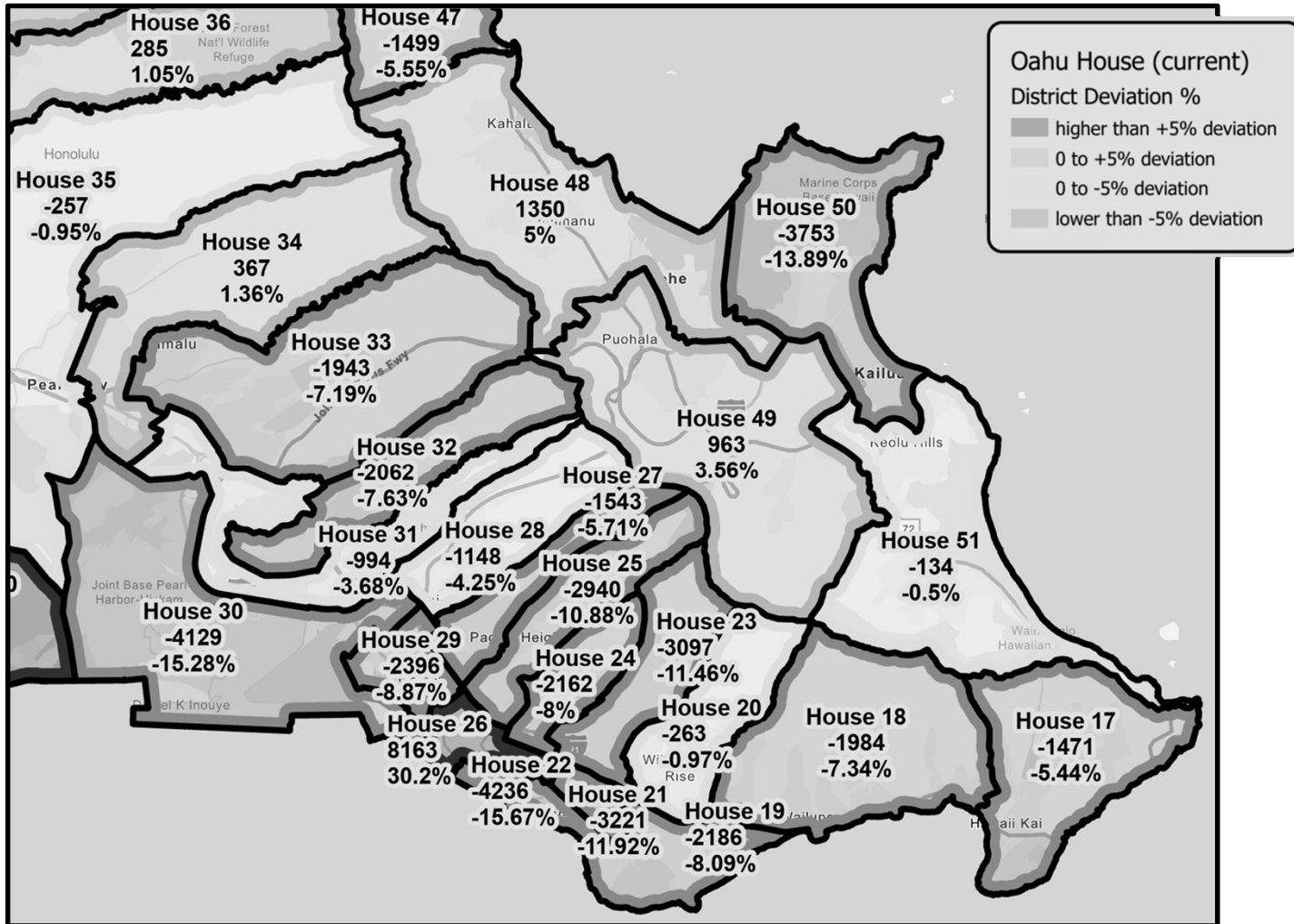
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# Current Legislative Districts – Oahu House

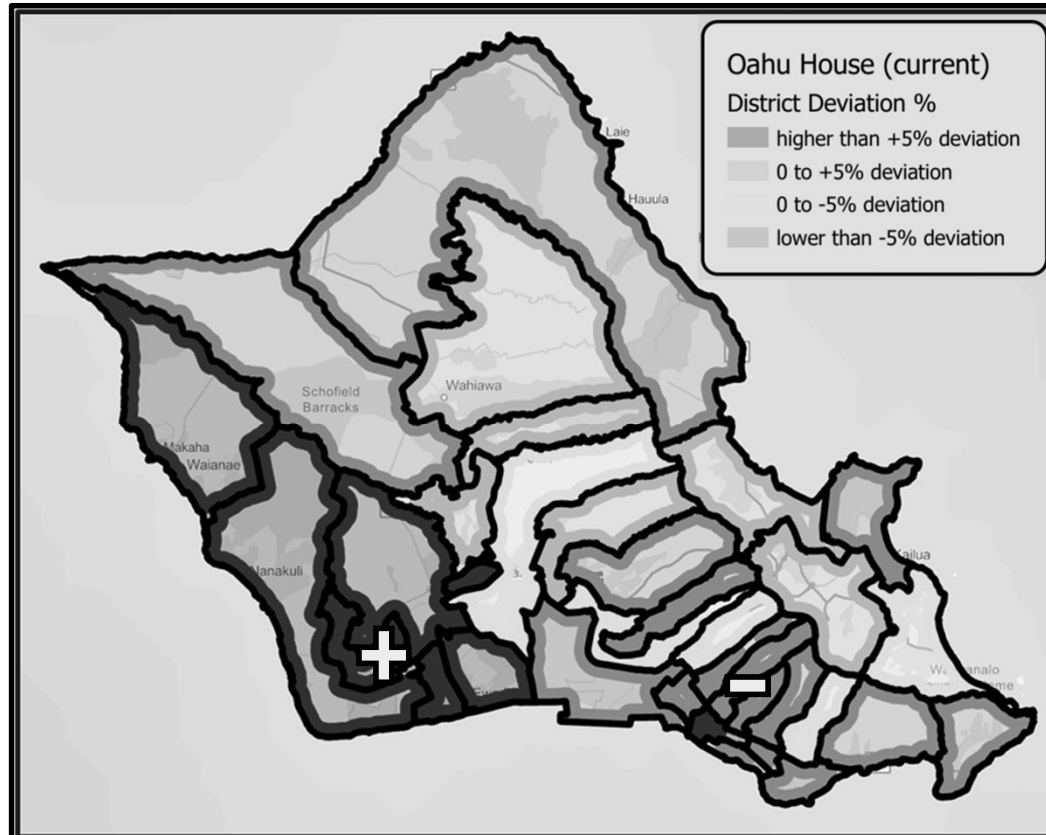
Redistricting Staff

Prepare template plans for current (2011-2020) districts



# Proposed Legislative Plans – Oahu House

**Redistricting**  
**➔ Technical Group**      **Prepare proposed legislative plans**



<b>OVERALL DEVIATION RANGE</b>			
<b>Plan: STATE HOUSE (current 2011-2020) districts</b>		<b>Plan Deviation:</b>	<b>56.17%</b>
<b>Oahu BIU (35 seats)</b>		highest deviation:	39.60%
BIU target population	27,026 per district	lowest deviation:	-16.57%

# Proposed Legislative Plans – Standards and Criteria

## Redistricting

Technical Group

Prepare proposed legislative plans



Courts have upheld:

- Total deviation less than 1% (Federal)
- Total deviation **less than 10%** within Basic Island Unit (State)

### OVERALL DEVIATION RANGE

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Oahu BIU (35 seats)

BIU target population 27,026 per district

Plan Deviation: **56.17%**

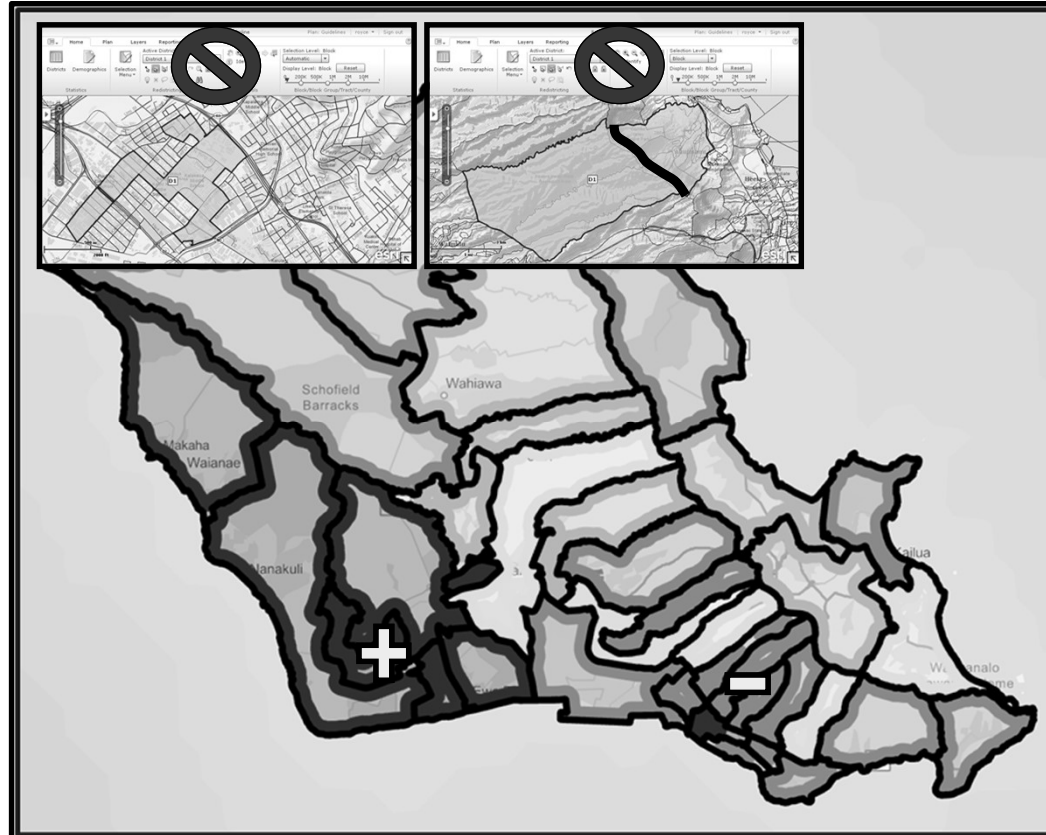
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lowest deviation: -16.57%

# Proposed Legislative Plans – Standards and Criteria

**Redistricting Technical Group** Prepare proposed legislative plans

- **Compact**
  - geometrically
  - geographically



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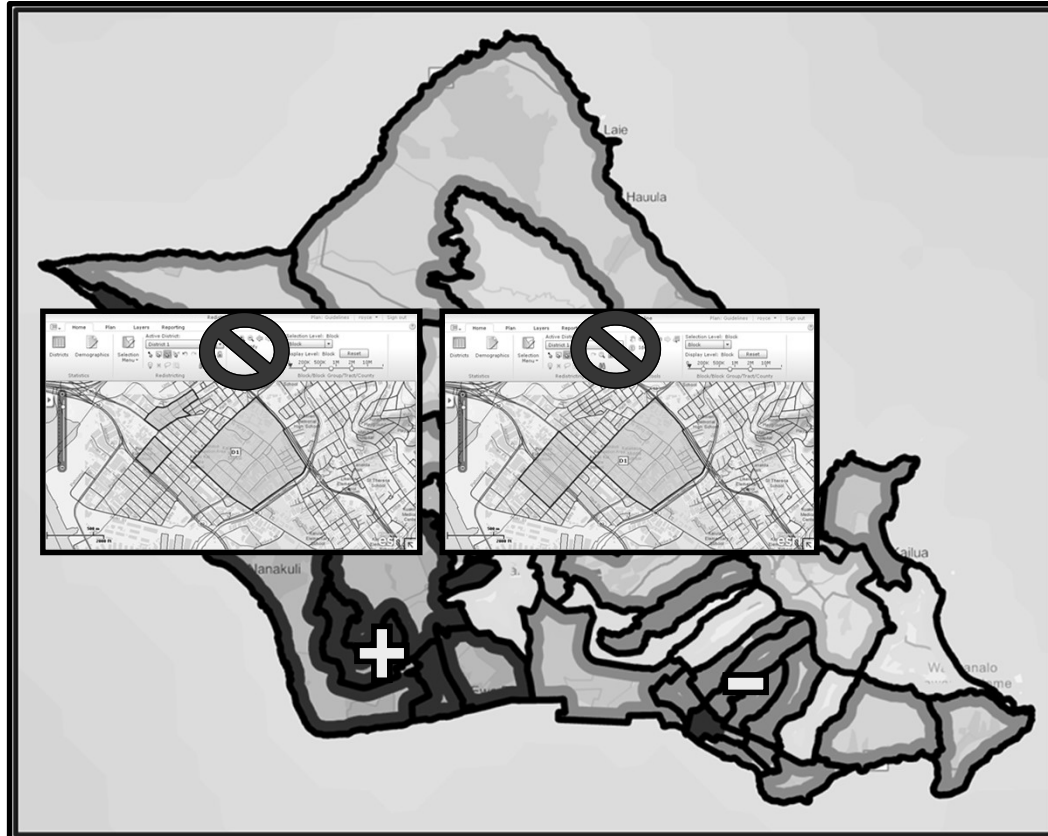
**OVERALL DEVIATION RANGE**

Plan: STATE HOUSE (current 2011-2020) districts	Plan Deviation:	56.17%
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# Proposed Legislative Plans – Standards and Criteria

**Redistricting Technical Group** Prepare proposed legislative plans

- **Compact**
  - geometrically
  - geographically
- **Contiguous**
  - no disconnects
  - no “one point” connections



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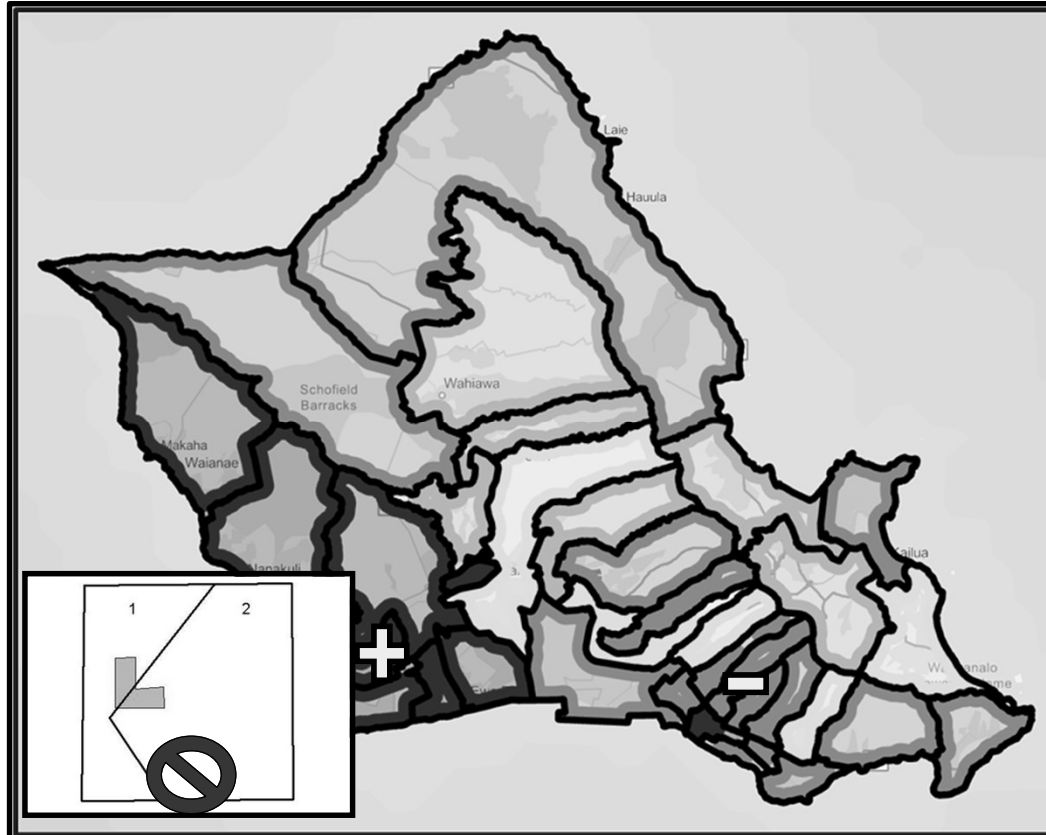
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# Proposed Legislative Plans – Standards and Criteria

**Redistricting Technical Group** Prepare proposed legislative plans

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- **No submergence**
  - preserve socio-economic communities



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27,026 per district		

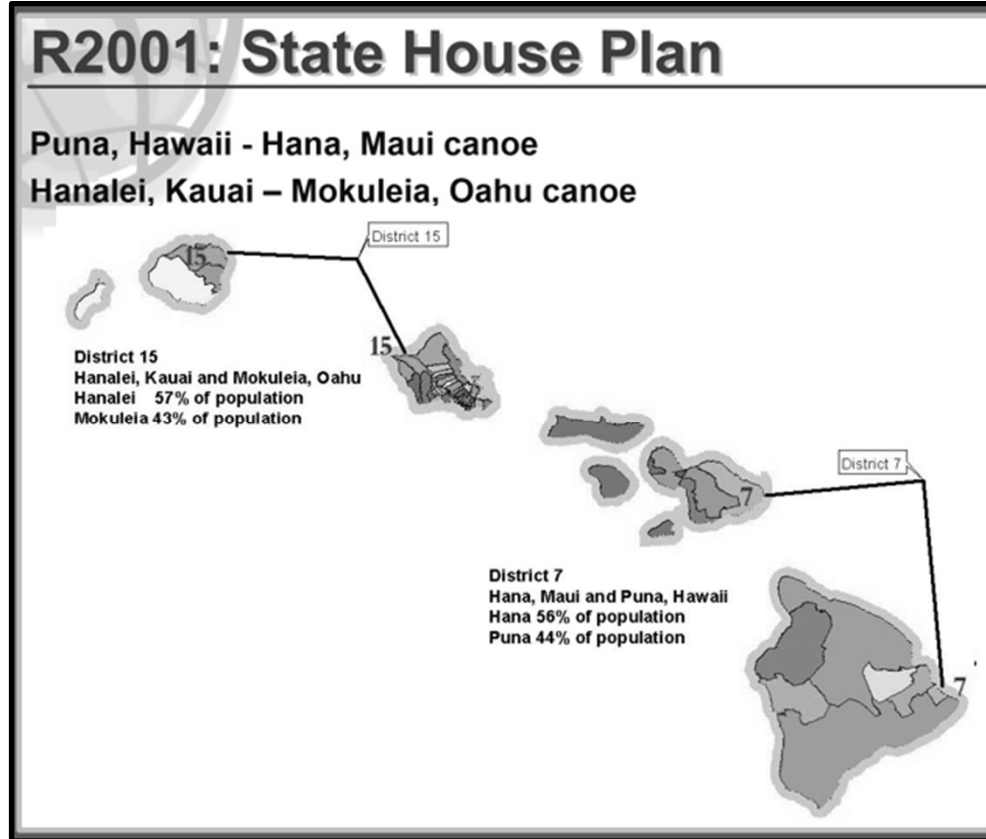
# Proposed Legislative Plans – Standards and Criteria

## Redistricting

Technical Group

Prepare proposed legislative plans

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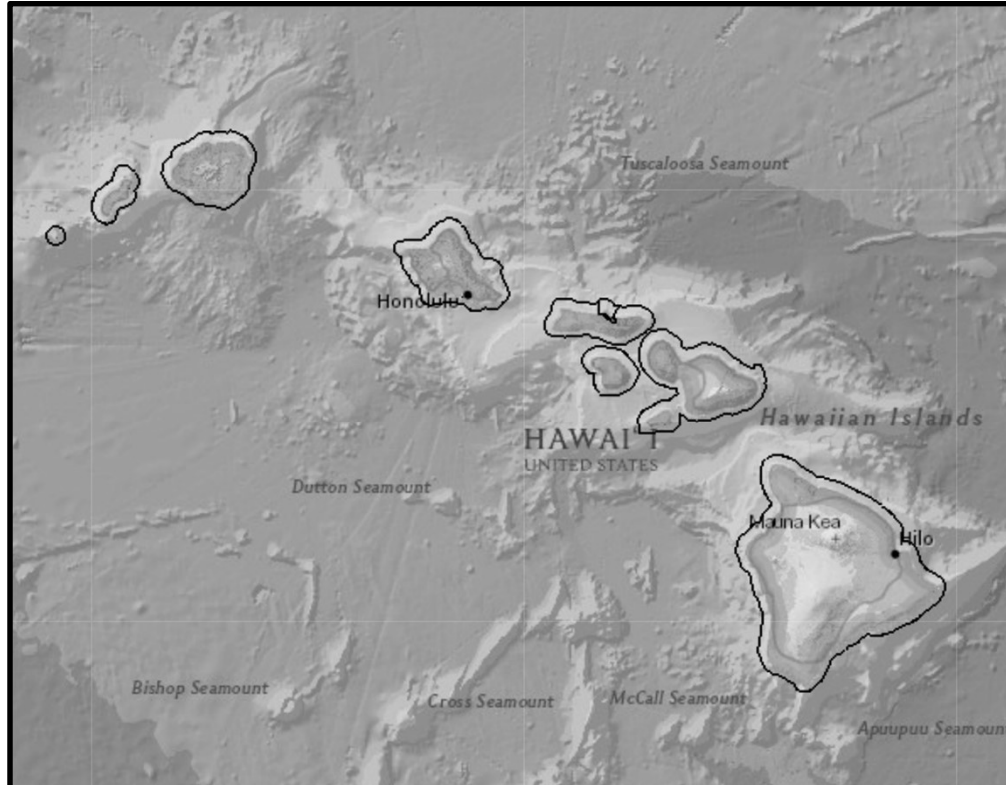
No Canoe Districts



# Proposed Legislative Plans – Standards and Criteria

**Redistricting Technical Group** Prepare proposed legislative plans

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Courts have upheld:

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- Total deviation less than 10% within Basic Island Unit (State)

**No Canoe Districts**

Hawaii Permanent Resident population	2020	Senate			House		
		target	Current dev%	TG dev%	target	Current dev%	TG dev%
Hawaii BIU	200,090	50,023	15.15%	2.22%	28,584	16.21%	5.72%
Maui BIU	164,610	54,870	14.33%	0.85%	27,435	15.73%	4.52%
Kauai BIU	72,997	72,997	0.00%	0.00%	24,332	4.63%	0.48%
Oahu BIU	945,909	55,642	30.72%	7.93%	27,026	56.17%	8.54%

# Proposed Legislative Plans – Hawaii Redistricting Online

## Redistricting

Technical Group

Prepare proposed legislative plans

The screenshot shows the homepage of the Hawaii Redistricting Online platform. At the top center is the official seal of the State of Hawaii. Below the seal, the main heading reads "Hawaii Reapportionment Commission - Redistricting Online". A paragraph of text explains that the platform assists the commission and the public in drawing redistricting plans based on the 2020 U.S. Census data, received on August 12, 2021. It notes that data for Hawaii Congressional, State Senate, and State House plans is available, as well as data for County of Hawaii Council plans. A link labeled "Learn More About Redistricting Online (opens Esri Help)" is provided. A central white box contains the "Sign in to Hawaii Redistricting Online" button, a "Welcome" message, and links for "Create a new account" and "Forgot Your Password?". The background features a dark, textured map of the Hawaiian Islands with labels such as "Mid-Pacific Mountains" and "Hawaiian Islands".

**Hawaii Reapportionment Commission - Redistricting Online**

Hawaii Redistricting Online assists the Hawaii Reapportionment Commission and the general public to draw Hawaii Redistricting Plans following the U.S. Census. The 2020 Census Data was received on August 12, 2021. Data for creating Hawaii Congressional, Hawaii State Senate and Hawaii State House redistricting plans is available now. Data for County of Hawaii Council redistricting plans is also available now.

[Learn More About Redistricting Online \(opens Esri Help\)](#)

**Sign in to Hawaii Redistricting Online**

Aloha! Welcome to Hawaii Redistricting Online


[Create a new account](#)  
[Forgot Your Password?](#)

# Proposed Legislative Plans – Hawaii Redistricting Online

## Redistricting

Technical Group

Prepare proposed legislative plans



## Hawaii Reapportionment Commission - Redistricting Online

- [Hawaii Redistricting Online Application](#)
- [Video Tutorial](#) - How to use the online redistricting application
- [Tutorial Addendum 1](#) - Template Plans for State Senate and State House
- Click Lists
  1. [New User](#)
  2. [Returning User](#)
  3. [Template Plans](#)
  4. [File tab - Managing Plans](#)
  5. [View tab - Map and District Windows](#)
  6. [Create tab - Map Window Tools](#)
  7. [Create tab - Redistricting Tools](#)
  8. [Review tab - Check Integrity](#)
  9. [Share tab - Groups](#)
  10. [Submit tab - Submit Plan](#)

# Proposed Legislative Plans – Step by Step

## Census

- ✓ FPB Federal Population Base (P.L. 94-171)
- ✓ HPB Hawaii Permanent Resident Population Base

## Reapportionment

- ✓ Federal FPB - Congressional (U.S. House)
- ✓ State HPB - State Senate and State House

# Questions?

## Redistricting

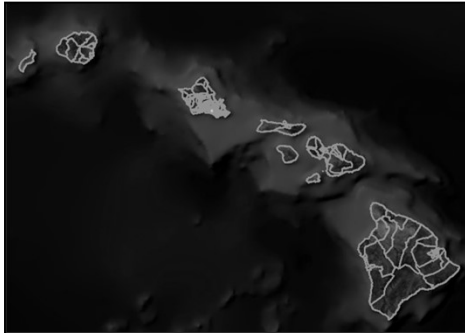
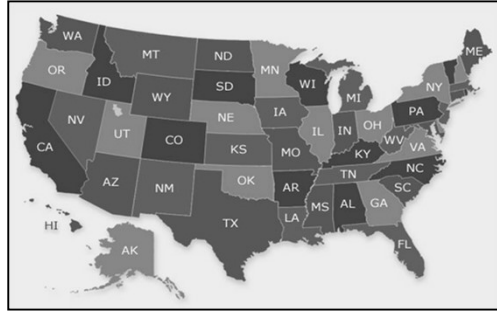
- ⇒ Staff Prepare template plans for current (2011-2020) districts
- ⇒ Technical Group Prepare proposed legislative plans
- Technical Group Present proposed legislative plans to Commission
- Commission Adopts proposed legislative plans
- Public Comments on proposed legislative plans
- Technical Group Revises legislative plans and presents to Commission
- Commission Adopts final legislative plans
- Office of Elections Final report and maps

## Reprecincting

- Office of Elections Ballot types – Congressional + State + County
- County Clerks New precincts, assign voters to new precincts

## Election

- Candidate Filing March 1, 2022
- Primary August 13, 2022
- General November 8, 2022



## Reapportionment and Redistricting in Hawaii

# TG Proposed Legislative Plans

-  
Technical

Permitted Interaction Group

Hawaii Reapportionment Commission  
October 14, 2021



# Proposed Legislative Plans – Step by Step

## Census

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# Proposed Legislative Plans – Hawaii Redistricting Online

## Redistricting

### Technical Group

Present proposed legislative plans to Commission

Hawaiian Islands

6283

6938

Mid-Pacific

STATE OF HAWAII

## Hawaii Reapportionment Commission - Redistricting Online

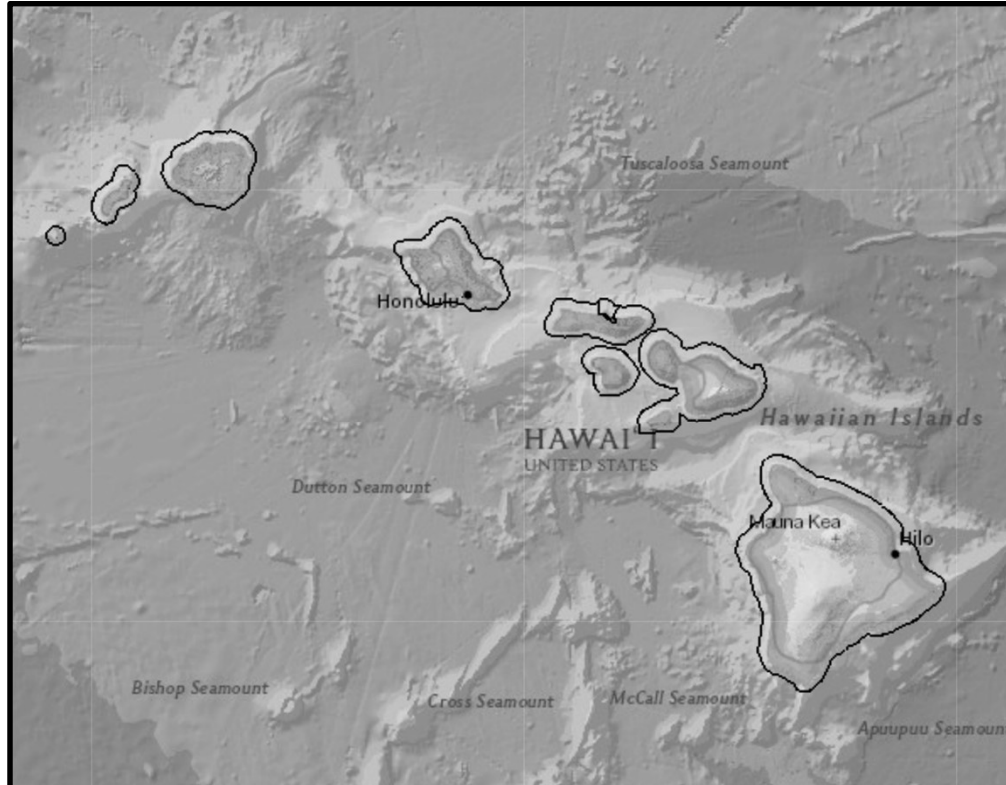
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# Proposed Legislative Plans – Standards and Criteria

**Redistricting  
Technical Group**

Present proposed legislative plans to Commission

- **Compact**
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	2020 Hawaii Permanent Resident population	Senate			House		
		target	Current dev%	TG dev%	target	Current dev%	TG dev%
Hawaii BIU	200,090	50,023	15.15%	2.22%	28,584	16.21%	5.72%
Maui BIU	164,610	54,870	14.33%	0.85%	27,435	15.73%	4.52%
Kauai BIU	72,997	72,997	0.00%	0.00%	24,332	4.63%	0.48%
Oahu BIU	945,909	55,642	30.72%	7.93%	27,026	56.17%	8.54%



# Proposed Legislative Plans – Kauai House

## Redistricting

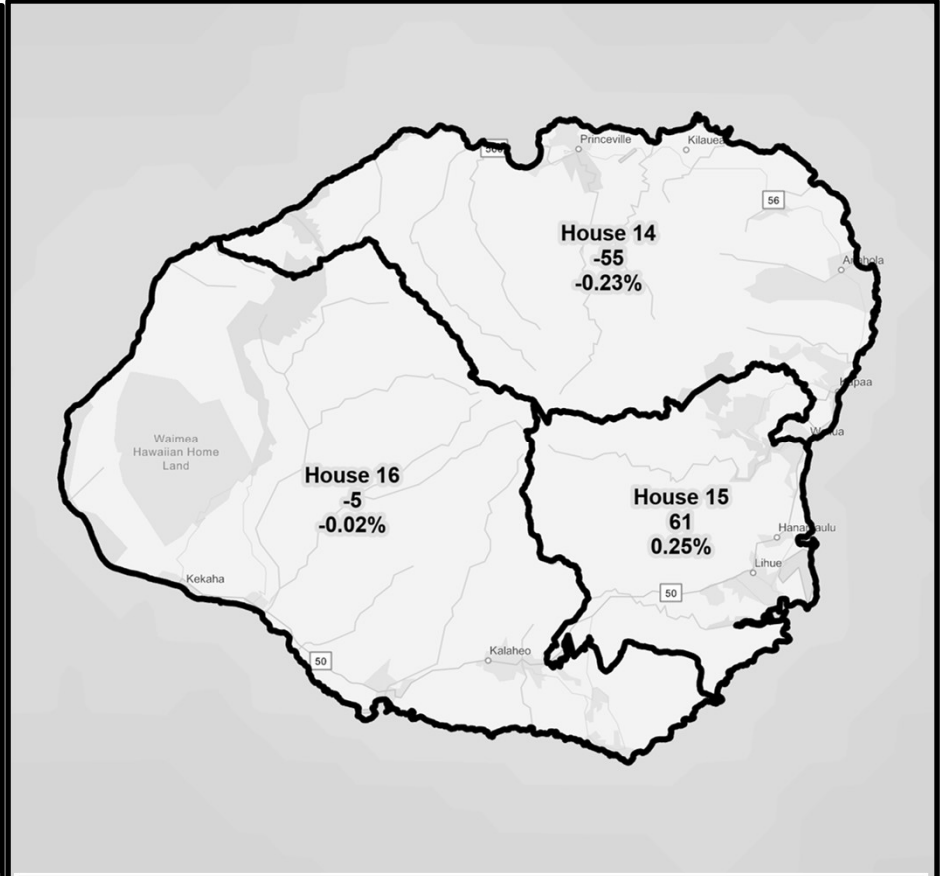
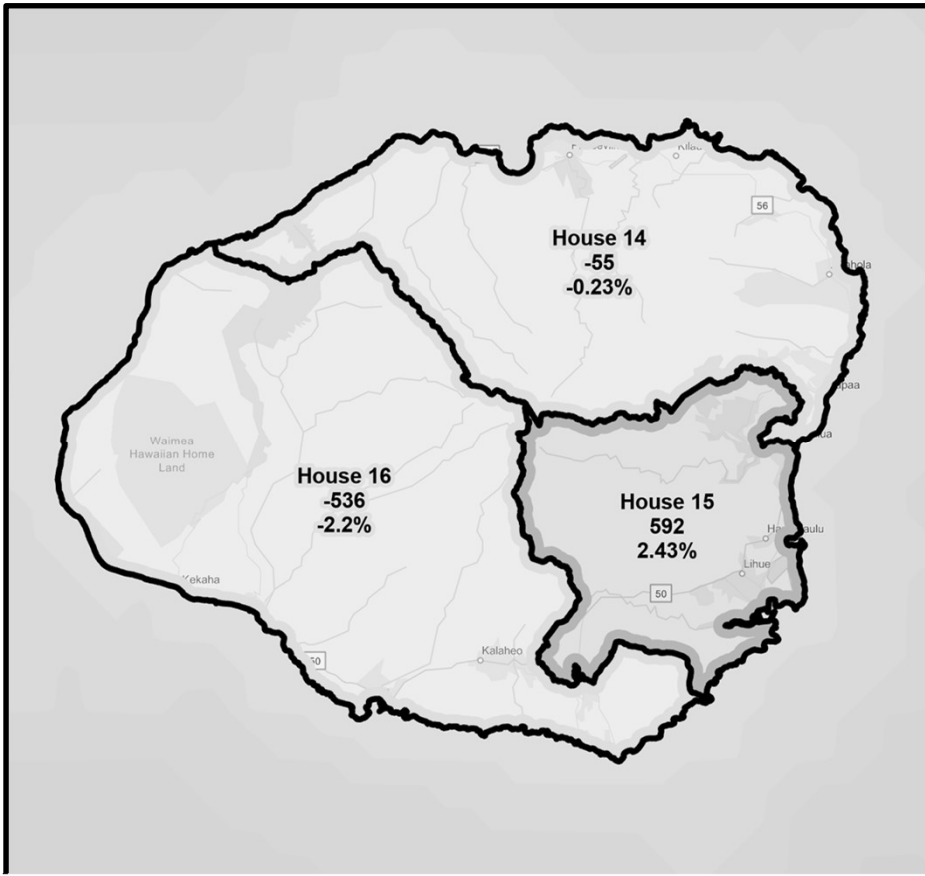
Technical Group

Present proposed legislative plans to Commission

Current (2011-2020)

4.63% → 0.48%

Proposed by Technical Group on 10/14



**OVERALL DEVIATION RANGE**

Plan: STATE HOUSE (current 2011-2020) districts	Plan Deviation:	4.63%
Kauai BIU (3 seats)	highest deviation:	2.43%
BIU target population 24,332 per district	lowest deviation:	-2.20%

**OVERALL DEVIATION RANGE**

Plan: STATE HOUSE (TG proposed 10/14) districts	Plan Deviation:	0.48%
Kauai BIU (3 seats)	highest deviation:	0.25%
BIU target population 24,332 per district	lowest deviation:	-0.23%

# Proposed Legislative Plans – Kauai House

## Redistricting

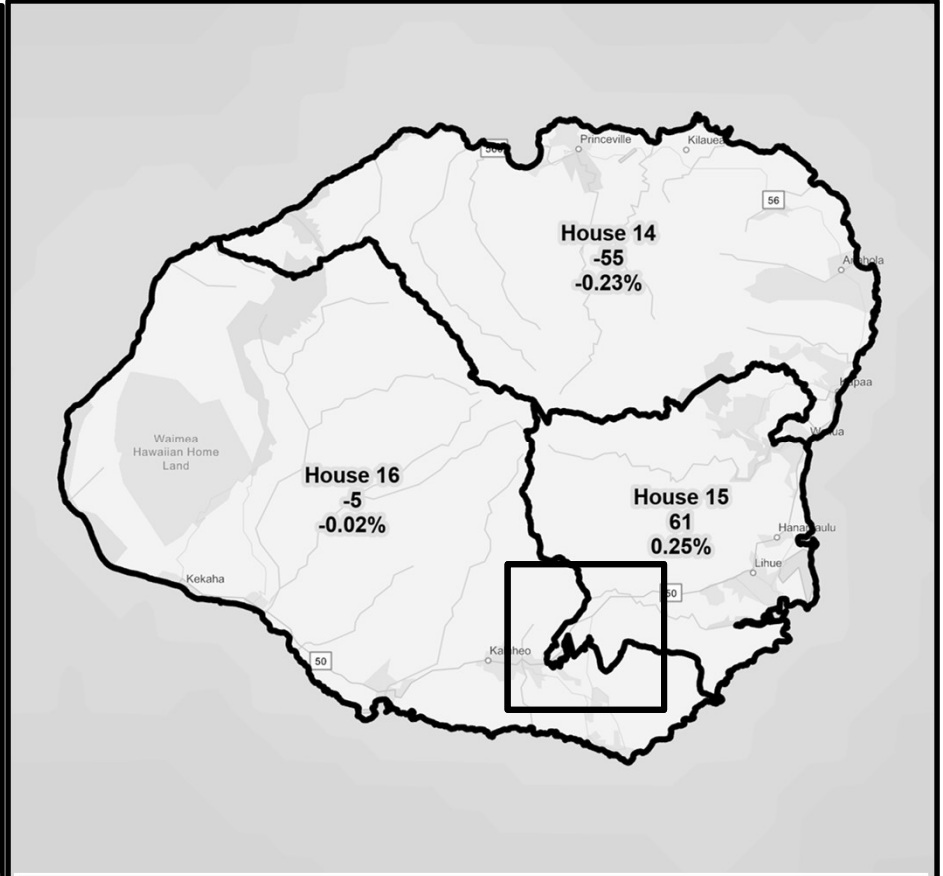
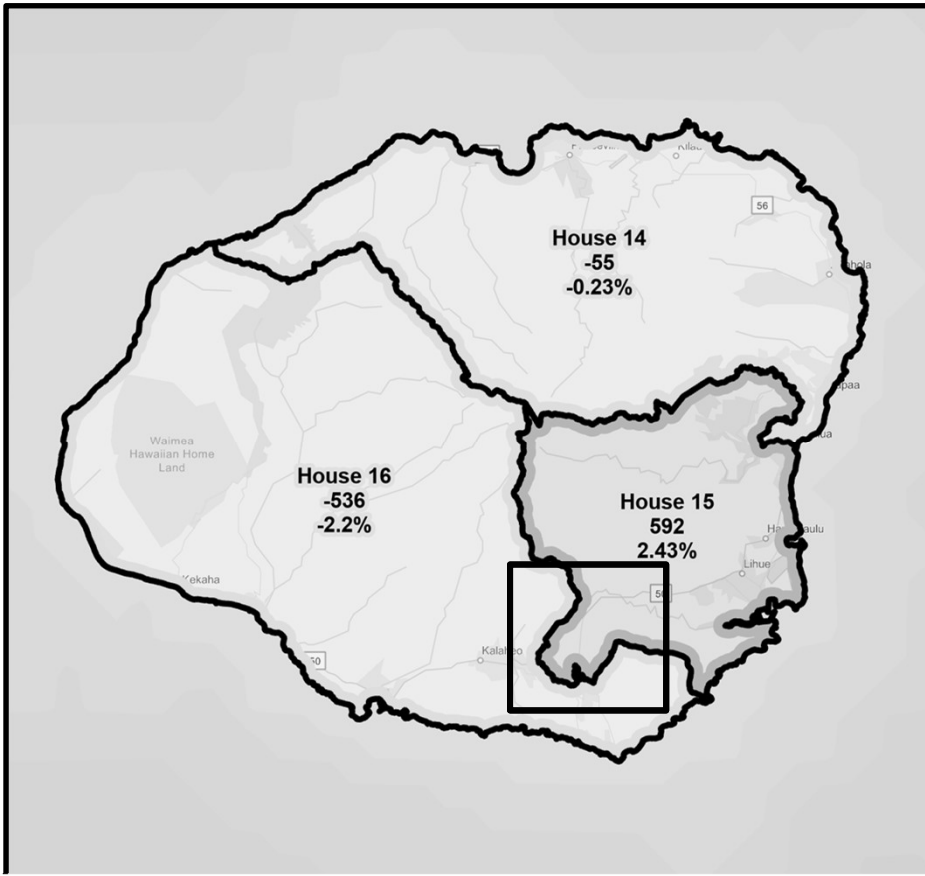
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# Proposed Legislative Plans – Kauai House

## Redistricting

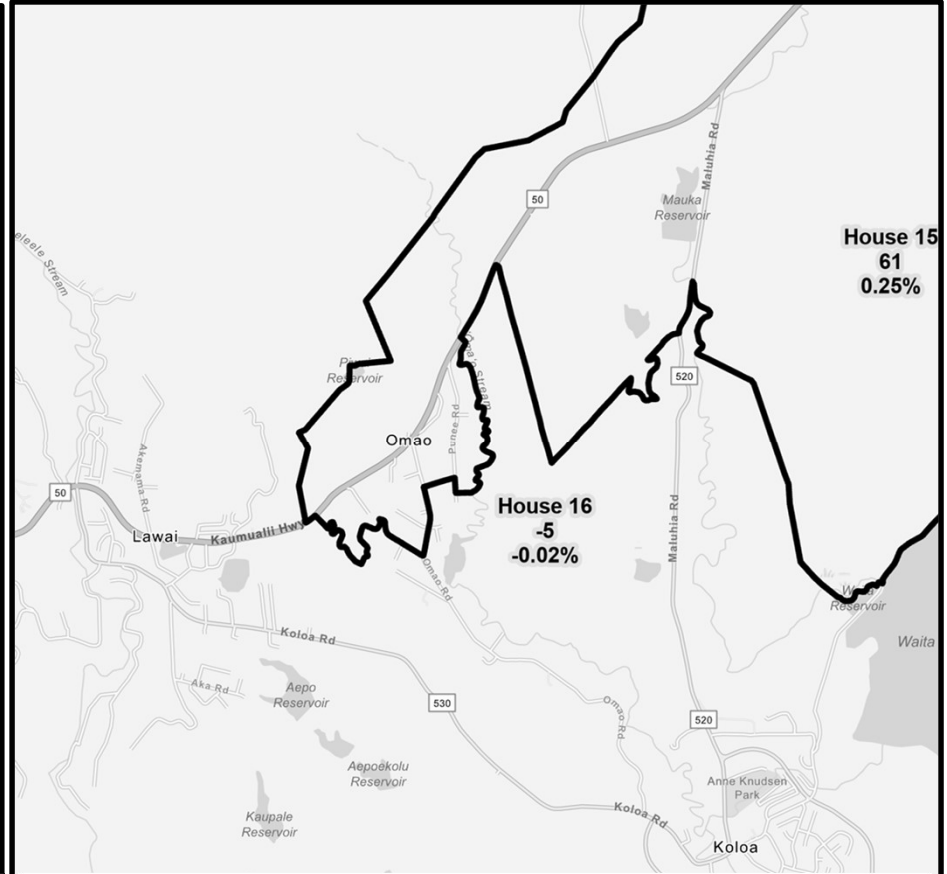
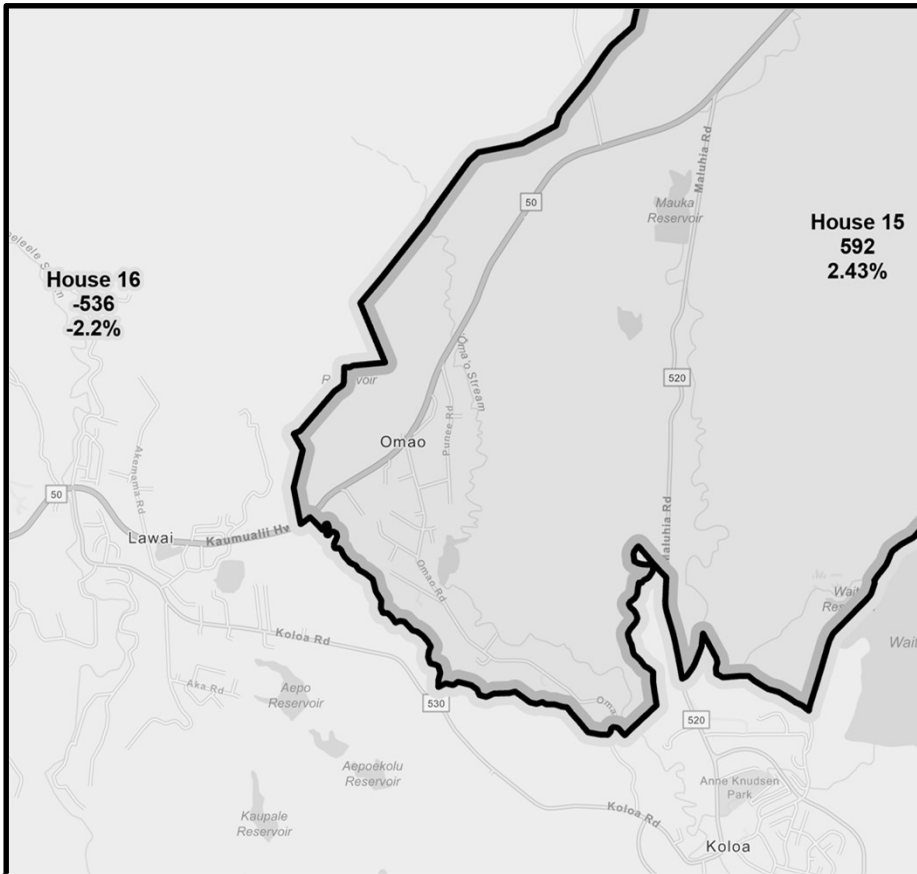
Technical Group

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**OVERALL DEVIATION RANGE**

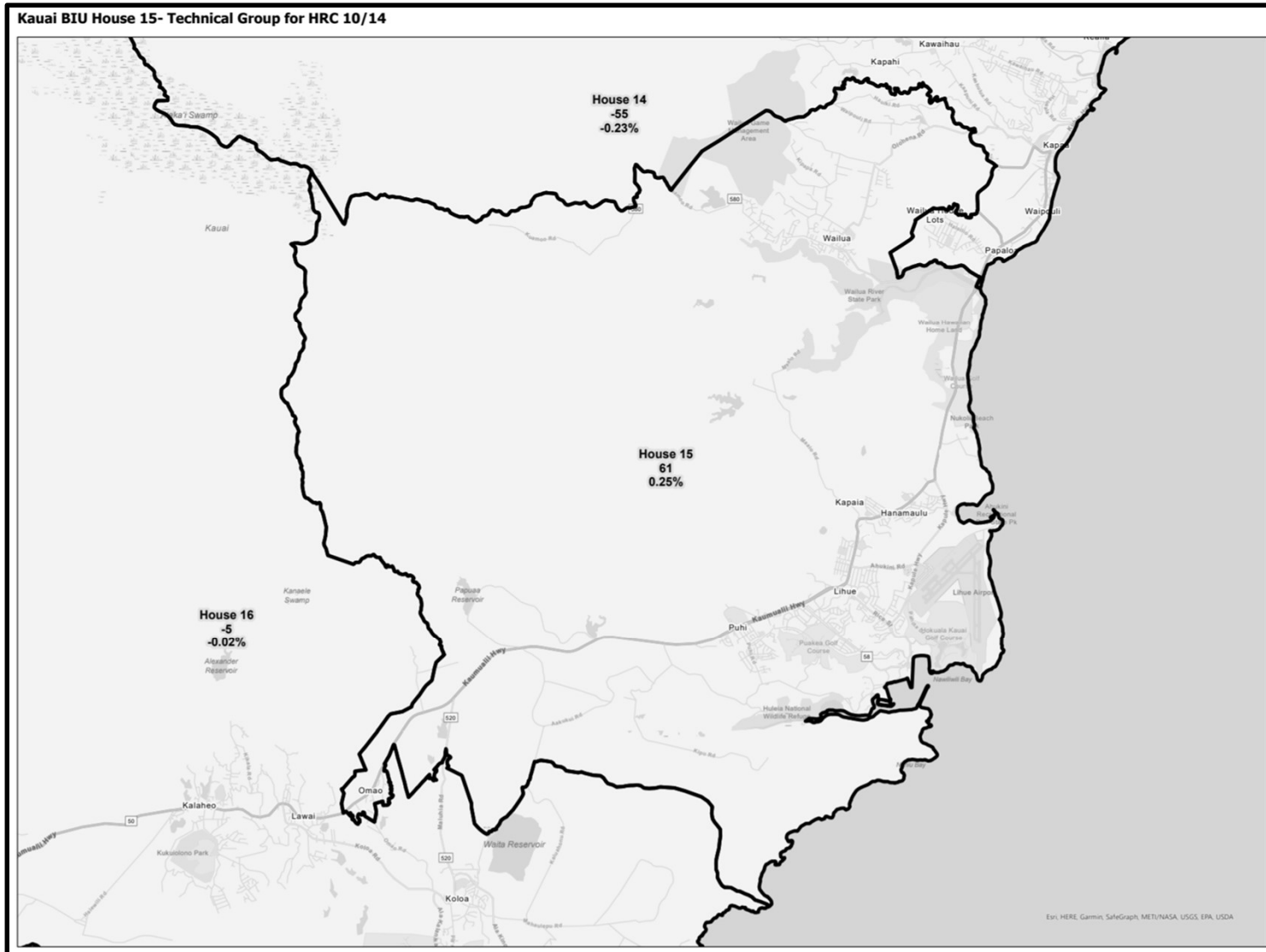
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# Proposed Legislative Plans – Kauai House

**Redistricting Technical Group Present proposed legislative plans to Commission**



# Proposed Legislative Plans – Maui Senate

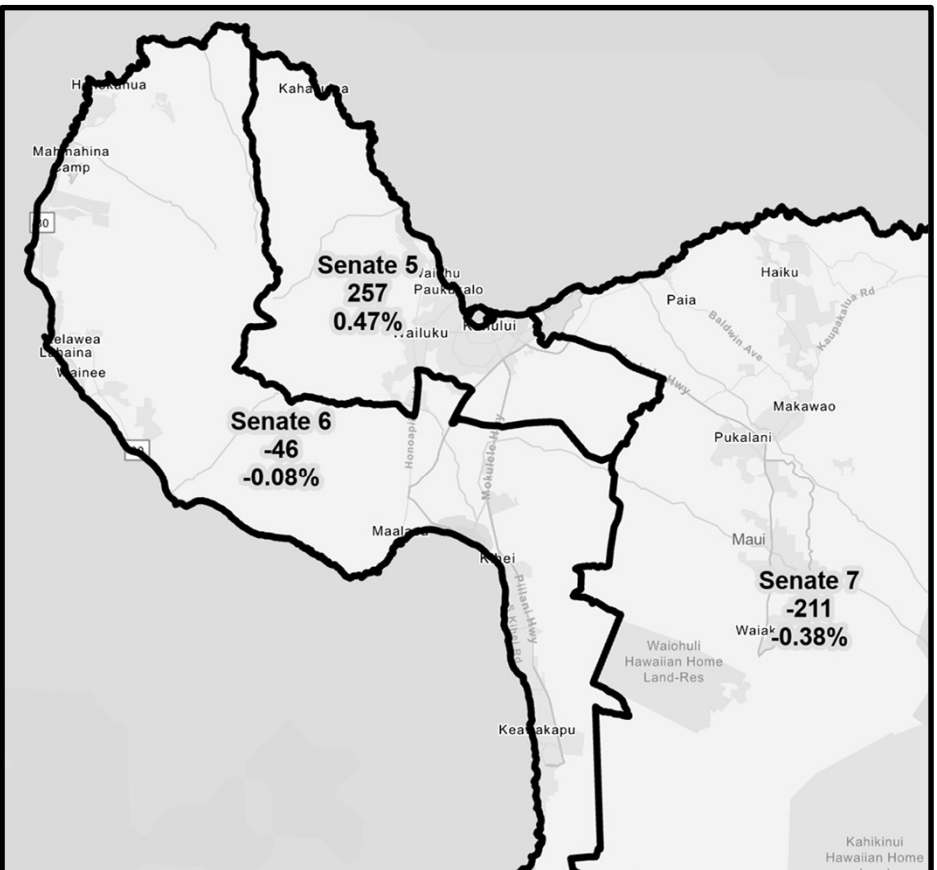
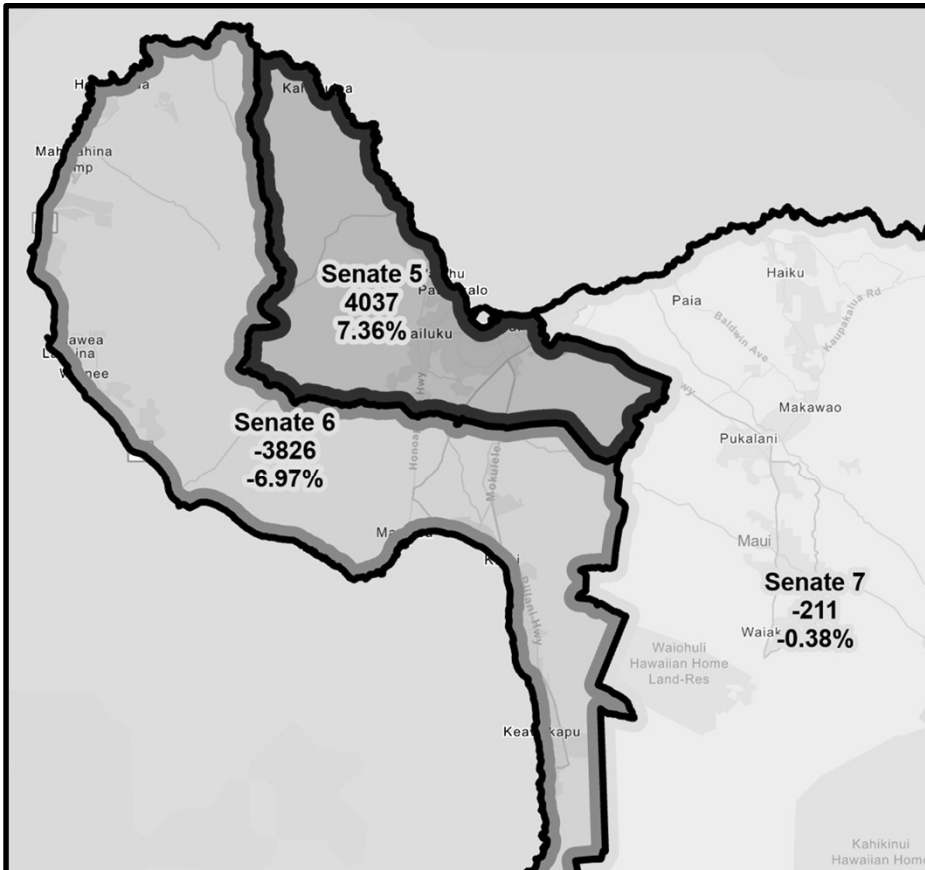
Redistricting  
Technical Group

Present proposed legislative plans to Commission

Current (2011-2020)

14.33% → 0.85%

Proposed by Technical Group on 10/14



OVERALL DEVIATION RANGE			
Plan: STATE SENATE (current 2011-2020) districts	Plan Deviation:	14.33%	
Maui BIU (3 seats)	highest deviation:	7.36%	
BIU target population	lowest deviation:	-6.97%	
		54,870	per district

OVERALL DEVIATION RANGE		BASIC ISLAND UNIT TARGETS	
Plan: STATE SENATE (TG proposed 10/14) districts	Plan Deviation:	0.85%	
Maui BIU (3 seats)	highest deviation:	0.47%	
BIU target population	lowest deviation:	-0.38%	
		54,870	per district

# Proposed Legislative Plans – Maui Senate

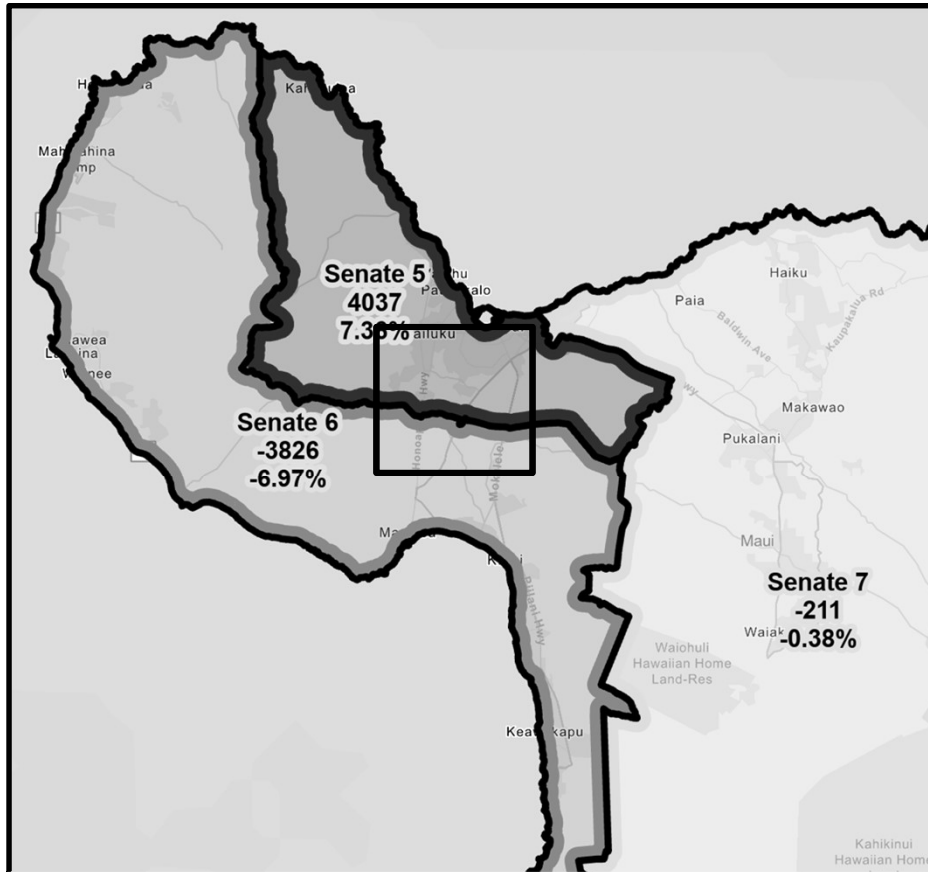
Redistricting  
Technical Group

Present proposed legislative plans to Commission

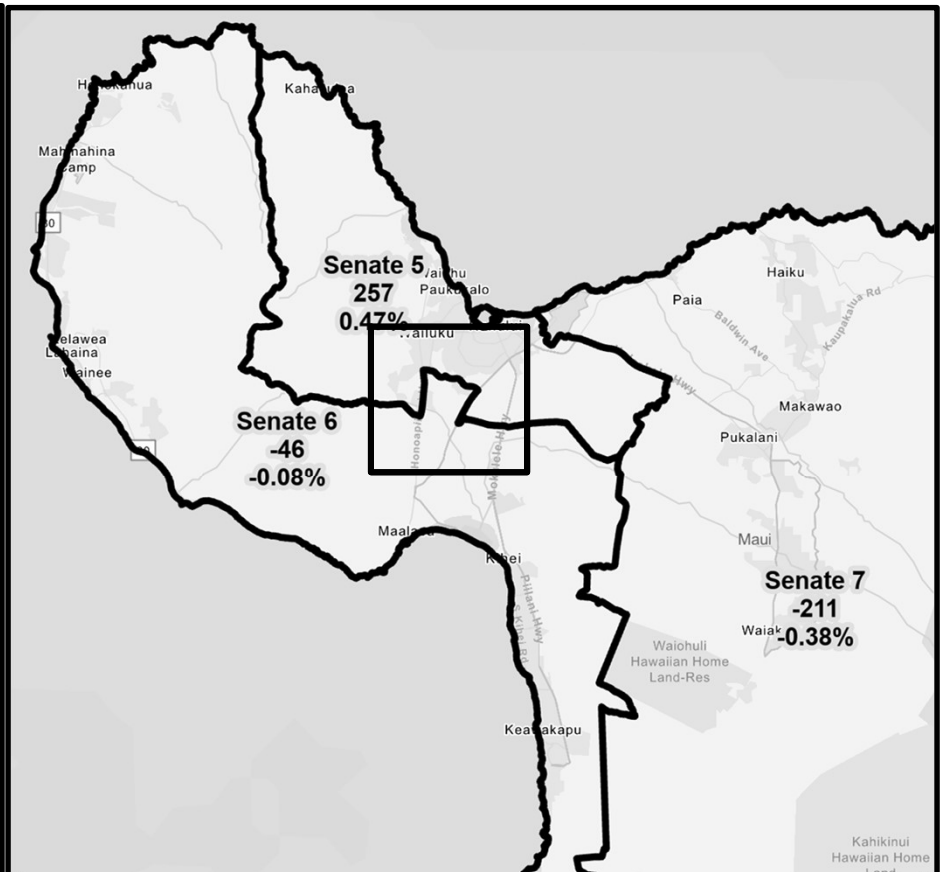
Current (2011-2020)

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Proposed by Technical Group on 10/14



OVERALL DEVIATION RANGE			
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# Proposed Legislative Plans – Maui Senate

## Redistricting

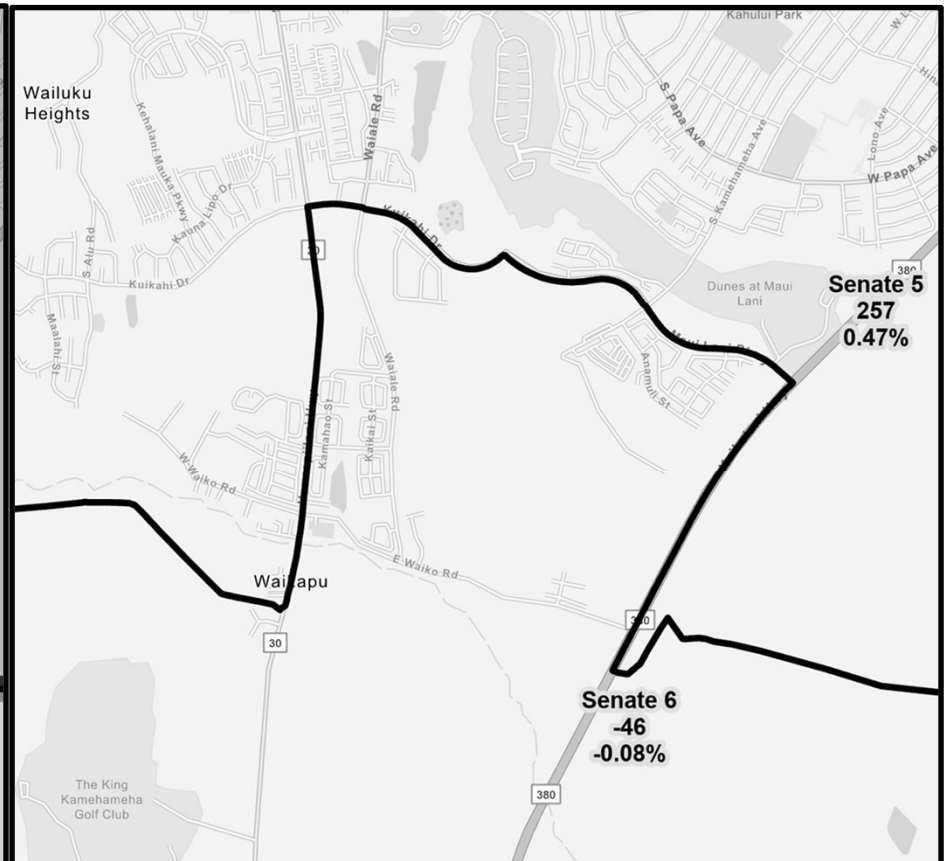
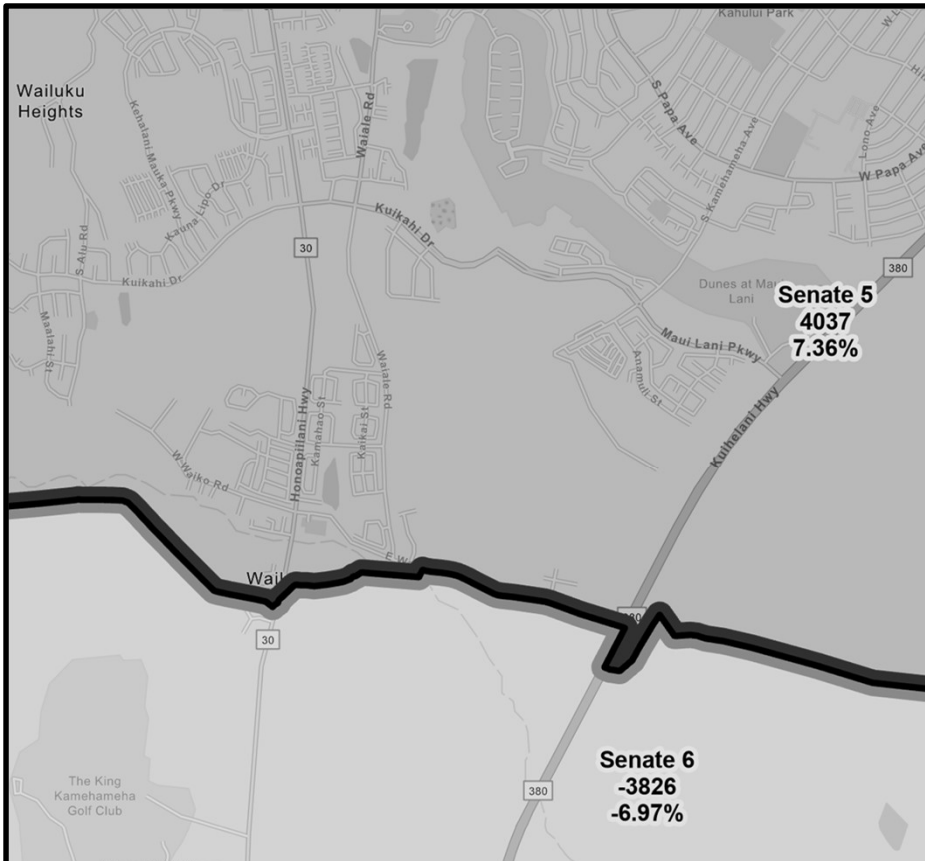
Technical Group

Present proposed legislative plans to Commission

Current (2011-2020)

14.33% → 0.85%

Proposed by Technical Group on 10/14



OVERALL DEVIATION RANGE		
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BIU target population 54,870 per district	lowest deviation:	-6.97%

OVERALL DEVIATION RANGE		BASIC ISLAND UNIT TARGETS	
Plan: STATE SENATE (TG proposed 10/14) districts	Plan Deviation:		0.85%
Maui BIU (3 seats)	highest deviation:		0.47%
BIU target population 54,870 per district	lowest deviation:		-0.38%





# Proposed Legislative Plans – Maui House

## Redistricting

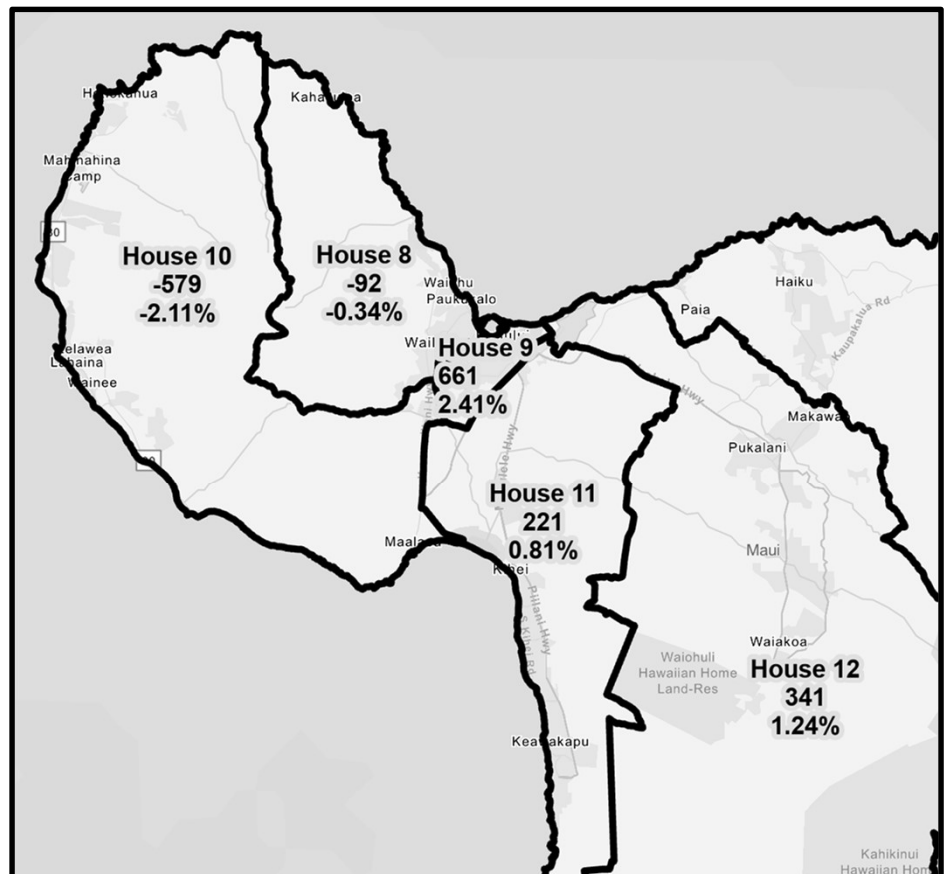
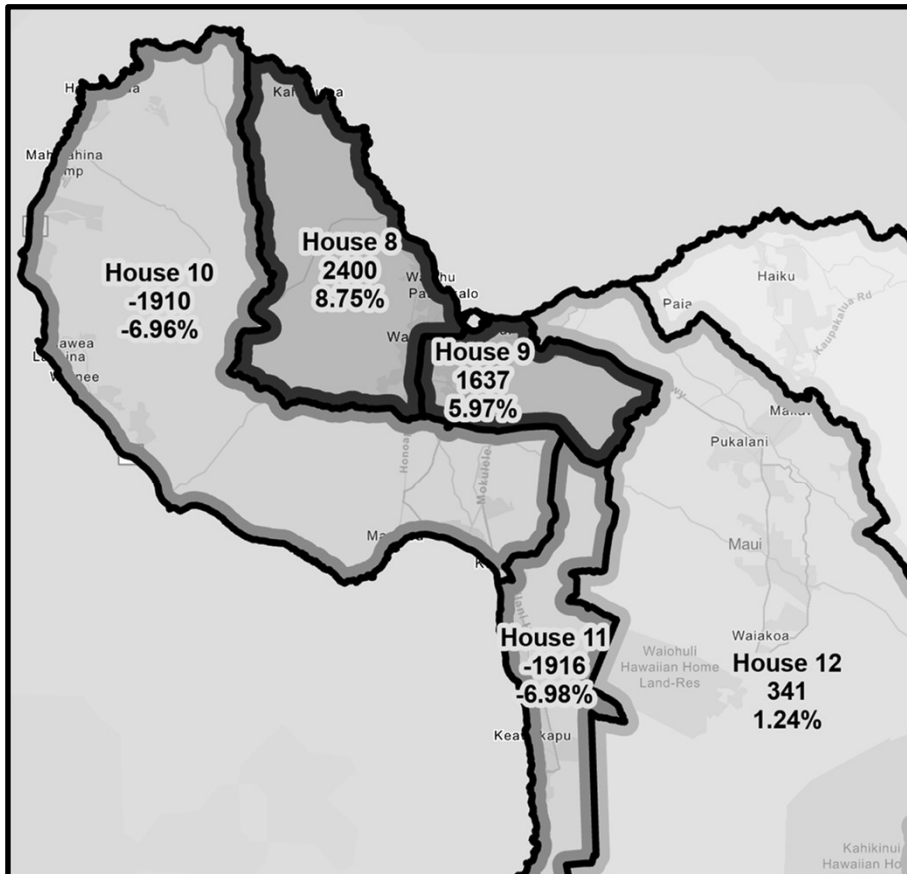
Technical Group

Present proposed legislative plans to Commission

Current (2011-2020)

15.73% → 4.52%

Proposed by Technical Group on 10/14



**OVERALL DEVIATION RANGE**

Plan: STATE HOUSE (current 2011-2020) districts	Plan Deviation:	15.73%
Maui BIU (6 seats)	highest deviation:	8.75%
BIU target population 27,435 per district	lowest deviation:	-6.98%

**OVERALL DEVIATION RANGE**

Plan: STATE HOUSE (TG proposed 10/14) districts	Plan Deviation:	4.52%
Maui BIU (6 seats)	highest deviation:	2.41%
BIU target population 27,435 per district	lowest deviation:	-2.11%

# Proposed Legislative Plans – Maui House

## Redistricting

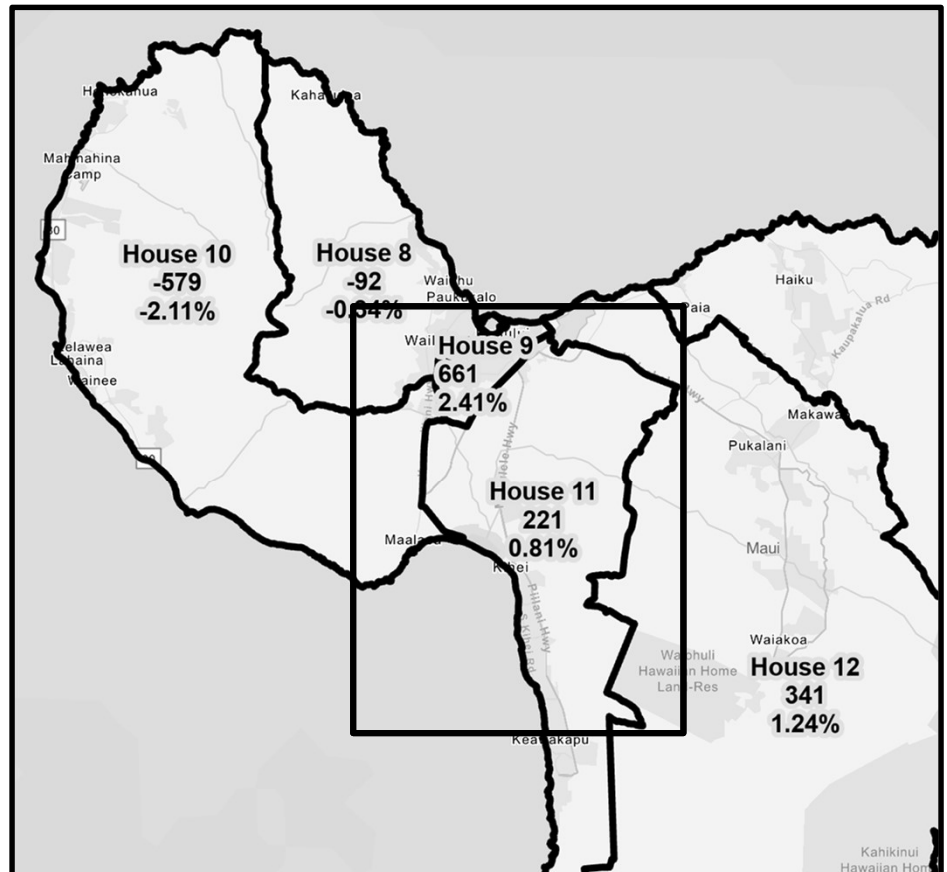
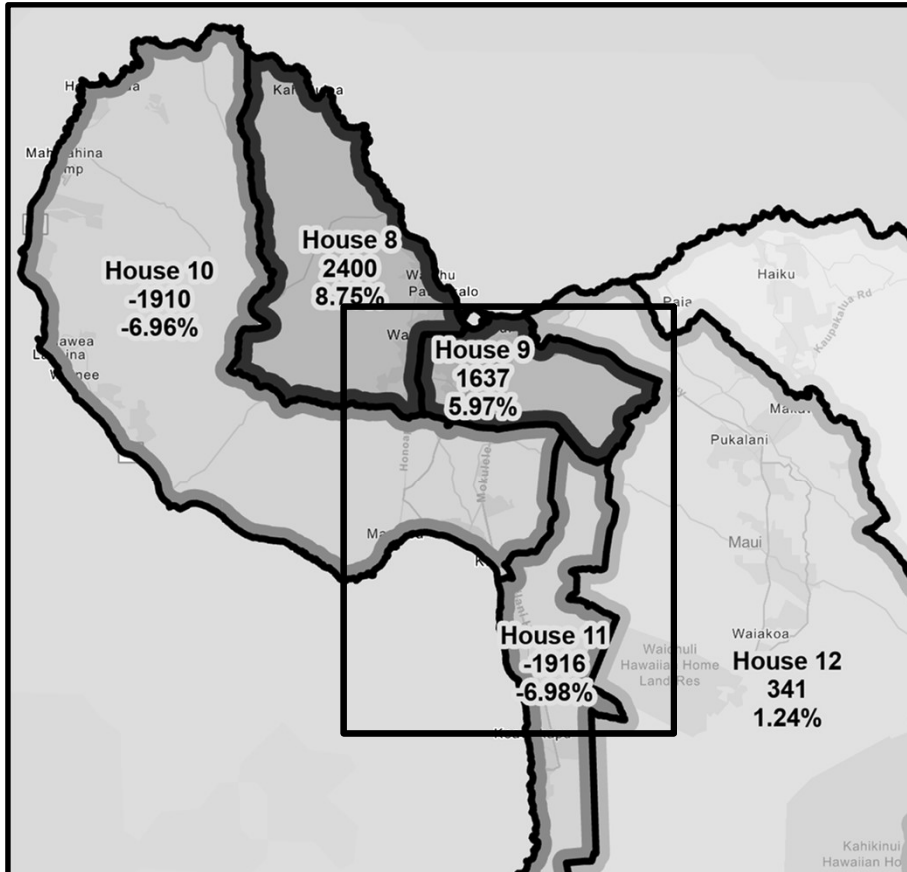
Technical Group

Present proposed legislative plans to Commission

Current (2011-2020)

15.73% → 4.52%

Proposed by Technical Group on 10/14



OVERALL DEVIATION RANGE			
Plan: STATE HOUSE (current 2011-2020) districts	Plan Deviation:	15.73%	
Maui BIU (6 seats)	highest deviation:	8.75%	
BIU target population	lowest deviation:	-6.98%	
		27,435	per district

OVERALL DEVIATION RANGE			
Plan: STATE HOUSE (TG proposed 10/14) districts	Plan Deviation:	4.52%	
Maui BIU (6 seats)	highest deviation:	2.41%	
BIU target population	lowest deviation:	-2.11%	
		27,435	per district

# Proposed Legislative Plans – Maui House

## Redistricting

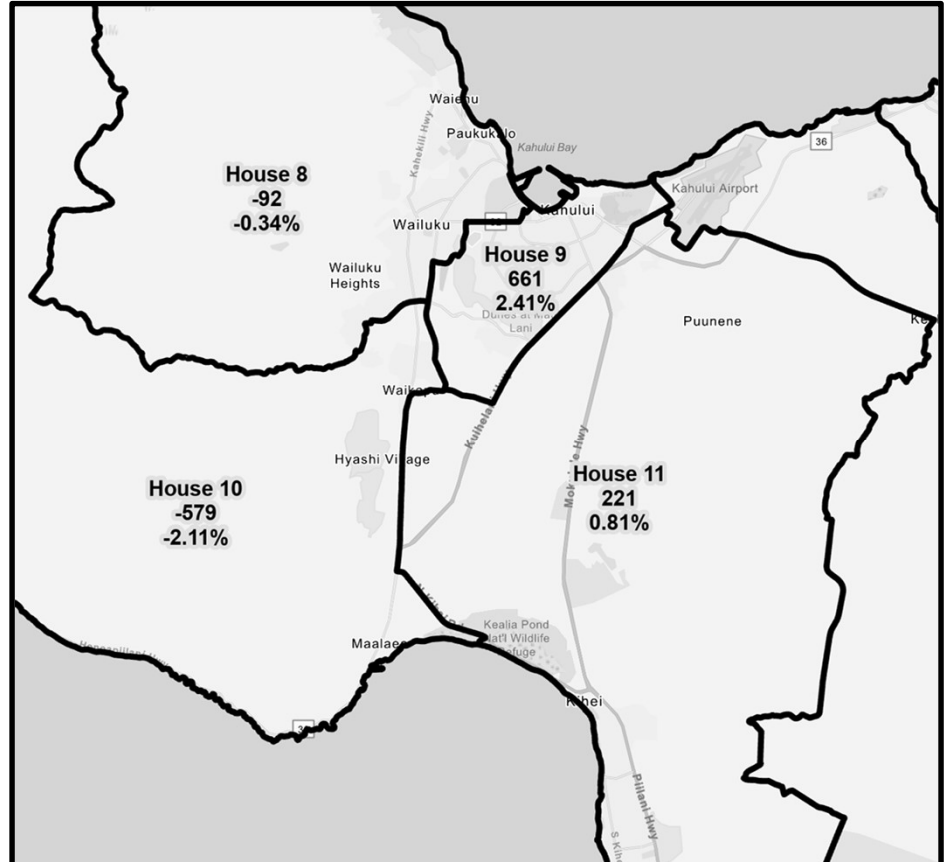
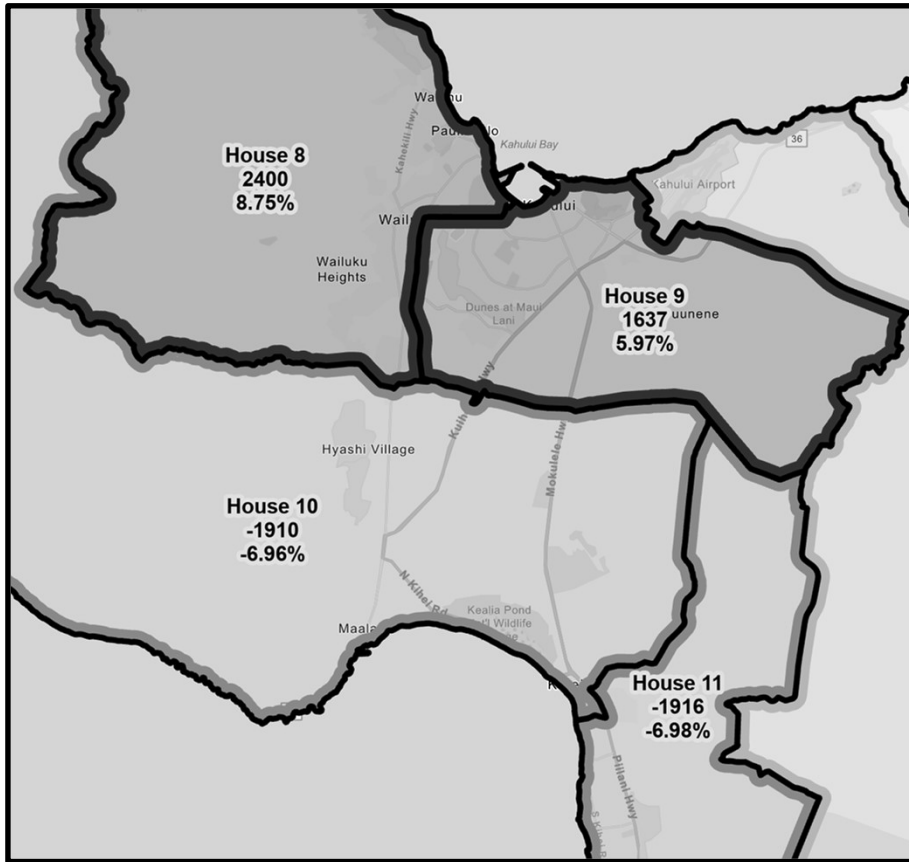
Technical Group

Present proposed legislative plans to Commission

Current (2011-2020)

15.73% → 4.52%

Proposed by Technical Group on 10/14



**OVERALL DEVIATION RANGE**

Plan: STATE HOUSE (current 2011-2020) districts	Plan Deviation:	15.73%
Maui BIU (6 seats)	highest deviation:	8.75%
BIU target population 27,435 per district	lowest deviation:	-6.98%

**OVERALL DEVIATION RANGE**

Plan: STATE HOUSE (TG proposed 10/14) districts	Plan Deviation:	4.52%
Maui BIU (6 seats)	highest deviation:	2.41%
BIU target population 27,435 per district	lowest deviation:	-2.11%



# Proposed Legislative Plans – Hawaii Senate

## Redistricting

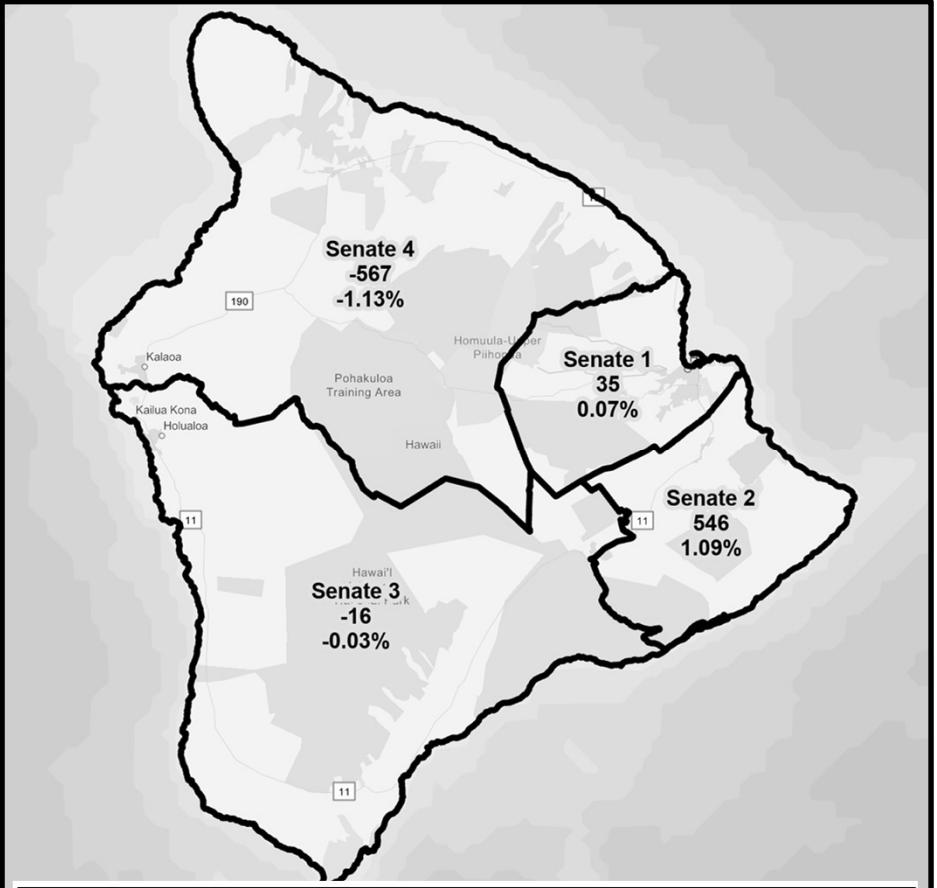
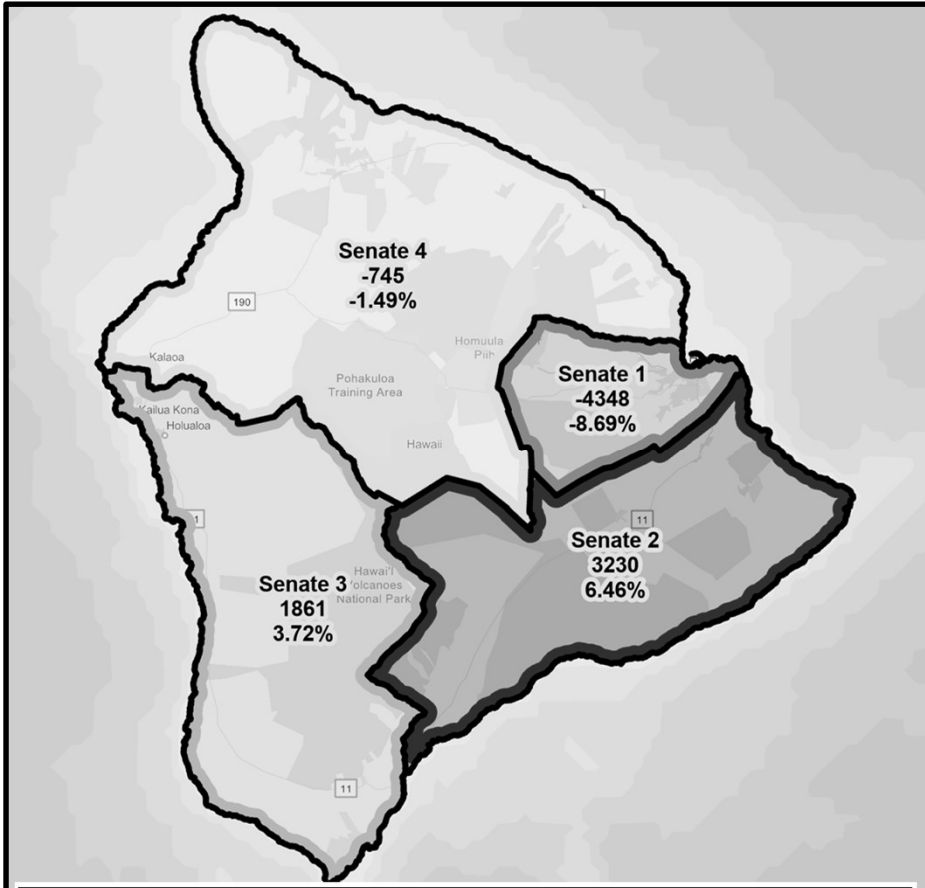
Technical Group

Present proposed legislative plans to Commission

Current (2011-2020)

15.15% → 2.22%

Proposed by Technical Group on 10/14



OVERALL DEVIATION RANGE			
Plan: STATE SENATE (current 2011-2020) districts	Plan Deviation:	15.15%	
Hawaii BIU (4 seats)	highest deviation:	6.46%	
BIU target population	lowest deviation:	-8.69%	
		50,023	per district

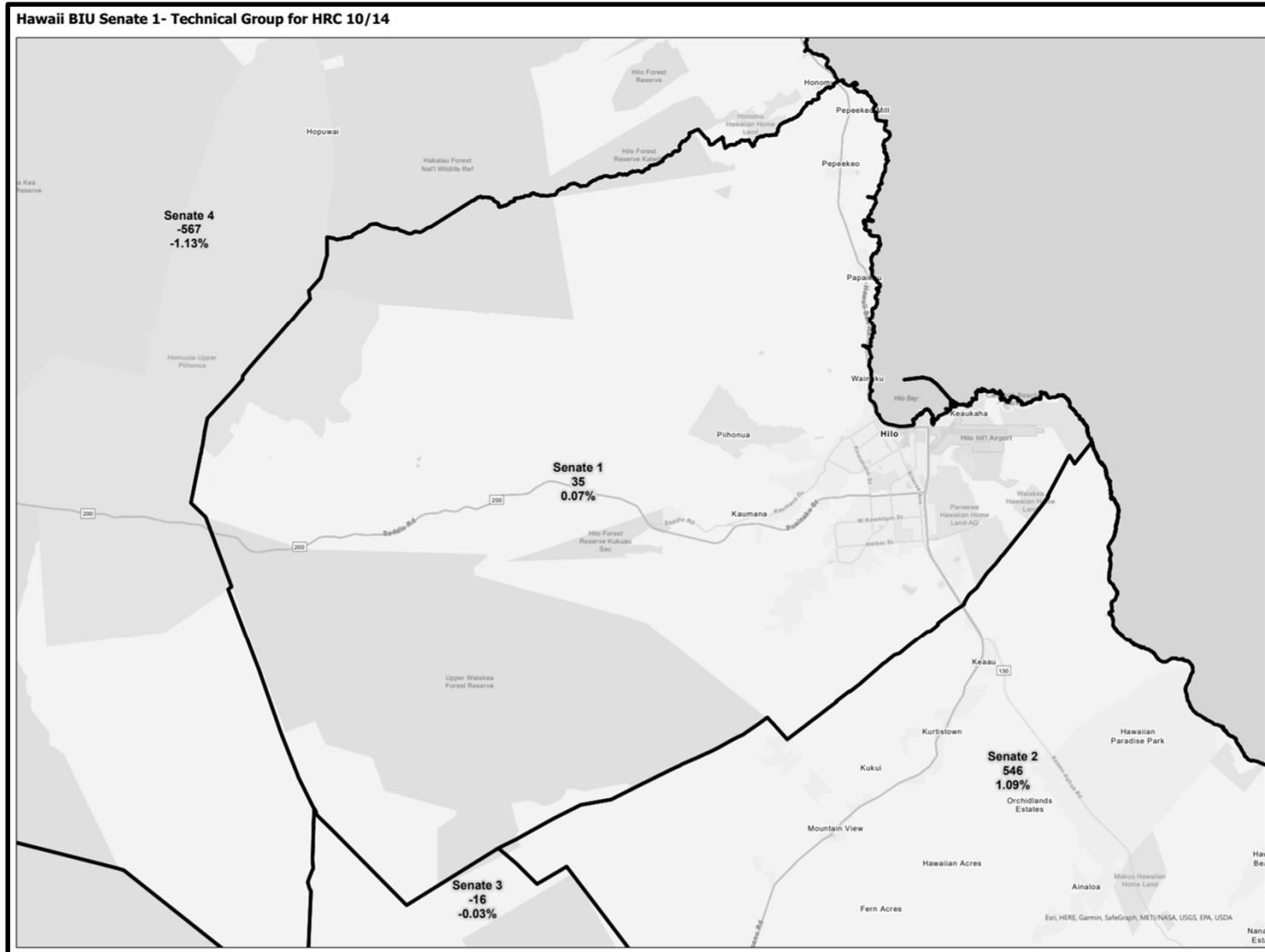
OVERALL DEVIATION RANGE		BASIC ISLAND UNIT TARGETS	
Plan: STATE SENATE (TG proposed 10/14) districts	Plan Deviation:	2.22%	
Hawaii BIU (4 seats)	highest deviation:	1.09%	
BIU target population	lowest deviation:	-1.13%	
		50,023	per district

# Proposed Legislative Plans – Hawaii Senate

## Redistricting

Technical Group

Present proposed legislative plans to Commission



# Proposed Legislative Plans – Hawaii House

## Redistricting

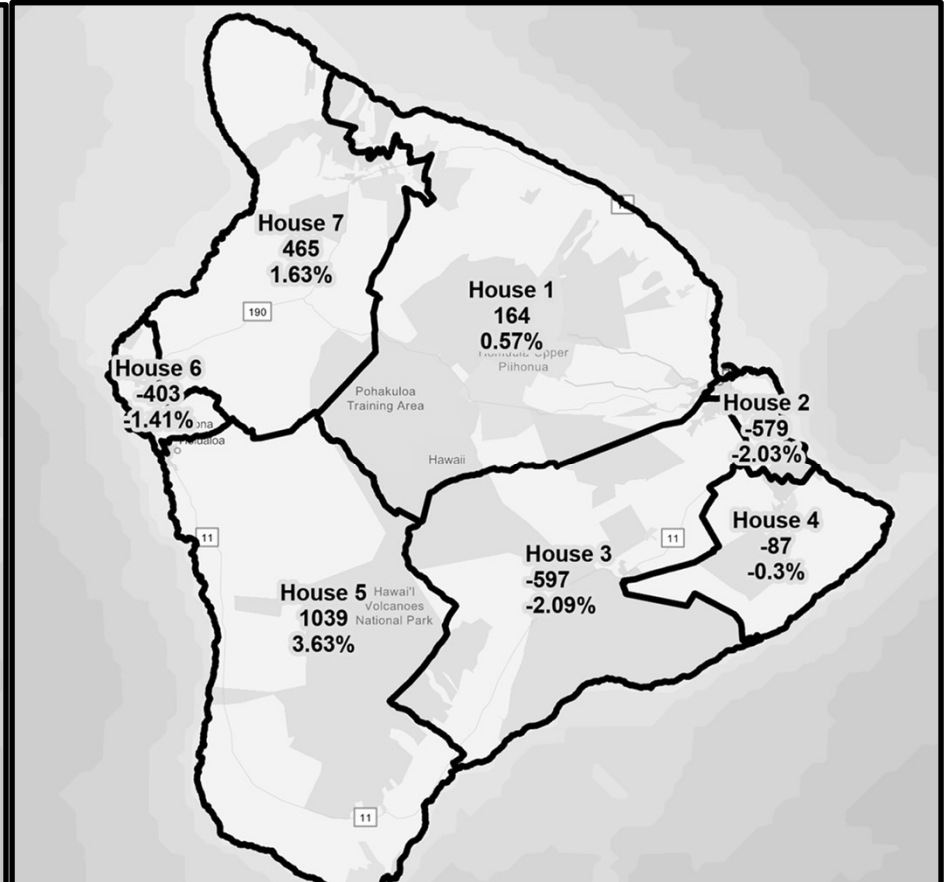
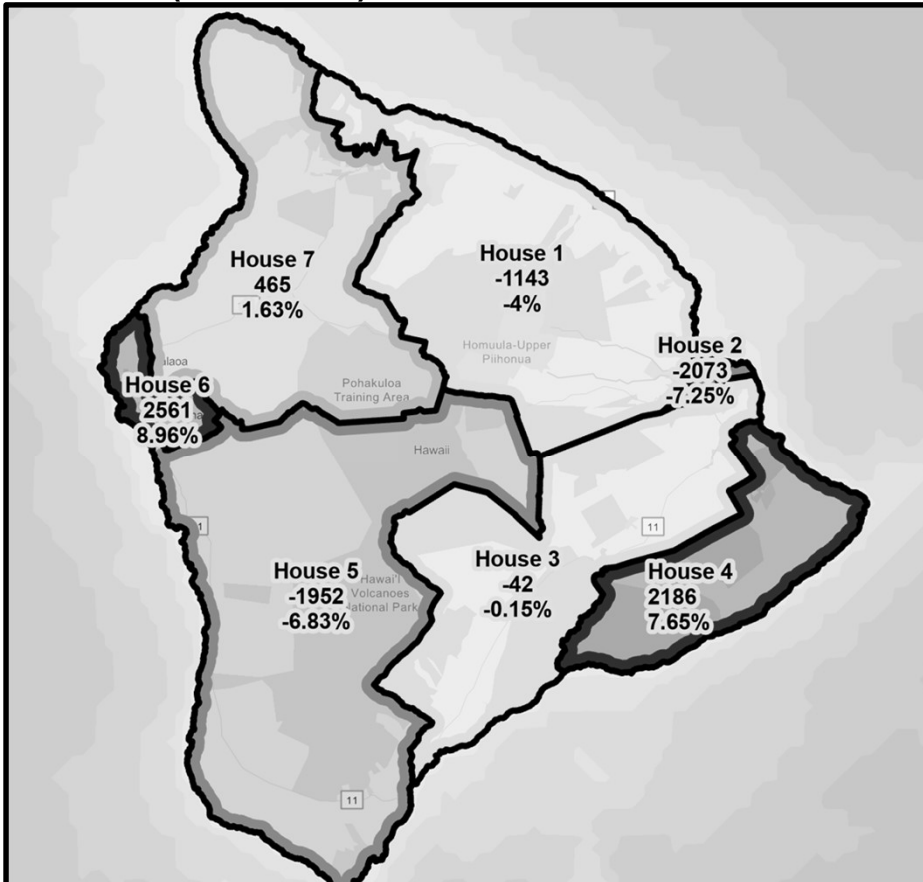
Technical Group

Present proposed legislative plans to Commission

Current (2011-2020)

16.21% → 5.72%

Proposed by Technical Group on 10/14



**OVERALL DEVIATION RANGE**

Plan: STATE HOUSE (current 2011-2020) districts	Plan Deviation:	16.21%
Hawaii BIU (7 seats)	highest deviation:	8.96%
BIU target population 28,584 per district	lowest deviation:	-7.25%

**OVERALL DEVIATION RANGE**

Plan: STATE HOUSE (TG proposed 10/14) districts	Plan Deviation:	5.72%
Hawaii BIU (7 seats)	highest deviation:	3.63%
BIU target population 28,584 per district	lowest deviation:	-2.09%

# Proposed Legislative Plans – Hawaii House

## Redistricting

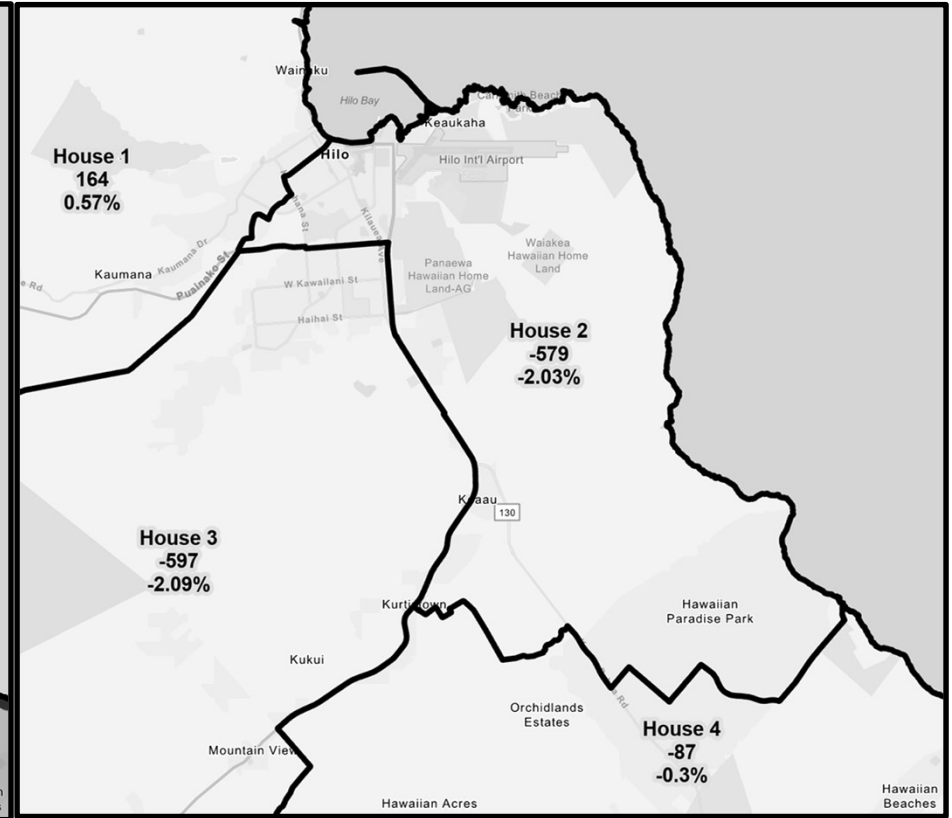
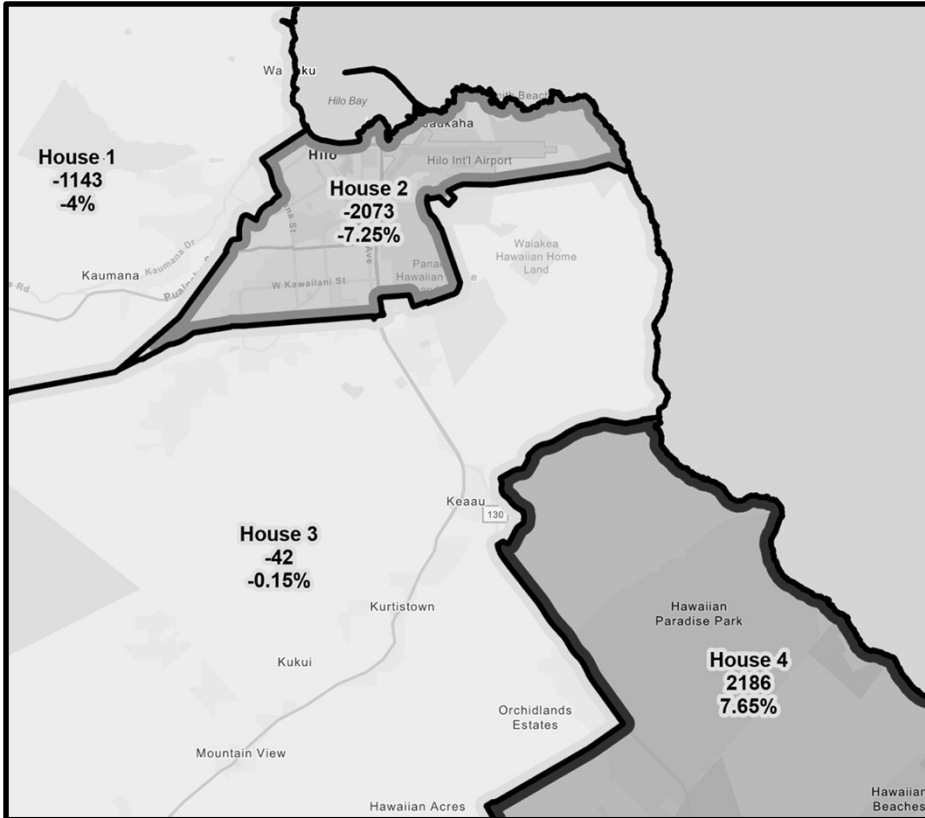
Technical Group

Present proposed legislative plans to Commission

Current (2011-2020)

16.21% → 5.72%

Proposed by Technical Group on 10/14



OVERALL DEVIATION RANGE			
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OVERALL DEVIATION RANGE			
Plan: STATE HOUSE (TG proposed 10/14) districts	Plan Deviation:	5.72%	
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BIU target population 28,584 per district	lowest deviation:	-2.09%	



# Proposed Legislative Plans – Hawaii House

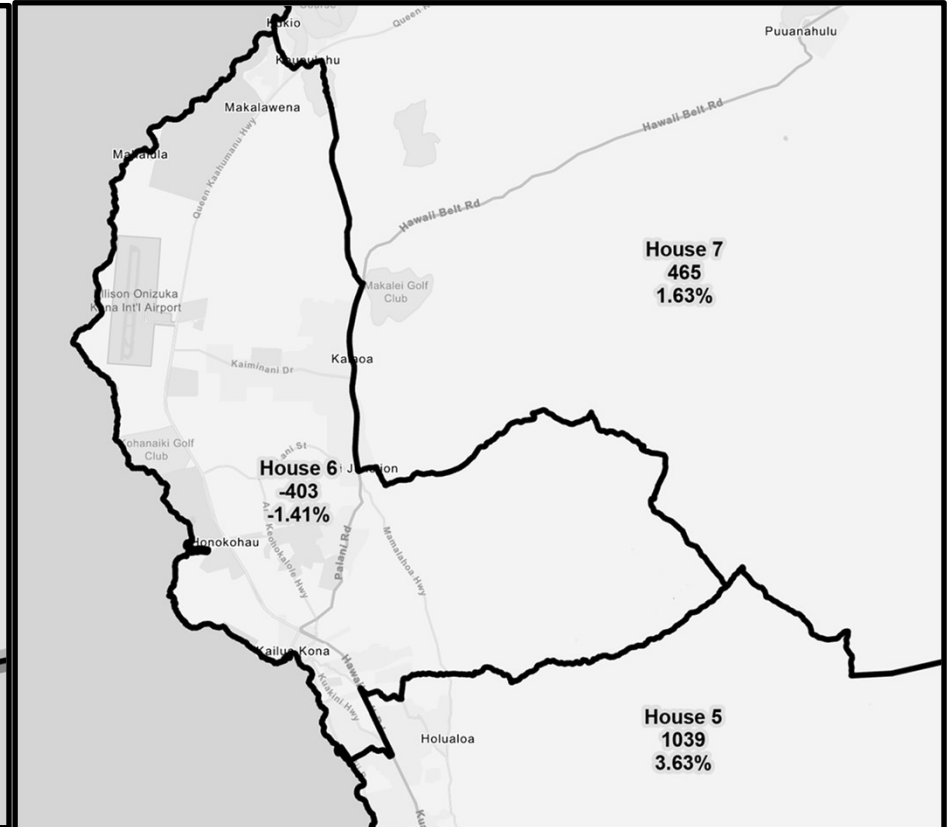
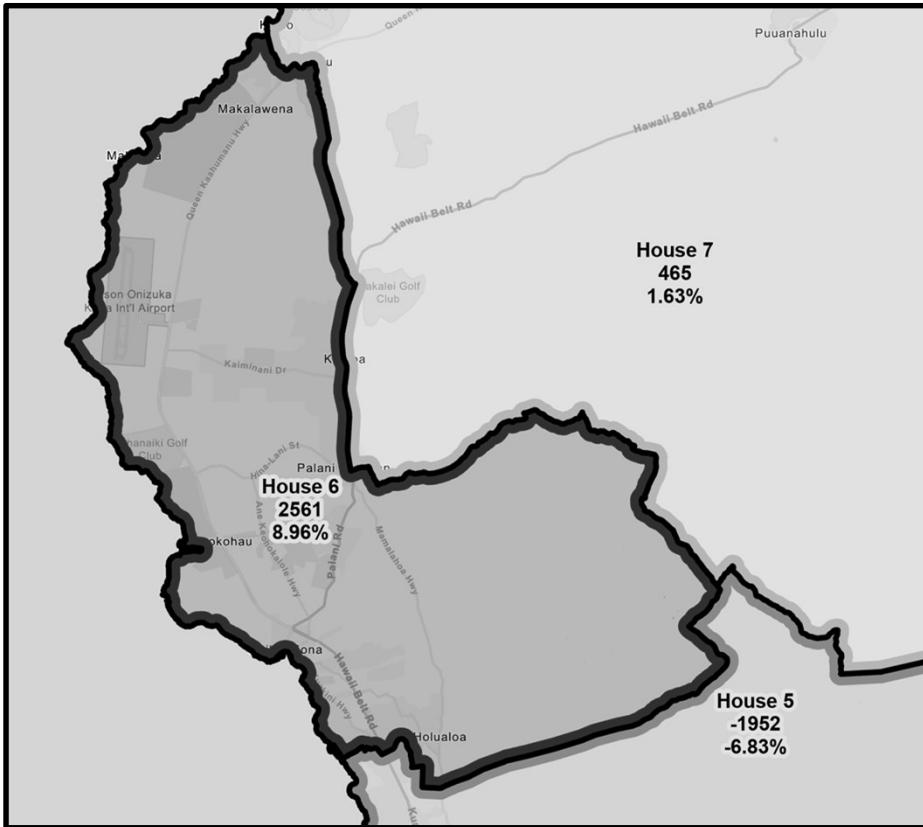
**Redistricting  
Technical Group**

Present proposed legislative plans to Commission

**Current (2011-2020)**

**16.21% → 5.72%**

**Proposed by Technical Group on 10/14**



OVERALL DEVIATION RANGE			
Plan: STATE HOUSE (current 2011-2020) districts	Plan Deviation:	16.21%	
Hawaii BIU (7 seats)	highest deviation:	8.96%	
BIU target population	lowest deviation:	-7.25%	
		28,584	per district

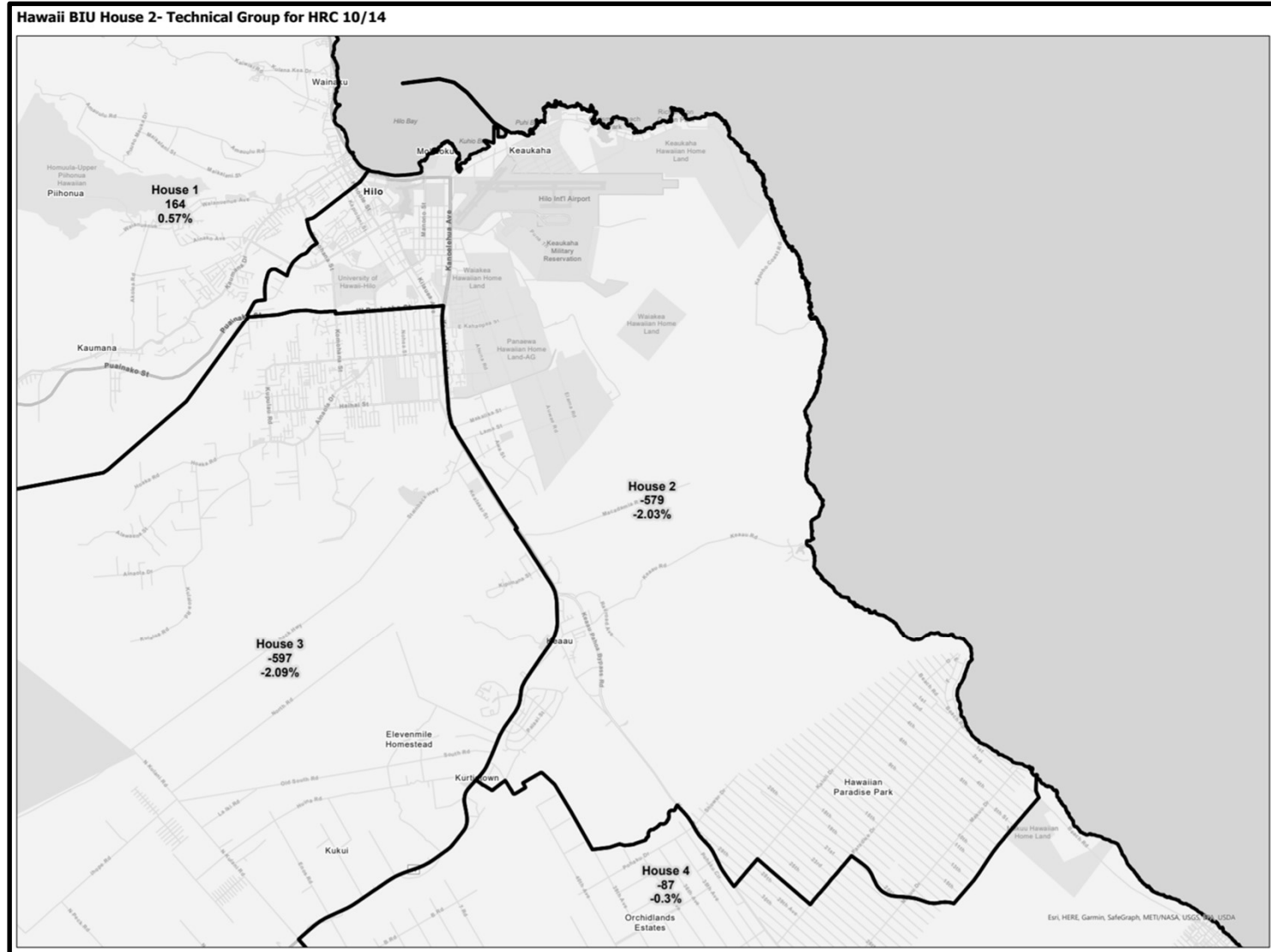
OVERALL DEVIATION RANGE			
Plan: STATE HOUSE (TG proposed 10/14) districts	Plan Deviation:	5.72%	
Hawaii BIU (7 seats)	highest deviation:	3.63%	
BIU target population	lowest deviation:	-2.09%	
		28,584	per district

# Proposed Legislative Plans – Hawaii House

## Redistricting

Technical Group

Present proposed legislative plans to Commission



# Proposed Legislative Plans – Oahu Senate

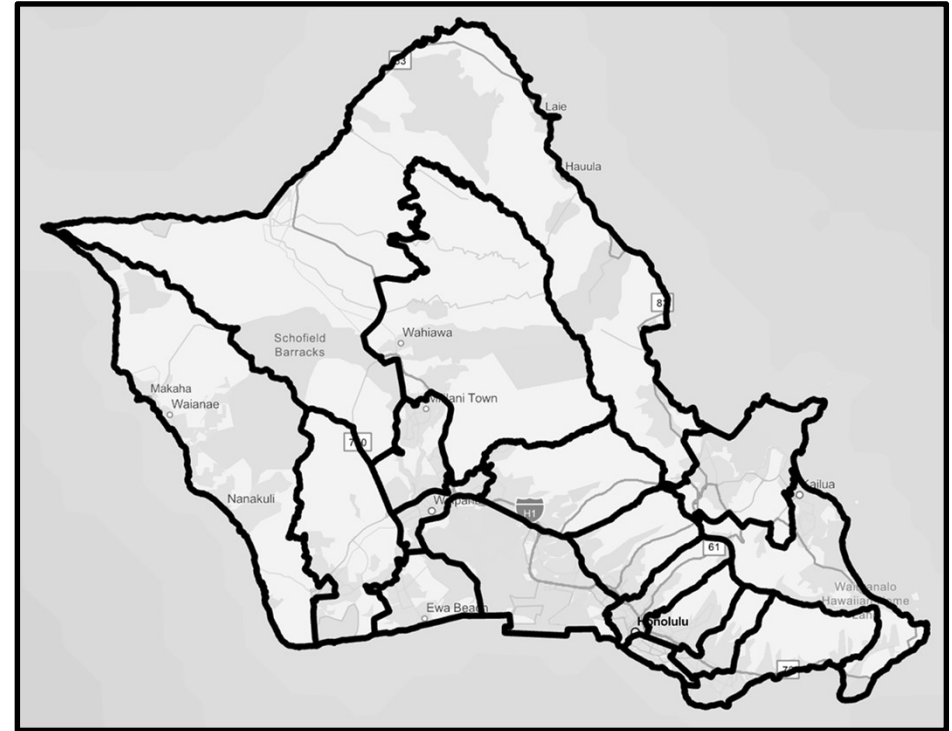
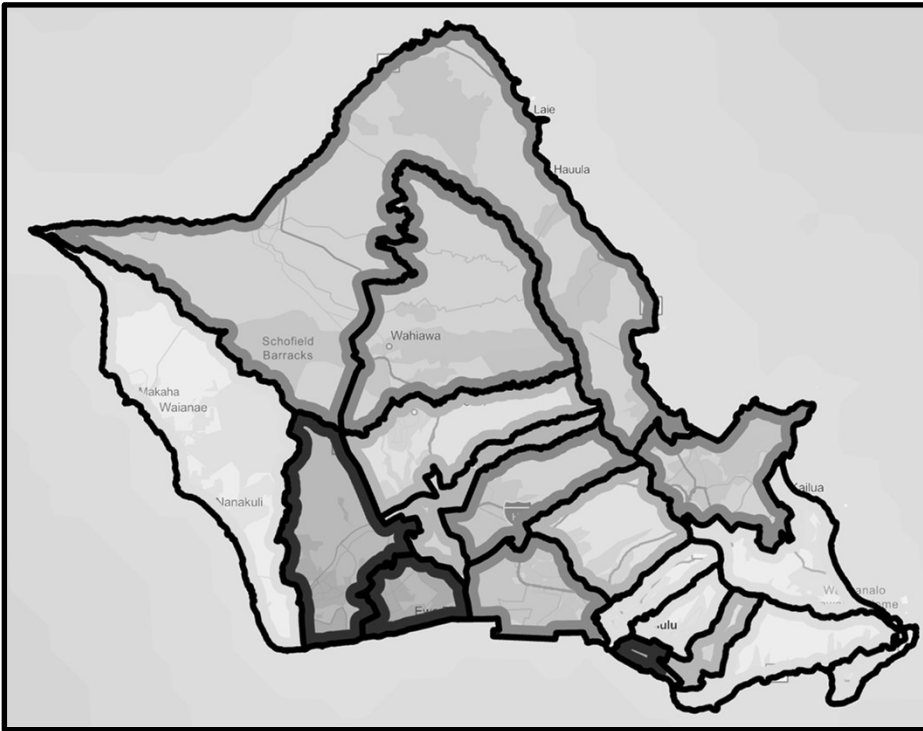
## Redistricting Technical Group

Present proposed legislative plans to Commission

Current (2011-2020)

30.72% → 7.93%

Proposed by Technical Group on 10/14



**OVERALL DEVIATION RANGE**

Plan: STATE SENATE (current 2011-2020) districts  
Oahu BIU (17 seats)  
BIU target population 55,642 per district

Plan Deviation: 30.72%  
highest deviation: 15.35%  
lowest deviation: -15.37%

**OVERALL DEVIATION RANGE**

Plan: STATE SENATE (TG proposed 10/14) districts  
Oahu BIU (17 seats)  
BIU target population 55,642 per district

**BASIC ISLAND UNIT TARGETS**

Plan Deviation: 7.93%  
highest deviation: 3.83%  
lowest deviation: -4.10%

# Proposed Legislative Plans – Oahu Senate

## Redistricting

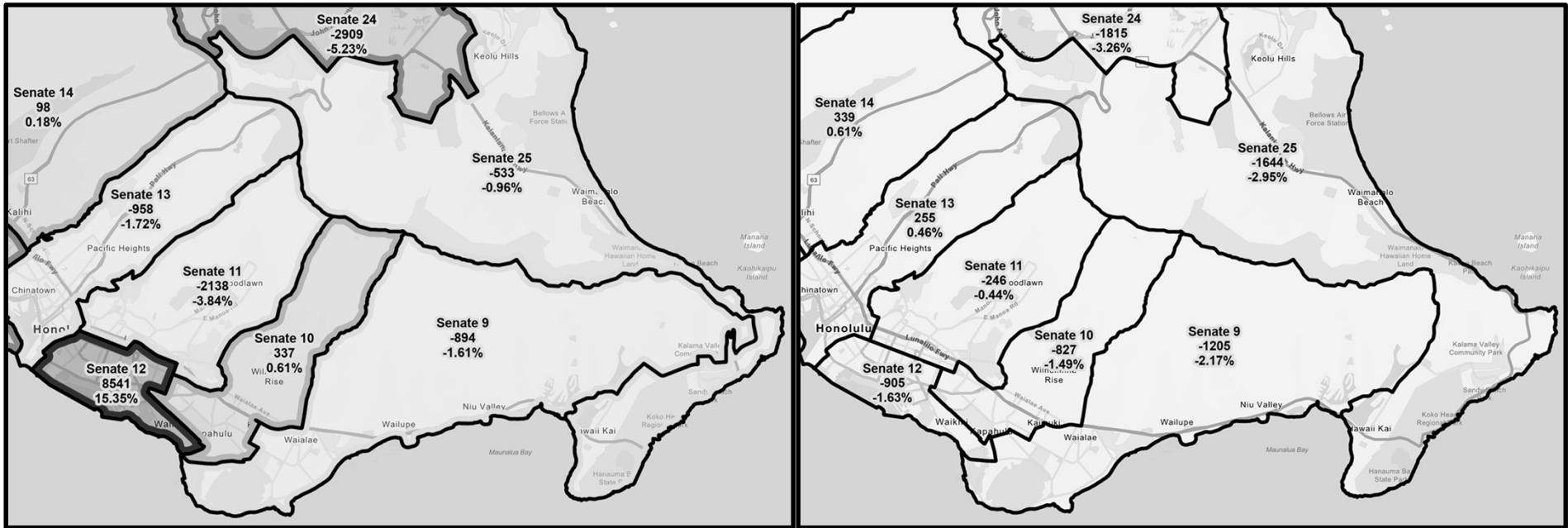
Technical Group

Present proposed legislative plans to Commission

Current (2011-2020)

30.72% → 7.93%

Proposed by Technical Group on 10/14



OVERALL DEVIATION RANGE			
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BIU target population	lowest deviation:	-15.37%	55,642 per district

OVERALL DEVIATION RANGE		BASIC ISLAND UNIT TARGETS	
Plan: STATE SENATE (TG proposed 10/14) districts	Plan Deviation:	7.93%	
Oahu BIU (17 seats)	highest deviation:	3.83%	
BIU target population	lowest deviation:	-4.10%	55,642 per district

# Proposed Legislative Plans – Oahu Senate

## Redistricting

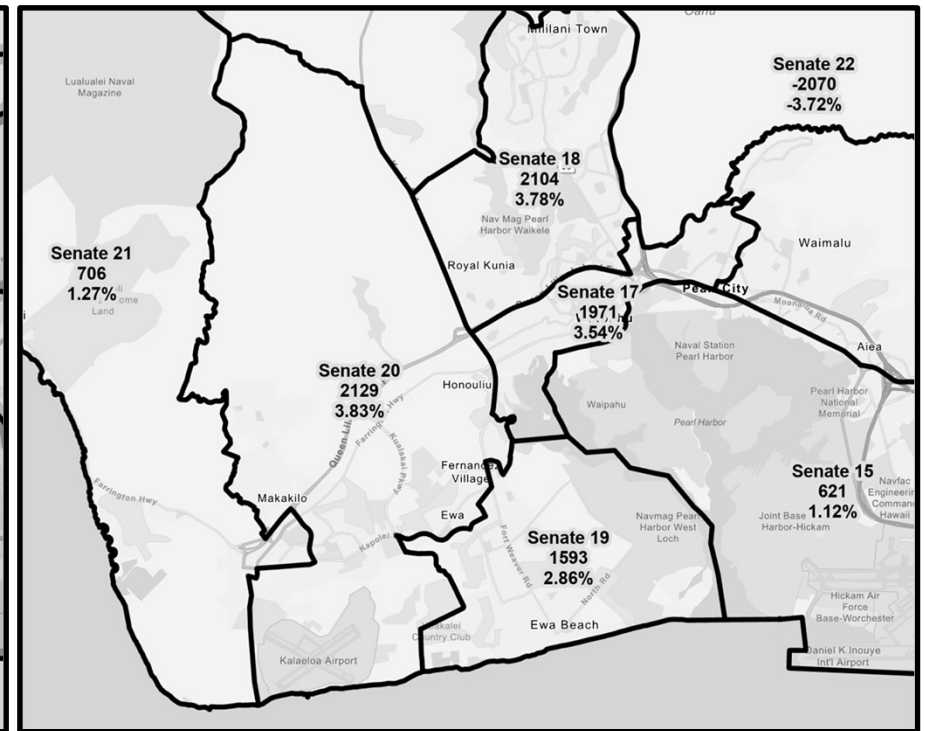
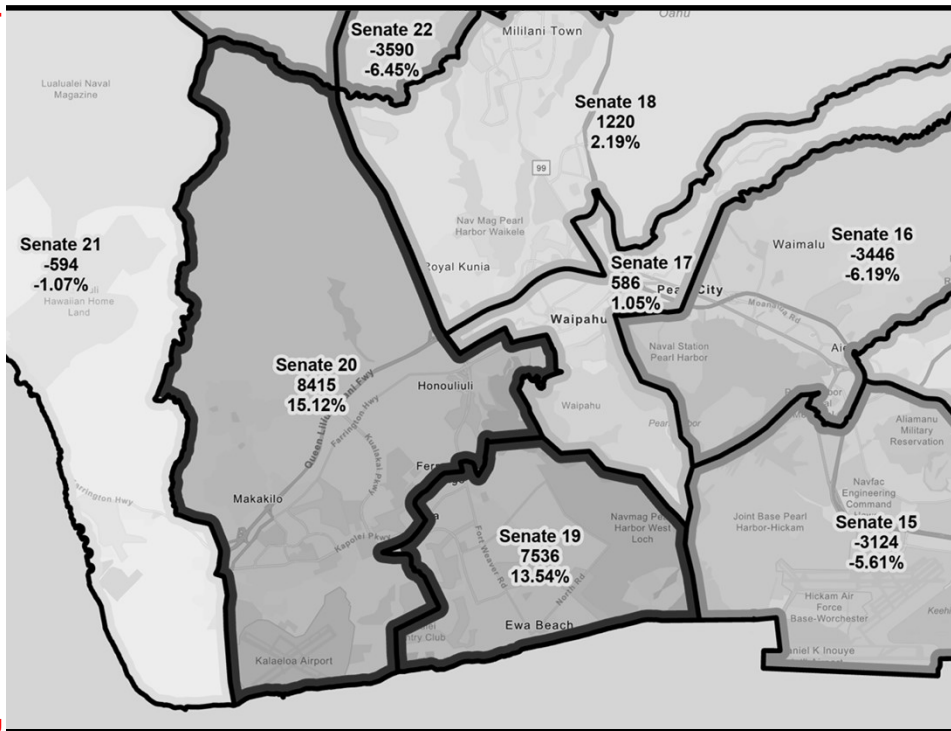
Technical Group

Present proposed legislative plans to Commission

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Proposed by Technical Group on 10/14



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# Proposed Legislative Plans – Oahu Senate

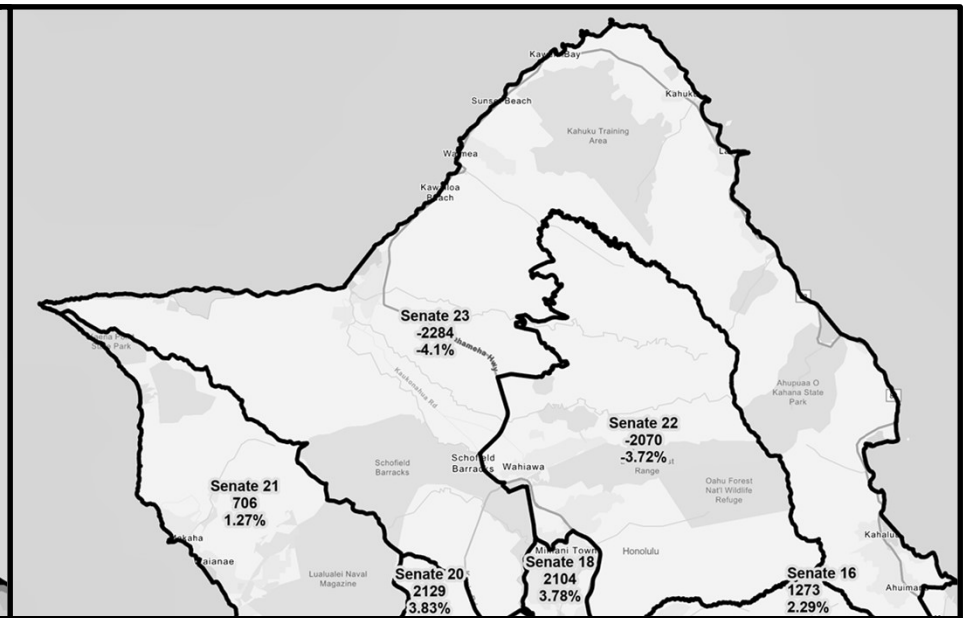
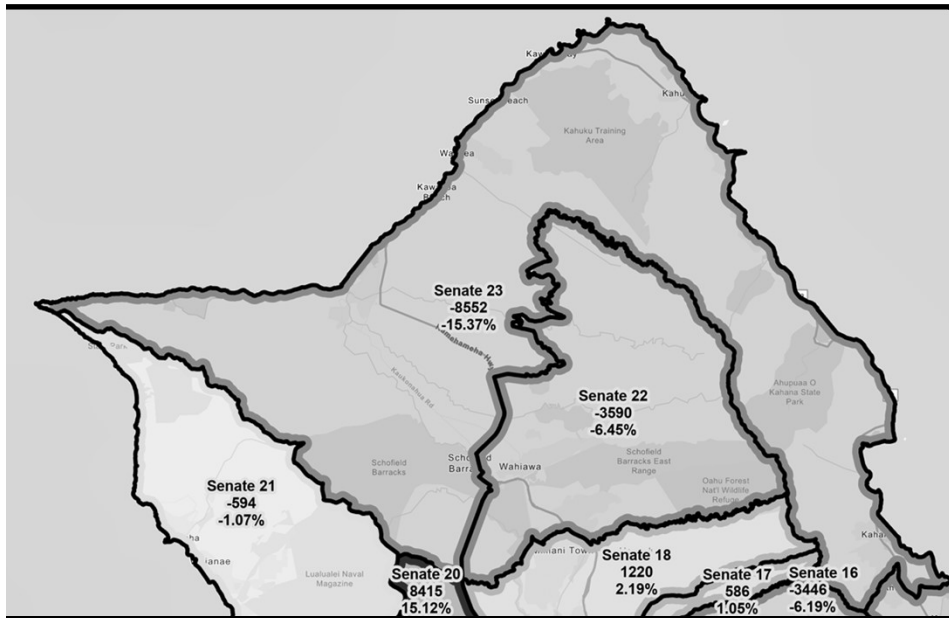
**Redistricting  
Technical Group**

Present proposed legislative plans to Commission

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Proposed by Technical Group on 10/14



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# Proposed Legislative Plans – Oahu Senate

## Redistricting

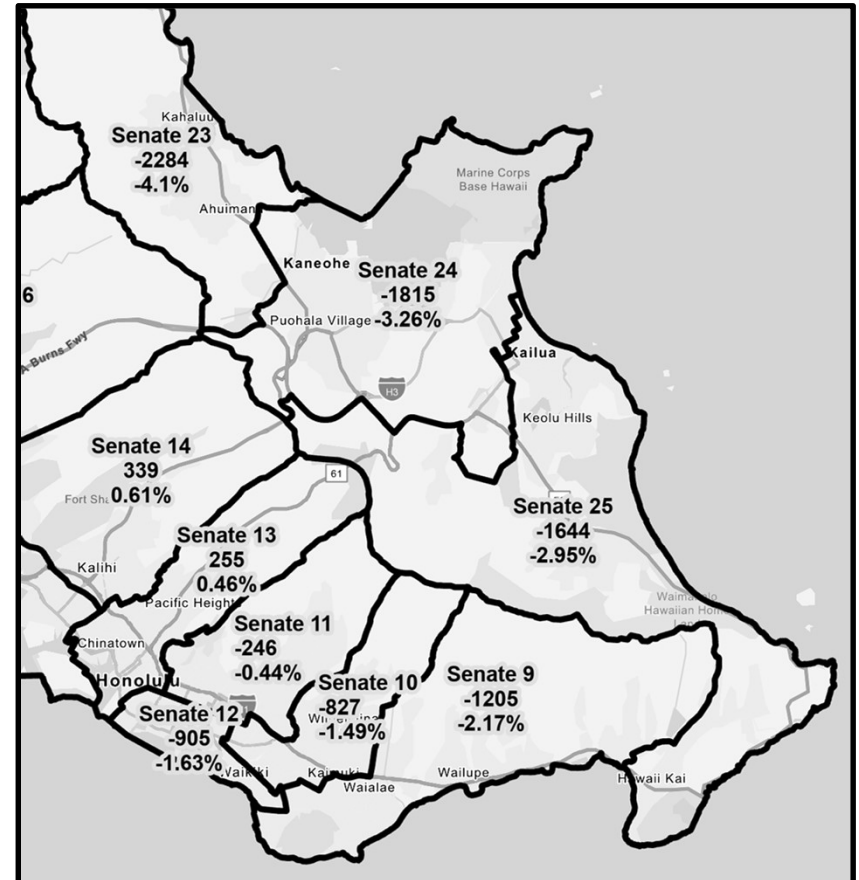
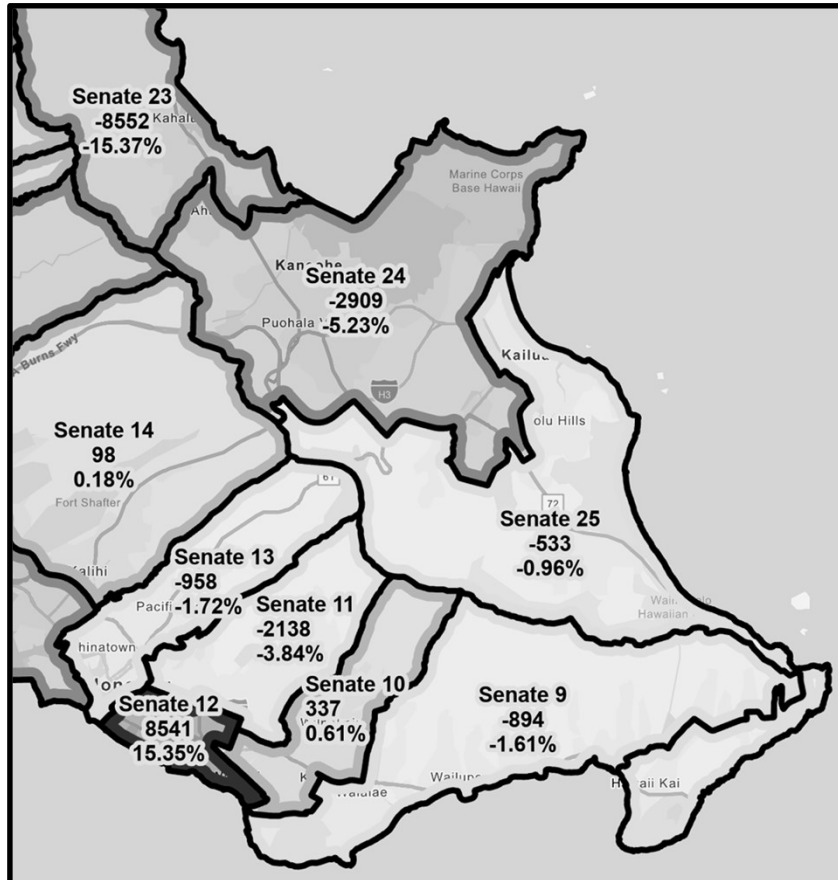
Technical Group

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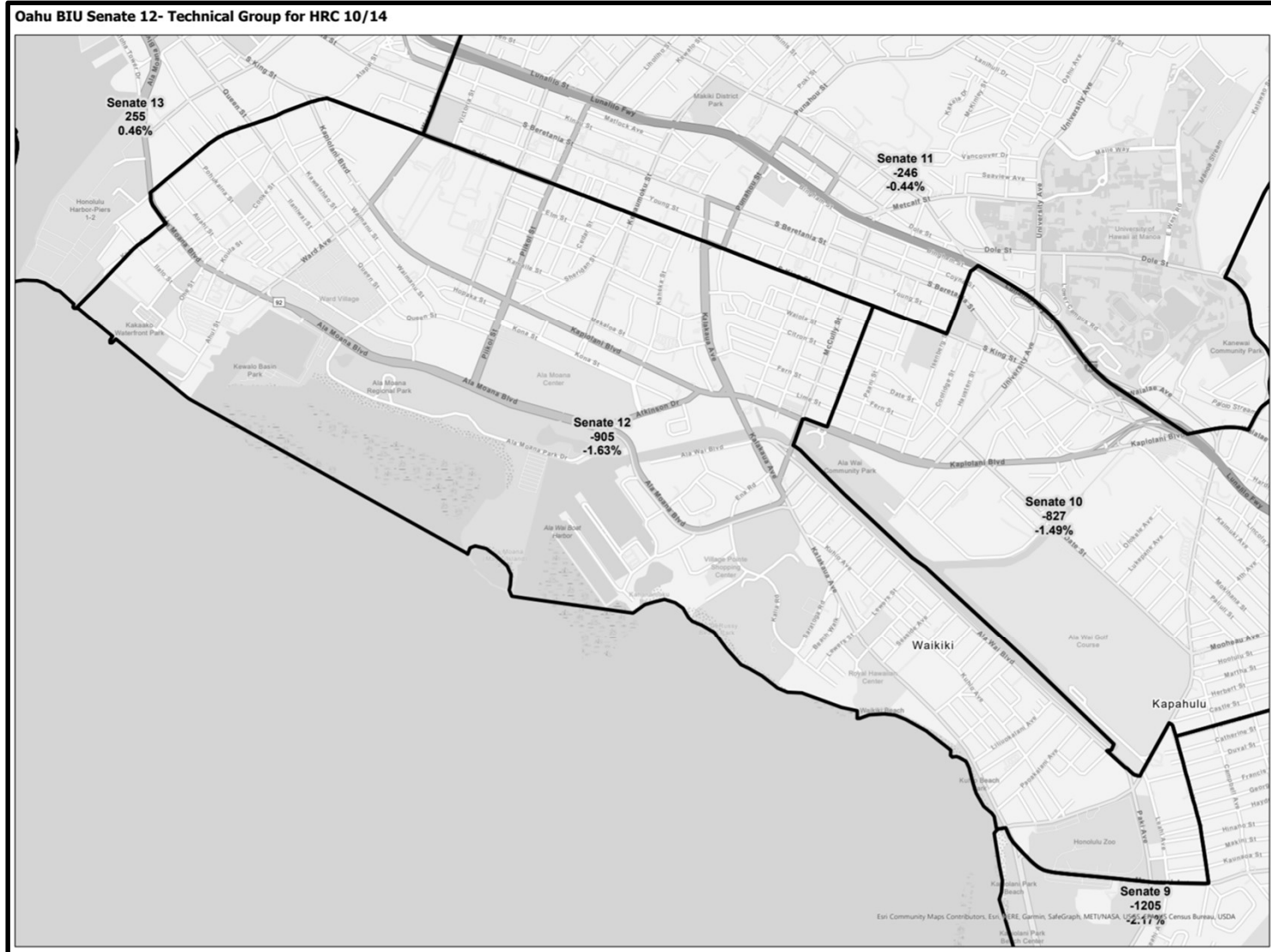
**BASIC ISLAND UNIT TARGETS**

# Proposed Legislative Plans – Oahu Senate

## Redistricting

Technical Group

Present proposed legislative plans to Commission





# Proposed Legislative Plans – Oahu House

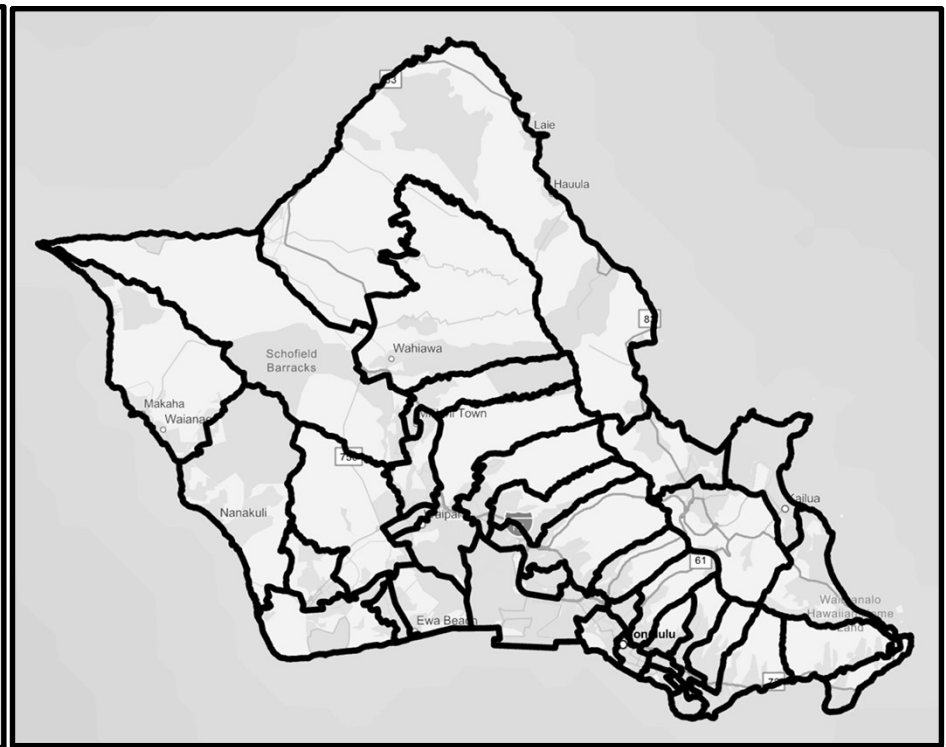
**Redistricting  
Technical Group**

**Present proposed legislative plans to Commission**

**Current (2011-2020)**

**56.17% → 8.54%**

**Proposed by Technical Group on 10/14**



**OVERALL DEVIATION RANGE**

<b>Plan: STATE HOUSE (current 2011-2020) districts</b>	<b>Plan Deviation:</b>	<b>56.17%</b>
<b>Oahu BIU (35 seats)</b>	highest deviation:	39.60%
BIU target population	lowest deviation:	-16.57%
		27,026 per district

**OVERALL DEVIATION RANGE**

<b>Plan: STATE HOUSE (TG proposed 10/14) districts</b>	<b>Plan Deviation:</b>	<b>8.54%</b>
<b>Oahu BIU (35 seats)</b>	highest deviation:	4.24%
BIU target population	lowest deviation:	-4.30%
		27,026 per district

# Proposed Legislative Plans – Oahu House

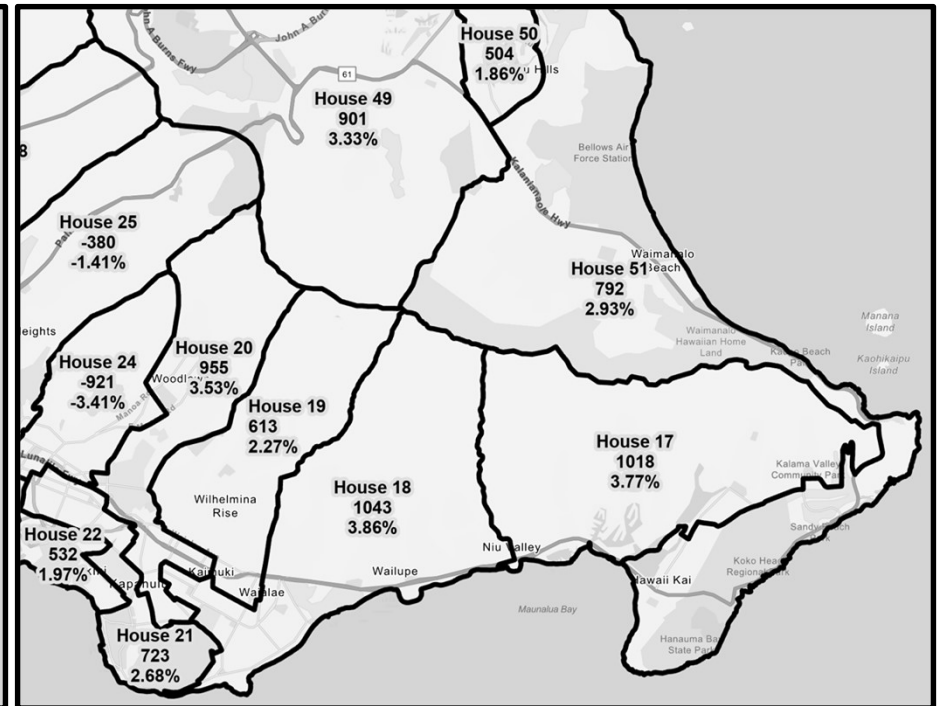
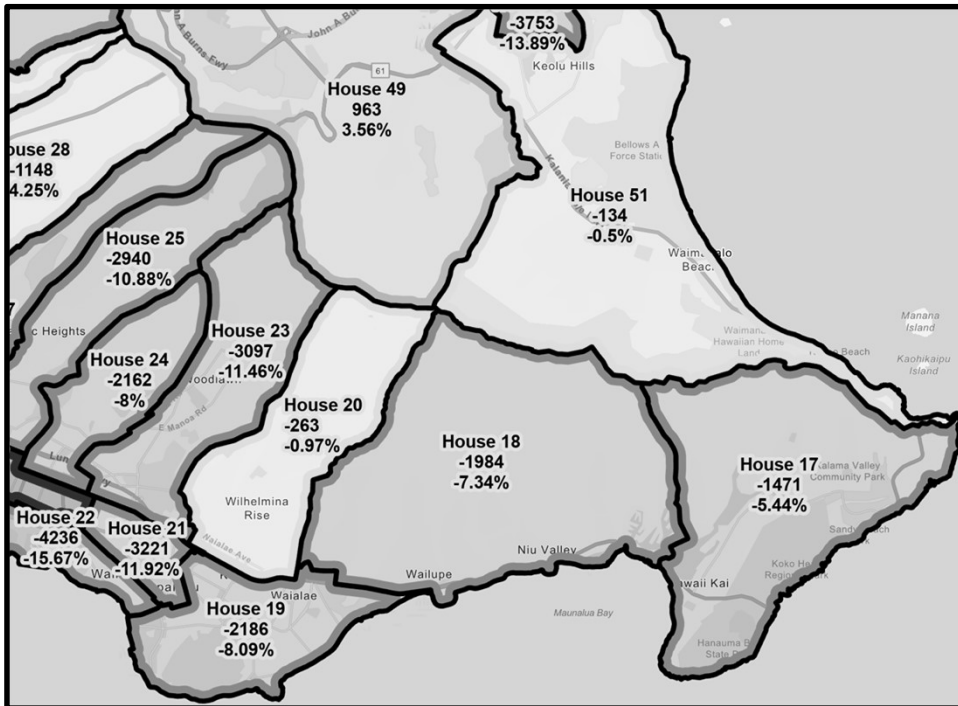
**Redistricting  
Technical Group**

**Present proposed legislative plans to Commission**

**Current (2011-2020)**

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**Proposed by Technical Group on 10/14**



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# Proposed Legislative Plans – Oahu House

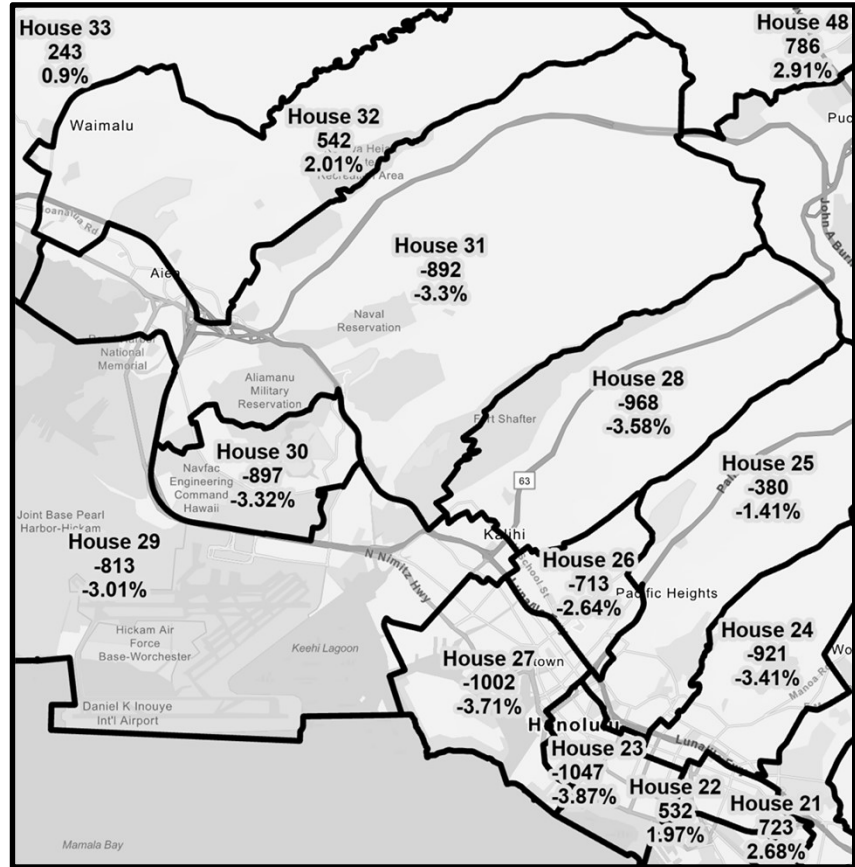
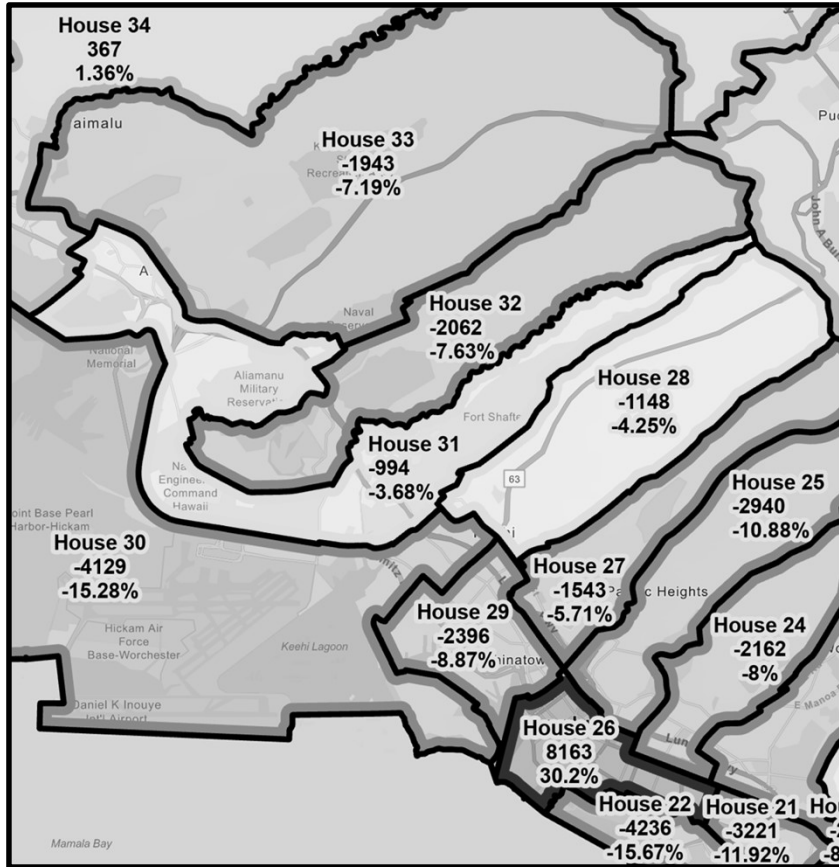
Redistricting  
Technical Group

Present proposed legislative plans to Commission

Current (2011-2020)

56.17% → 8.54%

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# Proposed Legislative Plans – Oahu House

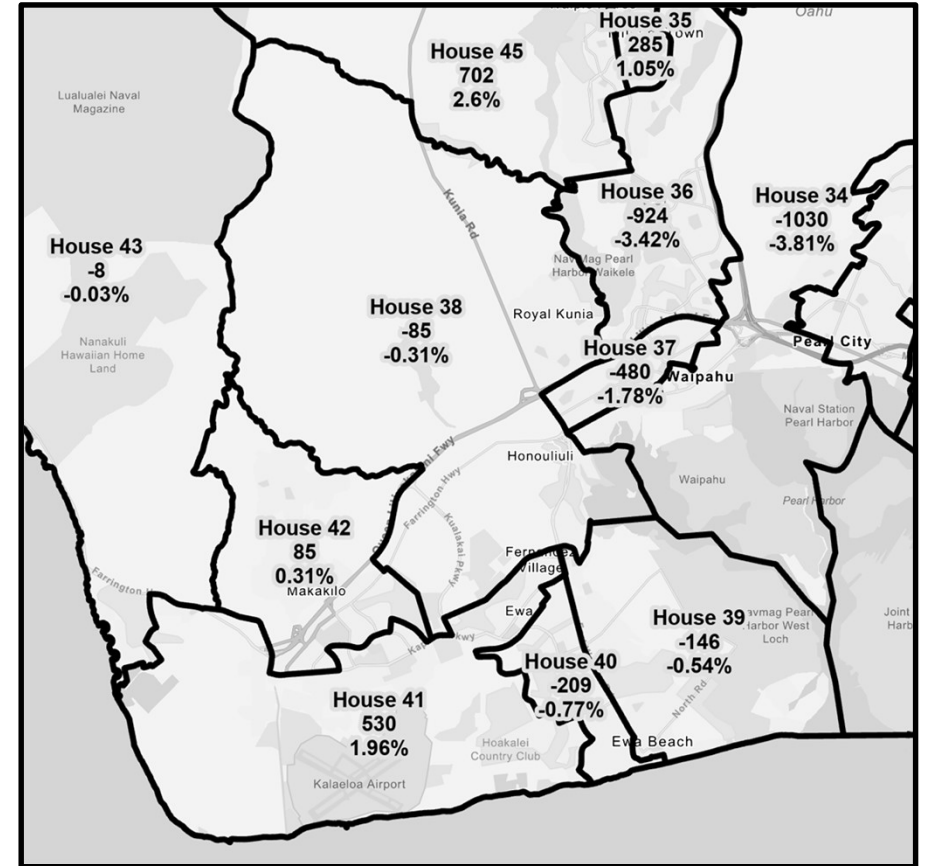
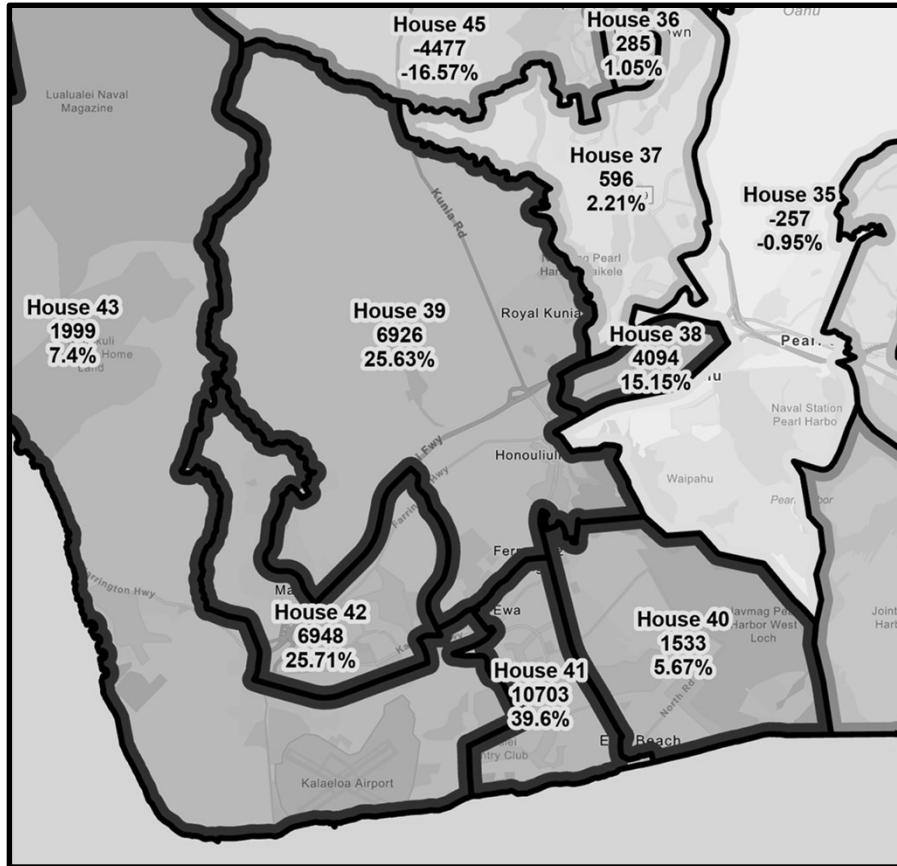
Redistricting  
Technical Group

Present proposed legislative plans to Commission

Current (2011-2020)

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Proposed by Technical Group on 10/14



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# Proposed Legislative Plans – Oahu House

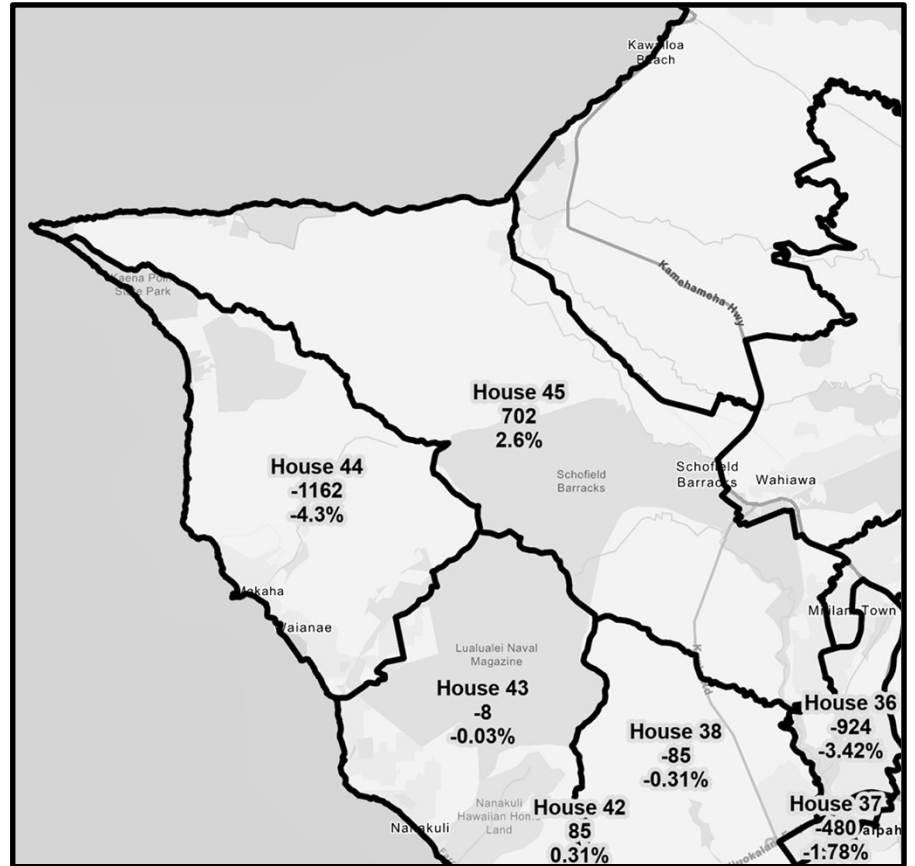
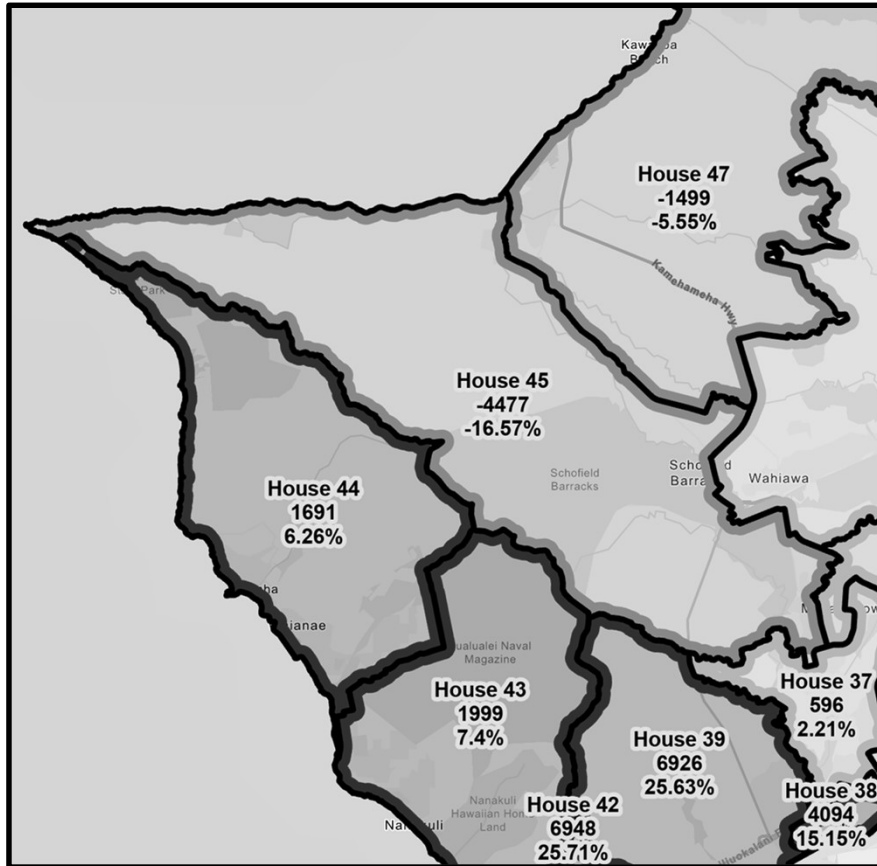
Redistricting  
Technical Group

Present proposed legislative plans to Commission

Current (2011-2020)

56.17% → 8.54%

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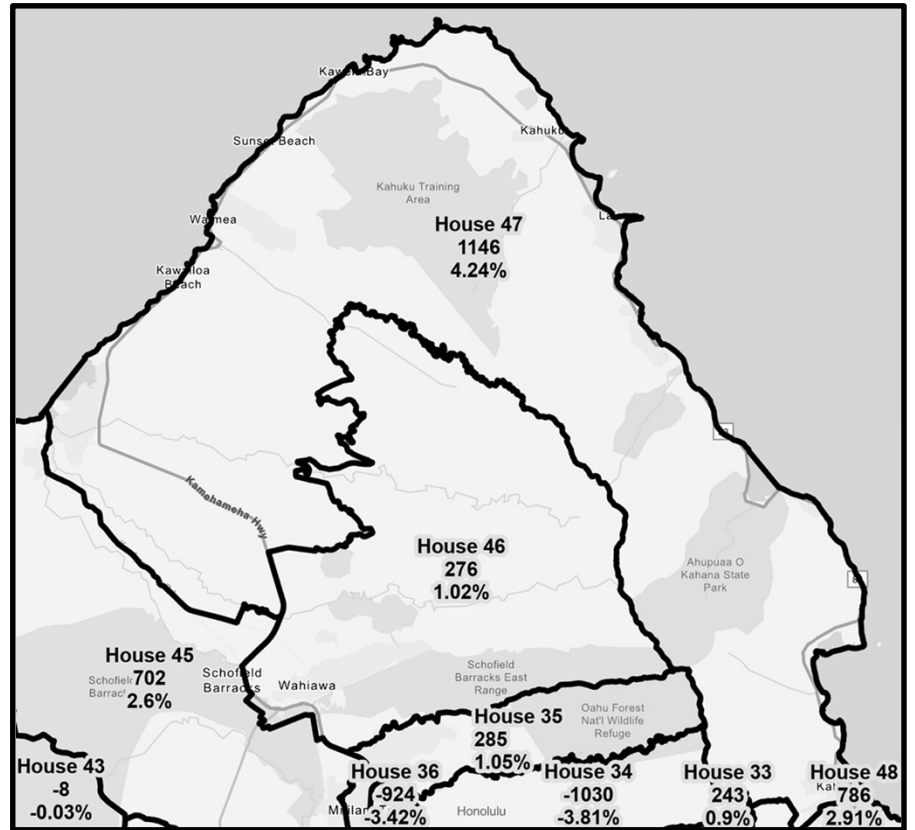
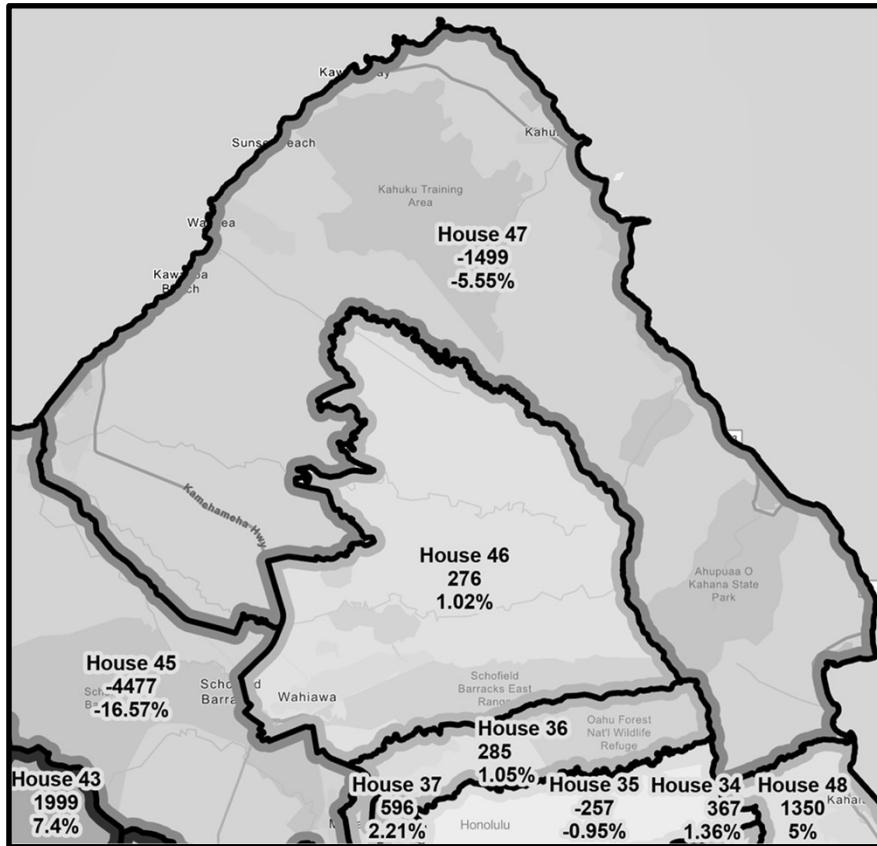
Redistricting  
Technical Group

Present proposed legislative plans to Commission

Current (2011-2020)

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Proposed by Technical Group on 10/14



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# Proposed Legislative Plans – Oahu House

## Redistricting

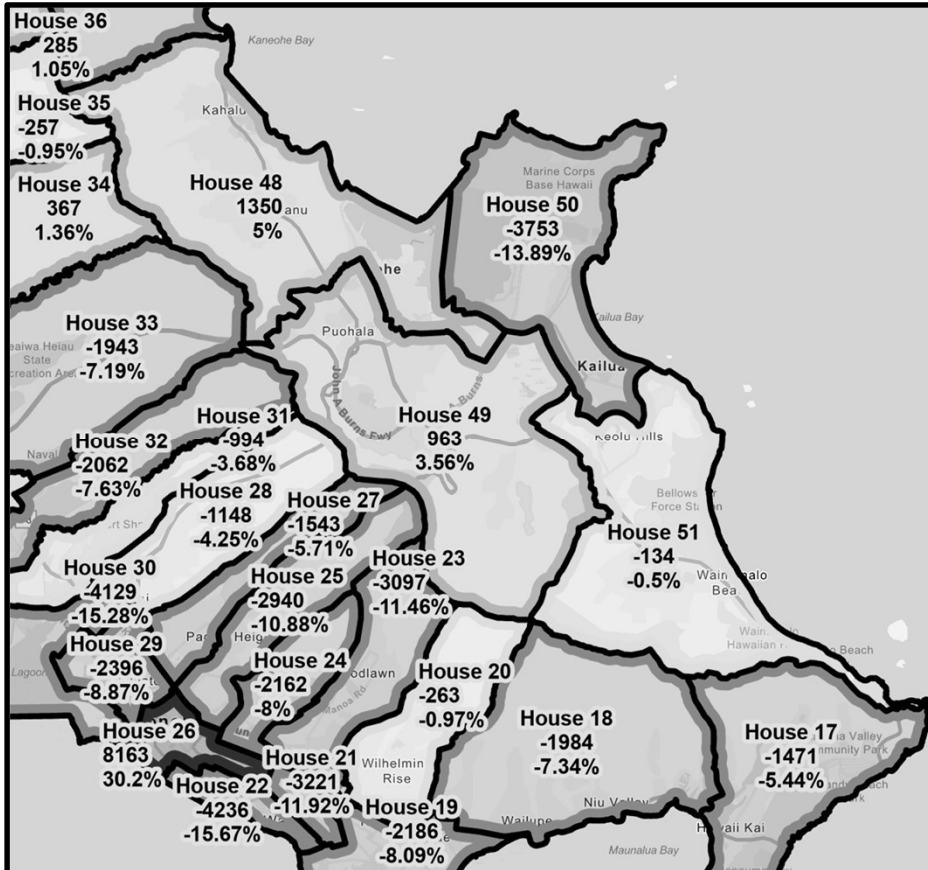
Technical Group

Present proposed legislative plans to Commission

Current (2011-2020)

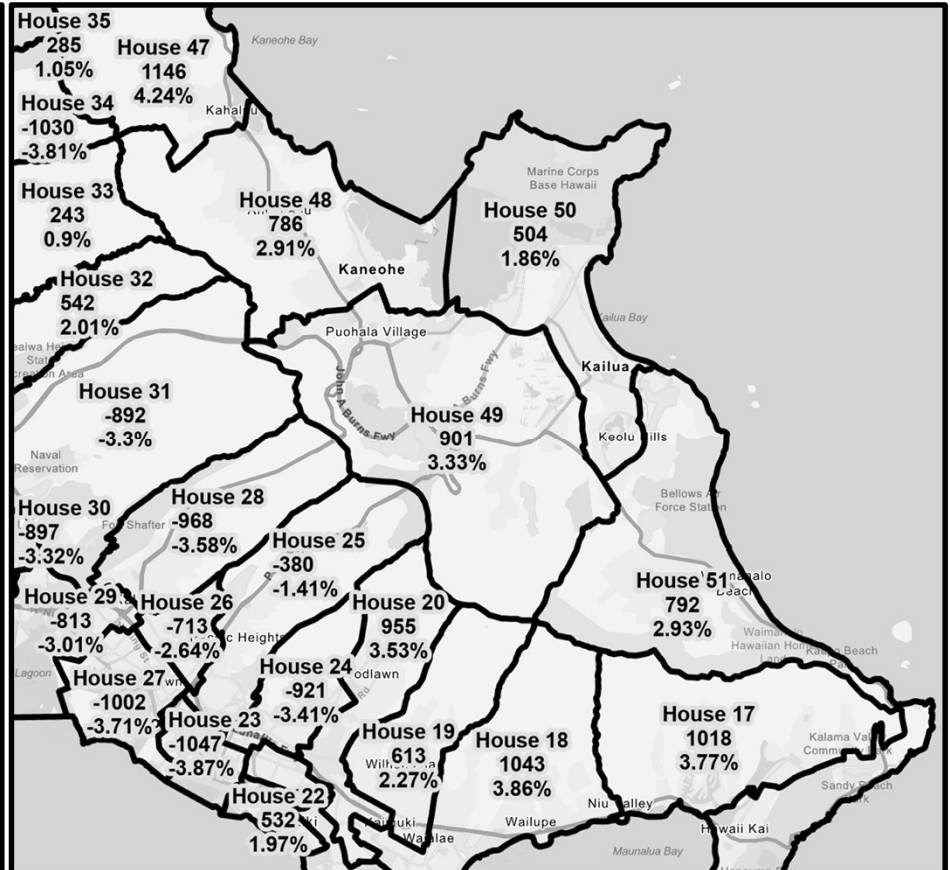
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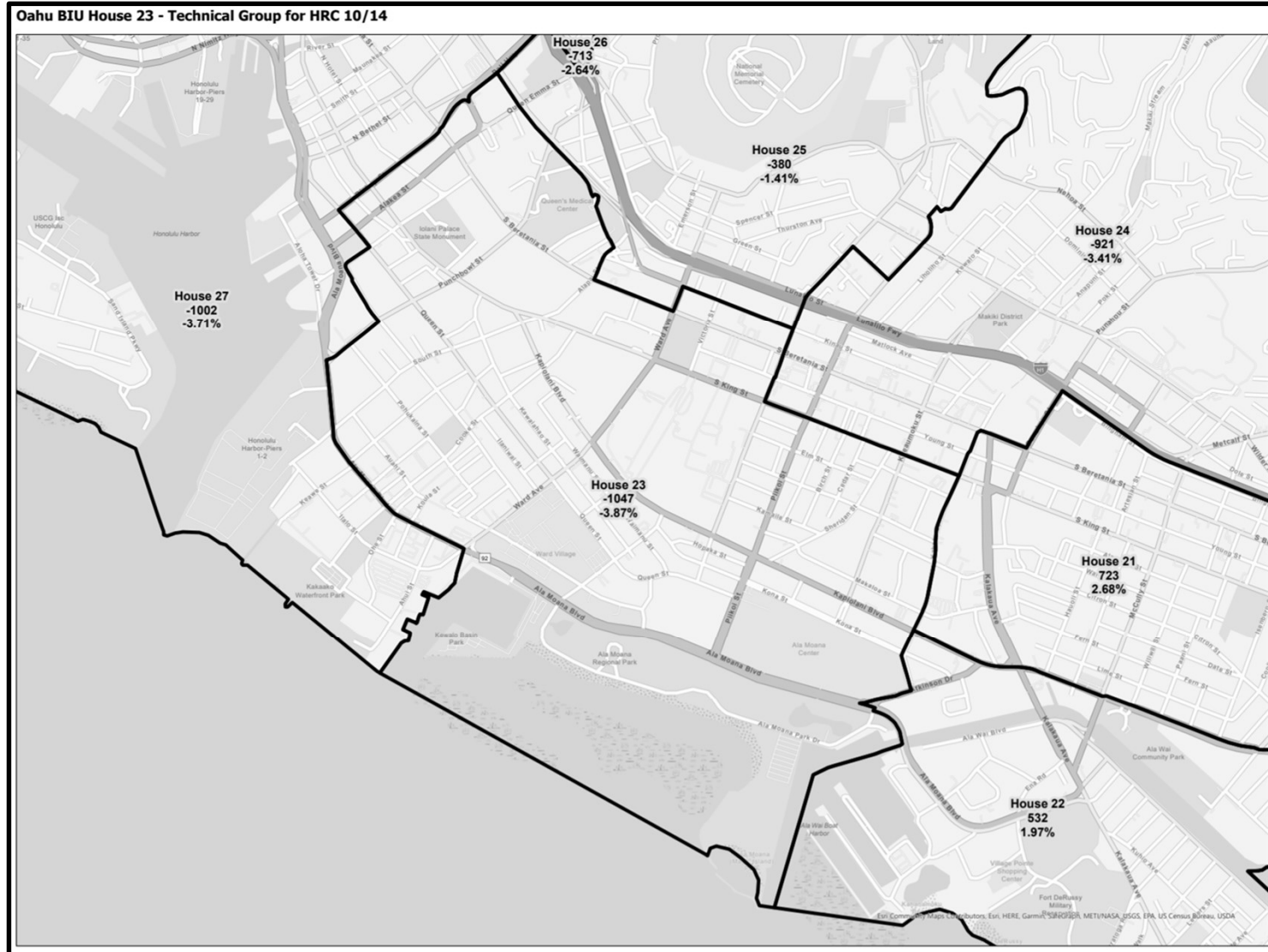


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# Proposed Legislative Plans – Oahu House

Redistricting  
Technical Group Present proposed legislative plans to Commission





# Proposed Legislative Plans – District Map PDFs

## Redistricting Technical Group

Present proposed legislative plans to Commission

### – Redistricting Plans

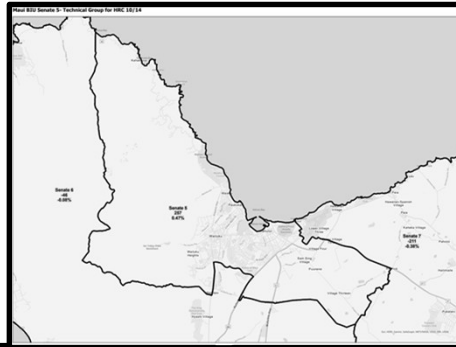
The Technical Committee Permitted Interaction Group presented the 2 Congressional redistricting plans for consideration.

- [View as interactive map](#)
- [View as PDF](#)

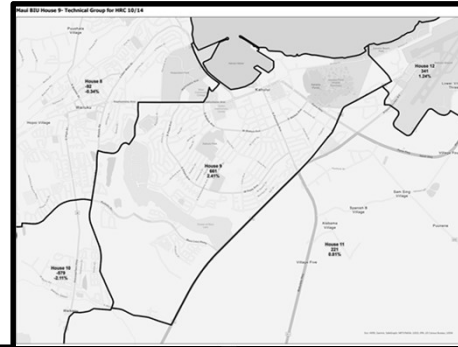
**Kauai House**



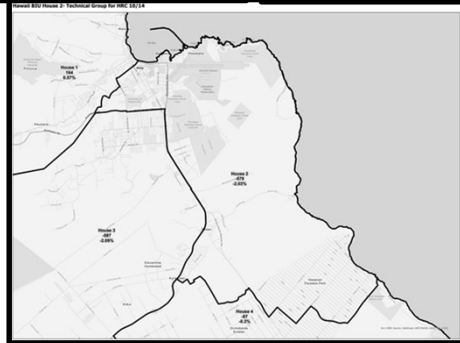
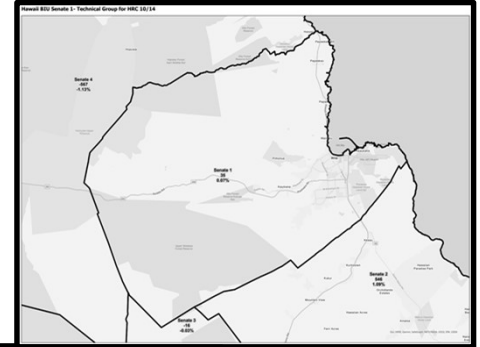
**Maui Senate**



**Maui House**



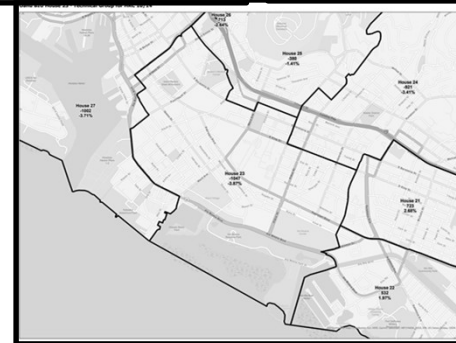
**Hawaii Senate**



**Hawaii House**



**Oahu Senate**



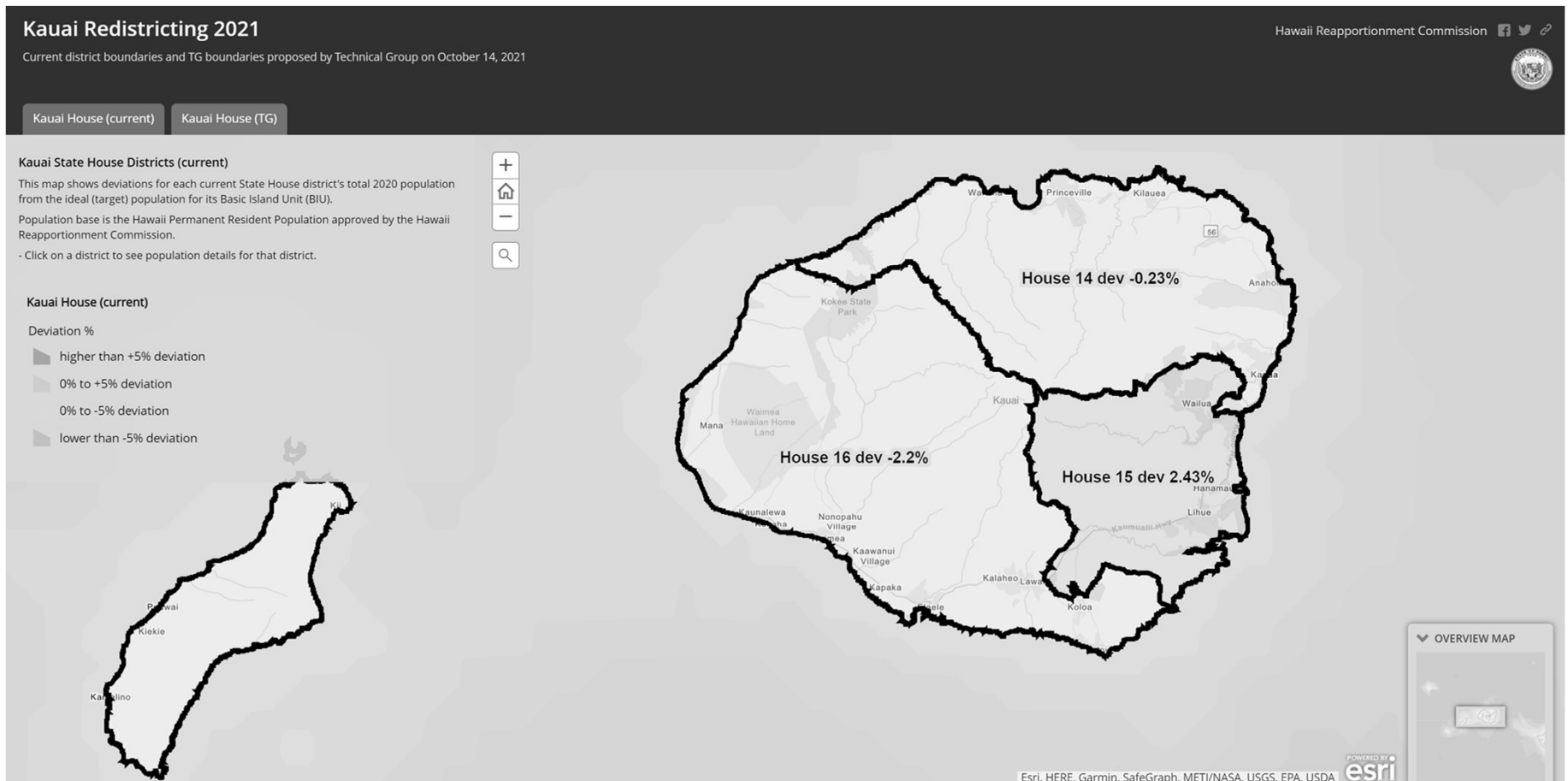
**Oahu House**

# Proposed Legislative Plans – Interactive Maps

## Redistricting Technical Group

Present proposed legislative plans to Commission

### Kauai Interactive Maps







# Proposed Legislative Plans – Interactive Maps

## Redistricting Technical Group

Present proposed legislative plans to Commission

### Maui Interactive Maps

**Maui Redistricting 2021** Hawaii Reapportionment Commission   





Current district boundaries and TG boundaries proposed by Technical Group on October 14, 2021 


Maui Senate (current) Maui Senate (TG) Maui House (current) Maui House (TG)

**Maui State Senate Districts (current)**  
 This map shows deviations for each current State Senate district's total 2020 population from the ideal (target) population for its Basic Island Unit (BIU).  
 Population base is the Hawaii Permanent Resident Population approved by the Hawaii Reapportionment Commission.  
 - Click on a district to see population details for that district.

**Maui Senate (current)**

Deviation %

-  higher than +5% deviation
-  0% to +5% deviation
-  0% to -5% deviation
-  lower than -5% deviation




Senete 5 dev 7.36%

Senete 6 dev -6.97%

Senete 7 dev -0.38%

OVERVIEW MAP

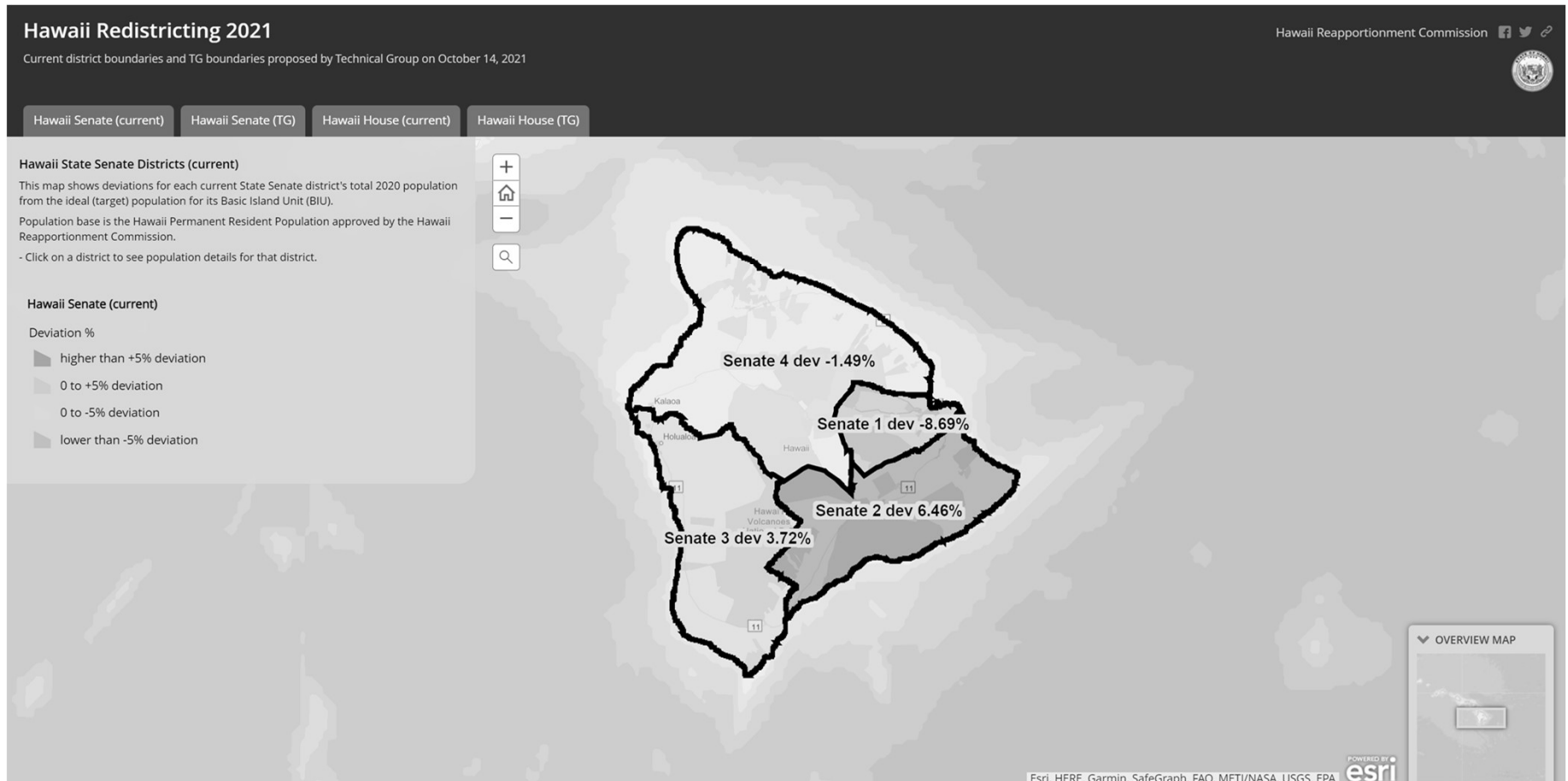
Esri, HERE, Garmin, SafeGraph, FAO, METI/NASA, USGS, EPA 

# Proposed Legislative Plans – Interactive Maps

**Redistricting  
Technical Group**

Present proposed legislative plans to Commission

## Hawaii Interactive Maps

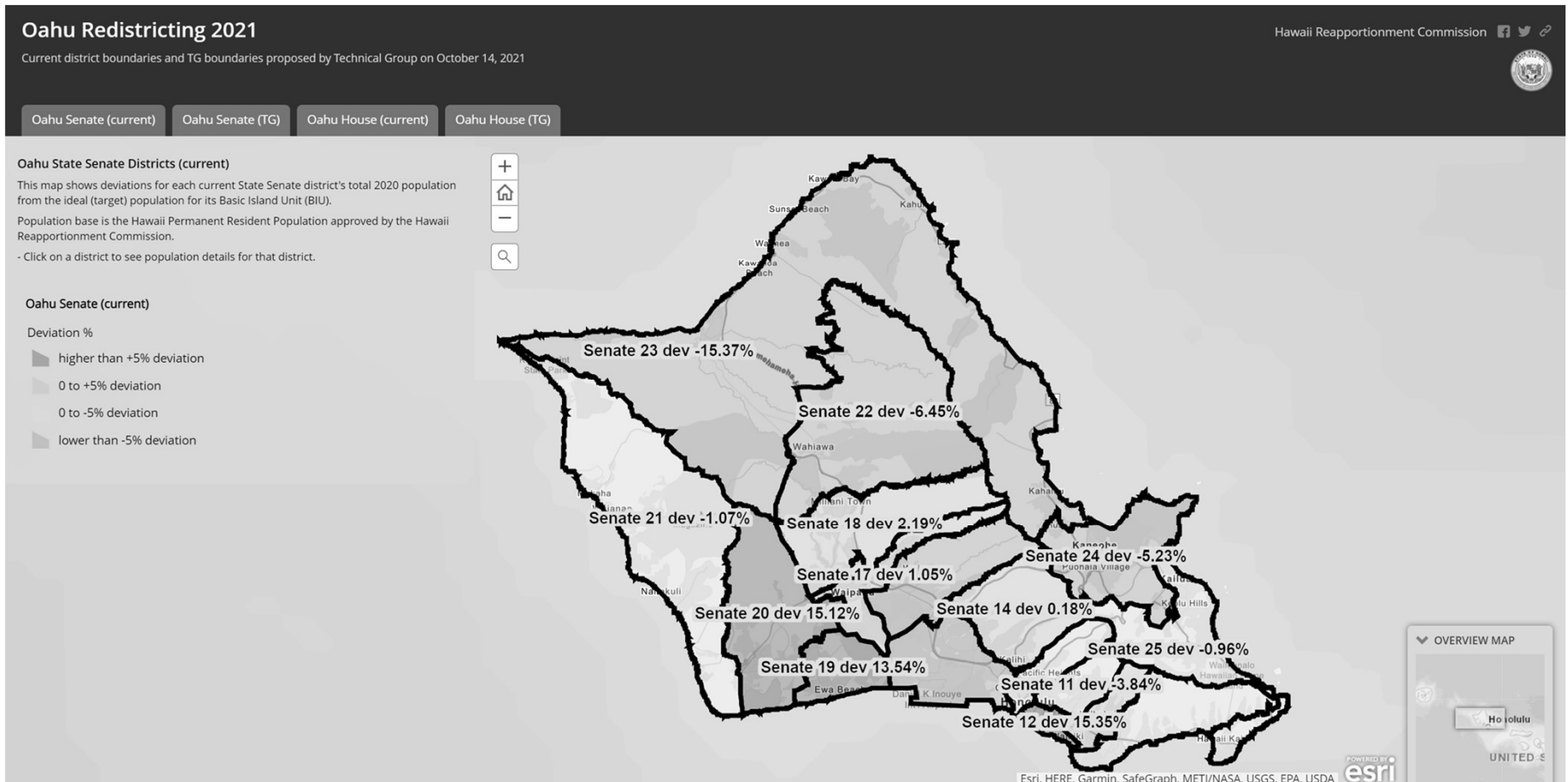


# Proposed Legislative Plans – Interactive Maps

Redistricting  
Technical Group

Present proposed legislative plans to Commission

## Oahu Interactive Maps



# Proposed Legislative Plans – Hawaii Redistricting Online

## Redistricting

Technical Group

Present proposed legislative plans to Commission



## Hawaii Reapportionment Commission - Redistricting Online

Hawaii Redistricting Online assists the Hawaii Reapportionment Commission and the general public to draw

TG - Hawaii House for HRC 10.14	5.72% overall (total) deviation
TG - Hawaii Senate for HRC 10.14	2.22% overall (total) deviation
TG - Kauai House for HRC 10.14	0.48% overall (total) deviation
TG - Maui House for HRC 10.14	4.52% overall (total) deviation
TG - Maui Senate for HRC 10.14	0.85% overall (total) deviation
TG - Oahu House for HRC 10.14	8.54% overall (total) deviation - new district numbers
TG - Oahu Senate for HRC 10.14	7.93% overall (total) deviation

# Proposed Legislative Plans – Step by Step

## Census

- ✓ FPB Federal Population Base (P.L. 94-171)
- ✓ HPB Hawaii Permanent Resident Population Base

## Reapportionment

- ✓ Federal FPB - Congressional (U.S. House)
- ✓ State HPB - State Senate and State House

# Questions?

## Redistricting

- ✓ Staff Prepare template plans for current (2011-2020) districts
- ✓ Technical Group Prepare proposed legislative plans
- ➔ Technical Group Present proposed legislative plans to Commission
- Commission Adopts proposed legislative plans
- Public Comments on proposed legislative plans
- Technical Group Revises legislative plans and presents to Commission
- Commission Adopts final legislative plans
- Office of Elections Final report and maps

## Reprecincting

- Office of Elections Ballot types – Congressional + State + County
- County Clerks New precincts, assign voters to new precincts

## Election

- Candidate Filing March 1, 2022
- Primary August 13, 2022
- General November 8, 2022