



2024 HAWAII COUNTY POINT IN TIME COUNT TOPLINE REPORT

Overview

There was a 28% overall reduction in Homelessness in Hawai'i County according to the 2024 Homeless Point in Time Count. Notably, the number of families with children experiencing homelessness has decreased by 52% since 2018. These are positive signs that consistent and intentional efforts — over time — to reduce homelessness can be effective. This reduction in homelessness also reflects the importance of ongoing collaboration between traditional homeless serving nonprofits, healthcare providers, mental health providers, government, law enforcement, and the larger community to support evidence-based solutions that help prevent homelessness from occurring and support homeless individuals in solving their experience of homelessness.

The 2024 Point in Time (PIT) represents the best available data to estimate one-day homelessness within the rural counties of Hawai'i, Maui, and Kaua'i on the night of January 22, 2024. The estimate adheres to the federal definition of homelessness which includes individuals and families residing in emergency shelters, transitional housing facilities, and persons identified as sleeping and living in an unsheltered location on the night of the count. The count is neither a measure of housing stability among people residing in housing nor a measure of the conditions of such housing and the general housing environment. The U.S. Department of Housing and Urban Development (HUD) requires Bridging the Gap (GAP) to produce an unduplicated estimate of sheltered and unsheltered homelessness on a one-day point-in-time conducted during the last 10 days of January. The count is a one-day snapshot of homelessness.

The main objective during this year's count was to obtain a reliable estimate of sheltered and unsheltered homeless individuals and families. The count helps to assess current levels of homelessness by household type, provide estimates for levels of veteran, chronic, unaccompanied youth, and parenting youth homelessness, and measure the prevalence of other underlying causes of homelessness such as mental health and substance use disabilities. Each year, PIT reporting is an integral part of local and national planning and serves to support policy and resource allocation decisions.

BTG's Homeless Management Information System (HMIS) was utilized to extract most of the sheltered data needed for this report and continues to serve as the repository for the surveys collected during the unsheltered PIT canvassing. The HMIS is a centralized database used to record services rendered to homeless individuals by homeless service providers throughout BTG. Service providers receiving certain federal, state, or county funding may participate in the HMIS as required.

To ensure that sheltered HMIS client and enrollment data was accurate, administrators contacted emergency and transitional shelter providers leading up to the count and confirmed that all clients sleeping in these facilities on the night of the count had active HMIS records. Domestic violence shelters not participating in the HMIS were contacted individually and asked to complete a manual survey form for each of their shelter projects.

For the unsheltered component of the PIT, BTG implemented a multi-day canvassing effort in 2024. This encompassed a multi-day physical count that occurred between Tuesday, January 23rd and Monday, January 29th. Field staff and volunteers asked all individuals appearing or known to be homeless during this period, "Where did you sleep this past Monday, January 22nd?" to help ensure that those counted were living in places not meant for human habitation on the night of the count. In 2024, Hawai'i Island continued to collect data on five descriptive questions on the Single and Head of Household surveys. These questions solicited information from respondents related to duration in Hawai'i, cause of homelessness, criminal history, emergency room utilization, and what services could be provided to assist in ending homelessness. Responses to these questions are detailed more extensively in the "Hawai'i Island Additional Unsheltered Questions" section of this report.

Unsheltered survey data was analyzed and used to create Tableau and ArcGIS dashboard data visualizations comparing PIT data since 2015. These dashboards are intended to accompany the tables presented in this report and can be found on the [BTG Website](#) under the Reports header.

The unsheltered survey form is largely based on HUD-defined data collection. Surveys collected during the count were reviewed for accuracy and completeness, entered in the PIT module of the HMIS, unduplicated, and analyzed to obtain the final statistics included in this report. Unsheltered survey forms along with other PIT resources can be accessed from the BTG website. The following unsheltered surveys were not included in the final unsheltered tally.

- Clients who reported living in a sheltered situation on the night of January 22, 2024.
- Duplicate surveys or records that were already counted in the sheltered component.

Stakeholders, regional leaders, homeless service providers, and volunteers attended several planning meetings and virtual training leading up to the PIT. The purpose was to convey the count's methodology to all involved, provide background and instructions, and to answer any questions regarding the surveys and methodology used during the unsheltered count.

Field staff were composed of team members from service agencies that regularly perform outreach to unsheltered homeless individuals. Survey teams were assigned to familiar regions to ensure that many of the high-density areas frequented by unsheltered homeless were surveyed. Skilled outreach staff familiar with these geographic areas and known to individuals experiencing homelessness were more likely to obtain accurate information. Service-based locations, such as food pantries or drop-in centers were also covered extensively during the count to reach additional unsheltered homeless.

Hawai'i Island Summary

Table 8 summarizes the total number of sheltered and unsheltered homeless for Hawai'i Island over the last seven years. An unsheltered count was not conducted in 2021 due to the COVID-19 pandemic. The table presents sheltered, unsheltered, and total homelessness. Individual and family homelessness is broken out within each component to detail differences from year to year between these key population groups. Charts identifying trends in homelessness for Hawai'i Island can be viewed from the dashboards link presented in the Overview section.

It is important to note that there were Homeless Enforcement actions “sweeps” that occurred in close proximity to the Point in Time Count. Sweeps create significant disruption for individuals experiencing homelessness that make it more difficult to get an accurate count of homeless individuals.

The 2024 PIT data for Hawai'i Island showed a decrease in total homelessness of 285 people, a reduction of 28 percent year-over-year. Sheltered homelessness decreased by 87 people, while unsheltered homelessness decreased by 198 people. The total number of homeless families was 41, fourteen fewer than in 2023. There were 30 sheltered families identified, 10 fewer than in 2023. Unsheltered family homelessness decreased by four families to 11 in 2024.

Table 8: Hawai'i Island Summary, 2018-2024

	2018	2019	2020	2021	2022	2023	2024
Sheltered	200	243	276	227	283	278	191
Individuals	76	74	117	109	88	124	100
Fam Individuals	124	169	159	118	195	154	91
Adults	46	68	76	48	79	66	42
Children	78	101	83	70	116	88	49
Families	33	41	46	32	48	40	30
All Households	109	113	160	138	136	163	129
Unsheltered	669	447	521	NA	554	725	527
Individuals	445	385	436	NA	496	670	493
Fam Individuals	224	62	85	NA	58	55	34
Adults	102	27	36	NA	25	25	16
Children	122	35	49	NA	33	30	18
Families	54	14	22	NA	18	15	11
All Households	440	374	415	NA	483	661	492
Total	869	690	797	NA	837	1,003	718
Individuals	521	459	553	NA	584	794	593
Fam Individuals	348	231	244	NA	253	209	125
Adults	148	95	112	NA	104	91	58
Children	200	136	132	NA	149	118	67
Families	87	55	68	NA	66	55	41
All Households	549	487	575	NA	619	824	621

Hawai'i Island Homeless Subpopulations

Hawai'i Island collected data on the subpopulations presented below in 2024. Table 9 highlights this data over the last seven years and delineates the data by project type. Sheltered statistics are broken out by emergency shelter and transitional housing project type. Results include a reduction in the total number of homeless veterans.

Table 9: Hawai'i Island Homeless Subpopulations, 2018-2024

	2018	2019	2020	2021	2022	2023	2024
Emergency Shelter							
Chronic Individuals	18	19	46	45	41	49	48
Chronic Families	3	6	7	5	3	0	1
Chronic Family Ind.	7	21	21	15	13	0	2
Vets	10	7	14	9	6	13	7
Vet Families	0	0	0	0	0	0	0
Vet Fam Ind.	0	0	0	0	0	0	0
Serious Mental Illness	37	28	65	55	47	73	51
Chronic Substance Use	25	21	42	36	41	60	42
HIV/AIDS	1	0	2	0	3	1	1
Fleeing DV	12	10	21	22	18	16	26
Transitional Housing							
Vets	2	1	3	3	2	1	1
Vet Families	0	0	1	1	0	0	0
Vet Fam Ind.	0	0	5	2	0	0	0
Serious Mental Illness	11	14	18	14	17	11	4
Chronic Substance Use	6	13	9	7	15	10	7
HIV/AIDS	0	0	0	0	0	0	0
Fleeing DV	8	11	7	7	8	5	2
Unsheltered							
Chronic Individuals	194	158	221	NA	240	269	288
Chronic Families	6	3	6	NA	2	2	4
Chronic Family Ind.	26	18	18	NA	6	8	11
Vets	37	41	44	NA	35	36	30
Vet Families	0	1	2	NA	0	1	1
Vet Fam Ind.	0	3	6	NA	0	5	2
Serious Mental Illness	204	165	228	NA	250	283	249
Chronic Substance Use	132	112	131	NA	189	200	218
HIV/AIDS	3	9	5	NA	9	8	2
Total by Subpopulation							
Chronic Individuals	212	177	267	NA	281	318	336
Chronic Families	9	9	13	NA	5	2	5
Chronic Family Ind.	33	39	39	NA	19	8	13
Vets	49	49	61	NA	43	50	38
Vet Families	0	1	3	NA	0	1	1
Vet Fam Ind.	0	3	11	NA	0	5	2
Serious Mental Illness	252	207	311	NA	314	367	304
Chronic Substance Use	163	146	182	NA	245	270	267
HIV/AIDS	4	9	7	NA	12	9	3

Hawai'i Island Unsheltered Homelessness

Tables 10 and 11 present data on Hawai'i Island unsheltered homelessness over the last seven years. These regions have remained consistent over the years and the regional map can be found in Appendix 1.

Table 10 highlights the total number of individuals experiencing homelessness by region. There was an overall decrease in unsheltered homelessness compared to 2023, with the largest numerical decrease in the North Kona region at 68%.

While Table 11 outlines the total number of households experiencing homelessness by region. Total number of households experiencing homelessness decreased by 169 persons compared to 2023, with large percentage declines in both family and individual households. Unsheltered family households decreased by four households, or 27%.

Table 10: Hawai'i Island Unsheltered Homeless Individuals by Region, 2018-2024

	2018	2019	2020	2021	2022	2023	2024
Individuals	445	385	436	NA	496	670	493
1: North Kohala	8	2	0	NA	0	3	1
2: Hamakua	22	6	19	NA	6	21	13
3: North Hilo	3	0	1	NA	16	2	2
4: South Hilo	139	144	185	NA	244	301	252
5: Puna	49	17	66	NA	35	63	59
6: Ka`u	38	24	11	NA	13	9	8
7: South Kona	13	16	1	NA	23	16	6
8: North Kona	143	146	132	NA	145	232	138
9: South Kohala	30	30	21	NA	14	23	14
Family Individuals	224	62	85	NA	58	55	34
1: North Kohala	0	0	0	NA	2	0	0
2: Hamakua	4	0	0	NA	0	8	0
3: North Hilo	0	0	3	NA	0	0	0
4: South Hilo	29	11	21	NA	12	13	17
5: Puna	39	18	14	NA	21	7	5
6: Ka`u	95	17	15	NA	0	3	4
7: South Kona	8	0	5	NA	0	5	0
8: North Kona	31	4	27	NA	23	16	5
9: South Kohala	18	12	0	NA	0	3	3
All Individuals	669	447	521	NA	554	725	527
1: North Kohala	8	2	0	NA	2	3	1
2: Hamakua	26	6	19	NA	6	29	13
3: North Hilo	3	0	4	NA	16	2	2
4: South Hilo	168	155	206	NA	256	314	269
5: Puna	88	35	80	NA	56	70	64
6: Ka`u	133	41	26	NA	13	12	12
7: South Kona	21	16	6	NA	23	21	6
8: North Kona	174	150	159	NA	168	248	143
9: South Kohala	48	42	21	NA	14	26	17

Table 11: Hawai'i Island Unsheltered Homeless Households by Region, 2018-2024

	2018	2019	2020	2021	2022	2023	2024
Indiv. Households	386	360	393	NA	465	646	481
1: North Kohala	6	2	0	NA	0	3	1
2: Hamakua	17	6	18	NA	6	21	13
3: North Hilo	2	0	1	NA	16	2	2
4: South Hilo	124	136	169	NA	229	290	245
5: Puna	44	16	62	NA	33	60	59
6: Ka`u	30	23	11	NA	12	9	8
7: South Kona	9	13	1	NA	22	16	6
8: North Kona	129	139	115	NA	134	223	133
9: South Kohala	25	25	16	NA	13	22	14
Family Households	54	14	22	NA	18	15	11
1: North Kohala	0	0	0	NA	1	0	0
2: Hamakua	1	0	0	NA	0	1	0
3: North Hilo	0	0	1	NA	0	0	0
4: South Hilo	8	3	6	NA	5	4	6
5: Puna	9	3	5	NA	5	2	2
6: Ka`u	23	4	3	NA	0	1	1
7: South Kona	2	0	1	NA	0	1	0
8: North Kona	7	1	6	NA	7	5	1
9: South Kohala	4	3	0	NA	0	1	1
All Households	440	374	415	NA	483	661	492
1: North Kohala	6	2	0	NA	1	3	1
2: Hamakua	18	6	18	NA	6	22	13
3: North Hilo	2	0	2	NA	16	2	2
4: South Hilo	132	139	175	NA	234	294	251
5: Puna	53	19	67	NA	38	62	61
6: Ka`u	53	27	14	NA	12	10	9
7: South Kona	11	13	2	NA	22	17	6
8: North Kona	136	140	121	NA	141	228	134
9: South Kohala	29	28	16	NA	13	23	15

Hawai`i Island Additional Unsheltered Questions

In 2024, Hawai`i Island collected data on five additional questions through its unsheltered canvassing efforts. The following questions were included on the Single and Head of Household survey forms and were only administered on Hawai`i Island.

- *Did you move to Hawai`i within the past year?*
- *What led to your current living situation?*
- *Have you been arrested in the last year?*
- *How many times have you been to the emergency room in the past year?*
- *What can we do to help you end your homelessness?*

Table 12 presents response data from the question “*Did you Move to Hawai`i within the past year?*”. Of the 492 households surveyed, 481 responded (98%), and 37 of the 481 (8%) stated that they had moved to Hawai`i within the past year. Only one of the 37 “yes” responses came from family households, while the remaining 36 came from individual households. Tables 13 through 15 present data for households responding “yes” to this question.

Table 12: Did you move to Hawai`i within the past year?

	Fam HH	Individual HH	Total
Yes	1	36	37
No	10	434	444
Unknown/Refused		11	11
Total	11	481	492

Table 13: If yes, what State or Country did you come from?

	Fam HH	Individual HH	Total
State	0	32	32
Alabama		1	1
Arizona		1	1
California		7	7
Colorado		1	1
Connecticut		1	1
Florida		1	1
Georgia		1	1
Illinois		1	1
Indiana		1	1
Michigan		1	1
Minnesota		1	1
Mississippi		1	1
Nevada		2	2
New Jersey		1	1
North Carolina		1	1
Ohio		1	1
Oklahoma		1	1
Oregon		4	4
Tennessee		1	1
Texas		2	2
Washington		1	1
Foreign Country	1	4	5
Afghanistan		1	1

Japan		2	2
Marshall Islands	1		1
Mexico		1	1
Total Households	1	36	37

Of the 37 households that moved to Hawai`i within the past year, 32 came from states, while five moved from a foreign country. Of the 32 state responses, the most came from California.

Seven of the 37 households (19%) that reported moving to Hawai`i within the past year indicated that they would be interested in returning home. This data is presented in the following table.

Table 14: If yes, are you interested in returning home?

	Fam HH	Individual HH	Total
Yes		7	7
No	1	29	30
Total	1	36	37

For the 37 households that arrived within the last year, Table 15 displays data on why they moved to Hawai`i.

Table 15: If yes, why did you come to Hawai`i?

	Fam HH	Individual HH	Total
Came for work/trade living arrangement		8	8
Came for the weather		8	8
To be with family or friends and it didn't work out	1	5	6
Other reason		15	15
Total	1	36	37

Table 16 presents data from the survey question “*What led to your current living situation?*”. This question allowed for only one selection, intended to be the primary reason that each household was living unsheltered. Of the 492 households surveyed, all households responded. Apart from “Other” responses, the most prevalent responses were “Family/Relationship Conflict”, followed by “Unable to afford rent”. These two reasons comprised 42 percent of the total (206 of 492 responses).

Table 16: What led to your current living situation?

Primary Reason	Fam HH	Ind HH	Total	% of Total
COVID-19		15	15	3.0%
Disability (mental/addiction/physical)		64	64	13.0%
Evicted from my home	2	45	47	9.6%
Family/Relationship Conflict	3	112	115	23.4%
Fleeing from Domestic Violence		8	8	1.6%
Lost home due to fire	1	5	6	1.2%
Lost my job, unable to secure work		21	21	4.3%
Medical Emergency		4	4	0.8%
Natural Disaster		2	2	0.4%
Recently released from incarceration		3	3	0.6%
Unable to afford rent	4	87	91	18.5%
Unable to secure affordable housing		13	13	2.6%
Other reason	1	102	103	20.9%
Total	11	481	492	100.0%

Table 17 presents response data from the question “*Have you been arrested in the last year?*” Of the 492 households surveyed, 478 responded (97%), with 119 of the 478 (25%) stating that they had been arrested in the last year. In terms of individual households, 119 of the 468 responding (25%) indicated that they had been arrested in the last year. Tables 18 and 19 present data for households responding “yes” to the question noted above. Table 18 groups the response data into three categories, as this conditional question was not categorized on the survey forms. Table 20 presents data from the survey question “*How many times have you been to the emergency room in the past year?*”.

Table 17: Have you been arrested in the last year?

	Fam HH	Individual HH	Total
Yes		119	119
No	10	349	359
Unknown/Refused	1	13	14
Total	11	481	492

Table 18: If yes, how many times?

	Fam HH	Individual HH	Total
1 or 2 times		76	76
3 to 5 times		31	31
6 or more times		12	12
Total		119	119

Table 19: If yes, how many days in the past year have you been in jail?

	Fam HH	Individual HH	Total
30 days or less		93	93
More than 30 days		26	26
Total		119	119

Table 20: How many times have you been to the emergency room in the past year?

Response	Fam HH	Individual HH	Total
None	8	270	278
1 or 2 times	3	153	156
3 to 5 times		39	39
More than 5 times		19	19
Total	11	481	492

Table 21 presents data from the survey question “*What can we do to help you end your homelessness?*” This question allowed for multiple response selections intended to convey data on what services can be provided to assist in resolving the household’s unsheltered homelessness. The percentage of total for each homeless service line is based on 492 total households. “Securing housing”, and “Money/Rent assistance” were the top two responses. Replacing lost or stolen documents came in third at 44%. All households picked at least one response from the options below.

Table 21: What can we do to help you end your homelessness?

Homeless Service	Fam HH	Ind HH	Total	% of HHs
Childcare	0	3	3	0.6%
Documents (Replace lost/stolen)	5	213	218	44.3%
Employment	3	121	124	25.2%
Legal aid	1	32	33	6.7%
Medical Insurance	1	51	52	10.6%
Money/Rent assistance	5	232	237	48.2%
Need medical care	1	37	38	7.7%
Reconnect with family to go home		28	28	5.7%
Securing housing	8	377	385	78.3%
Treatment program	1	36	37	7.5%
Other reason	3	75	78	15.9%

Discussion of Results

Hawai'i County continues to make progress in reducing the number of families experiencing homelessness. Slightly under **17%** of all people experiencing homelessness are members of a homeless family, either a parent or child. (To put this in context, nationally 30% of all individuals experiencing homelessness in 2023 were adults and children in a family.) In Hawai'i County, children as a percentage of the total people experiencing homelessness, dropped to **9.3%**. The potential for long-term negative impacts to children who experience homelessness is well documented. Impacts may include chronic health issues, reduced likelihood of completing high school, increased likelihood of justice involvement, and increased risk for adult poverty and homelessness. Reducing family and child homelessness is imperative to creating a community in which homelessness is rare, brief, and non-recurring.

In the last 24 months the County of Hawai'i has seen housing inventories shrink and rental costs climb significantly. Despite numerous challenges, Hawai'i County is making significant progress. The County's direct investment in reducing homelessness through its Homelessness and Housing Fund (HHF) is a crucial initiative addressing the pressing issues of homelessness and housing instability. The HHF exemplifies an unprecedented commitment to combating homelessness through strategic interventions and collaborative efforts. Dedicated to tackling the root causes of homelessness, the County acknowledges that addressing this issue requires a unified effort from various stakeholders, including government agencies, non-profit organizations, community groups, businesses, healthcare providers, and the broader community.

On May 1, 2023, the County executed sixteen agreements with thirteen non-profit organizations under the Homelessness and Housing Fund. These programs focused on addressing homelessness through the delivery of behavioral and substance abuse services, increase in the number of permanent supportive and permanent housing with supports, housing navigation and case management services, street medicine, mobile hygiene and engagement activities. In March, the County issued an Impact Report that highlights achievements through February 28, 2024.

In addition, the County secured 110 Emergency Housing Vouchers, which provided priority to households experiencing homelessness, ending their homelessness through long-term rental assistance. 100% of the eligible households secured stable housing.

With funding from the State of Hawai'i, Ohana Zone Fund, the County initiated the Hawai'i County Engagement Hui. The Engagement Hui brings together multiple service providers to coordinate consistent outreach to homeless individuals and families. The goal of the Engagement Hui is to assist unsheltered individuals and families in overcoming homelessness by connecting them with available community resources.

Looking Forward:

The Emergency Rent Assistance Program launched on May 1, 2024. This program intends to help keep people in their homes and/or help them get re-housed as quickly as possible by providing rental assistance.

Hawai'i County providers continue to seek and bring additional financial resources to the island to increase housing and services for our community. For example, it secured a \$1.2M Special Notice of Funding Opportunities (SNOFO) HUD grant to acquire new housing units, State Grant-In-Aid, and philanthropy funding for new services and expand its capacity to do Medicaid billable services.

The work on the site in North Kona for a new emergency shelter for homeless individuals and couples — Kukuiola Assessment Center and Emergency Shelter — is near completion. Vertical construction of Phase 1 of this multi-phase project is expected to begin in late 2024. These emergency shelter beds accompanied by the construction of affordable housing (with support) will help reduce the number of individuals and couples experiencing homelessness.

Hawai'i County is currently accepting proposals for its Affordable Housing Production Fund from eligible nonprofit and for-profit organizations, public agencies and community land trusts. These proposals should address the program's objectives to support, increase and sustain affordable rental and owner-occupied housing production in the County.

COMMUNITY ACTIONS TO ADDRESSING HOMELESSNESS

Community Alliance Partners (CAP), the Hawaii County chapter of BTG endorses the following actions:

1. BUILD, ACQUIRE, AND PRESERVE AFFORDABLE HOUSING

Homelessness is ultimately a housing problem. To reduce homelessness, Hawai'i must continue to dedicate itself to increasing the supply of housing — especially deeply affordable housing for those whose incomes fall at or below 30% of Area Median Income. CAP will continue to advocate for the prioritization of funding to support the purchase, building, and development of more deeply affordable housing.

2. INCREASE PERMANENT SUPPORTIVE HOUSING PROGRAMS

As a community, we must be committed to keeping people housed. Therefore, it is critical that we continue to support families in retaining their housing after a period of homelessness. This will involve funding robust programs that can provide intensive ongoing case

management and resource connectivity. Supportive services are particularly important for households with disabilities, trauma, addiction, a history of long-term homelessness, and other significant challenges to maintaining stable housing. Housing combined with supportive services is the foundation for long term housing stability.

3. **MAINTAIN RAPID RE-HOUSING (RRH) & LONG-TERM RENT SUBSIDY PROGRAMS**

Rapid re-housing is an intervention designed to help individuals and families exit homelessness quickly and return to permanent housing by providing three core program activities including housing identification, time-limited financial assistance, and housing-based case management services. In addition to shallow subsidies like Rapid Re-Housing, it is critical that long-term rental subsidy programs be expanded alongside increases in affordable housing units.

4. **EXPAND HOMELESS PREVENTION & DIVERSION STRATEGIES**

We must strengthen practices and increase system capacity to divert families from entering homelessness. Homeless prevention resources are critical for households who may need some assistance as they struggle to remain housed.

5. **EXPAND AND ENHANCE STREET OUTREACH - COORDINATED RESPONSE**

Individuals experiencing homelessness have significantly decreased life expectancies and are at greater risk of exposure to a variety of infectious diseases. Therefore, coordinated consistent outreach to those who are experiencing unsheltered homelessness is essential for creating the trusting relationships necessary to connect individuals to the resources that can help them end their period of homelessness. Providing "street medicine" alongside outreach is critical to the well-being of those experiencing homelessness as well as reducing costs incurred through emergency service usage. Street medicine teams can assess, treat and educate patients in need of medical assistance, and provide follow-up evaluation and care as needed, in their own environment. When employed in the context of addressing homelessness, street medicine programs can be an essential first step for an individual in obtaining higher levels of medical, mental health, and social care that can provide a pathway to securing housing and long-term stability.