

JOSH GREEN, M.D.
GOVERNOR
KE KIA'ĀINA



DEPT. COMM. NO. 350

STATE OF HAWAII | KA MOKU'ĀINA 'O HAWAI'
DEPARTMENT OF TRANSPORTATION | KA 'OIHANA ALAKAU
869 PUNCHBOWL STREET
HONOLULU, HAWAII 96813-5097

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IN REPLY REFER TO:

HWY-S 25-2.45022

January 23, 2025

The Honorable Ronald D. Kouchi
Hawaii State Senator
President and Members of the Senate
Thirty-Third State Legislature
Hawaii State Capitol, Room 409
Honolulu, Hawaii 96813

The Honorable Nadine K. Nakamura
Hawaii State Representative
Speaker and Members of the
House of Representatives
Thirty-Third State Legislature
Hawaii State Capitol, Room 431
Honolulu, Hawaii 96813

Dear President Kouchi, Speaker Nakamura, and Members of the Legislature:

For your information and consideration, I am transmitting a copy of the Annual Report for the Photo Red Light Imaging Detector System Pilot Program from Act 30 Session Laws of Hawaii 2020.

In accordance with Hawaii Revised Statutes 93-16, I am also informing you that the report may be viewed electronically at: <https://hidot.hawaii.gov/library/reports/reports-to-the-legislature/>.

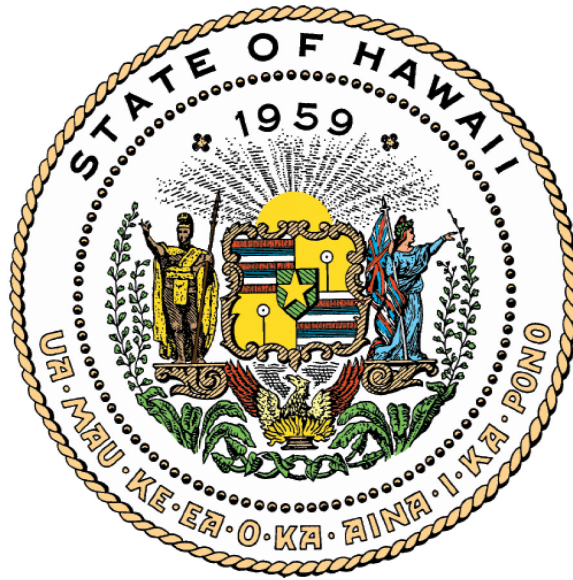
Sincerely,

A handwritten signature in black ink, appearing to read "Ed Sniffen".

EDWIN H. SNIFFEN
Director of Transportation

Attachment

Citations by Site



DEPARTMENT OF TRANSPORTATION'S
REPORT TO LEGISLATURE
OF
THE STATE OF HAWAII
REQUIRED UNDER

SECTION 8, ACT 30, SESSION LAWS OF HAWAII 2020

**ANNUAL REPORT: "PHOTO RED LIGHT IMAGING DETECTOR
SYSTEM PILOT PROGRAM"
FROM ACT 30
SESSION LAWS OF HAWAII 2020**

Citations by Site

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
DECEMBER 2024

DEPARTMENT OF TRANSPORTATION'S
REPORT TO THE LEGISLATURE
OF THE STATE OF HAWAII

REQUIRED UNDER

SECTION 8 ACT 30 SESSION LAWS OF HAWAII 2020

Annual report to the Hawaii State Legislature on the Photo Red Light Imaging Detector Pilot Program

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Introduction:

Act 30 enacted in the 2020 Session Laws of Hawaii authorized a two-year pilot project to determine the effectiveness of photo red light imaging detector systems in reducing red light running violations and the serious injuries and traffic deaths associated with this driver behavior. Section 8 of Act 30 requires the Hawaii Department of Transportation (HDOT) to report annually until 2024 on the status and progress of the program.

The photo red light imaging detector program has reached the end of its two-year pilot phase on November 20, 2024. This report covers the data collected during the second year (October 2023 – November 2024) of the two-year pilot program operations.

Reduction in motor vehicle collisions

HDOT's primary motivation in pursuing a Red-Light Safety Camera System (RLSC) was reduction of serious injuries from crashes where one of the drivers involved disregarded a traffic control device (e.g., ran a red light). To determine if the pilot had an effect on this, HDOT traffic engineers collected crash data for the year prior to the activation of the RLSC at each intersection and compared it to the crash data from the year following implementation.

The crash data shows a reduction in major crashes at the RLSC sites. Major crashes are defined as those involving a fatality, injury or property damage of \$3,000 or more. The crash reduction post implementation was 16 crashes, or roughly a 69% reduction.

Crash Data

Location & Direction of Traffic	Equipment Activation Date	Disregard Traffic Control Crashes	
		2021 - Act date	Act date – November 30, 2024
(NWB) Vineyard Boulevard and Palama Street	10/1/2022	2	1
(NWB) Vineyard Boulevard and Liliha Street	11/14/2022	2	1
(SEB) Vineyard Boulevard and Nuuanu Avenue	12/11/2022	0	2
(NWB) Vineyard Boulevard and Pali Highway	12/28/2022	0	0
(SWB) Pali Highway and School Street	1/4/2023	4	2
(NEB) Likelike Highway and School Street	3/10/2023	0	0
(WB) Kapiolani Boulevard and Kamakee Street	3/24/2023	2	1
(NB) Piikoi Street and S Beretania Street	3/29/2023	4	0
(SB) Ward Avenue and King Street	4/14/2023	4	0
(SWB) McCully Street and Algaroba Street	4/14/2023	5	0
TOTALS		23	7

Reduction in traffic-related incidents

Background

Activation dates for the RLSCs vary by location due to construction sequencing. There were 10 intersections selected for RLSCs based on crash history and an engineering study.



(Note: a copy of the study can be found at <https://hidot.hawaii.gov/highways/files/2022/12/Final-RLSC-engineering-study.pdf>)

Approaches (Go Live Dates)

#	Approach Name	Intersection Name	Direction	Go Live Date
5	HWIR005	Vineyard & Palama	NWB	10/1/2022
6	HWIR006	Vineyard & Liliha	NWB	11/9/2022
7	HWIR007	Vineyard & Liliha	SEB	11/9/2022
8	HWIR008	Vineyard & Nuuanu	SEB	12/7/2022
9	HWIR009	Vineyard & Pali	NWB	12/26/2022
10	HWIR010	Vineyard & Pali	SEB	12/26/2022
11	HWIR011	Pali & School	SWB	12/29/2022
2	HWIR002	Likelike & School	SWB	3/10/2023
3	HWIR003	School & Likelike	NWB	3/10/2023
1	HWIR001	Likelike & School	NEB	3/14/2023
4	HWIR004	School & Likelike	SEB	3/16/2023
16	HWIR016	Kapiolani & Kamakee	WB	3/22/2023
14	HWIR014	Piikoi & Beretania	NB	3/29/2023
15	HWIR015	Beretania & Piikoi	WB S	3/29/2023
12	HWIR012	Ward Ave & King St	SB	4/28/2023
13	HWIR013	King St & Ward Ave	EB	4/28/2023
17	HWIR017	Mccully & Algaroba	SWB	4/14/2023

Due to the staggered activation schedule the sites that were activated earlier may reflect a higher total number of citations as they have been issuing citations for a longer period of time. The following charts provide total citation numbers and trends.

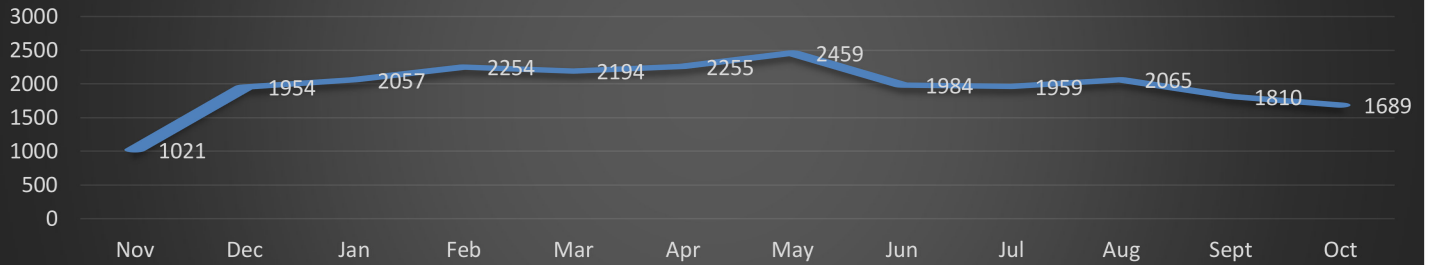
Red Light Notices Printed

(OCT 2023 – NOVEMBER 2024)

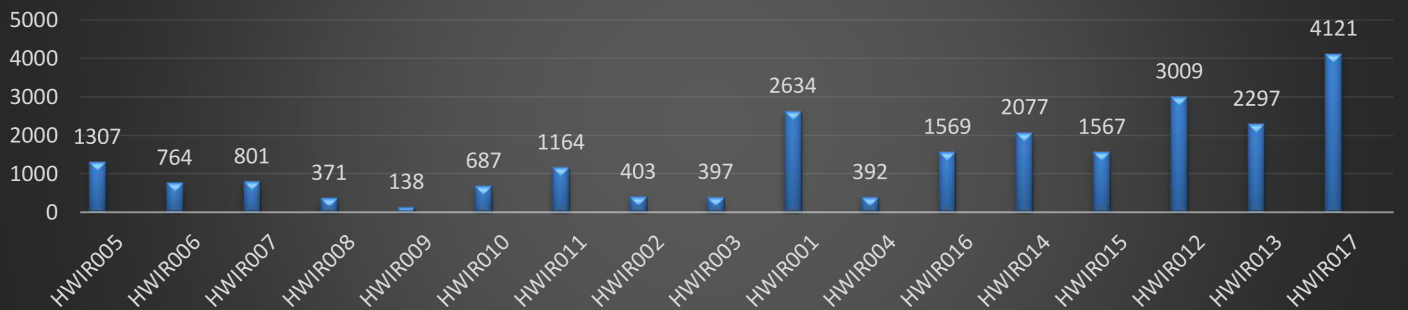
SITES HWIR009 AND HWIR010 DOWN SINCE MAY 2024 DUE TO HECO POWER ISSUE

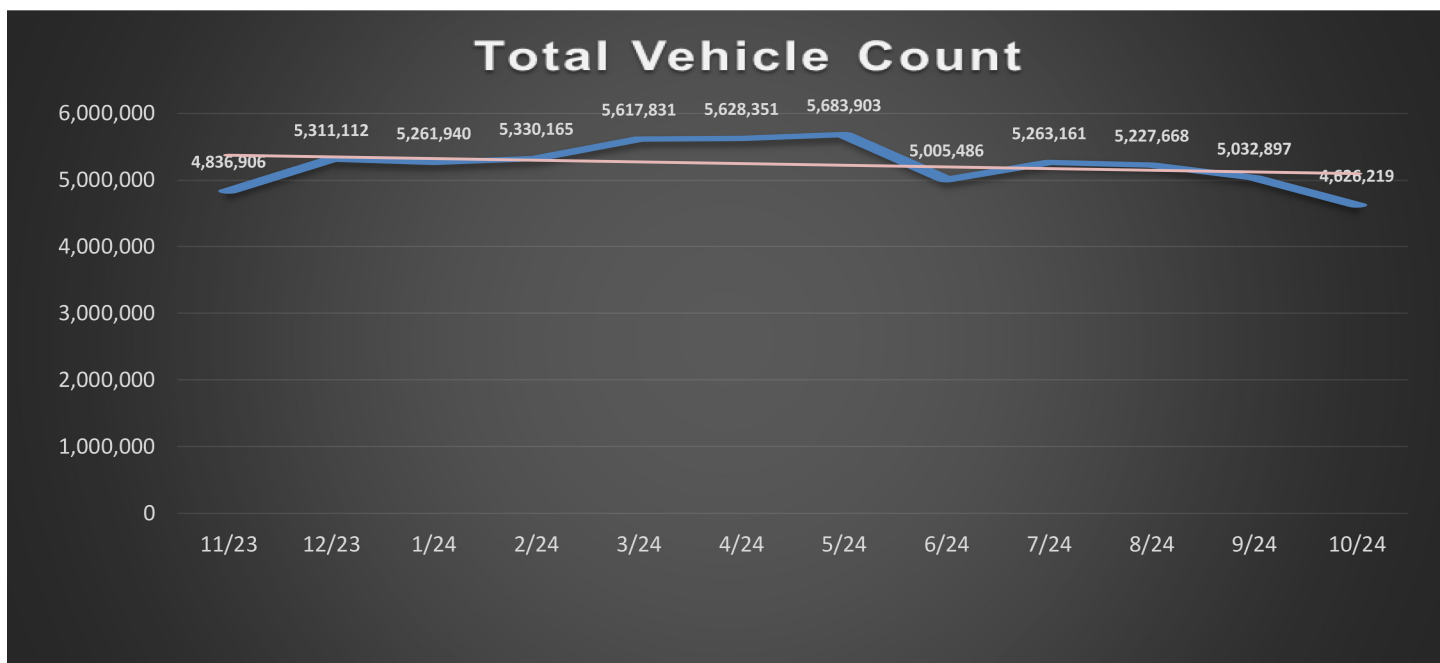
Month	23 NOV	23 DEC	24 JAN	24 FEB	24 MAR	24 APR	24 MAY	24 JUN	24 JUL	24 AUG	24 SEP	24 OCT	TOTAL
HWIR005	37	94	100	41	99	95	127	182	160	121	100	152	1307
HWIR006	14	41	57	64	67	64	80	75	64	91	75	72	764
HWIR007	37	68	68	54	51	85	72	53	53	98	93	69	801
HWIR008	18	25	21	32	30	27	29	42	31	52	27	37	371
HWIR009	10	18	20	24	11	21	34	0	0	0	0	0	138
HWIR010	53	90	123	101	113	108	99	0	0	0	0	0	687
HWIR011	69	102	100	93	122	107	109	106	99	148	109	0	1164
HWIR002	10	38	34	36	38	43	36	39	28	44	39	18	403
HWIR003	7	22	30	30	34	38	42	37	33	43	44	37	397
HWIR001	126	280	256	303	262	252	215	226	237	238	226	15	2634
HWIR004	31	20	42	56	32	29	36	14	16	42	31	43	392
HWIR016	64	146	109	146	126	156	190	105	100	125	121	181	1569
HWIR014	98	170	253	312	268	247	389	81	39	82	45	93	2077
HWIR015	71	114	115	153	120	142	137	111	169	151	125	159	1567
HWIR012	139	262	237	242	251	273	229	305	285	298	257	231	3009
HWIR013	59	191	206	217	219	225	239	206	226	153	158	198	2297
HWIR017	178	273	286	350	351	343	396	402	419	379	360	384	4121
Total	1021	1954	2057	2254	2194	2255	2459	1984	1959	2065	1810	1689	23698

Red Light Notices Printed by Month



Total Documents Printed by Approach





Additional factors in number of citations issued include the number of vehicles passing through the intersections which tends to vary based on factors such as school breaks, holidays and events. The charts below show overall vehicle counts and the percentage of RLSC citations issued compared to the total number of vehicles, which is fairly low. Counts show less than 0.04% of drivers are choosing to run red lights at the RLSC intersections.

Traffic Statistics

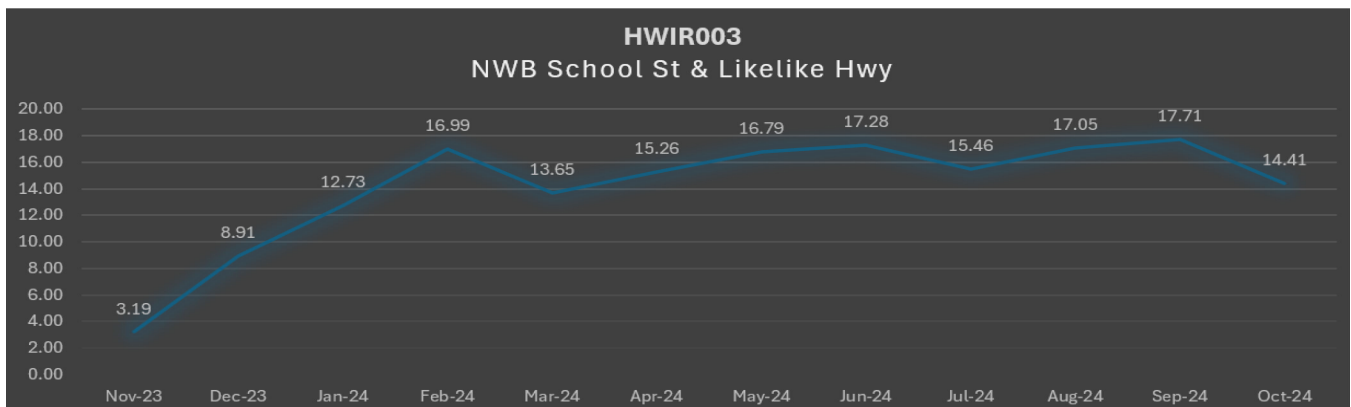
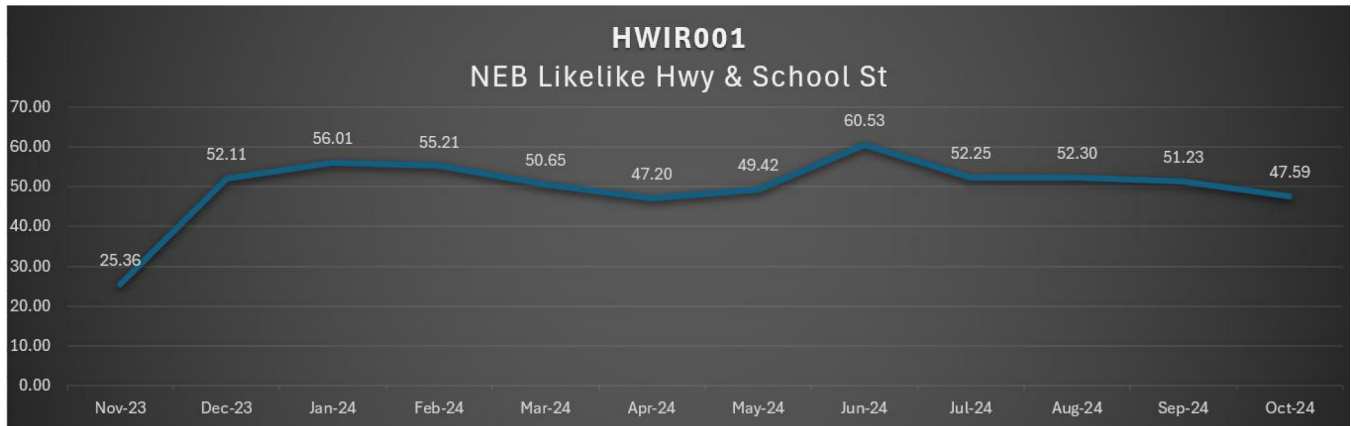
Month	Vehicle Count	Events	Issued Citations	Issued Warnings	Issued Total	%Issued
23-Nov	4,836,906	7,076	1,021	0	1,021	0.02%
23-Dec	5,311,112	8,182	1,954	0	1,954	0.04%
24-Jan	5,261,940	7,746	2,057	0	2,057	0.04%
24-Feb	5,330,165	7,809	2,252	0	2,252	0.04%
24-Mar	5,617,831	8,044	2,194	0	2,194	0.04%
24-Apr	5,628,351	7,929	2,255	0	2,255	0.04%
24-May	5,683,903	7,121	2,459	0	2,459	0.04%
24-Jun	5,005,486	5,974	1,983	0	1,983	0.04%
24-Jul	5,263,161	6,295	1,959	0	1,959	0.04%
24-Aug	5,227,668	6,332	2,065	0	2,065	0.04%
24-Sept	5,032,897	5,911	1,810	0	1,810	0.04%
24-Oct	4,626,219	5,670	1,689	0	1,689	0.03%

Citations by Site

(OCT 2023 – NOVEMBER 2024)

Citations are shown by month; Y-axis is vehicle volume per 100,000 vehicles.

SITES HWIR009 AND HWIR010 DOWN SINCE MAY 2024 DUE TO HECO POWER ISSUE

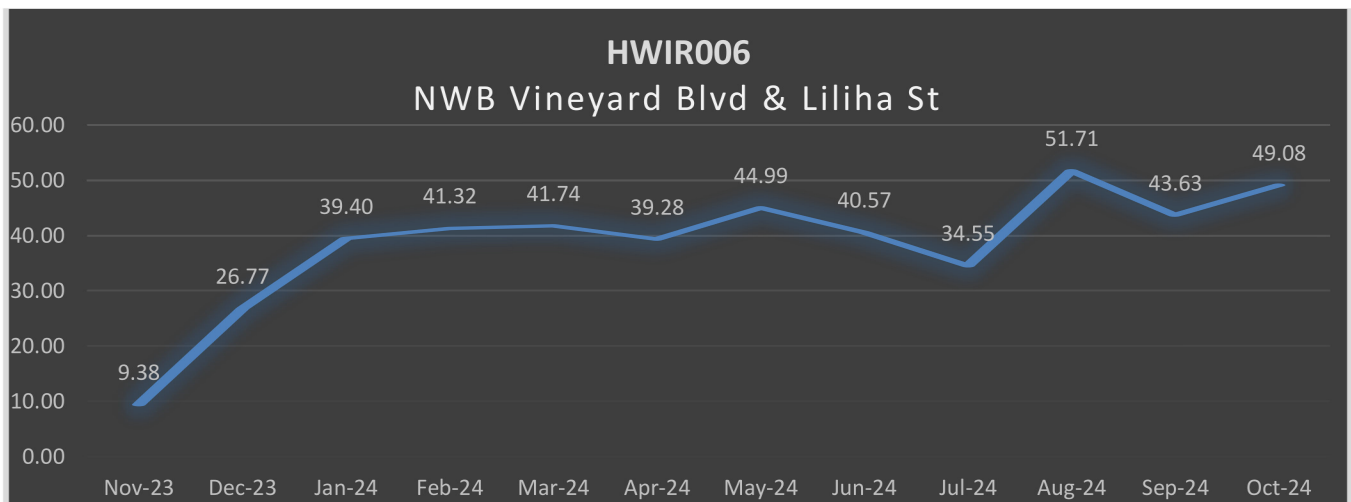
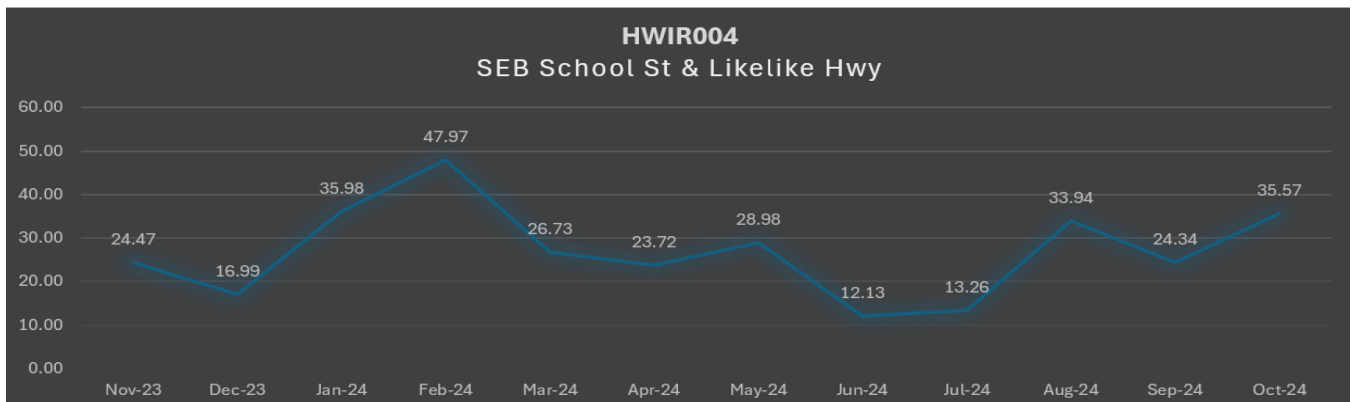
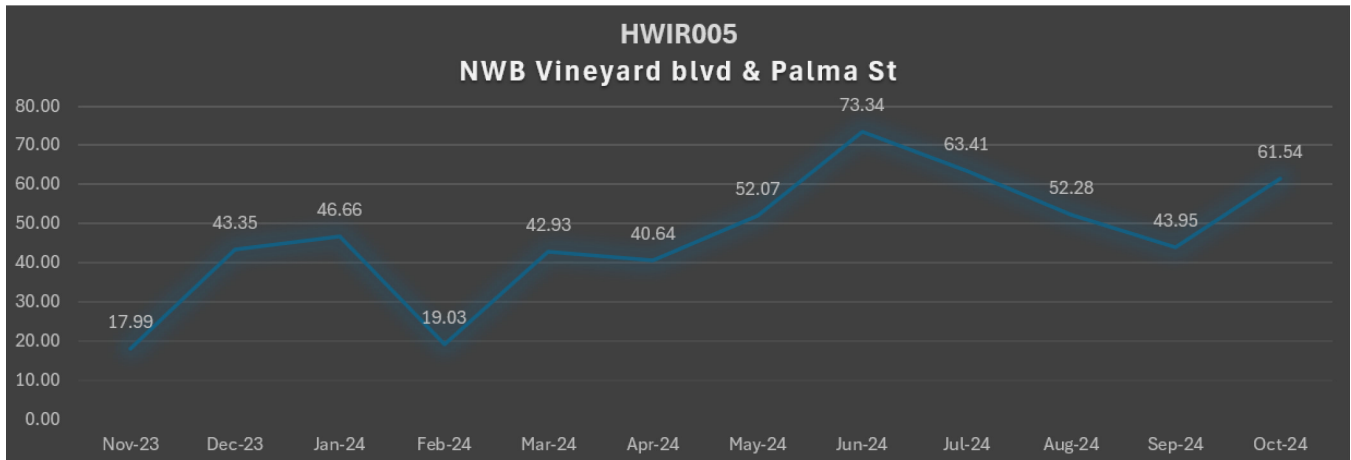


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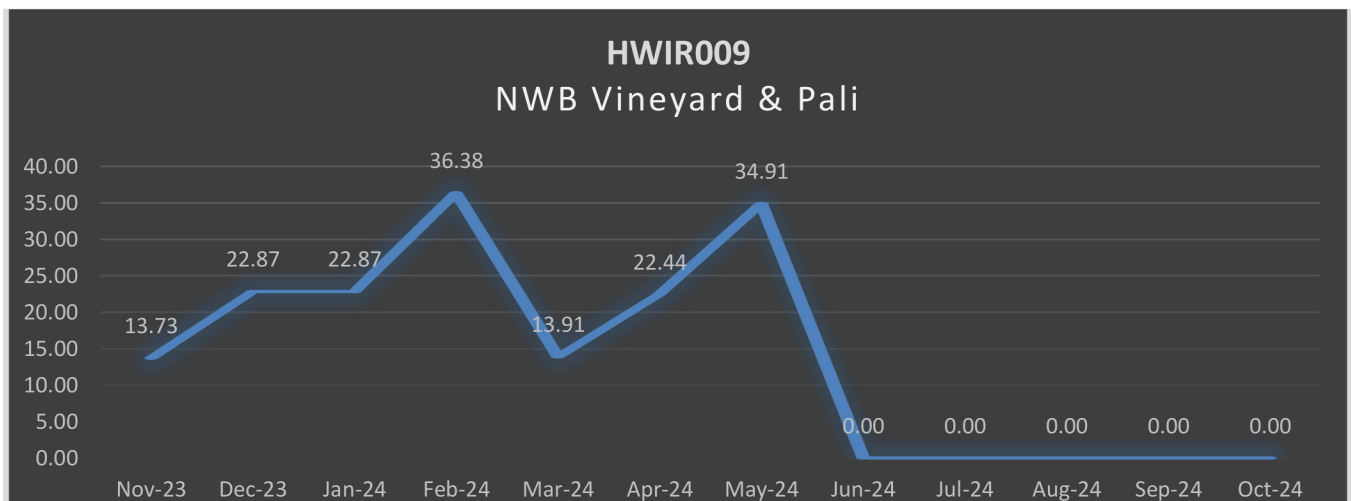
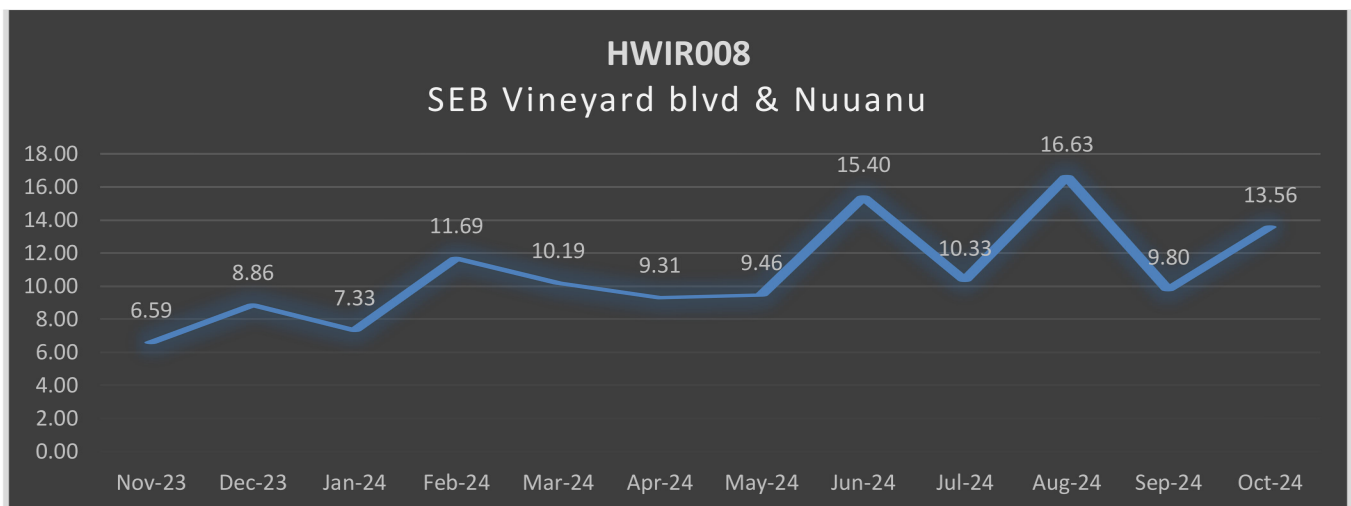
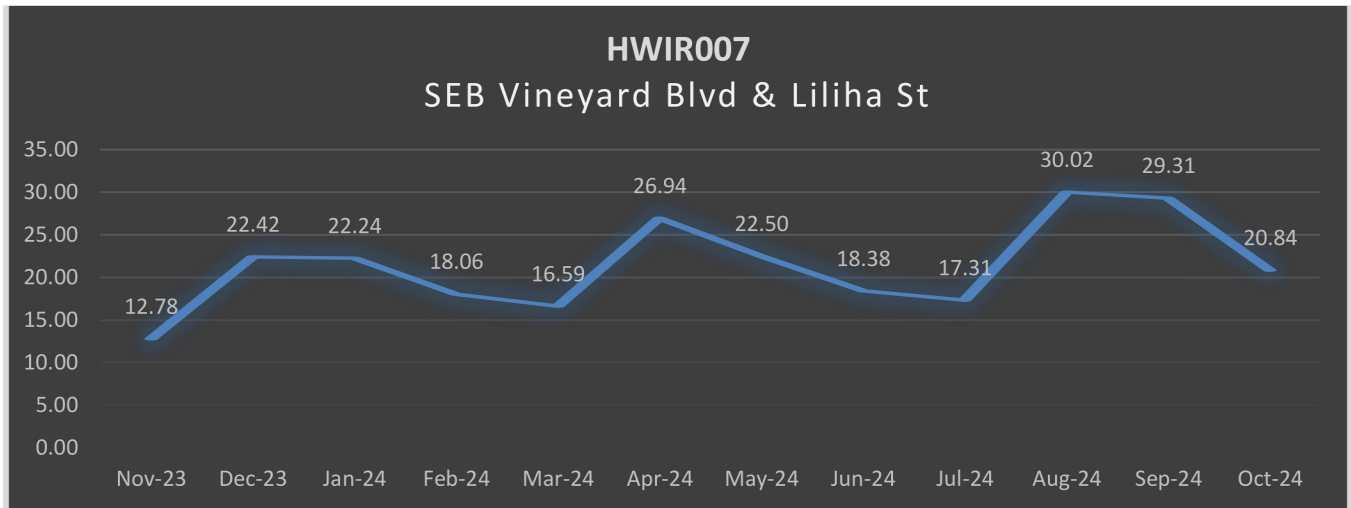


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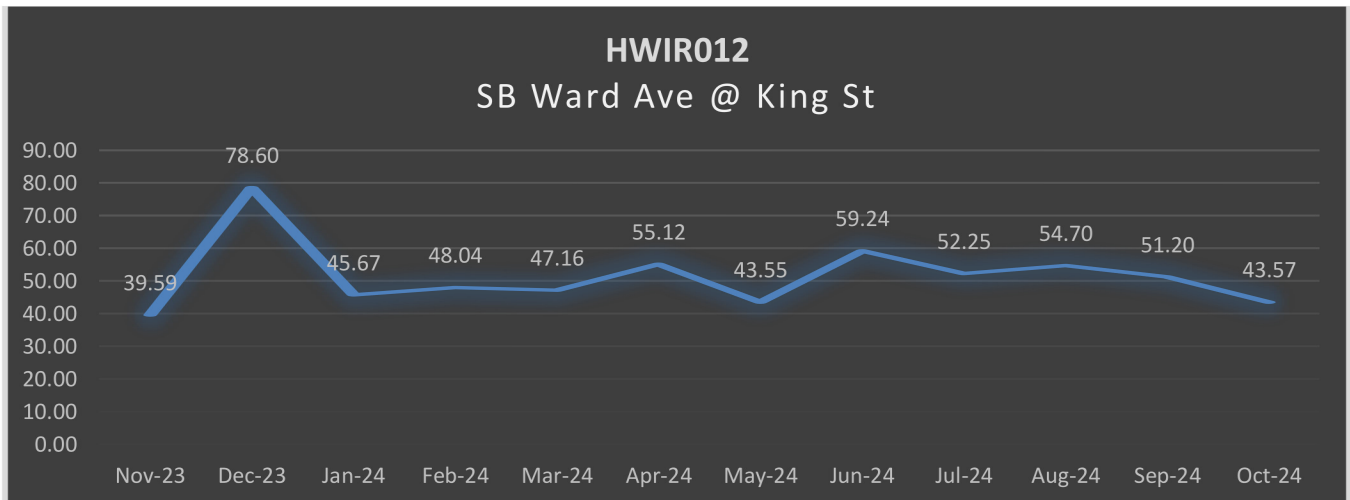
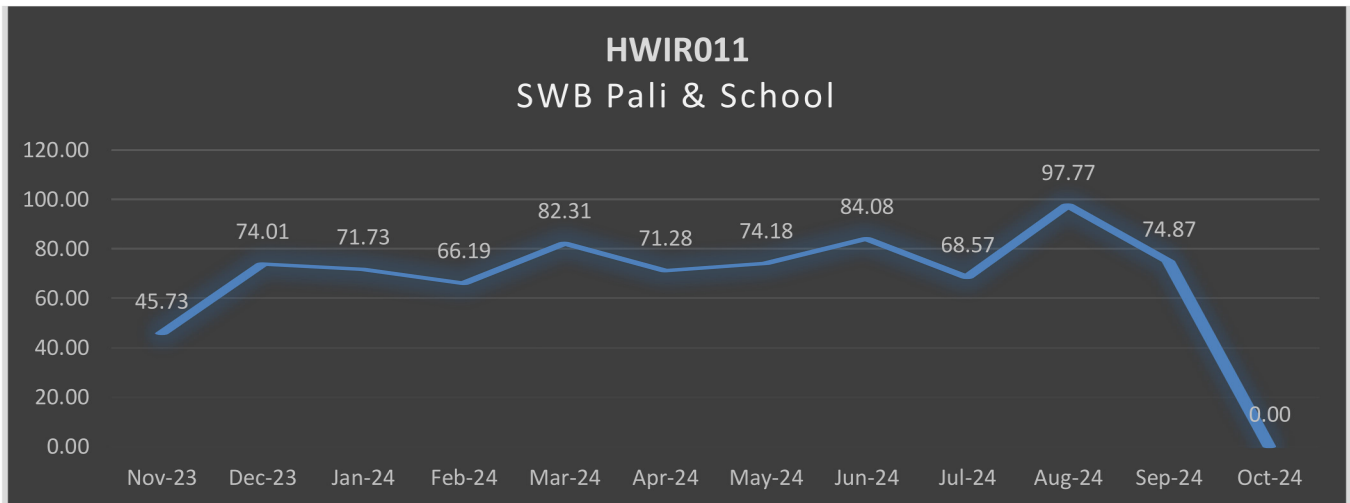
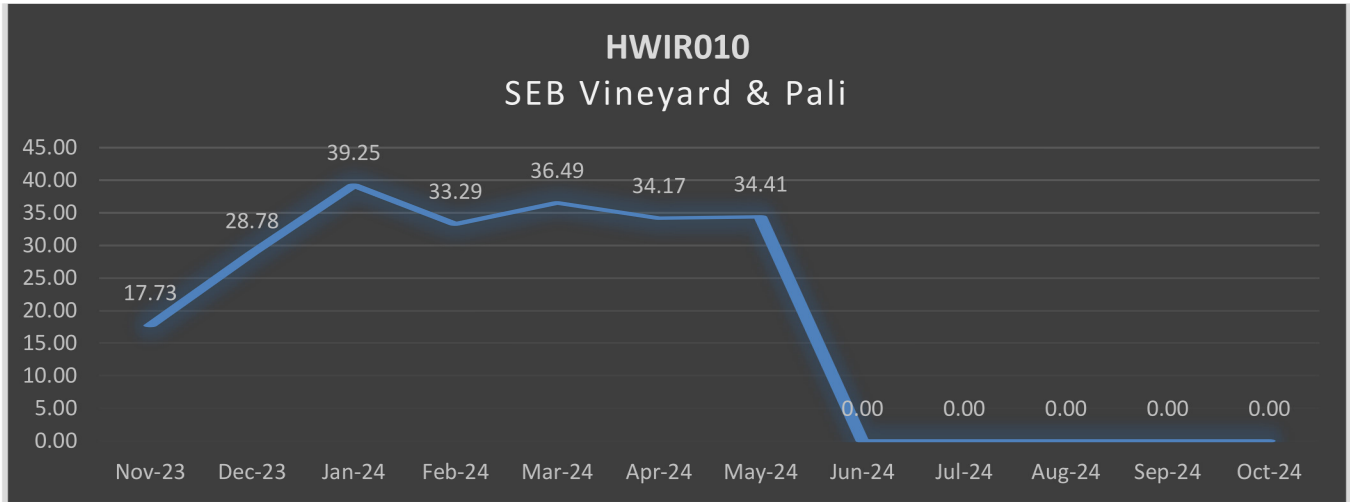


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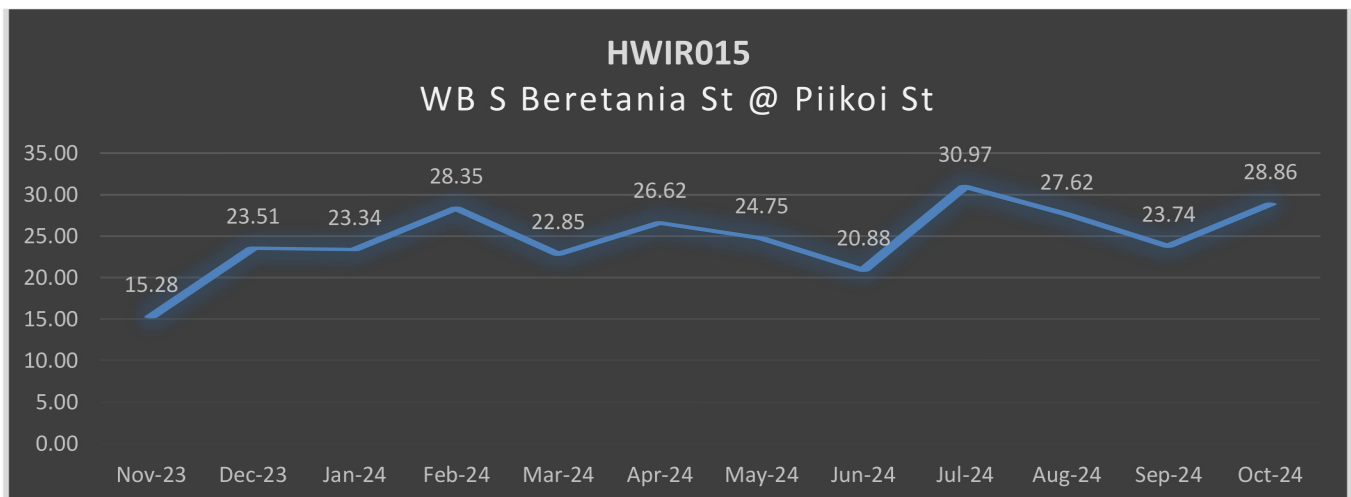
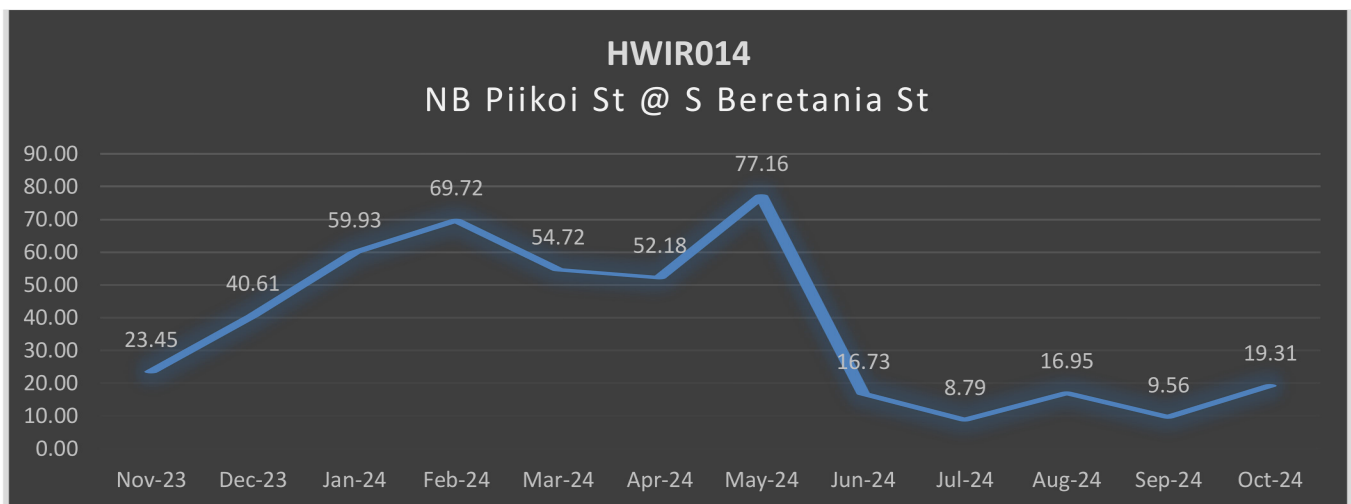
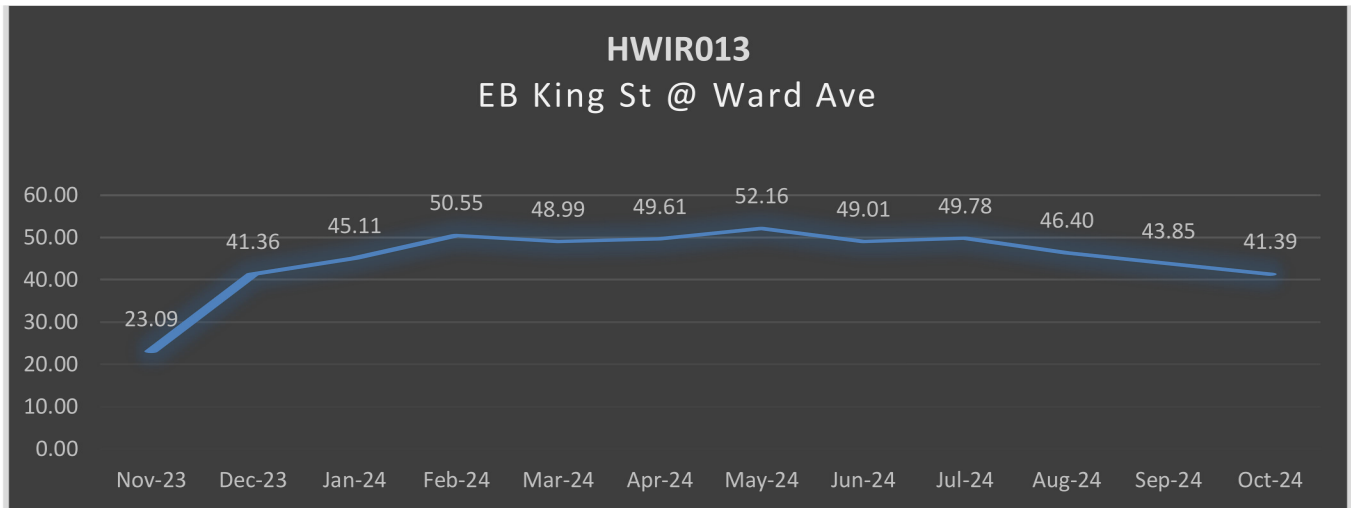


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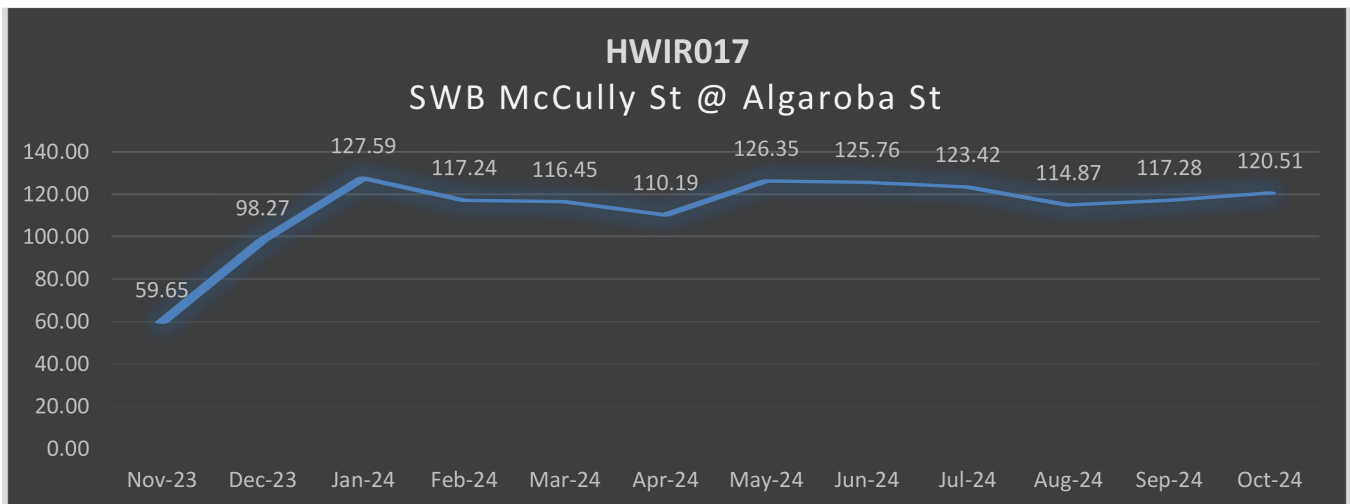
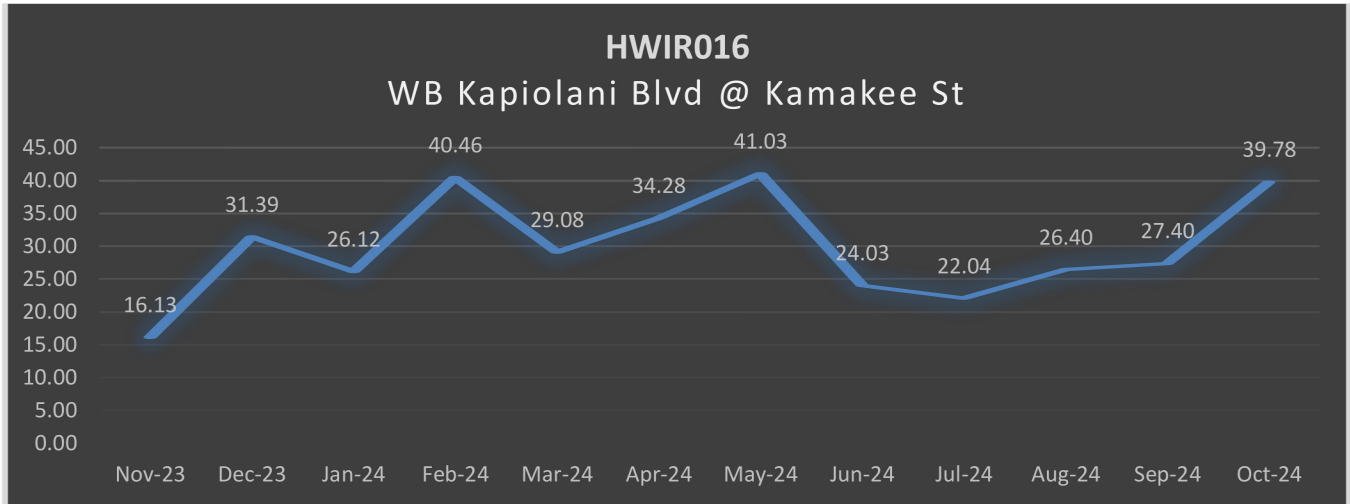


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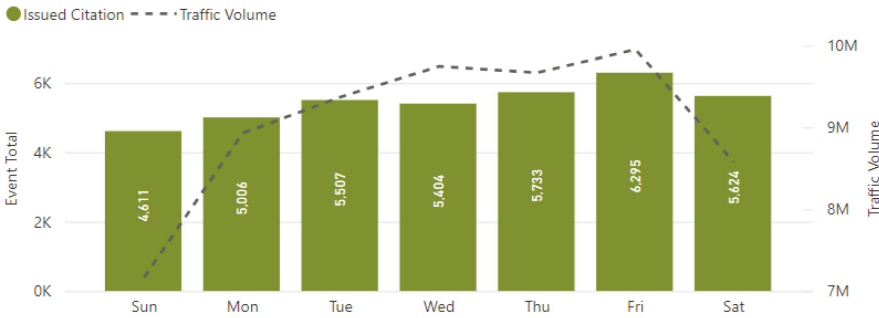
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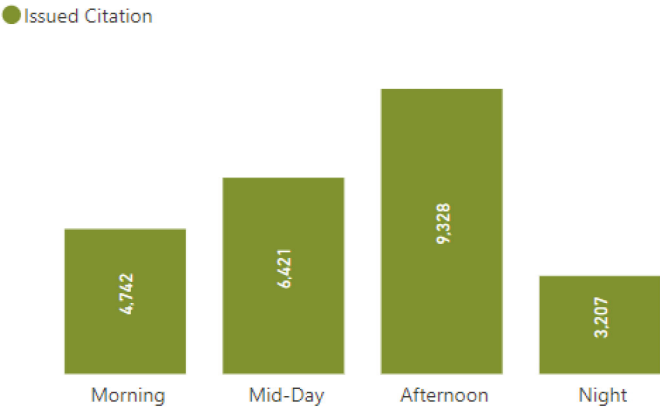


Citations by Day of the Week

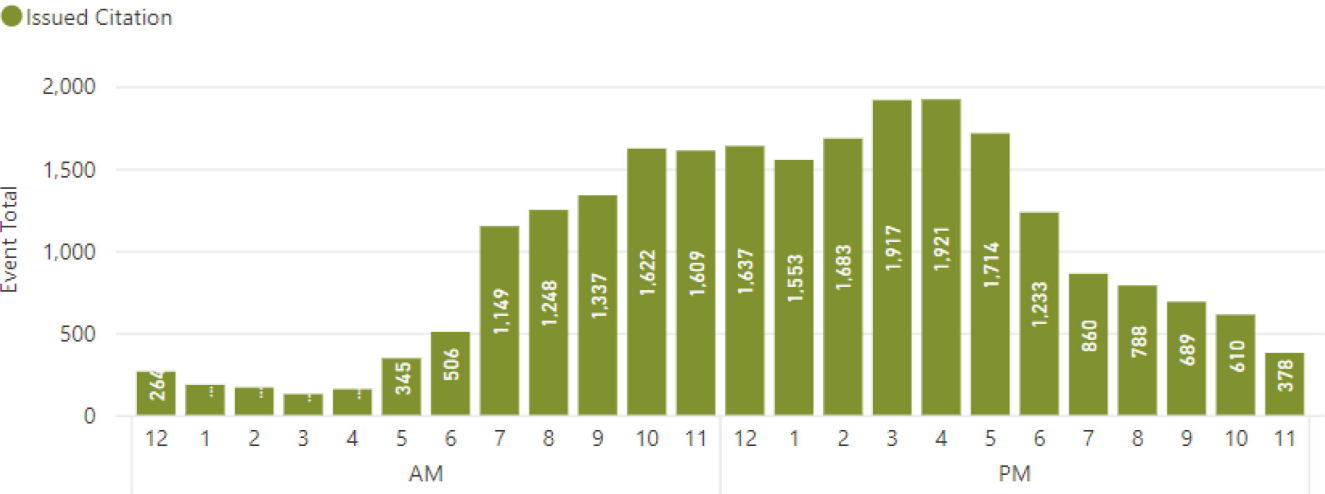
Events by Day of the Week



Events by Time of Day



Events by Hour of the Day



Recommendations for program improvement

HDOT and our traffic safety partners agree that we need to continue outreach and education efforts to further reduce red light running incidents. The pilot launch was conducted mainly with earned media accompanied by targeted outreach to English as a Second Language populations around the first RLSC sites.

As the program continues and expands, HDOT will continue to consult with the organizations that made up the initial red-light running committee to determine the needs of the program and how to best meet the program goals of reducing harmful traffic collisions.

Recommendation on establishment of a permanent program

HDOT and our partners continue to support the program becoming permanent due to the positive impacts it has had on traffic safety and look forward to the program being implemented statewide. Many communities statewide have requested RLSCs and HDOT will work with the necessary stakeholders to evaluate these requests now that the pilot period has ended.

Funding estimates

The total amount of the pilot program is \$2.8 million. The monthly cost for the equipment is \$90,267 for 17 cameras at 10 intersections. The pilot program is on budget.

Revenue collected from violations of HRS §291C-32(c) through the RLSC program between November 29, 2023, and November 29, 2024, totaled \$1,606,774.28.

As the intended goal of the program, reduce harmful crashes from disregard of a traffic control device, is being met, HDOT intends to continue to support RLSC operations through use of State Highways Funds. As a proven safety countermeasure, RLSC systems are also eligible for federal Highway Safety Improvement Program (HSIP) funding.

Mahalo for the opportunity to conduct and report out on the RLSC pilot project. Additional information can be found on the HDOT website at <https://hidot.hawaii.gov/highways/safety-camera-systems/red-light-safety-program/>