HNL Connect

Honolulu Transportation Demand Management

(TDM) Plan

April 2023

HNL Connect

Prepared by:

Steer

800 Wilshire Blvd, Suite 1320, Los Angeles, CA 90017, USA

+44 20 7910 5000
www.steergroup.com

Prepared for:

Department of Transportation Services City & County of Honolulu, Hawai'i

530 South King Street
Honolulu, HI 96813

steer

Steer has prepared this material for Department of Transportation Services. This material may only be used within the context and scope for which Steer has prepared it and may not be relied upon in part or whole by any third party or be used for any other purpose. Any person choosing to use any part of this material without the express and written permission of Steer shall be deemed to confirm their agreement to indemnify Steer for all loss or damage resulting therefrom. Steer has prepared this material using professional practices and procedures using information available to it at the time and as such any new information could alter the validity of the results and conclusions made.
This report was funded in part through grants from the Federal Highway Administration and Federal Transit Administration, U.S. Department of Transportation. The views and opinions of the agency expressed herein do not necessarily state or reflect those of the U.S. Department of Transportation.

Executive Summary

The City and County of Honolulu (City), along with the Oʻahu Metropolitan Planning Organization (OahuMPO), have set out to deliver a Transportation Demand Management (TDM) Plan for Honolulu. This document, the Honolulu TDM Plan, provides City overarching goals for TDM delivery, outlines existing conditions, explores best practices, and provides recommendations to guide the establishment of a fully functioning, feasible TDM program. The program, Honolulu Connect (*HNL Connect*), will be operated by the City Department of Transportation Services (DTS) and will serve residents, visitors, and employees across the island.

The development of the TDM Plan and the *HNL Connect* program scope resulted from a planning effort involving an interdepartmental team of City staff, stakeholders from the State of Hawaiʻi, OahuMPO, and a variety of non-governmental organizations. Recommendations for the *HNL Connect* program establishment and implementation have also been informed by market research of Honolulu residents, as well as identified best practices in comparable cities and regions.

Theme	Goal
1. Environment	Improve energy efficiency and mitigate vehicle emissions by supporting and encouraging active and shared modes of travel and reducing travel through telecommuting and other measures.
2. Equity	Apply context-sensitive and community-driven solutions to enhance connectivity and bolster reliable, safe, and affordable multimodal transport access for vulnerable communities. Ensure that land uses are integrated with a multimodal transport network through adoption of policies and with stakeholder support.
3. Land Use and Development	Ensure that land uses are integrated with a multimodal transport network through adoption of policies and with stakeholder support.
4. Long-term Resilience	Operate a revenue generating and self-sustainable TDM program with regular data collection and transparent reporting to the public.

TDM in Honolulu

TDM is the use of strategies to inform and encourage travelers to maximize the efficiency of our transportation systems leading to improved mobility, reduced congestion, and lower vehicle emissions[1]. It is a cost-effective approach to improving transportation by maximizing mobility choices that meet and exceed traveler needs.

HNL Connect: the Honolulu TDM Program

In order to leverage TDM productively in Honolulu, it is important that the TDM Plan go beyond traditional high-level recommendations, and focus on actionable recommendations that the City can implement directly. *HNL Connect* is the program and brand under which all TDM will be implemented. The program will be managed directly by DTS staff and will also engage with other City departments and partners.

In the first five years of delivery, *HNL Connect* will deliver six 'primary strategies' and provide support to a variety of additional initiatives across Honolulu. Aligning with all its work, the program will maintain broad public communication through social media, and regularly evaluate its impact through regular monitoring and reporting.

The six 'primary strategies' and four 'support strategies' that *HNL Connect* will deliver are summarized below.

Primary Strategies	Support Strategies
Annual Travel Challenge – a week-long travel contest incentivizing travel by sustainable modes	**Parking pricing management –** supporting efforts to parking pricing to encourage the use of sustainable modes
Targeted marketing – an annual marketing campaign encouraging sustainable travel choices	**TDM education –** supporting the provision of TDM fluency training to public officials, business owners, and the public
Restricted Parking Zone (RPZ) Program - encouraging travelers to use more sustainable options to driving alone to certain destination neighborhoods	**Citywide Multimodal Efforts** – promotion of first- and last-mile travel options
Vanpool subsidy provision – encouraging vanpool usage by providing up to $500 per vanpool per month	**Carpool matching** – support for carpool matching, currently managed at the statewide level
Developer TDM Reporting - formal processes for new projects to encourage site-based TDM delivery	
TDM program for City employees - TDM strategies and incentives provided directly to City employees	

Contents

1. Introduction **10**

TDM in Honolulu 12

The Honolulu TDM Plan 16

Vision and Strategic Priorities 18

2. Plan Development Approach **24**

Phase 1 Background Assessment 28

Phase 2: Goals and Objectives Identification 40

Phase 3: Strategy Evaluation 41

Phase 4: Action Plan Development 42

3. Program Detail **44**

Staffing and Funding 48

Federal Highway Administration (FHWA) Funding 48

City and County of Honolulu Staffing 49

Branding 50

Ongoing Communication 52

Social Media Communication 54

Monitoring and Evaluation 56

Objectives and Targets 60

Island-wide Progress 65

4. Action Plan: Strategy Implementation **68**

Strategy Overview 70

HNL Connect-Managed Strategies 72

HNL Connect-Partnered Strategies 98

Support Strategies 112

Parking Pricing 114

TDM Education 118

5. Taking TDM into the Future **122**

Next Steps 124

The Opportunity 124

Near-Term Priorities 124

Tracking Progress 124

Collaboratively Advancing a Wider Vision 126

Conclusion 127

Appendices **128**

Endnotes **140**

1. Introduction

TDM in Honolulu

What is TDM?

Transportation Demand Management (TDM) is the use of strategies to inform and encourage travelers to maximize the efficiency of our transportation systems leading to improved mobility, reduced congestion, and lower vehicle emissions.[2] It is a cost-effective approach to improving transportation by maximizing mobility choices that meet and exceed traveler needs.

Why TDM in Honolulu?

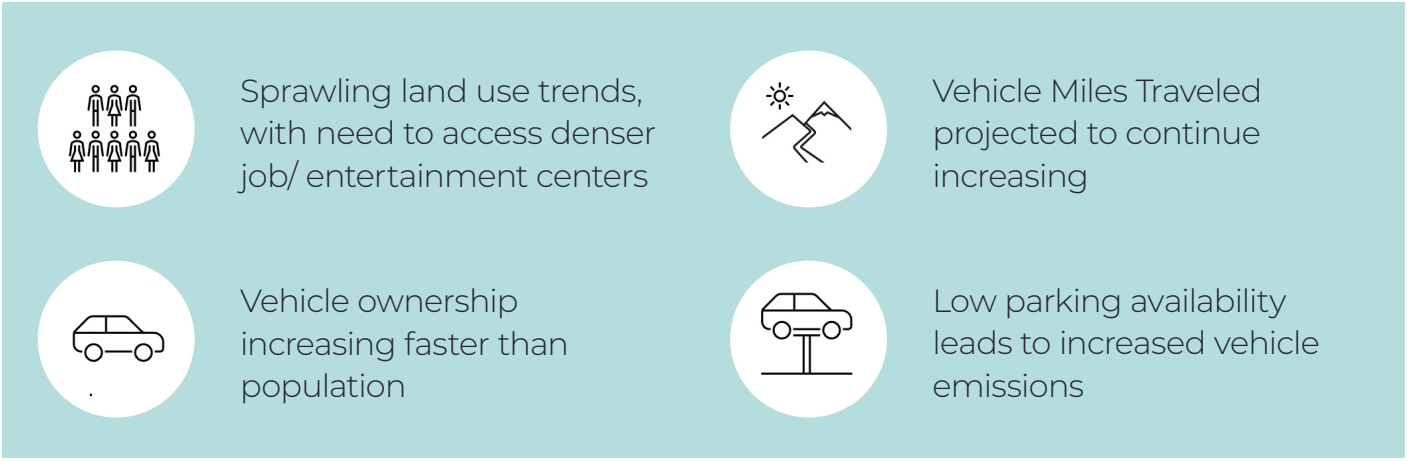
The island of Oʻahu, home to the City and County of Honolulu, is over 600 square miles (the majority of which is uninhabitable) and has a population of roughly 1,000,000 people. The most populous city in Hawaiʻi, Honolulu, has a relatively low population density of 1,664 people per square mile. These population dynamics, combined with tourism impacts, available land for housing, and a concentration of jobs in the south-southeast side of the island, have led to an extreme lack of affordable housing near job centers and a car-dependent reality. The result has been a self-reinforcing cycle of declining public transportation speed and unreliable travel times on the island, further and further from Honolulu's urban core.

In the 21 years leading up to 2021 the population of Oʻahu grew by 14%[3] while car ownership increased by 25%.[4] Oʻahu, therefore, now has arguably too many cars, and by traffic engineering standards not enough space along most roadway segments to efficiently move or store at current levels of their single-occupant use. Similarly, drivers often struggle to find parking in popular areas, many of which show above 85% occupancy; this leads to additional congestion and increased vehicle emissions as cars drive in circles to look for parking.

The 2045 Oʻahu Regional Transportation Plan (ORTP) projects insignificant changes in mode share by 2045, without encouragement from transportation interventions such as Complete Streets and TDM (see Figure 2). Given anticipated population growth and sustained rates of SOV travel, the 2045 ORTP therefore implies an *increase* in vehicle miles traveled (VMT), travel times, and in vehicle greenhouse gas (GHG) and volatile organic compounds (VOC) emissions.

This TDM Plan is meant to address such negative impacts to long-term environmental quality and equity in Honolulu. As Honolulu strives to stay on top of increasing car ownership and congested roadways, influencing behavior change and encouraging a shift away from drive-alone travel through TDM will be crucial.

Figure 1 TDM need in Honolulu



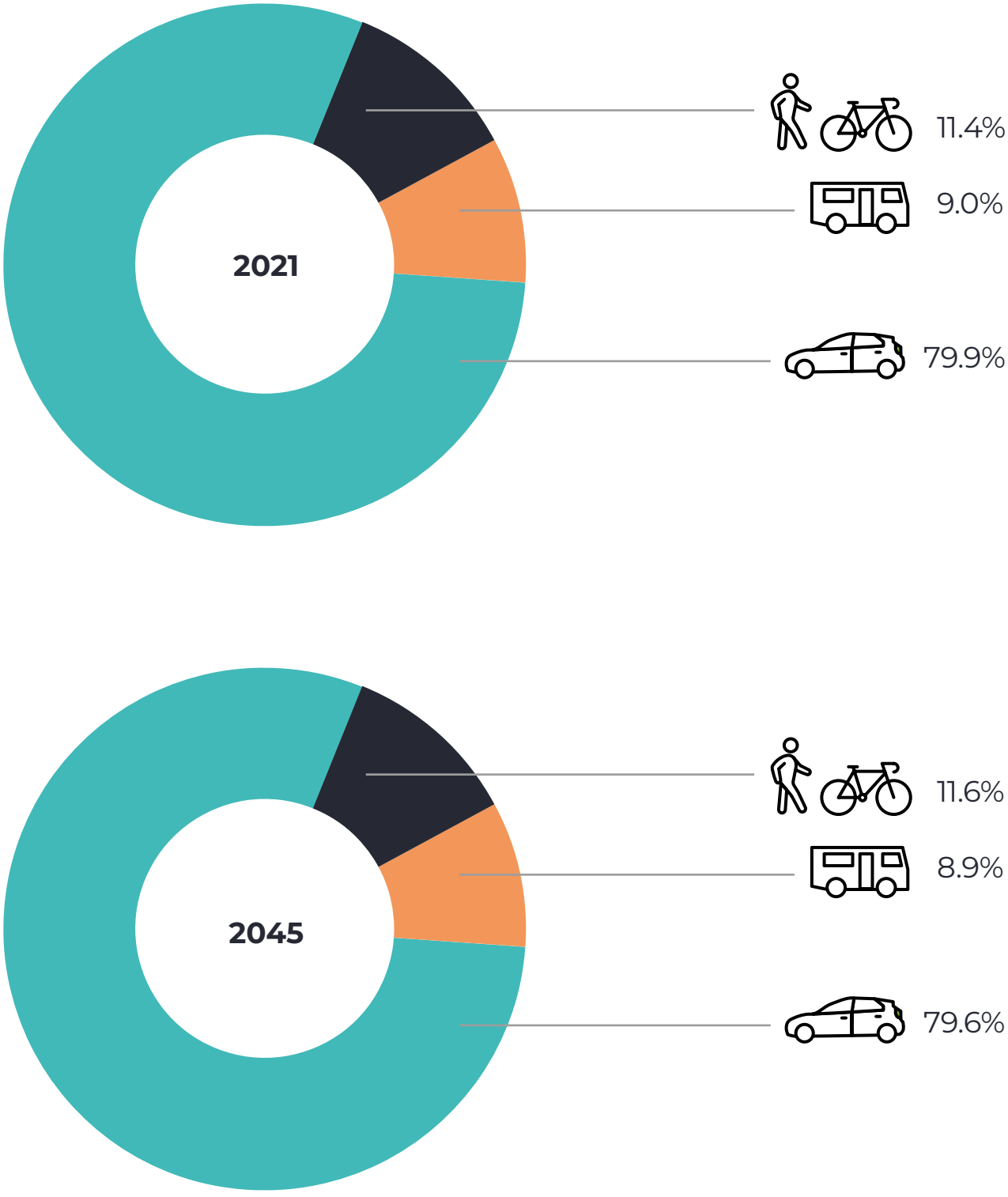


Figure 2 Mode Share in Honolulu (source: Adapted from 2045 ORTP)

Policy context

Rather than 'starting from scratch' or 'building out' of the issue described, the City is leveraging the current range of TDM-related programming and policy that exists today. These programs and policies are being implemented across the public and private sectors on both broad (up to statewide) and specific (site-based) scales. There are a number of plans and policies that support TDM principles, and conversely, which the recommended TDM policies and strategies in this Plan support. The implementation recommendations in this TDM Plan will be complementary to these existing efforts, including targeted recommendations to resource key gaps or needs, and support existing related efforts. The unique aspects of this TDM Plan fill the voids on the road to sustainability (e.g., parking strategies and vanpool subsidies), and therefore minimize the duplication of efforts. TDM-related policies and programs addressed outside of this Plan include but are not limited to:Climate Action Plan (2020-2025)

- Energy Conservation and Emissions Reduction Plan for City transportation systems (EERPT)
- Oʻahu Regional Transportation Plan (ORTP) 2050
- Honolulu Complete Streets Law (ROH 14-18)
- Oʻahu Pedestrian Plan (2022)
- Oʻahu Bike Plan (2019)
- Vision Zero Action Plan (forthcoming)
- Honolulu Strategic Transit Plan (forthcoming)
- Oʻahu Mobility Hub Study (forthcoming)
- Hawaiʻi State Transportation Plan (forthcoming)
- Statewide Transportation Demand Forecasting Model

Descriptions of each effort and its relation to this TDM Plan is included in **Appendix A.**

The Honolulu TDM Plan

The Honolulu TDM Plan (TDM Plan) has been developed by the City and County of Honolulu (the City) to support its broader goals and regional objectives relating to climate change, active transportation, health, and equity.

How to use this document

Planning and implementing TDM effectively will require the involvement of City staff as well as a range of stakeholders in Honolulu. This Plan recommends action primarily for the City, but may also inform decision-making for other TDM stakeholders. The purpose of this document is to serve as a framework and guide to implementing the formal TDM program in Honolulu, *HNL Connect*. This Plan, therefore, identifies roles and responsibilities, estimates resourcing implications, and provides justification as to why each TDM strategy was selected for Honolulu. Additionally, this document serves to help provide visibility and transparency to the public regarding the TDM Plan process and desired outcomes.

The Plan document is organized into five chapters:

1. Introduction

provides an introduction to TDM as a public service and suite of sustainability approaches, and explains why the TDM Plan was created

2. Plan Development Approach

outlines the process undertaken by the City and project team in developing the TDM Plan.

3. Program Detail

introduces the HNL Connect program and provides an overview of its elements. This chapter describes program management, implementation roles and responsibilities, and monitoring requirements

4. Action Plan: Strategy Implementation

provides a more detailed description of each TDM element or strategy to be implemented through the HNL Connect program.

5. Taking TDM into the Future

outlines near-term actions or 'next steps' as the City moves toward program implementation.

Vision and Strategic Priorities

Through the early TDM Plan planning process, the City developed a vision and set of priorities and goals for TDM delivery in Honolulu. The Vision Statement was co-created with City staff, elected officials, and local stakeholders:

"All travelers in the City and County of Honolulu have access to, and are empowered to choose effective, sustainable, and affordable multimodal transportation options that reduce stress on the transportation network."

Stemming from the Vision Statement, the TDM Plan consists of four strategic priorities, divided into four key themes, each of which has been connected to targeted goals (see Figure 3). Chapter 3 of this document outlines how those goals relate to additional measurable and actionable Key Performance Indicators (KPIs) and metrics tied to each of the recommended TDM strategies and are described in more detail in Section 3.6 of this document.

KEKAULIKE
NO
RIGHT

Figure 3. TDM Plan Strategic Priorities and Goals

1. Environment

Improve energy efficiency and mitigate vehicle emissions by supporting and encouraging active and shared modes of travel and reducing travel through telecommuting and other measures.

Goals

- Increase sustainable mode share
- Decrease vehicle miles traveled (VMT)
- Increase awareness of alternative transportation modes

2. Equity

Apply context-sensitive and community-driven solutions to enhance connectivity and bolster reliable, safe, and affordable multimodal transport access for vulnerable communities. Ensure that land uses are integrated with a multimodal transport network through adoption of policies and with stakeholder support.

Goals

- Increase accessibility
- Reduce travel cost burden

3. Land Use and Development

Ensure that land uses are integrated with a multimodal transport network through adoption of policies and with stakeholder support.

Goals

- Increase parking return on investment
- Maximize efficiency of parking assets

4. Long-term Resilience

Operate a revenue generating and self-sustainable TDM program with regular data collection and transparent reporting to the public.

Goals

- Increase TDM reporting
- Manage a self-sustaining TDM program

HNL Connect: The Honolulu TDM Program

In alignment with the *Long-Term Program Resilience* priority, the key product of the TDM Plan process was the establishment of the *HNL Connect* TDM program. *HNL Connect* will be managed directly by DTS staff, but will engage with other City departments as needed. The TDM Plan sets out basic guidelines for *HNL Connect* such as processes for regular communication and impact reporting. It also provides detailed descriptions of the main TDM strategies that will be directly ('primary strategies') or indirectly ('support strategies') supported by *HNL Connect*, including:

Primary Strategies

- **Annual Travel Challenge**– A promotional, week-long contest hosted annually, that will allow the public to compete for and win prizes and incentives for traveling by sustainable modes.
- **Targeted marketing** – An annual marketing campaign will be tailored to encourage sustainable travel mode choice by a unique target group, or promote a sustainable mode of travel (e.g., bikeshare).
- **Restricted Parking Zone (RPZ) Program** – Expanded from its current 'pilot' state, RPZ permit revenue will subsidize Mobility Wallets for residents who choose not to purchase a parking permit, encouraging the use of more sustainable travel to certain designation neighborhoods.

- **Vanpool subsidy provision** – To encourage an increase in vanpool usage, the City will offer subsidies to vanpool riders and drivers.
- **Developer TDM Reporting** – Formal processes for new projects across the City will encourage site-based TDM delivery as a complement to the *HNL Connect* program.
- **TDM program for City employees** - A program of TDM strategies and incentives provided directly to City employees will ensure more targeted TDM delivery for over 8,500 commuters.

Support Strategies

- **Parking pricing management** – Supporting the establishment of a parking pricing scheme that will encourage the use of sustainable modes, optimize off-street parking utilization, improve roadway safety and reduce congestion and emissions related to vehicle circling.
- **TDM education –** Supporting delivery of TDM education will increase conceptual knowledge and fluency training for public officials, business owners, and the general public.
- **Citywide Multimodal Efforts** - Entrepreneurial public-sector and private-sector delivery of Microtransit and Micromobility services**,** both of which support first- and last-mile travel, will be supported to make the use of public transit more effective.
- **Carpool matching –** Carpool matching will be facilitated through HIRideshare, currently managed at the statewide level.

2. Plan Development Approach

TRAIN 12
CAR 01

Approach Overview

The TDM Plan team approached Plan development in four phases, as defined below and captured in Figure 4.

1. **Background Assessment** – A review of on-island existing conditions related to TDM, and a comprehensive look at best practices more broadly. This phase also included the bulk of the stakeholder outreach, consisting of interviews, the establishment of a project Steering Committee, and an island-wide market research survey.
2. **Identification of Strategic Priorities and Goals**– Establishment of Strategic Priorities and Goals to frame the forthcoming TDM decision-making and continuing work in Honolulu, along with program level objectives related to outputs, actions, and inputs
3. **Strategy Evaluation** – Identification of a range of potential TDM strategies to be considered for Honolulu, and evaluation of strategies against the established goals and feasibility metrics. This phase concluded with the refinement of these potential strategies into a formalized set ofappropriate strategies for delivery in Honolulu.
4. **Action Plan Development** – Creation of a detailed action plan for TDM delivery in Honolulu, primarily through the establishment of *HNL Connect*. This phase also involved the development of any supportive material that will ultimately accompany the TDM Plan.

Figure 4. TDM Plan Approach[5]

Phase 1 Background Assessment

This initial phase of Plan development consisted of gathering in-depth knowledge of TDM-related policies and practices in Honolulu in order to establish an understanding of the types of strategies and programs that would be most impactful for the local context. Key methods employed included an existing policy and planning review, cataloguing of existing TDM delivery, market research analysis, and extensive stakeholder outreach. The TDM Plan team also worked alongside the team leading the Honolulu Transit Comprehensive Operations Analysis (COA) project, to identify some of the challenges associated with the current utilization of City parking infrastructure.

Existing Conditions

The review of existing conditions pertinent to TDM included an assessment of land use and land use trends, the socio-economic characteristics of Honolulu and Oʻahu, transportation and prevailing travel behavior, and the current state of TDM in Honolulu.

While no formal TDM program, plan, or policy existed for the general public in Honolulu prior to this Plan, a notable number of TDM-related initiatives have been implemented across the island. Some examples include the Complete Streets Policy, Safe Routes to School (SRTS), a Restricted Parking Zones (RPZ) pilot, and the (forthcoming) Vision Zero Action Plan.

Many institutions also offer the sale of monthly transit passes, and on average, monthly pass users pay almost 20% less per trip than the individual ride fare. Through such cost-saving incentives, the HOLO Card program provides encouragement to ride transit, and supports the reduction of the travel cost burden for Honolulu's transit riders. These efforts, amongst others, have helped to set the stage for a more aggressive and comprehensive TDM program in Honolulu.

Key challenges to TDM implementation on the island include (see Figure 5):

- Sprawling land use trends: over the past 40 years residential development in Honolulu has happened primarily in suburban areas, and although the City has experienced urban growth, population density of urban areas is still relatively low[6]. This provides challenges in managing VMT and emissions, as it is more likely that suburban residents need to travel to the urban core for work or entertainment.
- Large numbers of service-industry employees: the service industry tends to have variable travel habits that are harder to serve with fixed route pre-timed service. Individuals with variable schedules are also often more difficult to reach when marketing or providing education for TDM services.
- An underpriced public parking product: Honolulu's City-owned monthly parking rates are cheaper than the market supports in all neighborhoods. In some, such as Kukui Plaza and Hale Pauahi, City parking monthly rates are priced at less than 50% of market rate.[7] This encourages residents and visitors to drive to their destination with less consideration for the cost of parking.

Additionally, the TDM programming that does exist has not been consistently monitored to determine the impact of specific interventions - a key gap as it is, therefore, challenging to determine the impact of the TDM measures in place and the associated work being done.

The full Existing Conditions report can be found in **Appendix B.**

Figure 5 TDM challenges in Honolulu

Best Practices

The review of Best Practices summarized several TDM programs from across the globe and identified key takeaways for consideration in developing *HNL Connect*. Case studies relevant to Honolulu were selected to ensure that potential lessons learned would be appropriate for the local context. A total of six case studies were presented.[8] Key considerations that were identified in the Best Practices Report for consideration in the development of the TDM Plan and *HNL Connect,* are summarized to the right:

- **TDM Program Structure** – Program structure matters in connection with the question of whether developers and/or employers would be required to implement TDM (e.g., through an ordinance or similar regulation) or whether they would be encouraged to voluntarily participate, with incentives.
- **Performance Targets** – Program-wide Key Performance Indicators (KPIs) and strategy-specific metrics should reflect program goals. TDM Plan KPIs should be attainable and measurable. Program metrics should be trackable over time.
- **Audience** – The identification of the program's target audience(s) should consider program scale (including associated implications not only for the magnitude of intended TDM impacts, but also for funding and administration) and how implementation would affect the target audience(s) in various implementation timeframes.

- **Funding and Administration** – Dedicated funding sources are essential for sustained TDM implementation and effective monitoring and enforcement of TDM measures. Some TDM measures (e.g., new parking pricing models and innovative revenue collection) can be dedicated sources of TDM program funding.
- **Monitoring and Reporting** – TDM program tools/materials (e.g., applications and monitoring reports) should be standardized to consistently monitor both KPIs and strategy-specific metrics, and mitigate the administrative burden on City staff, as well as the target audience(s). Instruments such as surveys are commonly used and effective at capturing and tracking travel mode share.
- **Stakeholder Support** – Education and guidance are essential in helping the target audience(s) of TDM understand what is expected of them and will ensure that they have the appropriate resources to successfully comply with requirements.

The Best Practices case study review resulted in six key considerations to guide the development of Honolulu's TDM Plan:

- Overall program goals or strategic priorities should demonstrate clear value to employers, developers, and others across the island.
- Targets should be attainable, measurable, and trackable over time.
- Audience and scale should be considered when defining program strategies.
- A dedicated funding source will likely be needed to provide sustained support and implementation, as well as effective monitoring and enforcement.
- For any established development requirements, the City should consider mitigating administrative burden on developers and City staff.
- Education for employers and developers, who can deliver their own site-based programs, is critical.

The full Best Practices report can be found in **Appendix C.**

Stakeholder Engagement

Stakeholder outreach and coordination was conducted throughout the TDM Plan's development. Primary engagement activities included:

- Interviews with key stakeholders
- Steering Committee meetings
- A market research survey

Each of the engagement activities is further summarized to the right:

Interviews

Seven interviews were carried out with government agency representatives, transportation specialists, and hotel property owners/managers from the following organizations:

- Bikeshare Hawai'i
- City and County of Honolulu Department of Planning and Permitting (2 interviews)
- Marriott Kyo-ya Hotels
- OahuMPO
- Sheraton Kyo-ya Hotels
- Ulupono Initiative

The interviews were each framed by gaining an understanding of the interviewees' familiarity with TDM, and were focused on topics related to existing TDM efforts, related policies and programs, broader goals and objectives, and gaps and opportunities to TDM delivery in Honolulu.

Steering Committee

A Steering Committee was established to provide input throughout TDM Plan development. The Committee was comprised of members from various City departments, local community-based organizations, and partner agencies (e.g., the State, OahuMPO). Key contributions of the Committee included:

- Offering diverse perspectives regarding TDM issues
- Supporting the identification of the vision and desired outcomes
- Providing insights on transportation challenges
- Serving as TDM program champions

Market Research Survey

A market research survey was conducted in order to better understand Oʻahu residents' transportation behaviors and attitudes toward sustainable modes of transportation. Island-wide outreach was conducted through email and telephone in Fall 2021.

Participants included fulltime adult residents of Oʻahu.[9] The survey was comprised of questions falling into seven general categories:

- Household location and composition
- Travel characteristics
- Employment
- Vehicles in household
- Perceptions on various modes of travel
- Travel mode influencers
- Demographics (age, income, gender, ethnicity, origin, education)

The analysis provided insights into the barriers, motivations, and attitudes towards various modes of travel. In addition to other stakeholder input and the Background Assessment, the findings from the market research informed the prioritization of the TDM measures included in this TDM Plan. Key findings from the market research survey included the following:

- The majority (66%) of respondents were categorized as 'heavy drivers', using their vehicles five to seven days a week, on average;
- Finding parking in residential areas is challenging for approximately 25% of Oʻahu drivers;
- Those who live in the urban core are more open to adopting more sustainable travel modes;
- The top five most important travel mode influencers were: saving time, ability to carry items/cargo, saving money, air conditioning/ climate control, and privacy; and
- The majority (62%) of respondents indicated they would be more willing to use metered street parking if they could pay using credit/ debit cards.

The full Market Research Report can be found in **Appendix D.**

BIKE
LANE
ENDS

Parking Pricing Consideration

Research has shown that there are powerful relationships between parking management strategies (such as parking pricing), personal travel behavior, and GHG emissions. Parking pricing is often used as a tool to discourage drive-alone travel, increase reliability, and reduce vehicle travel due to circling in search of available parking. Some of the benefits of parking pricing include:

The price of parking influences drivers' choices to seek alternative solutions to driving. Parking is expensive to build (a free-standing garage space in Hawai'i can cost up to $57,000[10]); therefore, it is sensible for the City to consider utilizing TDM and other methods to decrease the demand for parking, rather than build more. Increasing parking pricing requires consensus and when done sensibly and equitably, it can ultimately generate revenue to further support TDM initiatives and the multimodal network, increasing access to key destinations for everyone.

Thus, when considering the design of a TDM program in Honolulu, it was critical to review the City's parking inventory to gain an understanding for how it might encourage or discourage drive-alone travel. The City currently manages over 3,100 on-street metered parking spaces, which include approximately 1,800 Smart Meters (which allow for payment via phone or credit card) and 1,300 coin-based meters. It is worth noting that the City is currently underway with a transition from coin-based meters to Smart Meters and thus these numbers will change.

In Summer 2022, the City conducted a review of their managed parking inventory as part of its Honolulu Transit COA design process and ahead of the expiration of the current parking management vendor contracts. The review revealed that, as of 2023, the City is spending just under $11 million on their parking maintenance and operation annually, and generating only $6.7 million in revenue. In short, the City is actually *losing* over $4.75 million on its current parking operation each year (see Figure 6).

The City's COA Consultant Team identified that parking in City-owned facilities is currently priced anywhere between 15% and 80% below the market rate seen in privately-owned garages. Three different pricing scenarios (low/medium/high levels of intervention) were explored to project the impacts of potential parking pricing increases. They found that the 'mid-level' scenario, which would bring the City-owned parking inventory in line with island market rates, would generate 40-60% more revenue for the City. It was also estimated that scenario could decrease automobile travel by 0.8% and increase transit and active (bike and pedestrian) travel by 1.3% and 1.2%, respectively, representing thousands of trips per day taken through an active transportation mode.

This would result in significant environmental benefits such as lower carbon emissions and space requirements. As shown in Figure 7, the average personal vehicle emits almost nine ounces of carbon dioxide per person miles traveled and requires over 104 square feet of space per occupant. Reducing the demand for parking and increasing the efficient use of existing parking infrastructure will enable land to be used in a way that offers more impactful societal benefits (e.g., green space/urban parks, bicycle and pedestrian infrastructure, affordable housing, etc.).

Observed Honolulu Customer Payment Preference

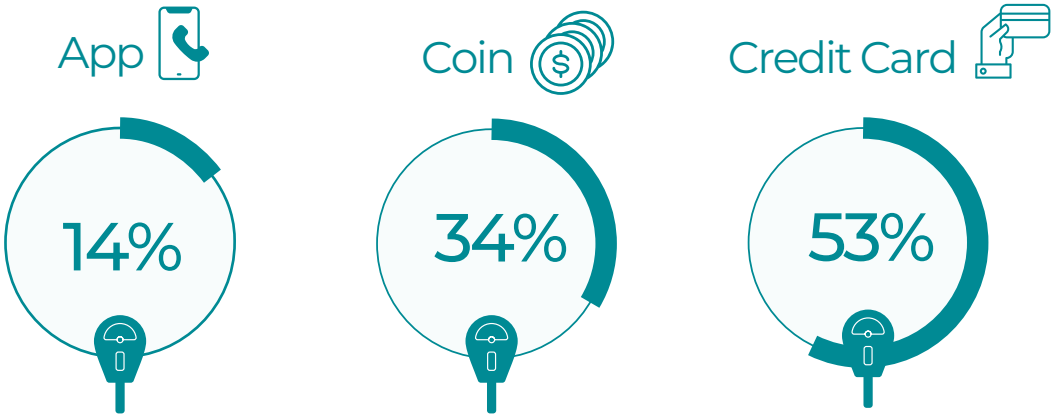
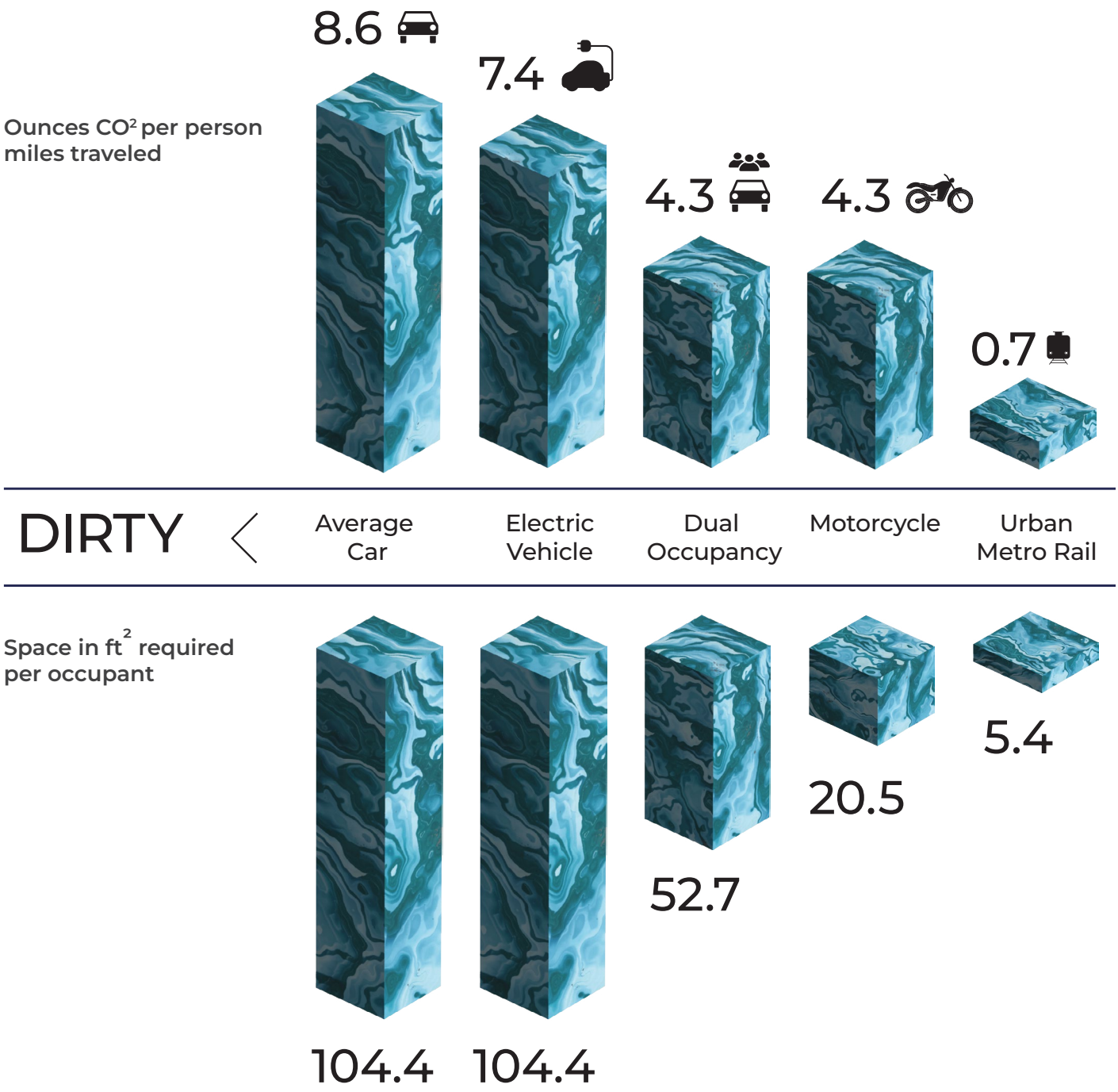
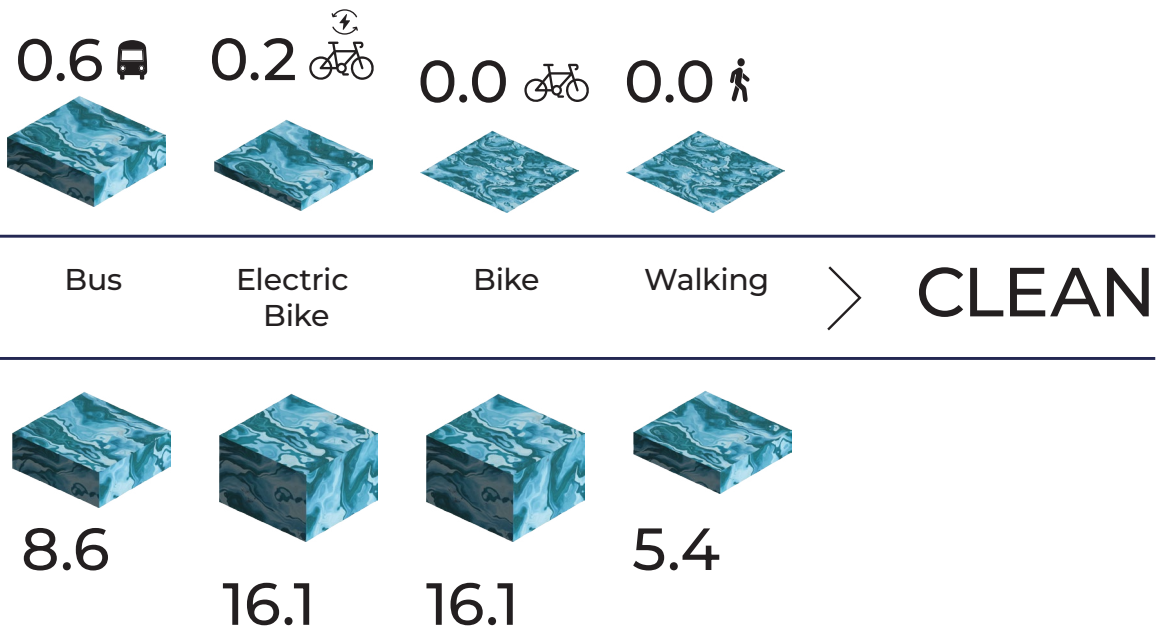


Figure 7. Carbon Emissions and Space Requirements by Mode (source: Adapted from 2021 Right-of-Way Widths for Planned Street Improvements)




0.6
0.2
0.0
0.0
Bus
Electric Bike
Bike
Walking
CLEAN
8.6
16.1
16.1
5.4

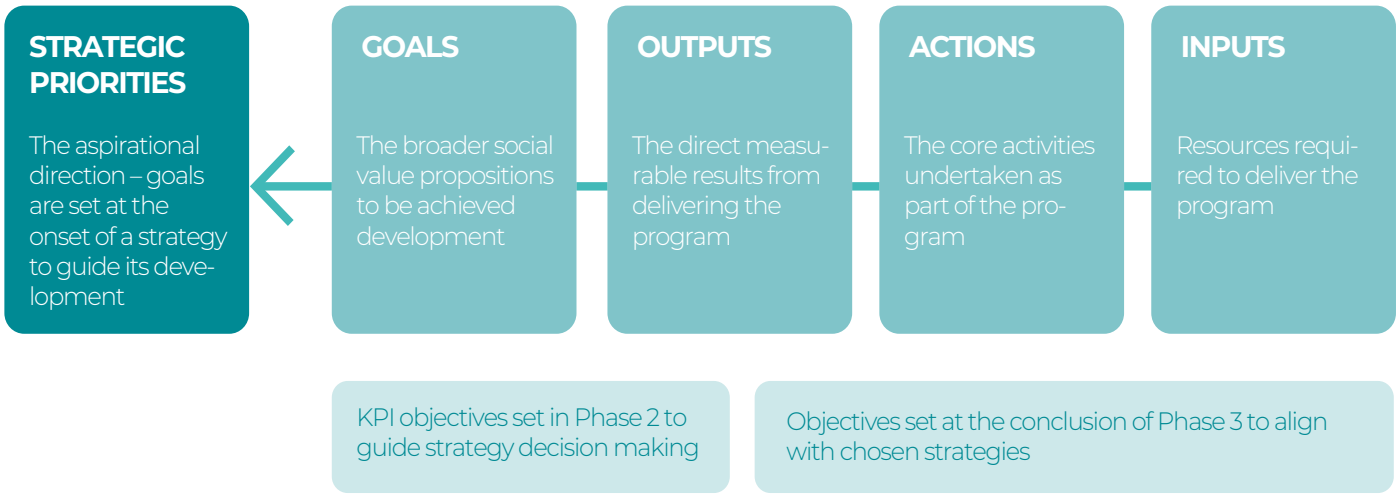
Phase 2: Goals and Objectives Identification

The TDM Program's goals and objectives were development based on the logic framework depicted in Figure 8.

The logic framework is a strategic framework that breaks down a strategy, program, or project into discrete elements and allows each element to be evaluated alone, as well as part of a holistic strategy, program, or project.

The Strategic Priorities set the aspirational direction for the *HNL Connect* program, and were established early on in the TDM Plan development process. Further, goals were defined in order to guide strategy decision-making. The Strategic Priorities and Goals, in addition to the Background Assessment and stakeholder input, guided the prioritization and selection of *HNL Connect* strategies. The process for the prioritization and selection of the strategies is further described in the following section.

Figure 8. Logic Framework



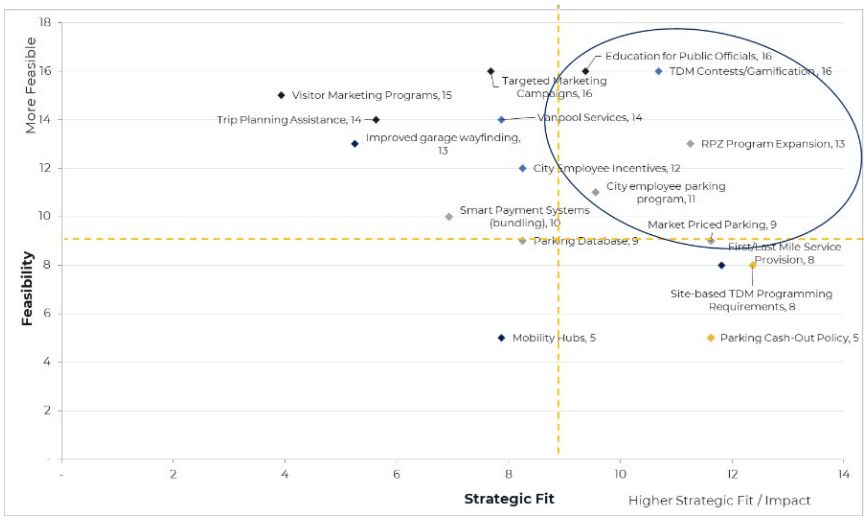
Phase 3: Strategy Evaluation

Following the development of the goals and outcome-based objectives, a comprehensive 'long list' of over 70 potential TDM strategies was compiled. The strategies consisted of infrastructure, policy/plan, service provision, and TDM programs and support measures. Key insights from the Background Assessment phase helped to inform the identification of relevant strategies for further consideration. Sixteen of these 70+ strategies were retained for further evaluation and consideration.

The measures were further evaluated through the lens of critical success factors, objectives, constraints, and dependencies in order to prioritize the strategies with the best strategic fit, impact, and feasibility for successful implementation in Honolulu. Figure 9 summarizes the evaluation approach, where each strategy was evaluated and scored based on its strategic fit and alignment with the four program goals, and its feasibility.

The project team and Steering Committee then provided further feedback and discussion to ultimately identify the final list of Primary and Support strategies that would be formalized in the TDM Plan (outlined above in section 1.2.3 and in Chapter 4).

Figure 9. Mapping Feasibility vs. Strategic Fit



Phase 4: Action Plan Development

Once the strategies were determined, the team developed an Action Plan to guide the implementation of the strategies themselves. The Action Plan (provided in Chapter 3) describes funding sources and staffing requirements for the *HNL Connect* program. It also provides detailed implementation guidelines for each strategy, highlighting processes, recommended partnerships, and metric collection processes.

Although not directly included in the Action Plan text, the following items were also developed to accompany it:

- Detailed brand guidelines for the *HNL Connect* program;
- A social media guide, tracking list, and sample content;
- Draft Administrative Rules for the Restricted Parking Zone (RPZ) program;
- Tools to support the developer TDM Plan reporting process (including a developer handbook, notification letter templates, and an internal tracking and reporting tool);
- Educational material such as one-pagers for the general public and for agencies to utilize to further TDM education more broadly; and
- Supportive material to be used within the City Employee TDM program.

These items were developed to advance existing TDM programs (e.g., the RPZ program) during this Plan's development, and to ensure that *HNL Connect* has the necessary supporting resources for an expeditious launch and implementation.

3. Program Detail

KEEP AREA BETWEEN
CARS CLEAR

Program Overview

TDM initiatives initiated and managed by the City will fall directly under the *HNL Connect* program umbrella. The City will also provide indirect support to and monitor other TDM initiatives envisioned by *HNL Connect*, which will be implemented in the private sector and non-profit arenas, and by the general public. As such, *HNL Connect* includes an outward-facing brand intended to identify what events, activities, and efforts the program recognizes as TDM, and call out where the program is a sponsor or partner. The branding is also intended to be present as the City communicates on social media and other online platforms, implements TDM strategies, and presents annual reports of TDM program impacts.

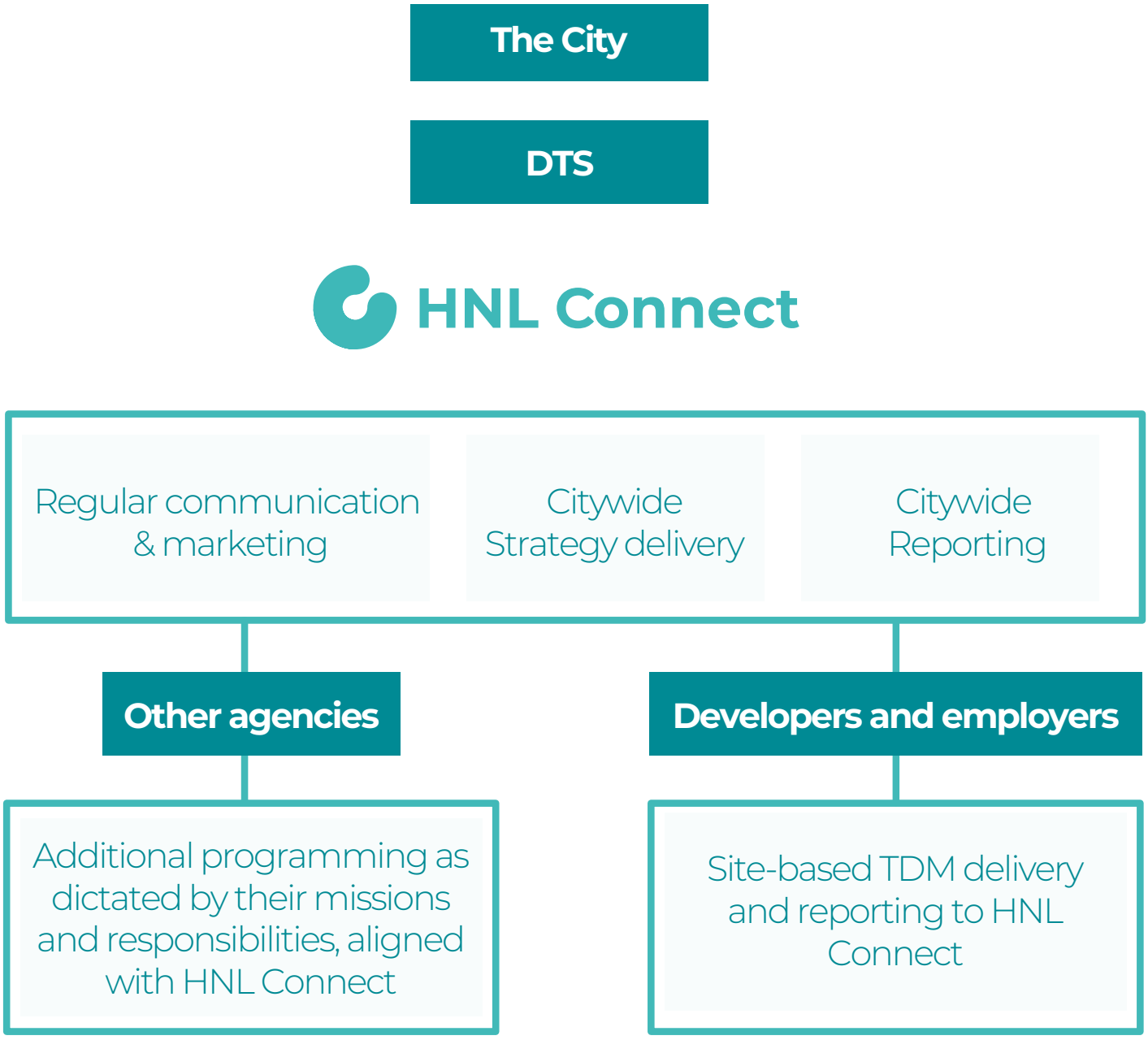
This chapter defines the broad roles, responsibilities, and processes that are required to maintain the *HNL Connect* program. Chapter 4 provides a detailed review of each of the strategies that will be implemented through *HNL Connect*.

TDM Program Administration and Ownership

As is depicted in Figure 10, the *HNL Connect* program will be led by the Department of Transportation Services (DTS). DTS is responsible for the multimodal movement of people and goods on various city transportation systems. The Department's goal is to provide increased safety for users of all modes and increased quality of life for residents by providing a balance between travel modes such as private vehicles, transit, bicycles, and walking.[11]

DTS will coordinate with other departments as needed, and will coordinate with developers and employers who will provide their own on-site TDM programs, but will be responsible for the overall program delivery.

Figure 10. ***HNL Connect*** Program Structure



Staffing and Funding

The following sub-sections describe the planned resourcing (funding and staffing) for *HNL Connect*. Collectively, the program will be funded through federal, state, and local funding, and staffed by the City.

Federal Highway Administration (FHWA) Funding

Beginning in Fiscal Year 2024, the City will allocate $1 million annually (80% FHWA funding, 20% local match) to execute *HNL Connect*. These funds will cover the major operations of the program described in the following sections. This funding will support the purchase of TDM technology tools, including but not limited to monitoring, compliance, and information-sharing platforms, and the provision of incentives and subsidies for more sustainable transportation choices such as transit, ridesharing and active transportation.

City and County of Honolulu Staffing

In addition to the FHWA funds which will support operation and maintenance of the strategies identified below, the City, through the Department of Transportation Services (DTS) will support the program directly through provision of a *HNL Connect* Program Manager who is responsible for maintaining the various sub-programs directly supported by the City, managing consultant contracts, and enabling cross-departmental coordination.

Branding

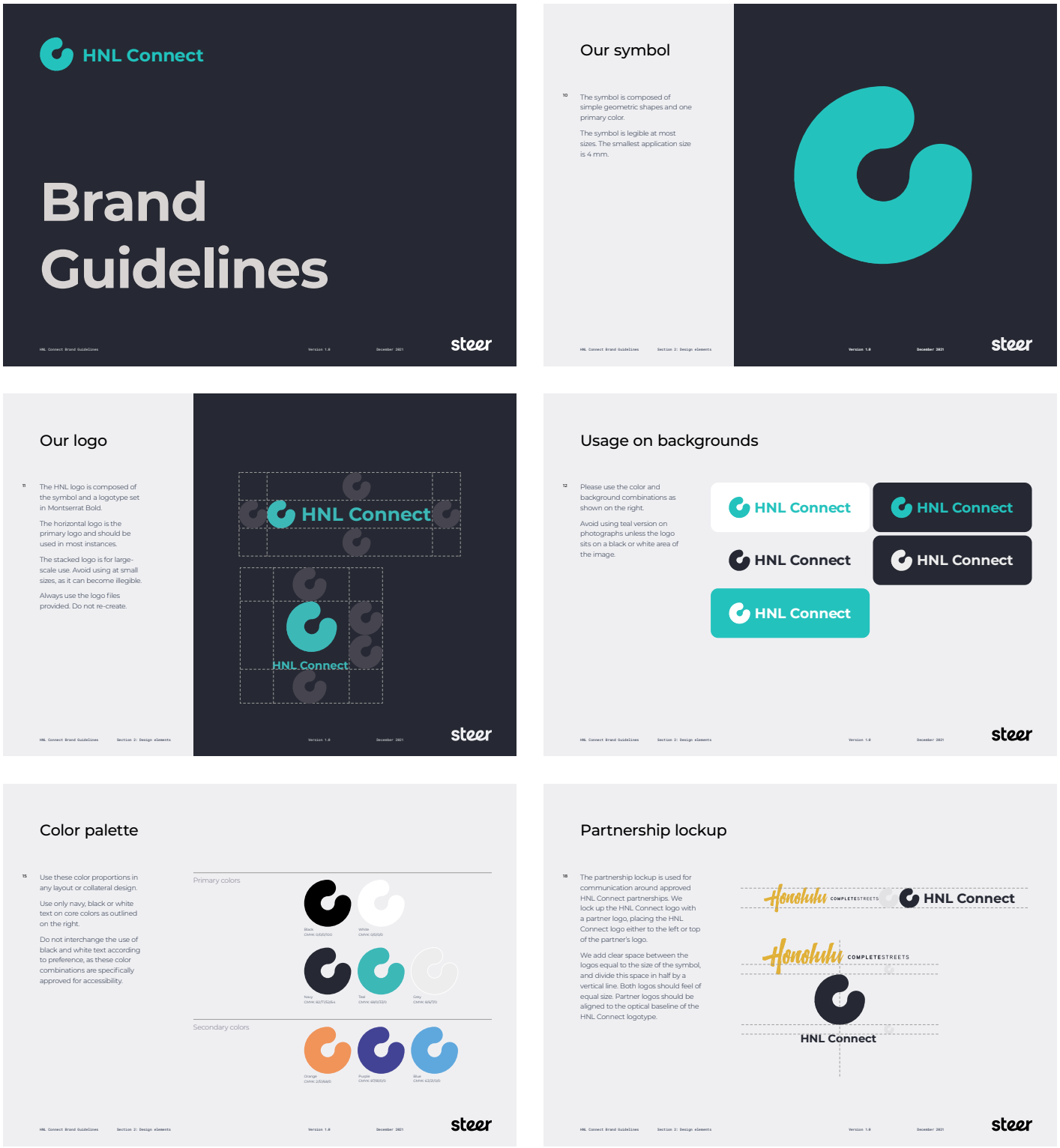
The *HNL Connect* brand was developed to invoke connection and alignment, encouraging Honolulu's residents, employees and visitors to travel more efficiently. An excerpt from the *HNL Connect* Brand Guidelines is provided in Figure 11.

Brand guidelines for *HNL Connect*, along with a set of logo and iconography assets, have been provided to ensure the City is able to maintain brand integrity as it implements *HNL Connect*.

Brand values include:

- **Empathy**: Being human and appreciating other individuals' humanity. Being considerate and understanding.
- **Service**: Getting a chance to save other peoples' time. Making things simpler for others; planning ahead of time and anticipating needs.
- **Focused**' It's a never-ending process of getting better at what you're doing. Acting with intention and mindfulness.
- **Inviting**: A team player approach; being open for the pass. Providing welcoming experiences to our customers.
- **Cooperation**: Taking the interests of all into account. Seeing ourselves as part of the community.
- **Engaging**: Engaging the responsibilities with passion, presence, and inspiration. Supporting others in doing the same.

Figure 11: HNL Connect Brand Guidelines



Ongoing Communication

The *HNL Connect* program will maintain an online presence through regular updates to the City's Complete Streets (CS) website, as well as social media posts.

Website Communication

The City's CS website has an embedded page dedicated to TDM. It currently houses information about the TDM Plan project, as well as links to reports, memos, and educational material.

As the *HNL Connect* program becomes more formalized, the website will continue to be maintained, and can be used as a location for:

- Flyers and event notices
- Links to strategy or partnering program-based resources
- Guidance for developers
- Annual program reports

Transportation Demand Management Plan Factsheet

Purpose of the TDM Plan

The City and County of Honolulu is currently developing a Transportation Demand Management (TDM) Plan to improve transportation choices, reduce vehicle miles traveled, and to increase walking, bicycling, rideshare and transit use on the island.

The purpose of the TDM Plan is to help achieve the City and County's transportation, environmental, economic, health and equity goals in line with its existing policies.

Did you know?

- 97% of working-age residents on Oahu have access to transit
- 41% of households have access to one or no cars
- 67% of commuters drive alone to work
- The vehicle economy costs the island $14.3 billion annually
- TDM is successful! The Oahu Vanpool program has reduced 2.5 million commuter miles and 1.9 million lbs of CO2 emissions

Honolulu COMPLETESTREETS

What will the plan do?

- Create a plan for Honolulu that is guided by targets and evaluation measures.
- Develop and implement strategies that reduce demand on the road network and shift trips to walking, bicycling, rideshare, and transit use.
- Enhance awareness of TDM and encourage sustainable travel behaviors through marketing and education.

What is TDM?

TDM consists of a toolkit of strategies, policies, and programs to better manage transportation needs. Strategies that reduce, re-mode, re-time, and/or re-route trips can:

- Reduce congestion by managing travel demand with supply
- Reduce energy emissions by supporting more efficient and sustainable modes of travel
- Increase land dedication for non-parking uses, such as housing and mixed-use development
- Improve public safety, health outcomes, equity, and supporting livability

Examples of TDM on Oahu

Oahu Vanpool Incentive Program

Blue Planet Foundation's Oahu Commute Challenge

Residential Restricted Parking Zone pilots

University of Hawaii at Manoa's Commuter Program

Biki Employer Plans for employee bikeshare

This plan was funded in part through grants from the Federal Highway Administration and Federal Transit Administration, U.S. Department of Transportation. The views and opinions of the agency expressed herein do not necessarily state or reflect those of the U.S. Department of Transportation.

Social Media Communication

To avoid saturation across a multitude of City-run social media accounts, the *HNL Connect* brand and messaging will be shared through the pre-existing CS and DTS accounts on the following platforms:

- Instagram: **@hnl.completestreets**
- Facebook: **Honolulu Complete Streets**
- Twitter: **@hnldts**

Currently, the cadence for posts on the CS Instagram account is one post per week, on average. The Transportation HNL Twitter page currently has more activity, with more than three Tweets per week, on average. The Honolulu CS Facebook page currently posts about twice a week, on average.

It is recommended that *HNL Connect*-branded content be posted about once per week (in addition to CS-related content) on Instagram, Facebook, and Twitter. Post content will fall under two categories

- **News posts** – provide the City with the opportunity to post about policy changes, promotions, upcoming meetings, and more in order to raise awareness. News posts are typically time-bound and intended to be posted ahead of or within a few days of an event or change.
- **Information posts** – are not time-bound and can be developed in advance and posted regularly to ensure brand recognition upkeep, provide useful information and education about multimodal travel, and educate the public about transportation systems that are already running.

The City will maintain the *HNL Connect* Social Media Guide which provides more detail on social media post design and content, and on alignment between *HNL Connect* and other City brands.

Monitoring and Evaluation

TDM Data Collection, Compliance Reporting and Monitoring, and Information-Sharing

The ongoing implementation and evolution of *HNL Connect* will lean on an evidence-based approach informed by the regular collection and analysis of data at both the citywide and site level. Monitoring and evaluation of the program will comprise of qualitative and quantitative data collected by the City, the private sector, and the public. Table 2 summarizes the primary tools that will be leveraged to assess the impact and success of the *HNL Connect* program. More information about data collection for each strategy is outlined in Chapter 4.

Table 2. *HNL Connect* Monitoring and Evaluation Tools

TDM Software Platform	**Annual Travel Challenge** – the software platform will facilitate the creation of the 'backend' of the Annual Travel Challenge, including the creation of the customized challenges, wcollection of participant-provided data, and supporting ongoing communication with participants through built-in notification and communication tools. Data points such as the total number of participants in the annual challenge and the number of recorded trips by mode are examples of the type of participant-provided data that the software will be able to track. **Vanpool Subsidy Provision** – the platform will allow for robust vanpool management functions. *HNL Connect* will likely use the platform to support the distribution of subsidies to eligible participants. **City Employee TDM/Parking Program** – the software platform will streamline the delivery of City commuter services and the associated data collection through distribution of electronic surveys and advanced data analysis and subsidy distribution directly to City employees.
Complete Streets Social Media Accounts	**Targeted Marketing** – the City's Instagram, Facebook, and Twitter accounts will not only be used for ongoing TDM marketing and engagement, but also for the annual targeted marketing campaigns that will be specific to a unique group or travel mode. Examples of campaign-specific data points that *HNL Connect* will track include the subscriber growth rate per campaign and engagement metrics such as the total number of likes, comments, and shares published during the campaign period.

Developer TDM Plan Tracker	**Developer TDM Reporting** – The City will track the Developer TDM program through an excel-based tool that will provide insights to which sites across the city are participating, what strategies they are implementing, and who is in compliance. It will also track responses to the online Travel Behavior Survey received by individual commuters.
Annual Travel Behavior Survey	**Developer TDM Reporting** – The City will prepare an electronic travel survey for property owners to distribute to their tenants and employees in order to identify how people are typically traveling to/from their site. This helps both the City and site-based Transportation Coordinators understand where programs or strategies might be adjusted to best support non-SOV travel, and allows for calculation of VMT contributed by individual users at the site level.
Annual TDM Plan Status Report	**Developer TDM Reporting** – The Annual TDM Plan Status report will outline the strategies originally included on the TDM Strategies Plan, and will confirm whether they are being delivered as agreed. The report will also allow the City to understand where new strategies have been implemented by properties.
RPZ Program Tracker	**RPZ Program Management** – The City's RPZ Program tracker will serve as a centralized repository for the administrative elements of the RPZ program. Data points that the tracker will include are RPZ locations, neighborhoods which have expressed interest in the program, the total number of RPZ permits and associated revenue, as well as the total number of mobility wallets funded through RPZ permit sales.
Strategy-Specific Results Reports	**All *HNL Connect* 'Primary' Strategies** – A strategy-specific results report will be prepared for the six *HNL Connect* 'primary strategies.' These reports will include monthly activity trackers and quarterly summaries describing the status of each strategy. These reports will serve as key inputs to the *HNL Connect* Annual Report (described in the following section).
Island-wide Reporting Sources	Various State departments such as the Department of Business, Economic Development & Tourism Context and the Department of Transportation provide island-wide data. *HNL Connect* will include island-wide data in Annual Report to allow the program outcomes to be presented in context of island-wide trends. It is expected that the program will report on: • Vehicle Miles Traveled (and associated emission-related metrics) • Mode share • Parking utilization • Transit ridership and bikeshare usage

Annual Reporting

Ongoing monitoring of *HNL Connect* will include input and performance-related information generated from the implementation of each of the TDM strategies, in order to prepare an annual *HNL Connect* Program Report ("Annual Report"). The Annual Report, to be released in December each year, will summarize the strategy outcomes through reported progress toward program-wide of KPIs and strategy-specific metrics, and qualitative data describing the status of each of the initiatives (e.g., key accomplishments and next steps). The target audience for the Annual Report will be decision-makers and the public.

The first Annual Report will be released in February 2025, and report on progress in calendar year 2024. This initial Annual Report will serve as the baseline to which future reports will be compared. As such, it will be essential to maintain a useful and replicable set of KPIs, metrics, and reporting methods promoting consistency in quantitative metrics and qualitative content. A high-level outline of the Annual Report is summarized in Table 3.

Table 3. Annual TDM Program Report Outline

Topic	Key Content
Background	Definition of TDM Why the *HNL Connect* TDM Program was established *HNL Connect* Program goals Relationship to broader City initiatives/goals Summary of the report's purpose and structure
Monitoring TDM Strategies	Summary of each TDM strategy, description of key activities and accomplishments for the past year Table of associated strategy-specific metrics, and review of change from previous year to demonstrate progress toward targets Standalone report of developer activity (see subsection 4.3.1)
Monitoring TDM Impact	Summary table of progress toward program-wide KPIs and island-wide progress Summary of performance metrics (graphs, charts) Descriptive, qualitative analysis on strategies' progress
Conclusion and Next Steps	Summary of findings or conclusions about the year in TDM, overall and strategy by strategy, recommendations for strategy implementation adjustments, and/or issues and opportunities to address going forward

Objectives and Targets

The Logic Framework

The Logic Framework was developed in the 1960s by the United States Agency for International Development (USAID) to improve processes for identifying key elements of and structuring a monitoring process for their projects. It has since been adopted internationally and across a variety of industries.[12] The Logic Framework provides a joint review of overall program impact through the achievement of outcome-based objectives and more detailed objectives designed for each of the *HNL Connect* program's TDM strategies. It allows the City to identify where strategies can clearly demonstrate their impact, as well as where those ties may be less apparent. These instances may indicate a lack of data or highlight areas where there are opportunities to evolve within the program.

The Logic Framework includes the following elements:

- **Inputs**: The resources required to operate the program. In this case, programmatic inputs highlight budget and staff time for each of the TDM strategies.
- **Actions**: The work that the *HNL Connect* team will undertake in order to implement each strategy.
- **Outputs**: Measurable accomplishments from each strategy. It is expected that most outputs in the form of metric values will quantify the results of the actions identified.
- **Outcomes (Goals)**: Directly tied to stated objectives of the program. Outcomes Goals generally demonstrate wider benefits realized.

The Logic Framework is helpful in addressing the following questions (see Figure 13):

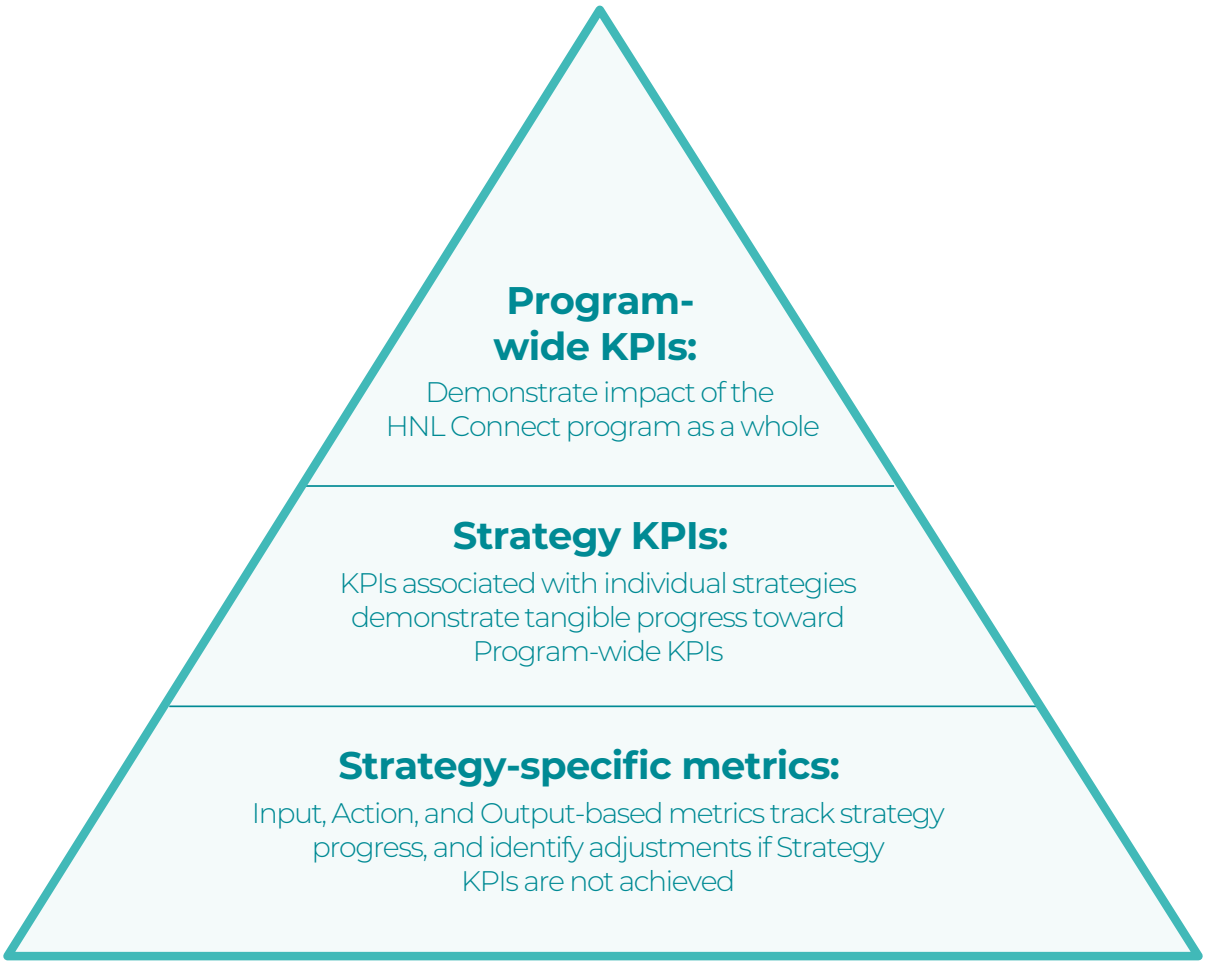
- What **inputs** are required to implement each strategy and the *HNL Connect* program overall?
- What **actions** are being taken to achieve current program goals and desired outcomes by the *HNL Connect* team? Are they aligned to these intended achievements?
- What measurement **outputs** have been recorded? What do they communicate about the overall success of each strategy?
- What are the current project or program goals and desired **outcomes**? Were they achieved?

Establishing targets along the logic chain ensures that the *HNL Connect* program will be able to pivot or make adjustments as required. For example, if the program is receiving the intended number of click-throughs on their e-newsletter, but are not receiving the intended number of engagements or shares to demonstrate broader awareness, it may mean content should be adjusted or that the initial output-based target is too low. Upon evaluating their metrics each year, the *HNL Connect* program will review the appropriateness of their targets and adjust accordingly.

Figure 13. Logic Framework Summary

INPUTS	ACTIONS	OUTPUTS	GOALS
Resources required to deliver the program Example: Time and budget spent on design and distribution of targeted marketing campaign e-newsletter	The core activities undertaken as part of the program Example: Design and distribution of targeted marketing campaign e-newsletter	The direct measurable results from delivering the program Example: Click throughs in targeted marketing campaign e-newsletter	The broader social value propositions to be achieved Example: Increased awareness of alternative transportation modes

Figure 14. KPIs and Metrics Hierarchy



KPIs and Metrics

KPI and metric targets for each goal and subsequent objective have been established based on a variety of factors, such as previous programmatic data collected by the City and their partners and use of the Trip Reduction Impacts of Mobility Management Strategies (TRIMMS©) model.

Utilizing the logic framework as a guide, the HNL Connect program will collect and report on three categories of data annually (see Figure 14):

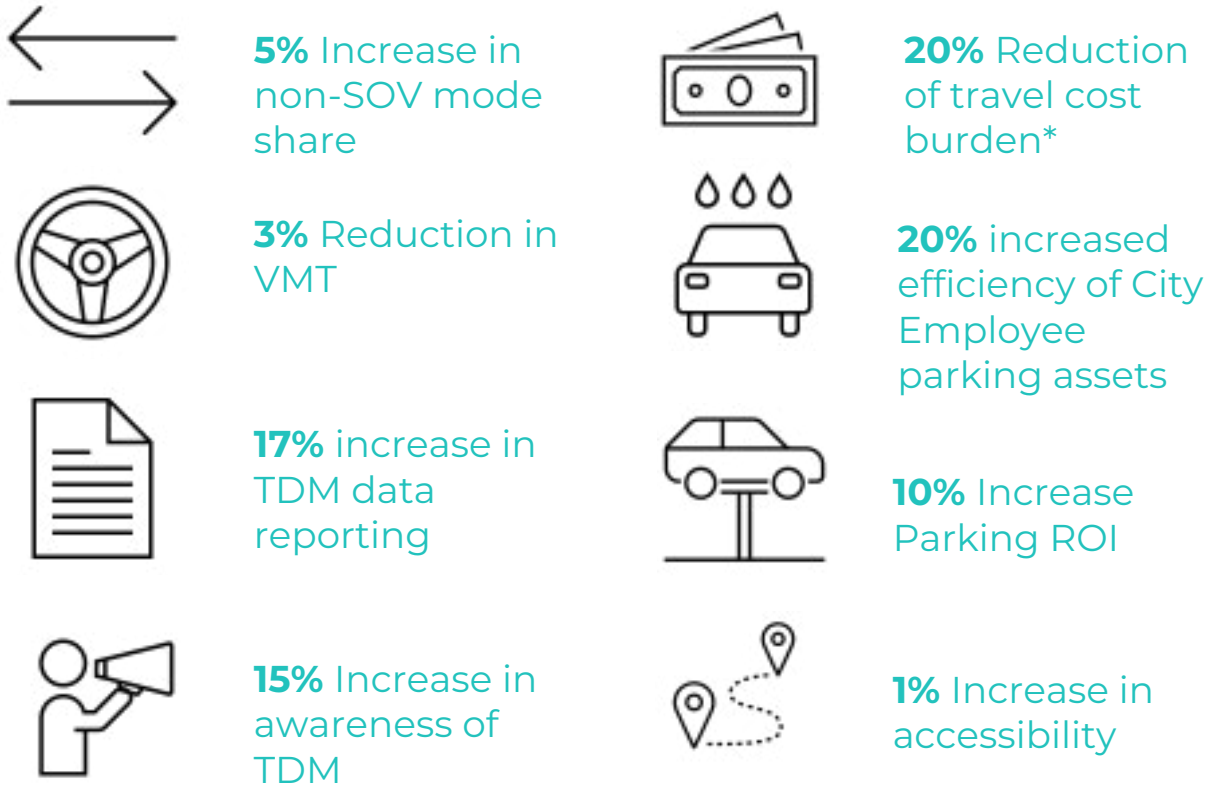
- **Program-wide KPIs** demonstrate broad program-wide progress toward the *HNL Connect* goals. Annual reporting will demonstrate the cumulative progress of the Strategy KPIs (described below).
- **Strategy KPIs** have been established where tangible and measurable outcomes from each strategy can demonstrate progress toward program-wide KPIs. Annual reporting will include data points collected from strategy implementation, and may involve calculation or extrapolation (for example, estimating VMT based on reported travel mode and typical trip distance).
- **Strategy-specific metrics** include key 'action,' 'output', and 'input'-based objectives that have been developed for each strategy. Annual reporting on these metrics helps to identify whether there may be opportunities to strengthen program delivery in order to make better progress toward Strategy and Program-wide KPIs.

Program-wide KPIs have been presented in Figure 15. Strategy KPIs and Strategy-specific metrics are detailed within each strategy description in Chapter 4. A full table of program metrics can be found in the Appendix.

Establishing a baseline

As *HNL Connect* consists of all new or expanded programs, all overall program and strategy objectives are based on percent change or growth over an established baseline. That baseline will be established through the program's first Annual Report, set to be produced in January 2025. All Annual Reports will provide quantitative data tied to each of the established or current objectives, and Annual Reports beginning in January 2026 (describing calendar year 2025) will also detail change over the 2024 baseline numbers.

Figure 15. Program-wide KPIs and targets



*for specific program users

Island-wide Progress

Many of the goals associated with this Plan and *HNL Connect* are also influenced by factors outside of TDM delivery. For example, island-wide VMT depends on overall trends such as car ownership, infrastructure progress, and the state of the economy. While TDM provision will influence VMT, it is unlikely to be the sole factor in its annual change.

While the KPIs and metrics described above are designed specifically to review the impact that *HNL Connect* will have toward each goal, it is important to view that in the context of island-wide progress. The *HNL Connect* Annual reports will also include the Island-wide metrics identified in Table 4.**Table 4. Island-wide Metrics for Annual Report**

***HNL Connect* Goal**	**ISland-wide Metric**	**Data Source**
Increase sustainable mode share	Island-wide non-SOV mode-share	US Census Bureau - American Communities Survey (ACS)
Decrease Vehicle Miles Traveled (VMT)	Island-wide Vehicle Miles Traveled	Department of Business, Economic Development & Tourism - State Data Book, VMT for Honolulu County
Reduce travel cost burden	Percent of cost of living related to transportation	State of Hawai'i - Housing and Transportation (H+T) Index
Increase parking Return on Investment (ROI)	Annual City parking budget vs. parking revenue	City budgets
Maximize efficiency of parking assets	Parking utilization rates	Parking garage and meter technology

The *HNL Connect* program will also continue to monitor whether additional island-wide metrics might be beneficial to report, and if not already in existence, will work with the City to identify means of collecting relevant metrics.

For each island-wide metric, *HNL Connect* will report on the difference between the change experienced annually, and the change in the related program-wide KPI. This dual reporting will allow the City to understand the program's impact toward broad island-wide goals relative to factors outside of its purview.

Additional Data Tools

While the preceding program impact tables and processes therein are intended to demonstrate clear linkages between the *HNL Connect* program and its direct impact through measurable KPIs, there are other methods and tools that can be used to generate 'metadata' related to TDM and to broader outcomes of trip and VMT reduction. These data are helpful as methods of inference to corroborate or disprove TDM reporting through KPIs. Such tools include, but are not limited to, online trip logging and anonymized/ aggregated travel pattern monitoring, as described below.

TDM Software Platform

TDM Software Platforms provide a platform for travelers to indicate (through web or mobile apps) how and where they have traveled, allowing employers or agencies to keep track of individual trip-level data. These tools tend to result in accurate data in smaller group-level settings (such as through an individual employer who can generally verify travel mode in exchange for high-level rewards) or over smaller periods of time (where less long-term effort is required to provide correct data). It is anticipated that the *HNL Connect* program will use a tool like this to:

- Facilitate the Annual Travel Challenge
- Support vanpool subsidy administration
- Track participation and travel habits for City employees

Such tools sometimes have challenges associated with long-term use over large geographies with less oversight, as participants receive less encouragement to track their trips on a daily basis, or set up automatic tracking without maintaining the habits they have selected on the platform. While the City may decide to allow the general public to log trips throughout the year, it is not recommended that a trip logging tool be utilized as a primary data source outside of the two more specific identified uses highlighted above.

Travel Pattern Data Providers

There are a number of data vendors who offer tools that utilize anonymized and aggregated data from smartphones and navigation devices to display travel networks, routes, and volume across North America. They allow agencies to access information about travellers (typically by a percentage or ratio of total travellers) based on set geographic locations at specific times, showing where high volumes originate, and by which travel mode sites are accessed.

Travel habits are influenced by many factors beyond just TDM, so even if data was compared before and after a TDM strategy was implemented, it would likely be difficult for these tools to demonstrate the impact of the TDM strategy directly, particularly when viewing travel habits citywide. Still, the level of granularity accessible through these tools may be useful in demonstrating the impact of TDM strategies in more discreet cases (for example, looking at travel modes for employees accessing a large employer site during the Annual Travel Challenge week). As the *HNL Connect* program evolves, the City may wish to explore how such tools might support future TDM monitoring and reporting needs.

4. Action Plan: Strategy Implementation

Honolulu COMPLETESTREETS
RESTRICTED PARKING
ZONE A
015754

Strategy Overview

The *HNL Connect* TDM strategies fall into two major categories:

- **Primary Strategies:** these strategies will be the main focus of the program, making up roughly 80% of program time and budget. For the public and those who interact with each strategy, they will be branded with the *HNL Connect* look and feel, helping to raise awareness for the program overall. Primary strategies fall under two sub-categories:
  - *HNL Connect*-Managed: These strategies fall under the sole discretion of the City's DTS and the *HNL Connect* team
  - *HNL Connect*-Partnered: These strategies still fall under the *HNL Connect* brand umbrella and will be largely staffed by DTS and the *HNL Connect* team. They also require specific and regular collaboration with other City entities or departments.
- **Support Strategies:** these strategies describe efforts that are already planned or underway in Honolulu through key partners such as other City departments, state agencies, or non-governmental organizations. The DTS and the *HNL Connect* team will provide support for those agencies through activities such as:
  - Participating in meetings and committees
  - Promoting events or activities through the *HNL Connect* communication channels
  - Providing TDM-specific tools to support outside education or information-sharing efforts

Figure 10 outlines the overall program structure, and Table 8 lists all of the TDM strategies by category.

Figure 16. *HNL Connect* Strategy Typologies

Figure 17. *HNL Connect* Strategies

HNL Connect-Managed Strategies

The following TDM strategies will be fully managed by the *HNL Connect* program. Dedicated staff time and budget will be allocated to each of the strategies described on the following pages.

UILA! POWER UP, HONOLULU!
3501
22 ALAPAI TC
VIA KAKAAKO

Annual Travel Challenge

The Travel Challenge is intended to encourage individuals, especially those who do not use sustainable modes, to try one or more of them over a short period of time, normally a week or a month. The primary goal is to convince individuals who drive alone to use an alternate transportation mode such as biking, walking, carpool, or transit.

Typically, travel challenges require individuals to register on a platform, make or join a team, and log their trips each time they use a mode other than SOV as they compete for awards. Challenges may be specific to one mode, or could include multiple modes, including automobile as part of the journey. To encourage participation, all participants may be eligible to receive awards as part of an overall VMT reduction effort, and top performers earn prizes such as local business gift cards or giveaways.

In Honolulu, the Annual Travel Challenge will build off the success of the Oʻahu Commute Challenge, last presented in 2020 by Blue Planet Foundation. The findings from the 2020 Challenge indicate that challenges like these in Honolulu encourage the use of sustainable modes of transportation. The 2020 Challenge was able to solicit participation from 140 commuters, 107 of whom indicated their participation as the reason they tried a new mode for the first time. Most of the participants (89%) indicated they would continue to use sustainable modes after the month-long challenge was complete.

Moving forward, for at least one week each May an official island-wide challenge administered by the City and the *HNL Connect* program, in collaboration with Blue Planet Foundation, will encourage residents to log non-drive-alone commutes and non-leisure trips, aligning with national Bike to Work activities. Teams organized by employers or social groups will compete for the most points earned by logging non-SOV trips.

While the Annual Travel Challenge welcomes and encourages employers who are already successful in generating excitement for TDM from pre-existing teams, it will be also open to the public to allow anyone to participate.

The Challenge, held in person and virtually, will provide opportunities for additional engagement activities such as:

- Attending events at employer or residential sites to promote the Challenge and increase participation from individuals at sites where teams are set up;
- Producing, promoting, and hosting 'Marquee' style events such as a 'rush hour race', where a driver, transit rider, and cyclist all compete to reach a certain destination during rush hour, to generate media attention and raise the public profile of sustainable travel options;
- Facilitating a 'Travel buddy' system, partnering veteran cyclists or transit riders with those who are new and need encouragement or feel safer with a partner; and
- Producing, promoting, and hosting 'Wrap up' award ceremonies or happy hour events to celebrate the Challenge participants.

Five Year Work Plan

The *HNL Connect* team will be responsible for managing the island-wide challenge, likely partnering with Blue Planet Foundation. Additional potential non-governmental partners for the Challenge may include, but are not limited to, the Ulupono Initiative, Hawaiʻi Bicycling League, Bikeshare Hawaiʻi, and Love to Ride. Besides the City, government agencies on Oʻahu and in Honolulu may include the Hawaiʻi Department of Transportation (HDOT) and the OahuMPO.

Key activities will include the following:

- **Developing a strategy for the Annual Challenge,** including roles/responsibilities, timeline, budget, branding the challenge name, and the platform/mechanism for participants to log trips
- **Partnering with local businesses** on the supply of the prize offerings, and determining prize thresholds and levels appropriate to the size of teams in the competition.
- **Developing supporting promotional materials,** including flyers and posters, social media content, and content for the Complete Streets and TDM websites
- **Summarizing challenge outcomes**, including a report on the Challenge and its outcomes, based on established KPIs and associated metrics.

KPIs, Metrics and Targets

The *HNL Connect* team will obtain the following metrics in connection with each Challenge KPI, annually (see Table 5). The metrics collected in the first year (2024) will establish a baseline upon which future year objectives will be compared, in order to effectively evaluate successes and areas for improvement. Preliminary targets are identified in Table 5, though the *HNL Connect* team will adjust to determine annual targets as needed.

3% Increase in non-SOV mode share

3% Reduction in VMT

5% Increase in TDM reporting

Table 5. Travel Challenge Annual Metrics

Inputs		Actions		Outputs
Metric	**Target**	**Metric**	**Target**	**Metric**
City staff time spent	150 hours	Number of communication material (social posts, newsletters, etc.)	1% increase	Number of challenge participants
Strategy budget	$170,000	Number of on-site events held	1% increase	Number of trips logged
				Number of non-vehicle miles recorded

Outcomes (Goals)

Target	KPI	Target	Source
2% increase	**Increase in non-SOV mode share:** Challenge participants who indicate they are 'likely' or 'very likely' to increase use of sustainable mode	3% increase	Survey at conclusion of Annual Travel Challenge
2% increase	**Increase in TDM Reporting**: Participating sites	5% increase	Travel Platform
2% increase	**Reduction in VMT**: Combined reported average trip length for challenge participants who indicate they are 'likely' or 'very likely' to increase use of sustainable mode	3% increase[13]	Survey at conclusion of Annual Travel Challenge

Targeted Marketing Campaigns

Local attitudes towards and knowledge of sustainable modes have a significant impact on travel behavior. Effective TDM programs are broken down to the greatest extent by geography, making targeted marketing a crucial part of TDM implementation. The most successful TDM marketing initiatives involve a wide range of community partners, such as public officials, community organizations, and sustainable transportation mode advocates.

Targeted TDM marketing campaigns also include understanding the types of transportation services individuals desire, identification of the barriers to sustainable modes, and promotion of available local travel choices.

There are limits to what marketing can accomplish on its own, but the benefits of targeted marketing include increased local public support for TDM strategies, and crucially, the increased effectiveness of TDM efforts (i.e., reduced vehicular travel). Such marketing campaigns are frequently implemented alongside other TDM measures or designed around specific audiences who are already more likely to be receptive.

HNL Connect will implement one Targeted Marketing Campaign annually. Each campaign will be unique, with a specific focus either on an area, audience or mode of travel. The goals of the Campaign will be to increase awareness of, and interest in, TDM services/ programming, and to increase the use of sustainable transportation modes amongst Honolulu residents and visitors.

The *Honolulu Transportation Demand Management Study Market Research Report* (2022) provides valuable information on the groups of individuals in Honolulu who are most likely to change their behavior. These groups are described in Table 6 and will set the baseline for the priority target segments for the first 5 years of the TDM Plan's implementation.

Table 6. Honolulu Target Audiences

Groups of Interest	Factors Identified in Market Research Survey
Urban Honolulu dwellers/ renters	· Have challenges finding parking where they live · Would do without a personal vehicle if they could · Like to travel by walking
Millennials/ Gen Z who do not live with parents	· Reducing the use of personal · vehicles would make them feel good · Have challenges finding parking where they live · Would rather bike than take the bus
Transplants who are currently attending Hawai‘i colleges	· Reducing the use of personal vehicles would make them feel good · Have challenges finding parking where they live · Would do without a personal vehicle if they could · Like to travel by streetcar/trolley · car and walking · Feel a moral obligation to reduce GHG emissions
Single-vehicle households	· Have challenges finding parking where they live · Like to travel by streetcar/trolley car and walking · Feel a moral obligation to reduce GHG emissions
Cultural organizations geared towards Native Hawaiians	· Like to travel by bicycle, streetcar/trolley car and walking · Feel a moral obligation to reduce GHG emissions · This ethnic group was more open to sustainable modes of transportation vs. Japanese and Filipinos and were similar to Caucasians

Outreach Channel(s)	Mode(s) to Promote
• Social media • Promotional • events	TheBus, walking
• Social media • Promotional • events	Bicycle, bikeshare, carpool
• Social media • Through colleges • Promotional • events on campus or at college events	TheBus, carpool, walking
• Social media • Through large • Employers • Promotional events focused on economic development (i.e., job fairs, financial seminars)	TheBus, carpool, walking
• Social media • Through Native • Hawaiian • organizations/clubs (i.e., Council for Native Hawaiian Advancement, hula halau)	Bicycle, bikeshare, TheBus, walking

Five-Year Work Plan

HNL Connect will design, produce, and push out one Targeted Marketing Campaign per year, likely in the fall season, but the team may choose to align a campaign with other complementary activities (such as the opening of a new transit route or Biki pass product).

Key activities will include the following:

- **Developing strategy and messaging**: The team will establish a campaign plan, including roles/responsibilities, timeline, budget allocation, and core messages and narratives
- **Creating outreach materials and content**: The Campaign effort will use the *HNL Connect* brand assets and create other branded materials such as flyers and promotional products and/or prizes. Content may be created to be placed at transit stations and on transit vehicles, such as decals with QR codes linking to the campaign webpage or traditional print flyers. In addition, digital content will be developed for social media posts and the TDM web page.
- **Executing campaign outreach**: The Campaign will be conducted through posting of social media, deploying content on various other media including the local press and transit system, hosting informational booths at employer events, or popular local and tourist destinations, and dissemination of hard-copy content at target locations.
- **Evaluating campaign success**: developing a report summarizing the campaign and key outcomes based on established metrics. The metrics should remain consistent from year to year. The metrics from the first year will establish a baseline upon which future year outcomes will be compared in order to effectively compare successes and areas for improvement.

Potential local partners for this strategy include the business community, which in the last five years has placed a growing focus on the climate crisis and ways to mitigate impacts. For example, 'Environment' is one of the Honolulu Chamber of Commerce *4HI Campaign* four key vision areas. In general, it is expected that the Chamber will be a key resource to *HNL Connect* in connecting with businesses for program partnership and support. There are over 2,000 member companies representing over 200,000 employees across Honolulu.

KPIs, Metrics and Targets

The *HNL Connect* team will obtain the following metrics in connection with each Targeted Marketing Campaign KPI, annually (see Table 7). The metrics collected in the first year (2024) will establish a baseline upon which future year objectives will be compared in order to effectively compare successes and areas for improvement. Preliminary targets are identified in Table 7, though the team will adjust to determine annual targets as needed.

10% Increase in TDM awareness

Table 7. Targeted Marketing Campaign Annual Metrics

Inputs		Actions		Outputs
Metric	**Target**	**Metric**	**Target**	**Metric**
City staff time spent	60 hours	Number of materials distributed (including social media posts, flyers, events, etc. - to vary by campaign)	3% increase	Number of social media channel subscribers
Strategy budget	$175,000			

	Outcomes (Goals)		
Target	**KPI**	**Target**	**Source**
3% increase	**Increase in TDM awareness**: Total engagements with Targeted Marketing Campaigns	10% increase	Mediums TBD based on individual campaigns

Vanpool Subsidy Provision

A vanpool consists of a group of 5 to 15 people who commute to and from work in a van or SUV. Vanpooling is often employed for longer commutes (10 miles or more each way), due to its nature of a one-stop pickup and drop-off structure. Vanpools generally use rented vans, often supplied by employers, non-profit organizations, or government agencies. This strategy tends to have a lower cost than public transit for long commutes, per rider, as it does not require a paid driver and avoids potentially empty backhauls. Vanpooling is particularly effective in areas not well-served by public transit as the rendezvous point is typically closer than the nearest transit station/stop for all participants. Vanpooling requires an organizational structure to address vehicle ownership, expense recovery, and liability issues.

In 2016, Honolulu launched the Oʻahu Vanpool Program. The Program subsidized the cost of monthly vanpool use for riders and drivers across the island. Vanpool riders and drivers could sign up for the incentive program and receive up to $500 for each vanpool. The Program was operated by private vendors who contracted with the City and the subsidies were provided by the City. As of March 2021, the Vanpool Program had 57 active vanpools. Its annual environmental impact included about 2.5 million commuter miles reduced representing a savings of over 150,000 trips, and roughly 1.9 million lbs. of CO2 emissions reduced. The farebox recovery ratio was 118%, considerably higher than that of TheBus (27%.) As is evident from these statistics, vanpool is a proven successful sustainable mode of transportation on Honolulu. Moreover, public agencies may report vanpool data to the National Transit Database (NTD) to earn additional federal transit funds in future years. However, the current contract for vanpool subsidy provision expired in 2021 and has not yet been renewed.

Five-Year Work Plan

HNL Connect will re-introduce an expanded vanpool subsidy program, in coordination with the City Strategic Transit Plan, and manage it with a $500 vanpool subsidy per month.

Key activities will include:

- **Establishing partnership(s)** with one or more vanpool vendors and privately organized groups;
- **Increasing vanpool participation** by working with vendors and neighborhood associations to promote the vanpool subsidy program, recruit riders and drivers, and establish more vanpools;
- **Reporting to the NTD** by compiling ridership and mileage data for vanpool trips and providing it to the NTD for future access to Section 5307 federal funds; and
- **Evaluating program success** by developing a report summarizing the program and key outcomes, based on established KPIs and metrics. The metrics from the first year will establish a baseline upon which future year outcomes will be compared in order to effectively compare successes and areas for improvement.

KPIs, Metrics and Targets

The *HNL Connect* team will obtain the following metrics in connection with each Vanpool Program KPI annually (see Table 8). The metrics collected in the first year (2024) will establish a baseline upon which future year objectives will be compared in order to effectively compare successes and areas for improvement. Preliminary targets are identified in Table 8, though the team will adjust to determine annual targets as needed.

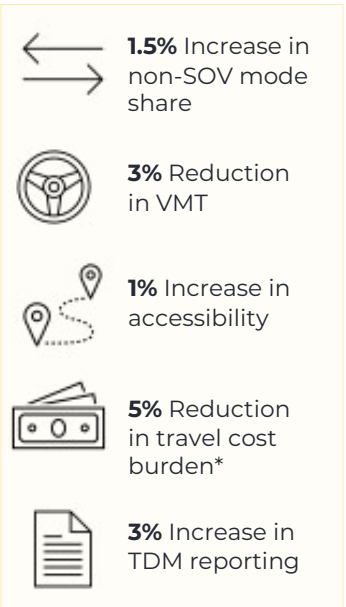


Table 8. Vanpool Subsidy Provision Annual Metrics

Inputs		Actions		Outputs
Metric	**Target**	**Metric**	**Target**	**Metric**
City staff time spent	200 hours	Number of vanpools receiving subsidy	5% increase	Number of vanpool riders/ drivers
Strategy budget	$400,000			

Outcomes

Target	Metric (KPIs)	Target	Source
2% increase	**Increase in non-SOV mode share**: Vanpool trips	1.5% increase	Vanpool trips recorded through subsidy program
	Reduction in VMT: Reported average daily VMT	3% reduction	Total vanpool rider [x] route length for each participating vanpool
	Increase in accessibility: Vanpool routes originating within .5 miles of TVI/EJ designated block groups	1% increase	Vanpool provider data listing geographic start/end of vanpool routes
	Reduction in travel cost burden: $ distributed to vanpool riders overall	5% increase	Total money distributed through vanpool program
	Increase in TDM reporting: Number of destinations receiving vanpool subsidies	3% increase	Number of worksites registered for vanpool program

Restricted Parking Zone (RPZ) Program

RPZ programs reserve on-street parking spaces within designated geographic areas for those vehicle owners who reside in them. As envisioned, residents will be entitled to purchase a specific number of long-term parking permits per household, the proceeds from which will incentivize transit by offering subsidies for those RPZ residents who opt out of the program due to transit dependency or just choosing to not have a vehicle. And by making it more difficult for non-residents to park in public spaces RPZ programs discourage drive-alone travel to these areas.

In 2017, the City instituted a pilot RPZ in Kalihi Valley that impacted about 198 addresses and 230 on-street parking spaces. In that case, permits were issued to participating residents free of charge. The pilot allowed the City to identify administrative/operational issues, such as notification and the need for one-day 'event permits' for when residents host gatherings. Ultimately, the pilot resulted in an average 70% occupancy of available on-street parking, down from 91% prior to its launch. Over 98% of the 171 residents who provided feedback on the program supported extending it.

City staff and City Council have since taken steps to support the formalization of the RPZ program beyond its pilot phase, with a process for neighborhoods to become designated as an RPZ area and for residents who do not purchase permits to access a 'Mobility Wallet' with free stored value toward transit or bikeshare. At the time of writing this TDM Plan, the Bill to authorize the City RPZ program has been introduced, and through the development of the Plan, the City and project team have drafted an Administrative Rules document that will accompany the Bill. That document outlines key elements of the RPZ program including:

- **Permit application process and limits**:
  - RPZ permits will be valid for no more than one year. Permit holders may apply for a new permit at the end of the calendar year.
  - Application will take place online on the department website. Applicants must provide proof of residency, as well as proof that their vehicle registration matches the applicant's dwelling unit address in order to be eligible for an RPZ permit or a Mobility Wallet.

  - Applications that do not fulfill the above requirements will be rejected. Successful applications will be notified by email and/or USPS and applicants will be required to pay the fee in order to receive their permit.
  - Households are limited on the number of permits they can hold at a time.
  - As residents move in and out of RPZ areas, retreating residents must turn in their permit, or pass along to the new resident to turn in and renew with their license plate number.
  - Permit fees will increase with each additional permit received per household, as specified in the Ordinance)
- **Permit design and display requirements**:
  - Permits will consist of decals for residents which must be affixed to their rear windshield, and hang tags for visitors (the design for the decal is shown in Figure 18).
  - Resident permits will include license plate numbers so enforcement officials can confirm the decal is in the correct vehicle.
  - The permit color will change each calendar year, so enforcement officials can confirm permits are up to date.
- **Enforcement**:
  - Public spaces in RPZ areas will be designated for no parking for vehicles without the appropriate RPZ permit during specific times. Time limits will be determined on a case-by-case basis by DTS and the Director.
  - Vehicles illegally parked in an RPZ space will be subject to fine.
  - Sharing of permits between vehicles is not allowed.
- **Mobility Wallet**:
  - Mobility wallets, consisting of city payment cards with credit toward transit or other sustainable travel modes, will be provided to residents of eligible dwelling units who choose not to purchase a parking permit.

Five-Year Work Plan

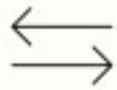
Once the RPZ program has been established outside of its pilot phase, the *HNL Connect* program will be responsible for maintaining it.

Key activities will include:

- Providing education and information to the public about the RPZ program
- Working with neighborhood groups to establish new RPZs
- Managing permit and Mobility Wallet sales and distribution
- Providing customer service to permit and Mobility Wallet holders

KPIs, Metrics and Targets

The *HNL Connect* team will obtain the following metrics in connection with each RPZ Program KPI, annually (see Table 9). The metrics collected in the first year (2024) will establish a baseline upon which future year objectives will be compared in order to effectively compare successes and areas for improvement. Preliminary targets are identified in Table 9, though the team will adjust to determine annual targets as needed.



1.5% Increase in non-SOV mode share

10% Reduction in travel cost burden*

10% Increase in parking ROI

S KING
145
1B HAWAII KAI
LIMITED STOPS
WAY
WJN 760
NISSAN
WJV 016
HYBRID
TZN 150
RAV4

Table 9. RPZ Program Annual Metrics

Inputs		Actions		Outputs
Metric	**Target**	**Metric**	**Target**	**Metric**
City staff time spent	Managed outside of HNL Connect hours	Number of RPZs established	5% increase	Number of permits provided
Strategy budget	$20,000			

	Outcomes		
Target	**KPIs**	**Target**	**Source**
10% increase	**Increase in parking ROI:** RPZ revenue	10% increase	Revenue collected through purchase of RPZ permits
	Increase in non-SOV mode share: Transit trips	1.5% increase	Trips recorded through Mobility Wallet HOLO Cards
	Reduction in travel cost burden: $ distributed to Mobility Wallet recipients	10% increase	Number of mobility wallets distributed [x] mobility wallet value

HNL Connect-Partnered Strategies

The implementation of the following TDM strategies will be delivered collaboratively by City departments and the *HNL Connect* team.

4001
HAWAII
BUS4001
ALOHA STATE

Developer TDM Reporting

The Transportation Impact Assessment (TIA) Guide provides guidance on the scope of study required when evaluating impacts of new development projects. The TIA Guide sets requirements for developer assessment, City evaluation, and reporting based on the number of *net new peak-hour trips* projects are expected to generate:

- Projects assessed to generate less than 50 net new peak hour trips are not required to do any TDM reporting.
- Projects assessed to generate **50 or more** net new peak hour trips must provide a *TDM Strategies Plan*, defining the TDM strategies they are committing to on site. This plan is required in order to obtain building permits.
- Projects projected to generate **100 or more** net new peak hour trips are also required to provide the City with an update on progress towards executing their TDM strategies annually, through *Ongoing Compliance Reports*. These updates are required for the first five years the project is occupied.[14]

Through the TDM Plan development process, the project team has produced guidance tools to support City (a joint effort between multiple departments) maintenance of a database of developer TDM reports and travel behavior information. The tools formalize a set of strategies from which developers may choose in order to have their TDM Strategies Plans approved (Table 10).

Following the receipt of their Certificate of Occupancy, projects that are required to provide ongoing reporting will fill out a form annually to indicate which strategies they have continued to undertake, and how much participation they have been able to generate. They will also distribute a City online travel survey to residents and employees who utilize their sites on a daily basis. This survey will allow the City to monitor developer-directed TDM and broader TOD travel behavior across larger project sites.

Table 10. Developer TDM Strategies

Base Strategies *All required for all projects*	**Primary Strategies** At least two (2) required for all projects	**Secondary Strategies** *At least two (2) required for all projects*	**Parking Strategies** *Bike parking as required and at least one (1) other required for projects with vehicle parking*
Designate an on-site transportation coordinator Include information about TDM program in lease agreements	• Provide bike share passes for all residents/tenants • Provide free or subsidized bus passes for all residents/tenants • Provide a Guaranteed Ride Home program to residents/tenants • Provide shuttle service to access site • Provide vanpool or carpool subsidies to residents/tenants	• Provide a web/intranet page dedicated to transportation options • Support carpool matching among residents/tenants • Provide information about transportation in new tenant/new hire packets • Provide raffles or contests to encourage non-single occupancy vehicle travel • Host on-site events dedicated to transportation options	• Shared parking strategy • Parking cash-out program • Unbundled parking • Reserved parking • space(s) for carshare • Short and long-term bicycle parking

Five-Year Work Plan

DTS and *HNL Connect* will be responsible for upholding developer requirements, in partnership with the Department of Planning and Permitting (DPP)'s Building Division (BD). A breakdown of responsibilities is included in Figure 19.

Key activities will include:

- Reviewing and approving initial TDM Strategies Plans that accompany TIA submissions
- Maintaining list of 'required' projects and their reporting status
- Notifying projects who are expected to provide Annual Compliance Reports of their requirements
- Reviewing and approving Annual Compliance Reports
- Maintaining a database of strategies used and travel habits from the online survey
- Acting as a resource for developers who have questions about the process or about their TDM requirements
- Providing an annual metrics report

KPIs, Metrics and Targets

The *HNL Connect* team will obtain the following metrics in connection with established Developer TDM KPIs, annually (see Table 11). The metrics collected in the first year (2024) will establish a baseline upon which future year objectives will be compared in order to effectively compare successes and areas for improvement. Preliminary targets are identified in Table 11, though the team will adjust to determine annual targets as needed.

1% Increase in non-SOV mode share

2.5% Reduction in VMT

10% Reduction in travel cost burden*

10% Increase in TDM reporting

Table 11. Developer TDM Reporting Annual Metrics

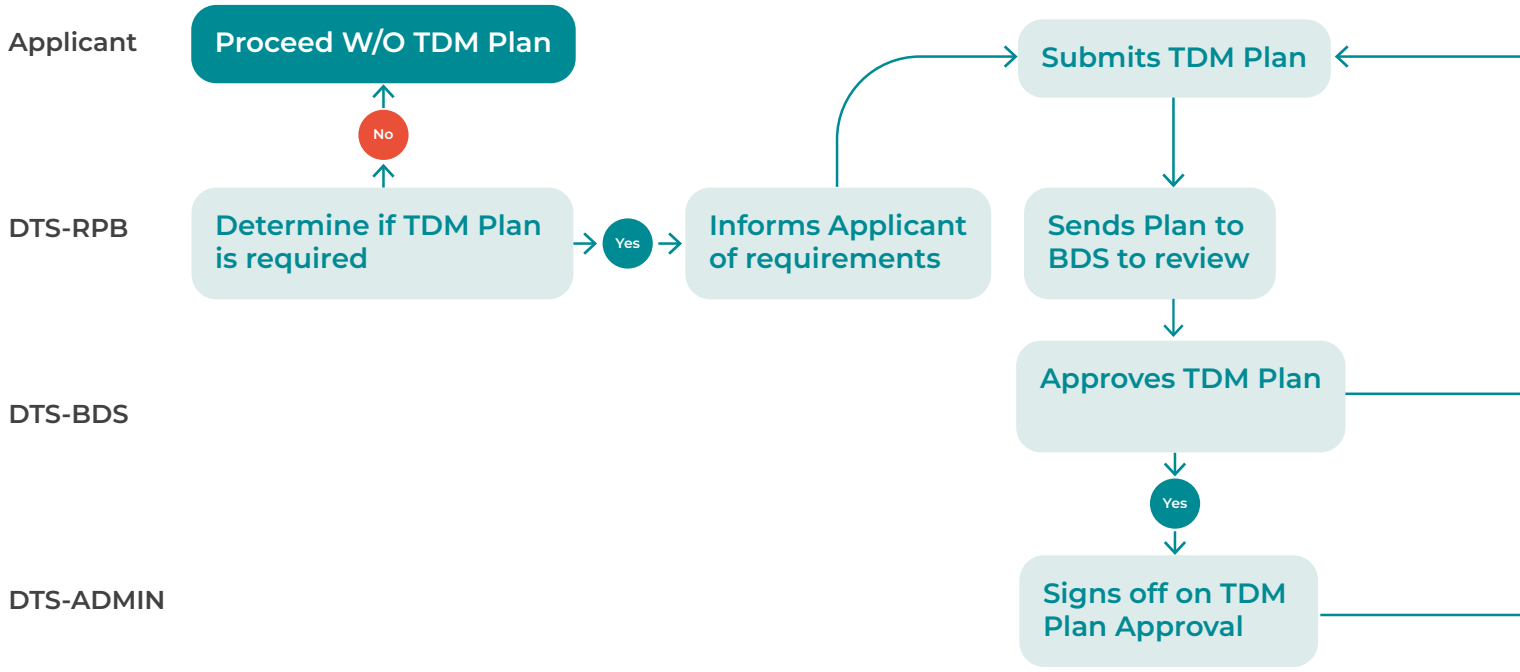
Inputs		Actions		Outputs
Metric	**Target**	**Metric**	**Target**	**Metric**
City staff time spent	104 hours	Number of TDM Strategies Plans approved	2% increase	Number of participants in developer TDM programs (on average)
Strategy budget	$40,000	Number of Ongoing Compliance Reports approved	2% increase	Number of Biki and HOLO cards purchased

Outcomes

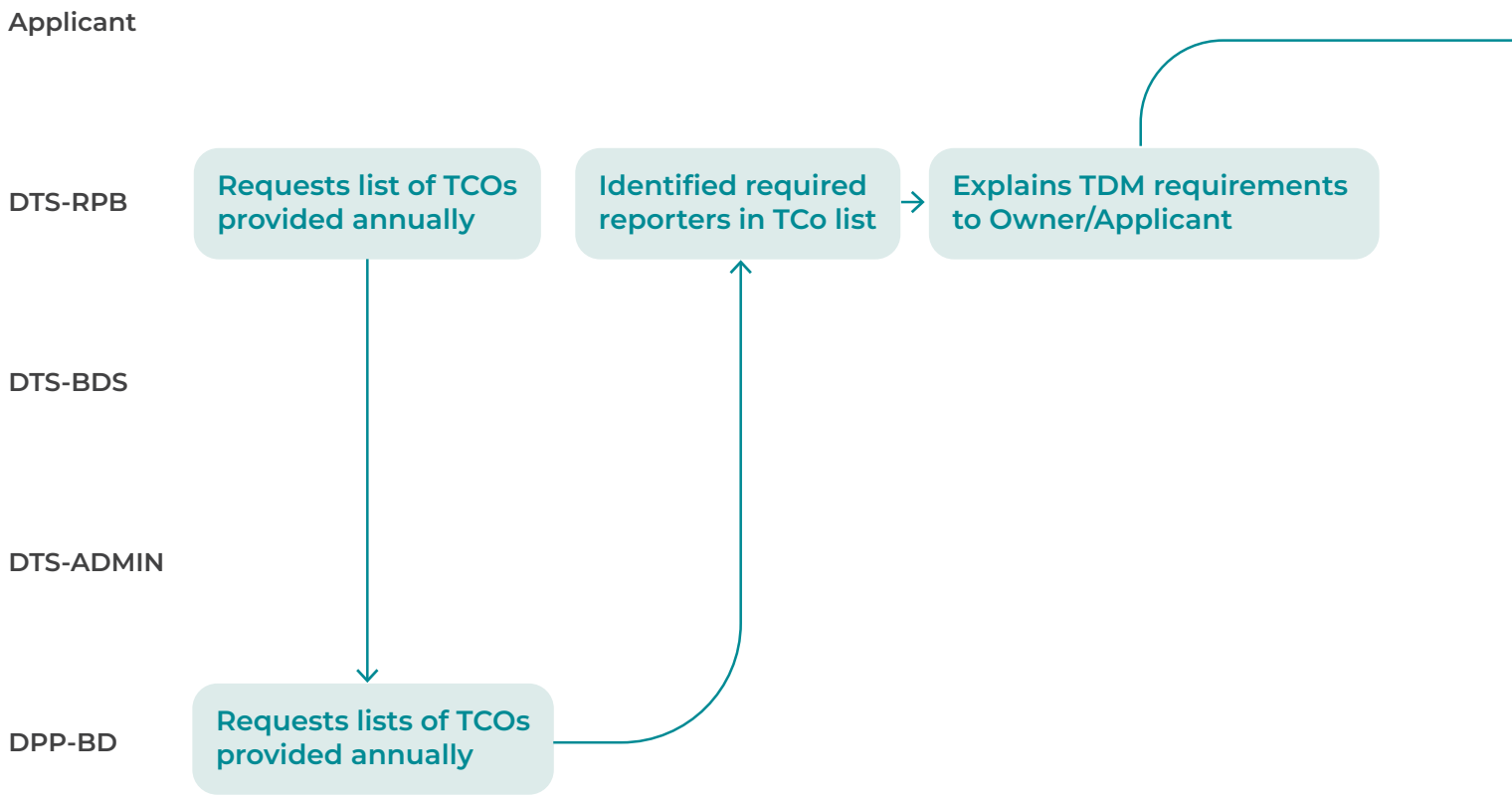
Target	KPIs	Target	Source
2% increase	**Increase in non-SOV mode share**: Reported mode share	1% increase	Non-SOV mode share reported in Annual Compliance Report Survey
2% increase	**Increase in TDM reporting**: Annual Compliance Report survey responses	10% increase	Number of survey responses
	Reduction in travel cost burden: $ value distributed through bike and transit subsidies	10% increase	Number of subsidy participants [x] subsidy value
	Reduction in VMT: Reported average daily VMT	2.5% reduction	Reported trip length [x] reported average daily vehicle miles in Annual Compliance Report survey

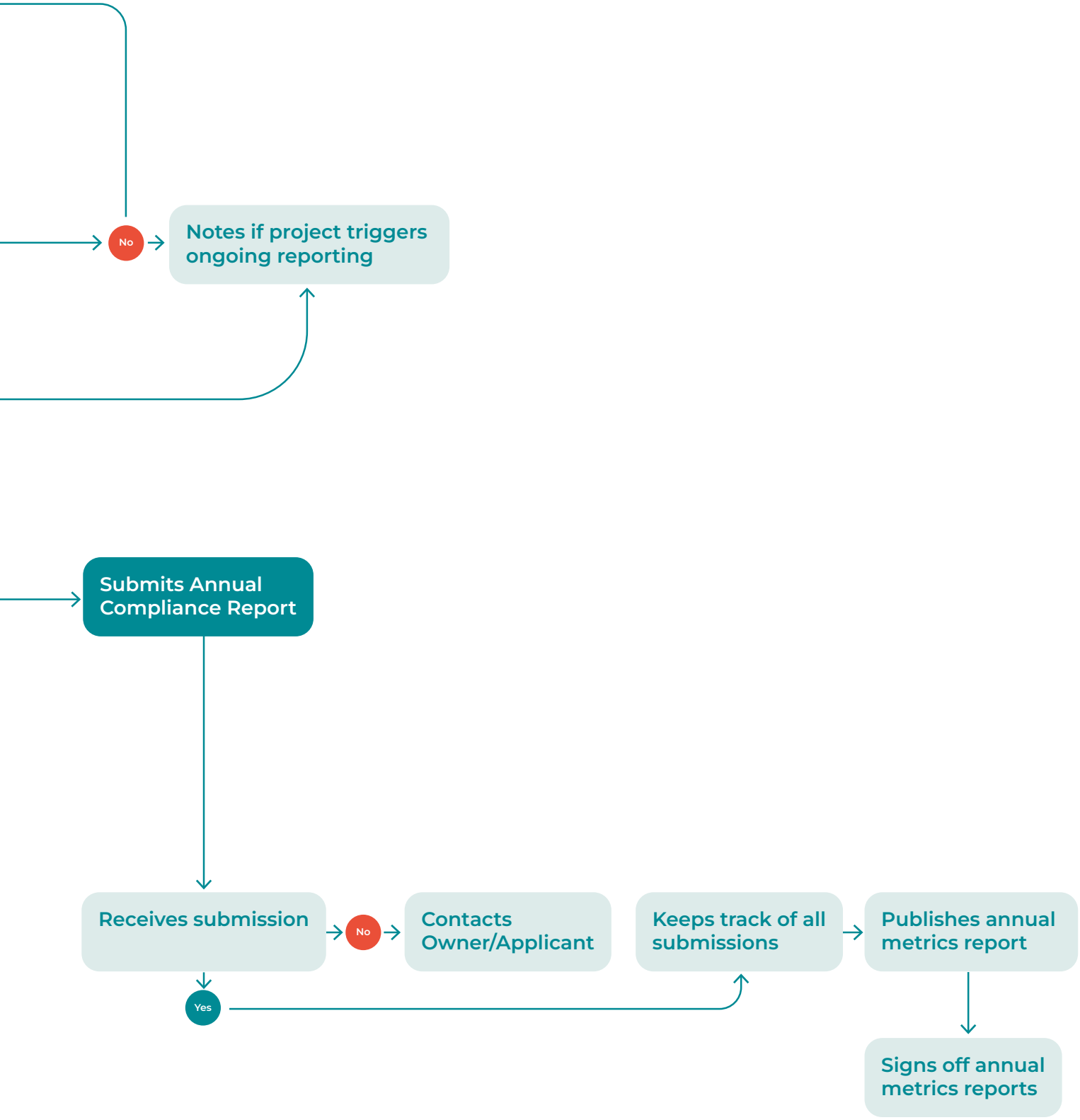
Figure 19. Developer TDM Reporting - City Responsibilities

TDM Strategies Plan Submission



Ongoing Compliance (Years 1 – 5)




No
Notes if project triggers ongoing reporting
Submits Annual Compliance Report
Receives submission
No
Contacts Owner/Applicant
Yes
Keeps track of all submissions
Publishes annual metrics report
Signs off annual metrics reports

City Employee TDM/Parking Program

The City currently faces the following key issues, which the City Employee TDM Program will help to address:

- Growing workforce with expectation to fill 2,100+ vacant positions.
- High vacancy and turnover rates among City personnel.
- Lack of incentives for sustainable transportation options for City staff.
- Inequitable distribution of current transportation benefits (subsidies have only been available for parking and no other modes).

The City Employee TDM (CETDM) Program has been designed as part of the City Energy and Emission Reduction Plan (EERP). The CETDM Program is viewed as a set of strategies and supporting policies targeting City staff, which maximize their alternative travel choices, including the mode of transportation, the route they take, and the time they travel. Reducing drive-alone trips is a central output of CETDM that supports various City goals such as reducing emissions, reducing congestion, alleviating parking pressure, enhancing employee recruitment and retention through attractive work-life balance, and leading by example as a major employer in the downtown area. TDM also enables the City to use its assets including land and parking facilities more efficiently and productively, thereby addressing access needs for its growing workforce.

The CETDM Program includes City employee strategies (existing and new) and community-wide TDM program strategies that the City can leverage for the benefit of employees. These include:

- Incentives (e.g., free bus passes, free/subsidized Biki passes, etc.)
- Policies (e.g., telecommuting and compressed work week)
- Programming (e.g., Guaranteed Ride Home), and
- Infrastructure (e.g., multimodal access facilities such as DIY bike repair stations and end-of-trip facilities)

Five-Year Work Plan

Upon the implementation of the CETDM Program, the *HNL Connect* team will provide ongoing support through the provision of TDM training and onboarding for new City employees. Key activities will include:

- Supporting program roll-out (including development of informational pieces for staff describing the new program);
- Developing informational content about the program, to be hosted on the internal staff intranet;
- Maintaining and collaborating with an online platform vendor to facilitate subsidy provision and travel behavior data collection;
- Providing as-needed support to individual staff on their decisions regarding which TDM options to participate in; and
- Maintaining databases related to program participation and travel habits.

KPIs, Metrics and Targets

The *HNL Connect* team will obtain the following metrics in connection with the CETDM Program, annually (see Table 12). The metrics collected in the first year (2024) will establish a baseline upon which future year objectives will be compared in order to effectively compare successes and areas for improvement. Preliminary targets are identified in Table 12, though the team will adjust to determine annual targets as needed.

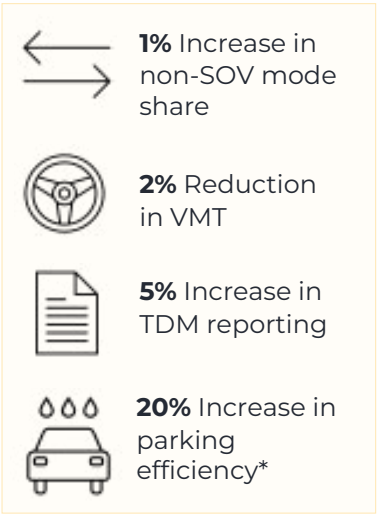


Table 12. CETDM Program Annual Metrics

Inputs		Actions		Outputs
Metric	**Target**	**Metric**	**Target**	**Metric**
City staff time spent	350 hours	Number of employees reached during trainings	1% increase	Number of employees enrolled in TDM benefits
Strategy budget	$100,000			Employee survey participation rate

	Outcomes		
Target	**KPIs**	**Target**	**Source**
2% increase	**Increase in non-SOV mode share:** Reported mode share	1% increase	Non-SOV mode share reported in Annual City Travel Survey
3% increase	**Reduction in VMT:** Reported average daily VMT	2% reduction	Reported trip length [x] reported average daily vehicle miles in Citywide survey
	Increase in TDM reporting: City employees receiving transit subsidy	5% increase	Number of employees who received a transit subsidy [x] transit subsidy value
	Increase in parking efficiency: Number of individuals on parking permit waitlist	20% decrease	Number of individuals on wait list

Support Strategies

TDM Support Strategies refer to those strategies that have been identified as priorities for delivery in Honolulu, but that are expected to be carried out primarily by partnering agencies, organizations or City departments. The subsections below outline the importance of each strategy, and define the *HNL Connect* role in supporting their implementation.

CITY AND COUNTY OF

Parking Pricing

Parking pricing as a TDM-supporting parking management policy has proven to be an extremely influential tool in determining travel behavior. In principle, higher parking prices discourage drive-alone travel and encourage travelers to experiment with different modes. Beyond that, more intricate parking pricing tools or systems can support improved accessibility, optimization of parking demand versus capacity, and combined with technology, the reduction of added VMT and vehicle emissions from 'circling' - the act of trolling for free parking spaces on City streets and in City parking facilities.

The City is currently conducting a procurement to replace outdated coin-based parking meter technology. As outlined in subsection 2.2.4, the City is also considering future adjustments to the pricing structure of city-owned public parking spaces, primarily to address the current parking revenue-cost deficit. This study explored additional parking strategies to reduce VMT, including:

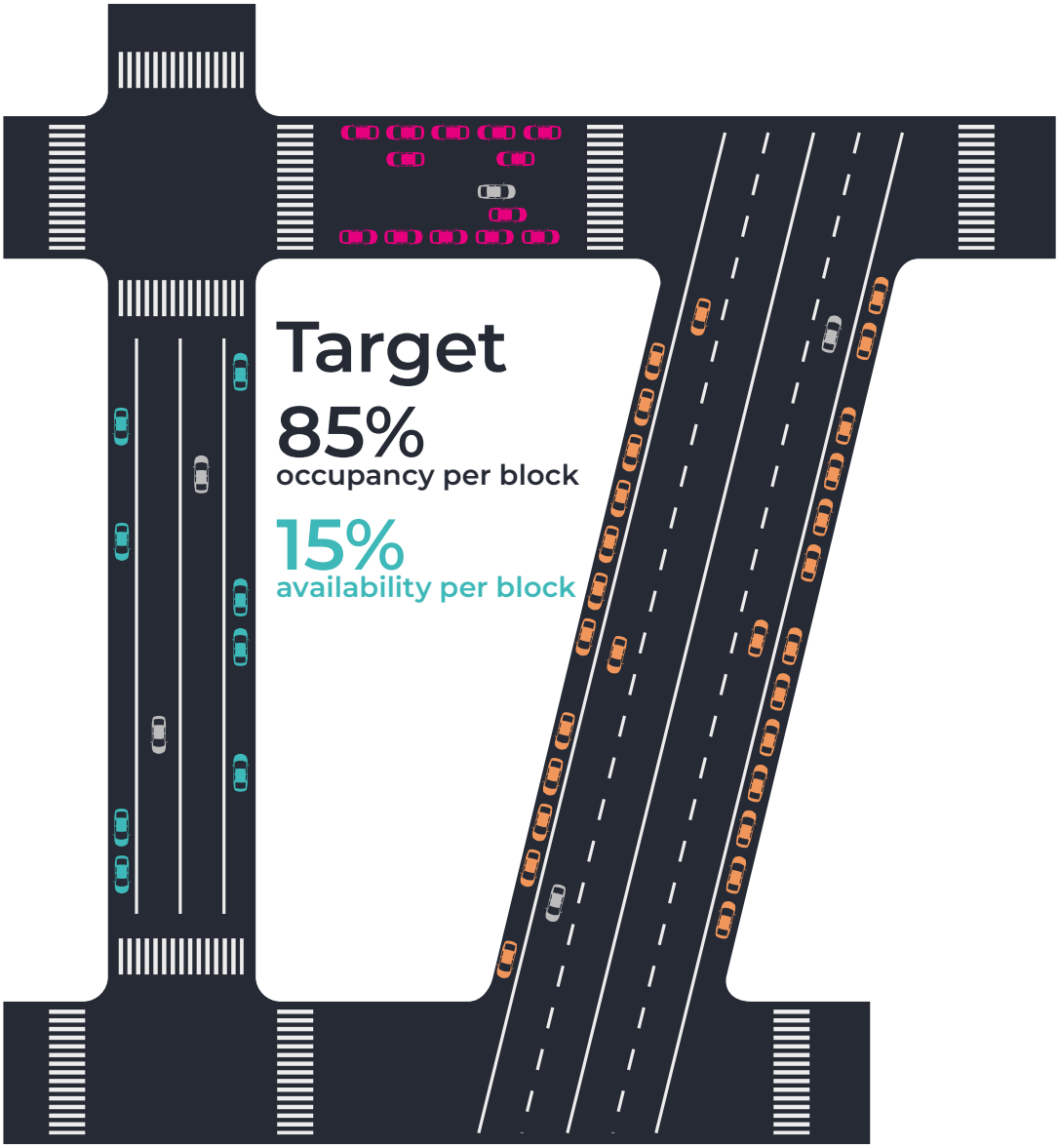
- **Smart payment systems**, including their integration with HOLO Card and similar technology, to allow for vehicle use for first/last mile trips, while encouraging travelers to also use transit.
- **Income-eligible discounts**, providing a reduction in all parking costs to individuals approved for HOLO card's Low Income Transit Fare Program with HOLO card payment. This would allow for a multi-modal approach to the provision of transportation subsidies in Honolulu.

- **Dynamic parking pricing,** allowing the City to control prices in its parking facilities and for its on-street spaces through temporal and demand-based adjustments, encouraging drivers to park further away or seek other modes and, therefore, maintaining availability and minimizing circling across the system. Figure 20 provides a visual representation of the impact of dynamic pricing.
- **A parking database**[15] beginning in summer 2023, buildings subject to the Better Buildings Benchmarking Program will share information about the number of parking spaces or parking area on their sites, along with data about location, and primary use.[16] This referencing system can be leveraged with parking utilization information to prevent the over-supply of parking, and ultimately may help demonstrate the construction cost savings of TDM practices.
- **Parking mobile app**, which would allow users to pay for parking on their mobile devices and will provide information about parking occupancy and cost to help drivers understand ahead of time (pre-trip or en-route) where they are most likely to be able to park within their preferred price range.
- **Parking maximums** establish an upper limit on the number of parking spaces that new development is permitted to construct. In December 2020, Honolulu adopted Ordinance 20-41 which eliminates the minimum parking requirement for new homes and businesses in areas that are well-served by transit and lowers minimums in other areas.[17] While the elimination of parking minimums is certainly a step in the right direction to updating outdated parking and land use regulations, precedent has shown that developers still often provide an abundance of parking. As such, some cities have adopted strategies and laws such as parking maximums and have right-sized their requirements in concert with TDM requirements.

There are a range of potential benefits that managed parking may offer. For example, strategies which reduce parking utilization rates make it easier to find a space, thereby supporting a balanced system and reducing wasted time 'circling' as well as reducing the associated VMT and vehicle emissions. Keeping spaces open also allows individuals with limited physical mobility to park closer to their destination, thus having a positive impact from an equity perspective. Managed parking may also reduce instances of double-parking and other traffic safety issues. Benefits such as this contribute positively to the user-friendliness of the overall system.

As the City moves forward with parking pricing policy and technology changes, *HNL Connect* involvement will include its Project Manager and other City staff participating in meetings and committees, and being available to policy makers to provide data, and professional judgement. *HNL Connect* can also use social media posts and direct engagement with program partners to ensure information about parking programs.

Figure 20. Dynamic Parking Ideal Occupancy



Progressive parking

If block/lot is too full, increase the price
If block/lot is too empty, lower the price
If block/lot is just right, keep the same price

Parking utilization

0%	75%	90%	100%
Lower price	No change	Raise price	

TDM Education

Generating buy-in and support for TDM at the highest levels of leadership can support its longevity. Educating public officials such as electees, business owners, and executive-level employees will help to ensure that TDM across the island is sufficiently resourced and that decision-makers can make informed judgments on how to shape and implement TDM programming.

While *HNL Connect* can provide its own education, Oʻahu is rich with agencies and organizations whose missions align with TDM. These entities possess deep connections and established education outlets across the island. *HNL Connect* will work to support partner agencies by providing them with the tools they need to expertly incorporate TDM education into their existing educational programming.

To accompany the TDM Plan, a one-page information sheet on TDM was created. Importantly, this tool makes the distinction between TDM as an educational and incentivization tool and the more efficient use of transportation infrastructure that TDM supports.

As *HNL Connect* progresses, the team will continue to liaise with partners to provide tailored information or material for their educational platforms. Materials may include:

- Engaging content for brief (1-3 minute) videos focused on TDM strategies and/or *HNL Connect*
- Presentation material for legislative briefings, listening sessions, and other workshops
- Webinar content or presentations
- Print and digital collateral
- Social media posts
- Content to be included in news media op-eds

Citywide Multimodal Efforts (Microtransit and Micromobility)

In coordination with the Honolulu Transit Comprehensive Operations Analysis and the development of its Strategic Transit Plan, the City continues to explore opportunities to promote multimodal travel easier through options such as microtransit and micromobility:

- **Microtransit** is the provision of flexible transit options that provide riders with on-demand transportation without the constraints of fixed routes or schedules. In Honolulu, microtransit could serve low-traffic and low-density areas in lieu of under-performing bus routes that have a relatively higher cost per rider[18]. Microtransit service would complement existing transit service on the island, be integrated with the HOLO fare payment system[19]. In 2021, the City developed a white paper to explore how microtransit pilots might be implemented.
- **Micromobility** encompasses a range of lightweight, typically electric or human-powered vehicles such as e-scooters, bicycles (including e-bikes), and mopeds which are generally designed to provide quick and convenient transportation around highly populated urban areas. Micromobility options are typically used for shorter distances, or first-mile/last-mile (FMLM) connections. Many cities face a FMLM challenge, as not everyone can live or work within walking distance of transit. Currently, bikeshare is the primary form of micromobility in Honolulu and is managed by Bikeshare Hawai'i (more commonly known as Biki), which is a 501(c)(3) non-profit organization operating under a public-private-non-profit model.

The *HNL Connect* team will coordinate with the development and implementation of the City Strategic Transit Plan and remain apprised of private-sector micromobility and microtransit projects offerings throughout Honolulu. This coordination may take the form of participating in technical advisory committees or assuming other support roles. As pilots or projects move forward, *HNL Connect* can support through promotion of microtransit and micromobility options on their social media channels. This can be done through formal targeted marketing or less formal outreach through social media posts.

Carpool Matching

The Hawai‘i Department of Transportation (HDOT) designates rideshare programs as “the least expensive way to reduce rush hour traffic congestion.” Housed within its Highways Division Traffic Branch, HDOT has a Transportation Demand Management Office which provides a variety of programs and services aimed at encouraging shared rides.

The State operates a free online Carpool/School Pool Match system (HIRideshare) that allows users to register and enter logistical information and carpooling preferences. The Carpool/School Pool Match system is targeted at employees and families for work and school related trips, respectively.

HIRideshare is currently linked on the City’s TDM web page. At a minimum, *HNL Connect* can continue to market the service to Honolulu employees and residents, and direct engagement with employers or property managers through the *HNL Connect* social media platform.

5. Taking TDM into the Future

Next Steps

The Opportunity

An estimated 64% of commuters in Honolulu drive alone to work, while 14% carpool, 10% use sustainable modes (walking, cycling, and transit) and 11% work from home. With the average personal vehicle emitting almost 9 ounces of carbon dioxide per person miles travelled, this quickly adds up to significant pollution generated each day by commuters alone. Interestingly, approximately 30-50% of trips made by people driving alone in Honolulu are under 3 miles, which presents a key opportunity for TDM to help shift the needle. Shifting travel behavior to more sustainable modes through the implementation of the strategies outlined in this plan will support broader efforts to reduce GHG emissions with the goal of ultimately achieving carbon neutrality by 2045.

Near-Term Priorities

Commencing in 2024, the City will allocate $1 million annually to deliver HNL Connect, representing the largest TDM investment by the City, to date. These funds will cover the major operations of the program, including the purchase and subsequent maintenance of supporting technology tools and platforms, and the provision of incentives and subsidies for travelers who use alternative modes of transportation. Table 13 summarizes HNL Connect near-term priorities.

Tracking Progress

The implementation of the full suite of TDM strategies contained in this plan will help fill the voids on the road to sustainability. To be transparent about whether or not HNL Connect is achieving the intended objectives and targets, the City will publish an Annual Report. The Annual Report will summarize HNL Connect strategy performance, through consistent reporting on KPIs and associated metrics, and with qualitative data describing the status of each of the initiatives (i.e., key accomplishments and next steps). The Annual Report will be released each year in February, providing a review of the previous year. The first Annual Report will be presented in February 2025.

Initiative/ Program	Description
Branding and marketing media mentions	Establishing greater brand awareness of *HNL Connect* as ***the*** TDM program in Honolulu will set the foundation for the roll-out of the program's strategies. Following introductory media posts, *HNL Connect* should establish a regular cadence of ongoing communication through a combination of information and news-based content.
TDM communications (e.g., newsletter/flyer/blog)	Coordination with partner agencies and organizations on TDM issues offers many benefits, including promoting visibility of TDM initiatives, consistency in messaging, and supporting efficiency by reducing the potential for duplicative efforts. As such, *HNL Connect* should consider establishing regular opportunities to connect with partner staff on TDM issues. To start, the program may choose to establish a TDM blog, or distribute a TDM newsletter to partner agencies and organizations.
Reintroduction of vanpool subsidy program	The proven historic success of vanpool in Honolulu demonstrates that the expansion of the vanpool subsidy program is a low-barrier strategy yet has the potential for significant impacts in VMT reduction. As such, it is recommended that *HNL Connect* prioritize the program's re-instatement by re-establishing partnerships with one or more vanpool vendors and promoting the program amongst City employees and the broader commuting population.
Free transit for City employees	City employee badges are now able to be loaded with the HOLO application and used as a HOLO card, offering a more seamless experience for staff who use transit. Establishing a process to analyze aggregated HOLO card usage data should be prioritized as it will allow *HNL Connect* to better understand employee transit ridership trends, offering additional insight to employee travel behavior and VMT reduction.
RPZ expansion	Given the recent introduction of the Bill which would formalize the RPZ program, it is recommended that *HNL Connect* launch an awareness campaign through its social media platforms, sharing information on how the formalized RPZ program would work and the program's benefits. Establishing the associated tools to effectively manage the RPZ program should also be initiated in the short-term such that *HNL Connect* can quickly shift focus to RPZ expansion efforts, pending the Bill's approval.

Collaboratively Advancing a Wider Vision

Successfully addressing and managing congestion and reducing GHG emissions requires a multi-pronged approach and diverse "toolkit" of strategies. In addition to TDM, some of these strategies include land use and growth management, public transit and active transportation improvements, and operational enhancements (e.g., transit signal priority, management of goods movement, etc.).

The implementation of transit-oriented development (TOD) will help reduce urban sprawl across surrounding agricultural lands and open areas, in addition to encouraging livable and walkable neighborhoods whilst increasing transit ridership. Key elements of TOD that are supportive of congestion and GHG emissions reductions include:

- Destinations – coordination between land use and transportation (e.g., focused growth along existing and planned frequent transit corridors);
- Distance – implementation of a fine-grained street network that supports multiple modes;
- Design – incorporation of people-centered design approaches (e.g., reduced minimum off-street parking requirements, multi-modal streets, and public spaces);
- Density – concentration and intensification of land uses near frequent transit;
- Diversity – planning and implementing a mix of land uses and housing types (including affordable housing); and
- Demand Management – implementing supporting TDM measures to discourage unnecessary driving.

The 2050 ORTP will lay out the path forward for the city's transportation system, guiding investment in bike, walk, and transit infrastructure, as well as a greater emphasis on land use and transportation integration.

TDM marketing, education, services, and policies will leverage these advances in TOD and multi-modal implementation by promoting increasing public awareness of the benefits to using sustainable modes, offering engaging opportunities and incentives for the public to try and continue to use sustainable modes, as well as support the development community in implementing TDM at the site-level.

Conclusion

Honolulu has experienced a significant increase in the level of drive-alone travel over several decades, contributing to increased travel times, vehicle emissions, and road safety challenges which all negatively impact quality of life and have harmful environmental impacts. As the City strives to address the impacts of increasing car ownership and congested roadways, influencing behavior change and encouraging a shift away from drive-alone travel through TDM is essential.

The development of this TDM Plan and HNL Connect resulted from a 3- year effort involving an inter-departmental team of City staff, stakeholders from the State of Hawai'i, OahuMPO, and a variety of non-governmental organizations. With a focus on the first five years of delivery (2024-2029), the HNL Connect program will deliver the six 'primary strategies', and four 'supporting strategies' described in this Plan.

HNL Connect was created with flexibility in mind, enabling the program to support new TDM-related initiatives as they arise, or as sustainable transportation technologies emerge or evolve, and as transportation options develop or expand across Honolulu. This TDM Plan should be updated accordingly and at least once every five years.

Appendices

SPEED
LIMIT
25
biki

Appendix A TDM Related Plans and Policies

Appendix B Existing Conditions Report

Appendix C Best Practices Report

Appendix D Market Research Report

Appendix E HNL Connect KPIs and Metrics Table

Endnotes

1 Association for Commuter Transportation. (n.d.). What is TDM? Retrieved from https://www.actweb.org/what-is-tdm

2 Association for Commuter Transportation. (n.d.). What is TDM? Retrieved from https://www.actweb.org/what-is-tdm

3 Hawai'i Regional Economic Analysis Project. (2022). Hawaii vs. Honolulu County Comparative Trends Analysis: Population Growth and Change, 1969-2021. Retrieved from https://hawaii.reaproject.org/analysis/comparative-trends-analysis/population/tools/150000/150003/

4 Department of Business Economic Development and Tourism. (2021). Table 18.07 – Motor Vehicles Registered, by County: 1995 to 2021. Retrieved from https://files.hawaii.gov/dbedt/economic/databook/db2021/section18.pdf

5 While the four TDM Plan development phases were generally carried out in chronological order, some elements that align with each phase were completed outside of the phase's primary time period. Stakeholder outreach (described as part of Phase 1) was carried out across the entire 3-year plan development period. Some of the elements that support Phase 4 such as the HNL Connect brand, or the social media plan did not rely on a final list of strategies, and were carried out earlier. Some of the Plan's objectives were identified prior to the strategy evaluation and others were identified after Phase 3 was complete.

6 Oahu MPO. (2021). 2045 O'ahu Regional Transportation Plan. Retrieved from https://www.oahumpo.org/?wpfb_dl=2215

7 City and County of Honolulu. (2010). City and County of Honolulu Public Parking System: Preliminary Feasibility Analysis of Monetization. Retrieved from https://www.oahumpo.org/plans-programs-and-studies/planning-studies/honolulu-urban-core-parking-master-plan/

8 The case studies included: West Palm Beach, FL; Las Vegas, NV; Seattle, WA; San Francisco, CA; Santa Monica, CA; San Diego County, CA.

9 Individuals who live on O'ahuO'ahu a minimum of six months a year.

10 Ulupono Initiative. (2020). The Costs of Parking in Hawai'i. Retrieved from https://ulupono.com/media/ivcfs2pu/the-cost-of-parking-in-Hawai'i-report-2020-08.pdf

11 City and County of Honolulu. (2022). About DTS. Retrieved from https://www.honolulu.gov/transportation/about-us.html

12 USAID. (2023). Logic Framework. Retrieved from https://www.usaid.gov/logical-framework

13 Increase in combined trip length results in a decrease in VMT

14 Of note, Ongoing Compliance Report requirements are tied to site location, NOT the project applicant. If a project changes ownership before this five-year period has expired, new owners must continue to report in order to maintain compliance with CCH.

15 The Center for Neighborhood Technology. GreenTRIP Parking Database. Retrieved from http://database.greentrip.org/.

16 City and County of Honolulu. (2022). Ordinance 22-17. Retrieved from https://hnldoc.ehawaii.gov/hnldoc/document-download?id=14729

17 City and County of Honolulu. (2020). Ordinance 20-41. Retrieved from https://hnldoc.ehawaii.gov/hnldoc/document-download?id=9207

18 City and County of Honolulu. (2021). Advanced Project Planning Report Microtransit Pilot. Retrieved from https://www.honolulu.gov/rep/site/dts/Honolulu_DTS_Microtransit_Pilot_Draft_Planning_Report.pdf

19 Ibid.