



Orange County Transportation Demand Management Plan

March 2025

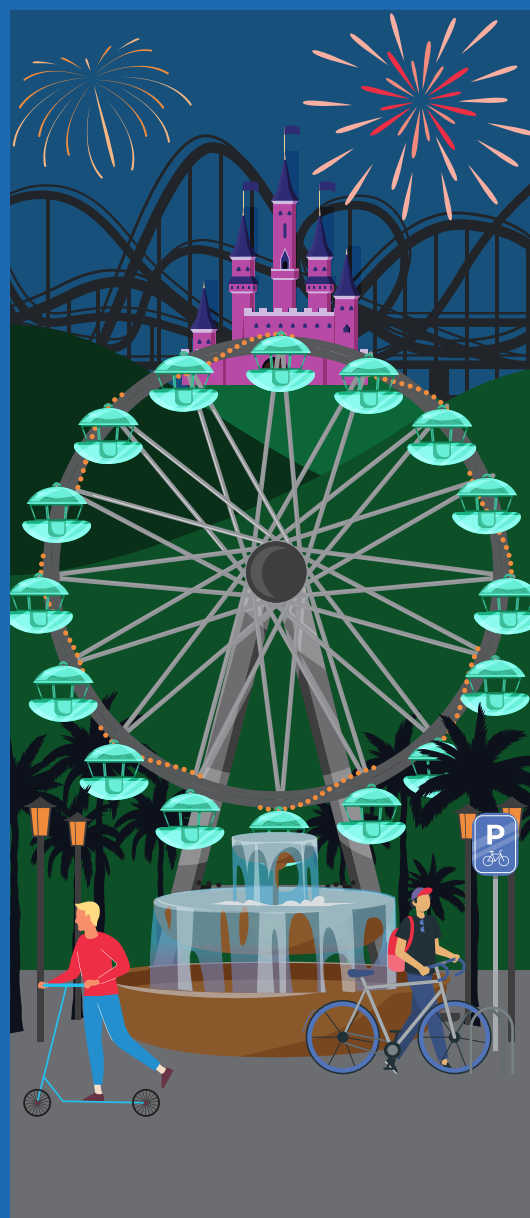


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Introduction

A Plan for Orange County

Orange County, home to over 3 million residents, is expected to experience significant growth over the next two decades, with population projected to grow by 3% and employment by 8% by 2045¹. This growth will place additional strain on the county's roadway systems, leading to increased congestion, greenhouse gas emissions, and air quality concerns. Additionally, the region faces growing climate-related risks, including wildfires, extreme heat, drought, and rising sea levels.

To address these challenges, Orange County Transportation Authority (OCTA) is committed to optimize the county's transportation system through effective planning and delivery of sustainable strategies. OCTA aims to decrease roadway demand by reducing the need to rely on single-occupancy vehicles (SOV) by expanding access to shared and active modes such as transit, carpooling, bicycling and walking. This approach aligns with the state's Climate Action Plan for Transportation Infrastructure (CAPTI) initiatives to reduce greenhouse gas emissions and also positions transportation demand management as a key strategy for a more sustainable and resilient transportation system.

What is Transportation Demand Management (TDM)?

Transportation Demand Management (TDM) is a strategic approach to optimize the use of the existing transportation system to reduce vehicle miles traveled (VMT) and greenhouse gas (GHG) emissions. This can be achieved by encouraging and providing alternatives to SOV trips through programmatic and policy-based solutions. These strategies focus on promoting sustainable options such as carpooling, biking, walking, and transit, while also supporting initiatives such as remote work and land use planning that bring people closer to destinations they frequent. TDM efforts, which often include incentives and educational programs to encourage use of non-SOV travel modes, can alleviate congestion at a fraction of the cost of expanding roadway or transit infrastructure.

¹ Orange County Projections 2022, Center for Demographic Research - California State University, Fullerton, Retrieved from - https://www.fullerton.edu/cdr/_resources/pdf/ocff.pdf

Why is TDM suitable for Orange County?

Orange County's diverse demographics and unique mobility challenges create significant opportunities for the effective use of TDM. In northern and central parts of the county, dense populations and large employment centers contribute to significant traffic congestion that can be alleviated through TDM strategies that promote alternatives to SOV trips. In southern Orange County, where development is less dense, TDM initiatives can still offer practical and cost-effective solutions such as carpooling or shuttles that complement bus and rail services to enhance travel options and improve access to key destinations.

OCTA and its partners have already established a solid foundation in Orange County through TDM initiatives such as the countywide Rideshare program and local efforts led by local partners, that promote awareness and utilization of sustainable transportation options. There is an opportunity to continue building upon existing programs and expanding TDM offerings to address Orange County's evolving transportation needs.

In 2023, OCTA commissioned the Orange County Transportation Demand Management Plan (the Plan) to help establish roles and responsibilities, guide investment decisions and identify opportunities for both countywide and local TDM initiatives. The Plan intends to put forth a comprehensive TDM approach for the County, providing a framework for future planning studies and program development.

Document Structure

This Orange County Transportation Demand Management Plan is structured as follows:

Chapter 1

Needs Assessment and Goals

Summarizes background research, stakeholder engagement, and public outreach efforts that identified challenges and opportunities for TDM implementation and establishes the Plan's goals.

Chapter 2

TDM Toolbox

Describes the strategy selection and development process. This chapter includes fact sheets for each recommended TDM strategy, providing information on benefits, challenges, case studies, and delivery recommendations.

Chapter 3

Delivery Considerations

Provides guidance for implementors, including phasing, packaging, communication and collaboration, and funding opportunities.

Chapter 4

Next Steps

Outlines the actionable steps required to advance the Plan, focusing on OCTA's role as a leader and facilitator.

1

Needs Assessment and Goals



Needs Assessment and Goals

The needs assessment examined existing conditions for TDM within Orange County. Findings from this assessment helped define the project goals as shown in Figure 1.

Figure 1: Project Goals



These goals form the foundation for TDM-related planning, policy, and program recommendations within this document and are described in detail below.

- **Mobility:** Improving mobility options is essential to reduce automobile dependency and traffic congestion. Fewer SOVs can lead to shorter travel times and enhanced roadway safety. Expanded travel options for shorter trips, improved first- and last-mile connectivity, and active transportation supportive environment can improve mobility and accessibility while providing health benefits.

- **Sustainability:** In consideration of future urban expansion, travel demand growth, changing demographics, and shifting regional objectives, this goal calls for a more efficient transportation system that supports environmental and economic sustainability. Promoting and incentivizing alternative transportation options can alleviate traffic congestion and reduce VMT and GHG emissions. Additionally, improving accessibility to jobs and key destinations fosters economic growth and supports the state’s climate goals.
- **Equity:** Survey respondents identified private vehicles as the most convenient and reliable travel mode, highlighting challenges around transit availability and efficiency for those who cannot own or operate personal vehicles. TDM strategies can address programming, service, and network gaps to accommodate people of all ages, income levels, locations, ethnicities, and physical abilities. For disadvantaged and low-income communities, prioritizing equitable access to education, employment opportunities, and healthcare can improve quality of life, increase household incomes, and reduce transportation cost burdens.
- **Partnership:** A cohesive transportation network requires extensive coordination and partnership between public and private stakeholders. The multi-partner approach can strengthen TDM offerings and encourage greater adoption of sustainable travel options. Engaging community-based organizations and local stakeholders will help develop strategies tailored to specific needs within communities.





The needs assessment focused on three key areas: Policies and Plans, Stakeholder Input, and Geographic Review. The needs assessment process and findings for each key areas are summarized in the following sections.

Policies and Plans

Orange County’s TDM landscape is shaped by an array of regulations, programs, and strategic initiatives aimed at improving mobility, reducing congestion, and promoting sustainable travel choices. From federal regulations that emphasize congestion management, to state-level programs addressing traffic impacts, and local ordinances championing alternative modes, these mechanisms work together to mold transportation ecosystems.

Relevant policies and plans were reviewed to ensure alignment with broader regional, countywide, and local goals. Table 1 summarizes key findings from the policies and plans review categorized under the four project goals.

Table 1: Key Findings: Policies and Plans

 Mobility	 Sustainability
<ul style="list-style-type: none">• Policy environment is supportive of alternative mobility options.• Increased shared mobility options are needed to reduce single-occupancy vehicle dependency.• There are existing programs and services that TDM strategies can be built upon.	<ul style="list-style-type: none">• More TDM measures are needed to enhance the efficiency and sustainability of transportation systems.• There is demand for improved bicycle and pedestrian infrastructure for a sustainable system.
 Equity	 Partnership
<ul style="list-style-type: none">• Transportation funding investments are often paired with public health and social equity goals.• LRTP identified the need to expand mobility choices for all.• LRTP, OC Mobility Hubs Strategy, and OCTA South Orange County Multimodal Transportation Study have identified equity as a key factor for strategy focus.	<ul style="list-style-type: none">• Stronger partnerships are needed to advance TDM efforts.• Several countywide services and programs require increased coordination with partners, such as Metrolink and Metro.• Policy recommendations focus on implementing higher capacity, fixed-route transit in denser parts of the County. Improving connection to jobs using OC Flex service, connected to Metrolink stations and freeway BRT, are identified for suburban areas.

Stakeholder Input

Stakeholder input was critical to ensure the Plan reflects county and local values and addresses the diverse needs of stakeholders across Orange County. Public outreach also helped build awareness of the Plan and its objectives and fostered understanding of how various stakeholders could contribute to or benefit from the Plan’s successful implementation.

The Outreach Report (Appendix 1) summarizes the public engagement efforts that helped shape the Plan based on community feedback. A variety of engagement tools were used to gather stakeholder input including:

- **Advisory Committee:** comprised of OCTA and partner agency staff meeting throughout project development to provide technical input and expertise.
- **Stakeholder Working Group:** included local jurisdiction staff sharing community perspectives and facilitating communication with their constituencies.

- **Stakeholder Interviews:** conducted with a major employer, a transportation management association, an advocacy group, a university, and a shared mobility provider to gain insights from key sectors.
- **Public Workshops and Surveys:** conducted to inform county residents and commuters on Plan development and to gather insights about their travel decisions, trip types, and motivations for alternative travel options. A second public workshop and survey collected feedback on the prioritized strategies.
- **Citizens Advisory Committee:** the project team presented at quarterly meetings to provide updates and solicit inputs from this OCTA public committee comprised of residents and community advocacy groups.

Table 2 summarizes key findings from the stakeholder input.

Table 2: Key Findings: Stakeholder Inputs

<div data-bbox="349 1136 537 1178" data-label="Section-Header"> <h3> Mobility</h3> </div> <ul style="list-style-type: none"> • Support for policies that enhance pedestrian and cyclist infrastructure. • Public interest in expanding mobility options for short trips, including active transportation and micro-mobility. • Survey results show drive-alone, walking, and bus as the most commonly used modes. • Need to close first- and last- mile gaps to connect to alternative modes. 	<div data-bbox="1040 1129 1304 1178" data-label="Section-Header"> <h3> Sustainability</h3> </div> <ul style="list-style-type: none"> • Consider environmental sustainability in travel mode choices. • Concerns regarding congestion, greenhouse gas (GHG) emissions, and limited job access. • Alignment with broader regional objectives (e.g., 2028 Olympics).
<div data-bbox="362 1570 524 1623" data-label="Section-Header"> <h3> Equity</h3> </div> <ul style="list-style-type: none"> • 13% survey respondents commute more than 25 miles each way reflecting travel time burden and relative job-housing imbalance. • Opportunities for improved accessibility for vulnerable populations. • Gaps in transit service remain a challenge for many transit-dependent populations. • Connectivity gaps and limited mobility options in parts of South County. 	<div data-bbox="1045 1570 1295 1623" data-label="Section-Header"> <h3> Partnership</h3> </div> <ul style="list-style-type: none"> • Commuters use a variety of travel modes, presenting opportunities to improve intermodal connectivity. • Need for a multi-partner approach to increase transportation service utilization and amplify outreach efforts. • Need for seamless integration of transportation services across jurisdictions.


Geographic Review

The following key geographic metrics and indicators were analyzed to understand the diverse needs and opportunities across Orange County:


- **Demographics:** distributions of population and employment density and projected growth, communities of concern², income levels, vehicle ownership, and major trip generators.
- **Circulation Network:** roadway, bicycle, and transit networks.
- **Travel Indicators and Patterns:** trip origins-destinations and VMT trends.

Table 3 summarizes key findings from the geographic review. For the full assessment, refer to Appendix 2.

Table 3: Key Findings: Geographic Review

 **Mobility**

- Population density is highest in the northern half of the county, particularly along major freeway corridors.
- Employment density is highest around John Wayne Airport (SNA), downtown Santa Ana, Irvine Spectrum, and major freeway interchanges in Cities of Orange and Santa Ana.
- The county experiences more inbound commute trips than outbound trips.

 **Equity**


- Approximately 29% of the population resides in Communities of Concern, which are concentrated in densely populated areas.
- Many key destinations in Orange County are concentrated in North and Central County.
- South Orange County has hilly terrain and gaps in its bicycle network.
- Most high-frequency transit corridors are concentrated in North and Central County.

Vision

A vision statement was developed to guide the Plan development. It was based on the findings of the needs assessment and OCTA priorities. The vision also complements OCTA’s mission to develop and deliver transportation solutions to enhance the quality of life in Orange County by focusing on the goals of mobility, sustainability, equity and partnership.

Vision Statement

The Orange County Transportation Demand Management Plan aims to enable and promote a diverse range of sustainable travel options to maximize the efficiency of the transportation system, foster sustainable travel choices, ensure convenience and equitable access for all communities, and cultivate partnerships for community-driven implementation.

 **Sustainability**

- Households without access to vehicles are typically concentrated in lower income areas, near universities and colleges, or within senior housing communities.
- The southern and northeastern parts of the county exceed the countywide average VMT per capita.

 **Partnership**




- Opportunities to increase collaboration with Caltrans and Metrolink to strengthen regional transit connectivity.
- Major trip generators include colleges, shopping centers, medical centers, and entertainment destinations. New and expanded partnerships with these organizations will be crucial to reduce SOV trips.

² Communities of concern, as defined in the OCTA Directions 2045 LRTP, refers to Orange County census tracts in the top one-third for both non-white population and households living in poverty.

Outcomes and Objectives

The Plan includes a set of outcome-based objectives for each goal, prioritizing measurable impacts and tangible results that address the identified needs. The outcomes and objectives for each of the four goals are outlined in Figure 2.

Figure 2: Project Goals & Outcomes

	Goals	Outcomes	Objectives
 Mobility	Improve access to mobility options that support a more efficient transportation system.	People are more aware and utilize a variety of multi-modal travel options.	<p>Increase in TDM supportive policies, programs, and services that can support travel options, increase awareness, and reduce vehicle dependency.</p> <p>Increase in non-SOV mode share.</p>
 Sustainability	Enhance long-term climate resiliency and economic vitality.	Improve livability due to improved air quality and access to opportunities.	<p>Reduction in VMT.</p> <p>Reduction in GHG emissions.</p> <p>Reduction in congestion.</p> <p>Increase in economic growth.</p>
 Equity	Reduce travel burdens and disparities for vulnerable communities and populations.	Enhance access to transportation and mobility options, especially for vulnerable communities and populations.	<p>Reduction in travel cost burden in communities of concern.</p> <p>Improved access to multi-modal options for transit-dependent populations.</p>
 Partnership	Strengthen communication and coordination between public and private transportation partners and stakeholders.	Strengthen TDM offerings that seek efficiency through synergy and partnerships with similar organizations and in places with demonstrated TDM need.	<p>Collaboration with employers, local authorities, and community-based organizations (CBOs) to broaden outreach and connect with new populations.</p>

2

TDM Toolbox



TDM Toolbox

The TDM Toolbox includes 21 shortlisted strategies that aim to enable and promote a diverse range of sustainable travel options that are well suited for Orange County.

The Toolbox provides implementors such as employers, developers, local jurisdictions, transit agencies and others with a menu of strategies that can help enable policies, services and infrastructures for sustainable travel choices and provide education and encouragement to support those choices.

Strategy Development and Prioritization

To arrive at a prioritized list of strategies for Orange County, an initial list of 51 strategies were compiled based on OCTA’s priorities, feedback from stakeholder engagement, and a review of local and regional plans and policies. All 51 strategies were evaluated on their Strategic Fit to the established goals and outcomes of the Plan to allow for the shortlisting of strategies that are most contextual for Orange County.

Each preliminary strategy was evaluated on how well they satisfy the desired outcomes and scored based on their relative alignment to the established goals and outcomes. A total of 8 questions were developed, as shown in Table 4, to support evaluators with assessing the strategic fit for each of the preliminary strategies.

Based on scoring, low-performing strategies were either screened out or nested within high-performing strategies to limit redundancies and strengthen existing strategies.

A final list of 21 strategies were included as part of the TDM Toolbox.

Table 4: Strategy Evaluation Framework

Evaluation Criteria	Questions
<p>1. Alignment with Mobility Outcome - People are more aware and utilize a variety of multi-modal travel options.</p>	<p>1a. How well does this strategy support reduction of drive-alone vehicle trips and vehicle dependency?</p> <hr/> <p>1b. How well does this strategy increase the awareness of travel options in the region?</p>
<p>2. Alignment with Sustainability Outcome - Improve livability due to improved air quality and access to opportunities.</p>	<p>2a. How well does this strategy support reduction of greenhouse gas emissions?</p> <hr/> <p>2b. How well does this strategy support increased access to jobs and other opportunities?</p>
<p>3. Alignment with Equity Outcome - Enhance access to transportation and mobility options, especially for vulnerable communities and populations.</p>	<p>3a. How well does this strategy support the reduction in travel costs for communities of concern?</p> <hr/> <p>3b. How well does this strategy support increased access to multi-modal options and regional destinations for communities of concern?</p>
<p>4. Alignment with Partnership Outcome - Strengthen TDM offerings that seek effectiveness through synergy and partnerships with similar organizations and in places with demonstrated TDM need.</p>	<p>4a. How well does this strategy expand and strengthen existing TDM offerings through partnership?</p> <hr/> <p>4b. How well does this strategy foster new partnerships, coordination, and data exchanges?</p>

Strategy Categories

The 21 selected strategies were organized into 5 categories that address various aspects of expanding sustainable transportation options.

- **Policy & Plan** - strategies that support the development, enhancement, and implementation of policies that foster an effective and streamlined TDM environment.
- **Marketing & Education** - strategies focused on increasing awareness of sustainable travel options.
- **Infrastructure & System Upgrades** - strategies that require infrastructure investments to enhance accessibility and connectivity for sustainable travel choices.
- **Services** - strategies that introduce new or enhance existing alternative transportation services.
- **Incentives & Facilitation** - strategies that can help facilitate or incentivize behavior change.

How to Read the Fact Sheets

The Toolbox is comprised of a two-page fact sheet for each TDM strategy. The first page provides an overview of the strategy, including:

- **Description:** what the strategy entails
- **Relevance:** goals the strategy supports and trip types it serves
- **Potential Leads:** agencies suitable to lead the strategy implementation
- **Key Metrics:** estimated costs and potential VMT reduction
- **Potential Partners:** agencies or organizations that can support the efforts or collaborate with the lead implementors
- **Complementary Strategies:** strategies that can be combined to boost impact and create synergy
- **Benefits:** potential advantages and positive outcomes of implementing the strategy
- **Challenges:** potential concerns or obstacles that may arise
- **Case Studies:** real-world applications that highlight best practices and lessons learned
- **Measurements:** metrics to monitor performance





The second page focuses on the strategy's application in Orange County and provides specific delivery recommendations for implementors, tailored to local contexts.

Figure 3 provides a reference chart for the icons and ratings used to facilitate a quick understanding of each strategy in the fact sheets.

Figure 3: Fact Sheet Icons and Ratings










Program Outcomes

The following icons are used to indicate which goals, defined in this study, are best supported by the TDM strategies.

-  **Mobility:** Expanded public awareness of, and access to, multi-modal travel options.
-  **Sustainability:** Improved livability due to improved air quality and access to opportunities.
-  **Equity:** Enhanced access to transportation and mobility options, especially for vulnerable communities and populations.
-  **Partnership:** Strengthened TDM offerings that seek effectiveness through synergy with similar organizations that have demonstrated TDM need.






Costs

Given the programmatic nature of the TDM strategies, costs were derived from the “Funding Feasibility” scoring developed as part of the strategy evaluation process.

-    **Low**
-    **Medium**
-    **High**










Trip Types

The trip purpose that the strategy targets.

-  **Commuter:** Trips taken for work
-  **Leisure:** Recreational trips
-  **Visitor:** Trips coming to OC
-  **Essentials:** Short trips by residents
-  **School:** Trips taken by students

VMT Reduction Potential

Based on its potential to reduce VMT beyond existing programming. Estimated calculations were based on Mobility Lab’s Transportation Demand Management Return on Investment calculator. Key assumptions were made for each strategy and can be found in Appendix 3.

-    **Low:** Limited potential to reduce VMT/SOV trips (less than 10,000 daily VMT reduced).
-    **Medium:** Medium potential to reduce VMT/SOV trip (10,000-100,000 daily VMT reduced).
-    **High:** High potential to reduce VMT/SOV trips (over 100,000 daily VMT reduced).

PP.1






Complete Streets Policies

Complete Street Policies should prioritize safe and accessible transportation choices and identify opportunities for improved integration with ongoing and planned transportation projects to maximize public and private investment and advance an integrated transportation network.

Program Outcomes

- | | |
|--|--|
|  Mobility |  Partnerships |
|  Sustainability |  Equity |

Trip Types

- | | |
|--|---|
|  Commute |  Leisure |
|  Essentials |  Visitor |
|  School | |

Potential Lead(s)

Local Jurisdictions

Costs

💰 💰 💰 Medium

VMT Reduction

● ● ● Medium

Potential Partners

- Community Organizations
- OCTA (CTC & Transit Agency)

Complementary Strategies

- Active Transportation Infrastructure Improvements
- Bicycle/Transit Integration
- Mobility Hubs
- Motor Vehicle Restriction Zones
- Safe Routes to School (SRTS) Program
- Shared Micromobility Programs
- Transit Oriented Development and Non-SOV supportive land use

+ Benefits

- Improves safety for users of all modes
- Increases transportation options and accessibility
- Enhances community livability and economic vitality
- Encourages first/last mile connectivity

— Challenges

- Securing funding for retrofitting existing streets
- Balancing needs of different user groups within limited right-of-way
- Coordinating across multiple agencies and departments

Case Studies

- **Howard County, Maryland** - The Howard County Complete Streets Policy prioritizes safety of “vulnerable street users” (defined in the policy as pedestrians, bicyclists, children, seniors, and people with accessibility needs) as the highest priority during project selection, implementation and evaluation. This framework ensures that Howard County will prioritize historically disinvested communities, particularly communities of color, for biking and walking infrastructure.
- **City of Sacramento, California** - The City of Sacramento Complete Streets Policy requires the City to approach every transportation improvement and project phase as an opportunity to apply a Complete Streets framework to create safer, more accessible streets for all roadway users. The City’s approach provides an opportunity to thoughtfully integrate and advance a comprehensive and connected multimodal transportation network.

Measurement

- Number of complete street projects funded
- Dollars spent on project improvements

PP.1 Complete Streets Policies

? How does this strategy relate to Orange County?

Complete Streets policies are most effective at reducing SOV trips in areas with high pedestrian, bicycle, and transit activity, including:

- Urban centers like Downtown Santa Ana, Anaheim's Platinum Triangle, and Irvine Spectrum that could benefit from improved multimodal infrastructure.
- Transit corridors near OC Streetcar, Metrolink stations, and high-frequency bus routes to enhance first- and last-mile connections.
- School zones and universities, where safer bike and pedestrian access is critical.
- Suburban and mixed-use developments transitioning to higher density, particularly in South Orange County and TOD areas.

Existing complete street efforts includes OCTA's Complete Streets Program (OCCSP), developed consistently with SCAG's STBG/CMAQ and Complete Streets Program guidelines, which help screen and recommend projects that meet local and regional priorities. Additionally, the Orange County Council of Governments (OCCOG) Complete Streets Handbook and Funding Toolkit provides guidance for jurisdictions on implementing both basic and advanced Complete Streets measures with context-sensitive design options.

⚙️ Delivery Recommendations

- **PP.1.1:** Continue to ensure that complete street projects led by local jurisdictions are compatible with OCTA transit services.
- **PP.1.2:** Prioritize projects that support operational efficiencies and improve transportation infrastructure.
 - Dedicated transit lanes, bus signal priority, and operational traffic improvements to ensure that transit vehicles experience minimal wait time at intersections.
 - Appropriate sidewalks and crossings to provide quality first and last mile connections to the transit system, expressed as a key theme in stakeholder input.
- **PP.1.3:** Track Complete Street project progress and provide guidance on aligning with local and countywide TDM and transit planning efforts.
 - Leverage construction phase outreach to encourage residents and visitors to use alternative transportation options.
 - Celebrate project milestones (construction kick-off, mid-way to project completion, and groundbreaking) to highlight the pedestrian and bicyclist-focused benefits.



PP.2 Motor Vehicle Restriction Zones

Designated streets or neighborhoods where vehicle access is limited, either temporarily or permanently.

Program Outcomes

-  Mobility
-  Sustainability
-  Partnerships
-  Equity

Trip Types

-  Essentials
-  School
-  Visitor

Potential Lead(s)

Local Jurisdictions, OCTA

Costs

💰 💰 💰 Medium

VMT Reduction

● ● ● Medium

Potential Partners

- Business Improvement Districts
- Community Organizations
- OCTA (CTC & Transit Agency)

Complementary Strategies

- Active Transportation Infrastructure Improvements
- Complete Streets Policies
- Shared Micromobility Programs
- Transit Oriented Development and Non-SOV Supportive Land Use

+ Benefits

- Increases safety in designated area
- Empowers users to partake in alternative modes of transportation in the designated areas
- Reduces the number of private automobile trips to and from the designated area

— Challenges

- Potential opposition from local businesses and motorists due to limiting access
- Potential transportation impacts to nearby facilities

Case Studies

- **Temporary Open Streets Events** - Open street events, such as CicLAvia in Los Angeles or CicloIrvine in Irvine, are examples of temporary Motor Vehicle Restriction Zones, where designated major streets are temporarily closed to motor vehicles for active transportation.
- **Permanent Motor Vehicle Restriction Zones** - Examples of permanent motor vehicle restriction zones in California include the 3rd Street Promenade in Santa Monica; Promenade on Forest in Laguna Beach; and Main Street in Downtown Riverside.

Measurement

- Number of restricted zones implemented
- Length of restricted roadways
- Number of business or public participation
- Dollars spent on project improvements

PP.2 Motor Vehicle Restriction Zones

? How does this strategy relate to Orange County?

Motor Vehicle Restriction Zones can enhance pedestrian and bicycle experience in high-traffic areas, retail corridors, and popular gathering locations. Some locations in Orange County already demonstrate the benefits of limiting vehicle access:

- **The Promenade on Forest** - A pedestrian plaza in downtown Laguna Beach that supports outdoor dining, shopping, and community gatherings.
- **Farmers Markets** - Many cities, including Anaheim, Irvine, and Fullerton, temporarily close streets for farmers markets, creating pedestrian-friendly spaces.

Local jurisdictions could expand these efforts by:

- Identifying dense retail districts and entertainment areas with consistently high pedestrian activity.
- Converting temporary street closures, such as those used for farmers markets and special events, into permanent car-free zones.

⚙️ Delivery Recommendations

- **PP.2.1:** Support partners in leading the implementation of Motor Vehicle Restriction Zones, providing guidance on approach and regional transportation integration as needed.
- **PP.2.2:** Facilitate knowledge sharing among local jurisdictions that have implemented or are considering Motor Vehicle Restriction Zones.
- **PP.2.3:** Identify local areas to pilot temporary motor vehicle restriction zones.
- **PP.2.4:** Incorporate motor vehicle restriction zones as part of downtown improvement or revitalization plans, neighborhood traffic management or congestion pollution mitigation plans to support both environmental and economic development.



PP.3 Parking Supply Management

Minimum parking requirements are modified for developments in locations with accessible alternative modes (i.e., near transit stations, in areas with good walking facilities, etc.) or if a development adopts TDM programming to reduce vehicle ownership and use.

Program Outcomes

-  Mobility
-  Sustainability
-  Equity

Trip Types

-  Commute
-  Essentials
-  Visitor

Potential Lead(s)

Local Jurisdictions

Costs

   -    Low to Medium

VMT Reduction

   High

Potential Partners

- Developers
- Employers

Complementary Strategies

- Active Transportation Infrastructure Improvements
- Motor Vehicle Restriction Zones
- Parking Cash Out
- Shared Micromobility Programs
- TDM Ordinance and Policy Development
- Transit Oriented Development and Non-SOV supportive land use
- Universal Design Transit Enhancements

+ Benefits

- Reduces development costs associated with providing excess parking
- Can improve urban design and walkability by reducing surface parking lots
- Encourages use of alternative transportation modes

— Challenges

- May face opposition from residents or businesses concerned about parking availability
- Enforcement of parking management strategies can be challenging or costly

Case Studies

- **Minneapolis, Minnesota** - The city took an incremental approach to parking reform. In 2009, the city introduced the parking reform package that eliminated parking requirements in downtown districts.
- **Atlanta, Georgia** - In 2015, the city conducted a review of existing zoning policy and recommended replacing parking minimums with parking maximums.

Measurement

- Parking spaces allocated and used

PP.3 Parking Supply Management

? How does this strategy relate to Orange County?

Parking supply management is most effective in urban centers and transit-connected areas, where it can help reduce reliance on SOV. Assembly Bill (AB) 2097 (2022) is an existing policy that supports this shift. To maximize effectiveness, local jurisdictions could focus their parking management efforts on:

- High-density areas with strong transit connections for pilot parking management programs.
- Collaborate with developers of mixed-use or joint-development projects to integrate innovative parking strategies.
- Provide guidance during the entitlement and permitting process to ensure parking management is incorporated into development plans.

⚙️ Delivery Recommendations

- **PP.3.1:** Develop a parking management handbook or toolbox which would provide guidance on policy development and strategy implementation.
- **PP.3.2:** Coordinate with new and existing residential and commercial developments near transit to manage parking supply.
 - Require adoption of parking management strategies as part of the developer agreements where possible.
 - Partner with TMA/TMOs to promote alternatives to driving that can support with making the business case for reduced parking.



PP.4



TDM Ordinance and Policy Development

Ordinance that identifies local policies that support TDM strategies and reduce single occupancy vehicle travel. By supporting the implementation of a variety of transportation programs and amenities that promote sustainable commute options, employees/residents can be less reliant on private automobiles.

Program Outcomes

-  Mobility
-  Sustainability
-  Equity

Trip Types

-  Commute
-  Essentials
-  Visitor

Potential Lead(s)

OCTA (CTC), Local Jurisdictions

Costs

   Medium

VMT Reduction

   High

Potential Partners

- Developers
- Employers

Complementary Strategies

- Commuter Tax Benefits
- Individualized/Personalized Marketing
- Parking Cash Out
- Parking Supply Management
- Rewards for Non-SOV Travel
- TMA/TMOs

+ Benefits

- Establishes a consistent framework for TDM implementation across jurisdictions
- Encourages private sector investment in sustainable transportation solutions
- Informs developers and employers of mobility options and programming
- Enhances access to transportation options and benefits through formal regulation

— Challenges

- TDM policies can be politically unpopular with developers
- Impacts on congestion can be difficult to measure
- Requires ongoing monitoring and enforcement to ensure compliance
- Effectiveness can vary depending on local transportation options and land use patterns

Case Studies

- **South Coast Air Quality Management District's Rule 2202** - The South Coast Air Quality Management District's (AQMD) Rule 2202 affects employers of four counties in the SCAG Region, which includes OCTA.
- **City of Carlsbad TDM Ordinance and San Diego Association of Government (SANDAG) role** - The City of Carlsbad TDM Ordinance requires non-residential developments anticipated to generate 110 or more average daily employee trips to develop and implement a TDM plan.

Measurement

- Number of municipalities with active ordinances in place
- Number of developments or employers subject to ordinances

PP.4

TDM Ordinance and Policy Development

? How does this strategy relate to Orange County?

Existing TDM requirements in Orange County vary by employer size:

- AQMD Rule 2202 - Requires employers with 250+ employees to implement TDM programs and report their efforts to meet regional air quality regulations.
- Smaller Employers - Those with fewer than 250 employees are not required to adopt TDM strategies unless mandated by a city ordinance or developer agreement.

TDM ordinances are most effective where alternative transportation options can be readily utilized and integrated, including:

- Densely populated job centers with high commuter volumes
- Areas with high-quality transit services
- Mixed-use developments that combine residential, commercial, and office uses
- Business districts and economic hubs, including areas with active business councils and business improvements districts (e.g. Dana Point, Newport Beach, and Huntington Beach)

⚙️ Delivery Recommendations

- **PP.4.1:** Assess which local jurisdictions have denser employment areas or developments along corridors with high quality transportation networks and services and could potentially benefit from a TDM regulatory structure. Possible prospects could be:
 - Downtowns or center cities
 - Areas with high transit connectivity
 - Specific plan areas
- **PP.4.2:** Identify TDM policy applicability and target Drive-Along-Rate (DAR) or Average Vehicle Ridership (AVR) based on geography or other factors such as land-use, development type, etc.
 - Work with SCAQMD to expand existing Rule 2202 requirements to a wider audience.
- **PP.4.3:** Identify internal and external partners to support with TDM policy implementation and enforcement.
- **PP.4.4:** Develop a toolkit of strategies for employers and developers to implement TDM strategies successfully.
- **PP.4.5:** Lead in development of a TDM policy guidance or a framework for policy that the cities could use.
- **PP.4.6:** Local jurisdictions can work with developers and key stakeholders to develop a TDM ordinance.
 - Include a recommendation for TDM ordinance in plans such as the Congestion Mitigation Plan or City Strategic Plan.
 - Conduct an existing conditions analysis to justify a TDM ordinance.
 - Meet with key stakeholders, committee, and council for feedback.
 - Develop language for policy.
 - Meet with key stakeholders, committee, and council for review (may take several meetings) before it is ready for actual approval.

PP.5

Transit Oriented Development (TOD) and Non-SOV Supportive Land Use


Policies or zoning that encourage mixed-use developments near access to sustainable modes and key destinations. These modes may include walking, cycling, micromobility, and transit.

Program Outcomes

 Mobility  Equity

 Sustainability

Trip Types

 Commute  Visitor

 Essentials

Potential Lead(s)

OCTA (CTC), Local Jurisdictions

Costs

   Medium

VMT Reduction

   High

Potential Partners

- Local Jurisdictions
- Community Organizations
- Developers
- OCTA (CTC)
- Transit Agencies

Complementary Strategies

- Active Transportation Infrastructure Improvements
- Complete Streets Policies
- Mobility Hubs
- Motor Vehicle Restriction Zones
- Parking Cash Out
- Parking Supply Management
- Shared Micromobility Programs
- Universal Design Transit Enhancements

Benefits

- Reduces the need for car ownership
- Reduces demand for parking
- Increases accessibility to jobs and services
- Promotes healthier, more walkable communities

Challenges

- TOD supportive policies can be politically unpopular due to the promotion of increased density
- Potential for gentrification and displacement of existing residents and businesses

Case Studies

- **Los Angeles' Transit Oriented Communities (TOC) Incentive Program** - In nearby Los Angeles, the Transit Oriented Communities (TOC) Program provides incentives to developers to encourage construction of market rate and affordable housing near bus and train stations.
- **The Santa Clara Valley Transportation Authority (VTA) Transit Oriented Development** - The VTA implemented TOD initiatives to enhance multi-modal transportation options and community connectivity.

Measurement

- Number of policies in place
- Number of TOD developments
- Employment and housing density
- Commercial mix
- Travel behavior
- Zoning flexibility
- Resident reactions
- Housing type
- Consumer activity patterns

PP.5

Transit Oriented Development (TOD) and Non-SOV Supportive Land Use

? How does this strategy relate to Orange County?

Orange County's low-density residential and auto-oriented land uses contributes to increases in traffic congestion. Introducing TOD and non-SOV supportive land uses near high-quality transit and other higher-density destinations could encourage shorter multimodal trips and greater transit usage. However, anti-displacement considerations (inclusive land-use development, preservation, protections, etc.) should be embedded in the TOD strategy to ensure inclusive development.

TOD Land Use strategy is most effective in areas that:

- Are near existing or planned high-frequency transit services
- Have a walkable infrastructure
- Are high-density destinations
- Have limited parking

Existing TOD plans in Downtown Santa Ana and Anaheim's Platinum Triangle provide learning opportunities for other local jurisdictions in the county.

Certain areas in Orange County are well-suited for TOD strategies, including:

- Areas surrounding John Wayne Airport
- Downtown Santa Ana
- Irvine Spectrum
- Areas near major transit corridors (e.g., along OC Streetcar route)

⚙️ Delivery Recommendations

- **PP.5.1:** Continue to explore TOD opportunities on OCTA-owned properties and mobility hub concepts at transit stops and stations.
- **PP.5.2:** Explore opportunities for supporting land-use development through policies that can encourage partners to invest on existing transit corridors.
 - LA Metro's Transit Oriented Communities (TOC) Policy & Incentive Program encourages the construction of affordable housing near bus and train stations by providing special exceptions to development standards in lieu of percentage of on-site restricted affordable units.






ME.1 Individualized/Personalized Marketing

Individualized or personalized marketing that target people who are most able and willing to modify their travel patterns. This type of marketing strategy can be applied in a workplace or a residential setting.

Program Outcomes

-  Mobility
-  Sustainability
-  Equity

Trip Types

-  Commute
-  Essentials
-  School
-  Leisure
-  Visitor

Potential Lead(s)

Local Jurisdictions

Costs

💰 💰 💰 Low

VMT Reduction

● ● ● Low

Potential Partners

- Employers
- Developers
- OCTA (CTC & Transit Agency)
- Transit Agencies

Complementary Strategies

- Commuter Tax Benefits
- Commuter Preference Survey
- Private Shared Transportation/Shuttles
- Rewards for Non-SOV Travel
- Safe Routes to School Program
- Subsidization of Non-SOV Travel
- TMAs/TMOs
- Transit Oriented Development and Non-SOV supportive land use

+ Benefits

- More effective in changing behavior than general marketing approaches
- Can be used to promote and increase awareness of relevant worksite/building-based programs and mobility options

— Challenges

- Risk of personal information exposure if data not handled securely
- More resource-intensive to implement and maintain compared to general marketing

Case Studies

- **SCAG Employer Targeted Marketing** - A major employer in the SCAG Region utilized zip code data to identify employees residing along a major transit line to participate in a pilot commute program, offering fully subsidized transit passes.
- **SANDAG Shift Program** - The Shift San Diego program was designed to provide residents, businesses and commuters impacted by a series of construction projects along the I-5 corridor with information and multimodal transportation solutions to minimize disruption, confusion and potential traffic challenges.

Measurement

- Number or percentage of engagements or individuals reached
- Number of individuals who changed their behavior
- Program registrations

ME.1 Individualized/Personalized Marketing

? How does this strategy relate to Orange County?

OCTA routinely participates in broader marketing campaigns like Bike Month and Clean Air Day. There is an opportunity to develop more targeted, individualized marketing efforts, particularly:

- Around new or improved transit services in areas with high potential for mode shift (e.g., dense employment centers, university campuses)
- For specific user groups (e.g., new residents, employees of large companies)

OCTA can identify new opportunities where individual marketing can be more effective to get someone to try transit. Given Orange County's significant hospitality market, there are opportunities to partner with hotels and visitor centers to provide TDM information and resources. OCTA could also implement a "Teach the Trainer" program to train key hospitality staff on how to disseminate sustainable travel information to visitors. From the stakeholder engagement, there was an interest in travel training and education for people with disabilities and seniors. This is an opportunity for OCTA to partner with employers or community organizations to reach this audience and develop an individualized marketing campaign.

⚙️ Delivery Recommendations

- **ME.1.1:** Partner with hotels and visitor centers to provide TDM information and resources.
 - Create a toolkit to provide "how to get around" materials to be posted on website, used in a hotel welcome video, and integrated into a welcome guide.
- **ME.1.2:** Develop a "Teach the Trainer" program to train key hospitality staff on how to disseminate sustainable travel information to visitors - Partner with employers or community organizations to reach this audience and develop an individualized marketing campaign
- **ME.1.3:** Work with community organizations (senior centers, Aging and Disability Resource Connection, etc.) to promote transportation services such as OC Access for people with cognitive and physical limitations..



ME.2

Safe Routes to School (SRTS) Program

Safe Routes to School (SRTS) programs involve working with schools and school districts to promote safe active transportation modes for students. These programs aim to reduce the number of parent drop-offs via private automobiles and encourage walking, cycling, and other sustainable transportation options.

Program Outcomes

 Partnerships  Equity

Trip Types

 School

Potential Lead(s)

Local Jurisdictions, School Districts or TMOs/
TMA, OCTA (CTC)

Costs

   -    Low to Medium

VMT Reduction

   Medium

Potential Partners

- Community Organizations
- Educational Institutions
- OCTA (CTC & Transit Agency)
- OC Health Care Agency

Complementary Strategies

- Active Transportation Infrastructure Improvements
- Complete Streets Policies
- Individualized/Personalized Marketing
- TMA/TMOs
- Transit Oriented Development and Non-SOV supportive land Use

+ Benefits

- Reduces congestion surrounding schools during peak periods
- Lowers greenhouse gas emissions surrounding schools
- Increases safety for students and families
- Increases health and fitness for students and families
- Improves local air quality

— Challenges

- May require additional resources for law enforcement
- Challenges for students utilizing preexisting hostile bike/pedestrian infrastructure
- Requires ongoing funding for modal change and effectiveness
- Coordination required among school districts, local jurisdictions, and transit providers

Case Studies

- **Healthy RC Safe Routes to School Program** - In Rancho Cucamonga, California, the Healthy RC Safe Routes to School Program brings together parents, community members, students, school employees, city employees, and police to address safety obstacles in the public realm students face in walking or biking to school and come up with strategies to address them.
- **Sacramento County Department of Transportation (SACDOT)** - California Safe Routes to School program, also known as SR2S, awarded funding statewide for infrastructure improvement projects around schools.

Measurement

- Number of students participating in SRTS-related activities and events
- Student walk/bike tallies

ME.2 Safe Routes to School (SRTS) Program

? How does this strategy relate to Orange County?

SRTS work is already happening throughout Orange County. In 2021, OCTA, in partnership with Orange County Health Care Agency, created the SRTS Action Plan with 4 key recommendations:

1. Establish a Countywide SRTS Program
2. Create and sustain lasting partnerships
3. Develop a culture of safety
4. Fund and build safe streets

OCTA can continue to support these efforts as well as review the next steps from their SRTS STEP Campaign, which included:

- Working with other County agencies to ensure that these City SRTS plans are reviewed for regional planning efforts
- Supporting pedestrian and bicycle infrastructure near schools
- Leveraging community engagement as it is a key component for state and federal grant applications

⚙️ Delivery Recommendations

- **ME.2.1:** Expand Orange County Safe Travels Education Program (OC STEP) to additional schools in this southern county region.
 - Already administered in 25 schools mostly Northern County, including schools in disadvantaged communities.
- **ME.2.2:** Promote STEP activities, events, and resources to students, teachers, and families.
- **ME.2.3:** Continue OCTA and OCHCA's collaboration with SRTS stakeholders and use stakeholder feedback to understand the challenges and opportunities of walking and biking in Orange County neighborhoods.
- **ME.2.4:** Promote Youth Ride Free.
 - Hold school/parent assemblies about how to ride transit.
 - Promote in school emails and e-newsletters.
 - Partner with OC Health Care Agency, community-based organizations, and Parent/Teacher Associations (PTA) to promote Youth Ride Free.



S.1 Dynamic Carpool

On-demand ride-sharing system that matches drivers and passengers via mobile application. This flexibility enables travelers with irregular schedules to carpool without committing to the same arrangement every day.

Program Outcomes

- | | |
|--|--|
|  Mobility |  Partnerships |
|  Sustainability |  Equity |

Trip Types

-  Commute

Potential Lead(s)

Local Jurisdictions, Employers

Costs

-    Medium

VMT Reduction

-    High

Potential Partners

- Private Mobility Operators
- TMOs/TMAs
- OCTA (CTC & Transit Agency)
- Transit Agencies

Complementary Strategies

- MaaS/Trip Planning Support
- Mobility Hubs
- Rewards for Non-SOV Travel
- TDM Ordinance and Policy Development
- Transit Oriented Development and Non-SOV Supportive Land Use

+ Benefits

- Travelers using public, open systems to find matches have a larger pool of users, and a better chance of finding a carpool match
- Provides flexibility for users with variable schedules
- Time savings from using HOV lanes
- Cost savings from sharing the cost of fuel, tolls, parking, or vehicle wear and tear

— Challenges

- People may be hesitant to travel with those they do not know
- Pool of employees or residents to create carpools may be too small in some locations

Case Studies

- **Waze Pilot, City of Santa Monica** - Waze Carpool partnered with the City of Santa Monica and GoSaMo TMO to create a marketing campaign that offered rides for a flat \$2 for two months. The TMO promoted the campaign on its social media channels and via its newsletter which was distributed to 1200 employees and residents in Santa Monica. The campaign resulted in 2000+ completed dynamic carpool rides which saved 100,626 miles and reduced 79,863 lbs CO2 emissions.
- **Scoop Pilot, King County, WA** - King County Metro Transit partnered with Scoop and the University of Washington in a 5-month pilot that tested a \$2 incentive for riders and drivers for each carpool trip via Scoop's application. The program successfully reduced nearly 1M VMT at an estimated cost of \$0.40 per mile.

Measurement

- Number of participants who register for the program or express interest in carpooling
- Number of carpool matches provided
- Number of carpools created
- Number of people carpooling over time
- Carpool trip lengths/mileage

S.1 Dynamic Carpool

? How does this strategy relate to Orange County?

Dynamic Carpool can be an effective strategy for Orange County due to several key factors:

- The county's extensive network of HOV and express lanes that offer time and cost savings for high-occupancy vehicles.
- Presence of large employment centers (e.g., Irvine Business Complex near John Wayne Airport, Irvine Spectrum) that draw significant commuter traffic.
- A large pool of interregional commuters making long distance trips.

These factors would help support dynamic carpooling because:

- High traffic areas with frequent congestion encourage use of HOV and express lanes
- Dense areas naturally have higher demand for carpooling and can create more opportunities for matches
- Sharing rides helps drivers to reduce wear and tear on their vehicles and save money on maintenance, fuel, and insurance.

⚙️ Delivery Recommendations

- **S.1.1:** Work with employers and developers through TMA/TMOs and Rideshare programs to promote carpooling.
- **S.1.2:** Identify potential opportunities for public-private partnerships to realize the advantages of app-based dynamic carpooling.
 - Consider developing a mobile application for the RideMatch platform or work with vetted vendors to introduce an app-based dynamic carpooling platform.
- **S.1.3:** Launch a pilot app-based carpooling program.
 - Build partnerships with mobility vendors to expand transit access by offering discounted parking fee or guaranteed parking spot at Park & Ride locations.
 - Develop a school pool program for families.






S.2 Mobility Hubs

Mobility hubs are identifiable places that facilitate multiple transportation modes to provide seamless, multimodal connections. Travel options can include walking, cycling, ridehailing, ridesharing, carsharing, bikesharing, local delivery services, and public transit. The provision of a mobility hub network, whether it be county-wide or in select local jurisdictions, provides users with the necessary mix of travel modes to empower them to use non-SOV transportation options more regularly.

Program Outcomes

-  Mobility
-  Equity
-  Sustainability

Trip Types

-  Commute
-  Visitor
-  Essentials

Potential Lead(s)

OCTA, Local Jurisdictions

Costs

\$\$\$ - \$\$\$\$ Low to High

VMT Reduction

●●● High

Potential Partners

- Developers
- Employers
- Transit Agencies
- Private Mobility Operators

Complementary Strategies

- Active Transportation Infrastructure Improvements
- Bicycle/Transit Integration
- Complete Streets Policies
- Dynamic Carpool
- MaaS/Trip Planning Support
- Shared Transportation/Shuttles
- Shared Micromobility Program
- Transit Oriented Development and Non-SOV Supportive Land Use
- Universal Design Transit Enhancements

+ Benefits

- Supports trip connections across the county, thereby enhancing equitable access to jobs and opportunities
- Increased options for first and last mile connectivity
- Improves accessibility to various transportation options
- Promotes sustainable travel choices
- Can serve as community gathering spaces

— Challenges

- Establishing a governance framework for mobility hubs
- Securing funding for implementation and ongoing operations and maintenance
- Identifying and coordinating with multiple mobility service providers and partners
- Maintaining safety/security at hubs locations

Case Studies

- **Mobility Hubs in the Twin Cities, Minnesota** - The Twin Cities and The Metropolitan Council (Met Council) started piloting Mobility Hubs across the region in 2019 with seven locations.
- **San Francisco Caltrain Mobility Hub** - Located at Caltrain's busiest train hub, the Caltrain BikeHub at the San Francisco Station historically parked over 200 bikes daily during peak months.

Measurement

- Number of Mobility Hubs implemented across county
- Number of trips taken on each transit mode present at hub
- Number of registered users on transit service programs available at hubs

s.2 Mobility Hubs

? How does this strategy relate to Orange County?

The *Orange County Mobility Hubs Strategy* established a framework for mobility hub planning throughout the county. It identified areas of high potential for a future county-wide mobility hubs network based on their mode shift and vehicle miles travelled impacts. The study identified five types of mobility hubs: gateways and regional activity centers, large trip generators/destinations, local transit connections, neighborhood centers, and virtual hubs. Considering the complexity of designing, building, and operating these facilities, OCTA's next step is to establish a pilot program. The pilot program should help determine key factors for success, including the anticipated usage levels, the required components, necessary collaboration with agencies, stakeholders and technology partners, and cost.

⚙️ Delivery Recommendations

- **S.2.1:** Coordinate and collaborate with relevant partners on studies to identify prospective mobility hub sites to further concept operational development.




S.3 Shared Transportation/Shuttles

Shared transportation or shuttle services that provide first/last mile solutions and fill in transit system gaps. These services offer targeted transportation options for specific groups or areas, complementing the broader public transit network.

Program Outcomes

-  Mobility
-  Sustainability
-  Partnerships
-  Equity

Trip Types

-  Commute
-  Essentials
-  Leisure
-  Visitor

Potential Lead(s)

OCTA (Transit Agency)

Costs

\$\$\$ High

VMT Reduction

●●● Low

Potential Partners

- Local Jurisdictions
- Developers
- Employers
- TMAs/TMOs

Complementary Strategies

- MaaS/Trip Planning support
- Mobility Hubs
- Parking Supply Management
- Subsidization of Non-SOV Travel
- TMAs/TMOs

+ Benefits

- Improves site access and connectivity
- Reduces congestion and parking demand at destinations
- Can be tailored to specific user needs or schedules
- Enhances transportation options in areas underserved by public transit

— Challenges

- Can be costly for employers to implement and maintain
- Risk of duplicating existing transit services if not carefully planned
- Requires ongoing coordination and management

Case Studies

- **iShuttles, Irvine** - The iShuttles, operated by OCTA, provides weekday access to major employment destinations from local train stations in Irvine. Routes 400A and 401B serve the Tustin Metrolink station and the Irvine Business Complex, while routes 402C and 403D connect passengers to the Irvine station and Irvine Spectrum areas.
- **Commute Seattle: SSA Marine and McKinstry Shared Shuttle** - SSA Marine, McKinstry, BUSUP, King County Metro and Commute Seattle came together to provide a shuttle on a fixed route for the corporate campuses in the industrial area of Seattle known as “SoDO,” south of downtown.

Measurement

- Shuttle ridership

S.3 Shared Transportation/Shuttles

? How does this strategy relate to Orange County?

Shared transportation and shuttles are most effective in areas with high demand for first- and last-mile connections. Ideal locations include:

- Communities with limited fixed-route transit that need better local circulation.
- Employment centers where shuttles connect workers to transit hubs (e.g., iShuttle serving the Irvine Business Complex and Irvine Spectrum Center).
- High-traffic visitor destinations, such as tourist and entertainment districts (e.g. Anaheim Regional Transportation serving the Anaheim Resort Area)
- Employer- or TMA-operated private shuttle that provide direct connections between transit hubs and workplaces.

The OC Go (M2) Community-Based Circulator Funding Program (Project V) provides funding for community-based circulators, shuttles and trolleys that complement transit services and fill in first- and last-mile gaps. OCTA could continue to refine program guidelines to reflect evolving local needs, provide technical assistance to agencies, evaluate and adjust service for better efficiency, and facilitate knowledge sharing among successful Project V grantees.

⚙️ Delivery Recommendations

- **S.3.1:** Support the promotion of existing circulars.
 - Work with larger employers to have their employees use existing circulars to connect to transit or to use for other trips during their work day.
 - Work with CBOs to promote these circulars to other users to help fill a transportation need for those who are in communities of concern.
- **S.3.2:** Work with local and regional partners and organizations to understand existing gaps in the transportation network that could be effectively filled by expanding or adding shuttle service.
- **S.3.3:** Support employers interested in this service by connecting them with vendors to discuss pricing and how operations can be structured.

S.4 Shared Micromobility Program

Shared micromobility programs that provide access to shared bicycle, e-bike, e-scooter, and other small, lightweight vehicles for short-distance trips. These programs offer alternatives to car travel for first/last mile connections and short distance trips, typically through docked, dockless, or hybrid systems.

Program Outcomes

 Mobility  Equity

Trip Types

 Commute  Leisure
 Essentials  Visitor

Potential Lead(s)

OCTA (Transit Agency), Local Jurisdictions

Costs

   Medium

VMT Reduction

   Low

Potential Partners

- Local Jurisdictions
- Private Mobility Operators
- Transit Agencies

Complementary Strategies

- Active Transportation Infrastructure
- Complete Streets Policies
- MaaS/Trip Planning support
- Mobility Hubs
- Motor Vehicle Restriction Zones
- Subsidization of Non-SOV Travel
- Transit Oriented Development and Non-SOV Supportive Land Use

+ Benefits

- First- and last-mile connections for all
- Promotes active and healthy lifestyles
- Enhances accessibility and mobility options for transit dependent population
- Reduces emissions through the use of sustainable transportation technologies

— Challenges

- Potential safety hazards if devices are parked or operated improperly
- Potential public resistance due to safety concerns or perceived clutter
- Some options require tech-savviness, which may exclude certain user groups

Case Study

- **The City of Chicago’s “Divy” micromobility program** - offers subsidized shared micromobility options for dockless and docked e-scooters, bikes, and e-bikes. The system is owned by the Chicago Department of Transportation and has been operated by Lyft.
- **SEPTA On-Demand, Philadelphia, PA** - A tech-driven, on-demand option gives the Southeastern Pennsylvania Transportation Authority (SEPTA) an opportunity to enable riders to call a bus to any spot in a pre-designated zone at any time of day, any day of the week and connect to fixed bus, rail, and Metro service.

Measurement

- Number of rides taken
- Number of registered users

S.4 Shared Micromobility Program

? How does this strategy relate to Orange County?

OCTA's Mobility Hubs Strategies, which was completed in 2022, identified micromobility as a potential component of future transportation hubs.

Orange County has potential for shared micromobility, particularly in denser areas and near transit hubs. This strategy is recommended for Orange County for several reasons:

- It can address the “first- and last-mile” challenge that many transit users face, potentially increasing overall transit ridership.
- Micromobility is an environmentally friendly alternative for short trips.
- It can enhance mobility options for residents and visitors alike, supporting the county's tourism industry and improving quality of life for locals.

⚙️ Delivery Recommendations

- **S.4.1:** Identify areas to pilot micromobility (use of bikes, scooters, and other mobility types like neighborhood electric vehicles) in visitor areas.
- **S.4.2:** Develop and provide shortlist/bench of shared micromobility operators through a solicitation process and lock in rates for cities and organizations that may use their services.
- **S.4.3:** Collaborate with shared mobility operators to create discounted subscription rates for income-qualified individuals.
- **S.4.4:** Support integration of micromobility as part of regional mobility hub planning and implementation efforts.
- **S.4.5:** Identify feasible locations for a pilot program, and recommend appropriate infrastructure and vehicle types in the county-level shared micromobility feasibility study.








IS.1 Active Transportation Infrastructure Improvements

Active transportation infrastructure improvements are enhancements that improve safety and accessibility for walking, cycling, and other non-motorized travel.

Program Outcomes

-  Mobility
-  Sustainability
-  Partnerships
-  Equity

Trip Types

-  Commute
-  Essentials
-  School
-  Leisure
-  Visitor

Potential Lead(s)

Local Jurisdictions

Costs

💰 💰 - 💰 💰 Low to High

VMT Reduction

● ● ● Medium

Potential Partners

- Community Organizations
- Developers
- OCTA (Transit Agency)
- Transportation Agencies

Complementary Strategies

- Complete Streets Policies
- Bicycle/Transit Integration
- Mobility Hubs
- Shared Micromobility Programs
- Transit Oriented Development and Non-SOV Supportive Land Use

+ Benefits

- Improves safety for users of all modes
- Improves public health through increased physical activity
- Enhances access to multimodal travel options and destinations
- Contributes to neighborhood attractiveness

— Challenges

- Additional right-of-way or innovative solutions may be required to accommodate infrastructure
- May require utility relocation
- Could be politically unpopular and may require Master Plan Arterial Highways amendment if lane reduction is required
- Requires investment and support by local jurisdictions and other partners
- Requires community support for adoption

Case Studies

- **Local improvements** - Class IV bikeways, also referred to as separated bikeways or cycle tracks, are installed around Santa Ana, San Clemente, and Dana Point. Many of these have converted existing or planned traffic lanes to accommodate bike facilities.
- **Corridor Improvement Plans in Los Angeles** - 7th Street in City of Los Angeles is on the city's designated list of high injury network streets. In response to this designation, the 7th Street Forward project has been designed to make a busy thoroughfare safer for bicyclists, pedestrians, transit riders and drivers.

Measurement

- Number of pedestrians/bike trips
- Number of improvements/projects implemented
- Miles of bike lanes implemented
- Dollars spent on improvements

IS.1 Active Transportation Infrastructure Improvements

? How does this strategy relate to Orange County?

The South OC Multimodal Transportation Study and the OC Bike + Ped Plan both identified the need to improve active transportation, safety, and connectivity as well as to enhance walking/biking access to transit. There is expressed interest from the stakeholder engagement to fill transportation gaps and replace more of their shorter, single occupancy vehicle trips, including connections to public transportation.

⚙️ Delivery Recommendations

- **IS.1.1:** Conduct events/workshops for stakeholders to collaborate on advancing active transportation policies, programs and infrastructure in Orange County.
 - Promote the OCTA's Bikeway Connectivity Study as public engagement is currently in progress.
- **IS.1.2:** Coordinate with partners to identify areas with high pedestrian related accidents to implement safety improvements.
 - Safety improvements could include sidewalk widening, crosswalk installation, pedestrian scrambles, etc.
 - Coordinate with transit agencies to align project pipelines.
- **IS.1.3:** Leverage local, state and federal grant opportunities to fund active transportation infrastructure upgrades.
 - Encourage internal teams and partner organizations to apply for grant funding.




IS.2 Bicycle/Transit Integration

Bicycle/Transit Integration involves amenities, such as racks, storage, and on-board, that connect cycling and public transportation.

Program Outcomes

-  Mobility
-  Equity
-  Sustainability

Trip Types

-  Commute
-  Leisure
-  Essentials
-  Visitor

Potential Lead(s)

Local Jurisdictions, OCTA (Transit Agency)

Costs

💰 💰 💰 - 💰 💰 💰 Low to High

VMT Reduction

● ● ● Medium

👥 Potential Partners

- Community Organization
- Developers
- Employers
- Transit Agencies
- Local Jurisdictions

🌀 Complementary Strategies

- Active Transportation Infrastructure Improvements
- Complete Streets Policies
- Mobility Hubs
- Shared Micromobility Programs

+ Benefits

- Increased first-last mile connection options for public transportation
- Extends the reach of transit services by promoting multi-modal travel
- Supports healthy lifestyles by promoting active transportation

— Challenges

- Supports trips that are too long to be travelled by bike alone, which may limit its appeal
- May require modifications to transit vehicles or stations
- Potential conflicts between cyclists and other transit users

👉 Case Studies

- **Los Angeles Metro On-Demand Bike Lockers** - Los Angeles Metro has implemented an innovative on-demand bike locker system across nine rail stations in its network, addressing the perceived lack of security with traditional inverted-U bike racks.
- **Metrolink Bike Cars** - Metrolink's rail network in Southern California features one bike car on all trains that can accommodate up to nine bikes.

📊 Measurement

- Number of integration/ enhancement projects implemented
- Number of transit stations in county with bicycle infrastructure
- Number of buses with bike racks
- Number of trains with designated bike areas

IS.2 Bicycle/Transit Integration

? How does this strategy relate to Orange County?

Orange County is continually enhancing bicycle/transit integration, particularly in areas with existing or planned transit services. Current efforts include:

- Work with local jurisdictions and local partners (e.g. bike coalitions) to identify areas where the current bike network is insufficient and prioritize connections to transit stations.
- Coordinate with local jurisdictions to identify funding opportunities for improvements.
- Review and potentially expand bike-carrying capacity on buses and trains.
- Implement secure bike parking facilities at major transit hubs.
- Develop programs to educate transit users about bike-on-transit options.

⚙️ Delivery Recommendations

- **IS.2.1:** Work with local partners (e.g. bike coalitions) to identify areas where the current bike network is insufficient and prioritize connections to transit stations.
- **IS.2.2:** Continue to identify funding opportunities for bicycle/transit Integration improvements.
- **IS.2.3:** Review and potentially expand bike-carrying capacity on buses and trains.
- **IS.2.4:** Develop programs to educate transit users about bike-on-transit options.
 - Create tutorial on how to load bike on transit.
 - Develop transit etiquettes video series.








IS.3 Universal Design Transit Enhancements

Universal Design Transit Enhancements involve improvements to public transit vehicle and station design to accommodate people of all abilities, ages, sizes, and needs. This includes accommodations for wheelchair users, parents with strollers, hand carts, wheeled luggage, and individuals with various physical or cognitive limitations.

Program Outcomes

- | | |
|--|--|
|  Mobility |  Partnerships |
|  Sustainability |  Equity |

Trip Types

- | | |
|--|---|
|  Commute |  Leisure |
|  Essentials |  Visitor |
|  School | |

Potential Lead(s)

Local Jurisdictions, OCTA (Transit Agency)

Costs

💰 💰 💰 - 💰 💰 💰 Low to High

VMT Reduction

● ● ● Low

Potential Partners

- Local Jurisdictions
- Community Organizations
- Transit Agencies

Complementary Strategies

- Bicycle/Transit Integration
- MaaS/Trip Planning Support
- Mobility Hubs
- Shared Micromobility Program

+ Benefits

- Promotes accessibility and usability, enabling more people to use transit
- Helps all users navigate unfamiliar environments
- Increases transit ridership by making services more inclusive
- Improves overall user experience and satisfaction with transit services

— Challenges

- Determining appropriate coverage area for enhancements
- Balancing diverse needs within budget constraints
- Addressing technological limitations in older infrastructure
- Maintaining and enhancing transit designs over time
- Ensuring staff are properly trained to assist all users

Case Studies

- **New York State MTA Universal Design Initiative** - The New York State Metropolitan Transportation Authority (MTA) has dedicated \$5.2 billion to create a 95% accessible transit system.
- **Maricopa Association of Governments (MAG) Designing Transit Accessible Communities Study** - The Maricopa Association of Governments (MAG) in Phoenix, AZ conducted this study to equip their member agencies with tools and guidance for promoting and sustaining better planning practices, specifically on improving accessibility at transit stops and supporting community needs.

Measurement

- Number of enhancement projects implemented
- Level of satisfaction for transit access and use

IS.3 Universal Design Transit Enhancements

? How does this strategy relate to Orange County?

Through the key stakeholder group input, there are expressed interests in Orange County to incorporate transit options for those with disabilities, create more paratransit services, and provide transit operator training to for disability etiquette and acceptance.

To address these community needs, OCTA is preparing a collaborative study to identify safety and access improvements near some of the highest ridership bus stops in Orange County. The Bus Stop Safety and Accessibility Plan will leverage community engagement with comprehensive technical analysis to recommend safety enhancements and access improvements for pedestrians accessing bus stops.

⚙️ Delivery Recommendations

- **IS.3.1:** Leverage existing planning and programming for people with physical or cognitive limitations to identify transit stations that needs the most improvements for wayfinding and accessibility.
 - Review survey data & feedback collected from OC Access participants.
- **IS.3.2:** Local jurisdiction can coordinate with OCTA to identify funding opportunities for improvements.
 - Human Services Transportation Coordination Plan by OCTA encourages a higher-level of public-private participation for target populations such as seniors and persons with disabilities.



IF.1 Commute Preference Surveys

Surveys that help to determine preferences, knowledge, barriers and opportunities for changing travel behavior and providing TDM services. These survey can be administered through employer surveys, general marketing research, focus groups, etc.

Program Outcomes

 Sustainability  Partnerships

Trip Types

 Commute

Potential Lead(s)

OCTA (Transit Agency)

Costs

   Low

VMT Reduction

   Low

Potential Partners

- AQMD
- Local Jurisdictions
- Employers
- Developers
- TNCs
- Transit Agencies
- Private Mobility Operators

Complementary Strategies

- TMAs/TMOs

+ Benefits

- Gains understanding of motivations and barriers
- Gathers insights on how to improve program service
- Compiles data to inform decision making for the prioritization of TDM strategies

- Challenges

- May cause survey fatigue
- Achieving statistical significance

Case Studies

- **SANDAG Commuter Survey** - SANDAG provides a survey template for employers to assess existing commutes, gather level of interests in try a new commute, understand the barriers and motivations to try the new commute. Results from that survey help to develop a customized TDM plan for the employer to use to promote the prioritized modes of interest to their employees.
- **San Francisco Municipal Transportation Agency (SFMTA) Travel Decisions Survey** - The SFMTA conducts a biennial Travel Decisions Survey that reveals a comprehensive view of travel behaviors among Bay Area residents.

Measurement

- Number of survey participants
- Survey response rate

IF.1 Commute Preference Surveys

? How does this strategy relate to Orange County?

While Orange County employers with 250 or more employees are regulated by South Coast Air Quality Management District's (SCAQMD) Rule 2202 to report and submit their AVR reports, there's an opportunity to provide/require additional questions to get information beyond the current commute. Questions about motivations, barriers, and level of satisfaction could help to develop messaging for targeted audiences and prioritize TDM services that can be offered. OCTA have periodically distributed surveys to understand the motivations and barriers associated with various travel options. Further analysis may be needed to determine how this data can inform TDM initiatives. Alternatively, if SCAQMD or SCAG took the lead on this type of effort, OCTA could help promote the survey and use the data gathered for analysis. Another approach could be for OCTA or an employer in Orange County to conduct their own survey, including requiring participation from employers with fewer than 250 employees.

⚙️ Delivery Recommendations

- **IF.1.1:** Work with AQMD and other regional partners to identify opportunities to add custom questions to the Annual Employer Commute Survey to capture data on motivations and barriers to sustainable transportation.
- **IF.1.2:** Leverage regional stakeholder engagement and outreach efforts for Long Range Transportation Planning and other initiatives to capture commute preference data without causing survey overlap and fatigue.
- **IF.1.3:** Work with employers or developers to add commute preference questions to annual employee/tenant satisfaction survey.
- **IF.1.4:** Share data with partners to encourage updates to existing commuter programs - Develop a platform that allows employers and developers to benchmark commuter program performance against regional and local-level program data.



IF.2 Commuter Tax Benefits

Commuter Tax Benefits allow tax-exempt funds for commuters to pay for parking, transit and vanpool. This voluntary benefit, regulated by the IRS, aims to encourage the use of public transportation and other alternative commute options by reducing the associated costs for employees.

Program Outcomes

-  Mobility  Equity
-  Sustainability

Trip Types

-  Commute

Potential Lead(s)

Employers

Costs

   Low

VMT Reduction

   Low

Potential Partners

- OC Rideshare
- Transit Agencies
- Employers

Complementary Strategies

- Individualized/Personalized Marketing
- TMAs/TMOs
- TDM Ordinance and Policy Development

+ Benefits

- Reduces travel cost burden
- Encourages adoption of non-SOV commute options
- Provides tax savings for both employers and employees
- Supports broader transportation demand management goals

- Challenges

- Requires a small administrative and financial commitment from employers
- Employer paid parking may limit the effectiveness of the strategy

Case Study

- **SANDAG Sustainable Transportation Service** - SANDAG provides information about pre-tax benefits to its employers via a one-page fact sheet of the benefits and an educational webinar.

Measurement

- Number of employers who provide commuter tax benefits
- Number of fact sheets shared
- Number of webinar attendees

IF.2 Commuter Tax Benefits

? How does this strategy relate to Orange County?

Commuter tax benefits is a way to save money, bolster employee satisfaction, boost productivity, reduce parking and traffic congestion issues, and align with sustainability goals, all of which contribute to a company's success. This type of incentive can be part of the overall benefits of a company to attract new recruitments and retain existing employees. Employers can setup these benefits through their payroll vendor. Public transit options in Orange County, such as buses and Metrolink trains, can be more attractive and accessible when employers support them financially.

⚙️ Delivery Recommendations

- **IF.2.1:** Create resources such as factsheets, HR training materials, potential vendor list, etc. to support employers with implementing commuter tax benefit programs.
 - Compile a vetted list of payroll vendors such as Edenred, Paychex, AD, etc. that offer Transit & Parking Spending Accounts (TSA/PSAs).
 - Develop educational materials on the benefits and how to get employees signed up to the program.
- **IF.2.2:** Leverage OCTA Rideshare and existing TMA/TMOs to spotlight employer commuter programs and provide opportunities for peer mentorship, especially for small businesses.
- **IF.2.3:** Partner with transit agencies to highlight corporate programs that allows employers and organization to provide transit benefits to their employees at a pre-tax basis.
 - Metrolink offers a Corporate Partner Program that offers discounts and complimentary round trip-tickets, in addition to pre-tax benefits.
 - Metro's E-Pass Program is a pay-per-boarding program that is capped at a monthly limit to reduce the cost of employer/employee paying for transit.
- **IF.2.4:** Promote savings to be realized from commuter tax benefits program.
 - Regularly communicate the advantages of a TSA/PSA in terms of financial savings to be realized and the ease of using a pre-tax benefit card via newsletters, email blasts, webinars and on employee intranet. Take advantage of regional promotions such as SoCal Transit Week to promote the program.






IF.3 Mobility as a Service (MaaS)/ Trip Planning Support

Mobility as a Service (MaaS) is the integration of various forms of transport services (e.g. transit, ridesharing, shared micromobility, etc.) into a single mobility platform. MaaS/Trip Planning support involves implementing platforms that provide users with seamless access to trip planning information and streamlined payment systems for multimodal trips through a single interface such as a mobile app, website, or employee portal.

Program Outcomes

 Partnerships  Equity

Trip Types

 Commute  Leisure
 Essentials  Visitor
 School

Potential Lead(s)

OCTA (Transit Agency), Private Mobility Operators

Costs

   -    Medium to High

VMT Reduction

   High

Potential Partners

- Local Jurisdictions
- Employers
- Developers
- TNCs
- Transit Agencies
- Mobility Operators

Complementary Strategies

- Dynamic Carpool
- Mobility Hubs
- Shared Transportation/Shuttles
- Shared Micromobility Programs
- TMAs/TMOs

+ Benefits

- Increases awareness of non-SOV modes to users through inclusion in the trip planning process
- Simplifies the process of paying for trip-chaining journeys
- Improves user experience and accessibility of public transportation
- Complement the potential deployment of mobility hubs network
- Streamline data collection process for agencies

- Challenges

- Public/private partnerships can be difficult to navigate
- Rapidly evolving technology and lack of industry standards
- Integration of multiple transportation providers and payment systems
- Potential exclusion of users without smartphones or banking access

Case Studies

- **LA Metro's TAP** - LA Metro, in partnership with digital business transformation (Publicis Sapient), developed TAP, a program that enables seamless travel across the 27 municipal transit systems in LA county. In addition to bus and rail, TAP is also integrated with Metro Bike Share. Further integration with Microtransit, Scooters, Ride-Hailing, Parking and Electric Vehicle car charging are being developed.
- **Uber Technologies Inc.** - Uber has developed a service model that offers diversified transportation options. Users are able to book a private taxi or access bike and e-scooters, all through the Uber app. Uber has also expanded its MaaS capabilities by partnering with Moovit, a start-up leader in multimodal trip planning, to integrate real-time public transit data from over 7000 agencies directly within the Uber app.

Measurement

- Number of users
- Number of trips planned
- Number of multimodal trips booked

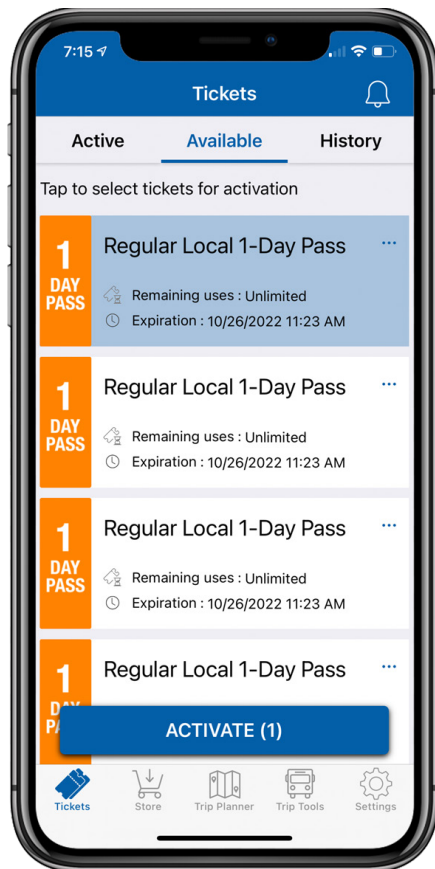
IF.3 Mobility as a Service (MaaS)/ Trip Planning Support

? How does this strategy relate to Orange County?

Orange County is made up of 34 different incorporated local jurisdictions, all of which have varying levels of public and privately operated transportation services operating across all of them. The provision of a MaaS Trip Planning service, whether it be through app, website, dashboard, or portal will provide users with the necessary trip planning knowledge on how to access all the transportation options available and pay for them conveniently.

⚙️ Delivery Recommendations

- **IF.3.1:** Increase engagement on OC Bus App and Trip Planner.
- **IF.3.2:** Leverage transit app data (such as OC Bus App, Transit App, OC Flex) to advance innovation and inform decision making.
 - Identify areas of improvement such as integrating and tracking feature or data integration with other existing apps like Strava to track different types of trips to support multimodal programming.
- **IF.3.3:** Work with partners to build a regional MaaS platform with multimodal trip planning, payment integration, and real-time trip tracking.



IF.4 Parking Cash Out

Parking Cash Out (PCO) is an employer program where employees are offered the option to receive the option to receive a cash payment in lieu of a parking space.

Program Outcomes

-  Mobility
-  Sustainability
-  Partnerships


Trip Types

-  Commute

Potential Lead(s)

Local Jurisdictions, Employers

Costs

-    Low

VMT Reduction

-    Medium

Potential Partners

- Employers
- Developers
- OCTA (CTC)
- TMAs/TMOs

Complementary Strategies

- Parking Supply Management
- TMAs/TMOs
- TDM Ordinance and Policy Development

+ Benefits

- Encourages use of alternative transportation modes
- Reduces demand for parking, potentially allowing for repurposing of parking spaces

- Challenges

- Employees must have other modes of transportation available for the strategy to be effective
- More effective when employer leases parking spaces (vs. owning lot) as immediate savings realized
- Employees may choose to park elsewhere, potentially creating parking challenges on local streets
- Can be complex to administer and monitor, especially for smaller businesses

Case Studies

- **SCAG Region Parking Cash Out** - Within SCAG, the City of Santa Monica does regulate parking cash-out with support and guidance from the TMO.
- **Seattle Children's Hospital** - Seattle Children's Hospital used parking cash-out to reduce drive alone commutes from 73% to 38% in 2015.

Measurement

- Cash outs provided (number of employees not using parking spaces, and how often)

IF.4 Parking Cash Out

? How does this strategy relate to Orange County?

A recent study¹ commissioned by the Federal Highway Administration found that PCO typically reduces affected automobile travel 10-30 percent depending on the value of the incentive and various other factors. The more flexible the incentive, the greater the impact.

In the SCAG region, employers of 50 persons or more and meet certain conditions as mandated by California's Parking Cash-Out Law are required to offer cash allowance in lieu of parking space. The law was recently amended as part of Assembly Bill (AB) 2206 that added more specific guidelines. In response, the California Air Resources Board (CARB) updated its PCO Informational Guide to provide additional resources and support for employers looking to implement the PCO program. Further, the revised guide provides a current summary of the law and answers general questions about the benefits and applicability of the law.

Local Jurisdictions could take on a role in supporting employers who implement this strategy. Although no current list of participating employers in Orange County is available online, local jurisdictions could coordinate with SCAG to obtain this information and showcase successful implementation examples to educate and create more awareness.

⚙️ Delivery Recommendations


- **IF.4.1:** Host informational session/ trainings about California's Parking Cash Out requirement.
 - Work with TMA/TMOs, and large individual employers, to share resources and materials related to Parking Cash Out to applicable employers.
 - Invite local jurisdictions such as City of Santa Monica to present learnings and recommendations for parking cash-out program monitoring and enforcement to other interested local jurisdictions.
 - Coordinate with local and regional partners to identify and showcase employers who successfully promote this strategy.
- **IF.4.2:** Identify capacity within internal jurisdictional departments to support parking cashout implementation and enforcement.
 - Coordinate with enforcement teams to identify non-compliance.
 - Provide mobility staff support to help employers implement parking cashout.
 - Develop tool and resources such as FAQs to support employers with identifying applicability and calculating parking cash-out amounts.
- **IF.4.3:** Promote parking cash-out to employees through regular communications to incentivize mode shift.
 - Add parking cash out information to employee newsletters, email-blasts, intranet and other communication channels to ensure program visibility.

¹ Federal Highway Administration, An Assessment of the Expected Impacts of City-Level Parking Cash-Out and Commuter Benefits Ordinances, March 2023, <https://ops.fhwa.dot.gov/publications/fhwahop23023/fhwahop23023.pdf>

IF.5 Rewards for Non-SOV Travel

Employers or large public agencies can introduce incentive programs which encourage commuters and/or employees to bike, walk, use transit, and work remote. Rewards and incentives can effectively encourage the practice of sustainable commute. Examples of rewards and incentives include gift cards, discounts to retailers, movie tickets, and wellness products.

Program Outcomes

-  Mobility
-  Partnerships
-  Sustainability

Trip Types

-  Commute
-  School
-  Essentials
-  Leisure

Potential Lead(s)

Local Jurisdictions, Employers

Costs

💰 💰 💰 Medium

VMT Reduction

● ● ● High

Potential Partners

- Local Jurisdictions
- Developers
- Educational Institutions
- Employers
- OCTA (Transit Agency)
- TMAs/TMOs
- Transit Agencies

Complementary Strategies

- Individualized/Personalized Marketing
- MaaS/Trip Planning Support
- Subsidization of Non-SOV Travel
- TMAs/TMOs

+ Benefits

- Added benefit or work retention tool
- Wider reach to community participants
- Encourages behavior change towards sustainable transportation modes
- Provides data on commute patterns and mode choices
- Can be tailored to target specific user groups or travel behaviors

— Challenges

- Most programs require participants to log trips daily
- Difficulty in verifying the accuracy of self-reported trips

Case Studies

- **LA Metro’s “One Car Challenge”** - A 5-week pilot program that offered payments to 200 qualifying Santa Monica residents to leave their second car at home each week. Participants can earn a payment of \$119.80 each week if they give up one of their household cars each week, totalling up to \$599 total per household.
- **The Inland Empire (IE) Commuter Program** - The IE Commuter Program, offered by Riverside County Transportation Commission and San Bernardino County Transportation Authority, provides TDM services to eligible employers and commuters.

Measurement

- Number of participants in incentive programs
- Number of incentives provided

IF.5 Rewards for Non-SOV Travel

? How does this strategy relate to Orange County?

OCTA currently has the OC Bus Rewards Program which allows users to earn points by riding OC Bus. Points can be redeemed for free one-day and 30-day OC Bus passes. OCTA could examine this program to identify opportunities expand to other commute modes or provide additional rewards such as referral bonuses. Local jurisdictions or implementors may consider partnerships with local businesses to boost program participation and support local economy. Employers can leverage regional celebrations and invest in technology to promote and expand employer reward programs.

⚙️ Delivery Recommendations

- **IF.5.1:** Leverage regional events and programs to promote reward programs.
 - Coordinate with events such as OCTA Bike Rally and Bike Month, to nudge people and reward sustainable commute behaviors.
 - Support AQMD employers with implementing rewards programs for compliance.
- **IF.5.2:** Implement gamification elements to encourage ongoing engagement.
 - For example, OCTA or partners could develop a \$3-5/day incentive to encourage walking, biking, or taking transit.
- **IF.5.3:** Expand OC Rewards program to involve the broader business community or school campuses to strengthen program utilization.
 - Work with local business to develop rewards for using alternative commutes that could equate to discounts or credits towards retail/food purchase.
 - Encourage businesses to act as ambassadors for encouraging sustainable travel to their establishment.
 - Coordinate with schools to provide discounts at the campus store.
- **IF.5.4:** Develop marketing campaign for targeted audiences.
 - Work with sustainability clubs at UCI, Irvine Valley College and Concordia to promote sustainable travel.
 - Work with BIDs and local partners to distribute information on existing rewards programs such as RideMatch, OC Rewards, etc. to small businesses.

IF.6 Subsidization of Non-SOV Travel

Employer or transit-agency managed programs to subsidize the cost of carpooling, vanpooling, transit, or first/last mile trips. This strategy aims to make sustainable transportation options more financially attractive to commuters and travelers.

Program Outcomes

-  Mobility
-  Partnerships
-  Sustainability

Trip Types

-  Commute
-  School
-  Essentials
-  Leisure

Potential Lead(s)

OCTA (Transit Agency), Local Jurisdictions

Costs

\$\$\$ Medium

VMT Reduction

●●● High

Potential Partners

- Developers
- Employers

Complementary Strategies

- Individualized/Personalized Marketing
- MaaS/Trip Planning Support
- Rewards for Non-SOV Travel
- Safe Routes to School Programs
- Transit Oriented Development and Non-SOV Supportive Land Use

+ Benefits

- Increases transit ridership (if targeted at transit) and utilization of other sustainable modes
- Promotes equitable access to transportation options
- Serves as an effective employee benefit and retention tool
- Supports broader environmental and sustainability goals

- Challenges

- May result in decreased revenue for transit agencies if not offset by increased ridership
- Can be costly for employers, particularly for small employers
- Requires ongoing administration and management

Case Studies

- **Los Angeles Metro’s “U-Pass Pilot Program”** - Los Angeles Metro’s U-Pass Pilot Program subsidizes the cost of monthly transit passes for university students and facilitates the process by allowing students to purchase passes through their universities.
- **SANDAG Vanpool Program** - The program offers up to a \$500 monthly subsidy, not to exceed 50 percent of the vehicle lease cost, for 7 to 15 passenger vanpool vehicles.

Measurement

- Number of participants registered to receive subsidies
- Number of subsidies provided

IF.6 Subsidization of Non-SOV Travel

? How does this strategy relate to Orange County?

OCTA currently offers subsidization programs that serve as building blocks for a comprehensive Non-SOV Travel subsidy strategy, including:

- The Youth Ride Free pass that allows the use of the OC Bus free to youth ages 6-18,
- \$400 subsidy for vanpool participants, and
- Guaranteed Ride Home.

These programs are effective building blocks for employers to add to their commute benefit packages. OCTA has the opportunity to build upon these initiatives by:

- Increasing participation in current programs through targeted outreach and education.
- Exploring new subsidies for other commute modes or specific target audiences.
- Partnering with major employers to develop customized subsidy programs.
- Integrating subsidies with other TDM strategies for maximum impact.

⚙️ Delivery Recommendations

- **IF.6.1:** Expand on existing programming such as Youth Ride Free, vanpool subsidy, Guaranteed Ride Home, etc. via targeted campaigns and partnerships.
- **IF.6.2:** Continue to collect metrics and data on existing subsidy programs to evaluate opportunities for program improvement and expansion.
- **IF.6.3:** Expand on ways to streamline subsidy administration through existing or new technological platforms.



IF.7 Transportation Management Associations Organization (TMA/TMOs)

A member-controlled organization that provide transportation services in a particular area. By coming together as an entity, these businesses can leverage public and private funds to promote ridesharing and other alternative commuting options that reduce traffic congestion and improve air quality. TMA/TMOs could support planning and implementation of employee commute programs and assist with TDM regulation compliance.

Program Outcomes

- Mobility
- Partnerships

Trip Types

- Commute
- Essentials
- School
- Leisure
- Visitor

Potential Lead(s)

Local Jurisdictions

Costs

💰 💰 💰 Medium

VMT Reduction

● ● ● Medium

Potential Partners

- Developers
- Employers
- OCTA (CTC)
- Private Mobility Operators
- Tourism Organizations
- Transit Agencies

Complementary Strategies

- Commuter Tax Benefits
- Commute Preference Surveys
- Individualized/Personalized Marketing
- MaaS/Trip Planning Support
- Parking Cash Out
- Shared Transportation/ Shuttles
- Rewards for Non-SOV Travel
- TDM Ordinance and Policy Development

+ Benefits

- Improves awareness of transportation options through outreach and consistent engagement
- Advocates for improved access to transportation options and reduction of travel cost burden

- Challenges

- Difficult to measure the direct impact on congestion and VMT reduction
- May require ongoing investment (from private or public funds)
- Success relies heavily on effective programming of the individual TMA/TMO

Case Studies

- **Spectrumotion** - Spectrumotion is a TMA funded solely by the property owners in the Irvine Spectrum Area. They serve the business park known as the Irvine Spectrum in Irvine, California, which has about 116,000 employees/commuters.
- **Santa Monica Transportation Management Organization (GoSaMo TMO)** - The GoSaMo TMO was established in 2016 and funded by the City of Santa Monica.

Measurement

- Number of TMO/TMAs in the county
- Number of TMO/TMA members

IF.7 Transportation Management Associations Organization (TMA/TMOs)

? How does this strategy relate to Orange County?

The SCAG region is home to ten TMAs and TMOs, the majority of which are in Los Angeles County, with one in Orange County. Los Angeles Metro regularly convenes the Los Angeles County TMAs to facilitate knowledge sharing and mutual support.

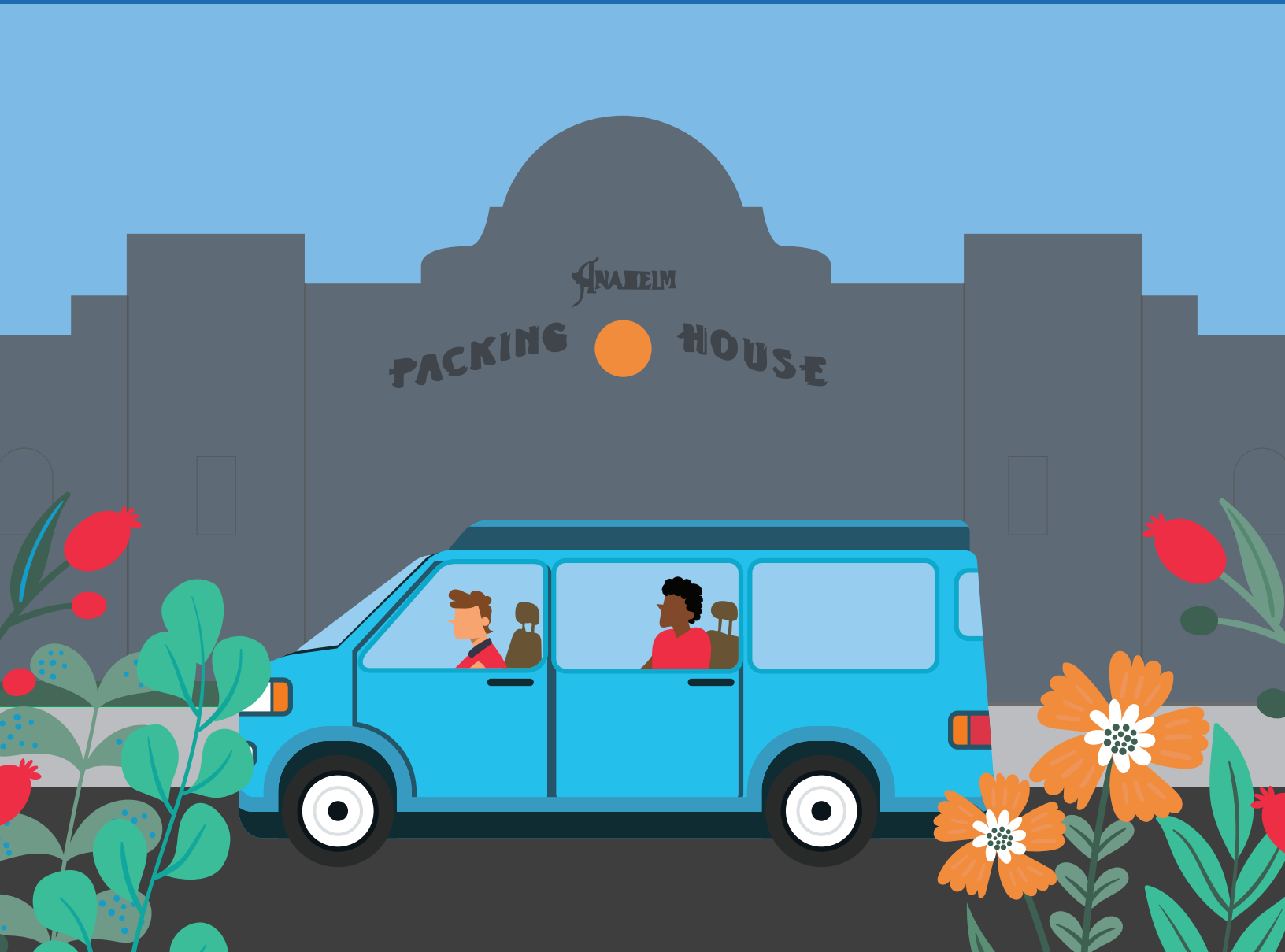
Orange County is well-suited for the establishment of additional TMAs due to the presence of many dense employment centers surrounding key transportation corridors. Areas surrounding John Wayne Airport (SNA), downtown Santa Ana, and locations where major freeways such as I-5, SR-22, and SR-57 intersect in the Cities of Orange and Santa Ana are good candidates.

⚙️ Delivery Recommendations

- **IF.7.1:** Coordinate a group of developers or employers who want to or are required to invest in congestion reduction or air quality improvement measures in their communities and understand the case for working together to form a TMA/TMO.
 - Regional agencies or local jurisdictions should identify areas in need for a TMA/TMO and review any deficiencies they are trying to fill as well as areas with the highest AVR.
 - Use local examples such as, Spectrumotion, the TMA that serves the business park in Irvine Spectrum, to showcase what a TMO/TMA can achieve.
- **IF.7.2:** Assist commuters, residents or visitors that could benefit from improved transportation options, outreach and engagement.
 - TMA/TMOs are usually best taken forward or coordinated either at the City level (e.g. Santa Monica), or by a group of organizations choosing to work together (e.g. Anaheim Transportation Network).
 - The City of Santa Ana could target dense employment or residential areas around John Wayne Airport and downtown Santa Ana.
- **IF.7.3:** Provide leadership, guidance, or support for a specific transportation need like the coordination of shuttle service, marketing of new transit options, or assistance with regulatory compliance.

3

TDM Strategy Delivery



TDM Strategy Delivery

This chapter provides guidance for the successful implementation of TDM strategies in Orange County. While the TDM Toolbox recommends a list of strategies, this section outlines additional tools to support the integration of TDM planning and implementation into future planning studies and program development.

The resources in this chapter are organized into four components:

- **Phasing:** Suggested implementation timelines based on factors such as feasibility, readiness, and resource availability.
- **Packaging:** Guidance to strategically combine TDM strategies to optimize efficiency and effectiveness.
- **Communication and Collaboration:** Best practices for engaging stakeholders, fostering partnerships, and effectively promoting TDM strategies.
- **Funding:** Potential funding sources to support the delivery of TDM strategies.

Phasing

This section provides a recommended timeline for the implementation of each strategy. The purpose is to provide implementing agencies a general idea of how TDM strategies could be phased. Based on available funding and willingness to implement certain strategies, the phasing should be adjusted to ensure contextual and effective implementation.

Each strategy has been categorized as short-term (within 2 years), mid-term (2-4 years), and long-term (more than 4 years).

Table 5: Implementation Timeline

Phasing	Timeline
Short-term	Within 2 year
Mid-term	2 to 4 years
Long-term	More than 4 years

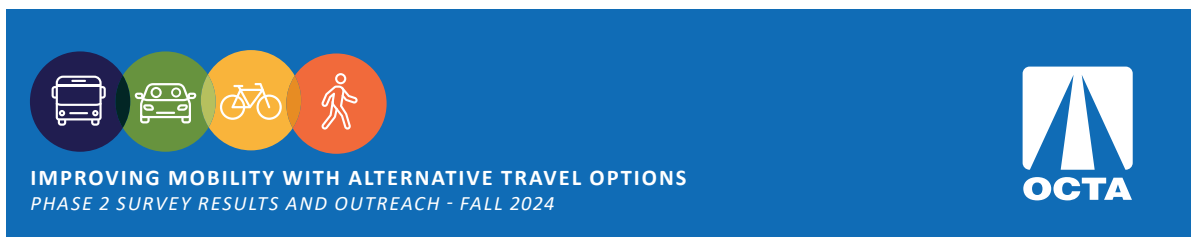
The following factors have been considered as part of the “Implementation Fit” evaluation process:

- Existing program(s) that this strategy can build on
- Ease of implementation
- Relative cost
- Geographic consideration

As part of the “Implementation Fit”, each strategy was initially assessed on its relative deliverability, feasibility and location fit to inform preliminary phasing recommendations. A second evaluation was conducted to further refine the phasing based on stakeholder and community feedback gathered through working group meetings and public surveys.

Figure 4 summarizes results from Phase 2 of the public survey, which identified community priorities for TDM implementation in Orange County. Survey participants ranked “safer streets for walking and biking” and “better access for pedestrians, bicyclists and transit users” as the top desired outcomes, highlighting strong public support for strategies that enhance safety, accessibility, and connectivity to active and sustainable transportation options.

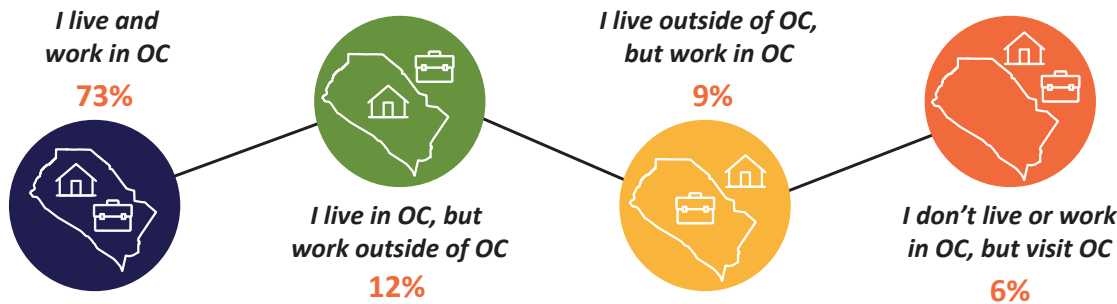
Figure 4: Top Outcomes for TDM Implementation in Orange County (arranged in descending order)



Total number of surveys
1402



1: What is your connection to Orange County (OC)?



2: Please rank the following solutions you would like to see to encourage sustainable travel in your community.

Rank from 1-6, with 1 being the most helpful and 6 being the least helpful.



Table 6 lists the recommended phasing for each strategy based on the “Implementation Fit” evaluation process and stakeholder and community feedback.

Table 6: Recommended Implementation Timeline for Each Strategy

ID	Strategy	Phasing
PP.1	Complete Streets Policies	Short-term
ME.1	Individualized/Personalized Marketing	Short-term
ME.2	Safe Routes to School (SRTS) Programs	Short-term
IF.1	Commute Preference Surveys	Short-term
IF.2	Commuter Tax Benefits	Short-term
IF.3	MaaS/Trip Planning support	Short-term
IF.4	Parking Cash Out	Short-term
IF.5	Rewards for Non-SOV Travel	Short-term
IF.6	Subsidization of Non-SOV Travel	Short-term
PP.2	Motor Vehicle Restriction Zones	Mid-term
PP.4	TDM Ordinance and Policy Development	Mid-term
PP.5	Transit Oriented Development and Non-SOV Supportive Land Use	Mid-term
S.1	Dynamic Carpooling	Mid-term
S.2	Mobility Hubs	Mid-term
S.3	Shared Transportation/Shuttles	Mid-term
S.4	Shared Micromobility Program	Mid-term
IS.1	Active Transportation Infrastructure Improvements	Mid-term
IS.2	Bicycle/Transit Integration	Mid-term
IF.7	Transportation Management Associations/Organization (TMA/TMOs)	Mid-term
PP.3	Parking Supply Management	Long-term
IS.3	Universal Design Transit Enhancements	Long-term

Implementation timelines do not account for preliminary work that might be needed for establishing a business case for implementation or acquiring funding. Based on organizational and community priorities and funding opportunities, the timeline for preliminary work will differ across various implementors. The suggested implementation timelines are inclusive of detailed strategy planning and strategy implementation as shown in Figure 5.

Figure 5: Strategy Implementation Process



Due to the programmatic nature of TDM, most strategies can be detailed and implemented within a short to mid-term timeline.

- **Short-term strategies** mainly include incentive-based and educational strategies that can be quickly deployed with minimal challenges and can apply to a wide audience. Many of these strategies can be expanded through existing programs and partnerships, such as OC Rideshare and employer commuter programs to leverage established resources for wider implementation. Interdepartmental teams within OCTA and local jurisdictions typically play a key role in supporting and executing these strategies.
- **Mid-term strategies** include a mix of infrastructure upgrades, service enhancements, policy initiatives, and incentives that require a moderate level of investment and stakeholder collaboration. These strategies typically require additional time for conducting feasibility studies, developing programming, coordinating with external partners, and procuring consultant or vendor contracts.
- **Long-term strategies** include infrastructure upgrades and policy changes that require extensive planning, multi-agency coordination, and significant behavior shifts. These strategies are typically programmed over an extended timeline due to their complexity and level of coordination needed for successful implementation.

Packaging

TDM strategies are most effective when implemented in combination, ensuring that the associated policy, service, and infrastructure all work cohesively to enable the public to make sustainable transportation choices. For example, a supportive policy environment combined with reliable transit service with first- and last-mile options, and effective public outreach, can significantly increase the adoption of alternative transportation modes.

Packaging strategies together can optimize resources, reduce costs, and improve operational effectiveness by aligning efforts to achieve greater impact. Unlike complementary strategies, which are grouped based on their functional purposes, packaging is driven by implementor’s unique priorities, targeted needs, and available resources.

There are various ways to combine strategies for an effective implementation. Here are some approaches to consider when packaging TDM strategies:

- Trip types/ audiences
- Geographic context
- Unique needs
- Phasing

Trip types/audiences

Who are you targeting?

- Commuters
- Residents
- Visitors
- Students

Geographic context

What area is the most strategic to focus on first?

- Areas with employment/population density
- Areas at major trip generators
- Areas that are gaps or infrequencies in transportation system

Phasing

What strategies could be implemented in a designated timeframe?

- Mixture of:
 - Strategies that could build upon existing programs and can be implemented in the short-term
 - Mid-term to long-term strategies that will require wider funding and community buy-in but can provide opportunities for program and service expansion, leading to further efficiencies

Unique needs

Are there special needs that require addressing?

- This is for cases such as universities or schools that have special needs or communities of concerns

For example, the following strategies could be packaged together by **employers as part of their employer commuter programs**. These strategies focus on shifting employee behaviors to sustainable transportation options through encouragement, marketing, and parking controls.

- **Parking Supply Management:** Make a business case or justified proposal to reduce parking and promote alternative transportation choices.
- **Individualized/Personal Marketing:** Coordinate with transit agencies on the services and programs offered and develop a campaign that can market sustainable commute choices.
- **Dynamic Carpool:** Promote existing programs such as the RideMatch platform to increase signups for a bigger user pool and better matches.
- **Commuter Tax Benefits:** Use employee pre-tax dollars to purchase transit passes or go towards vanpool.

Another approach would be based on geographic locations, such as areas with higher employment density (i.e., Santa Ana). Strategies that could be packaged together based on **geographic context** are:

- **Transit Oriented Development/Non-SOV Supportive Land Use:** Downtown Santa Ana has been identified as an area suitable for TOD which will ensure a good level of transit service and biking infrastructure is available to facilitate sustainable transportation choices.
- **Transportation Management Associations/Organizations:** a coordinated effort by a single TMA could efficiently promote existing transportation choices and TDM resources within high density areas.
- **Subsidization of Non-SOV Travel:** expand outreach to these commuters to learn about other existing programming such as Youth Ride Free, vanpool subsidy, Guaranteed Ride Home, etc. via targeted campaigns and partnerships within communities of concerns.

Communication and Collaboration

Effective communication and collaboration are crucial for TDM programs to achieve their full potential. This section provides recommendations on collaboration and communication methods which could be adopted by different lead implementors:

- OCTA, Local Jurisdictions, and Transit Agencies
- TMA/TMO and Community-Based Organizations
- Employers/Developers

Coordination, consensus building, and marketing are three different types of communication and collaboration that can aid TDM implementation. Each of the three approaches is discussed in more detail below. Tables are also provided to suggest roles within coordination, consensus building, and marketing for the categories of lead implementors identified above.

Coordination

Coordination helps facilitate collaboration between implementers and relevant stakeholders to ensure contextual and effective implementation. Table 7 provides several techniques to ensure internal and cross-agency coordination.


Check-in meetings

Regular meetings within internal teams can be used to check in on the workplan timeline, report the progress of initiatives, address any challenges, and identify the next steps. Frequency will depend on the team ranging from weekly to monthly.

Internal department team (IDT) meetings

IDT meetings bring together different departments such as economic development, community outreach, or operations within the organization that is responsible for effective TDM implementation. Frequency for these types of meetings can range from monthly to quarterly. Capacity within existing teams should be assessed among the group to designate a lead team member who can guide, track process, and move initiatives forward.

Table 7: Coordination Tactics

Type	OCTA, Local Jurisdictions, Transit Agencies	Employers/ Developers	TMA/TMO, CBO
 Coordination	●	●	●
Internal department team (IDT) meetings	●		

Consensus Building

Consensus building is a critical component of successful implementation of TDM strategies. The process typically focuses on securing community buy-in, addressing potential conflicts, aligning priorities, and streamlining implementation. The process typically involves engaging key stakeholders or partners to identify key roles, develop work plan, and move initiatives forward. Table 8 shows a variety of techniques for engaging stakeholders and building consensus throughout the lifecycle of a project or program.

Steering or Stakeholder Committees

A regional TDM Council or Steering Committee could bring together representatives from mobility teams across Orange County local jurisdictions. The committee members could provide critical feedback and expertise at key project milestones to ensure the project implementation is aligned with local needs. Stakeholder committees often also include representatives from Community Based Organizations (CBOs) and TMA/TMOs. These advocate groups can provide valuable perspective and connection with their respective networks during city- or agency-led efforts such as community plans or strategic plans.

Advisory Committees

An advisory committee, comprised of regional, state, and local agency representatives, play a key role in shaping policies and guiding TMD strategy implementation. These committees provide insight and feedback on regional TDM needs, alignment with regional goals, and funding opportunities. The group typically meets at project milestones to provide ongoing feedback and guidance throughout the project duration.

Focus Groups

Focus groups are a targeted tool for gathering in-depth feedback on specific issues. For example, a focus group of homeowners' association's (HOA), property managers, business improvement districts, neighborhood councils, hospitality, or visitor bureau representatives could provide feedback on how to create a tailored and effective marketing campaign for Clean Air Day. Discussion topics could focus on resources that would be helpful to promote it, identifying messages that would resonate, and identifying opportunities for each stakeholder to host an event. Another example could be a marketing campaign targeted at community of concerns to promote using bikes for shorter trips. A focus group could be comprised of the residents, schools, businesses, community groups in a particular neighborhood and discussion topics could be around interests, motivations, and barriers to riding a bike in the community.

Community Meetings and Workshops

Community meetings and workshops are effective ways to introduce a project or program to the public and gather meaningful feedback to guide the recommendations or direction of a strategy. These meetings can be held virtually, in-person, or as a hybrid event to optimize participation. Community engagement is typically conducted at key stages of a project:

- At project initiation to gather insights on existing conditions.
- Midway to solicit feedback on strategies (e.g. potential locations for a shared micromobility program pilot).
- Near project completion to report findings and recommendations.

The role of CBOs or TMAs/TMOs can vary in these settings including hosting the event, participating as representatives, or acting as ambassadors to share information with their respective networks.

Presentations to Community Leaders

Engaging local officials, such as mayors or councilmembers, is beneficial for building support among community leaders and can be accomplished via an informational session for the project or a strategy.

Board meetings

Many agencies and CBOs have Boards of Directors that meet regularly (monthly, bi-monthly, or quarterly). These meetings can be leveraged to coordinate and collaborate on local and regional TDM initiatives. Presenting to the board allows the implementor to align on objectives, seek approval for new programs, and foster partnership.

Survey

Travel preference surveys could be used to gain insights from commuters on existing commutes, interest in changing behaviour, motivations, and barriers, and ways to promote transportation options and resources.

Table 8: Consensus Building Tactics

	Type	OCTA, Local Jurisdictions, Transit Agencies	Employers	TMA/TMO, CBO
 <p>Consensus Building</p>	Steering committees	●		●
	Advisory committees	●		●
	Focus Groups	●		
	Community meetings/ workshops	●	●	●
	Presentations to community leaders	●		
	Board meeting	●		●
	Survey	●	●	●

Marketing

Marketing informs tactics to generate awareness and promote and encourage sustainable transportation through targeted messaging. In the following tables, marketing tactics have been categorized into digital marketing and public relations.

Digital marketing refers to the use of online platforms, digital technologies, and internet-based strategies to promote resources, products, or services.

Table 9: Marketing Tactics

	OCTA, Local Jurisdictions, and Transit Agencies	Employers/Developers	TMA/TMOs & CBOs
Digital Marketing			
Marketing Tactics	Application	Application	Application
Social Media Marketing	<p>Developing social media campaigns on Facebook, Instagram, LinkedIn, etc. with precise targeting of potential Orange County audiences based on socio-demographic criteria as well as interests/behaviors related to transportation choices. This tactic is ideal for reaching key demographics such as students, visitors or residents of communities of concerns.</p> <p>Coordinating with an internal digital marketing team to cross-promote programs and sustainable transportation alternatives such as teleworking during capital project constructions across social channels will help amplify the message.</p>	<p>Using existing business or property social media outlets to promote messages related to sustainable transportation. In addition to employee commuting, businesses could use their channels to encourage visitors to take sustainable travel options.</p>	<p>Using existing social media outlets to cross-promote key messages from partner organizations.</p>

	OCTA, Local Jurisdictions, and Transit Agencies	Employers/Developers	TMA/TMOs & CBOs
Email Marketing (e.g., e-newsletters)	Building an opt-in email database allows nurturing of interested prospects by sending updates on plans to improve travel options in Orange County. It is a cost-effective channel for continually engaging the audience and promoting TDM options and resources. An enhanced strategy would include advanced segmentation of audience profiles, personalized content, system tools (scheduled emails or managed social media posts) and comprehensive analytics (metrics and data points to understand performance, audience behavior, and content effectiveness).	Creating a specific email database by mode for employees and residents to receive information about sustainability and related transportation options.	Developing or forwarding relevant information about sustainability and transportation options to members and stakeholders via emails or e-newsletter articles.
Toolkit	Creating a package of turnkey marketing materials that can be used by partners to help promote campaigns, programs or projects such as Safe Routes to School, OC Rideshare, etc. Examples of materials are newsletter copies, social media posts, flyers, and webpage graphics. OCTA has a webpage dedicated to digital toolkits: https://octa.net/about/about-octa/digital-toolkits/	Including any program and project updates in regularly scheduled company or property newsletter to make employees aware of existing and upcoming TDM activities.	Using existing toolkit provided by the MPO, Local Jurisdictions, and Transit Agencies.
Intranet/ Webpage	Including relevant updates and information related to sustainable travel options on appropriate webpages or to create a dedicated webpage for specific TDM initiatives.	Hosting an internal webpage to post employee and resident transportation information and to develop discussion boards or groups, for example to facilitate ridesharing matches.	Including relevant updates and information related to sustainable travel options on external webpage.
Transit Screens	Placing advertisements and videos via transit screens at transit stops or ticket offices.	Placing advertisements and videos via transit screens at building lobbies and elevators.	Not applicable.

Public relations involve communicating and maintaining positive relationships with various stakeholders, including the media, employees, and the public.

Table 10: Public Relations Tactics

	OCTA, Local Jurisdictions, and Transit Agencies	Employers & Developers	TMA/TMOs & CBOs
Public Relations			
Marketing Tactics	Application	Application	Application
Press Outreach	Proactively pitching launch announcements, event updates, ridership milestones etc. to local media outlets like The Orange County Register, OC weekly, Voice of OC, and more. This leverages the trusted voice of journalists vs. paid advertising.	Not applicable.	Not applicable.
Press Releases/ Blog Posts	Distributing press releases via OCTA and city websites.	Distributing press releases to announce regional event participation. Securing bylined articles authored by businesses to showcase employee human interest stories or announce milestones like launching a new vanpool.	Developing posts to communicate how the CBO or TMA/TMO is supporting sustainable transportation options to the community.

Funding

This section provides an overview of potential funding sources to support the implementation of TDM strategies outlined in this Plan. The listed sources serve as a starting point for implementors, offering guidance on identifying and pursuing funding opportunities related to TDM initiatives.

OCTA (as CTC), Local Jurisdictions, and Transit Agencies

Table 11 highlights funding sources geared toward TDM initiatives typically led by Transportation Commissions such as OCTA, local jurisdictions, and transit agencies. Each entry includes a brief description of the funding program, high-level eligibility criteria, and a link to additional resources and information. However, the links that are provided are currently active and may become inactive in the future. Implementors may review changes to existing grant programs and future grant opportunities at [Grants.gov](https://www.grants.gov) which is a useful resource for looking for potential grants through multiple agencies.

Table 11: Funding Sources for the OCTA, Local Jurisdictions, and Transit Agencies

Funding Source	Description	Eligibility	Webpage
Federal			
Federal Highway Administration’s Congestion Mitigation & Air Quality (CMAQ) Program	Support transportation projects and programs that reduce mobile source emissions to help meet the requirements of the Clean Air Act.	State and local governments	https://www.fhwa.dot.gov/environment/air_quality/cmaq/index.cfm
USDOT: Better Utilizing Investments to Leverage Development (BUILD) Transportation Discretionary Grants	Roads, bridges, transit, rail, ports or intermodal transportation.	Project sponsors, including state and local governments, counties, tribal governments, transit agencies, and port authorities	https://www.transit.dot.gov/funding/grants/better-utilizing-investments-leverage-development-build-transportation-grants-program#:~:text=U.S.%20DOT's%20Better%20Utilizing%20Investments,Recovery%20(TIGER)%20grant%20program.

Funding Source	Description	Eligibility	Webpage
State			
California Air Resources Board: Clean Mobility Options	Zero-emission carsharing, car- and van-pooling, bike- and scooter-sharing, innovative transit services, and ride-on-demand services in California’s historically underserved communities.	Eligible projects must be in a community that: (1) is on the Disadvantaged Communities List for Climate Investments in accordance with CalEPA’s designation (2) is a tribal land or tribal property within AB 1550 designated low-income communities, or (3) serves a deed restricted affordable housing facility with at least five units and located within an AB 1550 designated low-income community	https://ww2.arb.ca.gov/our-work/programs/clean-mobility-options-voucher-pilot-program-cmo/clean-mobility-options-projects
California Air Resources Board: California Sustainable Transportation Equity Project (STEP)	Active transportation subsidies, construction of new pedestrian facilities, new bike routes and networks (Class I, II, or IV) and supporting infrastructure.	Community-based organizations, local governments, and tribes that serve priority populations throughout California	https://ww2.arb.ca.gov/resources/fact-sheets/sustainable-transportation-equity-project
California Department of Transportation (Caltrans): Highway Safety Improvement Program	Safety-related pedestrian, bikeway and crossing projects. Certain activities under the SRTS, safety/ education and enforcement programs; also, certain spot improvements. Bike lanes, paved shoulders, crosswalks, intersection improvements and signage.	City, a county, or a tribal government federally recognized within the State of California	https://dot.ca.gov/programs/local-assistance/fed-and-state-programs/highway-safety-improvement-program
California Office of Traffic Safety: California Office of Traffic Safety Grants	Traffic-safety education, awareness and enforcement programs aimed at drivers, pedestrians and cyclists.	Public entities	https://www.ots.ca.gov/grants/
California State Transportation Agency (CalSTA)	Primarily transit programs.	State and local investments	https://calsta.ca.gov/subject-areas
California Strategic Growth Council: Affordable Housing and Sustainable Communities Program	Bicycle and pedestrian corridor and crossing improvements, particularly those in the area covered in specific plans.	Government agencies and institutions (including local government, transit agencies and school districts), developers and nonprofit organizations	https://sgc.ca.gov/grant-programs/ahsc/

Funding Source	Description	Eligibility	Webpage
California Strategic Growth Council and Department of Conservation: Transformative Climate Communities	Bicycle and pedestrian facilities and bike share programs.	Community-led development and infrastructure projects	https://sgc.ca.gov/grant-programs/tcc/
California Transportation Commission (CTC): Active Transportation Program (ATP)	Infrastructure and non-infrastructure projects (e.g., encouragement, education, and enforcement), and plans (including active transportation and Safe Routes to School plans)	A strong preference is given to projects in disadvantaged communities	https://catc.ca.gov/programs/active-transportation-program
California Transportation Commission (CTC): Local Partnership Program	Improve aging infrastructure, road conditions, active transportation, transit and rail, health and safety benefits	Jurisdictions with voter approved taxes, tolls, or fees, which are dedicated solely to transportation improvements.	https://catc.ca.gov/programs/sb1/local-partnership-program
St Jude’s Hospital: St. Jude’s Hospital Grants	SRTS efforts that incorporate or build on complete streets concepts. The organization supports and advises on the grant application process.	Local Orange County jurisdictions	https://www.stjude.org/research/why-st-jude/shared-resources/grants-and-sponsored-programs-office.html

Funding Source	Description	Eligibility	Webpage
Regional			
SCAG: Sustainable Communities Program	Bicycle, pedestrian, and Safe Routes to School plans	Local jurisdictions	https://scag.ca.gov/sustainable-communities-program
South Coast AQMD: AB 2766 Subvention Fund Program Resource Guide	Trip reduction incentive programs, vanpool programs, TMA/TMOs, parking management, bicycle facilities, public transportation facilities, traffic calming	Local jurisdictions	https://www.aqmd.gov/docs/default-source/transportation/ab2766-motor-vehicle-subvention-fund-program/ab2766-resource-guide.pdf?sfvrsn=18
Local			
OCTA: Call for Projects	A competitive process to allocate available federal, state, and local funds to improve all modes of surface transportation via various programs.	Local Orange County jurisdictions	https://www.octa.net/programs-projects/programs/funding-programs/call-for-projects/
OCTA: OC GO Measure M Funding Programs	Widen streets, improve intersections, coordinate signals, build Smart Streets and rehabilitate pavement	Local Orange County jurisdictions	https://www.octa.net/programs-projects/programs/funding-programs/measure-m-funding-programs/overview/

Developers, Employers, and TMA/TMOs

Table 12 provides examples of funding programs for TDM strategies led by developers, employers, or TMAs/TMOs. It includes a brief description of each funding source, its provider, and examples of how this type of funding has been applied. Funding at this level typically comes directly from the developer, employer or users (e.g., TMA members). In some instances, noted with an asterisk, local jurisdictions may partner with the implementors to support funding and facilitation. Employers and developers can also explore opportunities to apply for local funding sources, such as OCTA’s “Call for Projects”, by partnering with Orange County’s 34 incorporated cities or the County of Orange.

Table 12: Funding Programs for TMO/TMAs, Employers and Developers

Funding Program	Description	Funding Source	Examples
Developer/Transportation Impact Fees	Charges levied by local governments on new development. Enactment of TDM Ordinances will allow local jurisdictions to collect fees which are used to fund TMO.*	Developers and local jurisdictions	Federal Highway Administration (FHA) Develop Impact Fees Fact Sheet City of Santa Monica collects transportation impact fees to support the GoSaMo TMO.
TMA/TMO membership dues or fees	TMA/TMO dues used for operational costs.	Membership dues (e.g., from local employers).	Burbank TMO Membership
Commute subsidy	A developer, TMA/TMO, or employer can choose to subsidize a sustainable commute option.	Developer, TMA/TMO, Employer	University of California, Irvine offers various types of commuter benefits including a 20% rebate to employees and students who use the train to commute to campus and park for free if they carpool with 4 or more employees.

*Coordination with local jurisdictions needed.

Community-Based Organizations (CBO)

A community-based organization (CBO) is a nonprofit group or initiative that operates within and serves a specific local community. These organizations are typically focused on addressing the needs, interests, and concerns of the people in that community. Eligibility for most of the funding sources requires a CBO to operate within a disadvantaged community and partner with a public agency. Typically, local jurisdictions or transit agencies reach out to CBOs directly when their involvement is needed for specific projects.

To streamline collaboration, OCTA could explore establishing a centralized dashboard for CBOs where contact information can be shared and accessed for partnership opportunities. An example of this approach is LA Metro's Metro CBO Database, which centralizes contact information across multiple departments, promotes consistent communication, and tracks partnerships with CBOs. This platform fulfills the agency's commitment to promote equity by engaging with organizations that reflect the diverse communities they serve.

A similar CBO database for OCTA could facilitate the following:

- Increase involvement with CBOs for regional and local agency projects
- Explore partnership opportunities in the project area
- Expanding the scope or scale of collaboration or projects with the agency and the other local jurisdictions
- Form partnerships for funding applications

4

Next Steps



Next Steps

As both the county transit agency and County Transportation Commission (CTC), OCTA is well positioned to strengthen TDM programming by initiating studies, integrating TDM into its planning and operations, and fostering collaboration among local stakeholders. This chapter outlines the actionable next steps to advance the TDM strategies identified in the Plan, focusing on OCTA’s role as a leader and facilitator.

The subsections that follow are organized by the specific roles OCTA will undertake in advancing the recommended TDM strategies. Please note the action ID number refers to the Delivery Recommendations section of each of the TDM Toolbox strategy.

OCTA’s Role as the CTC

As the CTC, OCTA’s mission is to deliver a balanced and sustainable transportation system that enhances the quality of life for everyone traveling within Orange County. This position qualifies OCTA to lead strategies in the role of a planning agency or in the role as a county coordinator. The following strategies could require policy changes, additional studies, or facilitation of collaborations between various stakeholders.

Planning Agency

OCTA plays a key role in advancing planning studies that support the development and funding of many transportation projects and programs in Orange County. The following strategies listed in Table 13 require additional study and coordination to assess existing needs, evaluate potential impact, and ensure any project and policy development are in alignment with broader goals.





Table 13: Delivery Recommendations for OCTA as a Planning Agency

TDM Strategy	Action ID	Delivery Recommendation
S.2 Mobility Hub	S.2.1	Coordinate and collaborate with relevant partners on studies to identify prospective mobility hubs.
S.3 Shared Transportation/ Shuttles	S.3.2, S.3.3	Work with local and regional partners and organizations to identify existing gaps in the transportation network.
S.4 Shared Micromobility Program	S.4.1, S.4.2, S.4.3, S.4.5	Identify priority areas to pilot micromobility programs and support local jurisdictions by developing guidance on implementing discounts for eligible individuals to enhance accessibility.
PP.2 Motor Vehicle Restriction Zones	PP.2.1	Support partners in leading the implementation of Motor Vehicle Restriction Zones, as appropriate.
PP.3 Parking Supply Management	PP.3.1	Develop a parking management handbook or toolbox in coordination with local jurisdictions.
PP.4 TDM Ordinance and Policy Development	PP.4.5	Lead in development of TDM policy guidance or a framework for policy that the cities could use.
PP.5 Transit Oriented Development and Non-SOV Supportive Land Use	PP.5.1	Continue to explore TOD opportunities on OCTA-owned properties and mobility hub concepts at transit stops and stations.
IS.3 Universal Design Transit Enhancements	IS.3.1	Identify transit stations that needs the most improvements for wayfinding and accessibility.

County Coordinator

Beyond its role in planning and programming, OCTA serves as a facilitator, ensuring collaboration and coordination among local jurisdictions, transit providers, and other stakeholders to effectively deliver projects, programs, and services. The following table highlights how OCTA can foster partnership, facilitate knowledge sharing, and support the collective implementation of TDM strategies at both the local and countywide levels.

Table 14: Delivery Recommendations for OCTA as a County Coordinator

TDM Strategy	Action ID	Delivery Recommendation
 Commute Preference Surveys	IF.1.1, IF.1.2	Identify opportunities to leverage regional outreach efforts and surveys to capture data on motivations and barriers.
 MaaS/Trip Planning Support	IF.3.3	Work with partners to build a regional MaaS platform.
 Motor Vehicle Restriction Zones	PP.2.2	Facilitate knowledge sharing and coordination among local jurisdictions.
 TDM Ordinance and Policy Development	PP.4.3	Identify internal and external partners to support with TDM policy implementation and enforcement.

OCTA’s Role as the Countywide Transit Agency

As the county’s transit agency, OCTA can leverage its existing marketing and outreach initiatives for its transit services and infrastructure to integrate TDM offerings.

Programming

OCTA oversees and manages several TDM programs and tools such as OC Rideshare, Youth Ride Free and OC Bus app to encourage and support residents and commuters with alternatives to driving. The following recommendations focus on marketing, data collection, technology, and partnership opportunities to expand and improve existing TDM programming efforts.

Table 15: Delivery Recommendations for OCTA Programming as the Countywide Transit Agency

TDM Strategy	Action ID	Delivery Recommendation
IF.1 Commute Preference Survey	IF.1.4	Share data with partners for benchmarking commuter program performance.
IF.3 Mobility as a Service (MaaS)/ Trip Planning Support	IF.3.1, IF.3.2	Increase engagement on transit apps and utilize data to advance innovation.
IF.5 Rewards for Non-SOV Travel	IF.5.3	Expand OC Rewards program to involve the broader business community or school campuses to strengthen program utilization.
IF.6 Subsidization of Non-SOV Travel	IF. 6.1, IF.6.2, IF.6.3	Continue evaluation of existing OCTA subsidy programs to identify opportunities for improvement and expansion.
ME.1 Individualized/Personalized Marketing	ME.1.2	Develop a “Teach the Trainer” ³ program.
ME.2 Safe Routes to School (SRTS) Program	ME.2.1, ME.2.3	Expand OC Step and continue collaboration with SRTS stakeholders to drive program improvement.
IS.2 Bicycle/Transit Integration	IS.2.4	Develop programs to educate transit users about bike-on-transit options.

3 Teach the Trainer Program is a training initiative to train key staff or employees on how to disseminate sustainable travel information and become effective trainers themselves.

Projects and Services

In its role as the transit agency, OCTA is responsible for coordinating with local jurisdictions to improve transit infrastructure and services. The following recommendations focus on supporting local jurisdictions with planning and delivery of infrastructure projects and expanding services that can facilitate multimodal trips.

Table 16: Delivery Recommendations for OCTA Projects and Services as the Countywide Transit Agency

TDM Strategy	Action ID	Delivery Recommendation
PP.1 Complete Streets Policies	PP.1.1	Continue to ensure that complete street projects led by local jurisdictions are compatible with OCTA transit services.
	PP.1.3	Track Complete Street project progress and provide guidance on aligning with local and countywide TDM and transit planning efforts.
IS.2 Bicycle/Transit Integration	IS.2.2	Continue to identify funding opportunities for Bicycle/Transit Integration improvements.
	IS.2.3	Explore expanding bike carrying capacity on buses and trains.

OCTA has multifaceted roles as a planning agency, community coordinator, and transit agency. The delivery recommendations outlined here provide a comprehensive framework for OCTA to define its internal roles and lead efforts in TDM investments, partnerships, programming, and policy development. Additionally, this plan will serve as a strategic guide for securing grants and funding to support the successful implementation of these recommendations.

