# CENTRAL MOBILITY HUB AND CONNECTIONS COMPREHENSIVE MULTIMODAL CORRIDOR PLAN

# Appendix D: Transportation Solution Strategies

D. Transportation Solution Strategies	
D.1. Federal CMP Consistency	
D.2. Summary of Strategies	
Mobility Hub & Flexible Fleet Improvements	
Next OS Improvements	20
Transit Improvements	34
Complete Corridors/Active Transportation(AT) Improvements	40
Freeway Improvements	48

# **D. Transportation Solution Strategies**

## **D.1. Federal CMP Consistency**

Recommendations are consistent with SANDAG's Federal Congestion Management Process (CMP). Proposed projects using federal funds that may add single occupancy vehicle (SOV) capacity undergo evaluation for alternatives that do not induce SOVs prior to programming. Projects captured on the CMP network are regularly monitored through State of the Commute reports. More information, including levels of analysis and reporting, can be found in Appendix N of the 2021 Regional Plan<sup>1</sup>.



<sup>&</sup>lt;sup>1</sup> SANDAG 2021 Regional Plan Appendix N

### D.2. Summary of Strategies

#### **Mobility Hub & Flexible Fleet Improvements**

Mobility Hubs and Flexible Fleets include first-last mile strategies that provide access to key destinations, high-frequency transit networks, and intermodal centers within the study area and area of influence. While the Central Mobility Hub will serve as the anchor hub of mobility services within the CMH and Connections CMCP study area, regional connectivity relies on the support of outlying Mobility Hubs. Mobility Hubs are areas with high concentrations of people, employment, and other key destinations, which can be enhanced by increased amenities and travel choices. The Mobility Hubs provide travelers with on-demand travel options to make short trips around their community and connect to regional transit facilities via Flexible Fleets and active transportation amenities. SANDAG's mobility hub approach fosters connectivity for travelers to essential services and other activities of daily life.

With the airport, Downtown, and other regional destinations such as Sports Arena, Mission Bay and Coronado, the CMH and Connections CMCP study area generates a significant volume of daily trips for work, leisure and regional and international travel. Demographic data projections show significant population and employment growth by 2050, especially along Pacific Highway and in the Midway community. The study area is also home to several social equity focus communities, especially older adults. These communities are expected to grow as new development projects such as veteran homes are being built.

These communities, travelers and workers are faced with serious mobility and accessibility challenges. The street network surrounding the PTC and its neighboring communities sees excessive speeds and largely inadequate infrastructure for pedestrians and cyclists. The CMH and Connections CMCP also includes a series of mobility nodes that will enhance walking, biking, and public transit.

#### Mobility Hubs Key Concepts

Mobility Hubs are broken up into three tiers, with the CMH serving as a key hub for the project area as well as for the San Diego region. Each tier will have some combination of shelters for riders, as well as bike racks, bike lockers, placemaking and wayfinding signage, dynamic flexible parking, and dedicated parking for e-scooters and shared rideables.

The three hub subtypes are Regional Mobility Hubs, Mobility Nodes within the study area, and enhanced transit stops. A brief description of each type of Mobility Hub is provided below.

Regional Mobility Hub – Regional Mobility Hubs cover the largest geographic area of the three
types of mobility hubs. Regional Mobility Hubs were defined as part of SANDAG's 2021 Regional
Plan based on sociodemographic and mobility data. They serve areas of San Diego where
people, jobs and places connect and where existing and planned transit infrastructure can be
leveraged to support daily mobility needs. The Regional Hubs are focus areas where Mobility Hub
strategies and Flexible Fleets can further support a modal shift and changes in travel behaviors.



- Mobility Nodes Mobility Nodes refer to areas within the regional hubs with higher population concentrations and activities that will be served by Flexible Fleet and Mobility Hub amenities. They include areas with higher concentrations of trip origins and/or destinations, higher concentrations of equity-focus communities, and areas expected to grow as a result of city-led programs, plans and private development projects. These nodes span one, two, or a few miles based on community characteristics and are uniquely designed to fulfill a variety of travel needs while strengthening and building a local sense of place. Transit will also connect these nodes to and from these areas of high activity.
- Enhanced stops Enhanced transit stops are sites where either various modes or services converge, such as a transit stop located adjacent to a bike facility, or where multiple routes connect. These enhancements improve the traveler's experience and connectivity.

#### Flexible Fleet Key Concepts

The Flexible Fleets strategy builds on the popularity of shared mobility services such as on-demand rideshare, bikeshare, and scootershare—these fleets provide mobility options for all types of trips, including package deliveries, which can reduce the need to own a car. The variety of services makes it easier to connect to high-speed transit and other important destinations by providing a first and last-mile connection or fulfilling a complete trip.

A trip using a Flexible Fleet can be reserved through a mobile app. Public agencies are working with the private sector to ensure there are options for people without a smartphone or credit card who would like to use the service.

- **Micromobility** includes small, low-speed, vehicles like e-scooters, bikes, and other rideables to provide short trips around a community.
- Rideshare allows riders headed to similar destinations to share a ride together. This includes
  carpool, vanpool, and pooled ride hailing services such as UberPOOL and Lyft Shared.
  Eventually these services may operate autonomously with vehicles designed exclusively around
  passenger needs.
- Microtransit is typically a multi-passenger shuttle that can carry up to 15 passengers and provide
  rides within a defined service area. This technology-enabled transit service allows users to
  reserve a ride ahead of time or on-demand. Smaller, all-electric shuttles, also known as
  neighborhood electric vehicles (NEV), are another form of microtransit that provides a sustainable
  and convenient solution for short trips around communities.
- **Ridehailing** services enable someone to request a ride in real-time. Services link the passenger with available drivers based on their trip length, number of passengers, origin, and destination. This includes services such as Uber, Lyft, and taxis. Ridehailing services may be autonomous in the future.



Table D-1: Mobility Hub and Flexible Fleet Transportation Solution Strategies

#### Mobility Hub and Flexible Fleet Transportation Solution Strategies Included in **Exact Expected** 2021 Refined If Included. Match to Year if the 2021 **Strategy Name Description** what's the RP Strategy RP 2021 not in ID 2021 RP #? Year RP? 2021 RP Network Mobility Hub - All Wayfinding Signage MH01 N/A N/A 2025 No No MH02 Mobility Hub - All Placemaking amenities including resting No No N/A N/A 2025 areas and shade, benches, device charging stations, landscaping and public art MH03 PTC Mobility Hub Parking corrals for shared rideables No No N/A N/A 2025 PTC Mobility Hub Lockers for safe retail deliveries MH04 No No N/A N/A 2025 PTC Mobility Hub MH05 Bike lockers and fix-it stations No N/A N/A 2025 No MH06 PTC Mobility Hub Dynamic / flexible parking No No N/A N/A 2030 PTC Mobility Hub MH07 Multilingual interactive kiosks No No N/A N/A 2030 **MH08** PTC Mobility Hub TNC / KissNRide dedicated area No N/A N/A 2030 No Ocean Beach Parking corrals for rideables 2025 MH09 No No N/A N/A Mobility Node EV and e-bike chargers MH10 Ocean Beach No No N/A N/A 2030 Mobility Node Ocean Beach N/A 2025 MH11 Lockers for safe retail deliveries No N/A No Mobility Node

Refined Strategy ID	Strategy Name	Description	Included in the 2021 RP Network	Exact Match to 2021 RP?	If Included, what's the 2021 RP #?	2021 RP Year	Expected Year if not in 2021 RP
MH12	Ocean Beach Mobility Node	Bike lockers and fix-it stations	No	No	N/A	N/A	2025
MH13	Ocean Beach Mobility Node	Dynamic / flexible parking	No	No	N/A	N/A	2035
MH14	Ocean Beach Mobility Node	Multilingual interactive kiosks	No	No	N/A	N/A	2025
MH15	Sports Arena Mobility Node	Parking corrals for rideables	No	No	N/A	N/A	2035
MH16	Sports Arena Mobility Node	EV and e-bike chargers	No	No	N/A	N/A	2035
MH17	Sports Arena Mobility Node	Lockers for safe retail deliveries	No	No	N/A	N/A	2035
MH18	Sports Arena Mobility Node	Bike lockers and fix-it stations	No	No	N/A	N/A	2035
MH19	Uptown Mobility Node	Parking corrals for rideables	No	No	N/A	N/A	2025
MH20	Uptown Mobility Node	Dynamic / flexible parking	No	No	N/A	N/A	2035
MH21	Uptown Mobility Node	Bike Lockers and Fix-it Stations	No	No	N/A	N/A	2025
MH22	Uptown Mobility Node	EV and e-bike chargers	No	No	N/A	N/A	2025
MH23	Uptown Mobility Node	Multilingual interactive kiosks	No	No	N/A	N/A	2025

Refined Strategy ID	Strategy Name	Description	Included in the 2021 RP Network	Exact Match to 2021 RP?	If Included, what's the 2021 RP #?	2021 RP Year	Expected Year if not in 2021 RP
MH24	Downtown/Little Italy Mobility Node	Lockers for safe retail deliveries	No	No	N/A	N/A	2025
MH25	Downtown/Little Italy Mobility Node	Parking corrals for rideables	No	No	N/A	N/A	2025
MH26	Downtown/Little Italy Mobility Node	Bike Lockers and Fix-it Stations	No	No	N/A	N/A	2025
MH27	Downtown/Little Italy Mobility Node	Dynamic / flexible parking	No	No	N/A	N/A	2035
MH28	Downtown/Little Italy Mobility Node	Multilingual interactive kiosks	No	No	N/A	N/A	2025
MH29	Downtown/City College Mobility Node	Lockers for safe retail deliveries	No	No	N/A	N/A	2025
MH30	Downtown/City College Mobility Node	Parking corrals for rideables	No	No	N/A	N/A	2025
MH31	Downtown/City College Mobility Node	Bike Lockers and Fix-it Stations	No	No	N/A	N/A	2025

Refined Strategy ID	Strategy Name	Description	Included in the 2021 RP Network	Exact Match to 2021 RP?	If Included, what's the 2021 RP #?	2021 RP Year	Expected Year if not in 2021 RP
MH32	Downtown/City College Mobility Node	Dynamic / flexible parking	No	No	N/A	N/A	2035
MH33	Downtown/City College Mobility Node	Multilingual interactive kiosks	No	No	N/A	N/A	2025
MH34	Downtown/ Imperial Transit Center Mobility Node	Parking corrals for rideables	No	No	N/A	N/A	2025
MH35	Downtown/ Imperial Transit Center Mobility Node	Bike Lockers and Fix-it Stations	No	No	N/A	N/A	2025
MH36	Downtown/ Imperial Transit Center Mobility Node	Lockers for safe retail deliveries	No	No	N/A	N/A	2025
MH37	Downtown/ Imperial Transit Center Mobility Node	Dynamic / flexible parking	No	No	N/A	N/A	2035
MH38	Downtown/ Imperial Transit Center Mobility Node	Multilingual interactive kiosks	No	No	N/A	N/A	2025



Refined Strategy ID	Strategy Name	Description	Included in the 2021 RP Network	Exact Match to 2021 RP?	If Included, what's the 2021 RP #?	2021 RP Year	Expected Year if not in 2021 RP
MH39	Ocean Beach Next Gen Rapid Enhanced Stop	Multilingual interactive kiosks	No	No	N/A	N/A	2025
MH40	Ocean Beach Next Gen Rapid Enhanced Stop	Personal device charging stations	No	No	N/A	N/A	2025
MH41	Ocean Beach Next Gen Rapid Enhanced Stop	Dynamic / flexible parking	No	No	N/A	N/A	2035
MH42	Ocean Beach Next Gen Rapid Enhanced Stop	TNC / curb drop off dedicated area	No	No	N/A	N/A	2025
MH43	Ocean Beach Next Gen Rapid Enhanced Stop	Seating and shelter	No	No	N/A	N/A	2025
MH44	Ocean Beach Next Gen Rapid Enhanced Stop	Bike Racks	No	No	N/A	N/A	2025
MH45	Ocean Beach Next Gen Rapid Enhanced Stop	Parking corrals for rideables	No	No	N/A	N/A	2025
MH46	Sunset Cliffs Next Gen Rapid Enhanced Stop	Multilingual interactive kiosks	No	No	N/A	N/A	2025



Refined Strategy ID	Strategy Name	Description	Included in the 2021 RP Network	Exact Match to 2021 RP?	If Included, what's the 2021 RP #?	2021 RP Year	Expected Year if not in 2021 RP
MH47	Sunset Cliffs Next Gen Rapid Enhanced Stop	Personal device charging stations	No	No	N/A	N/A	2025
MH48	Sunset Cliffs Next Gen Rapid Enhanced Stop	Dynamic / flexible parking	No	No	N/A	N/A	2035
MH49	Sunset Cliffs Next Gen Rapid Enhanced Stop	TNC / curb drop off dedicated area	No	No	N/A	N/A	2025
MH50	Sunset Cliffs Next Gen Rapid Enhanced Stop	Seating and shelter	No	No	N/A	N/A	2025
MH51	Sunset Cliffs Next Gen Rapid Enhanced Stop	Bike Racks	No	No	N/A	N/A	2025
MH52	Sunset Cliffs Next Gen Rapid Enhanced Stop	Parking corrals for rideables	No	No	N/A	N/A	2025
MH53	Shelter Island Next Gen Rapid Enhanced Stop	Multilingual interactive kiosks	No	No	N/A	N/A	2025
MH54	Shelter Island Next Gen Rapid Enhanced Stop	Personal device charging stations	No	No	N/A	N/A	2025



Refined Strategy ID	Strategy Name	Description	Included in the 2021 RP Network	Exact Match to 2021 RP?	If Included, what's the 2021 RP #?	2021 RP Year	Expected Year if not in 2021 RP
MH55	Shelter Island Next Gen Rapid Enhanced Stop	Dynamic / flexible parking	No	No	N/A	N/A	2035
MH56	Shelter Island Next Gen Rapid Enhanced Stop	TNC / curb drop off dedicated area	No	No	N/A	N/A	2025
MH57	Shelter Island Next Gen Rapid Enhanced Stop	Seating and shelter	No	No	N/A	N/A	2025
MH58	Shelter Island Next Gen Rapid Enhanced Stop	Bike Racks	No	No	N/A	N/A	2025
MH59	Shelter Island Next Gen Rapid Enhanced Stop	Parking corrals for rideables	No	No	N/A	N/A	2025
MH60	Naval Base Point Loma Next Gen Rapid Enhanced Stop	Multilingual interactive kiosks	No	No	N/A	N/A	2025
MH61	Naval Base Point Loma Next Gen Rapid Enhanced Stop	Personal device charging stations	No	No	N/A	N/A	2025



#### Mobility Hub and Flexible Fleet Transportation Solution Strategies Included in **Exact Expected** 2021 Refined If Included, the 2021 Match to Year if RP Strategy **Strategy Name Description** what's the 2021 RP not in 2021 RP #? ID Year RP? 2021 RP **Network** MH62 **Naval Base Point** Dynamic / flexible parking No No N/A N/A 2035 Loma Next Gen Rapid Enhanced Stop **Naval Base Point** TNC / curb drop off dedicated area MH63 No No N/A N/A 2025 Loma Next Gen Rapid Enhanced Stop MH64 Seating and shelter N/A Naval Base Point No N/A 2025 No Loma Next Gen Rapid Enhanced Stop MH65 Naval Base Point Bike Racks N/A N/A 2025 No No Loma Next Gen Rapid Enhanced Stop MH66 Naval Base Point Parking corrals for rideables No No N/A N/A 2025 Loma Next Gen Rapid Enhanced Stop Liberty Station Next Multilingual interactive kiosks N/A N/A 2025 **MH67** No No Gen Rapid **Enhanced Stop** Liberty Station Next MH68 Personal device charging stations No No N/A N/A 2025 Gen Rapid



**Enhanced Stop** 

Refined Strategy ID	Strategy Name	Description	Included in the 2021 RP Network	Exact Match to 2021 RP?	If Included, what's the 2021 RP #?	2021 RP Year	Expected Year if not in 2021 RP
MH69	Liberty Station Next Gen Rapid Enhanced Stop	Dynamic / flexible parking	No	No	N/A	N/A	2035
MH70	Liberty Station Next Gen Rapid Enhanced Stop	TNC / curb drop off dedicated area	No	No	N/A	N/A	2025
MH71	Liberty Station Next Gen Rapid Enhanced Stop	Seating and shelter	No	No	N/A	N/A	2025
MH72	Liberty Station Next Gen Rapid Enhanced Stop	Bike Racks	No	No	N/A	N/A	2025
MH73	Liberty Station Next Gen Rapid Enhanced Stop	Parking corrals for rideables	No	No	N/A	N/A	2025
MH74	Uptown Next Gen Rapid Enhanced Stop	Multilingual interactive kiosks	No	No	N/A	N/A	2025
MH75	Uptown Next Gen Rapid Enhanced Stop	Personal device charging stations	No	No	N/A	N/A	2025
MH76	Uptown Next Gen Rapid Enhanced Stop	Dynamic / flexible parking	No	No	N/A	N/A	2035
MH77	Uptown Next Gen Rapid Enhanced	TNC / curb drop off dedicated area	No	No	N/A	N/A	2025

	Mobilit	ty Hub and Flexible Fleet T	ransportation	Solution	Strategies		
Refined Strategy ID	Strategy Name	Description	Included in the 2021 RP Network	Exact Match to 2021 RP?	If Included, what's the 2021 RP #?	2021 RP Year	Expected Year if not in 2021 RP
	Stop						
MH78	Uptown Next Gen Rapid Enhanced Stop	Seating and shelter	No	No	N/A	N/A	2025
MH79	Uptown Next Gen Rapid Enhanced Stop	Bike Racks	No	No	N/A	N/A	2025
MH80	Uptown Next Gen Rapid Enhanced Stop	Parking corrals for rideables	No	No	N/A	N/A	2025
MH81	UCSD Medical Center Next Gen Rapid Enhanced Stop	Multilingual interactive kiosks	No	No	N/A	N/A	2025
MH82	UCSD Medical Center Next Gen Rapid Enhanced Stop	Personal device charging stations	No	No	N/A	N/A	2025
МН83	UCSD Medical Center Next Gen Rapid Enhanced Stop	Dynamic / flexible parking	No	No	N/A	N/A	2035
MH84	UCSD Medical Center Next Gen Rapid Enhanced Stop	TNC / curb drop off dedicated area	No	No	N/A	N/A	2025

#### Mobility Hub and Flexible Fleet Transportation Solution Strategies Included in **Exact Expected** Refined 2021 If Included, the 2021 Match to Year if RP Strategy **Strategy Name Description** what's the RP 2021 not in 2021 RP #? ID Year RP? 2021 RP **Network** MH85 **UCSD Medical** Seating and shelter No No N/A N/A 2025 Center Next Gen Rapid Enhanced Stop MH86 **UCSD Medical** N/A Bike Racks No No N/A 2025 Center Next Gen Rapid Enhanced Stop **UCSD Medical** Parking corrals for rideables N/A MH87 N/A 2025 No No Center Next Gen Rapid Enhanced Stop N/A **MH88** Downtown / Little Multilingual interactive kiosks No No N/A 2025 Italy Next Gen Rapid **Enhanced Stop** MH89 Downtown / Little Personal device charging stations No N/A N/A 2025 No Italy Next Gen Rapid **Enhanced Stop** MH90 Downtown / Little Dynamic / flexible parking No N/A N/A 2035 No Italy Next Gen Rapid Enhanced Stop



#### Mobility Hub and Flexible Fleet Transportation Solution Strategies Included in **Exact Expected** 2021 Refined If Included. the 2021 Match to Year if RP Strategy **Strategy Name Description** what's the 2021 RP not in 2021 RP #? ID Year RP? 2021 RP **Network** MH91 Downtown / Little TNC / curb drop off dedicated area No No N/A N/A 2025 Italy Next Gen Rapid **Enhanced Stop** MH92 Seating and shelter N/A Downtown / Little No No N/A 2025 Italy Next Gen Rapid **Enhanced Stop** N/A MH93 Downtown / Little Bike Racks N/A 2025 No No Italy Next Gen Rapid Enhanced Stop N/A MH94 Downtown / Little Parking corrals for rideables No No N/A 2025 Italy Next Gen Rapid **Enhanced Stop** FF01 Flexible Fleet -Micromobility fleet (shared e-bikes and N/A N/A 2035 No No Ocean Beach e-scooter) FF02 Flexible Fleet -Carshare No No N/A N/A 2035 Ocean Beach FF03 Flexible Fleet -Microtransit service from transit to beach 2035 No No N/A N/A Ocean Beach FF04 Flexible Fleet -Micromobility fleet (shared e-bikes and No No N/A N/A 2035 Sports Arena e-scooter) Boulevard



Refined Strategy ID	Strategy Name	Description	Included in the 2021 RP Network	Exact Match to 2021 RP?	If Included, what's the 2021 RP #?	2021 RP Year	Expected Year if not in 2021 RP
FF05	Flexible Fleet - Sports Arena Boulevard	Carshare	No	No	N/A	N/A	2035
FF06	Flexible Fleet - Sports Arena Boulevard	Microtransit service from transit to Sports Arena and commercial destinations	No	No	N/A	N/A	2035
FF07	Flexible Fleet Uptown	Micromobility fleet (shared e-bikes and e-scooter)	No	No	N/A	N/A	2035
FF08	Flexible Fleet Uptown	Carshare	No	No	N/A	N/A	2035
FF09	Flexible Fleet Uptown	Microtransit service along University	No	No	N/A	N/A	2035
FF10	Flexible Fleet - Downtown - Little Italy	Micromobility fleet (shared e-bikes and e-scooter)	No	No	N/A	N/A	2035
FF11	Flexible Fleet - Downtown - Little Italy	Carshare	No	No	N/A	N/A	2035
FF12	Flexible Fleet - Downtown - City College	Micromobility fleet (shared e-bikes and e-scooter)	No	No	N/A	N/A	2035
FF13	Flexible Fleet - Downtown - City College	Carshare	No	No	N/A	N/A	2035



#### Mobility Hub and Flexible Fleet Transportation Solution Strategies Included in **Exact Expected** 2021 Refined If Included, the 2021 Match to Year if RP Strategy **Strategy Name Description** what's the RP 2021 not in 2021 RP #? ID Year RP? 2021 RP **Network NEV around Liberty Station** FF14 Flexible Fleet -No No N/A N/A 2035 Liberty Station Next Gen Rapid Stop FF15 Flexible Fleet -Carshare N/A No No N/A 2035 Liberty Station Next Gen Rapid Stop FF16 Flexible Fleet -Micromobility fleet (shared e-bikes and N/A No No N/A 2035 **Liberty Station Next** e-scooter) Gen Rapid Stop FF17 Flexible Fleet -Microtransit service from transit to No N/A N/A 2035 No UCSD Medical hospital facility Center Next Gen Rapid Enhanced Stop FF18 Flexible Fleet -Carshare No No N/A N/A 2035 **UCSD Medical** Center Next Gen Rapid Enhanced Stop



Mobility Hub and Flexible Fleet Transportation Solution Strategies										
Refined Strategy ID	Strategy Name	Description	Included in the 2021 RP Network	Exact Match to 2021 RP?	If Included, what's the 2021 RP #?	2021 RP Year	Expected Year if not in 2021 RP			
FF19	Flexible Fleet - UCSD Medical Center Next Gen Rapid Enhanced Stop	Micromobility fleet (shared e-bikes and e-scooter)	No	No	N/A	N/A	2035			

#### **Next OS Improvements**

Next OS is the "brain" of the entire San Diego transportation system. It is a digital environment that: compiles transit, roadway, and mobility information from sources like passenger vehicles, delivery trucks, e-bikes, and scooters into a centralized data hub; analyzes this data to improve how transportation is planned, operated, and experienced; and shares this data with service operators and travelers alike. For example, Next OS ingests freeway traffic data, calculates travel time and compares this time to transit travel time, and notifies travelers via mobile application the fastest option.

Next OS makes the San Diego transportation system smarter, allowing it to adapt and respond to changing conditions throughout the day. For example, travel lanes on Complete Corridors can be dedicated to different uses or modes at different times of day depending on historic and irregular traffic levels. Next OS feeds service providers and transportation operators' dashboards with real-time data about road conditions and demand to optimize service.

Next OS provides travelers with timely and accurate information about their travel choices so they can make informed decisions about the best modes or routes for their trip. Mobile applications and interactive kiosks can be used to access real-time information and browse for, book, and pay for any mobility service.

Next OS can also inform planners and policymakers using data that provides a clear perspective on how the San Diego transportation system is functioning and what improvements might be needed and where. Next OS would complement the proposed TSS by integrating data, performing analysis, and making this information accessible to the public, thereby enabling the mobility benefits under considerations.

#### **Key Concepts**

- Active Transportation Demand Management (ATDM) technology enables transportation
  operators to modify how infrastructure and services are used based on changing traffic
  conditions. This also allows operators to make more use of existing roads and offers an
  alternative to costly road expansion. Real-time travel information helps people decide how,
  where, and when to travel to avoid congestion and dangerous driving conditions, thereby
  supporting mode shift.
- Active Traffic Management (ATM) technology enables operators to dynamically manage the
  roadway based on recurrent and non-recurrent congestion and traffic patterns. This strategy
  improves the efficiency and throughput of the freeway or roadway while simultaneously providing
  benefit to traveler safety. When integrated regionally, ATM can aid congestion management and
  travel time-reliability throughout the transportation system.
- Smart infrastructure and connected vehicles use high-speed communication networks to
  enable connected vehicles, smartphones, and smart roads to share data, which can help reduce
  collisions, increase network capacity, and improve travel times.
- Priority for transit, active transportation, and shared mobility services, including smart
  intersections, flexible lanes, dedicated transit lanes, micromobility lanes, and separate space for
  people who walk and bike. Priority enabled infrastructure and technology make traveling by
  transit, bike, or foot safer, faster, and more comfortable. More people choosing shared
  transportation options leads to better air quality.



Table D-2: Next OS Transportation Solution Strategies

	Next OS Transportation Solution Strategies										
Refined Strategy ID	Strategy Name	Description	Included in the 2021 RP Network	Exact Match to 2021 RP?	If Included, what's the 2021 RP #?	2021 RP Year	Expected Year if not in 2021 RP				
NO01	Next OS - Data Hub	High-speed data analytics, data repository, and data performance management platform that will bring together public transportation data and develop a public–private information exchange with companies such as transportation network companies and micromobility fleets. Micromobility and other flexible fleets will benefit from a consolidated database given the decentralized nature of the service. In addition, data hub should support complete corridor performance monitoring and metrics to support optimization of dynamic lane management for Active Traffic Management (ATM) and Active Transportation Demand Management (ATMD).	Yes	Yes	NO01	2035	N/A				
NO02	Next OS - Curb Access and Parking	Dynamic management of curbs including access and pricing rules. Overall functionality to be applied in proximity to neighborhood mobility hubs and where flex lanes are designated. Can also be applied throughout the study area where higher densities of commercial and residential uses occur, and the strategy would assist with reducing static parking requirements and allowing increased PUDO (pick-up/drop-off) areas.	Yes	Yes	NO02	2035	N/A				
NO03	Next OS - Transit Optimization	Dynamic transit routing, scheduling, and communications, already some functionality in place regionally, but enhanced optimization would include improved monitoring of traffic conditions and ensuring optimal use of ATDM functions.	Yes	Yes	NO03	2035	N/A				

		Next OS Transportation S	olution Stra	tegies			
Refined Strategy ID	Strategy Name	Description	Included in the 2021 RP Network	Exact Match to 2021 RP?	If Included, what's the 2021 RP #?	2021 RP Year	Expected Year if not in 2021 RP
NO04	Next OS - Mobility as a Service App	Application to plan, book, and pay across public and private shared services. Relies on the sharing of information between public and private providers. This function should be provided regionally and leveraged in the study area to promote transit and alternative modes and lower obstacles to greater mode shifts.	Yes	Yes	NO04	2035	N/A
NO05	Next OS - Smart Intersections - Pacific Highway1	Install smart Intersection technology to give priority to transit, freight and emergency vehicles and reduce intersection conflicts between vehicles, pedestrians, and cyclists, improving safety for vulnerable road users.	Yes	No	NO05	2025	N/A
NO06	Next OS - Smart Intersections - Pacific Highway2	Install smart Intersection technology to give priority to transit, freight and emergency vehicles and reduce intersection conflicts between vehicles, pedestrians, and cyclists, improving safety for vulnerable road users.	Yes	No	NO05	2025	N/A
NO07	Next OS - Smart Intersections - Rosecrans St	Install smart Intersection technology to give priority to transit, freight and emergency vehicles and reduce intersection conflicts between vehicles, pedestrians, and cyclists, improving safety for vulnerable road users.	Yes	No	NO05	2025	N/A
NO08	Next OS - Smart Intersections - Sports Arena Blvd	Install smart Intersection technology to give priority to transit, freight and emergency vehicles and reduce intersection conflicts between vehicles, pedestrians, and cyclists, improving safety for vulnerable road users.	Yes	No	NO05	2025	N/A



		Next OS Transportation S	Solution Stra	tegies			
Refined Strategy ID	Strategy Name	Description	Included in the 2021 RP Network	Exact Match to 2021 RP?	If Included, what's the 2021 RP #?	2021 RP Year	Expected Year if not in 2021 RP
NO09	Next OS - Smart Intersections - W Point Loma Blvd	Install smart Intersection technology to give priority to transit, freight and emergency vehicles and reduce intersection conflicts between vehicles, pedestrians, and cyclists, improving safety for vulnerable road users.	Yes	No	NO05	2025	N/A
NO10	Next OS - Smart Intersections - 5th Ave	Install smart Intersection technology to give priority to transit, freight and emergency vehicles and reduce intersection conflicts between vehicles, pedestrians, and cyclists, improving safety for vulnerable road users.	Yes	No	NO05	2025	N/A
NO11	Next OS - Smart Intersections - Barnett Dr	Install smart Intersection technology to give priority to transit, freight and emergency vehicles and reduce intersection conflicts between vehicles, pedestrians, and cyclists, improving safety for vulnerable road users.	Yes	No	NO05	2025	N/A
NO12	Next OS - Smart Intersections - W Washington	Install smart Intersection technology to give priority to transit, freight and emergency vehicles and reduce intersection conflicts between vehicles, pedestrians, and cyclists, improving safety for vulnerable road users.	Yes	No	NO05	2025	N/A
NO13	Next OS - Smart Intersections - N Harbor Dr	Install smart Intersection technology to give priority to transit, freight and emergency vehicles and reduce intersection conflicts between vehicles, pedestrians, and cyclists, improving safety for vulnerable road users.	Yes	No	NO05	2025	N/A



		Next OS Transportation S	olution Stra	tegies			
Refined Strategy ID	Strategy Name	Description	Included in the 2021 RP Network	Exact Match to 2021 RP?	If Included, what's the 2021 RP #?	2021 RP Year	Expected Year if not in 2021 RP
NO14	Next OS - Next Generation Integrated Corridor Management System	Provide coordinated response and control for real- time operations across freeway, arterials, and transit networks as part of the broader complete corridors concept in the study area. In particular, ICMS functions should support and integrate with the ATM/ATDM features and provide for improved mobility between the designated ATDM and the smart intersection/flex lane facilities under recurring and non-recurring congestion conditions.	Yes	No	NO06	2035	N/A
NO15	Next OS - Systems and Software	Enables regional transportation system operators to collect, analyze, and share data to improve transportation systems management and operations. This is a regionally enabled function that would be leveraged by the corridor to support a variety of operations and optimization efforts including optimizing transit service and operations, ATM, ATDM, and monitoring the success of ongoing mobility programs.	Yes	Yes	NO08	2035	N/A
NO16	Next OS - Truck Route Data	ATM concepts along the corridor include provisions for a temporal truck lane in areas with significant grades near the Port of San Diego. The scheduled times or actual status of this truck lane should be made available through Next OS to 511SD and associated traveler information systems.	Yes	Yes	NO07-GM56	N/A	N/A



		Next OS Transportation S	olution Stra	tegies			
Refined Strategy ID	Strategy Name	Description	Included in the 2021 RP Network	Exact Match to 2021 RP?	If Included, what's the 2021 RP #?	2021 RP Year	Expected Year if not in 2021 RP
NO17	Next OS - Emergency Response and Other Data	Emergency situations and incidents can significantly impact mobility along key portions of the corridor (e.g. open spaces susceptible to wildfires, etc.) that could limit capacity and impact transit services, truck routing, etc. It is important incidents and situations of this sort leverage Next OS to inform all operations centers and private and public mobility operators of the situation to allow for shifts in operations and to inform travelers of viable alternatives to reduce exacerbating impacts of the situation.	Yes	Yes	NO07-GM61	N/A	N/A
NO18	Next OS - Dynamic Curb Management - Port Transit Center	Physical, signage, and ITS infrastructure at PTC should be implemented to support flexible curb usage and accommodate for changing demand. Curb management may be integrated with smart parking solutions where appropriate.	Yes	No	N/A	N/A	N/A
NO19	Next OS - Dynamic Curb Management - Ocean Beach	Physical, signage, and ITS infrastructure at Ocean Beach Mobility Hub should be implemented to support flexible curb usage and accommodate for changing demand.	Yes	No	N/A	N/A	N/A
NO20	Next OS - Dynamic Curb Management - Sports Arena	Physical, signage, and ITS infrastructure in Midway/Sports Arena Mobility Hub should be implemented to support flexible curb usage and accommodate for changing demand.	Yes	No	N/A	N/A	N/A
NO21	Next OS - Dynamic Curb Management - Uptown	Physical, signage, and ITS infrastructure at Uptown Mobility Hub should be implemented to support of flexible curb usage and accommodate for changing demand. Curb management may be integrated with smart parking solutions where appropriate.	Yes	No	N/A	N/A	N/A



		Next OS Transportation S	olution Stra	tegies			
Refined Strategy ID	Strategy Name	Description	Included in the 2021 RP Network	Exact Match to 2021 RP?	If Included, what's the 2021 RP #?	2021 RP Year	Expected Year if not in 2021 RP
NO22	Next OS - Dynamic Curb Management - Downtown/Little Italy	Physical, signage, and ITS infrastructure at Downtown/Little Italy Mobility Hub should be implemented to support of flexible curb usage and accommodate for changing demand. Curb management may be integrated with smart parking solutions where appropriate.	Yes	No	N/A	N/A	N/A
NO23	Next OS - Dynamic Curb Management - Downtown/City College	Physical, signage, and ITS infrastructure at Downtown/City College Mobility Hub should be implemented to support of flexible curb usage and accommodate for changing demand. Curb management may be integrated with smart parking solutions where appropriate.	Yes	No	N/A	N/A	N/A
NO24	Next OS - Dynamic Lane Assignment	Part of the ATM/ATDM concept, lanes can be dynamically assigned based on temporal conditions and anticipated demands and traffic types. For ATDM this will typically include bus only lanes or bus and HOV lanes, but can also include HOT/Express Lanes or support Connected Autonomous Vehicle designated lanes. Repurpose road space to reflect current or expected demand conditions.	No	No	N/A	N/A	2030
NO25	Next OS - Shoulder Running	Part of the ATM/ATDM concept, shoulder running or "all-lanes running" allows for peak period use of shoulder areas as running lanes presuming the shoulders have been properly upgraded and prepared for regular traffic. Shoulder lanes may be used for transit lanes, truck lanes, or additional auxiliary lanes to support transitions to/from major N/S freeway corridors to the SR-52.	No	No	N/A	N/A	2030



		Next OS Transportation S	olution Stra	tegies			
Refined Strategy ID	Strategy Name	Description	Included in the 2021 RP Network	Exact Match to 2021 RP?	If Included, what's the 2021 RP #?	2021 RP Year	Expected Year if not in 2021 RP
NO26	Next OS - Flexible Travel Lanes - Broadway	Flexible Travel lanes to be dynamically reserved for transit, shuttles, rideshare, carshare and/or electric vehicles to relieve congestion and improve travel times.	No	No	N/A	N/A	2030
NO27	Next OS - Flexible Travel Lanes - 5th St	Flexible Travel lanes to be dynamically reserved for transit, shuttles, rideshare, carshare and/or electric vehicles to relieve congestion and improve travel times.	No	No	N/A	N/A	2030
NO28	Next OS - Flexible Travel Lanes - B St	Flexible Travel lanes to be dynamically reserved for transit, shuttles, rideshare, carshare and/or electric vehicles to relieve congestion and improve travel times.	No	No	N/A	N/A	2030
NO29	Next OS - ATM 1 - All Lanes Running I- 5 from I-8 to SR 94	Active Traffic Management 1: Enables the smooth flow of all traffic modes with a few dedicated lanes to HOV and transit, but all lanes open and running with variable speeds. Electronic signage enables use of shoulder areas, as well as enhanced traffic separation prior to major moves to N/S connecting facilities. ATM includes traveler information functions to warn of incidents and other conditions and would be integrated with regional traveler information solutions such as 511SD.	No	No	N/A	N/A	2030



		Next OS Transportation S	olution Stra	tegies			
Refined Strategy ID	Strategy Name	Description	Included in the 2021 RP Network	Exact Match to 2021 RP?	If Included, what's the 2021 RP #?	2021 RP Year	Expected Year if not in 2021 RP
NO30	Next OS - ATDM 1 - All Lanes Running I- 5 from I-8 to SR 94	Active Transportation and Demand Management 1: Promote a mode shift and support alternative modes along the corridor by integrating with smart intersections, incentivizing mode shifts, designating special transit lanes and ramp access along the ATM enabled areas of the CMH corridor. All lanes running could include utilizing shoulder lanes for transit during an interim period before managed lanes are in place and continued use could support interchange congestion. ATDM would also include integration with supporting traveler information and trip planning functions regionally as provided through systems such as 511SD and others.	No	No	N/A	N/A	2030
NO31	Next OS - ATDM Integration at PTC (Northbound)	In order to support proper access and improve transit service, the configuration of the on-ramps near the proposed PTC location should be adjusted and temporal transit/HOV lanes put in place to support integration of the arterial flex lanes and the ATDM elements on Southbound I-5.	No	No	NA	N/A	2030
NO32	Next OS - ATDM Integration at PTC (Southbound)	In order to support proper access and improve transit service, the configuration of the on-ramps near the proposed PTC location should be adjusted and temporal transit/HOV lanes put in place to support integration of the arterial flex lanes and the ATDM elements on I-5.	No	No	NA	N/A	2030



		Next OS Transportation S	olution Stra	tegies			
Refined Strategy ID	Strategy Name	Description	Included in the 2021 RP Network	Exact Match to 2021 RP?	If Included, what's the 2021 RP #?	2021 RP Year	Expected Year if not in 2021 RP
NO33	Next OS - ATDM Integration at PTC (Eastbound)	In order to support proper access and improve transit service, the configuration of the on-ramps near the proposed PTC location should be adjusted and temporal transit/HOV lanes put in place to support integration of the arterial flex lanes and the ATDM elements on I-8.	No	No	NA	N/A	2030
NO34	Next OS - Incident Management	Install the systems and ITS to coordinate incident detection, response, and clearing and restore traffic flow quickly and safely. This includes enhancement of camera, vehicle detection, and incident detection systems along SR52 and I-805, as well as improved integrated incident management between State and local agencies along the corridor consistent with emerging TSM&O and ICMS efforts.	No	No	N/A	N/A	2030
NO35	Next OS - Incident Response	Systems that prepare and communicate incidents to the community. Responses could dynamically adjust speed, divert or reroute traffic, encourage transit, and reach corridor wide coordination/integration.	No	No	N/A	N/A	2030
NO36	Next OS - Performance Monitoring	Utilize real- time data (speeds, volumes, vehicle occupancy, VSS compliance) to improve performance of transit, carshare, bikeshare, and traffic flows. This information can be used to point users to mobility alternatives and to enforce ATDM and dynamic lane assignments.	No	No	N/A	N/A	2030



		Next OS Transportation S	olution Stra	tegies			
Refined Strategy ID	Strategy Name	Description	Included in the 2021 RP Network	Exact Match to 2021 RP?	If Included, what's the 2021 RP #?	2021 RP Year	Expected Year if not in 2021 RP
NO37	Next OS - Performance Assessment, Evaluation, Optimization	Utilize historical data (vehicle classification, speeds, volumes, vehicle occupancy, VSS compliance) to perform system assessments and evaluations to better understand the impact of network changes and events on performance. Optimize system function informed by this analysis.	No	No	N/A	N/A	2030
NO38	Next OS - Fleet and Vehicle tracking	Consistent with current practice for bus and BRT systems, automatic vehicle location (AVL) functions help operators and the central management system understand the locations of individual vehicles within a transit network. This informs real-time transit information and should support integrated information between MTS provided services and potential private supporting flex fleet services.	No	No	N/A	N/A	2030
NO39	Next OS - Passenger Counting	This function helps to understand passenger demand patterns that can be used to adjust and inform service changes and improvements.	No	No	N/A	N/A	2030
NO40	Next OS - Integrated fare payment and trip-planning portal	Off-board fare payment and routing information makes it more seamless for riders using transit. Riders can pay beforehand for their whole trip and receive guided instructions for their trip, particularly if they are using multiple modes. This function should be regionally integrated with the MaaS functions and leveraged within the study area. Account based approaches such as those being rolled out regionally with Pronto could be leveraged.	No	No	N/A	N/A	2025



		Next OS Transportation S	olution Stra	tegies			
Refined Strategy ID	Strategy Name	Description	Included in the 2021 RP Network	Exact Match to 2021 RP?	If Included, what's the 2021 RP #?	2021 RP Year	Expected Year if not in 2021 RP
NO41	Next OS - Regional Traveler Information/511	Regional traveler information on trip planning, roadway conditions, weather, travel options, congestion, incidents, mobility services, mobility systems status, etc. would be provided for the CMH corridor through regional outlets such as 511SD and other private options receiving data from agency systems. Access to this information would be through multiple means including smartphone apps, web, broadcast through third parties, kiosks at mobility hubs, etc.	Yes	No	N/A	N/A	N/A
NO42	Next OS - Real-time Information	Real-time information allows riders to receive updates on their smartphone or locally placed dynamic signage to know the status of their transit vehicles and ease rider uncertainty.	No	No	N/A	N/A	2025
NO43	Next OS - Wi-Fi	Reliable on-board Wi-Fi is increasingly important as smartphones are widely used and can connect riders to real-time transit information, routing and payment as well for an enhanced experience while riding.	No	No	N/A	N/A	2025
NO44	Next OS - Audio and visual next stop announcements	Consistent with current standard practice ensure all buses and transit are equipped with communication devices to provide next stop announcements letting riders know the next stop and enhancing the customer experience. This feature also helps support the goal of equity for all types of users. This currently exists on MTS fixed route service.	No	No	N/A	N/A	2025
NO45	Next OS - Transportation Management Center	Leverage and operate ATM/ATDM functions through existing operations centers for Caltrans and MTS.	No	No	N/A	N/A	2025



		Next OS Transportation S	olution Stra	tegies			
Refined Strategy ID	Strategy Name	Description	Included in the 2021 RP Network	Exact Match to 2021 RP?	If Included, what's the 2021 RP #?	2021 RP Year	Expected Year if not in 2021 RP
NO46	Next OS - Universal Transportation Account	Leverage regional efforts towards an integrated application providing centralized information related to parking, rideable, mobility-on-demand and fixed route transit. This may leverage current account-based solutions such as Pronto (depending on institutional agreements).	No	No	N/A	N/A	2025
NO47	Next OS - Transit Signal Priority	Part of the smart intersection corridors functionality where signal programming allows transit vehicles to be prioritized at crossings/intersections. Shorter travel times and more reliable service could result from the addition of dedicated lanes paired with signal priority during peak travel hours. Should be integrated with physical infrastructure improvements (e.g. Flex Lanes, etc.) where possible.	No	No	N/A	N/A	2025
NO48	Next OS - Bike Signal Management	Along key active transportation arterials or in known areas of bicycle/auto conflict issues, bike signals (e.g. the green wave) may be installed to incentivize safe bicycle use as well as prioritize bikes on streets.	No	No	N/A	N/A	2025
NO49	Next OS - Smart Parking - PTC	Implement smart parking functionality which provides enhanced information on parking availability, time limitations, costs, and payment in conjunction with curb management and mobility hub efforts.	No	No	N/A	N/A	2030
NO50	Next OS - Smart Parking - Sports Arena	Implement smart parking functionality which provides enhanced information on parking availability, time limitations, costs, and payment in conjunction with curb management and mobility hub efforts.	No	No	N/A	N/A	2025



	Next OS Transportation Solution Strategies										
Refined Strategy ID	Strategy Name	Description	Included in the 2021 RP Network	Exact Match to 2021 RP?	If Included, what's the 2021 RP #?	2021 RP Year	Expected Year if not in 2021 RP				
NO51	Next OS - Smart Parking - Uptown	Implement smart parking functionality which provides enhanced information on parking availability, time limitations, costs, and payment in conjunction with curb management and mobility hub efforts.	No	No	N/A	N/A	2025				
NO52	Next OS - CMH Integrated Management Control Center	Centrally managed command and control center for most if not all different operational elements of the CMH. The control center would allow CMH to centrally integrate and manage the various discrete control systems allowing for analytics for multiple systems and entities, giving a more complete picture of ongoing operations performance by including functions of data management, analytics, visualization, and communications. A digital platform that compiles information from sources like passenger vehicles, delivery trucks, e-bikes, and scooters into a centralized data hub allows operations to be better planned, operated, and experienced.	No	No	N/A	N/A	2030				



#### **Transit Improvements**

Transit improvements create a complete network of high-speed, high-capacity, and high-frequency transit services that connect major residential areas with employment centers and attractions throughout the San Diego region. Transit services would connect to supporting Flexible Fleets and alternative modes at mobility hubs. New high-speed services covering longer distances with limited stops are separated from non-transit vehicular traffic using dedicated lanes. Improvements to existing transit services such as the Trolley, COASTER, SPRINTER, and Rapid may include additional rail tracks, more frequent service, managed lanes or dedicated transit lanes, and traffic signal priority to keep transit moving.

#### **Key Concepts**

- **Commuter Rail** is a high-speed train that serves longer regional trips and typically arrives every 5-10 minutes all day.
- **Light Rail** operates tram (also known as streetcar) services on major streets and improved Trolley services with higher frequencies, expanded service times, and faster travel times. Light rail typically arrives every 10 minutes all day.
- Next Gen Rapid offers fast, frequent, and more reliable bus service that uses transit priority
  measures such as dedicated bus lanes and priority at traffic signals, typically arriving every 10
  minutes all day.
- **Local Bus** services broaden the reach of the transit network into diverse neighborhoods, with buses arriving every 15 to 60 minutes depending on local need and demand.
- Microtransit completes the transit network by expanding access to transit into areas difficult to reach by buses. Microtransit is typically a multi-passenger shuttle that operates within a defined service area without fixed routes or schedules, arriving when summoned through a smartphone app.



Table D-3: Transit Transportation Solution Strategies

Transit Transportation Solution Strategies											
Refined Strategy ID	Strategy Name	Description	Included in the 2021 RP Network	Exact Match to 2021 RP?	If Included, what's the 2021 RP #?	2021 RP Year	Expected Year if not in 2021 RP				
TR01	Rapid 28	Proposed Rapid route from Point Loma to Kearny Mesa via Central Mobility Hub, Linda Vista	Yes	No	TL18	2035	N/A				
TR02	Rapid 910	Proposed Rapid route from Coronado to Downtown via Coronado Bridge	Yes	Yes	TL52	2035	N/A				
TR03	Rapid 120	Proposed Rapid route from Kearny Mesa to Downtown via Mission Valley	Yes	Yes	TL 28	2035	N/A				
TR04	Airport Connection 577	PTC to Airport via Car Rental Lot and Harbor Island East Basin	Yes	No	TL56	2035	N/A				
TR05	Tram 555	Downtown to Logan Heights, Golden Hill, South Park, North Park, University Heights, Hillcrest	Yes	Yes	TL18	2050	N/A				
TR06	Route 583	Proposed high speed commuter rail line from the PTC to the U.S. Border via Downtown San Diego	Yes	No	TL04	2050	N/A				

Transit Transportation Solution Strategies											
Refined Strategy ID	Strategy Name	Description	Included in the 2021 RP Network	Exact Match to 2021 RP?	If Included, what's the 2021 RP #?	2021 RP Year	Expected Year if not in 2021 RP				
TR07	Light Rail Transit PTC to OB	Proposed SPUR light rail transit line from Port Transit Center to Ocean Beach	No	No	N/A	N/A	2050				
TR09	Rapid 10 Phase 2	La Mesa to Ocean Beach via Mid-City, Hillcrest, Central Mobility Hub (full version of Rapid)	Yes	No	TL20	2035	N/A				
TR10	Rapid 12 Phase 2	Spring Valley to PTC via Southeast San Diego (full version of Rapid)	Yes	No	TL21	2035	N/A				
TR11	NCTD 398	Update of existing NCTD 398 route to include Stop connection at proposed PTC.	Yes	No	Existing	2025	N/A				
TR12	Route 10	Update of existing MTS 10 route to include Stop connection at proposed PTC.	Yes	No	Existing	2025	N/A				
TR13	Route 30	Update of existing MTS 30 route to include Stop connection at proposed PTC.	Yes	No	Existing	2025	N/A				



	Transit Transportation Solution Strategies											
Refined Strategy ID	Strategy Name	Description	Included in the 2021 RP Network	Exact Match to 2021 RP?	If Included, what's the 2021 RP #?	2021 RP Year	Expected Year if not in 2021 RP					
TR14	Route 923	Update of existing MTS 923 route to include Stop connection at proposed PTC.	Yes	No	Existing	2025	N/A					
TR15	Route 992	Update of existing MTS 992 route to include Stop connection at proposed PTC.	Yes	No	Existing	2025	N/A					
TR16	Rapid 235	Downtown San Diego to Escondido Next Gen Rapid Route. Updated 2021 RP Strategy to extend to PTC via Pacific Hwy	Yes	No	Existing	2025	N/A					
TR18	Broadway Dedicated Transit Lane Segment	Proposed dedicated transit only lane segment along Broadway	Yes	No	N/A	N/A	2030					
TR19	B Street Dedicated Transit Lane Segment	Proposed dedicated transit only lane segment along Broadway from 16th St to 4th St	Yes	No	N/A	N/A	2030					



		Transit Transpo	ortation Sol	ution Strat	egies		
Refined Strategy ID	Strategy Name	Description	Included in the 2021 RP Network	Exact Match to 2021 RP?	If Included, what's the 2021 RP #?	2021 RP Year	Expected Year if not in 2021 RP
TR20	N Harbor Drive Dedicated Transit Lane Segment	Proposed dedicated transit only lane segment along N Harbor Drive from Rosecrans St to Broadway	Yes	No	N/A	N/A	2030
TR22	Pacific Highway Dedicated Transit Lane Segment	Proposed dedicated transit only lane segment along Pacific Hwy from Taylor St to PTC	Yes	No	N/A	N/A	2030
TR23	Pacific Highway Dedicated Transit Lane Segment	Proposed dedicated transit only lane segment along Pacific Hwy from Broadway to Laurel St	Yes	No	N/A	N/A	2030
TR24	Rosecrans Street Dedicated Transit Lane Segment	Proposed dedicated transit only lane segment along Rosecrans St from Gate Rd to Barnett Ave	Yes	No	N/A	N/A	2030
TR25	Barnett Avenue Dedicated Transit Lane Segment	Proposed dedicated transit only lane segment along Barnett Avenue from Rosecrans St to Pacific Hwy	Yes	No	N/A	N/A	2030



	Transit Transportation Solution Strategies											
Refined Strategy ID	Strategy Name			Exact Match to 2021 RP?	If Included, what's the 2021 RP #?	2021 RP Year	Expected Year if not in 2021 RP					
TR26	Sports Arena Blvd Dedicated Transit Lane Segment	Proposed dedicated transit lane segment along Sports Arena Boulevard from W Point Loma Dr to Pacific Hwy	Yes	No	N/A	N/A	2030					
TR27	Point Loma Blvd Dedicated Transit Lane Segment	Proposed dedicated transit lane segment along Point Loma Blvd from Midway Dr to Cable St	Yes	No	N/A	N/A	2030					
TR28	Hancock Street Dedicated Transit Lane Segment	Proposed dedicated transit lane segment along Hancock St from Rosecrans St to Kurtz St	No	No	N/A	N/A	2030					
TR29	Kurtz Street Dedicated Transit Lane Segment	Proposed dedicated transit lane segment along Kurtz St from Rosecrans St to Hancock St	No	No	N/A	N/A	2030					



# Complete Corridors/Active Transportation(AT) Improvements

Complete Corridors provide a variety of travel choices and use technology to manage how highways and major roads are used in real-time. They provide a balance of dedicated, safe space for everyone, including people who walk, bike, and use Flexible Fleets. SANDAG is planning for a regional network of Complete Corridors on major roads and highways. The proposed network intertwines with the adopted regional bike network to create seamless connections within communities and across jurisdictions. Complete Corridors create a backbone for Flexible Fleets and Transit Leap services by combining infrastructure and technology solutions.

Active Transportation Improvements were developed with the goal of increasing connectivity by closing gaps along key travel routes and enhancing safety for all travelers by minimizing conflicts with vehicles to the greatest extent feasible. The specific location and type of facility for each improvement was based on connectivity needs, planned development in the area, and existing opportunities and constraints of the built environment.

## **Key Concepts**

Active transportation such as cycling and walking can serve whole trips or provide first and last-mile connections to other forms of transportation.

- Class I (Bike Path) a path separated from vehicle traffic for shared use by cyclists, pedestrians, and other non-motorized users with minimal vehicle crossings. Some paths may have restricted access or speed limits.
- Class II (Bike Lane) a striped lane for one-way bike travel on a roadway.
- Class III (Bike Route) bike riders share the roadway with motor vehicles. This bikeway type may be designated with signs only but may also include shared lane markings called "sharrows."
- Class IV (Separated Bikeway) an on-street bike lane that is physically separated from moving vehicles by parked cars or bollards.

In addition to the four bicycle facility classifications recognized by Caltrans, SANDAG recognizes a fifth type of facility called a Bike Boulevard.

Bike Boulevards accommodate cyclists and motorists through Class II or III bike facilities on low-volume, low-speed roadways that have been enhanced with traffic calming treatments to prioritize people traveling by bike.



Table D-4: Complete Corridors/Active Transportation Solution Strategies

#### **Complete Corridors/Active Transportation Solution Strategies** If Included **Expected** Exact Refined 2021 Included. Year if not in the Match Strategy **Strategy Name Description** what's RP Start **Finish** 2021 RP to 2021 in 2021 the 2021 ID Year RP? RP **Network RP#?** AT01 Truxtun Road Bike No N/A N/A 2025 Barnett Laning Road No Barnett Boulevard Avenue to Avenue Laning Road AT02 Yes N/A 2025 World Pier Central Coast Spanish Yes **Existing** Spanish Corridor - North Landing Park Landing **Harbor Drive Class** (West) to Park (West) World Pier AT042 2050 AT03 North Harbor Drive Stockton Yes No N/A Stockton North Harbor Path / Nimitz Road to North Road Drive Bridge Class I **Harbor Drive** AT04 No N/A N/A 2035 Sports Arena Midway Drive No Midway Pacific **Boulevard Class I** to Pacific Drive Highway Highway AT05 West Palm Street N/A N/A 2030 Pacific India Street Pacific No No Class I Highway to Highway India Street AT06 N/A N/A 2035 Sports Arena Sports Arena No No Rosecrans **Sports** Boulevard/Midway Arena Boulevard to Street Drive Class I Rosecrans Boulevard Street AT07 Sports Arena N/A N/A Rosecrans No Nο 2035 Rosecrans Barnett Boulevard/Midway Street Avenue Street to Drive Class I

	Complete Corridors/Active Transportation Solution Strategies											
Refined Strategy ID	Strategy Name	Description	Included in the 2021 RP Network	Exact Match to 2021 RP?	If Included, what's the 2021 RP #?	2021 RP Year	Expected Year if not in 2021 RP	Start	Finish			
		Barnett Avenue										
AT08	Pacific Highway Class I	Rosecrans Street to West Laurel Street	No	No	N/A	N/A	2035	Rosecrans Street	West Laurel Street			
AT09	Kurtz Street Class II	Sports Arena Boulevard to Rosecrans Street	No	No	N/A	N/A	2030	Sports Arena Boulevard	Rosecrans Street			
AT10	Chatsworth Boulevard/Lytton Street/Barnett Avenue Class II	Catalina Boulevard to Rosecrans Street	No	No	N/A	N/A	2030	Catalina Boulevard	Rosecrans Street			
AT11	Laning Road Class II	Rosecrans Street to Historic Decatur Road	No	No	N/A	N/A	2030	Rosecrans Street	Historic Decatur Road			
AT12	Sassafras Street Class II	Pacific Highway to India Street	No	No	N/A	N/A	2030	Pacific Highway	India Street			

#### **Complete Corridors/Active Transportation Solution Strategies** If **Expected** Included **Exact** Refined Included, 2021 Year if not in the Match Start **Strategy Name Description** RP Strategy what's **Finish** 2021 RP to 2021 in 2021 ID the 2021 Year RP? RP **Network RP#?** AT13 Sports Arena I-8 WB Off-No No N/A N/A 2025 I-8 WB Off-Sports Arena Boulevard/Midway Ramps to Ramps Boulevard Drive Class II Sports Arena Boulevard AT14 Sports Arena Sports Arena No No N/A N/A 2025 **Sports** Rosecrans Boulevard/Midway Boulevard to Arena Street Drive Class II Rosecrans Boulevard Street AT15 N/A N/A 2030 Sports Arena Rosecrans No No Rosecrans Barnett Boulevard/Midway Street Street to Avenue Drive Class II Barnett Avenue AT16 N/A N/A 2025 **Taylor Street Class** No No Morena Pacific Morena Ш Boulevard to Boulevard Highway Pacific Highway **AT17** Frontier Drive Hancock No No N/A N/A 2035 Hancock Sports Arena Class II Street Street to Boulevard Sports Arena Boulevard AT18 East Drive Class II **Kurtz Street** No N/A N/A 2035 **Kurtz Street** Sports Arena No to Sports Boulevard Arena Boulevard

	Complete Corridors/Active Transportation Solution Strategies												
Refined Strategy ID	Strategy Name	Description	Included in the 2021 RP Network	Exact Match to 2021 RP?	If Included, what's the 2021 RP #?	2021 RP Year	Expected Year if not in 2021 RP	Start	Finish				
AT19	San Diego Avenue/India Street Class II (B)	Old Town Avenue to Washington Street	No	No	N/A	N/A	2030	Old Town Avenue	Washington Street				
AT20	Coastal Rail Trail San Diego - Pacific Highway (Fiesta Island to Taylor Street) Class IV	Sea World Drive to Taylor Street	Yes	Yes	AT035	2050	2035	Sea World Drive	Taylor Street				
AT21	Pacific Coast Highway / Central Mobility Bikeway Class IV	Taylor Street to Laurel Street	Yes	Yes	AT011	2050	N/A	Taylor Street	Laurel Street				
AT22	Coastal Rail Trail San Diego - Pacific Highway (Laurel Street to Santa Fe Depot) Class IV	Laurel Street to Broadway	Yes	Yes	AT146	2050	N/A	Laurel Street	Broadway				
AT23	Uptown Bikeways: Washington Street and Mission Valley Bikeways Class IV	Hancock Street to University Avenue	Yes	Yes	AT007	2050	N/A	Hancock Street	University Avenue				

#### **Complete Corridors/Active Transportation Solution Strategies** If **Expected** Included **Exact** Refined Included, 2021 in the Match Year if not Start **Strategy Name Description** RP Strategy what's **Finish** 2021 RP to 2021 in 2021 ID the 2021 Year RP **Network** RP? **RP#?** AT24 **Central Coast** Sunset Cliffs Yes Yes AT017 2050 N/A North Harbor Sunset Corridor - Nimitz Cliffs Boulevard to Drive **Boulevard Class IV** North Harbor Boulevard Drive AT25 Sunset Cliffs N/A N/A Sunset Pacific West Point Loma No No 2030 Cliffs Boulevard / Sports Boulevard to Highway Arena Boulevard **Pacific** Boulevard Class IV Highway AT26 No N/A N/A 2030 Pacific Chatsworth Rosecrans No Rosecrans Boulevard/Lytton Street to Street Highway Street/Barnett Pacific Avenue Class IV Highway AT27 N/A N/A 2030 West Laurel North Harbor Drive No Rosecrans Rosecrans No Class IV Street to Street Street West Laurel Street AT28 Laning Road Class Historic No No N/A N/A 2030 Historic North Harbor **Decatur Road** Decatur Drive Road to North Harbor Drive AT29 Laurel Street Class N/A N/A 2030 Harbor Pacific No No Harbor Drive IV to Pacific Drive Highway Highway

#### **Complete Corridors/Active Transportation Solution Strategies** If **Expected** Included **Exact** Refined Included, 2021 Year if not in the Match **Strategy Name Description** RP **Start** Strategy what's **Finish** 2021 RP to 2021 in 2021 ID the 2021 Year RP? RP **Network RP#?** AT30 **Laurel Street Class** Pacific No No N/A N/A 2030 Pacific State Street IV Highway to Highway State Street AT31 **Hawthorn Street** N/A N/A 2030 Harbor I-5 NB Ramps Harbor Drive No No Class IV to I-5 NB Drive Ramps AT32 **Grape Street Class** Harbor Drive No No N/A N/A 2030 I-5 NB Ramps Harbor IV to I-5 NB Drive Ramps W Point Loma AT33 Sunset Cliffs I-8 WB Off-N/A N/A 2030 I-8 WB Off-No No **Boulevard Class IV** Ramps to W Ramps Boulevard Point Loma Boulevard AT34 Nimitz Boulevard Sunset Cliffs No No N/A N/A 2030 Sunset North Harbor Class IV Cliffs Boulevard to Drive North Harbor Boulevard Drive AT35 Rosecrans Street Pacific N/A N/A 2035 **Pacific** No No Sports Arena Boulevard Class IV Highway to Highway Sports Arena Boulevard AT36 2035 Rosecrans Street Sports Arena No N/A N/A **Sports** Lytton Street No Class IV Boulevard to Arena Lytton Street Boulevard

#### **Complete Corridors/Active Transportation Solution Strategies** If **Expected** Included **Exact** Refined Included, 2021 Year if not in the Match **Strategy Name Description** RP Start Strategy what's **Finish** 2021 RP to 2021 in 2021 ID the 2021 Year RP? RP **Network RP#?** AT37 Rosecrans Street Lytton Street No No N/A N/A 2030 Lytton North Harbor Class IV to North Street Drive Harbor Drive **AT38** Pacific Highway Rosecrans No No N/A N/A 2030 West Laurel Rosecrans Class IV Street to Street Street West Laurel Street **AT39** N/A 2030 Northern Kettner Northern No No N/A West Laurel Boulevard/Hancock Terminus to **Terminus** Street Street Class IV West Laurel Street AT40 N/A N/A 2030 San Diego Washington Washington No No West Laurel Avenue/India Street to Street Street Street Class IV West Laurel Street AT41 N/A N/A 2030 Ash Street State Street Class Hawthorn No Hawthorn No IV Street to Ash Street Street AT42 PTC/W Palm N/A N/A 2035 PTC CMH India Street PTC CMH No No Street Pedestrian (western (western edge of edge of Bridge Kettner Blvd) Kettner Blvd) to India Street



## Freeway Improvements

The I-8 and I-5 freeways currently handle high traffic volumes and are frequently congested. These conditions lead to long travel times and inefficiencies in the movement of vehicles and goods accessing the study area and future CMH. Local roads and access routes similarly handle high traffic volumes, creating competition with other modes and safety concerns.

Proposed freeway improvements include Managed Lanes, new or reconfigured interchanges along I-5 and I-8, Direct Access Ramps (DARs), and modifications of connecting roadways. These improvements will enhance connectivity for freeway travelers accessing the Port Transit Center, as well as provide access to and from key locations throughout the study area. The proposed solutions and alternatives discussed in this section aim to enhance HOV and transit travel times, reduce traffic congestion and improve the flow of vehicles and goods on freeways and the connecting local road network.

### **Key Concepts**

• Managed Lanes: Managed Lanes address congestion by controlling traffic movement on the freeway and highway. Two common approaches to lane management are: restricted vehicle eligibility, and access control through limited ingress/egress. Vehicle eligibility can be based on occupancy or vehicle type. The Managed Lanes concept is a departure from traditional capacity enhancements (i.e., adding new general-purpose lanes on a highway) because it seeks to regulate traffic demand, separate traffic streams, and optimize available and unused capacity.

**Complete Corridors:** Several Complete Corridor connections to the CMH have been studied that include access for both Managed Lanes and mixed-use lanes. Proposed Managed Lanes and DARs would increase the efficiency of vehicle and goods movement in the vicinity.



Table D-5: Freeway Transportation Solution Strategies

	Freeway Transportation Solution Strategies												
Refined Strategy ID	Strategy Name	Description	Included in the 2021 RP Network	Exact Match to 2021 RP?	If Included, what's the 2021 RP #?	2021 RP Year	Expected Year if not in 2021 RP	Start	Finish				
CC-01	I-5 Managed Lanes	Convert two existing general-purpose lanes to managed lanes and add two additional managed lanes	Yes	Yes	CC003	2035	N/A	Pacific Highway	SR-52				
CC-02	I-5 Managed Lanes	Convert two existing general-purpose lanes to managed lanes and add two additional managed lanes	Yes	Yes	CC002	2035	N/A	H Street	Pacific Highway				
CC-03	I-8 Managed Lanes	Convert two existing general-purpose lanes to managed lanes and add two additional managed lanes	Yes	Yes	CC023	2050	N/A	I-5	I-805				
CC-04	SR 163 Managed Lanes	Convert two existing general-purpose lanes to managed lanes	Yes	Yes	CC038	2035	N/A	I-8	I-805				

		Freeway	Transpor	tation Solı	ution Strateo	gies			
Refined Strategy ID	Strategy Name	Description	Included in the 2021 RP Network	Exact Match to 2021 RP?	If Included, what's the 2021 RP #?	2021 RP Year	Expected Year if not in 2021 RP	Start	Finish
CC-05	SR 163 Southbound Managed Lanes Phase 1	Convert southbound shoulder/median to managed lane on southbound SR 163	No	n/a	N/A	N/A	2035	I-805	I-8
CC-06	I-5/I-8 ML Connectors	South to East and West to North	Yes	Yes	CC067	2050	N/A	N/A	N/A
CC-07	I-5/I-8 ML Connectors	North to East and West to South	Yes	Yes	CC068	2050	N/A	N/A	N/A
CC-08	Complete Corridor: Airport Connectivity	Airport Connectivity including Laurel Street airport entrance, Laurel Street modifications (Pacific Highway to I-15), and new I-5 freeway ramps at Laurel Street and Redwood	Yes	Yes	CC117	2035	N/A	N/A	N/A
CC-09	I-5 at Old Town Avenue Interchange reconfiguration	Reconfigure Old Town Avenue Interchange	No	N/A	N/A	N/A	2035	N/A	N/A
CC-10	I-5 DAR at Port Transit Center	Reconstruct SB Sassafras St exit	No	N/A	N/A	N/A	2035	N/A	N/A



	Freeway Transportation Solution Strategies												
Refined Strategy ID	Strategy Name	Description	Included in the 2021 RP Network	Exact Match to 2021 RP?	If Included, what's the 2021 RP #?	2021 RP Year	Expected Year if not in 2021 RP	Start	Finish				
		ramp with access to Port Transit Center											