

Attachment 4: Project and Program Inventory

To: San Diego Association of Governments and Caltrans District 11

North County Comprehensive Multimodal Corridor Plan Project Team From:

Date: June 2023

North County Comprehensive Multimodal Corridor Plan – Project and Program Inventory Subject:

Below are the projects and programs for the North County Comprehensive Multimodal Corridor Plan (North County CMCP). The North County CMCP proposes projects and programs that support the local, regional and state goals and align with the objectives of the CMCP process. The projects and programs outlined below represent the culmination of a high-level planning effort. Further engineering analysis and studies are needed to provide information for design and implementation.

Table 1. North County CMCP Project and Program Inventory

Plan ID	Plan Name	Location	Project Type	Primary Strategic Anchor	Description	Category	Cost (Millions)
NC01	Mission Avenue Corridor-Wide Mobility Boulevard Improvements and Enhancements	Mission Avenue	Complete Corridor: Active Transportation, SIS, TSMO	Mobility Boulevard	 Provide the following mobility improvements and enhancements: Protected or enhanced bicycle facilities (Class I/Class IV preferred) Bicycle intersection clearance detection at signalized intersections Upgrade signalized intersections to smart intersections with bike signals that promote leading bicyclist interval, two-stage left turn facilities, and advance bicycle detection (up to 28 smart intersections) Improved pedestrian and bicycle facilities at overpasses and undercrossings such as wider sidewalks, protected or enhanced bicycle facilities, and landscaping (I-5 overcrossing) At grade pedestrian improvements to enhance existing crossing/connection at Palomar College and SPRINTER Station Establish corridor as a communication backbone with TSMO strategies (transit signal priority for high frequency transit) 		\$19
NC02	El Camino Real Corridor-Wide Mobility Boulevard Improvements and Enhancements	El Camino Real	Complete Corridor: Active Transportation, SIS, TSMO	Mobility Boulevard	 Provide the following mobility improvements and enhancements: Protected or enhanced bicycle facilities (Class I/Class IV preferred) Implement bicycle intersection clearance detection at intersections throughout corridor Upgrade signalized intersections to smart intersections with bike signals that promote leading bicyclist interval, two-stage left turn facilities, and advance bicycle detection (up to 35 smart intersections) Widen existing bridge and roadway at Cannon Rd to improve operations and add pedestrian/bicycle facilities Study all potential solutions to reduce congestion at Vista Way intersection Establish corridor as a communication backbone with TSMO strategies (transit signal priority for high-frequency transit and signal coordination with SPRINTER and on-/off-ramps of SR 78) Implement up to 35 smart intersections 		\$136



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Plan ID	Plan Name	Location	Project Type	Primary Strategic Anchor	Description		Cost (Millions)
NC03	Oceanside Boulevard Corridor-Wide Mobility Boulevard Improvements and Enhancements	Oceanside Boulevard	Complete Corridor: Active Transportation, SIS, TSMO	Mobility Boulevard	 Provide the following mobility improvements and enhancements: Protected or enhanced bicycle facilities (Class I/Class IV preferred) Implement bicycle intersection clearance detection at intersections throughout corridor Upgrade signalized intersections to smart intersections with bike signals that promote leading bicyclist interval, two-stage left turn facilities, and advance bicycle detection Enhance connectivity along Oceanside Boulevard first/last miles to align with future development Potential siting of the Inland Rail Trail to Oceanside Boulevard Establish corridor as a communication backbone with TSMO strategies (integrated corridor management, transit signal priority for high-frequency transit, and signal coordination with SPRINTER) 	Program	\$30
NC04	College Boulevard Corridor-Wide Mobility Boulevard Improvements and Enhancements	College Boulevard	Complete Corridor: Active Transportation, SIS, TSMO	Mobility Boulevard	 Provide the following mobility improvements and enhancements: Protected or enhanced bicycle facilities (Class I/Class IV preferred) Implement bicycle intersection clearance detection at intersections throughout corridor Upgrade signalized intersections to smart intersections with bike signals that promote leading bicyclist interval, two-stage left turn facilities, and advance bicycle detection Operational improvements including complete the arterial connection to ECR and widening from Vista Way to Old Grove Fill in missing sidewalk areas Establish corridor as a communication backbone with TSMO strategies (signal coordination with SPRINTER and on-/off-ramps of SR 78) 	Program	\$28
NC05	Melrose Drive Corridor-Wide Mobility Boulevard Improvements and Enhancements	Melrose Drive	Complete Corridor: Active Transportation, SIS, TSMO	Mobility Boulevard	 Provide the following mobility improvements and enhancements: Protected or enhanced bicycle facilities (Class I/Class IV preferred) Implement bicycle intersection clearance detection at intersections throughout corridor Upgrade signalized intersections to smart intersections with bike signals that promote leading bicyclist interval, two-stage left turn facilities, and advance bicycle detection Operational improvements at SR 78 interchange (widening, improve ramps and overpass) Establish corridor as a communication backbone with TSMO strategies (transit signal priority for high-frequency transit and signal coordination with SPRINTER and on-/off-ramps of SR 78) 	Program	\$32
NC06	Vista Way Corridor- Wide Mobility Boulevard Improvements and Enhancements	Vista Way	Complete Corridor: Active Transportation, SIS, TSMO	Mobility Boulevard	 Provide the following mobility improvements and enhancements: Protected or enhanced bicycle facilities (Class I/Class IV preferred) Implement bicycle intersection clearance detection at intersections throughout corridor Upgrade signalized intersections to smart intersections with bike signals that promote leading bicyclist interval, two-stage left turn facilities, and advance bicycle detection Establish corridor as a communication backbone with TSMO strategies 	Program	\$68
NC07	Sycamore Avenue Corridor-Wide Mobility Boulevard Improvements and Enhancements	Sycamore Avenue	Complete Corridor: Active Transportation, SIS, TSMO	Mobility Boulevard	 Provide the following mobility improvements and enhancements: Protected or enhanced bicycle facilities (Class I/Class IV preferred) Implement bicycle intersection clearance detection at intersections throughout corridor Upgrade signalized intersections to smart intersections with bike signals that promote leading bicyclist interval, two-stage left turn facilities, and advance bicycle detection Establish corridor as a communication backbone with TSMO strategies (signal coordination with on-/off-ramps of SR 78) 	Program	\$9





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Plan ID	Plan Name	Location	Project Type	Primary Strategic Anchor	Description	Category	Cost (Millions)
NC08	Rancho Santa Fe Rd Corridor-Wide Mobility Boulevard Improvements and Enhancements	Rancho Santa Fe Rd	Complete Corridor: Active Transportation, SIS, TSMO	Mobility Boulevard	 Provide the following mobility improvements and enhancements: Protected or enhanced bicycle facilities (Class I/Class IV preferred) Implement bicycle intersection clearance detection at intersections throughout corridor across 78 and SPRINTER Upgrade signalized intersections to smart intersections with bike signals that promote leading bicyclist interval, two-stage left turn facilities, and advance bicycle detection Provide flex service zone between Palomar Airport Rd and Santa Fe Dr Operational improvements at SR 78 interchange (widening, improve ramps and overpass) Establish corridor as a communication backbone with TSMO strategies (signal coordination with on-/off-ramps of SR 78) 	Program	\$17
NC09	Palomar Airport Road/San Marcos Boulevard Corridor- Wide Mobility Boulevard Improvements and Enhancements	Palomar Airport Road/San Marcos Boulevard	Complete Corridor: Active Transportation, SIS, TSMO	Mobility Boulevard	ovide the following mobility improvements and enhancements: Protected or enhanced bicycle facilities (Class I/Class IV preferred) mplement bicycle intersection clearance detection at intersections throughout corridor Upgrade all signalized intersections to smart intersections with recommended ICE analysis and oposed intersection improvements (i.e., bike signals that promote leading bicyclist interval, two-stage it turn facilities, and advance bicycle detection) Flex lanes during peak periods Provide flex service zone between Palomar Airport Road and Santa Fe Dr Establish as a communication backbone with TSMO strategies (transit signal coordination and anagement to enhance transit operations and signal timing with on-/off-ramps of SR 78 and I-5)		\$28
NC10	Santa Fe Avenue/Mission Road Corridor-Wide Mobility Boulevard Improvements and Enhancements	Mission Road/Santa Fe Road	Complete Corridor: Active Transportation, SIS, TSMO	Mobility Boulevard	 Provide the following mobility improvements and enhancements: Protected or enhanced bicycle facilities (Class I/Class IV preferred) Implement bicycle intersection clearance detection at intersections throughout corridor Upgrade signalized intersections to smart intersections with bike signals that promote leading bicyclist interval, two-stage left turn facilities, and advance bicycle detection Intersection improvements to allow active transportation improvements and operations at Smilax Road South Santa Fe Avenue to accommodate active transportation improvements Establish corridor as a communication backbone with TSMO strategies (transit signal priority for high-frequency transit and signal coordination with SPRINTER and on-/off-ramps of SR 78) 		\$134
NC11	Twin Oaks Valley/San Elijo Corridor-Wide Mobility Boulevard Improvements and Enhancements	Twin Oaks Valley	Complete Corridor: Active Transportation, SIS, TSMO	Mobility Boulevard	 Provide the following mobility improvements and enhancements: Protected or enhanced bicycle facilities (Class I/Class IV preferred) Implement bicycle intersection clearance detection at intersections throughout corridor Upgrade signalized intersections to smart intersections with bike signals that promote leading bicyclist interval, two-stage left turn facilities, and advance bicycle detection Establish corridor as a communication backbone with TSMO strategies (signal coordination with on-/off-ramps of SR 78) Provide flex/micro transit service along Twin Oaks Valley Road with flex service zone between Buena Creek Road and downtown San Marcos 	Program	\$57





1 Y Street

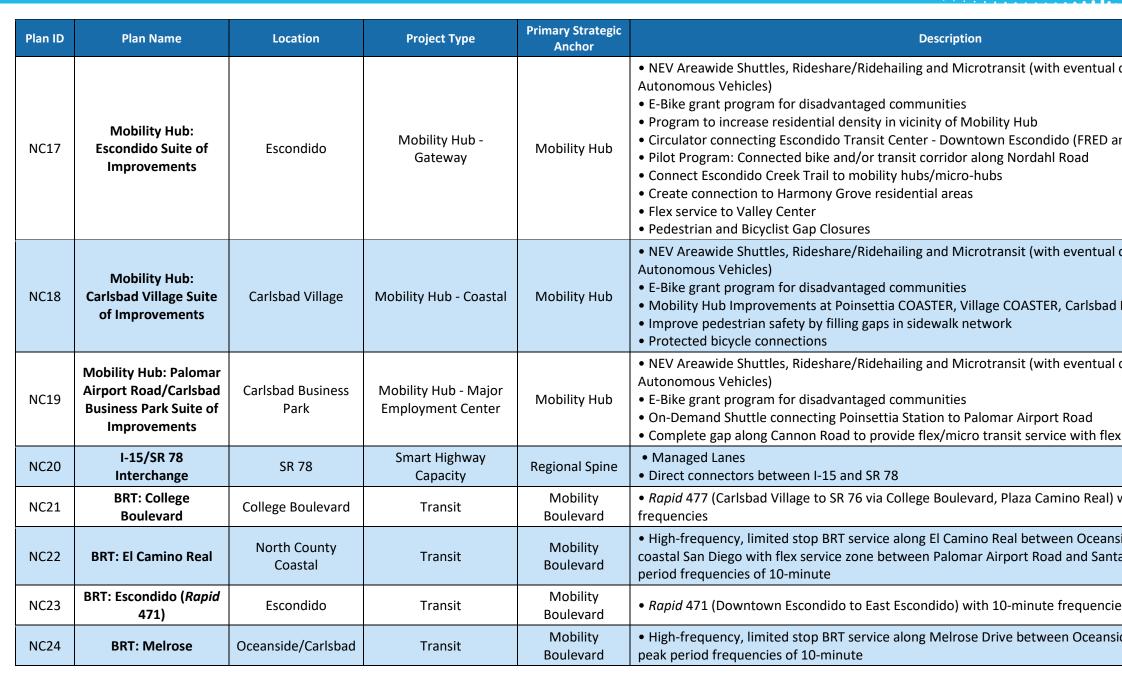


Plan ID	Plan Name	Location	Project Type	Primary Strategic Anchor	Description	Category	Cost (Millions)
NC12	Centre City Parkway Corridor-Wide Mobility Boulevard Improvements and Enhancements	Centre City Parkway	Complete Corridor: Active Transportation, SIS, TSMO, SPRINTER	Mobility Boulevard	 Provide the following mobility improvements and enhancements: Upgrade signalized intersections to smart intersections with bike signals that promote leading bicyclist interval, two-stage left turn facilities, and advance bicycle detection Implement bicycle intersection clearance detection at intersections throughout corridor Protected or enhanced bicycle facilities (Class I/Class IV preferred) Improve east/west pedestrian connection across N. Centre City Pkwy in Escondido Center-running Transit along Centre City Pkwy Improve E/W ped connection across N Centre City Pkwy in Escondido Establish corridor as a communication backbone with TSMO strategies (signal coordination with SPRINTER) 	Program	\$158
NC13	Valley Parkway Corridor-Wide Mobility Boulevard Improvements and Enhancements	Valley Parkway	Complete Corridor: Active Transportation, SIS, TSMO	Mobility Boulevard	 Provide the following mobility improvements and enhancements: Upgrade signalized intersections to smart intersections with bike signals that promote leading bicyclist interval, two-stage left turn facilities, and advance bicycle detection Implement bicycle intersection clearance detection at intersections throughout corridor Protected or enhanced bicycle facilities (Class I/Class IV preferred) Establish corridor as a communication backbone with TSMO strategies (signal coordination with SPRINTER) 		\$15
NC14	Mobility Hub: Oceanside Suite of Improvements	Oceanside	Mobility Hub - Gateway	Mobility Hub	 Coast Hwy Traffic Calming and Active Transportation Improvements NEV Areawide Shuttles, Rideshare/Ridehailing and Microtransit (with eventual conversion to Autonomous Vehicles) E-Bike grant program for disadvantaged communities Connector program in Downtown Oceanside Shuttle service for inland residents to access beaches Improve pedestrian safety by filling gaps in sidewalk network 		\$128
NC15	Mobility Hub: Vista Suite of Improvements	Vista	Mobility Hub - Suburban	Mobility Hub	 NEV Areawide Shuttles, Rideshare/Ridehailing and Microtransit (with eventual conversion to Autonomous Vehicles) E-Bike grant program for disadvantaged communities Pilot program along Business Park Dr Improve pedestrian safety by filling gaps in sidewalk network Protected bicycle connections 		\$87
NC16	Mobility Hub: San Marcos Suite of Improvements	San Marcos	Mobility Hub - Major Employment Center	Mobility Hub	Protected bicycle connections NEV Areawide Shuttles, Rideshare/Ridehailing and Microtransit (with eventual conversion to autonomous Vehicles) E-Bike grant program for disadvantaged communities Intra-City shuttle connecting CSUSM, Palomar Community College, San Marcos Creek District, San Marcos University District, San Marcos Civic Center, and other key community destinations with PRINTER Evaluate private ventures to encourage ridesharing, carpooling, and other first/last mile options ZEV Initiatives - Charging Infrastructure Improve pedestrian safety by filling gaps in sidewalk network Protected bicycle connections		\$160





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	Category	Cost (Millions)
conversion to Ind Circuit)	Program	\$268
conversion to Mall	Program	\$32
conversion to x service zone	Program	\$113
	Project	\$294
with 10-minute	Project	\$108
side, Carlsbad, and a Fe Dr with peak	Project	\$50
es	Project	\$85
ide and Carlsbad with	Project	\$47



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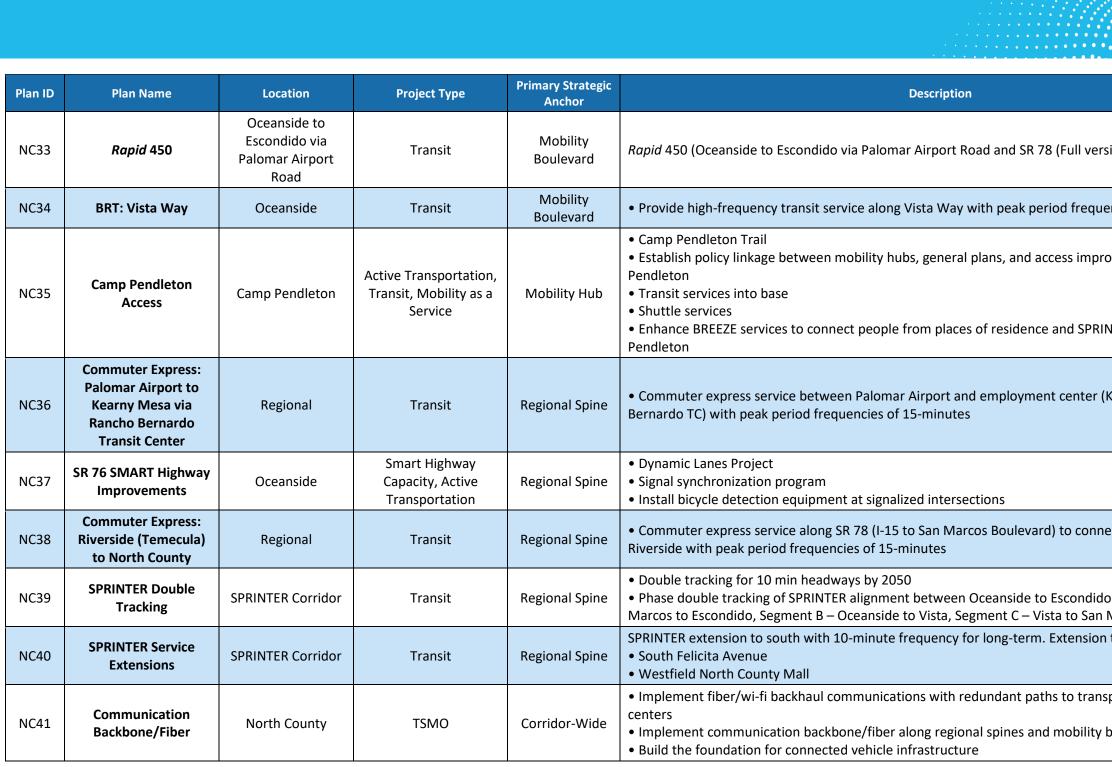


Plan ID	Plan Name	Location	Project Type	Primary Strategic Anchor	Description	Category	Cost (Millions)
NC25	SR 78 Operational Improvements and Managed Lanes	SR 78	TSMO/Smart Highway Capacity	Regional Spine	 Carpool/Managed Lanes/Express Lanes (w/ connectors to I-5, I-15) Auxiliary Lanes to address short trips Direct Access Ramp at Twin Oaks Valley Road Interchange operational improvements Transportation System Management and Operations (TSMO) infrastructure with Dynamic Messaging, V2I Data Collection and Smart Ramp Metering Expanded use of changeable message boards on the freeway and local arterials to inform driver decisions Integrated Corridor Management (ICM) Smart Ramp Metering Study the potential for a comprehensive network of shared parking areas along the corridor to serve as hubs for rideshare, EV and NEV charging, and other first mile/last mile options Establish SR 78 as a "Test Bed" for innovative/emerging technologies Auxiliary Lanes for short trips and highway operations improvements 	Program \$756	
NC26	Coastal Rail Trail	North Coast	Active Transportation	Regional Spine	Create/complete the coastal bike trail: • Construction of enhanced Class-II buffered bike lanes along Avenida Encinas between Carlsbad Boulevard and Cannon Road • Class-I multi-use path along the LOSSAN Corridor rail alignment between Cannon Road and Tamarack Avenue • Extend south to Cassidy St • Reach 3 Tamarack to Cannon • Reach 4 Cannon to Palomar Airport Road • Reach 5 Palomar Airport Road to Poinsettia Station • Alta Loma Marsh bridge • Morse Street to Oceanside Boulevard		\$45
NC27	North County Roundabouts Programs	North County	Operation Improvements	Corridor-Wide	Regionwide effort for mobility hub areas; 20 intersection conversions across the study area	Program	\$100
NC28	BRT: Mission Avenue/ SR 76	Mission Avenue/SR 76	Transit	Mobility Boulevard	• Provide high-frequency, limited stop BRT service along Mission Avenue in Oceanside with peak period frequencies of 10-minute	Project	\$42
NC29	BRT: Mission Avenue/Santa Fe Avenue (<i>Rapid</i> 474)	Mission Avenue/Santa Fe Road	Transit	Mobility Boulevard	• <i>Rapid</i> 474 (Oceanside to Vista via Mission Avenue/Santa Fe Avenue Corridor) with 10-minute frequencies	Project	\$71
NC30	I-5/SR 78 Interchange	SR 78	Smart Highway Capacity	Regional Spine	 Managed Lanes Direct connectors between I-5 and SR 78 	Program	\$731
NC31	Inland Rail Trail Destination Connections	Oceanside	Active Transportation	Regional Spine	 Extend the Inland Rail Trail to the coast Trailhead Improvements and Connectivity to Inland Rail Trail Inland Rail Trail Connections Improve bike and/or pedestrian crossings to increase active transportation safety on the trail and at trailheads 		\$128
NC32	BRT: Palomar Airport Road (<i>Rapid</i> 440)	Palomar Airport Road	Transit	Mobility Boulevard	• Rapid 440 (Carlsbad to Escondido Transit Center via Palomar Airport Road) with 10-minute frequencies	Project	\$71





A Street





	Category	Cost (Millions)
sion of <i>Rapid</i>)	Project	\$31
ency of 10-minute	Project	\$40
ovements to Camp NTER stations to Camp	Project	\$116
Kearny Mesa via Rancho	Project	\$25
	Program	\$85
ect subregion to	Project	\$25
o (Segment A – San Marcos)	Program	\$373
to:	Project	\$376
portation management	Program	\$55



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Plan ID	Plan Name	Location	Project Type	Primary Strategic Anchor	Description	Category	Cost (Millions)
NC42	Connecting Communities Across Regional Spines	North County	Transportation Interfaces	Regional Spine	 Improve connection between communities and at interchanges for people walking, biking, and using micromobility options Improve mobility at overpasses and underpasses across regional spines through protected bike facilities, sidewalk widening, curb extensions/bulb outs, signal timing treatments, and lighting improvements Improve conditions at at-grade rail crossings with clearly marked pedestrian/bike crossings, installation of a fixed median with flexible bollards, required safety measures for a quiet zone, and warning devices at pedestrian crossings Improve interchanges along I-5, SR 78, and I-15 to promote people and goods through-put while improving safety for non-motorized modes. New ped/bike facilities at I-5/SR 78 interchange to provide connections to coastal areas 	Program	\$300
NC43	Regional Highway and Arterial TSMO, Regional Traffic Signal Management System	North County	TSMO	Corridor-Wide	 Regionalize existing City traffic signal coordination and create a Regional Traffic Signal Management and Surveillance System (TSMSS) Regional Adaptive/Smart Signals conversion Establish an integrated corridor management system along Oceanside Boulevard, Vista Way, and Nordahl Road with signal communication coordination Video analytics (can provide automated incident alerts and identify operational issues) Cameras, for incident management and operations monitoring/adjustments Develop network optimization software to group platoons of connected and automated vehicles with common travel paths for priority routing through signalized routes Changeable message signs Pre-planned evacuation routes and traffic signal plans 		\$48
NC44	SPRINTER Grade Separations	SPRINTER Corridor	Transit	Regional Spine	Grade Separations at: •El Camino Real •Melrose Drive •North Drive •Vista Village Drive/ Main Street •Civic Center •Nordahl road/Auto Park Way and Mission Avenue Proposed Grade Separations at: •College Boulevard •York Drive •Buena Creek Road •Pacific Street		\$510
NC45	SPRINTER Electrification	SPRINTER Corridor	Transit	Regional Spine	SPRINTER Vehicle (rolling stock) conversion to all electric fleet	Program	\$69
NC46	San Luis Rey River Trail Extension	Oceanside	Active Transportation	Regional Spine	Extend the San Luis Rey River Trail East	Project	\$97
NC47	SPRINTER Station Access Improvements	North County	Transit	Regional Spine	 Access improvements to all 15 SPRINTER stations Enhance rider experience through: transit-approaching music, increased security, and EV chargers, bike parking, and passenger loading zones at transit stations Bike (or multi-use) paths from SPRINTER stations within Mobility Hubs to nearby attractions 		\$72





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Plan ID	Plan Name	Location	Project Type	Primary Strategic Anchor	Description	Category	Cost (Millions)
NC48	BRT: SPRINTER Parallel	Oceanside Boulevard, Santa Fe Avenue, and Mission Road	Transit	Regional Spine	Provide a high-frequency, limited stop BRT service parallel to SPRINTER, connecting Oceanside to Escondido along Oceanside Boulevard, Santa Fe Avenue and Mission Road with peak period frequencies of 10-minutes	Project	\$49





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