SANDAG

Transportation Committee

Item: **4**

October 19, 2018

Action Requested: **Discussion**

San Diego Forward: The 2019-2050 Regional Plan – Network Concepts

Overview

As part of the San Diego Forward: The 2019-2050 Regional Plan (2019 Regional Plan) process, the Board of Directors directed staff to develop distinct transportation networks that focus on congestion relief, reduced delay, and sustainability goals—specifically, SB 375 greenhouse gas emissions reduction targets. To start this process, staff developed three distinct network concepts and evaluated how these different combinations of projects, programs, and policies would perform (Attachment 1).

The concepts that have been developed are intended to generate discussion and are **not** intended as networks to be selected for the 2019 Regional Plan.

Fiscal Impact:

Each of the three transportation network concepts includes investments of approximately $180 billion (in year of expenditure) through 2050.

Schedule/Scope Impact:

The Board of Directors is scheduled to consider draft transportation networks in December 2018/January 2019; select a preferred network scenario in early 2019; and consider adoption of the final 2019 Regional Plan in spring 2020.

Key Considerations

There are many ways for the transportation system to meet the 2019 Regional Plan vision and goals. Each of the network concepts address the Board's performance measures to varying degrees; however, what the analysis shows is that it will be the policies, programs, and technologies (rather than specific capital project investments) that are the defining factors in terms of performance for the 2019 Regional Plan.

Concept A: Shared Mobility emphasizes more transit connections through earlier delivery, increased frequency, and additional services and routes. Flexible funding is focused on investments to support transit, with earlier delivery of a system of *Rapid* routes (community and major corridors) and reduced transit fares. This concept also includes pricing on Managed Lanes for solo drivers and two-person carpools.

Concept B: Connected Corridors emphasizes major corridor improvements for highway and transit services within the region's existing regional freeway and highway system and concentrates on completing a connected system of Managed Lanes. Flexible funding is focused on Managed Lanes/highway projects, and Managed Lanes are priced for solo drivers and two-person carpools.

Concept C: Policy Possibilities emphasizes actively managing the transportation network through new technologies, policies, and programs. Flexible funding is focused on transit with reduced fares and mobility management programs and incentives. Other considerations include tolled Express Lanes for all private vehicles (not for buses), parking pricing and pooled ride incentives, adoption of automated and connected vehicles, enhanced electric vehicle charging infrastructure, and incentives to purchase electric vehicles.

The specific investments included in each of the Network Concepts are detailed in Attachment 2.

Performance Measures

All of the concepts increase the share of people using transit, walking, biking; transit access to jobs and higher education (including for disadvantaged community populations); and opportunities for using bike facilities. However, only Concept C reduces vehicle delay for all drivers and achieves the 2035 SB 375 greenhouse gas emission reduction targets (Attachment 3).

Concepts A and B would include modest increases in expenditures for low-income persons and modest decreases for minorities and seniors. Concept C would include increases for all populations, most notably for low-income persons (Attachment 4).

What "moves the needle" in the way that individuals choose to travel is pricing (whether through tolls, mileage-based fees, parking fees, or lower transit fares) and technologies that improve travel flow and reliability for all users. The data analysis shows that investment in capital projects alone will not achieve the congestion relief or greenhouse gas emission reduction goals envisioned by the 2019 Regional Plan without the implementation of innovative policies, programs, and technologies.

TransNet Program of Projects

It is important to note that not all remaining *TransNet* projects are included in the network concepts. The introduction of new and emerging technologies as well as potential operational alternatives provide the opportunity for new mobility solutions that originally were not envisioned in the *TransNet* Ordinance. As a result, four *TransNet* projects are not included in any of the concepts and other *TransNet* projects only are included in some of the concepts (Attachment 5).

Next Steps

The Transportation Committee is asked to consider the transportation network concepts and provide feedback on the following questions:

1. What components of the network concepts are most important for inclusion in the draft network scenarios to be developed for review in December 2018/January 2019?
2. What program and technology investments should be considered in the 2019 Regional Plan?
3. What potential policies should be considered in the 2019 Regional Plan?

Extensive public engagement activities are planned to occur throughout October 2018 and input on the network concepts will inform the development of the draft network scenarios brought back for consideration later this winter.

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Attachments:
1. Discussion Memo
2. Draft 2019 Regional Plan Network Concepts Maps and Project Lists
3. Draft 2019 Regional Plan Network Concepts Performance Measures Evaluation and Results
4. Draft 2019 Regional Plan Network Concepts Performance Measures Results - Social Equity
5. *TransNet* Projects not included in Network Concepts
6. Draft 2019 Regional Plan Transportation Network Concept Outreach Flier
7. Other Projects for Consideration

Discussion Memo

Background

Development of the 2019 Regional Plan follows state and federal laws, regulations, and policies, including requirements under Assembly Bill 805 (Gonzalez Fletcher, 2018) and Senate Bill 375 (Steinberg, 2008)[1]. The starting point for crafting the three network concepts relies on a series of actions already taken by the Board of Directors. During the past year, the Board established the vision, goals, and policy objectives; Unconstrained Transportation Network; and performance measures for the 2019 Regional Plan. The Board also provided direction on the level of funding to use[2], approved the assumptions to develop the 2050 Regional Growth Forecast, and accepted the Regional Housing Needs Assessment Determination from the Department of Housing and Community Development. In addition to these inputs, local General Plans, Community Plans, Climate Action Plans and circulation element inputs were used to inform the concepts.

Network Concepts

When regional plans are developed, most of the discussion typically focuses on capital investments. Concepts A and B reflect this traditional approach and are project-based according to priorities identified by Caltrans and the transit operators (Attachment 2). Conversely, Concept C is policy-based and focuses on innovative policies, programs, and technologies that could be layered on top of infrastructure investments to maximize the efficiency and sustainability of the region's transportation network.

Making the most of the current system is particularly relevant for the San Diego region because approximately three-quarters of the residents, homes, job centers, and transportation infrastructure already are in place. This means that changes in land use patterns over the next few decades will be incremental. At the same time, research points to rapid changes in future transportation policies and technologies that could make a big difference in the way people and goods travel.

While there is uncertainty about how technology trends will evolve, policy and investment decisions by the Board of Directors to support the future integration of technology and new mobility services could lead to a more equitable and sustainable transportation network[3]. Below is a description of some of the policies, programs, and technologies that are considered in Concept C (and detailed in Attachment 2).

Existing Mobility Management Programs

Some programs, such as the **SANDAG Vanpool Program, bikeshare services, and car share**, currently are in place and included in each of the three network concepts. However, an **enhanced vanpool program** with additional targeted outreach through employers is included in Concept C, as modeling data shows that among these programs, vanpools would reduce greenhouse gas (GHG) emissions and vehicle miles traveled (VMT) the most.

Emerging Mobility Management Programs

The San Diego region already has started to see the introduction of microtransit options like neighborhood electric vehicles, such as FRED. SANDAG also has piloted trial transit passes and is partnering with Uber, Lyft, and Waze Pool on pooled rides. Concept C includes **pooled ride programs** like these with incentives to encourage and facilitate on-demand pooling through a mobile app; **microtransit** that includes both neighborhood electric vehicle shuttle services and commuter shuttle services; and **community-based travel planning** that conducts outreach to households near new, high frequency transit and regional bikeways. To help maximize the implementation of these programs, SANDAG or local jurisdictions could invest in **Managed Lanes** that reduce commute times, **trip incentives** to encourage use of pooled ride services as a convenient commute choice, and/or **complimentary trial transit passes** to further reduce GHG and VMT.

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[1] California Transportation Commission, 2017 Regional Transportation Plan Guidelines for Metropolitan Planning Organizations, adopted January 2017.

[2] Based on Board direction at the June 22, 2018, meeting, staff developed a potential range of assumed investments from $166 billion to $203 billion in year of expenditure. To ensure consistency across the concepts, the mid-point of this range (approximately $180 billion) was used to define the level of potential investments.

[3] Emerging Technologies White Paper, SANDAG, 2018.

Concept C also includes investments in **mobility hubs** to provide more connectivity to transit and pooled rides and an **enhanced Electric Vehicle (EV) charging program** that could incentivize workplace and public chargers to extend the electric range of plug-in hybrid EVs. The current Regional Plan includes an investment package of $30 million for EV charging, while Concept C imagines a more robust investment approach including nearly ten times the previous assumptions. The enhanced vehicle incentive program could encourage faster turnover of gasoline passenger vehicles to EVs, resulting in higher GHG reductions.

Future Technologies

Throughout the years, SANDAG has partnered with local jurisdictions and Caltrans to invest in **transportation technologies** on the highway system and at local intersections to help reduce delays at intersections for cars, transit, bike riders, and pedestrians. These efforts have resulted in an estimated 20 percent decrease in delay in those areas[4].

Concept C builds on the concept of **smart signals** by investing in data sharing among the region's local jurisdictions, Caltrans, public transportation providers *and* the private sector. Known as the **Transportation Mobility Cloud,** this technology would allow public and private transportation service providers to coordinate their use of the roads, enable the use of **connected and automated vehicles** to help increase highway capacity, and allow for the **active management of lane use** for various users (e.g., carpools, goods movement, transit) in order to **smooth out travel speeds** and reduce delays. Minimal infrastructure investment would be needed; however, significant coordination between SANDAG, the local agencies, and any participating private partners would be needed.

Potential Policies

Concepts A and B apply **congestion pricing** (variable fees charged to vehicles with a single occupant that choose to pay, like the Interstate 15 Express Lanes) on all Managed Lanes in the region and require an increase from two people to three people for use of the carpool lanes. Concept C goes further than this by **tolling** all Managed Lanes in the San Diego region. Each of these policies are corridor-based strategies to help manage the highway system and encourage shared rides. The investment level to implement these policy changes likely would be minimal; however, would represent a significant shift in current use of the Managed Lanes system in the San Diego region.

Concept C also tests pricing policies such as a **mileage-based user fee**, which is a systemwide strategy that would charge drivers based on the amount of driving; and expanded or increased **parking fees** (on-street and at job centers) that would be implemented by local jurisdictions. In 2016, the State of California conducted a pilot program to study a road charge model based on miles traveled as an alternative to the gas tax. Other states including Oregon and Washington also have explored pilot programs; however, none have been implemented beyond the pilot phase. It is important to note that significant coordination with surrounding counties and the state would be required to implement a regional mileage-based user fee program.

Each of these policies would provide incentives for shared rides and result in GHG and VMT reductions.

Employer-based trip reduction ordinances (TROs) are another Transportation Demand Management strategy that could be considered that requires employers over a certain size to develop and implement trip reduction plans and offer commuter benefits for their employees. The goal of a TRO is to promote the use of ridesharing, transit, and alternate modes to reduce single-occupant vehicle commute trips, traffic congestion, GHG and other pollutants. TROs can be implemented at all levels of government but are most successful when they are implemented regionally for greater impact and to ensure consistent and clear requirements for businesses across the region.

Reduced transit fares for all riders also was evaluated in Concept C. More specific transit fare reduction programs such as youth opportunity passes also could be considered. While these policies would result in reduced GHG emissions and VMT, they likely would require local or regional funding to backfill the additional subsidy required by lower fares.

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[4] 2017 ITS System Benefits, Costs, and Lessons Learned Report published by FHWA. https://www.its.dot.gov/press/2017/benefits_report.htm

2019 Regional Plan Network Concepts

Mobility Management Programs and Policy Considerations

Attachment 2

MOBILITY MANAGEMENT PROGRAMS	CONCEPT A: SHARED MOBILITY	CONCEPT B: CONNECTED CORRIDORS	CONCEPT C: POLICY POSSIBILITIES	ESTIMATED CAPITAL COSTS ($2018) MILLIONS*
Ongoing Transportation Demand Management (TDM) and Intelligent Transportation System (ITS) operations and administration	✔	✔	✔	$246
Commuter services and Rideshare incentive programs (vanpool, carpool)	✔	✔	✔	$153
TDM marketing, outreach, and education	✔	✔	✔	$84
Mobility as a Service (bikeshare, carshare)	✔	✔	✔	$178
Enhanced commuter services (pooled rides and microtransit)			✔	$64
Enhanced marketing, outreach, and education (community based travel planning)			✔	$1
Enhanced Mobility as a Service (mobility hub implementation)			✔	See Mobility as a Service
Enhanced Electric Vehicle (EV) charging program			✔	$232

FUTURE TECHNOLOGIES	CONCEPT A: SHARED MOBILITY	CONCEPT B: CONNECTED CORRIDORS	CONCEPT C: POLICY POSSIBILITIES	ESTIMATED CAPITAL COSTS ($2018) MILLIONS*
Connected vehicle highway program and transportation mobility cloud for connected and autonomous vehicles			✔	$48
Active Traffic and Demand Management mobility network (lane use control and speed harmonization)			✔	$640
Smart City initiatives (Smart Signals)			✔	$729

POTENTIAL POLICIES	CONCEPT A: SHARED MOBILITY	CONCEPT B: CONNECTED CORRIDORS	CONCEPT C: POLICY POSSIBILITIES	ESTIMATED CAPITAL COSTS ($2018) MILLIONS*
Increase carpool occupancy requirement (3+)	✔	✔		N/A**
Apply Congestion Pricing on all Managed Lanes	✔	✔		N/A**
Tolling on all Managed Lanes			✔	N/A**
Mileage-based user fees			✔	N/A**
Parking fees (on-street and at job centers)			✔	N/A**
Lower transit fares (for all riders and/or more specific applications such as youth opportunity passes)			✔	N/A**

*Dollars shown in $2018 millions. Actual cost will reflect Year-of-Expenditure dollars which includes a compounded interest factor of 2.77 percent annually
**Potential policies may include user based fees, which are not included in the regional capital costs.

Network Concepts for review throughout October 2018

2019 Regional Plan Network Concepts

Projects by Phase Year: DRAFT Transit Network

TRANSIT PROJECTS	CONCEPT A: SHARED MOBILITY			CONCEPT B: CONNECTED CORRIDORS			CONCEPT C: POLICY POSSIBILITIES			ESTIMATED CAPITAL COSTS ($2018) MILLIONS*
	2025	2035	2050	2025	2035	2050	2025	2035	2050	
Commuter rail double tracking (20-minute peak and 60-minute off-peak frequencies)	✓			✓			✓			$594
Commuter rail double tracking (including grade separations at Leucadia Blvd., stations/platforms at Convention Center/Gaslamp Quarter and Del Mar Fairgrounds, and extension to Camp Pendleton)		✓			✓			✓		$679
Commuter rail double tracking (including Del Mar Tunnel)			✓						✓	$3,824
SPRINTER track upgrades for 15-minute frequencies	✓			✓			✓			$550
SPRINTER double tracking (Oceanside to Escondido and six rail grade separations at El Camino Real, Melrose Dr., Vista Village Dr./ Main St., North Dr., Civic Center, Auto Parkway and Mission Ave.)		✓			✓			✓		$652
SPRINTER Branch Extension to Westfield North County			✓			✓			✓	$671
Mid-Coast Trolley Extension	✓			✓			✓			$1,241
Trolley: Blue Line Frequency Enhancements (7.5-minutes all day) and Rail Grade Separations (28th St., 32nd St., E St., H St., Palomar, and Blue/Orange Track Connection at 12th/Imperial)		✓			✓			✓		$288
Trolley: Blue Line rail grade separations at Taylor St. and Ash St.			✓			✓			✓	$289
Trolley: Orange Line Frequency Enhancements (7.5-minute peak/ 15-minute off-peak) and four rail grade separations at Euclid Ave., Broadway/Lemon Grove Ave., Allison Ave./University Ave., Severin Dr.		✓			✓			✓		$357
Trolley: Green Line Frequency Enhancements (7.5-minute peak/15-minute off-peak)[1]			✓			✓			✓	$0
Trolley: Green Line Station at Riverwalk		✓			✓			✓		TBD
Rapid 2: North Park to downtown San Diego via 30th St., Golden Hill			✓			✓			✓	$53
Rapid 10: La Mesa to Ocean Beach via Mid-City, Hillcrest, Old Town	✓					✓	✓			$55
Rapid 12: Spring Valley to Downtown to SDSU		✓				✓		✓		$63
Rapid 215: Infrastructure Enhancements		✓				✓		✓		$24
Rapid 28: Point Loma to Kearny Mesa via Old Town, Linda Vista		✓				✓		✓		$89
Rapid 30: Old Town to Sorrento Mesa via Pacific Beach, La Jolla, UTC (includes stop at Mid-Coast Balboa Station)		✓				✓		✓		$189
Rapid 41: Downtown to UTC/UC San Diego via Fashion Valley, Linda Vista, and Clairemont		✓				✓		✓		$94
Rapid 90: El Cajon Transit Center to San Diego International Airport ITC via SR 94, City College (peak only)	✓				✓		✓			$27

2019 Regional Plan Network Concepts

Projects by Phase Year: DRAFT Transit Network

TRANSIT PROJECTS	CONCEPT A: SHARED MOBILITY			CONCEPT B: CONNECTED CORRIDORS			CONCEPT C: POLICY POSSIBILITIES			ESTIMATED CAPITAL COSTS ($2018) MILLIONS*
	2025	2035	2050	2025	2035	2050	2025	2035	2050	
Rapid 103: Solana Beach to Sabre Springs *Rapid* station via SR 56 (peak only)		✓				✓		✓		$67
Rapid 120: Kearny Mesa to Downtown San Diego via Mission Valley			✓			✓			✓	$124
Rapid 225: Additional stations at Plaza and H St.		✓						✓		$532
Rapid inline stations on SR 163 at Sharp/Children's Hospital, University Ave.: Kearny Mesa to Downtown San Diego via SR 163		✓				✓		✓		$167
Rapid 236: Temecula (peak only) to Escondido Transit Center			✓			✓			✓	$131
Rapid 237: Miramar College to UC San Diego via Carroll Canyon Rd.	✓			✓			✓			$20
Rapid 440: Carlsbad to Escondido Transit Center via Palomar Airport Rd.		✓						✓		$137
Rapid 471: Downtown Escondido to East Escondido			✓						✓	$45
Rapid 473: Oceanside to UTC/UC San Diego via Hwy 101 Coastal Communities, Carmel Valley		✓				✓		✓		$245
Rapid 474: Oceanside to Vista via Mission Ave./Santa Fe Rd. Corridor			✓						✓	$97
Rapid 477: Camp Pendleton to Carlsbad Village via College Blvd., Plaza Camino Real						✓				$142
Rapid 625: SDSU to Palomar Station via East San Diego, Southeast San Diego, National City		✓				✓		✓		$109
Rapid 635: Eastlake to Palomar Trolley via Main St. Corridor		✓						✓		$102
Rapid 637: North Park to 32nd St. Trolley Station via Golden Hill	✓						✓			$59
Rapid 640A: I-5 - San Ysidro to Old Town Transit Center via City College	✓				✓		✓			$205
Rapid 640B: I-5 Iris/Trolley/Palomar to Kearny Mesa via Chula Vista, National City, and City College	✓				✓		✓			See *Rapid* 640A
Rapid 650: Chula Vista to Oceanside Transit Center via I-805/I-5 (peak only)		✓				✓		✓		$295
Rapid 653: Mid-City to Oceanside Transit Center via transit guideway from I-15 to Qualcomm Stadium (peak only)		✓				✓		✓		$85
Rapid 662: San Ysidro to Carmel Valley		✓			✓			✓		$1,406
Rapid 663: Mid-Coast Trolley Station to Stadium		✓				✓		✓		$1,058
Rapid 688: San Ysidro to Sorrento Mesa via I-805/I-15/SR 52 Corridors (peak only)		✓				✓		✓		$185

2019 Regional Plan Network Concepts

Projects by Phase Year: DRAFT Transit Network

TRANSIT PROJECTS	CONCEPT A: SHARED MOBILITY			CONCEPT B: CONNECTED CORRIDORS			CONCEPT C: POLICY POSSIBILITIES			ESTIMATED CAPITAL COSTS ($2018) MILLIONS*
	2025	2035	2050	2025	2035	2050	2025	2035	2050	
Rapid 689: Otay Mesa Port of Entry (POE) to UTC/Torrey Pines via Otay Ranch/Millennia, I-805 Corridor (peak only) including Otay Valley Rd. ramps		✓				✓		✓		See *Rapid* 688
Rapid 690: Mid-City to Sorrento Mesa via I-805 Corridor (peak only)		✓				✓		✓		See *Rapid* 688
Rapid 709: H St. Trolley Station to Millennia via H St. Corridor, Southwestern College	✓						✓			$87
Rapid 870: El Cajon to UTC via Santee, SR 52, I-805 (peak only)			✓			✓			✓	$98
Rapid 890: El Cajon to Sorrento Mesa via SR 52, Kearny Mesa (peak only)			✓			✓			✓	$20
Rapid 910: Coronado to Downtown via Coronado Bridge		✓				✓		✓		$53
Rapid 950: Extension of current route 950 to include Imperial Beach	✓			✓			✓			$9
Airport Express Routes[2]	✓			✓			✓			$0
San Marcos Shuttle[3]		✓			✓			✓		$0
Microtransit: Camp Pendleton to Carlsbad Village via College Blvd., Plaza Camino Real			✓						✓	$50
Microtransit: Mission Beach to La Jolla via Pacific Beach			✓			✓			✓	$125
Microtransit: SDSU to Spring Valley via East San Diego, Lemon Grove, Skyline		✓				✓		✓		$92
Microtransit: Iris Trolley Station to Otay Mesa via Otay, Airway Dr., SR 905 Corridor		✓				✓		✓		$88
Skyway: Pacific Beach to Mid Coast		✓				✓		✓		$182
Skyway: Sorrento Valley Skyway and COASTER Station Relocation			✓			✓			✓	$183
Skyway: Convention Center to San Diego International Airport	Under study			Under study			Under study			$250
Skyway: Balboa Park to Downtown San Diego			✓			✓			✓	$65
Streetcar: Downtown San Diego: Little Italy to East Village[4]			✓			✓			✓	$15
Streetcar: 30th St. to Downtown San Diego via North Park/Golden Hill[4]			✓			✓			✓	$22
San Diego International Airport Intermodal Transit Center and COASTER station and I-5 Direct Connector Ramps		✓			✓			✓		$189
San Ysidro Intermodal Transit Center Phase I		✓			✓			✓		$106
San Ysidro Intermodal Transit Center Phase II			✓			✓			✓	$26

2019 Regional Plan Network Concepts

Projects by Phase Year: DRAFT Transit Network

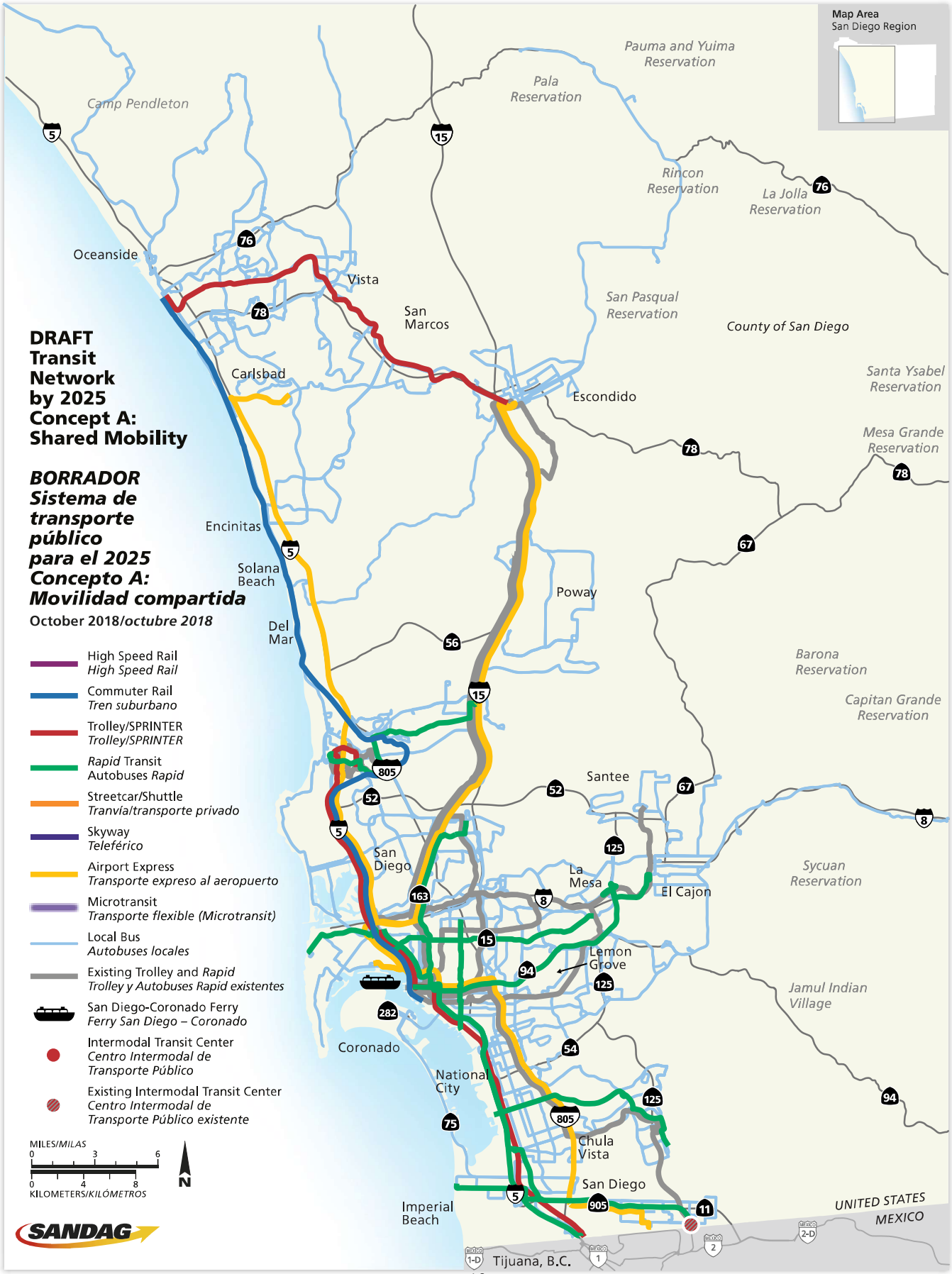
OTHER TRANSIT IMPROVEMENTS	CONCEPT A: SHARED MOBILITY			CONCEPT B: CONNECTED CORRIDORS			CONCEPT C: POLICY POSSIBILITIES			ESTIMATED CAPITAL COSTS ($2018) MILLIONS*
	2025	2035	2050	2025	2035	2050	2025	2035	2050	
Increase select local transit frequencies to 15 minutes[1]	✔						✔			$0
Increase select local transit frequencies to 10 minutes[1]		✔						✔		$0
Vehicle replacement	Throughout			Throughout			Throughout			
Transit system rehabilitation	Throughout			Throughout			Throughout			
Maintenance facilities	Throughout			Throughout			Throughout			
Intelligent Transportation System (ITS) (including transit signal priority, adaptive signals, and Universal Transportation Account)	Throughout			Throughout			Throughout			
Regulatory compliance (including zero emission fleets and quite zones)	Throughout			Throughout			Throughout			
Park & Ride lots	Throughout			Throughout			Throughout			

*Dollars shown in $2018 millions. Actual cost will reflect Year-of-Expenditure dollars which includes a compounded interest factor of 2.77 percent annually

1. Transit Frequency cost estimates will be included in separate transit operations cost categories
2. Implementation of these services is dependent upon funding from aviation and other private sources
3. Capital cost funded by the City of San Marcos
4. Streetcar cost is representative of 10 percent of the total capital cost

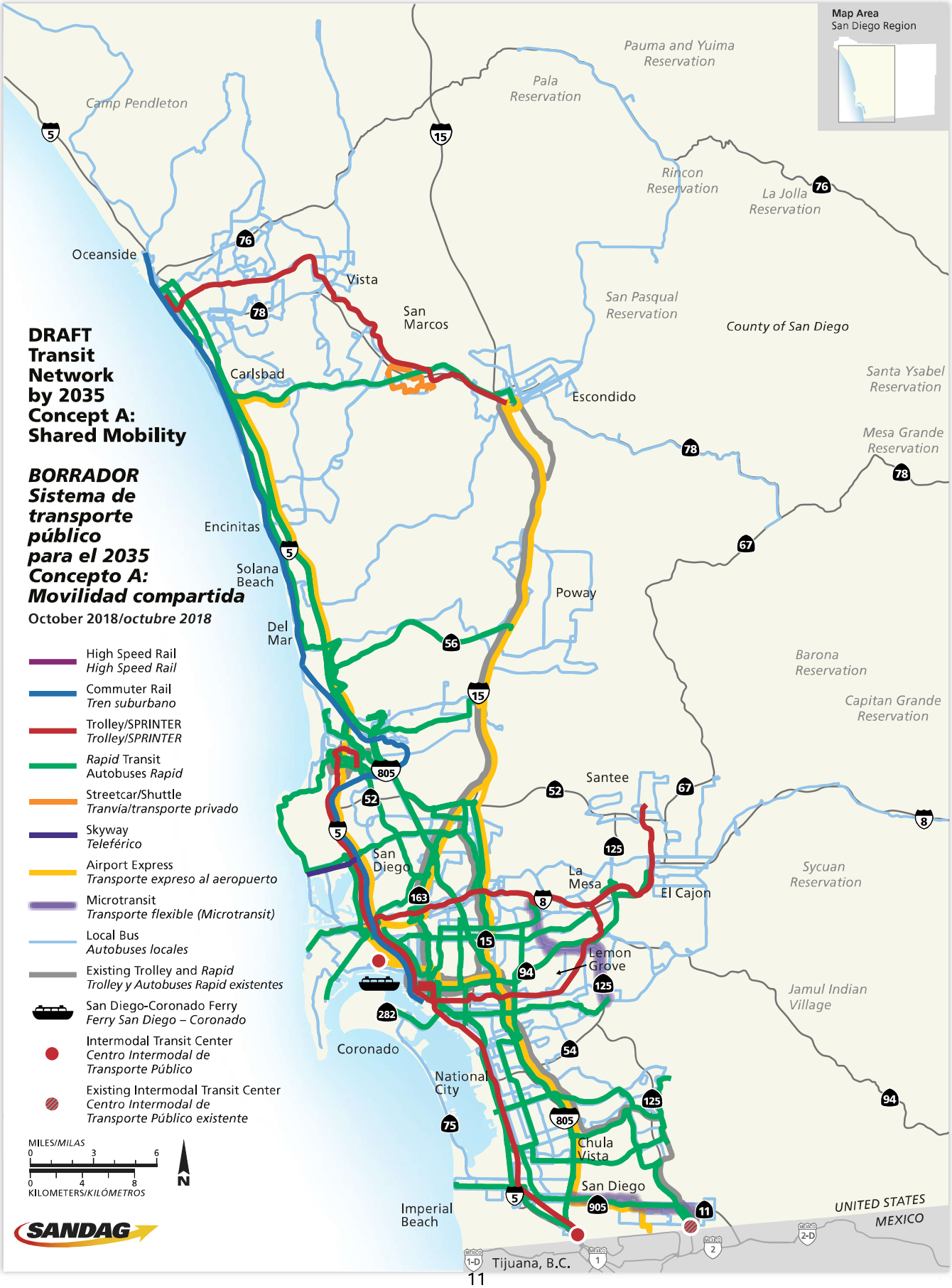
2019 Regional Plan Network Concept A: Shared Mobility

DRAFT Transit Network by 2025



2019 Regional Plan Network Concept A: Shared Mobility

DRAFT Transit Network by 2035



2019 Regional Plan Network Concept A: Shared Mobility

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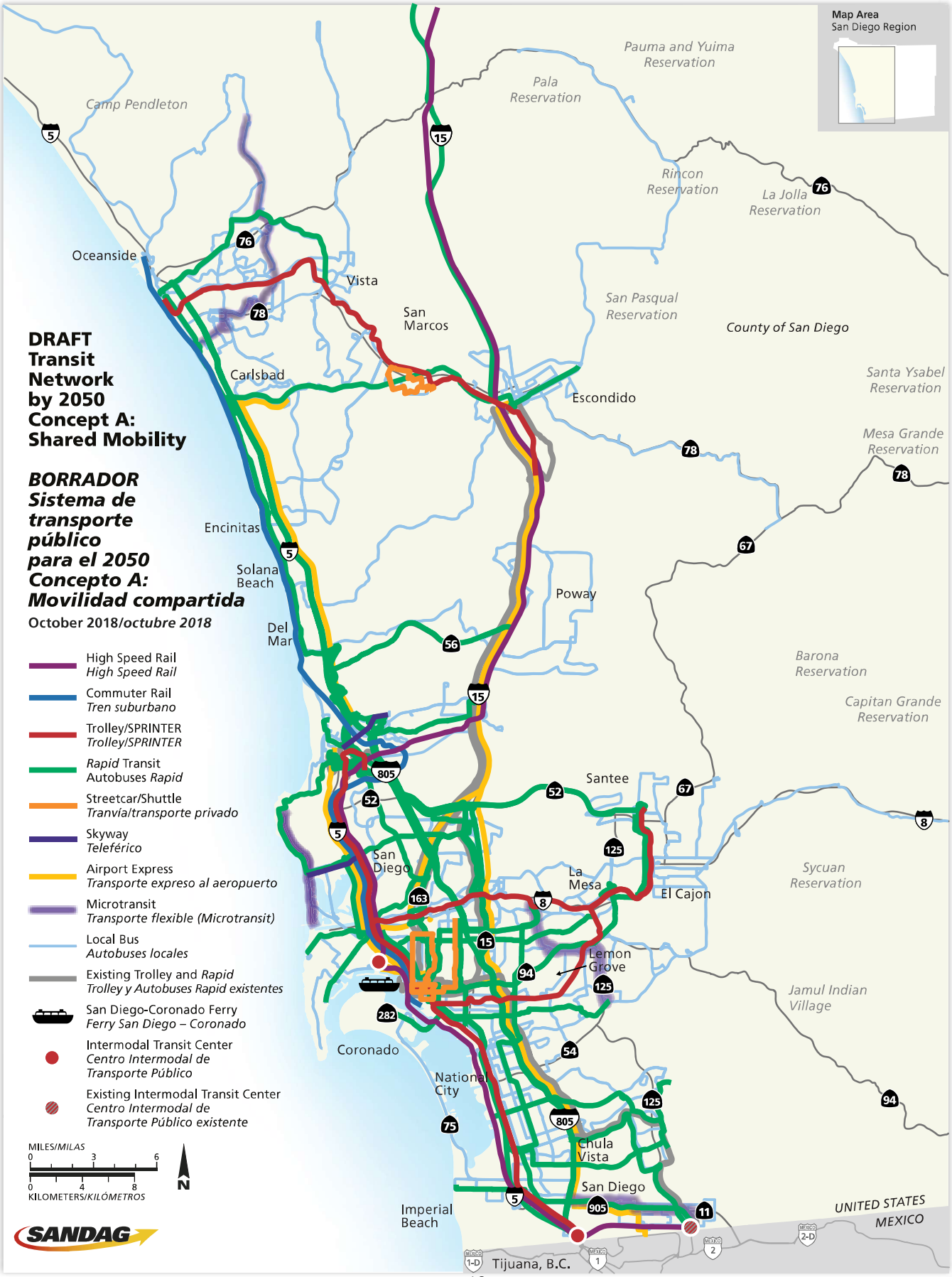
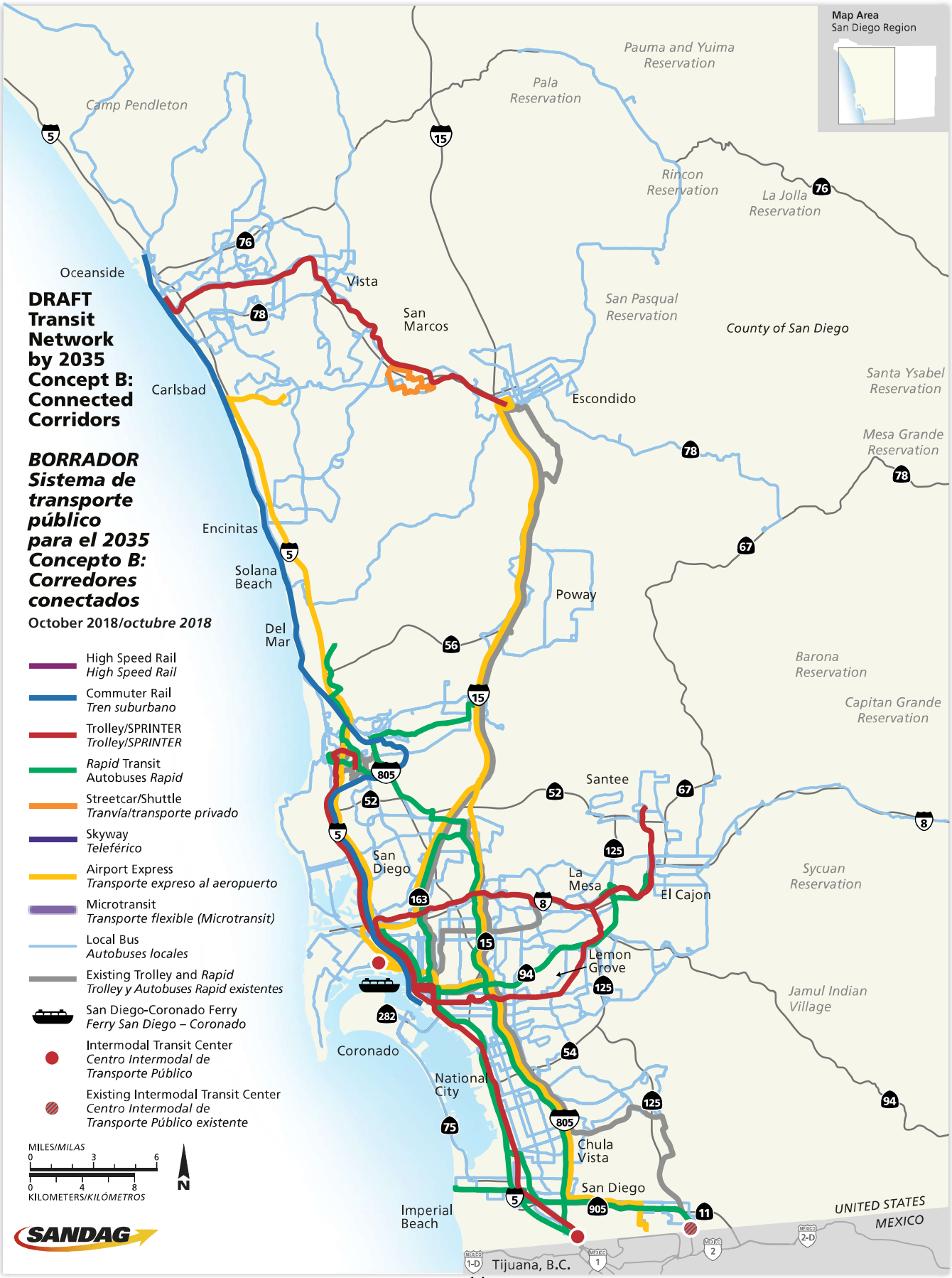


2019 Regional Plan Network Concept B: Connected Corridors

DRAFT Transit Network by 2025

2019 Regional Plan Network Concept B: Connected Corridors

DRAFT Transit Network by 2035



2019 Regional Plan Network Concept B: Connected Corridors

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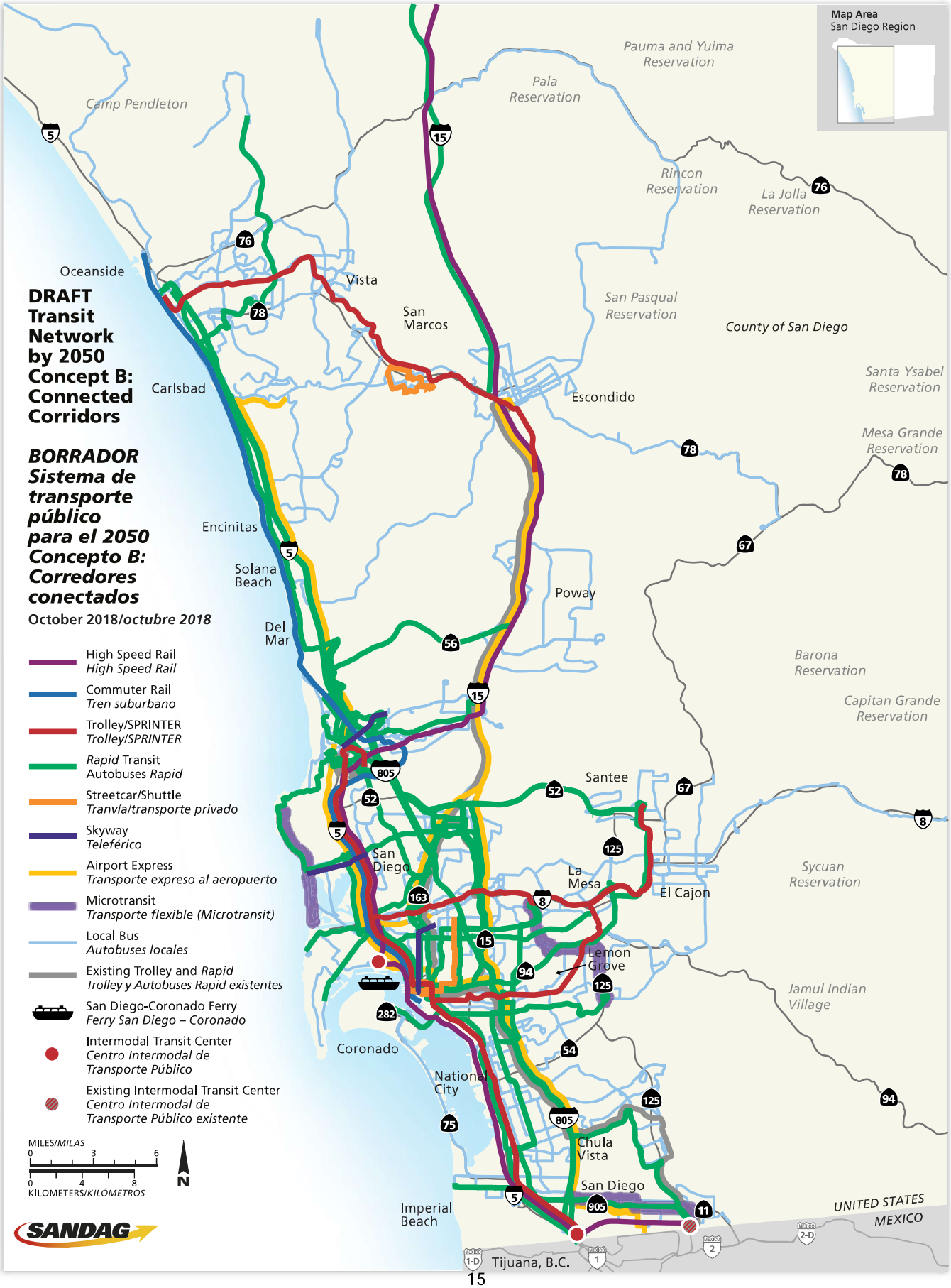
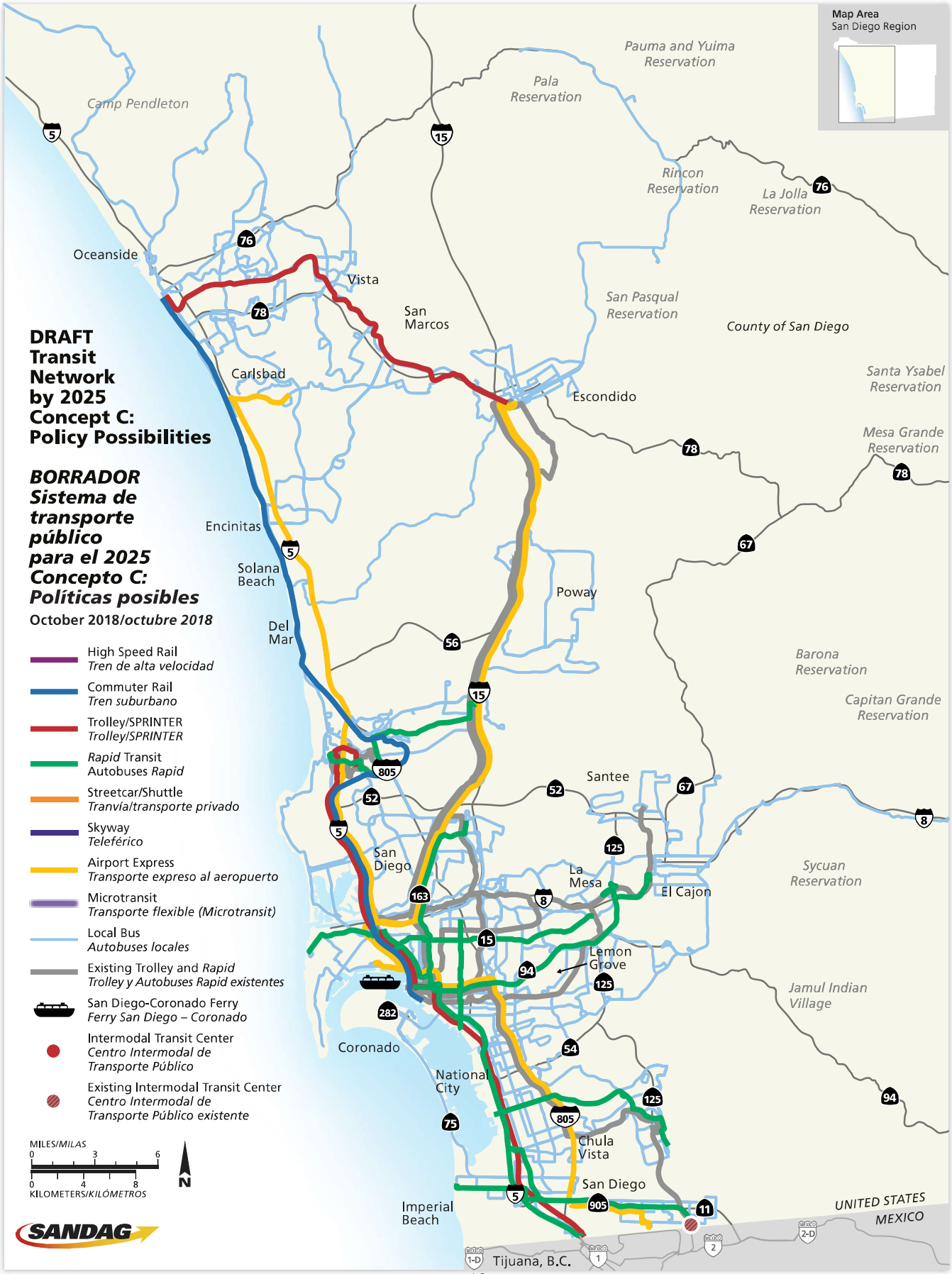


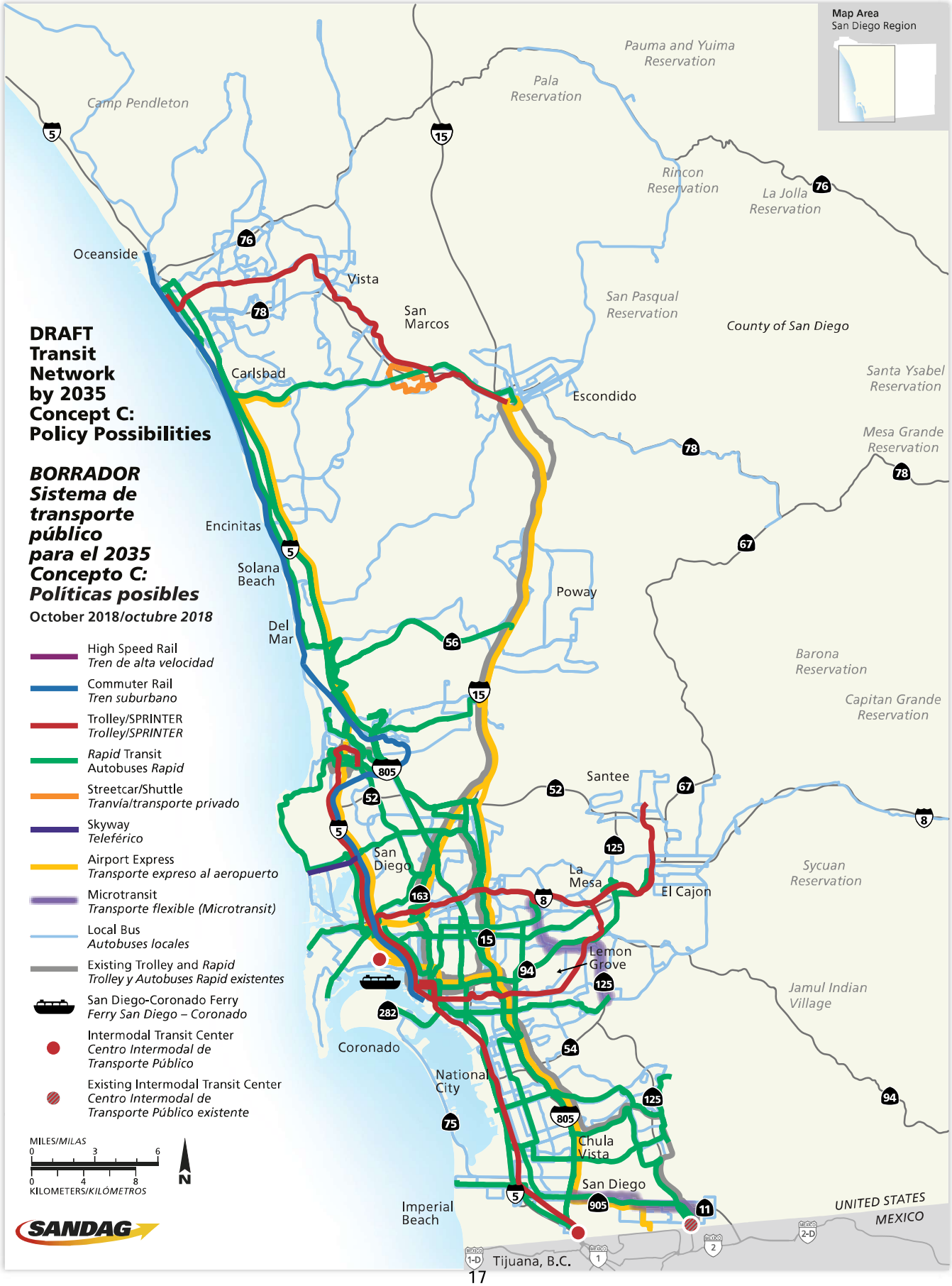
2019 Regional Plan Network Concept C: Policy Possibilities

DRAFT Transit Network by 2025



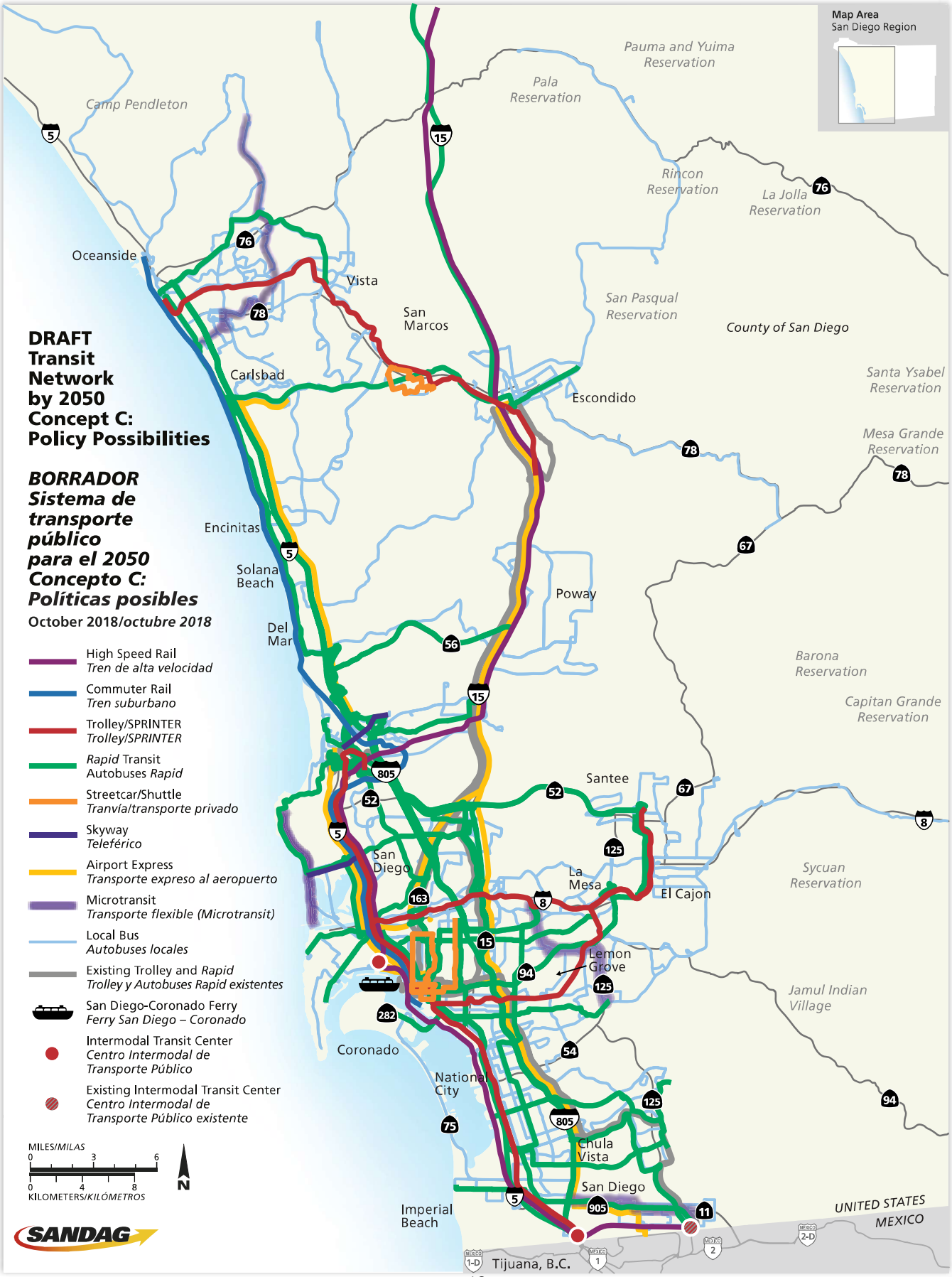
2019 Regional Plan Network Concept C: Policy Possibilities

DRAFT Transit Network by 2035



2019 Regional Plan Network Concept C: Policy Possibilities

DRAFT Transit Network by 2050



2019 Regional Plan Network Concepts

Projects by Phase Year: DRAFT Managed Lanes and Highway Network

MANAGED LANE/TOLL LANE PROJECTS	CONCEPT A: SHARED MOBILITY			CONCEPT B: CONNECTED CORRIDORS			CONCEPT C: POLICY POSSIBILITIES			ESTIMATED CAPITAL COSTS ($2018) MILLIONS*
	2025	2035	2050	2025	2035	2050	2025	2035	2050	
I-5: Add two managed lanes between SR 905 and SR 54 Supports *Rapid* 640			✓						✓	$529
I-5: Add two managed lanes between SR 54 and SR 15 Supports *Rapid* 640		✓				✓			✓	$584
I-5: Add two managed lanes between I-8 and La Jolla Village Drive						✓				$954
I-5: Add two managed lanes, plus connectors, between La Jolla Village Drive and SR 56 Supports *Rapid* 562, 650, 653			✓		✓				✓	$411
I-5: West to North and South to East connectors to SR 56						✓				$350
I-5: Add two managed lanes between Manchester Avenue and SR 78 Supports *Rapid* 650, 653	✓			✓			✓			$525
I-5: Add two managed lanes between SR 56 and SR 78						✓				$1,542
I-5: Add two managed lanes between SR 78 and Vandegrift Blvd.					✓					$113
I-5: Add (two additional) managed lanes between SR 78 and Vandergrift Blvd. Four managed lanes total.			✓			✓			✓	$617
I-5: Add two toll lanes between Vandegrift Blvd. and Orange County Supports *Rapid* 653			✓						✓	$1,010
I-5: Add four toll lanes between Vandegrift Blvd. and Orange County Supports *Rapid* 653						✓				$3,087
SR 11/Otay Mesa Port of Entry (POE): Four toll lanes, plus southbound connectors, between Enrico Fermi Drive and Mexico Supports *Rapid* 950	✓			✓			✓			$635
I-15: Add two managed lanes on a viaduct over Mission Valley						✓				$1,014
I-15: Add two managed lanes between I-8 and SR 163 Supports *Rapid* 653, 690	✓				✓		✓			$62
I-15: Add four toll lanes between SR 78 and Riverside County Supports *Rapid* 236			✓			✓			✓	$1,701
SR 52: Add two managed lanes, plus connectors, between I-15 and I-805 Supports *Rapid* 653, 870, 890			✓		✓				✓	$232
SR 52: Add two managed lanes, plus connectors, between I-15 and SR 125 Supports *Rapid* 870, 890			✓		✓				✓	$910
SR 78: Add two managed lanes, plus general purpose and managed lane connectors, between I-5 and Twin Oaks Valley Road			✓		✓				✓	$1,729
SR 78: Add two managed lanes, plus connectors and operational improvements, between Twin Oaks Valley Road and I-15			✓	✓					✓	$350

2019 Regional Plan Network Concepts

Projects by Phase Year: DRAFT Managed Lanes and Highway Network

MANAGED LANE/TOLL LANE PROJECTS	CONCEPT A: SHARED MOBILITY			CONCEPT B: CONNECTED CORRIDORS			CONCEPT C: POLICY POSSIBILITIES			ESTIMATED CAPITAL COSTS ($2018) MILLIONS*
	2025	2035	2050	2025	2035	2050	2025	2035	2050	
SR 94: Add two managed lanes, plus connectors and 28th Street inline station, between I-5 and I-805 Supports *Rapid* 90, 225, 235			✓			✓			✓	$1,089
SR 94: Add two managed lanes between I-805 and SR 125 Supports *Rapid* 90						✓				$488
SR 125: Add two freeway lanes and two managed lanes between SR 54 and I-8 Supports *Rapid* 90			✓							$673
SR 241: Add four toll lanes between Orange County and I-5	✓			✓			✓			$464
SR 241: Add two toll lanes (total of six) between Orange County and I-5		✓			✓			✓		$70
I-805: Add two managed lanes, plus south-facing DAR at Palomar Street, from SR 905 to Palomar Street Supports *Rapid* 688			✓						✓	$229
I-805: Add two managed lanes between SR 54 and SR 94 Supports *Rapid* 225, 650, 688, 689			✓						✓	$724
I-805: Add two managed lanes, plus connectors, between SR 94 and SR 15 Supports *Rapid* 225, 650, 688, 689	✓			✓			✓			$324
I-805: Add two managed lanes (restripe viaduct) between SR 15 and SR 163 Supports *Rapid* 650, 689, 690	✓				✓		✓			$616
I-805: Add two managed lanes between SR 163 and SR 52 Supports *Rapid* 650, 689, 690		✓		✓				✓		$190
I-805: Add two managed lanes, plus DAR at Nobel Drive, between SR 52 and Carroll Canyon Road Supports *Rapid* 650, 653, 688, 689, 690, 870, 890					✓					$759

HIGHWAY PROJECTS	CONCEPT A: SHARED MOBILITY			CONCEPT B: CONNECTED CORRIDORS			CONCEPT C: POLICY POSSIBILITIES			ESTIMATED CAPITAL COSTS ($2018) MILLIONS*
	2025	2035	2050	2025	2035	2050	2025	2035	2050	
I-8: Add two freeway lanes between 2nd Street and Los Coches Road					✓					$43
SR 56: Add two freeway lanes, plus north to west connector, between I-5 and I-15			✓		✓				✓	$367
SR 94: Add two freeway lanes between Avocado Blvd and SR 125						✓				$185
SR 125: Add four freeway lanes between SR 905 and SR 54			✓			✓			✓	$554
SR 94 / SR 125 south to east connector				✓						$120

Network Concepts for review throughout October 2018

2019 Regional Plan Network Concepts

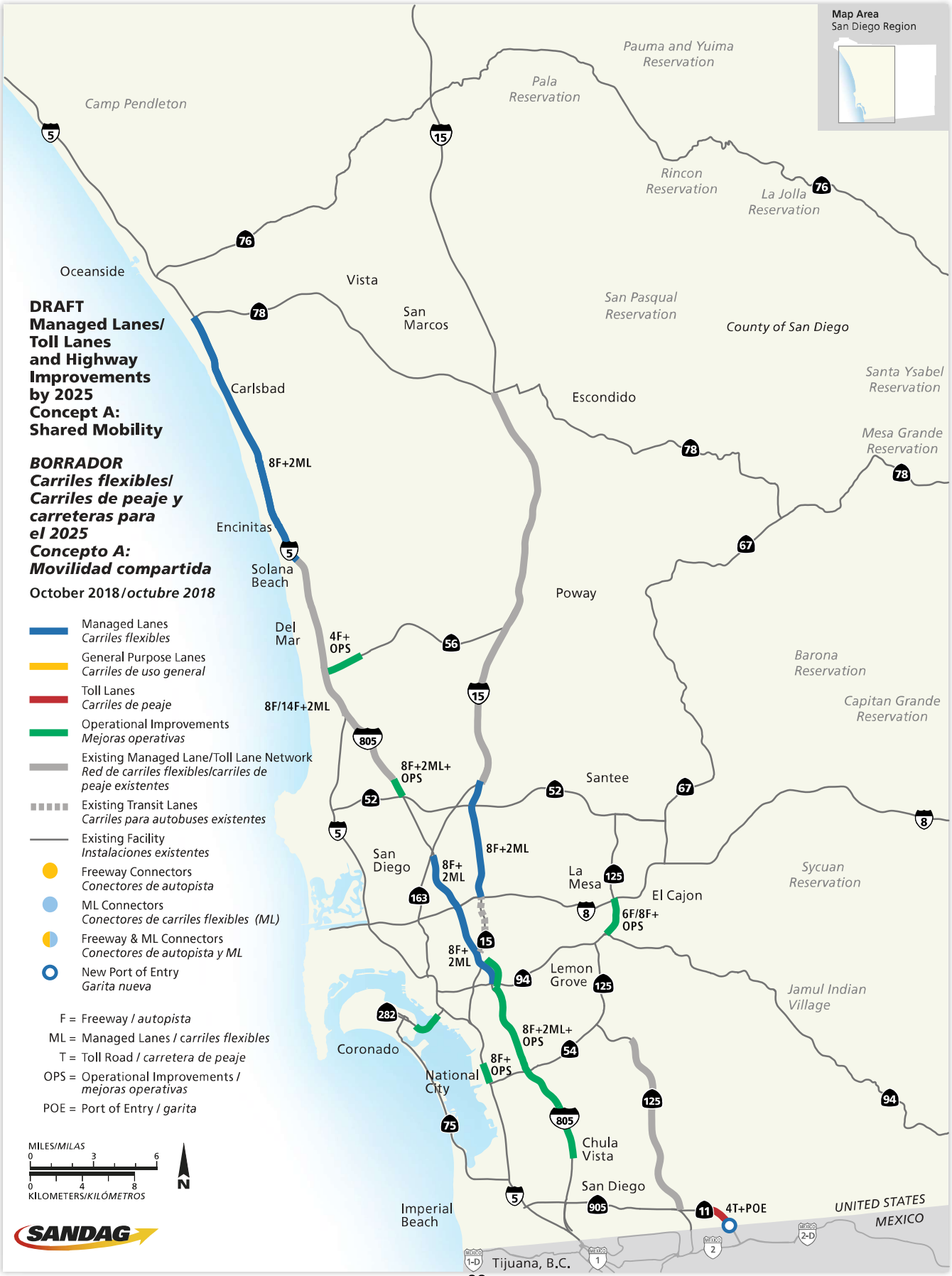
Projects by Phase Year: DRAFT Managed Lanes and Highway Network

OPERATIONAL IMPROVEMENTS	CONCEPT A: SHARED MOBILITY			CONCEPT B: CONNECTED CORRIDORS			CONCEPT C: POLICY POSSIBILITIES			ESTIMATED CAPITAL COSTS ($2018) MILLIONS*
	2025	2035	2050	2025	2035	2050	2025	2035	2050	
I-5: Operational improvements between SR 54 and 28th Street Supports *Rapid* 640	✓			✓			✓			$41
I-5: Operational improvements between SR 15 and I-8 Supports *Rapid* 640			✓			✓			✓	$1,936
I-5: Operational improvements between Mission Avenue and SR 76				✓						$21
I-8: Operational improvements between I-5 and SR 67				✓						$26
SR 52: Add two freeway lanes and add operational improvements between I-15 and SR 125 Supports *Rapid* 870 and 890				✓						$67
SR 56: Operational improvements between I-5 and Carmel Country Road Supports *Rapid* 103	✓			✓			✓			$36
SR 76: Operational improvements between I-15 and Couser Canyon			✓			✓			✓	$46
SR 78: Operational improvements between Mar Vista Drive and Twin Oaks Valley Road		✓		✓				✓		$175
SR 125: Operational improvements between SR 94 and I-8 Supports Route 90	✓			✓			✓			$41
I-805: Operational improvements between Naples Street and Home Avenue Supports *Rapid* 225, 650, 688, 689	✓			✓			✓			$51
I-805: Operational improvements between SR 52 and Nobel Drive Supports *Rapid* 650, 653	✓			✓			✓			$42
Coronado Bridge safety improvements Supports *Rapid* 910	✓			✓			✓			TBD

*Dollars shown in $2018 millions. Actual cost will reflect Year-of-Expenditure dollars which includes a compounded interest factor of 2.77 percent annually

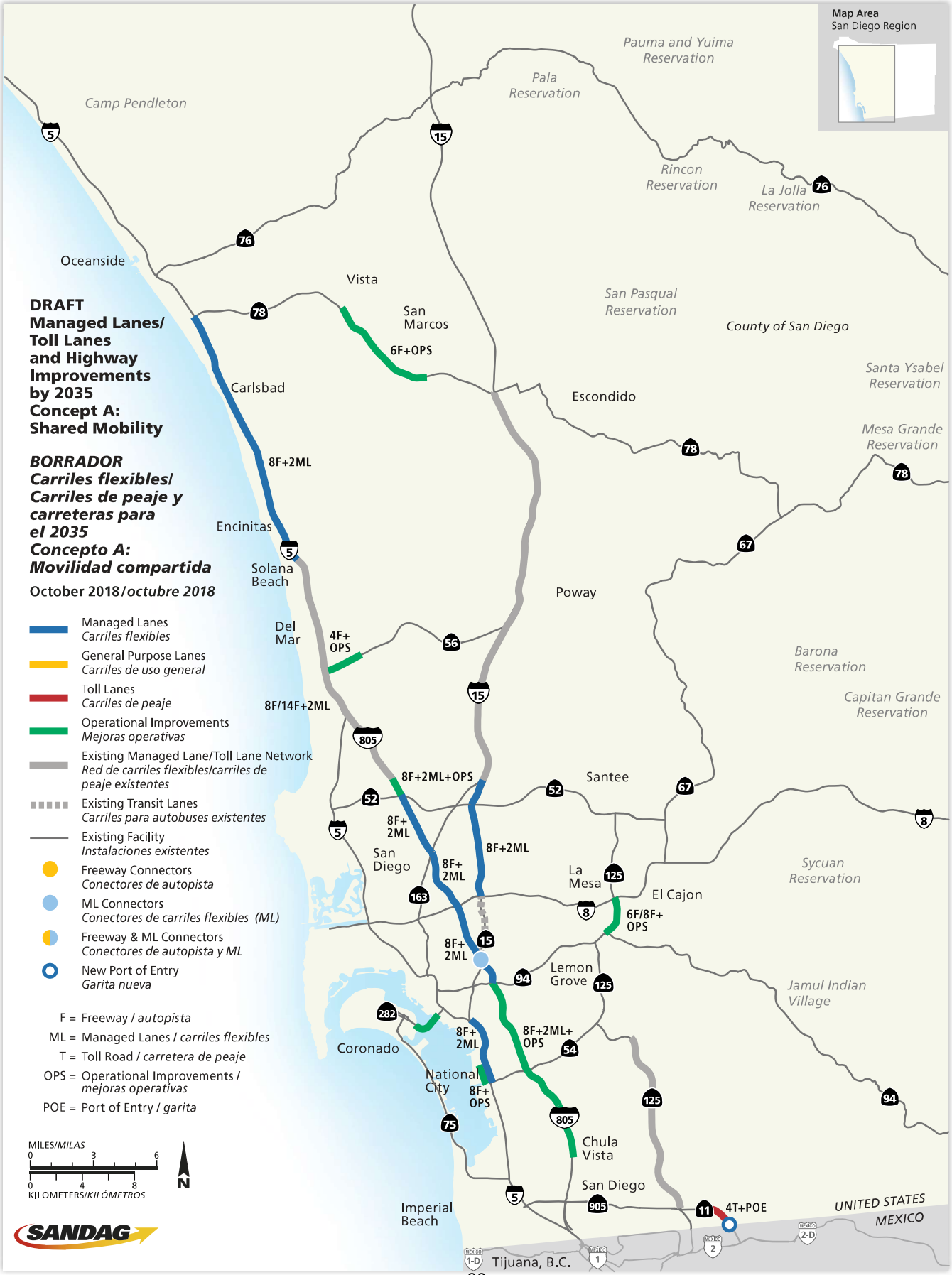
2019 Regional Plan Network Concept A: Shared Mobility

DRAFT Managed Lane/Toll Lane Network by 2025



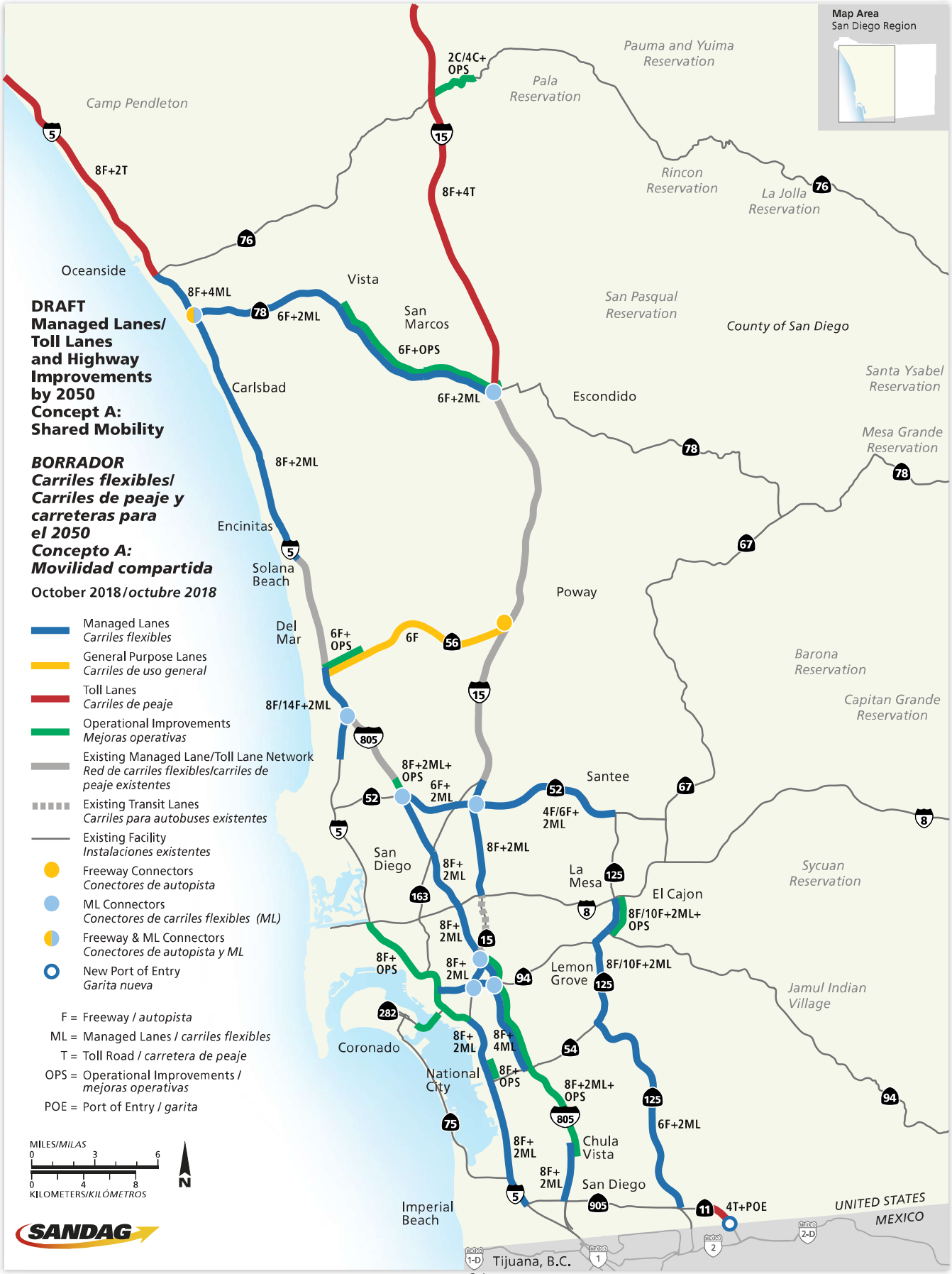
2019 Regional Plan Network Concept A: Shared Mobility

DRAFT Managed Lane/Toll Lane Network by 2035



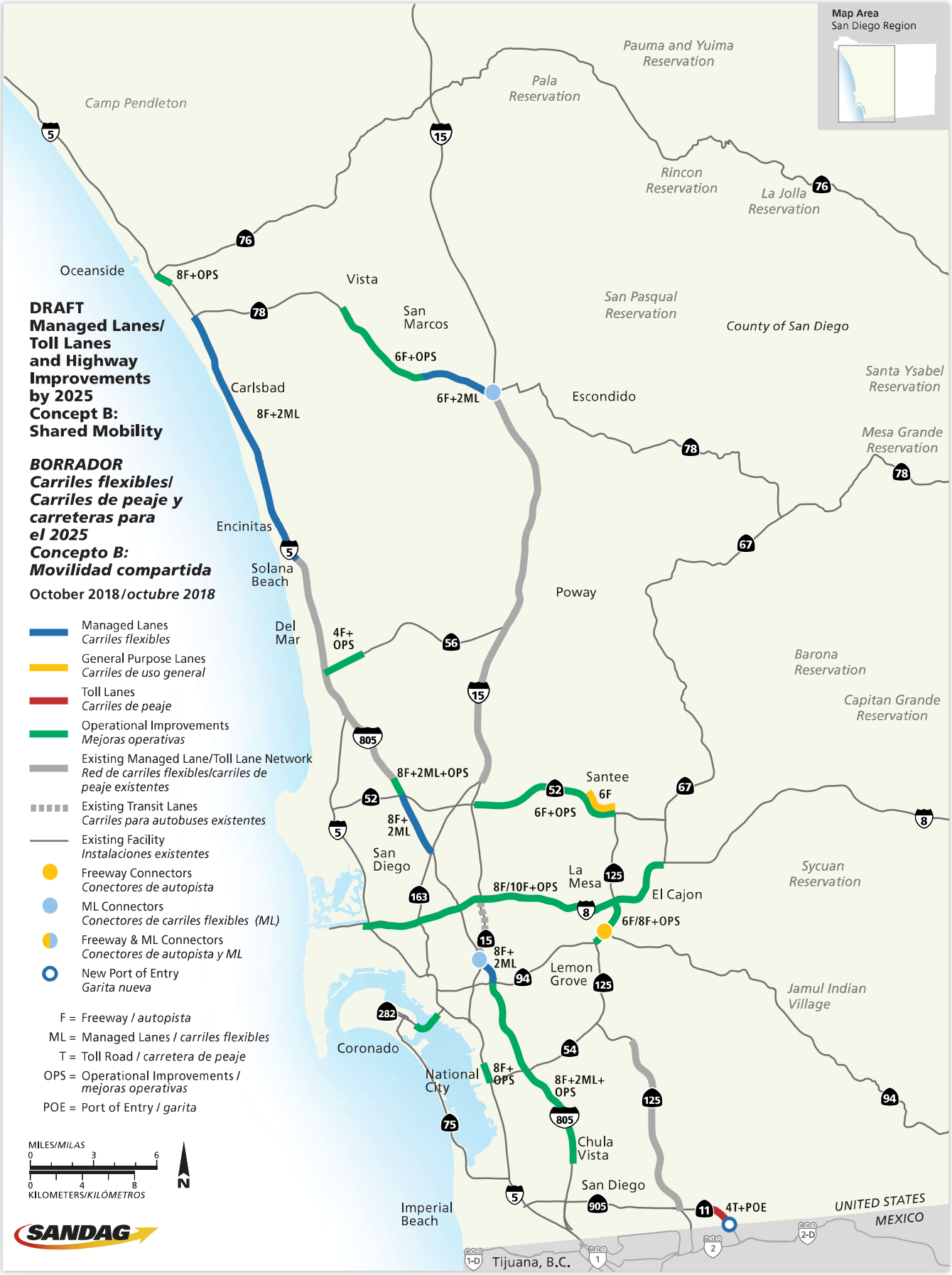
2019 Regional Plan Network Concept A: Shared Mobility

DRAFT Managed Lane/Toll Lane Network by 2050



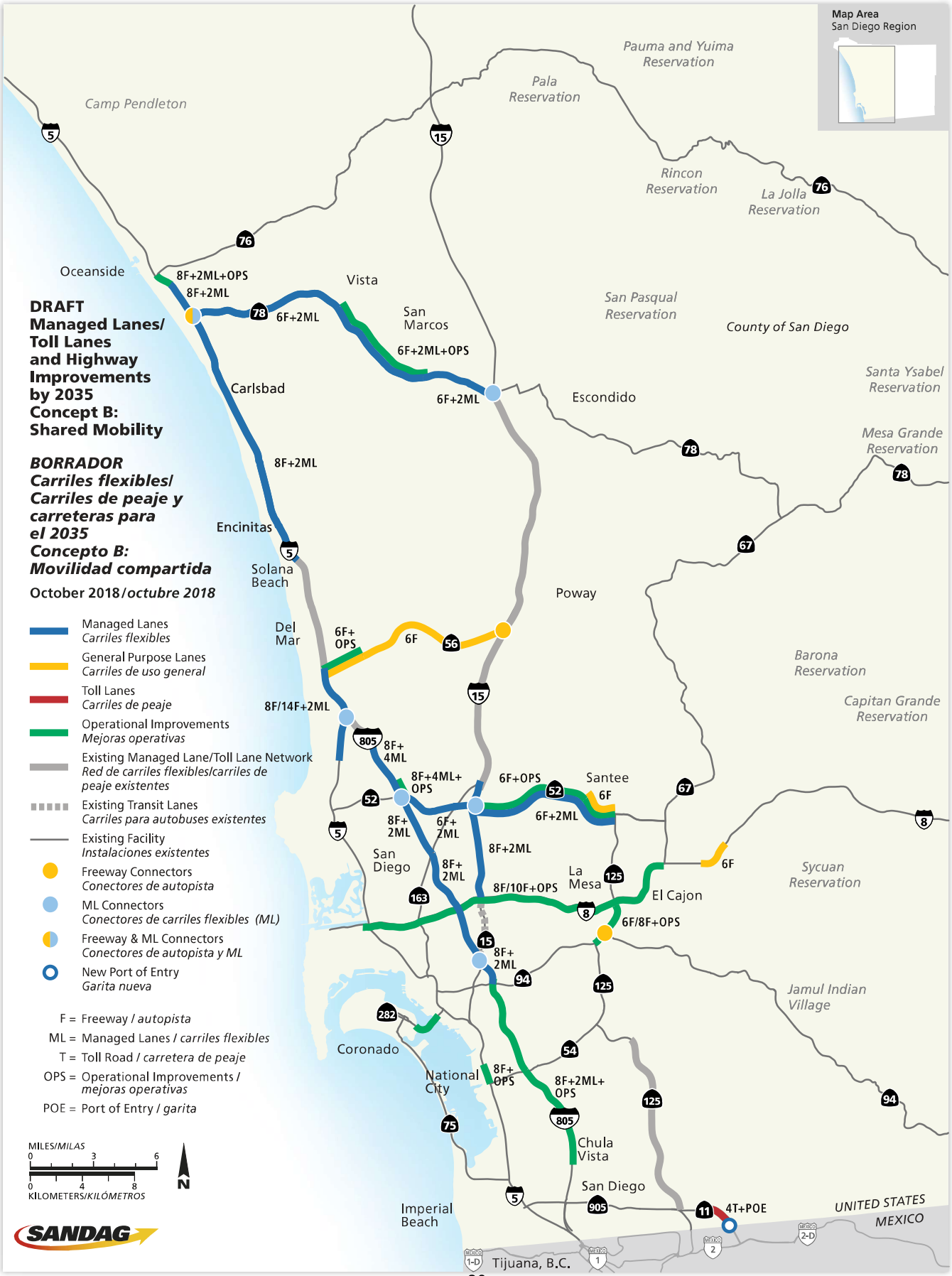
2019 Regional Plan Network Concept B: Connected Corridors

DRAFT Managed Lane/Toll Lane Network by 2025



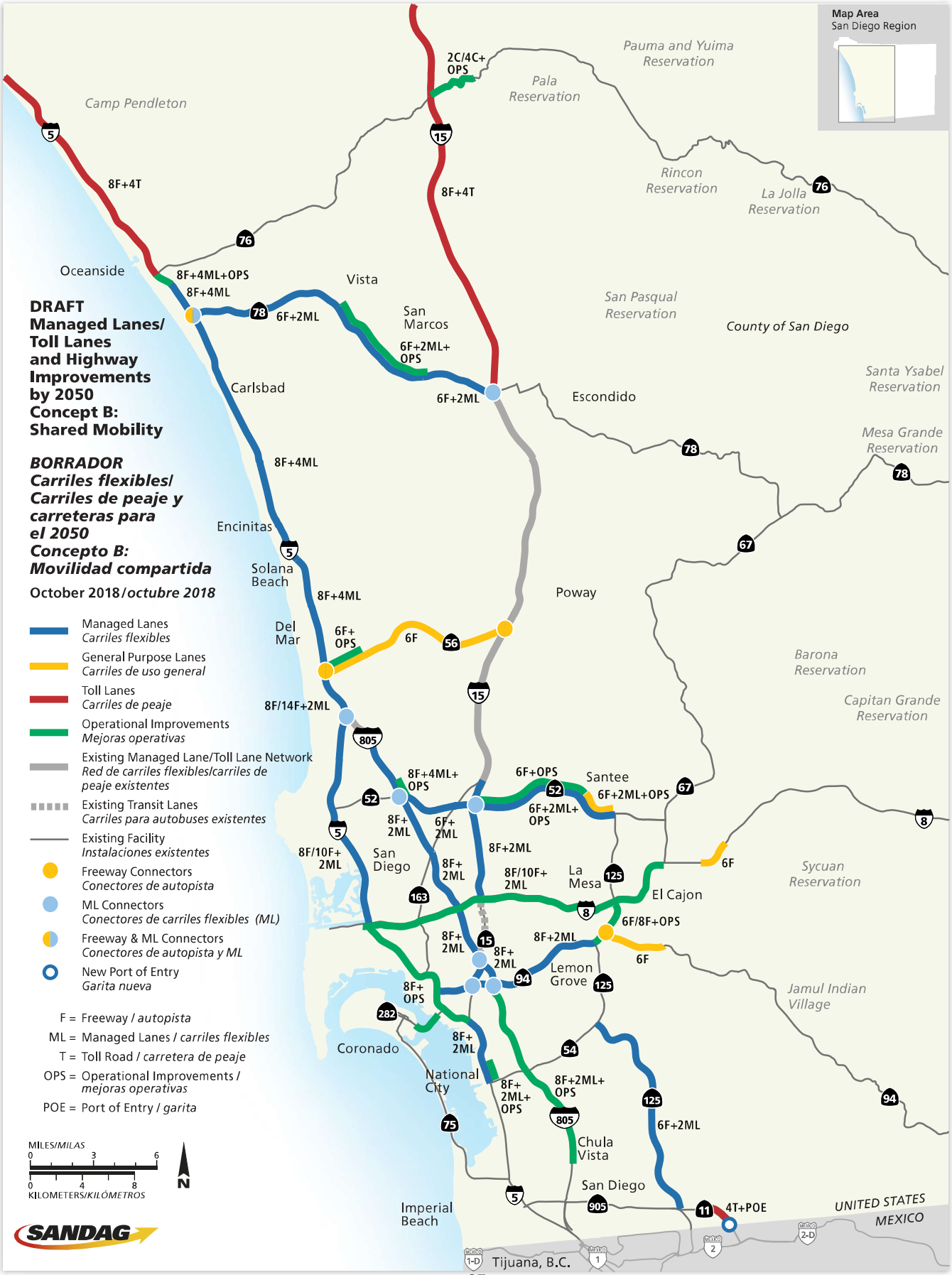
2019 Regional Plan Network Concept B: Connected Corridors

DRAFT Managed Lane/Toll Lane Network by 2035



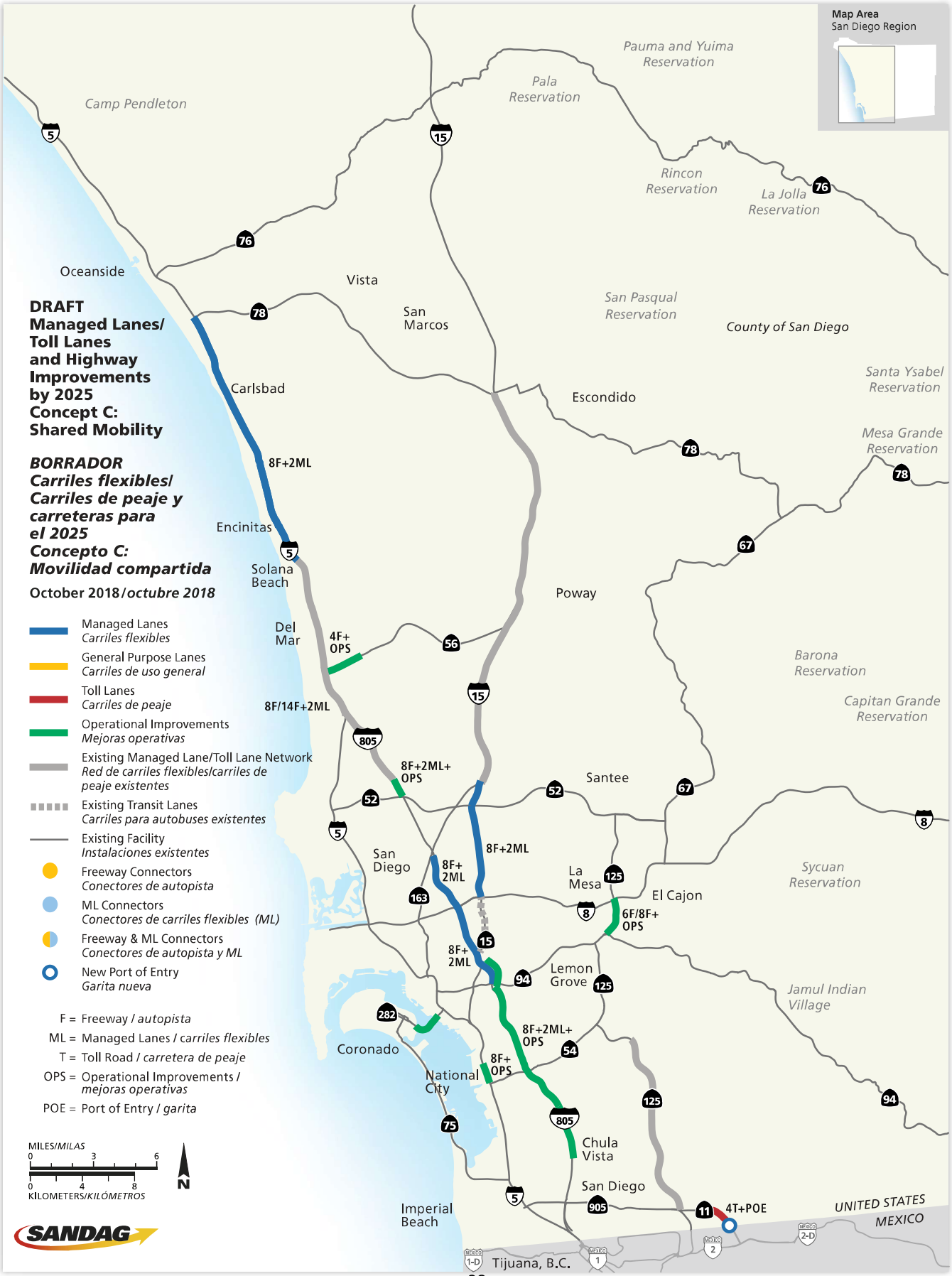
2019 Regional Plan Network Concept B: Connected Corridors

DRAFT Managed Lane/Toll Lane Network by 2050



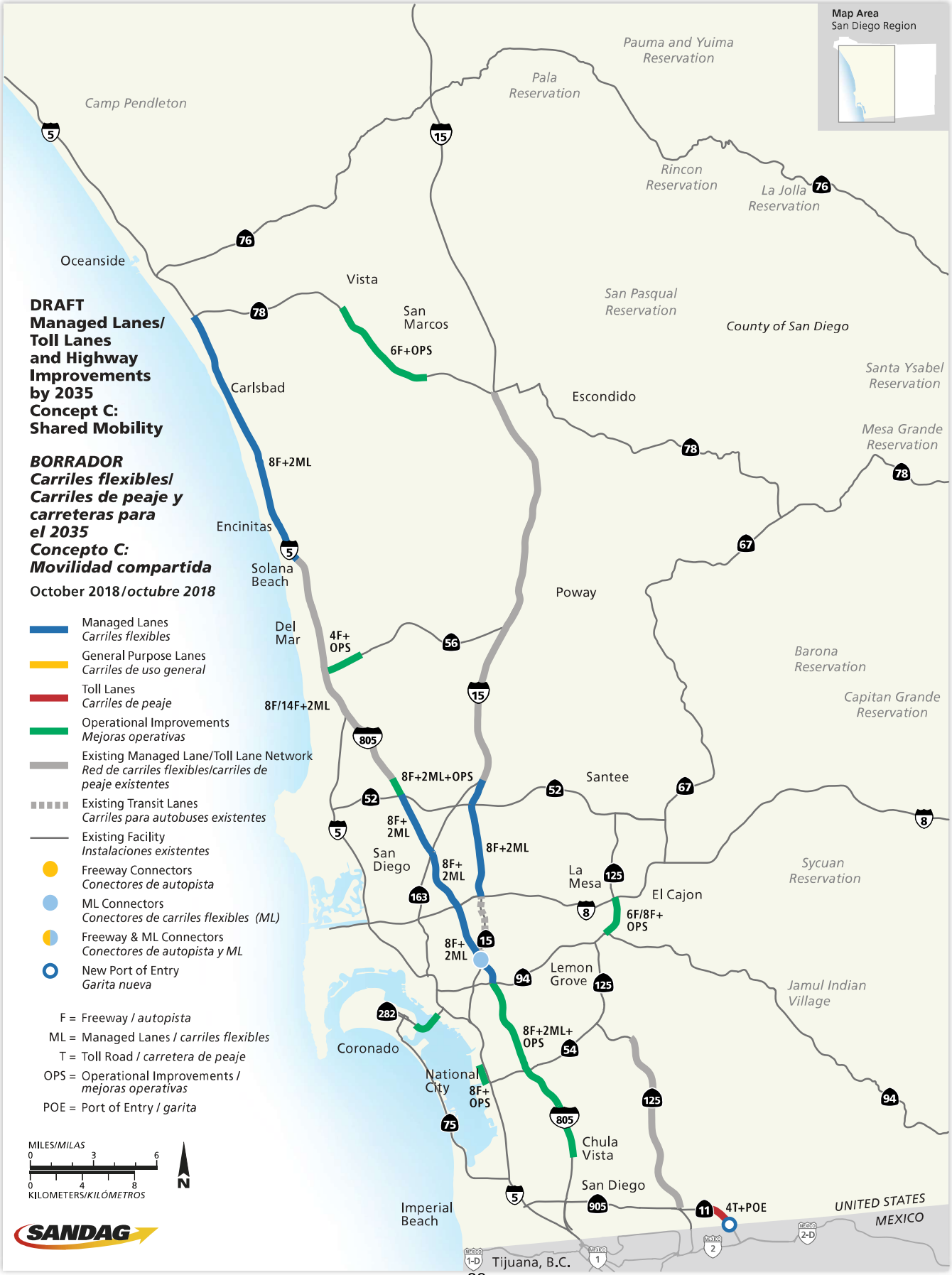
2019 Regional Plan Network Concept C: Policy Possibilities

DRAFT Managed Lane/Toll Lane Network by 2025



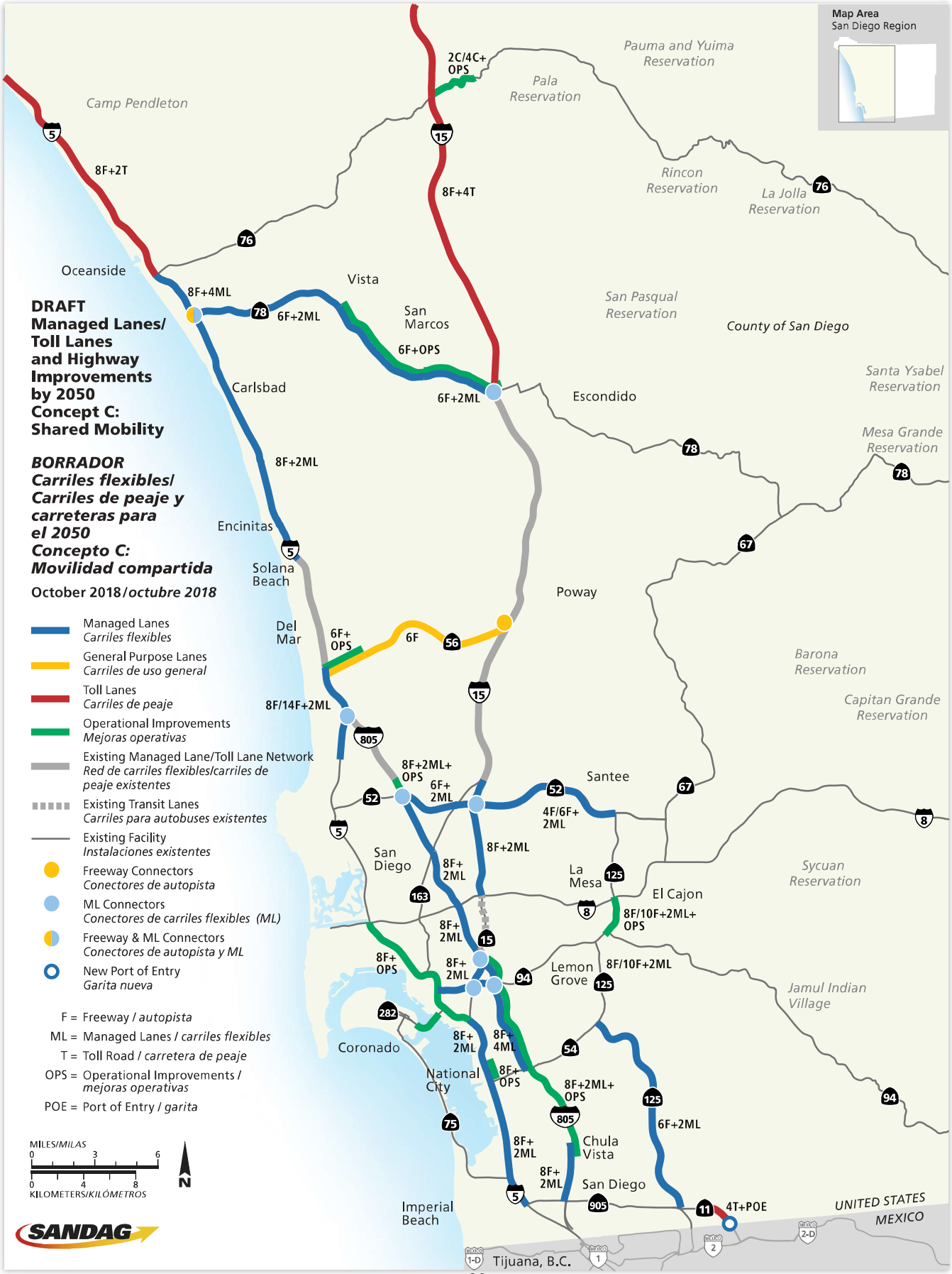
2019 Regional Plan Network Concept C: Policy Possibilities

DRAFT Managed Lane/Toll Lane Network by 2035



2019 Regional Plan Network Concept C: Policy Possibilities

DRAFT Managed Lane/Toll Lane Network by 2050



2019 Regional Plan Network Concepts

Projects by Phase Year: DRAFT Regional Bike Network

Bike Network Applies to All Network Concepts

PROJECT NAME	PHASE YEAR (IN ALL NETWORK CONCEPTS)			ESTIMATED CAPITAL COSTS ($2018) MILLIONS*
	2025	2035	2050	
Bayshore Bikeway Segment 8B: Ada Street to Palomar Street	✓			$1.64
Border to Bayshore Bikeway	✓			$10.18
Central Avenue Bikeway	✓			$4.62
North Park/Mid-City Bikeways: Howard	✓			$8.42
North Park/Mid-City Bikeways: Monroe	✓			$4.16
North Park/Mid-City Bikeways: Orange	✓			See North Park/ Mid-City Bikeways: Howard
North Park/Mid-City Bikeways: Robinson	✓			$3.15
North Park/Mid-City Bikeways: University	✓			$8.49
San Diego River Trail: Carlton Oaks Golf Course Segment	✓			$10.93
Uptown Bikeways: Eastern Hillcrest	✓			$5.91
Uptown Bikeways: Mission Hills and Old Town	✓			$2.35
Uptown Bikeways: Park Boulevard	✓			$2.51
Uptown Bikeways: Washington Street and Bachman Place	✓			$15.15
Bayshore Bikeway Coronado: Golf course adjacent		✓		$5.09
Chula Vista/National City connections		✓		$18.67
City Heights/Encanto/Lemon Grove		✓		$11.88
City Heights/Fairmount Corridor		✓		$20.37
Clairemont Dr. (Mission Bay to Burgener)		✓		$13.58
Coastal Rail Trail Carlsbad: Reach 3 Tamarack to Cannon		✓		$8.49
Coastal Rail Trail Carlsbad: Reach 4 Cannon to Palomar Airport Rd.		✓		$8.49
Coastal Rail Trail Carlsbad: Reach 5 Palomar Airport Rd. to Poinsettia Station		✓		$5.09
Coastal Rail Trail Del Mar		✓		$0.68
Coastal Rail Trail Encinitas: Carlsbad to Leucadia		✓		$11.88
Coastal Rail Trail Encinitas: Leucadia to G St.	✓			$8.49
Coastal Rail Trail Encinitas: Santa Fe to G St	✓			$3.00
Coastal Rail Trail Oceanside: Alta Loma Marsh bridge		✓		$8.49

2019 Regional Plan Network Concepts

Projects by Phase Year: DRAFT Regional Bike Network

Bike Network Applies to All Network Concepts

PROJECT NAME	PHASE YEAR (IN ALL NETWORK CONCEPTS)			ESTIMATED CAPITAL COSTS ($2018) MILLIONS*
	2025	2035	2050	
Coastal Rail Trail Oceanside: Broadway to Eaton		✓		$0.68
Coastal Rail Trail San Diego: Carmel Valley to Roselle via Sorrento		✓		$1.53
Coastal Rail Trail San Diego: Del Mar to Sorrento via Carmel Valley		✓		$0.68
Coastal Rail Trail San Diego: Encinitas Chesterfield to Solana Beach		✓		$4.67
Coastal Rail Trail San Diego: Mission Bay (Clairemont to Tecolote)		✓		$5.09
Coastal Rail Trail San Diego: Pacific Hwy (Fiesta Island Rd. to Taylor St.)		✓		$11.88
Coastal Rail Trail San Diego: Pacific Hwy (Laurel St. to Santa Fe Depot)		✓		$13.58
Coastal Rail Trail San Diego: Pacific Hwy (Taylor St. to W Washington St.)		✓		$6.79
Coastal Rail Trail San Diego: Pacific Hwy (W Washington St. to Laurel St.)		✓		$6.79
Coastal Rail Trail San Diego: Rose Canyon		✓		$3.00
Coastal Rail Trail San Diego: Rose Creek Mission Bay Connection		✓		$6.79
Coastal Rail Trail San Diego: Roselle Canyon		✓		$8.49
Coastal Rail Trail San Diego: UTC		✓		$0.80
Downtown to Southeast connections - Downtown San Diego to Golden Hill		✓		$3.56
El Cajon - Santee connections		✓		$20.37
Harbor Dr. (Downtown to Ocean Beach)		✓		$11.88
I-8 Flyover: Camino del Rio S to Camino del Rio N		✓		$16.98
Inland Rail Trail: Oceanside		✓		$32.26
La Mesa/Lemon Grove/El Cajon connections		✓		$10.19
Mira Mesa Bike Blvd.		✓		$6.79
Ocean Beach to Mission Bay		✓		$40.74
Pacific Beach to Mission Beach		✓		$16.98
Pershing and El Prado - Cross-Park	✓			$1.02
Rolando to Grossmont/La Mesa		✓		$3.40
San Diego River Trail: Bridge connection (Sefton Field to Mission Valley YMCA)		✓		$11.88
San Diego River Trail: Father Junipero Serra Trail to West Hills Pkwy		✓		$5.09
San Diego River Trail: I-805 to Fenton Marketplace	✓			$3.40

Network Concepts for review throughout October 2018

2019 Regional Plan Network Concepts

Projects by Phase Year: DRAFT Regional Bike Network

Bike Network Applies to All Network Concepts

PROJECT NAME	PHASE YEAR (IN ALL NETWORK CONCEPTS)			ESTIMATED CAPITAL COSTS ($2018) MILLIONS*
	2025	2035	2050	
San Diego River Trail: Qualcomm Stadium to Ward Rd		✓		$3.40
San Diego River Trail: Mast Park to Lakeside baseball park		✓		$16.98
San Diego River Trail: Rancho Mission Rd to Camino Del Rio North		✓		$0.51
San Diego River Trail: Short gap connections	✓			$1.70
Sweetwater River Bikeway: Ramps		✓		$15.28
Bay to Ranch Bikeway: E J St. from 2nd Ave. to Paseo Del Rey			✓	$20.37
Bay to Ranch Bikeway: River Ash Dr. to Paseo Ranchero			✓	$0.85
Carlsbad to San Marcos Corridor: Paseo del Norte to Avenida Encinas			✓	$0.68
Central Coast Corridor: Torrey Pines Rd. to Nautilus St.			✓	$10.19
Central Coast Corridor: Van Nuys St.			✓	$0.34
Central Coast Corridor: Van Nuys St. to San Rafael Pl.			✓	$1.70
Central Coast Corridor: Via Del Norte to Van Nuys St.			✓	$8.49
Centre City – La Mesa Corridor: Gateside Rd. to Campo Rd.			✓	$0.68
Chula Vista Greenbelt: Bay Blvd. to Oleander Ave.			✓	$28.86
Clairemont – Centre-City Corridor: Coastal Rail Trail to Genesee Ave.			✓	$3.40
E County Northern Loop: Calavo Dr. to Sweetwater Springs Blvd.			✓	$1.19
E County Northern Loop: El Cajon Blvd. to Washington Ave.			✓	$1.70
E County Northern Loop: N Marshall Ave. to El Cajon Blvd.			✓	$0.51
E County Northern Loop: SR 94 onramp to Del Rio Rd.			✓	$0.34
E County Northern Loop: Washington Ave. to Dewitt Ct.			✓	$1.70
E County Southern Loop: Pointe Parkway to Omega St.			✓	$1.36
El Camino Real Bike Lanes: Douglas Dr. to Mesa Dr.			✓	$1.70
El Camino Real Bike Lanes: Manchester Ave. to Tennis Club Dr.			✓	$0.85
El Camino Real Bike Lanes: Marron Rd to SR 78 off ramp			✓	$0.51
Encinitas to San Marcos Corridor: Encinitas Blvd/I-5 Interchange			✓	$0.34
Encinitas to San Marcos Corridor: Kristen Ct. to Ecke Ranch Rd.			✓	$0.68
Encinitas to San Marcos Corridor: Leucadia Blvd. to El Camino Real			✓	$3.40

2019 Regional Plan Network Concepts

Projects by Phase Year: DRAFT Regional Bike Network

Bike Network Applies to All Network Concepts

PROJECT NAME	PHASE YEAR (IN ALL NETWORK CONCEPTS)			ESTIMATED CAPITAL COSTS ($2018) MILLIONS*
	2025	2035	2050	
Encinitas to San Marcos Corridor: Double Peak Dr. to San Marcos Blvd.			✓	$20.37
Escondido Creek Bikeway: 9th Ave. to Escondido Creek			✓	$1.70
Escondido Creek Bikeway: El Norte Pkwy to northern bikeway terminus			✓	$10.19
Escondido Creek Bikeway: Escondido Creek to Washington Ave.			✓	$1.70
Escondido Creek Bikeway: Quince St. to Broadway			✓	$3.40
I-15 Bikeway: Camino del Norte to Aguamiel Rd.			✓	$22.07
I-15 Bikeway: Murphy Canyon Rd. to Affinity Ct.			✓	$67.91
I-15 Bikeway: Poway Rd interchange to Carmel Mountain Rd.			✓	$28.86
I-15 Bikeway: Rancho Bernardo Community Park to Lake Hodges Bridge			✓	$5.09
I-15 Bikeway: Via Rancho Pkwy to Lost Oak Ln.			✓	$6.79
I-15 Bikeway: W Country Club Ln to Nutmeg St.			✓	$6.79
I-8 Corridor: Lakeside Ave. to SR 67			✓	$0.85
I-8 Corridor: San Diego River Trail to Riverside Dr.			✓	$3.40
I-8 Corridor: Willows Rd. to SR 79			✓	$8.49
I-805 Connector: Bonita Rd. to Floyd Ave.			✓	$10.19
Kearny Mesa to Beaches Corridor: Clairemont Dr. to Genesee Ave.			✓	$16.98
Kearny Mesa to Beaches Corridor: Genesee Ave. to Linda Vista Dr.			✓	$10.19
Kearny Mesa to Beaches Corridor: Ingraham St. from Garnet Ave. to Pacific Beach Dr.			✓	$3.40
Mid-County Bikeway: I-5/Via de la Valle Interchange			✓	$0.51
Mid-County Bikeway: Manchester Ave./I-5 Interchange to San Elijo Ave.			✓	$1.36
Mid-County Bikeway: Rancho Santa Fe segment			✓	$5.09
Mid-County Bikeway: San Elijo Ave. to 101 Terminus			✓	$1.70
Mira Mesa Corridor: Reagan Rd. to Parkdale Ave.			✓	$0.68
Mira Mesa Corridor: Scranton Rd. to I-805			✓	$0.68
Mira Mesa Corridor: Sorrento Valley Rd. to Sorrento Valley Blvd.			✓	$1.36
San Luis Rey River Trail			✓	$62.81
SR 125 Connector: Bonita Rd.to U.S.-Mexico Border			✓	$66.21

Network Concepts for review throughout October 2018

2019 Regional Plan Network Concepts

Projects by Phase Year: DRAFT Regional Bike Network

Bike Network Applies to All Network Concepts

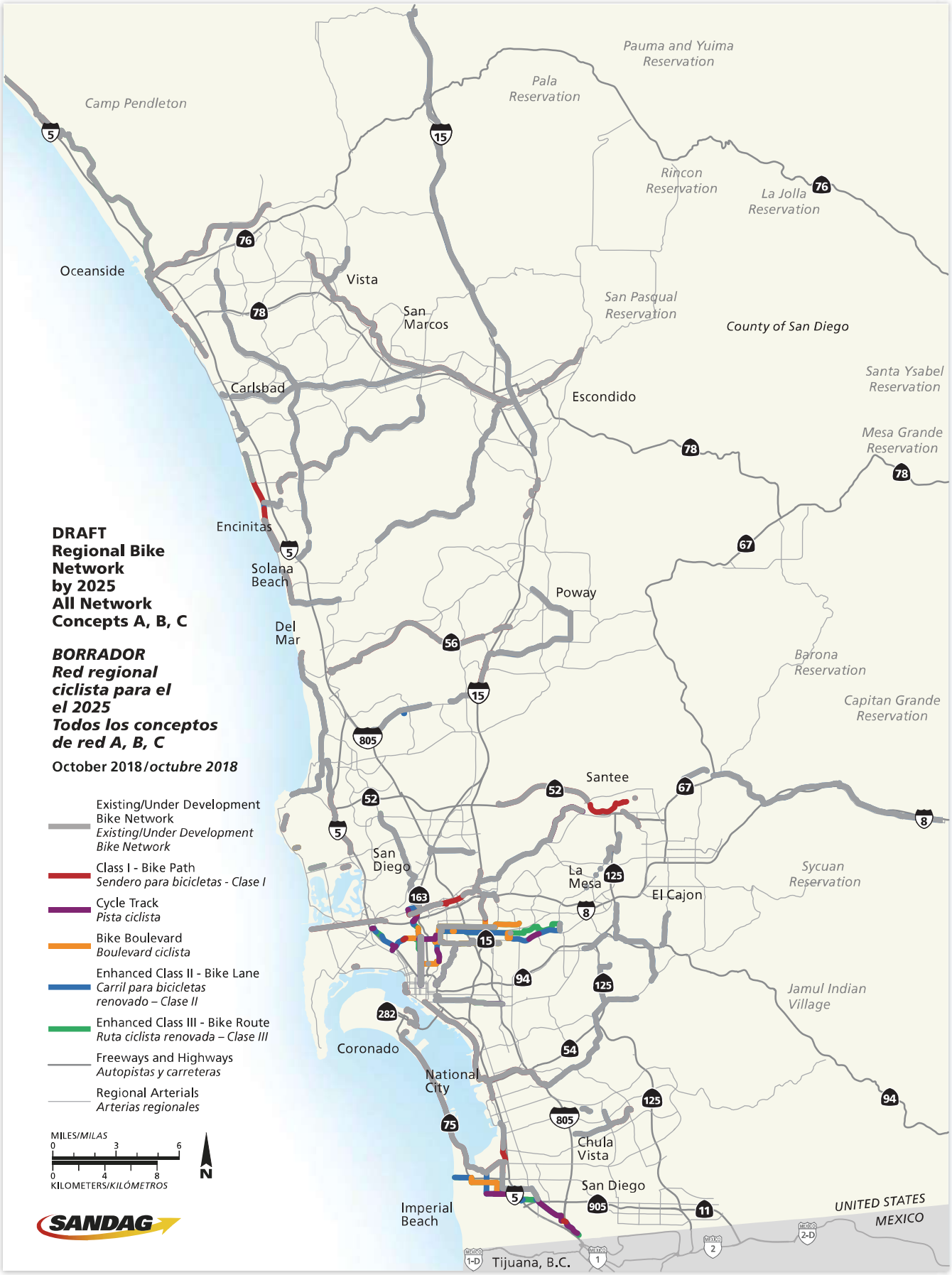
PROJECT NAME	PHASE YEAR (IN ALL NETWORK CONCEPTS)			ESTIMATED CAPITAL COSTS ($2018) MILLIONS*
	2025	2035	2050	
SR 125 Corridor: Mission Gorge Rd. to Glen Vista Way			✓	$0.51
SR 125 Corridor: Prospect Ave. to Weld Blvd.			✓	$1.36
SR 125 Corridor: SR 94 to S of Avocado St.			✓	$1.87
SR 52 Bikeway: I-5 to Santo Rd.			✓	$50.93
SR 52 Bikeway: SR 52/Mast Dr. to San Diego River Trail			✓	$3.40
SR 56 Bikeway: Azuaga St. to Rancho Peñasquitos Blvd.			✓	$3.40
SR 56 Bikeway: El Camino Real to Caminito Pointe			✓	$3.40
SR 905 Connector: E Beyer Blvd. to U.S.-Mexico Border			✓	$57.72
Vista Way Connector from Arcadia			✓	$3.57

OTHER REGIONAL BIKE NETWORK IMPROVEMENTS	PHASE YEAR (IN ALL NETWORK CONCEPTS)			ESTIMATED CAPITAL COSTS ($2018) MILLIONS*
	2025	2035	2050	
Local active transportation projects identified in local jurisdictions' plans or estimated based on prior plans	Throughout			$1,364.73
Regional bike and pedestrian programs including, but not be limited to, education, outreach, and encouragement to make biking and walking an attractive choice for daily trips	Throughout			$33.47
Regional Safe Routes to School implementation support to establish new programs, as well as sustaining and enhancing existing efforts, to make walking and biking to and from school a safer and more viable travel choice for students, faculty, staff, and parents / guardians	Throughout			$75.78
Regional Safe Routes to Transit at new transit stations to improve first mile / last mile accessibility	Throughout			$1,199.66

*Dollars shown in $2018 millions. Actual cost will reflect Year-of-Expenditure dollars which includes a compounded interest factor of 2.77 percent annually

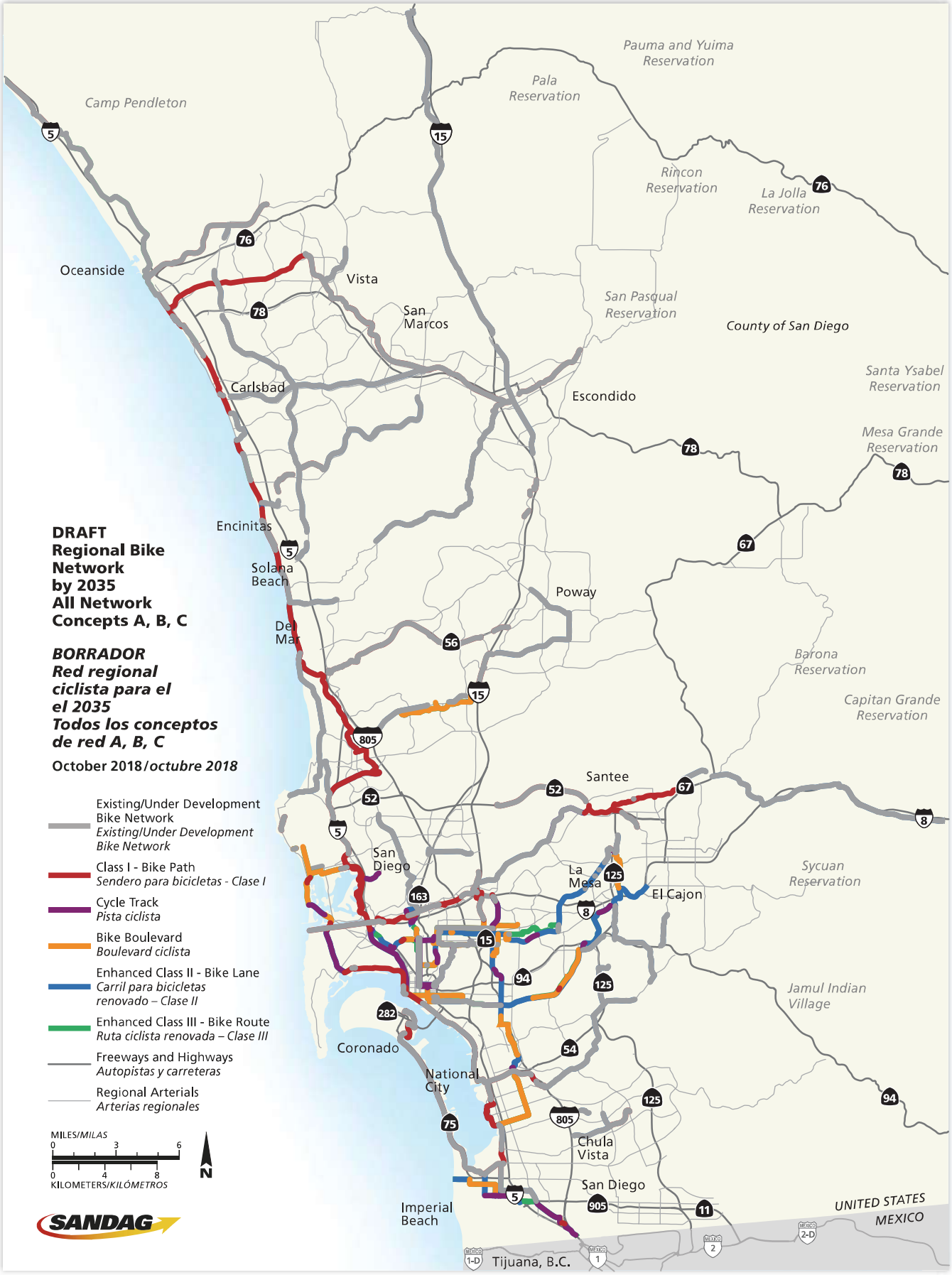
2019 Regional Plan Network Concepts A, B, and C

DRAFT Regional Bike Network by 2025



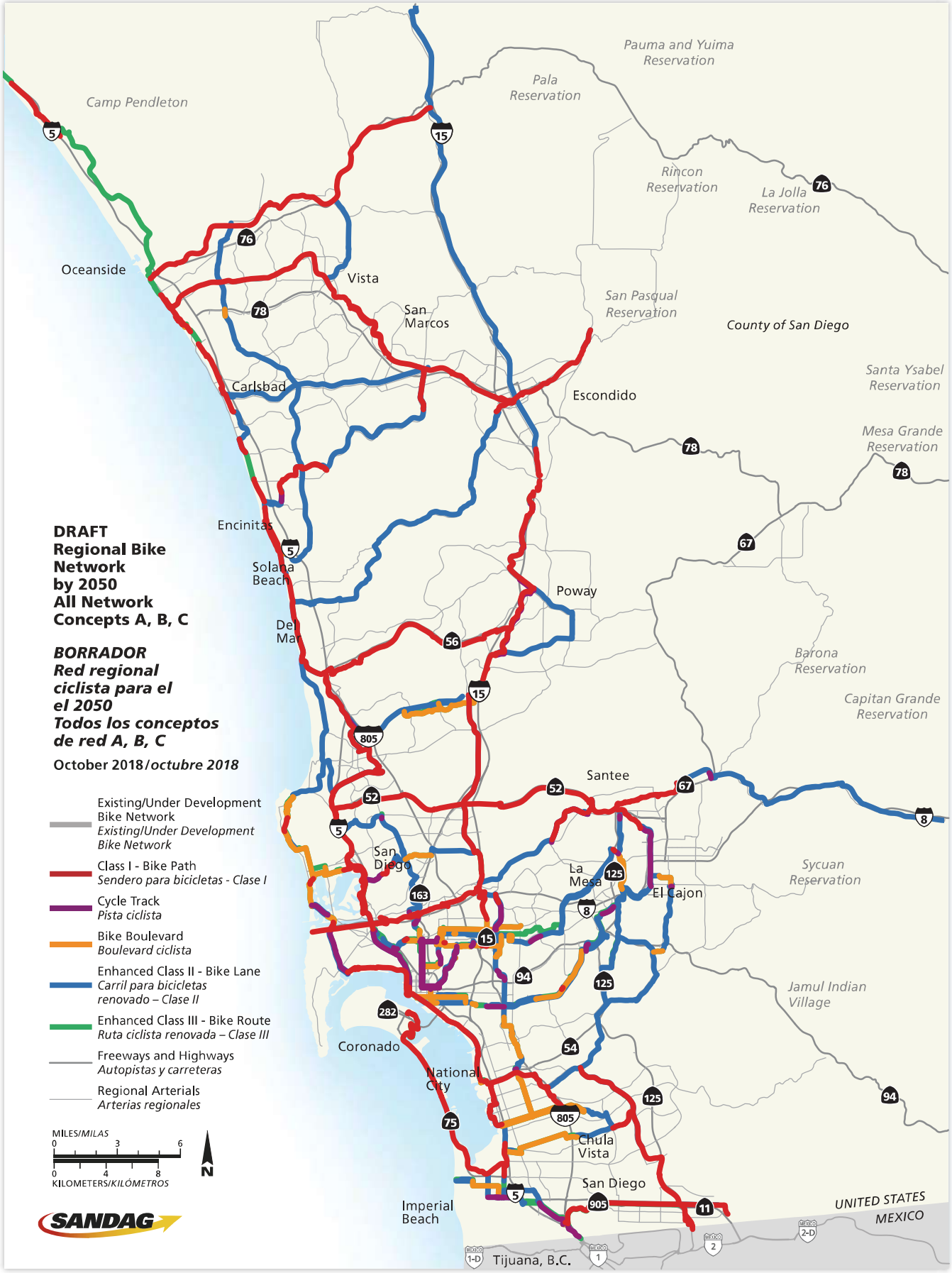
2019 Regional Plan Network Concepts A, B, and C

DRAFT Regional Bike Network by 2035



2019 Regional Plan Network Concepts A, B, and C

DRAFT Regional Bike Network by 2050



Draft 2019 Regional Plan Network Concepts Performance Measures Evaluation and Results

The three network concepts were evaluated using the performance measures approved by the Board of Directors on March 23, 2018. The performance evaluation of the three network concepts was conducted for the year 2035 to understand performance 15 years out, or the mid-point of the 2050 horizon year of the Regional Plan. Each of the concepts also were monitored to see if they would meet the SB 375 2035 greenhouse gas emissions reduction target (19%per capita reduction for passenger vehicles relative to 2005). Performance in 2035 was compared to current conditions (2016).

The preliminary population, housing, and employment forecast were used for the analysis of the network concepts. When the growth forecast is finalized, it will be incorporated in the travel demand modeling and network performance evaluation.

Overall Findings

- All three network concepts would perform better than 2016 in most areas; only Concept C reduces vehicle delay for all drivers.
- All three network concepts would reduce the percentage of people driving alone to work, increase transit access to jobs and higher education, and provide more opportunities for using high frequency transit and bike facilities. Concept A and Concept C would provide the largest increase in transit access with the percent of the population within half a mile of high frequency transit stops increasing from 31 percent in 2016 to 49 percent. Concept B would have a more modest increase to 39 percent.
- All three network concepts would increase physical activity; Concept C has the largest increase in the amount of time engaged in transportation-related physical activity.
- Only Concept C would meet the 2035 SB 375 greenhouse gas reduction target of 19 percent per capita by achieving 21.3 percent per capita. Concept A and Concept B would achieve a reduction of 14.7 percent and 14.1 percent, respectively.[1]
- Due to projections of significant growth in zero emission vehicle (ZEV) travel in the future, vehicle miles traveled (VMT) from gasoline and diesel vehicles are projected to remain near 2016 levels, increasing from approximately 83.6 million miles per day in 2016 to 86.6 million under Concept A and to 87 million under Concept B. Concept C would reduce gasoline and diesel VMT below 2016 levels, to 82.4 million.
- Per capita VMT (from all vehicles, including zero emission) would be consistent with 2016 levels of 25.7 miles under Concept B, decrease slightly to 25.6 miles with Concept A, and decrease more substantially to 24.4 miles with Concept C.
- All three scenarios would reduce smog-forming and particulate matter pollutants per capita below 2016 levels.

[1] All of the network concepts include projects and programs in the current Regional Transportation Improvement Program, which would cover the first four years of the 2019 Regional Plan and meet the 2020 SB 375 targets (15% per capita).

- Similar to non-disadvantaged communities, low-income, minority, and senior populations would experience an increase in physical activity, improved access to high frequency transit stops, and a modest increase in the percent of population who can access jobs/higher education within 30 minutes by transit.
- Concepts A and B would include modest increases in transportation expenditures for low-income persons and modest decreases for minorities and seniors. Concept C would include increases for all populations, most notably for low-income persons, with an additional 16.7 percent increase in income consumed by transportation costs as compared to 5.8 percent increase in income consumed by transportation costs for the non-low-income population.
- All network Concepts would reduce PM 2.5 exposure as compared to 2016, with Concept C including the lowest levels of exposure for all groups.

2019 Regional Plan Network Concepts

Performance Measures Results

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Performance measures are used to analyze future regional transportation networks. In December 2017, SANDAG hosted a workshop and online survey to gather input on potential transportation network performance measures for San Diego Forward: The 2019-2050 Regional Plan.

Major community input themes included support for a vehicle miles traveled (VMT) measure, assessing health outcomes and the perception of safety, and mode- and subregional-specific metrics. An industry-led Peer Review Panel provided further input and SANDAG staff presented the draft performance measures to SANDAG policy committees in February and March 2018. Final performance measures were approved by the SANDAG Board of Directors on March 23, 2018.

The following table provides model results for each of the network concepts developed for initial review and input in October 2018, along with baseline data for existing conditions today (2016 base year) and for 2035 without any additional transportation investments. Performance evaluation of the three network concepts was conducted for the year 2035 to understand performance 15 years out, or the mid-point of the 2050 horizon year of the Regional Plan.

Eight key questions are tied to the three goals of the 2019 Regional Plan; some key questions are answered by multiple metrics.

2019 Regional Plan Network Concepts

Performance Measures Results

Key Question		Performance Measure	Today (2016)	No Build (2035)	Concept A: Shared Mobility	Concept B: Connected Corridors	Concept C: Policy Possibilities
1. Is delay reduced?	1a	Daily vehicle delay per capita (in minutes)	10	12	12	12	9
2. Are more people walking, biking, using transit and sharing rides?	2a	Percent of all trips by walk, bike, transit, and carpool regionwide	54.6%	53.7%	54.3%	54.0%	56.5%
		carpool	43.7%	40.2%	40.1%	40.3%	40.0%
		transit	1.5%	1.7%	2.3%	1.8%	4.2%
		bike & walk	9.4%	11.8%	11.9%	11.9%	12.3%
	2a	Percent of work trips by walk, bike, transit, and carpool regionwide	20.8%	22.4%	24.3%	23.7%	29.1%
		carpool	11.5%	10.7%	11.2%	11.5%	11.6%
		transit	3.2%	4.0%	5.3%	4.3%	9.7%
		bike & walk	6.1%	7.7%	7.8%	7.9%	7.8%
	2a	Percent of all trips by walk, bike, transit, and carpool in Urban Area Transit Strategy (UATS) districts	55.0%	55.0%	55.7%	55.3%	58.4%
		carpool	42.0%	38.6%	38.4%	38.6%	38.4%
		transit	1.8%	2.0%	2.7%	2.1%	5.0%
		bike & walk	11.2%	14.4%	14.6%	14.6%	15.0%
	2a	Percent of work trips by walk, bike, transit, and carpool in Urban Area Transit Strategy (UATS) districts	22.6%	24.8%	27.1%	26.3%	32.8%
		carpool	11.5%	10.6%	11.2%	11.5%	11.6%
		transit	3.9%	4.9%	6.4%	5.2%	11.7%
		bike & walk	7.2%	9.3%	9.5%	9.6%	9.5%
	2b	Total Daily Vehicle Miles Travelled (VMT) from gasoline/diesel vehicles	83,600,000	87,000,000	86,600,000	87,000,000	82,400,000
	2b	Total Daily Vehicle Miles Travelled (VMT) from zero emission vehicles	387,000	8,290,000	8,260,000	8,310,000	7,820,000
	2b	Daily Vehicle Miles Travelled VMT per Capita (all vehicles)	25.7	25.7	25.6	25.7	24.4

2019 Regional Plan Network Concepts

Performance Measures Results

Key Question		Performance Measure	Today (2016)	No Build (2035)	Concept A: Shared Mobility	Concept B: Connected Corridors	Concept C: Policy Possibilities
3. Is the transportation system safer? Projected fatality and serious injury data does not reflect the effect of potential safety gains from connected and/or automated vehicles.	3a	**Vehicular fatalities and serious injuries per 1,000 people**	2.1	2.1	2.1	2.1	2.0
	3b	**Non-motorized fatalities and non-motorized serious injuries per 1,000 people**	0.4	0.4	0.4	0.4	0.4
4. Do the transportation investments help to improve the regional economy?	4a	**Benefit/Cost Ratio of transportation investments**	This metric is not available for the network concepts and will be calculated for the draft network scenarios in December 2018/January 2019				
5. Does the transportation network support smart growth?	5a	**Percentage of population within 0.5-mile of high frequency (≤15 minute peak) transit stops**	31%	37%	49%	39%	49%
	5a	**Percentage of employment within 0.5-mile of high frequency (≤15 minute peak) transit stops**	42%	44%	64%	47%	64%
	5b	**Percentage of population within 0.25-mile of a bike facility (Class I and II, cycletrack, and bike boulevard)**	61%	61%	65%	65%	65%
	5b	**Percentage of employment within 0.25-mile of a bike facility (Class I and II, cycletrack, and bike boulevard)**	75%	76%	77%	77%	77%

2019 Regional Plan Network Concepts

Performance Measures Results

Key Question		Performance Measure	Today (2016)	No Build (2035)	Concept A: Shared Mobility	Concept B: Connected Corridors	Concept C: Policy Possibilities
6. How does the transportation network support public health?	6a	**Time engaged in transportation-related physical activity per capita (in minutes)**	8	9	10	10	11
	6b	**On-road smog-forming and particulate matter pollutants per capita (pounds/day)**					
		ROG (Reactive Organic Gases)	0.015	0.006	0.006	0.006	0.005
		NOx (Oxides of Nitrogen)	0.031	0.009	0.008	0.008	0.008
		PM2.5 (Particulate Matter less than 2.5 µm)	0.002	0.001	0.001	0.001	0.001
7. Is access to jobs and key destinations improving for all communities?	7a	**Percent of population within 30 minutes of jobs and higher education**					
		Drive alone	100%	100%	100%	100%	100%
		Transit	81.1%	80.4%	84.0%	81.7%	84.0%
	7b	**Percent of population within 15 minutes of retail**					
		Drive alone	99.6%	99.2%	99.2%	99.7%	99.7%
		Transit	58.1%	58.5%	60.7%	59.0%	61.1%
	7b	**Percent of population within 15 minutes of health care**					
		Drive alone	99.7%	99.3%	99.3%	99.8%	99.8%
		Transit	58.9%	59.8%	61.7%	60.3%	62.1%
	7b	**Percent of population within 15 minutes of parks**					
		Drive alone	99.1%	98.4%	98.4%	98.9%	99.0%
		Transit	34.4%	36.4%	38.4%	36.8%	39.2%
	7b	**Percent of population within 15 minutes of beaches**					
		Drive alone	38.4%	31.6%	31.7%	32.7%	36.4%
		Transit	3.8%	3.5%	3.4%	3.4%	3.6%
8. Are greenhouse gas emissions reduced?	8a	**On-road CO2 emissions (tons/day)**	43,700	31,900	31,600	31,700	30,200
	8a	**On-road CO2 emissions per capita (pounds/day)**	26.7	17.2	17.1	17.1	16.3

2019 Regional Plan Network Concepts

Additional Performance Measures Results

Key Question		Performance Measure	Today (2016)	No Build (2035)	Concept A: Shared Mobility	Concept B: Connected Corridors	Concept C: Policy Possibilities
Innovative Mobility and Planning	A	Average peak-period travel time to work (minutes)	26	28	28	28	28
		drive alone	25	26	26	26	24
		carpool	23	24	24	24	22
		transit	64	62	58	60	56
		bike	23	25	27	28	27
		walk	22	21	21	21	22
	B	Average travel time to/from tribal lands (minutes)	26	26	26	26	25
	C	Average travel time to/from Mexico (minutes)					
		San Ysidro	15	17	15	14	15
		Otay Mesa	19	19	18	18	19
		Otay Mesa East	N/A	N/A	17	17	16
		Tecate	50	50	49	47	44
	D	Average travel time to/from neighboring counties (minutes)	55	58	58	57	54
	E	Average travel time to/from military bases/installations (minutes)	19	21	21	21	20
Vibrant Economy	F	Change in percent of income consumed by transportation costs	N/A	-0.6	-0.6	-0.6	7.8
Healthy Environment and Communities	G	Percentage of population within 0.5-mile of a major transit stop per California Code section 21064.3	13.9%	18.8%	29.8%	19.5%	29.8%
	G	Percentage of employment within 0.5-mile of a major transit stop per California Code section 21064.3	22.2%	25.3%	40.7%	27.4%	40.7%
	H	Percent of population engaging in more than 20 minutes of daily transportation-related physical activity	12.3%	14.7%	15.5%	15.0%	17.7%

2019 Regional Plan Network Concepts

Performance Measures Results - Social Equity

In addition to the 13 metrics associated with the 8 key questions, the metrics below are used to conduct a Social Equity analysis; performance measure results for the region's total population are compared to disadvantaged communities (seniors, low-income, and minority) and non-disadvantaged communities.

Key Question	Performance Measure		Today (2016)	No Build (2035)	Concept A: Shared Mobility	Concept B: Connected Corridors	Concept C: Policy Possibilities
SE 1. Are travel times to work distributed equitably?	SE 1	**Average peak-period travel time to work (minutes)**					
	SE 1	**Low-Income**	24	26	26	26	28
		drive alone	22	22	22	22	20
		carpool	21	22	22	22	21
		transit	63	61	57	59	56
		bike	20	22	24	24	23
		walk	21	20	20	20	20
	SE 1	**Non- Low-Income**	27	28	28	28	28
		drive alone	26	27	27	27	25
		carpool	24	24	25	25	23
		transit	65	62	58	60	56
		bike	26	27	30	30	29
		walk	25	23	23	22	23
	SE 1	**Minority**	27	28	28	28	28
		drive alone	25	26	26	26	24
		carpool	23	24	24	24	22
		transit	64	62	57	60	56
		bike	23	25	28	28	27
		walk	23	22	22	22	22
	SE 1	**Non-Minority**	26	27	27	27	27
		drive alone	25	26	26	26	24
		carpool	23	23	24	24	22
		transit	65	62	58	60	57
		bike	23	25	27	27	26
		walk	21	21	20	20	20

2019 Regional Plan Network Concepts

Performance Measures Results - Social Equity

Key Question	Performance Measure		Today (2016)	No Build (2035)	Concept A: Shared Mobility	Concept B: Connected Corridors	Concept C: Policy Possibilities
SE 2. Do the transportation investments help to improve the regional economy?	**SE 2**	**Benefit/Cost Ratio of transportation investments**	This metric is not available for the network concepts and will be calculated for the draft network scenarios in December 2018/January 2019				
SE 3. Is the relative cost of transportation distributed equitably?	**SE 3**	**Change in percent of income consumed by transportation costs**					
		Low-Income	N/A	0.9	0.9	0.8	16.7
		Non Low-Income	N/A	0.0	0.0	0.0	5.8
		Minority	N/A	-0.9	-0.9	-0.9	7.8
		Non-Minority	N/A	-0.6	-0.6	-0.6	6.9
		Senior	N/A	-1.0	-1.1	-1.1	7.7
		Non-Senior	N/A	-0.3	-0.3	-0.3	7.9
SE 4. Does the transportation network support smart growth?	**SE 4a**	**Percentage of <u>population</u> within 0.5-mile of high frequency (<=15 minute peak) transit stops**					
		Low-Income	40%	48%	58%	50%	58%
		Non Low-Income	27%	33%	46%	35%	46%
		Minority	36%	40%	52%	42%	52%
		Non-Minority	26%	34%	46%	36%	46%
		Senior	27%	31%	42%	32%	42%
		Non-Senior	31%	38%	50%	40%	50%
	SE 4a	**Percentage of <u>employment</u> within 0.5-mile of high frequency (≤15 minute peak) transit stops**	42%	44%	64%	47%	64%
	SE 4b	**Percentage of <u>population</u> within 0.5-mile of a major transit stop per California Code section 21064.3**					
		Low-Income	20%	26%	38%	27%	38%
		Non Low-Income	11%	16%	27%	16%	27%
		Minority	17%	20%	32%	21%	32%
		Non-Minority	11%	17%	27%	17%	27%
		Senior	11%	14%	24%	15%	24%
		Non-Senior	14%	19%	31%	20%	31%
	SE 4b	**Percentage of <u>employment</u> within 0.5-mile of a major transit stop per California Code section 21064.3**	22%	25%	41%	27%	41%

2019 Regional Plan Network Concepts

Performance Measures Results - Social Equity

6.16		Performance Measure	Today (2016)	No Build (2035)	Concept A: Shared Mobility	Concept B: Connected Corridors	Concept C: Policy Possibilities
SE 5. How does the transportation network support public health?	SE 5a	**Time engaged in transportation-related physical activity per capita (minutes)**					
		Low-Income	10	12	13	13	15
		Non Low-Income	6	8	9	8	9
		Minority	8	10	10	10	11
		Non-Minority	7	9	9	9	10
		Senior	6	7	7	7	8
		Non-Senior	8	10	10	10	11
	SE 5b	**Average exposure to Particulate Matter (PM2.5) per person**					
		Low-Income	7.60	6.64	6.56	6.59	6.26
		Non Low-Income	6.93	5.83	5.78	5.80	5.53
		Minority	7.49	6.24	6.18	6.20	5.90
		Non-Minority	6.78	5.81	5.75	5.77	5.49
		Senior	6.59	5.31	5.26	5.27	5.02
		Non-Senior	7.20	6.16	6.11	6.13	5.83
SE 6. Is access to jobs and key destinations improving for all communities?	SE 6a	**Percent of population within 30 minutes of jobs and higher education**					
		Low-Income: Drive alone	100%	100%	100%	100%	100%
		Non Low-Income: Drive alone	100%	100%	100%	100%	100%
		Low-Income: Transit	87.3%	86.8%	88.5%	87.5%	88.5%
		Non Low-Income: Transit	78.2%	78.1%	82.4%	79.6%	82.5%
		Minority: Drive alone	100%	100%	100%	100%	100%
		Non-Minority: Drive alone	100%	100%	100%	100%	100%
		Minority: Transit	84.2%	81.8%	85.5%	83.0%	85.5%
		Non-Minority: Transit	78.1%	78.8%	82.1%	80.0%	82.2%
		Senior: Drive alone	100%	100%	100%	100%	100%
		Non-Senior: Drive alone	100%	100%	100%	100%	100%
		Senior: Transit	79.6%	77.2%	80.5%	78.4%	80.6%
		Non-Senior: Transit	81.3%	81.0%	84.6%	82.3%	84.7%

2019 Regional Plan Network Concepts

Performance Measures Results - Social Equity

Key Question		Performance Measure	Today (2016)	No Build (2035)	Concept A: Shared Mobility	Concept B: Connected Corridors	Concept C: Policy Possibilities
SE 6. Is access to jobs and key destinations improving for all communities?		**Percent of population within 15 minutes of retail**					
	SE 6b	Low-Income: Drive alone	99.5%	98.6%	98.6%	99.6%	99.6%
	SE 6b	Non Low-Income: Drive alone	99.7%	99.4%	99.4%	99.8%	99.8%
	SE 6b	Low-Income: Transit	68.3%	69.3%	70.6%	69.7%	70.9%
	SE 6b	Non Low-Income: Transit	52.7%	54.2%	56.7%	54.8%	57.2%
	SE 6b	Minority: Drive alone	99.6%	99.2%	99.2%	99.7%	99.7%
	SE 6b	Non-Minority: Drive alone	99.6%	99.2%	99.2%	99.7%	99.7%
	SE 6b	Minority: Transit	62.0%	60.2%	62.6%	60.7%	62.9%
	SE 6b	Non-Minority: Transit	53.5%	56.1%	58.0%	56.6%	58.4%
	SE 6b	Senior: Drive alone	99.5%	99.6%	99.6%	99.7%	99.7%
	SE 6b	Non-Senior: Drive alone	99.6%	99.1%	99.1%	99.7%	99.7%
	SE 6b	Senior: Transit	54.5%	52.8%	54.6%	53.3%	55.1%
	SE 6b	Non-Senior: Transit	58.3%	59.3%	61.5%	59.8%	61.9%
		Percent of population within 15 minutes of health care					
	SE 6b	Low-Income: Drive alone	99.6%	98.8%	98.8%	99.8%	99.8%
	SE 6b	Non Low-Income: Drive alone	99.8%	99.5%	99.5%	99.9%	99.9%
	SE 6b	Low-Income: Transit	68.8%	70.5%	71.6%	70.9%	71.9%
	SE 6b	Non Low-Income: Transit	53.6%	55.5%	57.8%	56.1%	58.2%
	SE 6b	Minority: Drive alone	99.7%	99.3%	99.3%	99.8%	99.8%
	SE 6b	Non-Minority: Drive alone	99.7%	99.3%	99.3%	99.8%	99.8%
	SE 6b	Minority: Transit	63.1%	61.6%	63.7%	62.1%	64.0%
	SE 6b	Non-Minority: Transit	54.0%	57.2%	59.0%	57.8%	59.4%
	SE 6b	Senior: Drive alone	99.7%	99.8%	99.8%	99.9%	99.9%
	SE 6b	Non-Senior: Drive alone	99.7%	99.2%	99.2%	99.8%	99.8%
	SE 6b	Senior: Transit	55.3%	53.9%	55.5%	54.4%	56.1%
	SE 6b	Non-Senior: Transit	59.1%	60.6%	62.6%	61.1%	62.9%

2019 Regional Plan Network Concepts

Performance Measures Results - Social Equity

Key Question		Performance Measure	Today (2016)	No Build (2035)	Concept A: Shared Mobility	Concept B: Connected Corridors	Concept C: Policy Possibilities
SE 6. Is access to jobs and key destinations improving for all communities?	SE 6b	**Percent of population within 15 minutes of parks**					
		Low-Income: Drive alone	98.9%	97.7%	97.7%	98.7%	98.7%
		Non Low-Income: Drive alone	99.2%	98.7%	98.7%	99.0%	99.0%
		Low-Income: Transit	41.1%	44.7%	46.3%	45.2%	47.1%
		Non Low-Income: Transit	30.8%	33.1%	35.3%	33.5%	36.1%
		Minority: Drive alone	99.2%	98.4%	98.4%	99.0%	99.0%
		Non-Minority: Drive alone	99.0%	98.3%	98.3%	98.9%	98.9%
		Minority: Transit	38.0%	38.1%	40.3%	38.6%	41.2%
		Non-Minority: Transit	30.2%	33.9%	35.7%	34.3%	36.5%
		Senior: Drive alone	98.9%	98.6%	98.6%	98.7%	98.8%
		Non-Senior: Drive alone	99.1%	98.4%	98.4%	99.0%	99.0%
		Senior: Transit	31.1%	31.5%	33.0%	31.8%	33.8%
		Non-Senior: Transit	34.6%	37.0%	39.1%	37.5%	40.0%
	SE 6b	**Percent of population within 15 minutes of beaches**					
		Low-Income: Drive alone	41.5%	33.4%	33.6%	35.0%	39.4%
		Non Low-Income: Drive alone	36.7%	30.9%	31.0%	31.7%	35.2%
		Low-Income: Transit	3.1%	2.9%	2.9%	2.9%	3.0%
		Non Low-Income: Transit	4.1%	3.7%	3.6%	3.7%	3.8%
		Minority: Drive alone	36.5%	29.9%	30.1%	31.0%	34.8%
		Non-Minority: Drive alone	40.5%	33.9%	34.0%	35.0%	38.6%
		Minority: Transit	2.7%	2.9%	2.9%	2.9%	3.0%
		Non-Minority: Transit	5.0%	4.2%	4.2%	4.2%	4.4%
		Senior: Drive alone	36.7%	29.6%	29.7%	30.2%	33.4%
		Non-Senior: Drive alone	38.5%	31.9%	32.0%	33.0%	36.8%
		Senior: Transit	3.7%	3.1%	3.2%	3.1%	3.3%
		Non-Senior: Transit	3.8%	3.5%	3.5%	3.5%	3.6%

TransNet Project Segments in Network Concepts

All *TransNet* project segments that remain to be completed are included in the 2019 Regional Plan Unconstrained Network. However, not all remaining *TransNet* projects are included in all of the network concepts. The introduction of new and emerging technologies as well as potential operational alternatives provide the opportunity for new mobility solutions that originally were not envisioned in the *TransNet* Ordinance. As a result, four *TransNet* projects are not included in any of the concepts and other *TransNet* projects only are included in some of the concepts (designated by check marks below).

Based on Board direction, project segments listed below could be included in the transportation network scenarios that will be developed for consideration later this year or even in later Regional Plans if funding is identified and the project is still warranted given other factors such as the evolution of transportation technologies or changing land use decision making.

***TransNet* Project Segments**	**Concept A Shared Mobility**	**Concept B Connected Corridors**	**Concept C Policy Possibilities**
I-5 (SR 905 to SR 54) +2ML	✓		✓
I-5 (SR 54 to SR 15) +2GP			
I-5 (I-8 to La Jolla Village) +2ML		✓	
I-5/SR 56 West to North and South to East Connectors		✓	
I-5 (SR 56 to SR 78) +4ML (+2ML included in all concepts)		✓	
I-8 (2nd Street to Los Coches) +2GP		✓	
SR 54 (I-5 to SR 125) +2ML plus connectors			
SR 67 (Mapleview to Dye) +2GP			
SR 94 (I-805 to SR 125) +2ML		✓	
SR 94 (SR 125 to Avocado) +2GP		✓	
SR 94/SR 125 South to East Connector		✓	
SR 125 (SR 54 to I-8) +2GP and +2ML	✓		
I-805 (SR 905 to Palomar) +2ML	✓		✓
I-805 (SR 54 to SR 94) +4 ML (existing 2ML)	✓		✓
I-805 Viaduct Over Mission Valley[1]			
I-805 (SR 52 to Carroll Canyon) +4ML (existing 2ML)		✓	

GP = General Purpose Lanes
ML = Managed Lanes

[1] Restriping for new managed lanes could be considered for this viaduct.

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2019 Regional Plan Transportation Network Concept Outreach

We Want Your Input!

To ensure the Regional Plan meets the needs of all the diverse communities in the San Diego region, there are several opportunities for you to provide input. Each outreach event will include an interactive review of the network concepts. **If you plan to join us, RSVP to an event at Facebook.com/SANDAGregion/events.**

Join Us for an Open House

Stop by and talk with the project team and provide your input about the transportation network concepts.

Tuesday, October 16
4-7 p.m.
San Diego City College

Mathematics & Social Sciences
MS Room 140
1313 Park Boulevard
San Diego 92101

Enter the building on 15th Street between Broadway and C Street

Attend a Community Conversation

Join SANDAG Board members for an interactive presentation to learn about the network concepts, ask questions, and provide input.

- **Monday, October 15 from 6-7:30 p.m. in South County***
  Hosted by Chula Vista Mayor Mary Casillas Salas and Coronado Mayor Richard Bailey Chula Vista Police Department Community Room
  315 Fourth Avenue, Chula Vista 91910
- **Wednesday, October 17 from 6-7:30 p.m. in Central San Diego***
  Hosted by San Diego City Council President Myrtle Cole and San Diego City Councilmember Georgette Gómez
  Jacobs Center Community Room, 404 Euclid Avenue, San Diego 92114
- **Thursday, October 18 from 6-7:30 p.m. in East County**
  Hosted by El Cajon Mayor Bill Wells and La Mesa Councilmember Kristine Alessio
  La Mesa Arts Academy, 4200 Parks Avenue, La Mesa 91941
- **Tuesday, October 23 from 6-7:30 p.m. in North County Coastal**
  Hosted by Encinitas Mayor Catherine Blakespear and Solana Beach Mayor David Zito
  La Colonia Community Center, 715 Valley Avenue, Solana Beach 92075
- **Thursday, October 25 from 6-7:30 p.m. in North County Inland***
  Hosted by Escondido Mayor Sam Abed and Poway Mayor Steve Vaus
  Escondido Library, Turrentine Room, 239 S. Kalmia Street, Escondido 92025

*Spanish interpretation provided; Spanish speaking staff members will be present at all events

Take a brief, interactive online survey between October 1-31 at **SDForward.com/survey**

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San Diego FORWARD
The Regional Plan | 2019–2050

Network Concepts

In spring 2018, we asked for input about your top transportation and quality of life priorities. Several priorities were identified: congestion relief, climate change and the environment, emerging technologies, healthy communities, and housing, jobs, and the economy. With these priorities in mind, three network concepts have been developed for the public and SANDAG policymaker review and input.

The Shared Mobility, Connected Corridors, and Policy Possibilities network concepts were developed with the intent to provide travel choices, manage demand and enhance the transportation system, support goods movement and the economy, and consider impacts on social equity, the environment, and public health; however, each concept differs in how flexible funding is used and which programs, technologies, and potential policies are evaluated.

Visit **SDForward.com/networks** to review the concepts in detail.

What's Next?

WE ARE HERE

April 2017 Plan development began

Fall 2017 Unconstrained Networks defined

Winter 2018 Performance Measures approved

Spring 2018 Transportation Network Themes

Fall 2018 Network Concepts and Performance Measures

Winter 2019 Draft Network Scenarios and Performance Measures

Winter 2019 SANDAG Board selects Preferred Scenario

Fall 2019 Draft Plan and EIR

Winter 2020 Adopt Plan

Public input on the network concepts will be used to develop draft scenarios for further review and input later this winter. Then, the SANDAG Board of Directors will select a preferred scenario, which will form the core of the 2019 Regional Plan.

TransNet Ten-Year Review

Ten years of the 40-year *TransNet* measure have passed, and the voter approved half-cent sales tax for transportation improvements is undergoing the comprehensive review promised to voters. The *TransNet* Ten-Year Review is aligned with the development of the 2019 Regional Plan, and input gathered through the network development process will help inform potential revisions to improve *TransNet* performance going forward. Learn more at **sandag.org/TransNet10YearReview**.

In compliance with the Americans with Disabilities Act (ADA), this document is available in alternate formats by contacting the SANDAG ADA Coordinator, the Director of Administration, at (619) 699-1900 or (619) 699-1904 (TTY).

Meeting materials can be made available in alternate languages upon request. If you require assistance in order to participate, please contact SANDAG at (619) 699-1900 at least 72 hours in advance of the meeting. TTY: (619) 699-1904.

To learn more about the concepts, projects, and performance measures, visit **SDForward.com/networks**

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Difusión pública sobre conceptos de la red de transporte para el Plan Regional 2019

¡Queremos su participación!

Para garantizar que el Plan Regional satisfaga las necesidades de las diversas comunidades de la región de San Diego, hay diversas formas en las que usted puede participar. En cada evento de difusión pública encontrará una evaluación interactiva de los conceptos de la red de transporte. **Si está considerando participar, favor de confirmar su asistencia a uno de los eventos en Facebook.com/SANDAGregion/events.**

Acompáñenos en una Reunión pública

Pase a platicar con uno de los representantes del proyecto y proporcione su opinión sobre los conceptos de la red de transporte.

Martes, 16 de octubre de 4-7 p.m.
San Diego City College

Mathematics & Social Sciences
MS Room 140
1313 Park Boulevard
San Diego 92101

La entrada al edificio está sobre 15th Street, entre Broadway y C Street

Asista a una conversación comunitaria

Acompañe a los miembros de la Directiva de SANDAG en una presentación interactiva para aprender sobre los conceptos de la red, hacer preguntas y dar su opinión.

- **Lunes, 15 de octubre de 6-7:30 p.m. en el sur del condado***
  Organizada por Mary Casillas Salas, alcaldesa de Chula Vista y Richard Bailey, alcalde de Coronado
  Chula Vista Police Department Community Room
  315 Fourth Avenue, Chula Vista 91910

- **Miércoles, 17 de octubre de 6-7:30 p.m. en el centro de San Diego***
  Organizada por Myrtle Cole, presidenta del Concejo de San Diego; y Georgette Gómez, concejal de la Ciudad de San Diego
  Jacobs Center Community Room, 404 Euclid Avenue, San Diego 92114

- **Jueves, 18 de octubre de 6-7:30 p.m. en el este del condado**
  Organizada por Bill Wells, alcalde de El Cajon y Kristine Alessio, concejal de La Mesa
  La Mesa Arts Academy, 4200 Parks Avenue, La Mesa 91941

- **Martes, 23 de octubre de 6-7:30 p.m., zona costera del norte del condado**
  Organizada por Catherine Blakespear, alcaldesa de Encinitas y David Zito, alcalde de Solana Beach
  La Colonia Community Center, 715 Valley Avenue, Solana Beach 92075

- **Jueves, 25 de octubre de 6-7:30 p.m. en el interior del norte del condado***
  Organizada por Sam Abed, alcalde de Escondido y Steve Vaus, alcalde de Poway
  Escondido Library, Turrentine Room, 239 S. Kalmia Street, Escondido 92025

*Se proporcionarán servicios de interpretación en español; personal que habla español estará presente en todos los eventos

Tome una breve encuesta interactiva en línea del 1° al 31 de octubre en **SDForward.com/encuesta**

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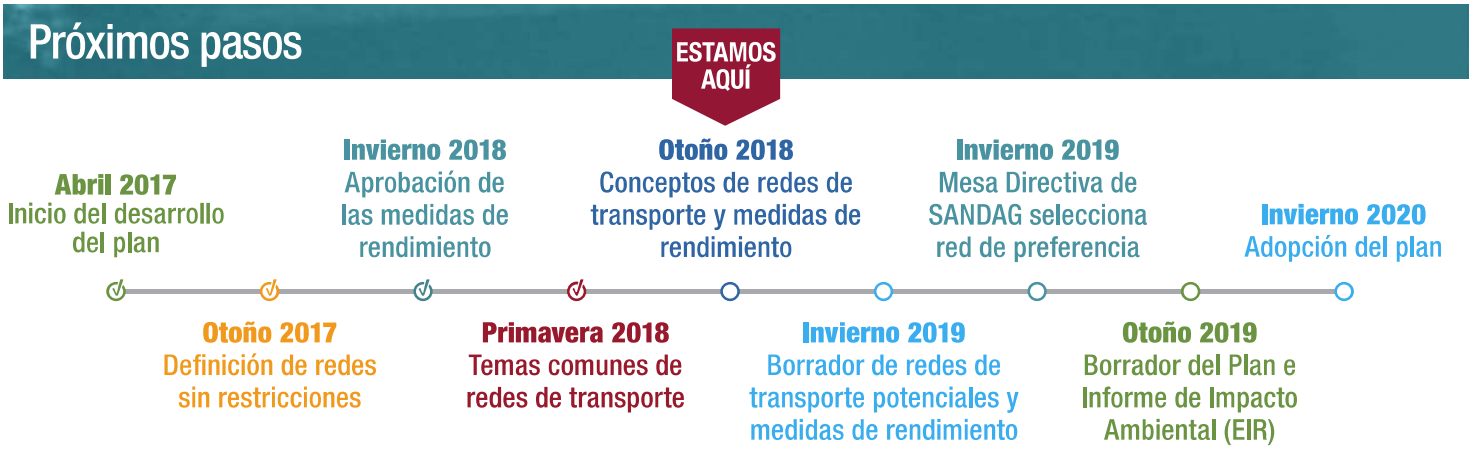
Conceptos de red de transporte

En la primavera de 2018, le solicitamos que expresara su opinión sobre las prioridades para el transporte y la calidad de vida en la región de San Diego. La participación pública identificó varias prioridades: reducir la congestión vehicular, cambio climático y medio ambiente, tecnologías emergentes, comunidades saludables, al igual que vivienda, empleos y economía. Teniendo en cuenta estas prioridades, hemos formulado tres conceptos de red de transporte para evaluación y comentarios del público y de los responsables de formular políticas de SANDAG.

Los conceptos de movilidad compartida, corredores conectados y posibles políticas se formularon con la intención de proporcionar opciones de viaje, administrar la demanda y renovar el sistema de transporte; respaldar el traslado de bienes y la economía; y tomar en cuenta el impacto sobre la equidad social, el medio ambiente y la salud pública. No obstante, cada concepto difiere en cuanto a cómo se utiliza el financiamiento flexible y qué programas, tecnologías y posibles políticas deberán evaluarse.

Visite **SDForward.com/redes** para evaluar los conceptos en detalle.

Próximos pasos



Con los comentarios públicos sobre los conceptos de la red de transporte se formulará el borrador de redes de transporte para otra ronda de evaluación y comentarios durante el invierno. Posteriormente, la Mesa Directiva de SANDAG seleccionará la red de transporte de su preferencia que constituirá el núcleo del Plan Regional 2019.

TransNet Evaluación decenal

Han pasado diez de los 40 años de la iniciativa *TransNet* y el impuesto de medio centavo sobre las ventas para proyectos de transporte está pasando por una exhaustiva evaluación, tal y como se les prometió a los votantes. La evaluación decenal de *TransNet* coincide con el desarrollo del Plan Regional 2019 y los comentarios recabados en el proceso de fórmula de redes de transporte ayudarán a guiar modificaciones potenciales a *TransNet*, a fin de mejorar su rendimiento en el futuro. Obtenga más información en **sandag.org/TransNet10YearReview**.

En cumplimiento con la ley de estadounidenses con discapacidades (ADA, por sus siglas en inglés), usted puede solicitar este documento en formatos alternos contactando a la coordinadora de ADA de SANDAG, la directora de administración, llamando al (619) 699-1900 o al (619) 699-1904 (TTY).

Los materiales de la reunión pueden estar disponibles en otros idiomas a petición previa. Si necesita asistencia para poder participar, por favor comuníquese con SANDAG al (619) 699-1900 por lo menos 72 horas antes de la reunión. TTY: (619) 699-1904.

Para obtener más información sobre los conceptos, proyectos y medidas de rendimiento, visite **SDForward.com/redes**

Other Projects for Consideration

The introduction of new and emerging technologies as well as potential operational alternatives provide the opportunity for new mobility solutions that previously may not have been considered. As a result, some projects from the 2015 Regional Plan (noted below) are not included in the concepts as they originally were envisioned. For example, the Purple Line LRT (Trolley 562) is a major trunk line capital transit project that was identified in the 2015 Regional Plan as a light rail or Trolley extension. The substantial transit demand in this corridor can be well served by light rail as it could be run frequently, includes minimal interruptions in travel, requires fewer operators to run, and can be perceived by users as a higher-level mode of transportation. As an alternative, Concepts A, B, and C propose a package of infrastructure and technology improvements as part of a system of *Rapid* services to achieve similar transit ridership in the corridor at a substantially lower capital cost and shorter time frame, with higher levels of connectivity throughout the region.

Based on Board direction and public input, the projects listed below could be included in the transportation network scenarios that will be developed for consideration later this year or in later Regional Plans if funding is identified and the project is still warranted given other factors such as the evolution of transportation technologies or changing land use decision making.

Transit Projects

TransNet	Service	Route	Description	Capital Cost ($2018); millions[1]
	SPRINTER	588	SPRINTER Express	$332
	Trolley	560	SDSU to Downtown San Diego via El Cajon Boulevard/ Mid-City (transition of Mid-City *Rapid* to Trolley)	$3,483
	Trolley	561	UTC to COASTER Connection (extension of Route 510)	$1,638
	Trolley	562	San Ysidro to Carmel Valley via National City/ Chula Vista via Highland Avenue/4th Avenue, Southeast San Diego, Mid-City, Mission Valley, and Kearny Mesa	$5,793
	Trolley	563	Pacific Beach to El Cajon Transit Center via Balboa and Kearny Mesa	$1,829
	Rapid	11	Spring Valley to SDSU via Southeast San Diego, Downtown, Hillcrest, Mid-City	$218
	Rapid	636	SDSU to Spring Valley via East San Diego, Lemon Grove, Skyline	$70
	Rapid	638	Iris Trolley to Otay Mesa via Otay, Airway Drive, SR 905 Corridor	$72
	Streetcar	554	Hillcrest/Balboa Park/Downtown San Diego Loop	$31
	Streetcar	565	Mission Beach to La Jolla via Pacific Beach	$27
			Subtotal	**$13,493**

Managed Lane Projects

TransNet	Freeway	From	To	Existing	With Improvements	Capital Cost ($2018); millions[1]
	SR 15	I-5	SR 94	6F	8F+2ML	$156
TransNet	SR 54	I-5	SR 125	6F	6F+2ML	$499
TransNet	I-805	Viaduct over Mission Valley		--	Viaduct	$1,014
					Subtotal	**$1,669**

Highway Projects

TransNet	Freeway	From	To	Existing	With Improvements	Capital Cost ($2018); millions[1]
TransNet	I-5	SR 54	SR 15	8F	10F	Combined w ML
	SR 52	I-5	I-805	4F	6F	$53
TransNet	SR 67	Mapleview Street	Dye Road	2C	4C	$1,092
					Subtotal	**$1,145**

Operational Improvements

TransNet	Freeway	From	To	Existing	With Improvements	Capital Cost ($2018); millions[1]
	I-8	I-5	SR 67	8F/10F	8F/10F+Operational	$1,413
					Subtotal	**$1,413**

[1] Dollars shown in $2018 millions. Actual cost will reflect Year-of-Expenditure dollars which includes a compounded interest factor of 2.77 percent annually.