



# Interstate 15

## Express Lanes Project Middle Segment (SR 56 to Centre City Parkway)

### How to stay informed

For construction updates and questions, log-on to [www.KeepSanDiegoMoving.com](http://www.KeepSanDiegoMoving.com) or call the Interstate 15 Project Information Hotline at 866-890-1397.



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### Quick Guide: Terminology

The Express Lanes Project includes new features that enhance I-15's transportation system. This quick guide will introduce the terminology of those new features. Details about how those features will work in the Middle Segment is provided inside this brochure.

**General Purpose Lanes** are highway lanes that are open to all motor vehicles at all times for no fee.

**I-15 Express Lanes** are lanes that are located in the middle of the highway to serve buses, carpools, vanpools, motorcycles and certain permitted clean air vehicles for no cost and single-occupant vehicles for a fee paid through the FasTrak® program.

**Certain permitted clean air vehicles** allowed to use the I-15 Express Lanes for free include hybrid-electric vehicles with EPA average fuel economy rating of 45 MPG or greater, other specially-designated super ultra-low emissions vehicles and zero-emissions vehicles.

**Intermediate Access Point (IAP)** provides access to and from the general purpose lanes to the express lanes.

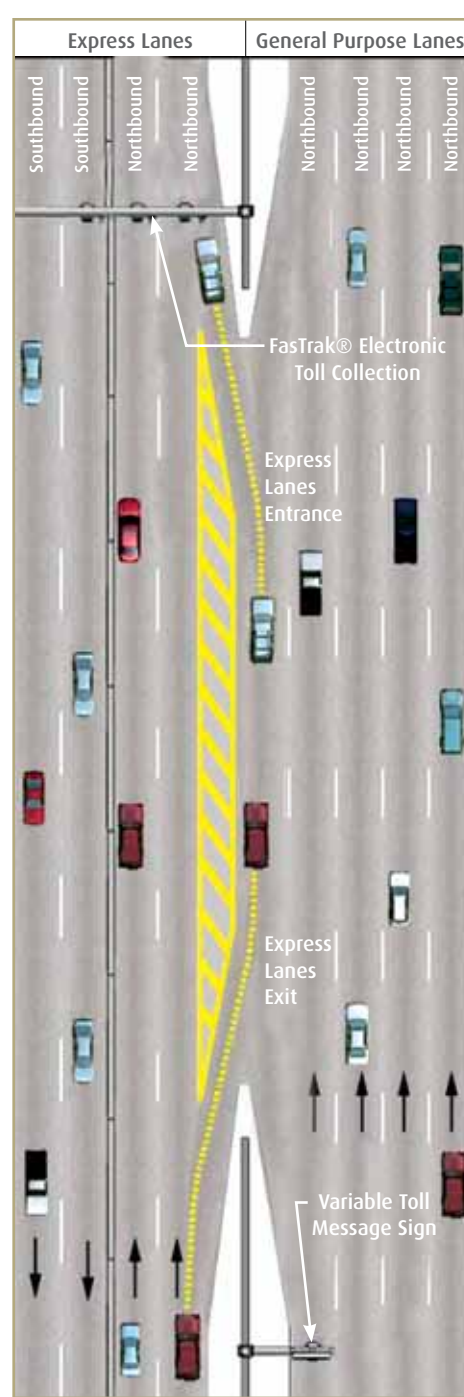
**Moveable Median Barriers** are made of concrete and separate the directional travel in the express lanes, so that up to three express lanes in one direction can be made available to respond to specific traffic demands.

**Barrier Transfer Machine** is a truck-like device that lifts the moveable concrete median barrier about 6 inches off of the express lanes, shifts it over and then places it back down. The Barrier Transfer Machine operates with the traffic flow.

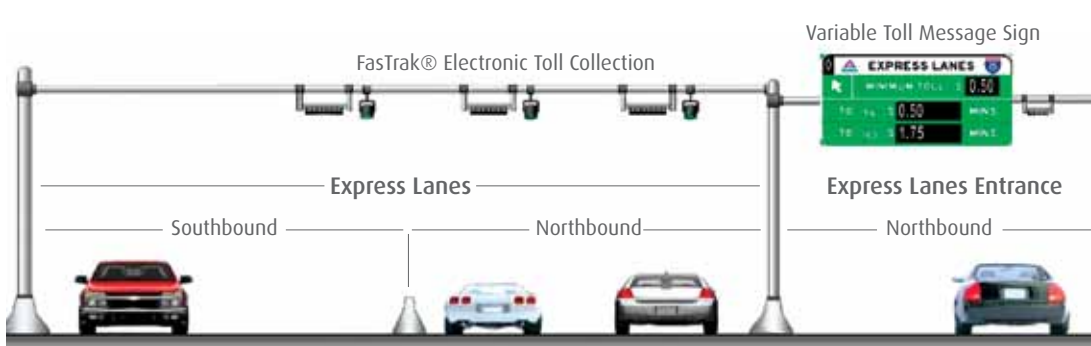
**Direct Access Ramp (DAR)** provides priority access for travelers who use the express lanes and Bus Rapid Transit Centers.

**Bus Rapid Transit (BRT)** is a new high-frequency bus system that will run more often, and be more reliable and convenient similar to the services of a light rail system.

**Flyover** is a high-level overpass that crosses over a highway interchange or intersection.



Intermediate Access Point Diagram



Cross Section of the I-15 Express Lanes

### Special Features of Express Lanes: Intermediate Access Points and Direct Access Ramps



Construction of the DAR at the Sabre Springs/Peñasquitos Transit Station: aerial view looking north.



Construction of the DAR at the Rancho Bernardo Transit Station: aerial view looking south.

#### Intermediate Access Points for Express Lanes

Southbound	Northbound
<ul style="list-style-type: none"> <li>▶ Entrance only before Via Rancho Parkway</li> <li>▶ Entrance/Exit before Rancho Bernardo Road</li> <li>▶ Entrance/Exit before Carmel Mountain Road</li> <li>▶ Exit only before SR 56/Ted Williams Parkway</li> </ul>	<ul style="list-style-type: none"> <li>▶ Entrance/Exit after SR 56/Ted Williams Parkway</li> <li>▶ Entrance/Exit after Camino Del Norte</li> <li>▶ Entrance/Exit after Rancho Bernardo Road</li> <li>▶ Exit only after Via Rancho Parkway</li> </ul>

#### Direct Access Ramps

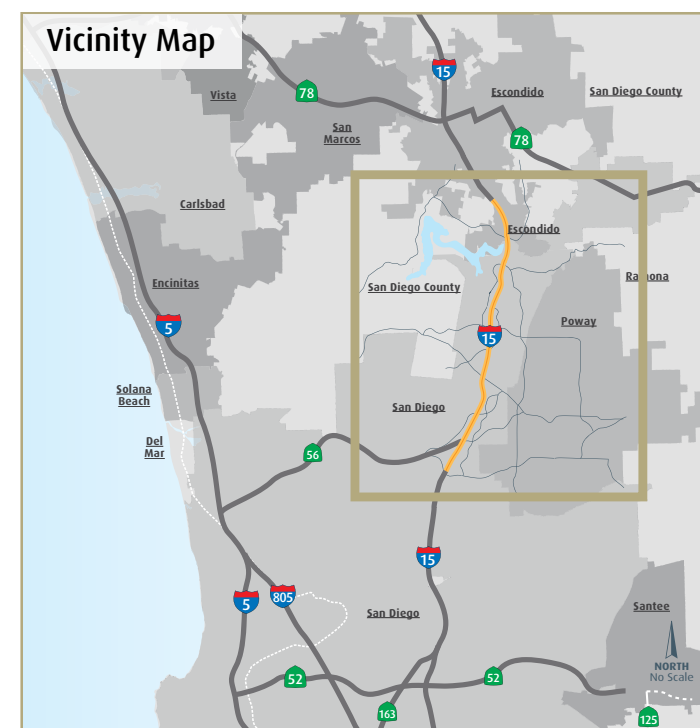
Another special feature of the express lanes is the Direct Access Ramp (DAR). DARs allow drivers to safely access the express lanes by directly merging into the lanes from inside the median. DARs prevent drivers from needing to weave across the general purpose lanes to use the express lanes and reduces slowdowns caused by these maneuvers. They also reduce the amount of traffic on other ramps in the area. A unique feature of DARs is that they directly connect to Park & Ride lots and future BRT Stations. Once the entire Express Lanes Project is fully completed, five DARs will begin to serve the new BRT services, increasing trip time reliability for bus transit users. Construction of two of the three DARs in the Middle Segment are shown in the pictures to the left.

In March 2009, San Diego's Interstate 15 Express Lanes Project ("Express Lanes Project") will open the last portion of the Middle Segment to travelers. This brochure introduces the Express Lanes Project as a whole and then highlights the features of the Middle Segment available to travelers.

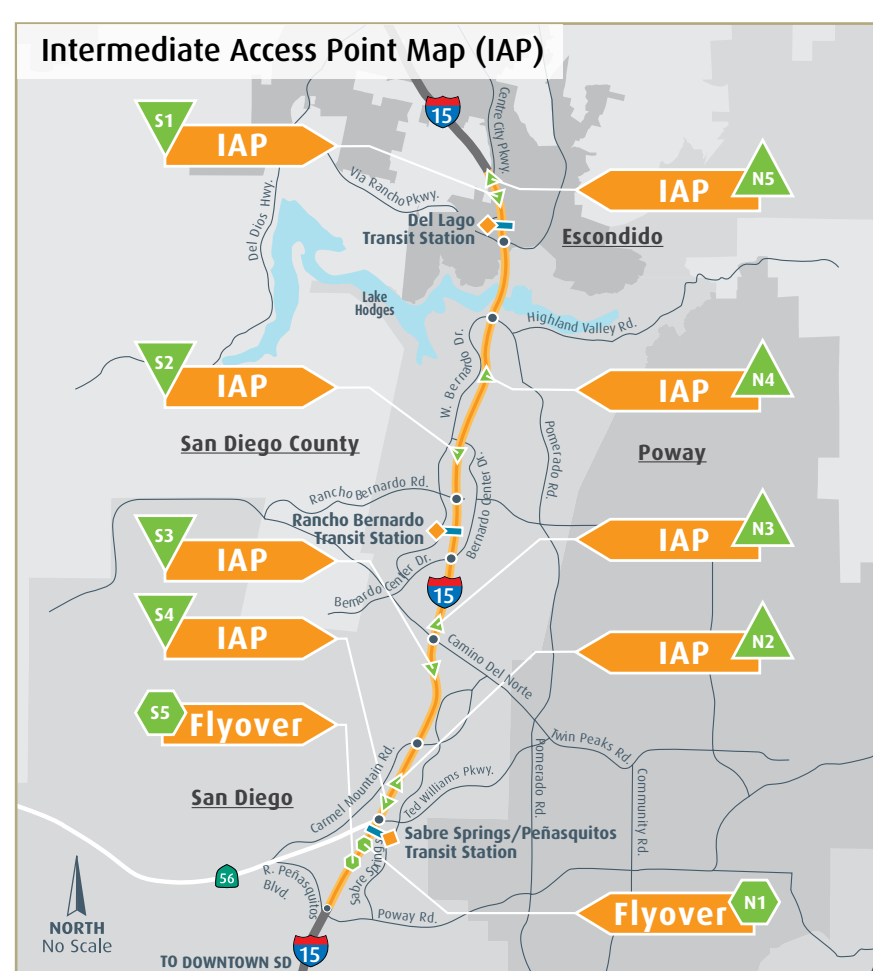
### Project Description

Building on the success of the existing Interstate 15 (I-15) Express Lanes and FasTrak® program, this Express Lanes Project creates a four lane, 20-mile express lane facility in the median of I-15 between State Route 163 (SR 163) and State Route 78 (SR 78). These new express lanes will be available to transit, carpools, vanpools, motorcycles and certain permitted clean air vehicles for free and to single-occupant vehicle drivers for a fee. Once completed in 2012, a new Bus Rapid Transit (BRT) system, the first of its kind in San Diego, will start services. BRT will provide a new, convenient transit service for San Diegans.

The Express Lanes Project is being constructed in three segments. The Middle Segment, the focus of this brochure, opens this year and runs from State Route 56 (SR 56)/Ted Williams Parkway to Centre City Parkway. The Northern Segment, from Centre City Parkway to SR 78, is slated for completion for 2011. The Southern Segment, located one mile south of the SR 163/I-15 merge to just south of the SR 56/I-15 interchange, will complete the Express Lanes Project in 2012. The total investment for these transportation improvements is estimated to be \$1.4 billion.



By adding express lanes between SR 163 and SR 78, the I-15 Express Lanes Project creates the infrastructure for a new Bus Rapid Transit service and more convenient, reliable travel choices.



Middle Segment Intermediate Access Points provide access to and from the general purpose lanes to the express lanes.

### Project Need and Benefits

Before this Express Lanes Project started, travelers on I-15 experienced lengthy delays due to increased travel demand. On average, these delays added 30 to 45 minutes to commute times. From 1987 to 2020, demand is anticipated to double.

Average Daily Trips		
1987	1999	2020
185,000	290,000	380,000

By 2020, projections showed commuting delays ranging from 80 to 90 minutes if improvements were not made. Once completed, the new express lanes will improve travel times and mobility, and connect to new Bus Rapid Transit Centers and Park & Ride lots. Together, these improvements will provide travelers with more reliable and convenient transportation choices.

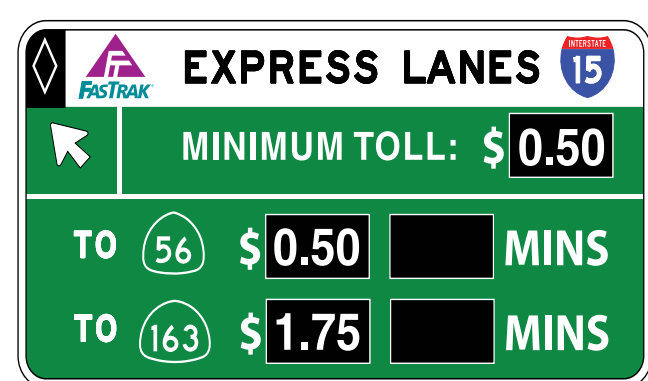
### Middle Segment and Express Lanes Special Features

The Middle Segment of the Express Lanes Project is eight miles long, extending the current reversible two-lane express lanes from SR 56/Ted Williams Parkway to Centre City Parkway.

The final section of the Middle Segment opens in March 2009 with four Express Lanes, two northbound and two southbound, available 24 hours a day.



The Barrier Transfer Machine changes the moveable median barriers to accommodate the flow of traffic.



The variable electronic toll message sign displays the current toll for the various segments of the express lanes.

The I-15 Express Lanes Project has many special features that will work to improve the travel experience in this corridor including:

- ▶ Moveable Median Barrier
- ▶ Advanced Traffic Control Devices
- ▶ Dynamic Pricing
- ▶ FasTrak® Electronic Toll Collection
- ▶ Commuter Express Bus and Future Bus Rapid Transit System
- ▶ Vanpools, Carpools and Park & Ride Lots
- ▶ Intermediate Access Points
- ▶ Direct Access Ramps

#### Moveable Median Barrier

The Barrier Transfer Machine will maximize express lane capacity by configuring the moveable median barrier to provide up to three of the four new express lanes in the direction of peak directional traffic. The lanes could also be configured to handle incidents or special events. Until the entire Express Lanes Project is complete in 2012, the typical lane configuration in the Middle Segment will be two lanes in each direction.

#### Advanced Traffic Control Devices

Because lane configurations in the express lanes will change based on congestion needs, advanced traffic control devices will be used. Devices such as innovative pop-up channelizers, in-pavement lighting and variable toll message signs will efficiently manage commuter traffic and ensure safety when using the new lanes. Pop-up channelizers will guide traffic out of the new express lanes when traffic is moving in the opposite direction. Instead of painted stripes, in-pavement lighting will delineate travel lanes where the existing express lanes transition to the new express lanes north of SR 56. Variable toll message signs, located at the express lane entrances, will provide guidance to merge into the express lanes. These signs display toll rates and travel times to the nearest destinations.

#### Dynamic Pricing

Tolls for FasTrak® users will range from \$0.50 to \$8.00 depending on the distance traveled, the time of day and the level of congestion in the express lanes. Tolls go up as congestion in the express lanes increases and are lowered when traffic volume decreases.

### Express Lanes Customers: FasTrak®, Commuter Express Buses, Vanpools and Carpools



Solo drivers can access the Express Lanes for a fee using a FasTrak® transponder that is placed on their windshield.

FasTrak® participants, Commuter Express Buses, vanpools and carpools will utilize the new features in the Express Lanes Project.

#### FasTrak® Electronic Toll Collection

FasTrak® is the electronic toll collection system universally accepted on all toll roads and toll bridges in California. To use the I-15 Express Lanes, solo drivers must have an established FasTrak® account and place a transponder in their windshield. More information is available at [www.511sd.com/fastrak](http://www.511sd.com/fastrak).

#### Commuter Express Buses and Future Bus Rapid Transit System

Commuter Express Bus Routes 810, 820, 850, 860 and 880 are routes that use the express lanes. Central to the I-15 Transit Strategy, routes 810, 820, 850 and 860 run inbound to downtown San Diego during the morning commute period and outbound in the afternoon. Route 880 runs inbound to Sorrento Valley and University City during the morning commute period and outbound in the afternoon.

Routes 810 and 880 will access the new Rancho Bernardo Transit Station Direct Access Ramp (DAR). Routes 820, 860 and select 810A afternoon routes will access the Sabre Springs/Peñasquitos Transit Station DAR. With the DAR, the buses will be able to access the express lanes directly, making trip times more reliable for bus riders. More information is available at [www.511sd.com](http://www.511sd.com).

Once the entire Express Lanes Project is fully completed, a Bus Rapid Transit (BRT) system will operate. This new high-frequency express bus system, the first of its kind in San Diego, will be operated by the Metropolitan Transit System. Buses will run more often, and be more reliable and convenient, similar to the services of a light rail system. These buses will run on the new express lanes, using the DARs to connect to them. A total of five BRT Centers will be available along the I-15 at the Mira Mesa Transit Station, Sabre Springs/Peñasquitos Transit Station, Rancho Bernardo Transit Station, Del Lago Transit Station and Escondido Transit Station.

#### Vanpools, Carpools and Park & Ride Lots

RideLink is San Diego's regional transportation assistance program that provides alternative choices to commuters including vanpool, carpools and transit. Also available to travelers are Park & Ride lots not mentioned in the chart on the left. They are:

- ▶ Via Rancho Pkwy./Del Lago Blvd.
- ▶ Rancho Bernardo Rd./I-15
- ▶ Rancho Peñasquitos Blvd.
- ▶ Community Rd./Twin Peaks Rd.
- ▶ Budwin Ln./Twin Peaks Rd.

More information is available at [www.511sd.com](http://www.511sd.com).

Commuter Express Bus Routes	
Route 810	Escondido ↔ San Diego <b>Park &amp; Ride Lots:</b> • Felicitá Plaza • Rancho Bernardo Transit Station • Sabre Springs/Peñasquitos Transit Station: 810A afternoon routes only
Route 820	Poway ↔ San Diego <b>Park &amp; Ride Lots:</b> • Poway Road/Sabre Springs Parkway • Sabre Springs/Peñasquitos Transit Station
Route 850	Rancho Peñasquitos ↔ San Diego <b>Park &amp; Ride Lots:</b> • Stoney Creek Rd./Carmel Mountain Rd. • Freeport Rd./Carmel Mountain Rd. • Paseo Cardiel/Carmel Mountain Rd.
Route 860	Carmel Mountain Ranch ↔ San Diego <b>Park &amp; Ride Lots:</b> • Rancho Carmel Dr./Carmel Mtn. Rd. • Rancho Carmel Dr./Provençal Pl. • Rancho Carmel Dr./SR 56 • Sabre Springs/Peñasquitos Transit Station
Route 880	Rancho Bernardo ↔ UTC <b>Park &amp; Ride Lots:</b> • 45 Ranch Library • Rancho Bernardo Transit Station



## I-15 Middle Segment Users Guide

### Legend

North and South Segments I-15

I-15 with Express Lanes

Highways

Arterial Roads

Commuter Express Bus Routes with Bus Stops on Roadway System

Access Point Description  
IAP or Flyover

### Commuter Express Bus Routes

● Existing On/Off Ramps

▼ Southbound Intermediate Access Point (IAP)

▲ Northbound Intermediate Access Point (IAP)

◊ Flyover Ramp

◊ Direct Access Ramp/Transit Station

🚗 Park & Ride Lot

County of San Diego

City of San Diego

TO DOWNTOWN SAN DIEGO



#### S1 IAP for I-15 Express Lanes

Entrance for Southbound I-15 Express Lanes  
Discontinued after 2011

Lake Hodges  
South portion of Direct Access Ramp open.  
North portion will open in 2011.

#### N5 IAP for I-15 Express Lanes

Exit for Northbound I-15 General Purpose Lanes  
Discontinued after 2011

Existing On/Off Ramp Via Rancho Pkwy.

Existing On/Off Ramp W. Bernardo Dr. / Pomerado Rd.

Bus Route 810 from Escondido to Downtown

#### S2 IAP for I-15 Express Lanes

**For drivers who enter I-15 from:**

- Felicitia Rd./Citracado Pkwy.
- Centre City Pkwy.
- Via Rancho Pkwy.
- W. Bernardo Dr./Pomerado Rd.

**For drivers who exit I-15 using:**

- Bernardo Center Dr.
- Camino Del Norte
- Carmel Mountain Rd.

#### N4 IAP for I-15 Express Lanes

**For drivers who enter I-15 from:**

- Camino Del Norte
- Bernardo Center Dr.
- Rancho Bernardo Rd.

**For drivers who exit I-15 using:**

- Via Rancho Pkwy.
- Centre City Pkwy.
- Felicitia Rd./Citracado Pkwy.

Existing On/Off Ramp Rancho Bernardo Rd.

#### S3 IAP for I-15 Express Lanes

**For drivers who enter I-15 from:**

- Rancho Bernardo Rd.
- Bernardo Center Dr.

**For drivers who exit I-15 using:**

- SR 56/Ted Williams Pkwy.

#### N3 IAP for I-15 Express Lanes

**For drivers who enter I-15 from:**

- SR 56/ Ted Williams Pkwy.
- Carmel Mountain Rd.

**For drivers who exit I-15 using:**

- Rancho Bernardo Rd.
- W. Bernardo Dr./Pomerado Rd.

Existing On/Off Ramp Bernardo Center Dr.

#### S4 IAP for I-15 Express Lanes

**For drivers who exit I-15 using:**

- Poway Rd./R. Peñasquitos Blvd.
- Scripps Poway Pkwy./Mercy Rd.
- Mira Mesa Blvd.
- Carroll Canyon Rd.
- Miramar Rd./Pomerado Rd.

#### N2 IAP for I-15 Express Lanes

**For drivers who enter I-15 from:**

- Miramar Rd./Pomerado Rd.
- Carroll Canyon Rd.
- Mira Mesa Blvd.
- Scripps Poway Pkwy./Mercy Rd.
- Poway Rd./R. Peñasquitos Blvd.

**For drivers who exit I-15 using:**

- Camino Del Norte
- Bernardo Center Dr.

Existing On/Off Ramp Camino Del Norte

#### S5 Flyover for I-15 Express Lanes

**For drivers who enter I-15 from:**

- SR 56/Ted Williams Pkwy.
- Carmel Mountain Rd.
- Camino Del Norte

Existing On/Off Ramp Carmel Mountain Rd.

#### N1 Flyover for I-15 Express Lanes

**For drivers who exit I-15 using:**

- SR 56/Ted Williams Pkwy.
- Carmel Mountain Rd.

Bus Routes 810, 820, 850 and 860 to Downtown  
Bus Route 880 to Sorrento Valley and UTC