Frequently Asked Questions

May 31, 2012

Overview

The questions and answers below provide current information on proposals to improve the Interstate 405 (I-405). The study area extends from about the State Route 73 (SR-73) in Costa Mesa to the Interstate 605 (I-605) at the Orange/Los Angeles County line. More information is available on the Orange County Transportation Authority (OCTA) website at http://www.octa.net/405improvement.

1. Why are improvements being proposed for I-405?

The I-405 was built in the 1960s and is the primary freeway serving coastal communities in northwest Orange County. It carries approximately 300,000 vehicles per day and traffic along the corridor is expected to grow by about 35-40 percent by 2040. Currently, both general purpose (GP) and high occupancy vehicle (HOV) lane traffic demand exceeds available capacity during peak periods. Additional lanes are being proposed to reduce congestion, enhance operations, increase mobility, improve trip reliability, maximize throughput, and optimize operations while minimizing environmental impacts and right-of-way acquisitions.

2. Who is planning the I-405 Improvement Project?

The State of California Department of Transportation (Caltrans) is the lead agency overseeing the preparation of the Environmental Impact Report (EIR) and Environmental Impact Statement (EIS) in accordance with the California Environmental Quality Act (CEQA) and the Federal National Environmental Policy Act (NEPA). The OCTA is the sponsoring agency.

3. What is an Environmental Impact Report (EIR) / Environmental Impact Statement (EIS)?

Both an EIR and an EIS are disclosure documents that are required to comply with CEQA (state law) and NEPA (federal law). The purpose of these documents is to analyze and disclose a project's potential effects/impacts on the natural and human environment and identify mitigation measures and alternatives to avoid significant effects.

The Project Development Team, which consists of Caltrans and OCTA staff representatives, has prepared a Draft EIR/EIS document for the I-405 Improvement Project that assesses a wide range of environmental factors, and analyzes the possible implications of each proposed project alternative. Among other environmental factors, the Draft EIR/EIS addresses traffic, air quality, noise, visual and construction impacts.

4. What are the proposed alternatives for improving the I-405?

There are currently three "build" alternatives as well as one "no-build" alternative. In 2006, voters approved Renewed Measure M (M2), a ½-cent sales tax for transportation improvements. Included in M2 was a project to add one GP lane in each direction on the I-405. All of the build alternatives include this M2 project.

- **No Build Alternative**

The No Build Alternative keeps the I-405 in a status quo condition. This alternative includes no additional lanes or interchange improvements.

- **Alternative 1: Add One General Purpose Lane in Each Direction**

Alternative 1 would add a single GP lane in each direction on the I-405 from Euclid Street to the I-605 interchange.

- **Alternative 2: Add Two General Purpose Lanes in Each Direction**

Alternative 2 would add one GP lane in each direction on I-405 from Euclid Street to the I-605 interchange (as in Alternative 1), plus add a second GP lane in the northbound direction from Brookhurst Street to the State Route 22 (SR-22) / 7th Street interchange and a second GP lane in the southbound direction from the Seal Beach Boulevard on-ramp to Brookhurst Street.

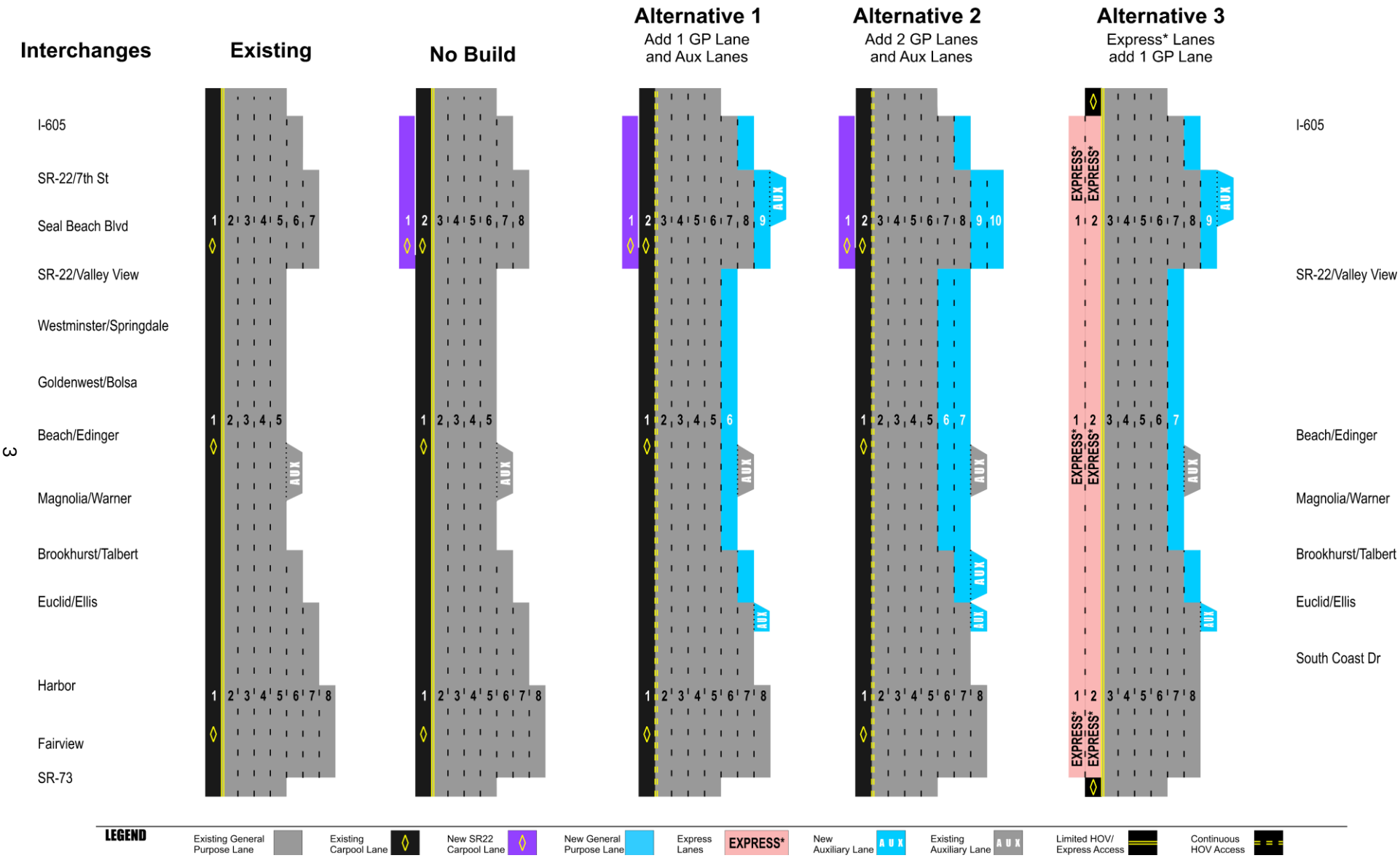
- **Alternative 3: Add One General Purpose Lane in Each Direction and Add Express Lanes**

Alternative 3 would add one GP lane in each direction of the I-405 freeway from Euclid Street to the I-605 interchange (as in Alternatives 1 and 2), plus add a tolled express lane in each direction of I-405 from the SR-73 to the SR-22 east.

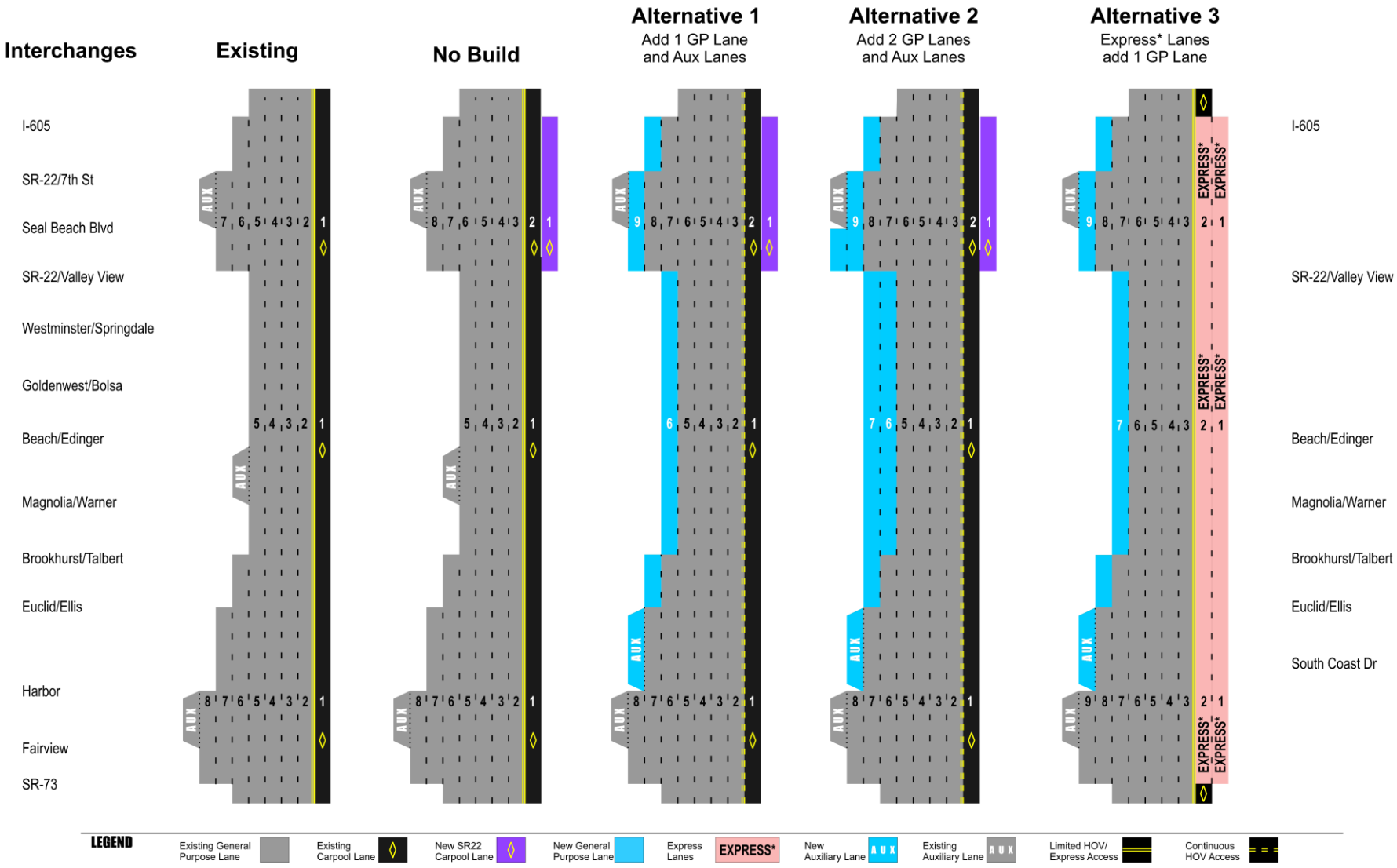
The tolled express lane and the existing HOV lanes would be managed jointly as a tolled express facility with two lanes in each direction from the SR-73 to I-605. The tolled express facility would operate so that single occupant vehicles and carpools with two persons per vehicle (HOV2+) would be tolled and carpools with three or more persons (HOV3+) would travel free or at a deeply discounted rate. From SR-22 to I-605, the existing HOV lane and the second HOV lane that is being built as part of the current West County Connectors project would be part of the tolled express facility. (See more detail in questions #9-14).

Lane configurations for each proposed alternative are included in the diagrams below.

NORTHBOUND I-405



SOUTHBOUND I-405



5. Why consider building more than the Measure M project?

The construction effort required for any of the proposed build alternatives would be significant. However, all of the proposed build alternatives generally fit within the existing right-of-way. Consideration of additional capacity is warranted to advance corridor mobility and also to avoid potential inflationary cost increases that could occur by deferring projects to later years.

6. Which interchanges would be improved with the build alternatives?

The I-405 Improvement Project would provide improvements to the following interchanges:

- Harbor Boulevard (Alternative 3 only)
- Euclid Street and Ellis Avenue
- Brookhurst Street and Talbert Avenue
- Magnolia Street and Warner Avenue
- Beach Boulevard and Edinger Avenue
- Goldenwest Street and Bolsa Avenue
- Springdale Street and Westminster Boulevard
- Bolsa Chica Road/Valley View Street and Garden Grove Boulevard
- Seal Beach Boulevard

7. What is traffic throughput for each alternative?

Traffic throughput is the volume of traffic expected to pass through a fixed point in one direction during one hour. During peak congested hours, the following throughput is anticipated on I-405 in the northbound direction at points between Brookhurst Street and SR-22 east:

- No Build 6,000 vehicles per hour
- Alternative 1 7,200 vehicles per hour
- Alternative 2 8,400 vehicles per hour
- Alternative 3 9,500 vehicles per hour

8. What is Average Daily Traffic for each alternative?

The environmental document includes projections related to Average Daily Traffic, or ADT. This is the number of vehicles expected to move through the corridor on a daily basis. Between SR-73 and I-605, the I-405 has three distinct segments. The ADT of each segment is identified on the table below.

I-405 Mainline Average Daily Traffic

Segment	Year 2009	Year 2020				Year 2040			
		No Build	Alt 1	Alt 2	Alt 3	No Build	Alt 1	Alt 2	Alt 3
SR-73 to Brookhurst St	307,000	333,000	357,000	374,000	383,000	351,000	391,000	419,000	435,000
Brookhurst St to SR-22 East	257,000	276,000	296,000	310,000	314,000	288,000	321,000	344,000	352,000
SR-22 East to I-605	370,000	404,000	433,000	453,000	455,000	427,000	475,000	509,000	512,000

Express Lanes Concept

9. What are express lanes?

Alternative 3 includes two express lanes in each direction between the SR-73 and the I-605. The express lanes would be separated from the GP lanes using channelizers and striping and would be located in the center of the freeway. Express lanes would be managed to maintain uncongested, free flow traffic speeds. Like Orange County's 91 Express Lanes, the Alternative 3 express lanes concept is that tolls would be adjusted up or down to ensure a reliable trip time. This provides an option for motorists to pay a toll when they want or need to travel at free flow speeds. The express lanes also would offer free or deeply discounted prices to HOV 3+ vehicles such as carpools, vanpools and buses and provide a real travel time-savings. This offers another travel option in the affected corridor.

10. What is congestion management pricing?

When there is too much traffic traveling and volume is at a point that congestion reduces travel speed and makes travel time in the express lanes unreliable, toll rates are adjusted to ensure free flow conditions. This restores trip reliability. Conversely, when the express lanes are underutilized, tolls are decreased which allows for more motorists to use the express lanes which also helps reduce congestion in the GP lanes. This concept of optimizing traffic volume is known as congestion management pricing.

11. What are toll revenues used for?

The express lanes proposed for Alternative 3 differ from traditional toll roads in that the priority for setting toll rates is to ensure that traffic throughput is optimized, not just to collect revenue. In addition to providing project funding, express lanes can produce "net revenues" in excess of those needed to repay construction bonds or operate or maintain the facility. Net revenues can then be used to make additional mobility improvements, generally within the same travel corridor.

Existing law allows for toll revenue to be used for operations, maintenance, indebtedness, improvements to the project, and improving public transportation in and near the project limits. The use of the net toll revenues would be subject to authorizing legislation and OCTA Board of Directors (Board) policy. For example, future legislation and policy could allow:

- Additional M2 freeway investments
- Capacity, operational and service improvements in the I-405 corridor, including transit services that utilize the express lanes
- Extensions and/or connections to the I-405 Express Lanes that contribute to its use and effectiveness
- Other mobility investments that serve the same travel markets as the I-405 corridor, which might include arterial improvements and local or regional transit services and connections

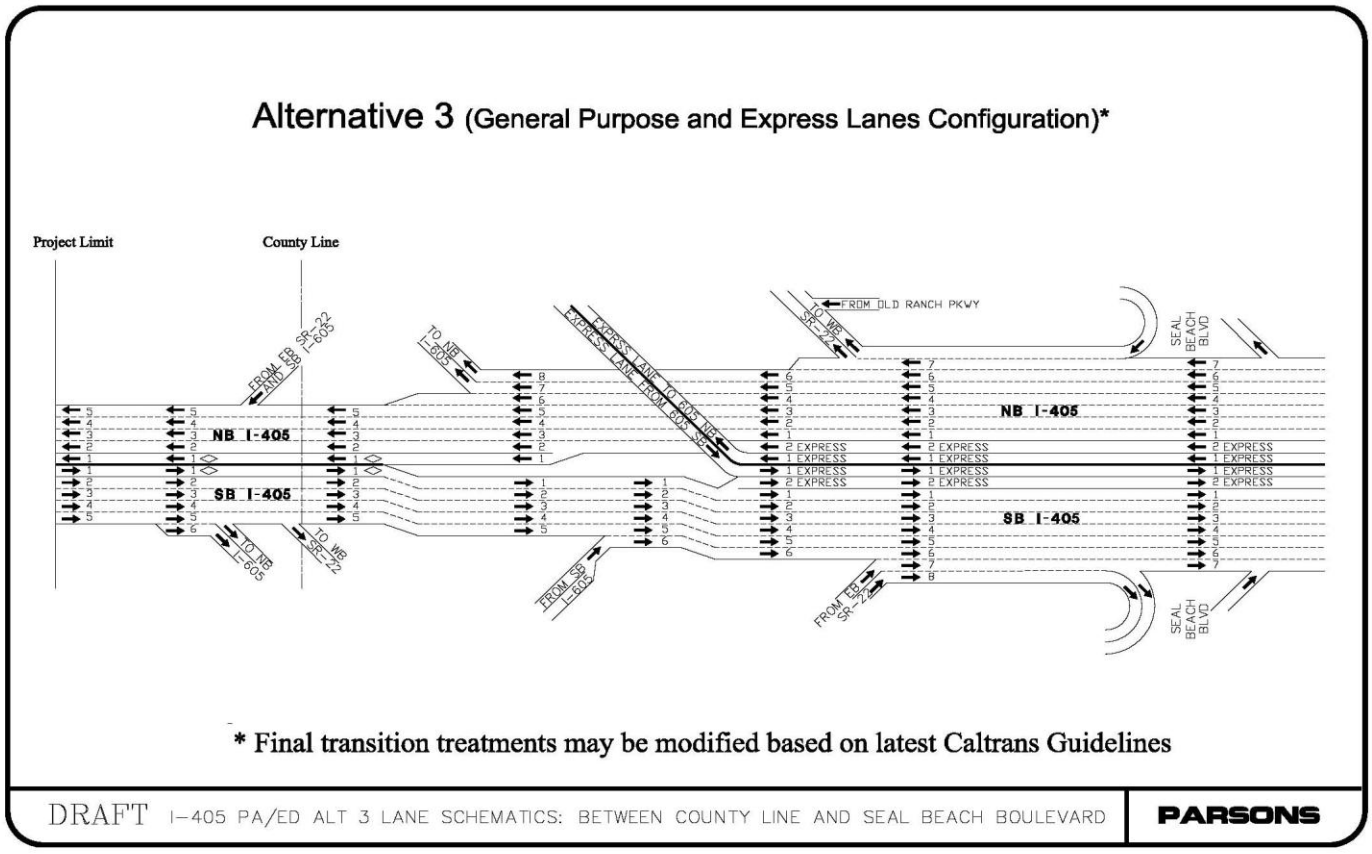
12. Would the express lanes proposed for I-405 in Alternative 3 have access points on each end like the 91 Express Lanes?

Operations of the proposed express lanes in Alternative 3 would be similar, but not identical, to the 91 Express Lanes. Access would be provided at each end (to and from the I-405 and I-605 at the north and to and from the I-405 and SR-73 at the south) but the project would also include intermediate access points at:

- Between Bolsa Avenue and Goldenwest Street overcrossings
- Between Magnolia Street and /Warner Avenue overcrossings
- At the SR-22 direct connector

13. How would the proposed express lanes on I-405 operate in the I-405/SR-22/I-605 area?

Below is a schematic that shows GP and express lanes configurations at and near the Los Angeles County line. In addition, a written description follows.



General Purpose and Express Lanes near the Los Angeles County Line

Travelling northbound on I-405 (from SR-22 to I-605) - The HOV lanes being built as part of the West County Connectors project, along with the existing HOV lane, would become part of the I-405 express lanes facility between the I-405/SR-22 and I-405/I-605 interchanges. The I-405/I-605 direct connector, also being built as part of the West County Connectors project, would become part of the express lanes facility and carry one of the two northbound express lanes over the I-405/I-605/SR-22 interchange to I-605 northbound. The second northbound express lane on the I-405 would terminate just over half a mile before the Los Angeles County line by splitting into two lanes. The lane on the left would be designated for HOV/carpools only and would tie-in with HOV lanes in Los Angeles County. The lane on the right would be for GP lane vehicles.

Travelling southbound on I-605 - The carpool lane and HOV direct connector ramp currently under construction on the I-605 would become part of the I-405 express lanes facility. As the southbound express lane from I-605 touches down in the median of I-405 it would join an express lane from southbound I-405 to create the two southbound express lanes.

Travelling southbound on I-405 to SR-22 - As the two southbound express lanes approach SR-22, an exit ramp would split off from the left express lane and utilize the I-405/SR-22 direct HOV connector ramp (currently under construction), which will become part of the express lanes facility. This will allow express lanes users to avoid the GP lanes in the I-405/SR-22 interchange.

14. What are the plans in Los Angeles County regarding a possible continuation of express lanes on I-405?

A February 2011 report, *Express Travel Choices, Phase II*, prepared by the Southern California Association of Governments and the Los Angeles County Metropolitan Transportation Authority, includes a study of express lanes on I-405 from the Los Angeles / Orange County line to Los Angeles International Airport. This connection, plus a segment which extends along I-405 to the Interstate 5 North in the San Fernando Valley, is included as a part of an Express / High Occupancy Toll Network concept presented in the Southern California Association of Governments *2012-2035 Regional Transportation Plan / Sustainable Communities Strategy.*

Preferred Alternative

15. How is the alternative for construction selected?

The Preferred Alternative will be identified during the preparation of the Final Environmental Document with recommendations from Caltrans and OCTA and after all public comments have been considered. During the preparation of the Record of Decision/Notice of Determination, the Preferred Alternative will be approved for design and construction.

Cost and Funding

16. How much will the improvements cost?

Improvements to the freeway, its interchanges, local streets in the vicinity of interchanges, and bridges over the freeway are currently estimated to cost between $1.3 billion and $1.7 billion. Cost estimates for each alternative are:

- Alternative 1 - $1.3 billion
- Alternative 2 - $1.4 billion
- Alternative 3 - $1.7 billion

17. Is the project fully funded?

When it was approved by voters in 2006, M2 provided approximately $973 million (escalated dollars) for the I-405 Improvement Project. In 2008, the national and local economies experienced a recession that reduced the forecasted amounts for the entire M2 program by approximately 36 percent. As a result, OCTA's 2012 forecast projects approximately $600 million available for the I-405 Improvement Project.

In addition to these revenue reductions, there is an overall increase in project costs for the three alternatives. Savings from other M2 projects could be made available to fill the gap pending OCTA Board approval. In order to add capacity beyond the M2 project, OCTA is currently reviewing alternative funding and delivery methods. These include a design-build delivery method and multiple financing options.

18. Why was only $600 million included for the Measure M2 project?

The original M2 project cost was based on conceptual information on the minimal widening alternative considered in the I-405 Major Investment Study completed in 2005. The I-405 Project Study Report, completed in 2008, included an engineering estimate of the project costs with more detail as well as more current materials costs. The current cost estimate also includes a comprehensive scope, including the following proposed enhancements:

- Interchange improvements
- Improvements to arterials in the vicinity of interchanges and at overcrossings
- More detailed project features such as drainage and signage
- Additional sound walls
- Improved ramp metering including increased vehicle storage on the ramps

In addition to added scope, the cost for raw materials has increased.

Delivery Models

19. What is the difference between design-build and design-bid-build?

Design-build and design-bid-build are different procurement methods used for construction projects. Design-build is a method to deliver projects in which the design and construction services are contracted and completed by a single entity. Design-build reduces the delivery schedule by overlapping the design and construction phases of a project. This method is currently under consideration to complete the project sooner and lower overall construction costs by taking advantage of reduced construction costs given the current competitive bidding market. This method shifts some of the construction risks to the (private) contractor as the contractor is responsible for the design.

The design-bid-build method is the more traditional method used in most highway construction. The designer and a construction contractor are two separate entities working under separate contracts that are let sequentially. The project is fully designed before being bid out for construction, which takes more time to deliver the overall project. The contractor who submits the lowest responsive bid is awarded the construction contract.

Right-of-Way

20. What does “generally within existing right-of-way” mean?

“Generally within existing right-of-way” refers to a statement in the Renewed Measure M Transportation Investment Plan that indicates that freeway improvements will be built primarily within the existing Caltrans property footprint. This was in response to public sentiment to minimize right-of-way impacts.

21. What are the right-of-way impacts for the I-405 Improvement Project?

For the I-405 Improvement Project, all of the build alternatives generally fit within the existing Caltrans right-of-way. While there may be some partial property acquisitions (sliver takes), at this stage of project development the project will not require full single-family residential property acquisitions along either side of the freeway. A major purpose of the preliminary engineering phase is to identify ways to make the most improvements while minimizing impacts. These results are discussed in the Draft EIR/EIS.

Conceptual engineering for the I-405 Improvement Project included engineering adjustments that will reduce potential right-of-way acquisition. These adjustments include removing auxiliary lanes where they are not required reducing the buffer between the carpool/express lanes and the GP lanes, and shifting the centerline of the freeway. Additional adjustments to minimize additional right-of-way are also being considered and are addressed in the Draft EIR/EIS and the Draft Project Report.

22. How many residential and commercial properties will need to be acquired?

No full single family residential property acquisitions are expected. However, up to four full commercial businesses acquisitions are required to construct any of the build alternatives. There will be partial property acquisitions of land from single family residential properties and commercial and industrial properties, mostly in the form of slivers along existing roadways.

Temporary Construction Easements (TCEs) also may be necessary in certain locations during construction for items such as soundwalls.

- Alternative 1 Up to 90 partial acquisitions & 112 TCEs
- Alternative 2 Up to 91 partial acquisitions & 224 TCEs
- Alternative 3 Up to 108 partial acquisitions & 257 TCEs

Information regarding right-of-way impacts, including potential properties acquisitions, is included in the Draft EIR/EIS currently being circulated to the public. However, it is only during the final design phase, after approval of the Final EIR/EIS, that the final determination of properties to be acquired will be made.

Project Schedule

23. What is the overall project schedule?

The Draft EIR/EIS is available for public review during the 45-day period that began on May 18, 2012 and ends July 2, 2012. Caltrans is expected to certify the Final EIR/EIS with a Notice of Determination/Record of Decision in 2013. As the funding and implementing agency, the OCTA Board will identify a LPA to advance to construction. It is anticipated that construction could begin in early 2015, if funding is fully realized.

Public Comments and Hearings

24. How can the public provide feedback?

The I-405 Improvement project Draft EIR/EIS has been released and is available for review until July 2, 2012. The full document is available on Caltrans' website at:

www.dot.ca.gov/dist12/405/index.htm

There are also links to the document from OCTA's website at:

www.octa.net/405improvement

The following public hearings are scheduled from 6 to 8 p.m. and will include a project presentation at 6:30 p.m.

- Monday, June 4, 2012
  Orange Coast Community College - Student Center
  2701 Fairview Road
  Costa Mesa

- Wednesday, June 6, 2012
  Westminster Community Center
  8200 Westminster Avenue
  Westminster

- Thursday, June 7, 2012
  Rush Park Auditorium
  3021 Blume Drive
  Rossmoor

- Thursday, June 14, 2012
  Fountain Valley Senior Center
  17967 Bushard Street
  Fountain Valley

Comments may be submitted by mail to:

Smita Deshpande
Caltrans District 12
2201 Dupont Drive, Suite 200
Irvine CA, 92612

By e-mail, comments can be sent to:

405.dedcomments.parsons@parsons.com

For further information, visit **www.octa.net/405improvement**