

BUS ON SHOULDER



FREQUENTLY ASKED QUESTIONS

1. What is Bus on Shoulder?

The three-year Transit Only Lane Demonstration Project allows for South Bay *Rapid* buses, (Route 225), operated by specially trained drivers and equipped with innovative technology, to perform Bus on Shoulder (BOS) operations along Interstate 805 (I-805) and State Route 94 (SR 94) between Downtown San Diego and National City. South Bay *Rapid* buses can operate on freeway shoulders during heavy traffic congestion, helping bus drivers to bypass slow traffic and maintain transit schedules.



2. How does this project help SANDAG and Caltrans meet our state and regional transportation goals?

The BOS project aligns with California's greenhouse gas and vehicle miles traveled reduction goals, Caltrans' innovation and modality priorities, and the SANDAG 5 Big Moves (Complete Corridors, Transit Leap, Mobility Hubs, Flexible Fleets, Next OS). These strategies reimagine how our region will grow and how people will get around. BOS will help connect users, transportation service providers, and "smart" infrastructure for seamless multimodal travel.

3. What is the project timeline?

The demonstration period is anticipated to start in 2021 after highway construction is completed and will operate for three years. Once completed, project team will assess the project, review key data and feedback from riders, commuters, bus drivers, and other stakeholders. Please note: due to the impacts of Covid-19, project timing may be affected.

4. Does this project include any construction?

Yes. Beginning in fall 2020, construction crews will be making modifications to freeway ramps and shoulders on I-805 and SR 94. This work will require periodic lane and ramp closures and night work. Daytime work hours are 7 a.m. - 3:30 p.m., Monday through Friday. Nighttime work hours are 9 p.m. - 5 a.m., Sunday through Thursday. Signage will be placed along the construction areas ahead of closures to help alert drivers. Construction is expected to be complete in spring 2021.

5. When can buses enter the freeway shoulder?

BOS operations will be limited to weekdays from 6 to 9 a.m. in the northbound I-805 and westbound SR 94 directions, and from 3 to 7 p.m. only on the eastbound SR 94 to southbound I-805 connector. Bus drivers can only enter the shoulder if travel lanes are operating under 35 miles per hour (mph) and can travel up to 15 mph faster than freeway traffic, with a maximum speed of 35 mph. No shoulder operations will take place when the pavement is wet or during inclement weather.

6. Is it okay for other buses or vehicles to drive on the shoulder?

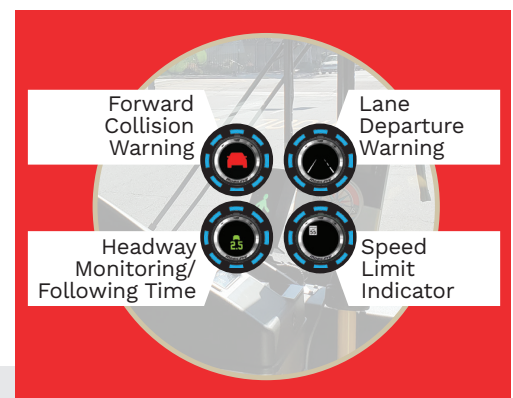
Driving on shoulders is only permitted for *Rapid* buses during the three-year demonstration period and emergency vehicles. South Bay *Rapid* buses have been equipped with the technology required to safely navigate between the freeway lanes and the shoulders. MTS drivers have also undergone extensive training, so they are prepared to drive on the shoulders.

7. Can CHP or drivers that need to pull over still use the shoulder?

Shoulders will always remain available for law enforcement, emergencies, and incident management. Buses using the shoulder will re-enter general purpose lanes when drivers are alerted to upcoming enforcement or emergency vehicles, stalled or stopped vehicles, or other obstructions in the shoulder.

8. What type of technology will be used on the buses?

These buses represent the San Diego region's first use of vehicle-to-infrastructure and advanced Intelligent Transportation System (ITS) technologies. Sensors embedded on these buses provide audio and visual alerts to the drivers regarding lane position and potential conflicts between the *Rapid* buses, other vehicles, or obstructions along the corridor and shoulder.



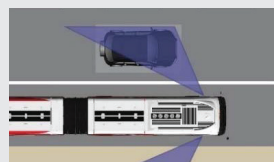
On-Bus + Infrastructure Technology



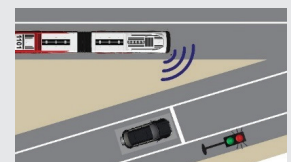
Lane Departure Warning



Forward Collision Warning



Blind Spot Warning



Ramp Metering Transit Priority System

9. What happens after the demonstration period is over?

After the project's three-year demonstration period, the freeway shoulders will be restored to prior condition and buses will no longer operate on the shoulders along this route. Detailed performance monitoring will be conducted throughout the demonstration period to document on-time performance data, travel speeds, technology usage, enforcement issues, and rider/driver perceptions of the service. The data gathered will provide participating agencies with insight and policy considerations for future vehicle-to-infrastructure technology and operations.

10. Will similar BOS projects be implemented in San Diego County?

The three-year demonstration period will provide valuable data and feedback from riders, commuters, bus drivers, and other stakeholders in the community. These factors will help guide discussions about potential policy considerations to support future bus on shoulder operations in San Diego County and throughout the state.

11. How much does the project cost and how is it funded?

The project is funded by the Federal Transit Administration and *TransNet*, a regional voter-approved half-cent sales tax for local transportation projects administered by SANDAG. The overall cost for the three-year project is approximately \$30.9 million. The budget includes \$17 million for new South Bay *Rapid* buses, costs for the vehicle-to-infrastructure and advanced ITS technologies, highway modifications, construction, and support costs for planning and design engineering.

12. What agencies are involved with the project?

The project is a partnership among San Diego Association of Governments (SANDAG), California Department of Transportation District 11 (Caltrans), San Diego Metropolitan Transit System (MTS), California Highway Patrol (CHP), Federal Transit Administration (FTA), and the U.S. Department of Transportation Federal Highway Administration (FHWA).

13. Where can I get more information on the project?

There are numerous ways to receive project information and construction notifications for the BOS project:

VISIT KeepSanDiegoMoving.com/BusOnShoulder

SIGN UP for email notifications at KeepSanDiegoMoving.com/Contact

FOLLOW us on social media



SANDAGregion
CaltransDistrict11
sdmts



@SANDAG
@SDCaltrans
@sdmts



SANDAGregion
CaltransDistrict11
SanDiegoMTS



@SANDAGregion
@sdcaltrans
@sdmts