Regional

Smart High-Occupancy-Vehicle Lanes on Interstates

Incentivize regional transit, car-pooling, and shared-rides by separating them from congested general freeway traffic

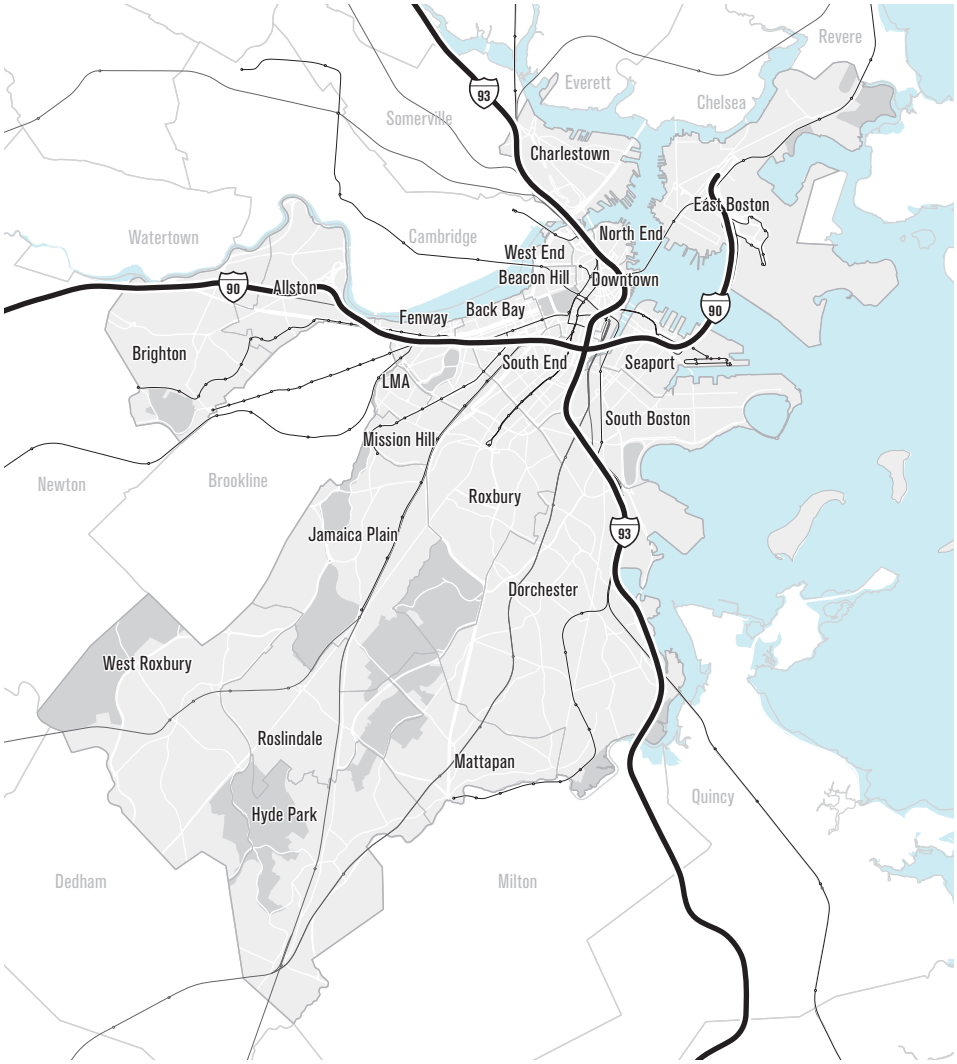
Project Scores: I-93, I-90, I-95

- ●●○ Access 1
- ●●○ Safety 1
- ◕●◔ Reliability
- ○○● Sustainability/Resiliency 1
- ○○○ Sustainability/Resiliency 2
- ◔◔○ Governance
- ○◔○ Access 2
- ○○○ Safety 2
- ●●○ Affordability

#15 in public voting

Project Description

In coordination with MassDOT, existing and new HOV lanes would be converted to smart lanes that are open only to transit, shared rides, and carpools—restricted to permitted vehicles only through MassDOTs new overhead license-plate reading gantries. This electronic lane technology allows the existing Interstate 93 HOV lane to be extended north to Interstate 95, the gap on I-93 between Morrissey Boulevard and Widett Circle to be filled, and new HOV lanes to be added to I-90 and Route 1. In the future, vehicles equipped with autonomous or driverless technologies that allow closer spacing and automated speed control can greatly increase the capacity of these lanes.



Benefits and Issues Addressed

Significant regional growth is expected by 2030, with increased driving further burdening congested highways if commuters do not shift to other modes. Rather than relying only on existing transit lines to take the burden, every highway can serve as a peak hour transit line by putting many more travelers into a single lane with higher operating speeds at peak than thousands of private cars can do alone today. Making this conversion soon can help incentivize shifts to transit, car-pooling, and shared rides before congestion eventually renders today's lane capacity insufficient.

Implementation

Approximate Cost: $15 million
Potential Funding Sources: MassDOT
Who's Responsible: MassDOT
Time Frame: five years

Best Practices

On US-36 in Colorado between Boulder and Denver, a public-private partnership provides one lane in each direction for buses and high-occupancy vehicles. Users below the occupancy limit can travel in the lane but must pay extra for this premium service. The price to use the lane varies dynamically throughout the day.

Public Input

"Increase distances of HOV lanes."
–02170

"Will Boston consider extending the HOV lanes North/South [on] route 3 with interstate 93?
–02190