



Traffic Improvement Options

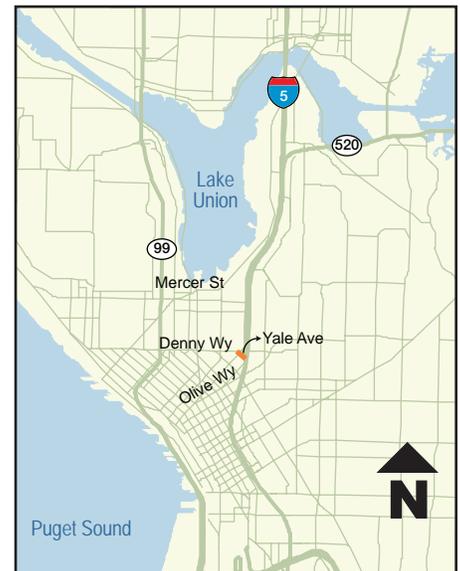
Twenty-one options were examined using transportation models for several sections of I-5. The options will need more analysis, including conceptual designs and cost estimates. Potential benefits in the year 2030 from four projects are summarized below to serve as examples, comparing traffic with and without the project. Project benefits from the traffic analysis were determined for a five-hour peak period—morning (5-10 a.m.) and afternoon (2-7 p.m.).

Examples of Potential Projects:

- **Meter Southbound Yale Avenue On-Ramp**
(Potential Timeline: 2-4 years)

Benefits: A ramp meter on the Yale Avenue on-ramp would reduce the amount of traffic entering southbound I-5 and improve overall traffic flow through this complex weaving section that is just north of where there are multiple ramps under the Convention Center. The analysis shows that this project would provide traffic flow benefits on I-5 from SR 520 to S. Forest Street (4.2 miles).

Challenges: This project would divert some Yale Avenue traffic to other local roadways during peak periods.



- **Add a northbound transit-only shoulder lane between Olive Way and SR 520 during weekday peak periods**
(Potential Timeline: 5-10 years)

Benefits: This project would provide nearly 3,000 transit riders on 15 different routes in the p.m. peak reliable travel times through this very congested section of I-5.

Challenges: During peak periods, the existing shoulder lane on northbound I-5 north of Olive Way would be used by transit vehicles only. The project would not require any significant construction on I-5.



- Add a northbound lane between Ravenna Boulevard and NE Northgate Way (Potential Timeline: 5-10 years)**

With the capacity of an additional lane, this project would improve travel times and speeds along this section of I-5. However, increased vehicles moving through this section could cause higher traffic volumes and lower speeds north of Northgate Way. Overall, the project would improve traffic operations from NE 45th Street to NE 130th Street.

Benefits: From NE 45th Street to NE 130th Street (4.7 miles): drivers could shave one and a half minutes off of their trips with speeds increasing by five mph during the p.m. peak. Improvements in travel times and speeds during the a.m. peak weren't significant.

Challenges: To widen approximately three miles, the project would need to reconstruct several structures and retaining walls. Project costs would be high. The project would need to be coordinated with Sound Transit's light rail project to Northgate.



- Add a lane southbound between SR 520 and S. Spokane Street (Potential Timeline: beyond 10 years)**

Benefits: Drivers could shave nearly 21 minutes off their trip during the p.m. peak period with speeds improving by 36 mph. During the morning, gains are modest: one-half minute savings and a three mph increase in speed.

Challenges: Widening five miles through downtown would be costly. Several structures and retaining walls would need to be rebuilt. Phasing the projects and traffic control during construction would add to the challenges.

