

U.S. 69 Express Toll Lanes - Managing Congestion Long Term

The U.S. 69 Modernization and Expansion Project – 69Express – is exploring ways to increase driver travel choices, reduce congestion and environmental impacts, and improve travel time predictability on U.S. 69 between 179th and 103rd Streets.

In addition to other options explored in past studies, 69Express is studying express toll lanes (ETLs) as a possible strategy for adding a new northbound and a southbound lane in the corridor; the existing lanes would remain toll-free. ETLs are being evaluated because they have been used successfully in areas like Johnson County where population and economic growth has led to increased traffic and congestion.

How ETLs manage congestion long term

ETLs reduce congestion by enabling people who place a higher value on shorter travel times to pay a user fee (tolls) to travel in the tolled lanes. Drivers have the option to stay in the toll-free general purpose lane or choose to use the ETL. Toll rates adjust depending on traffic conditions to keep traffic moving. Most people do not use them every day, but like having the option when they really need it. When drivers choose to leave the general-purpose lanes (toll-free) to use the ETLs instead, they free up space for the other drivers

A <u>Texas Transportation Institute</u> (TTI) study, <u>Managed Lanes in Texas: A Review of the</u> <u>Application of Congestion Pricing</u>, demonstrated two express tolled lanes in the Dallas/Ft. Worth region:

- Offered greater travel-time predictability.
- Improved travel speeds in the adjacent tollfree lanes by 7% and 10-15% respectively.

around them, which helps the entire corridor flow more smoothly.

The congestion management impacts can be seen in results such as those reported by <u>a Washington</u> <u>Department of Transportation (WSDOT) study conducted 39 months after the lanes opened</u>, drivers saved an average of 11 minutes using the ETLs compared to general purpose lanes.

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Travel times drop significantly, too. After the opening of ETLs in Austin, the <u>Central Texas Regional</u> <u>Mobility Authority reported significant time savings</u> for drivers in tolled and toll-free lanes (*Figure 1*).

Drivers in the toll-free, general purpose lanes saw their peak hour travel time drop from almost 19 minutes to seven minutes after the ETLs opened.

Though every roadway and its traffic characteristics are different, examples like I-405 are illustrative of the impacts ETLs can have. I-405 carried 19% more vehicles weekdays during peak periods compared to before tolling began. And ETLs prompted other changes that further reduced congestion. For

example:



Figure 1 – ETL Travel Time Savings in Austin, TX

- Express toll lane travel speeds increased by as much as 20 mph over toll-free lanes.
- General-purpose (free) lane speeds improved significantly in all sections, including by nearly 21% in one segment of the roadway.
- Other DOTs report similar experiences resulting in increased driver satisfaction:
 - The <u>Florida Department of Transportation</u> (FDOT) saw similar results after opening the sevenmile Miami-Dade I-95 Express Lanes. <u>According to FDOT</u>, the new ETLs boosted average speeds at peak periods from 15 to 45 miles per hour in toll-free lanes.
 - And the <u>Minnesota Department of Transportation</u> (MnDOT)'s <u>MnPASS</u> 2017 Customer Survey reported multiple sources of increased traveler satisfaction once ETLs become an option (*Figure 2*).



Figure 2 – Reasons Drivers Prefer Using ETLs



Why do you drive in a MnPASS lane at peak times?

Where extra capacity alone falls short

Historically, the solution to solving congestion has been to add more free capacity, an approach that only reduces congestion in the short term before traffic returns or exceeds previous levels and begins generating demand for even more lanes, notes the Texas A&M Transportation Institute's <u>2019 Urban</u> <u>Mobility Report</u>.

Express toll lanes, on the other hand, provide a long-term solution by using pricing to balance traffic across all lanes of a highway and by inducing people to increase the occupancy of their vehicles or shift to public transit as travel time predictability improves, thus reducing pressure to add lanes. Such was the experience of the <u>WSDOT</u> after opening its I-405 Express Lanes. It found that about <u>one-third of drivers</u> chose ETLs by paying tolls, increasing vehicle occupancy or shifting to public transit as a result of – and further improving - travel-time predictability.

In the end, this also produces long-term savings. An ETL significantly delays – or perhaps eliminates – the need for adding even more lanes. This reduces construction and maintenance costs, while also avoiding expansions that risk encroachment on nearby homes and businesses.

Learn More

To learn more about this subject – or about the project overall – please visit the <u>69Express project</u> <u>website</u> and <u>sign up to be updated about the project</u> as it progresses. You can post comments or pose questions about the project at <u>the website feedback page</u> as well.