Testimony to the House Transportation Policy Committee

Joe Cortright February 26, 2018





Synopsis

- Why we have congestion
- Widening freeways doesn't work
- Value price first, build later, or waste billions



Why we have congestion





The parable of Ben and Jerry





Once a year, it's free

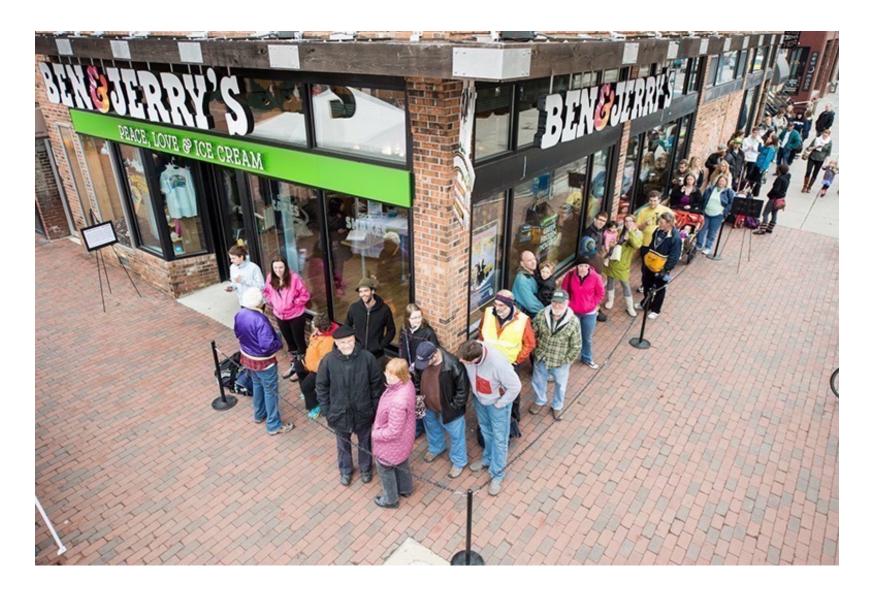


Free ice cream!

Need we say more?



And they have congestion





Which is the same thing that happens here, every day





You can't build your way out of congestion

"Induced demand": With "free" roads, more capacity simply generates more traffic



Fundamental Law of Road Congestion

American Economic Review 101 (October 2011): 2616–2652 http://www.aeaweb.org/articles.php?doi=10.1257/aer.101.6.2616

The Fundamental Law of Road Congestion: Evidence from US Cities[†]

By GILLES DURANTON AND MATTHEW A. TURNER*

We investigate the effect of lane kilometers of roads on vehicle-kilometers traveled (VKT) in US cities. VKT increases proportionately to roadway lane kilometers for interstate highways and probably slightly less rapidly for other types of roads. The sources for this extra VKT are increases in driving by current residents, increases in commercial traffic, and migration. Increasing lane kilometers for one type of road diverts little traffic from other types of road. We find no evidence that the provision of public transportation affects VKT. We conclude that increased provision of roads or public transit is unlikely to relieve congestion. (JEL R41, R48)

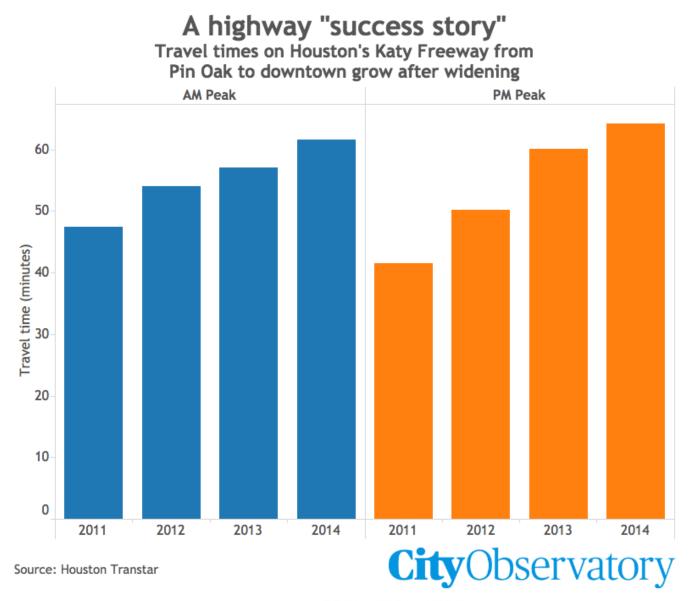


Fixing congestion: Katy didn't

Houston's 23-lane Freeway



Katy: Wider, but longer commutes





There's only one solution that works

Ask users to pay for using the scarce, valuable roadway.



Road pricing works around the world

- London Congestion Charge (2002)
- Stockholm (2006)
- Singapore Electronic Road Pricing (1998)
- Milan Congestion Charge (2008)
- Santiago, Chile (2005)

Stockholm: Traffic down 22%

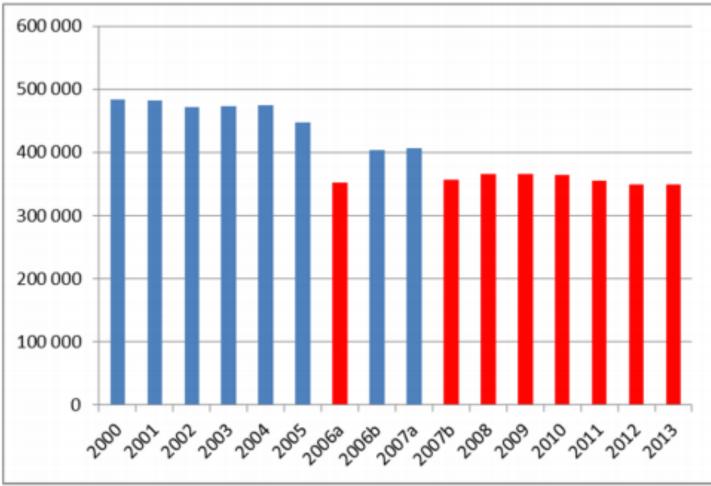
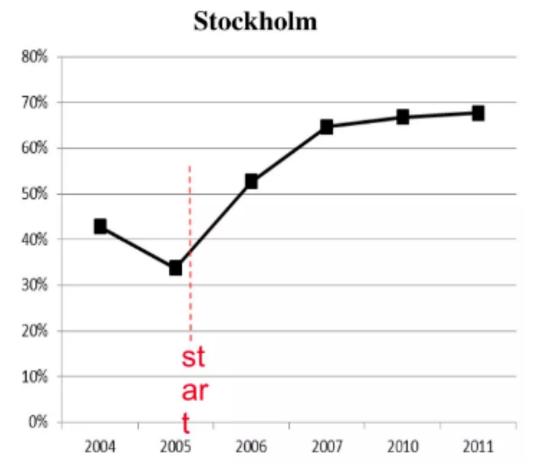


Figure 2. Average traffic volumes across the cordon, weekdays 6:00-19:00 excl. July. Blue: no charges. Red: charges. "2006a" is the trial period January-July 2006, and "2006b" is the remainder of 2006.



Seeing is believing



Support for congestion pricing among Stockholm residents increased dramatically once the policy was implemented. Image: Jonas Eliasson



Price first, build later!



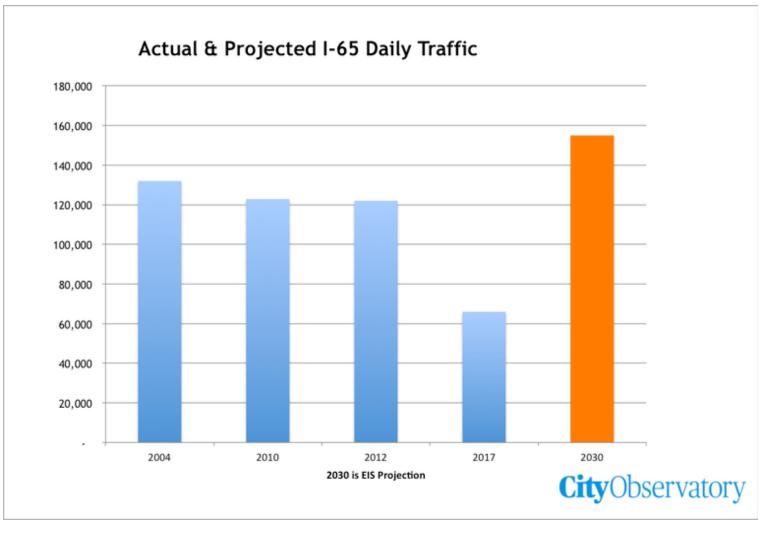
Lesson from Louisville



Spent \$1 billion to double I-65 Ohio River Crossing from 6-lanes to 12-lanes



They charged a \$1-2 tolltraffic dropped by 40%





They wasted \$1 billion



I-65 @ Lincoln & Kennedy Bridges - Mile 0.1: 02/13 17:21 EST



ODOT plans to waste a billion dollars, too.

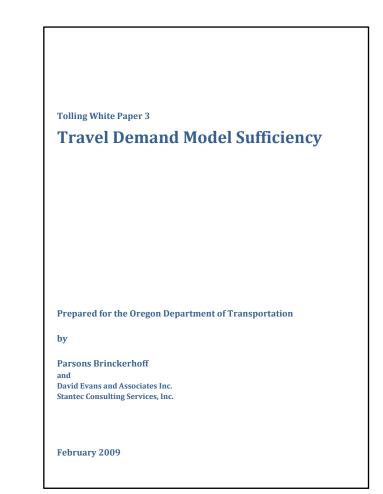


ODOT & PBOT engineers concede widening the I-5 freeway won't reduce daily, recurring congestion.



ODOT Models don't include pricing

"Existing models in Oregon are rated as excellent for the purposes they were designed, and some are internationally recognized. However, Oregon models have not been specifically designed to evaluate toll projects, so planners are not able to confidently forecast travel patterns for projects that are considering tolling/pricing. Existing models are not able to determine how travelers would change their mode, route, travel time, or destination in response to tolling/pricing." ODOT, Highlights of Tolling White Paper 3, March 2009





Conclusion

- Congestion exists because roads are under-priced
- Widening freeways doesn't work
- Price first, build later, or waste billions

