



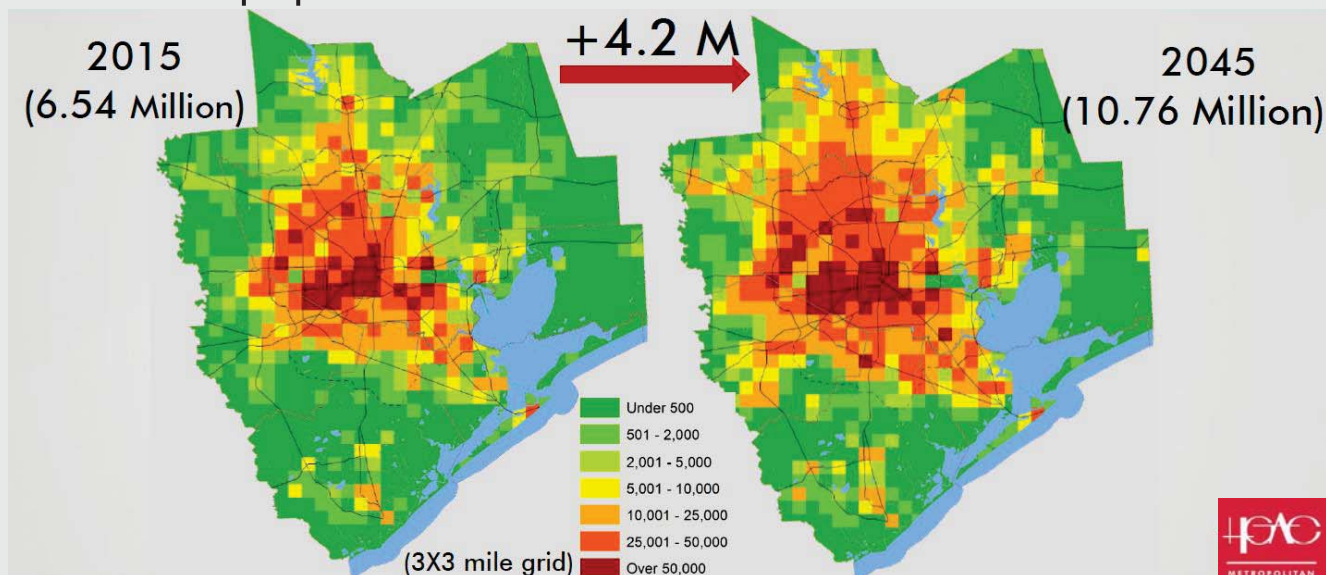
## BRIDGING TSMO AND ADM: A TRANSPORTATION BALANCING ACT

Texas Department of Transportation, Houston District

Joint Meeting of ITS Texas and TexITE, Nov. 7-9, 2018

### Houston Region - Eight-county

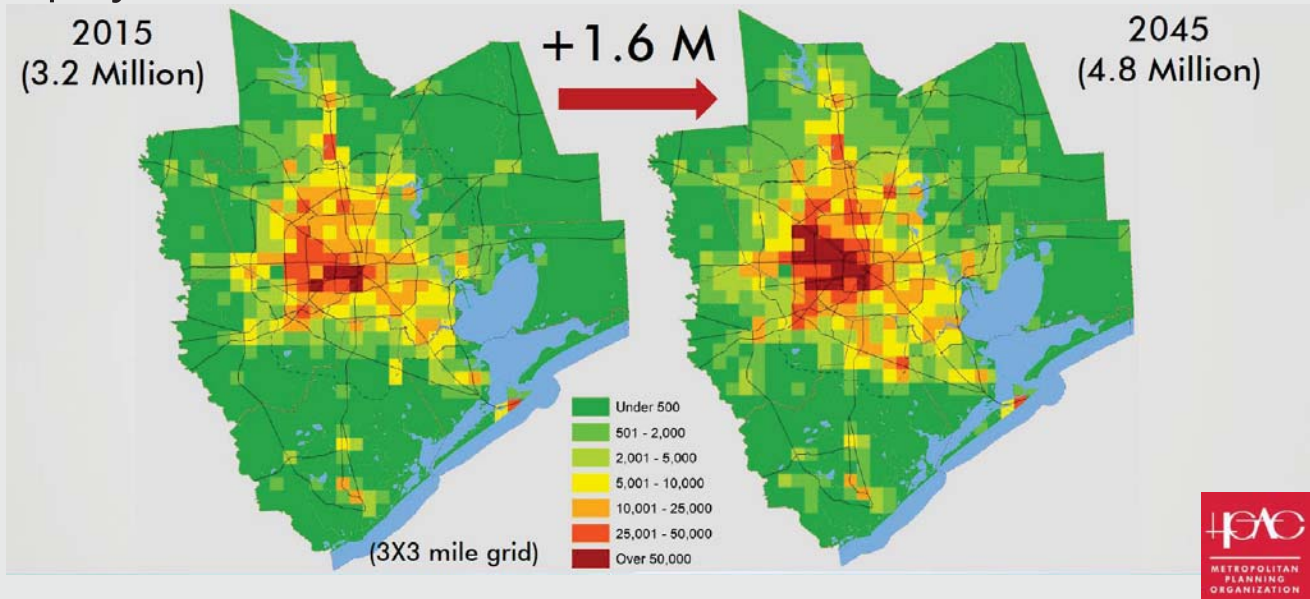
- Household population



Joint Meeting of ITS Texas and TexITE, Nov. 7-9, 2018

## Houston Region - Eight-county

### ■ Employment



Joint Meeting of ITS Texas and TexITE, Nov. 7-9, 2018

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## TxDOT Houston District

- Houston District maintains and operates a **total of 10,767 lane miles of pavement**.
  - Approximately two round trips from Los Angeles, CA to New York, NY
- Motorists in our region **drive approximately 131 million miles per day**.
  - Distance to Sun from the Earth is 93 million miles
- There are more than **8 million vehicle miles of daily truck traffic** on the Houston District system.
  - Houston District system carries enough daily truck traffic to circle the earth 321 times.



Joint Meeting of ITS Texas and TexITE, Nov. 7-9, 2018

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## 2018 Top 10 Most Congested Roads in Texas

2018	2017	County	Road Segment	From	To
➔ 1	1	Harris	W Loop Fwy / IH 610	Katy Fwy / IH10 / US90	Southwest Fwy / US 59 / IH 69
➔ 2	3	Harris	Southwest Fwy / IH 69 / US 59	W Loop Fwy / IH 610	South Fwy / SH 288
3	2	Travis	IH 35	US 290 N / SS69	Ben White Blvd / SH 71
4	4	Dallas	Woodall Rodgers Fwy / SS 366	US 75	N Beckley Ave
➔ 5	5	Harris	Eastex Fwy / IH 69 / US 59	SH 288	IH 10
6	24	Tarrant	North Fwy / IH 35W / US 287	SH 183	IH 30
➔ 7	7	Harris	Katy Fwy / IH 10 / US 90	N Eldridge Pkwy	Sam Houston Tollway W
8	6	Dallas	Stemmons Fwy / IH 35E / US 77	John W Carpenter / SH 183	Tom Landry Fwy / IH 30
9	10	Dallas	US 75	LBJ / IH 635	Woodall Rodgers Fwy / SS 366
➔ 10	9	Harris	North Fwy / IH 45	Sam Houston Tollway N	N Loop Fwy / IH 610



## Facing the Challenges Ahead

- TxDOT recognizes that building roads is not the only way to address traffic congestion
  - TxDOT cannot solve the problem alone—it's going to take teamwork and participation from everyone
  
- Congestion can be reduced by focusing on three key strategies
  - strategically adding road capacity
  - operating the system we have more efficiently
  - providing choices that help manage transportation demand



## Facing the Challenges Ahead (cont.)

- Shifting transportation landscape is changing the way we travel
  - Innovative technologies
  - Innovative partnerships
  - Societal trends (millennials, urbanization)
  - Mobility trends (AV/CV, TNC, carsharing, TDM, ridehailing, MaaS)
- Advances in mobility present historic opportunities for agencies, cities, and regions...
  - but they also pose significant challenges



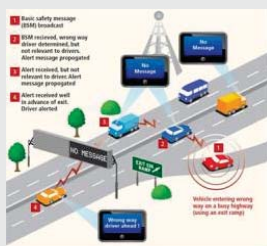
# FHWA ATCMTD 2016 Award Recipient Houston ConnectSmart

## Houston ConnectSmart Grant

- USDOT initiatives aimed at promoting the use of advanced and innovative technologies in transportation:
  - Advanced Transportation and Congestion Management Technologies Deployment (ATCMTD)
    - Funds cutting-edge transportation technologies that help reduce congestion and improve the safety of our transportation system
- TxDOT Houston District Grant
  - Three year technology deployment and implementation program

# Houston ConnectSmart

an integrated platform providing solutions for managing congestion by bridging



Transportation  
Systems  
Management  
and Operations  
(TSMO)

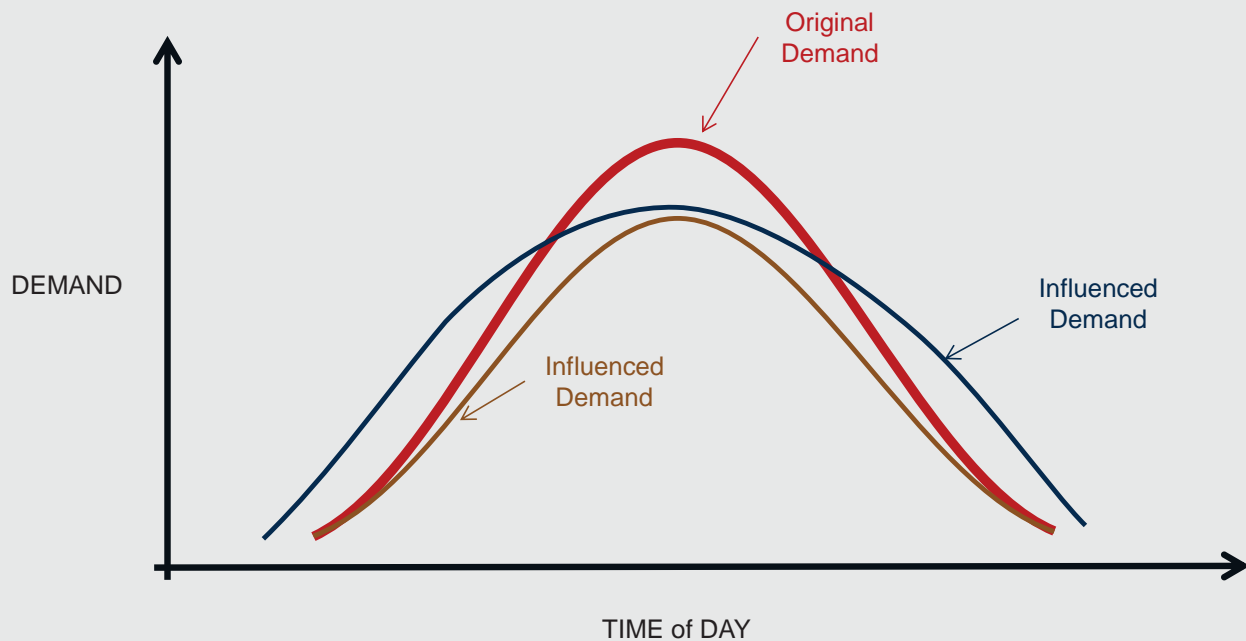
ConnectSmart  
Platform



Active Demand  
Management (ADM)

*Making Houston  
Less Congested and  
More Connected*

## Bridging TSMO and ADM (cont.)



## Partnerships

- Prime Agency



- Public Partners



- Private Partners

- Developers, transportation/mobility providers, technology providers

- Academic Partners

- To provide research and innovation

## Going Beyond

- This project serves as the springboard for:
  - Future regional comprehensive public-private collaborations
  - Future mobility management methods
- Inclusive, scalable, adaptive, and robust for future application and expansion.
- Sustainable business models for financial sustainability.



THANK YOU

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TxDOT Houston District