



CENTRAL TEXAS
Regional Mobility Authority

Welcome and opening remarks by the Chairman and the Board of Directors

Agenda Item #1

March 30, 2016



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Opportunity for Public Comment

Agenda Item #2

March 30, 2016



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Consent Agenda

No Agenda Items

March 30, 2016



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Regular Items

Agenda Items #3-9

March 30, 2016



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Approve the minutes for the February 24, 2016, Regular Board Meeting

Agenda Item #3

March 30, 2016



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Accept the financial statements for January 2016

Agenda Item #4

Mary Temple

March 30, 2016



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Regional Mobility Authority

Award a Contract for General Engineering Consulting Services

Agenda Item #5

Justin Word, P.E., Director of Engineering

March 30, 2016



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GEC Procurement Schedule



October 28, 2015
Board Approved
Procurement

March 2016
Recommendation to
Board

February 1, 2016
RFQs Received

2016

January 7, 2016
Issued Final RFQ

April 2016
Contract & Work
Authorization to Board

March 4, 2016
Interviews

November 16, 2015
Issued Draft RFQ

LEGEND

PROCUREMENT



Submitted February 1, 2016

Experience of Firm | 25%

Approach to Services | 30%

Staffing | 35%

DBE Participation | 10%



We evaluated three responses

- **HDR**
- **HNTB / CDM Smith**
- **WSP|Parsons Brinkerhoff**

**All three firms were
shortlisted for interviews**



Interviews held March 4

10 industry questions - 9 points each

Overall Team Performance – 7 points

Performance of Program Manager – 3 points



- **RFQ Phase – 50% of total score**
- **Interview Phase – 50% of total score**
- **Recommendation based on combined score**



To Be Announced at Board Meeting

Approve an Interlocal Agreement for the Adjustment and Relocation of City of Austin Water and Wastewater System Utilities in Connection with the 183S Project

Agenda Item #6

Justin Word, P.E., Director of Engineering

March 30, 2016



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Interlocal Agreement (ILA) between the City of Austin and the Mobility Authority

- Scope
 - Water and Wastewater relocations and associated reimbursements
- Roles and Responsibilities
 - City – Review, Permit, Inspect
 - Mobility Authority (D/B Contractor) – Design, Acquire Easements, Construct
- Financials (approximate)
 - \$10.1 MM Betterment Costs (from City)
 - \$ 1.5 MM Reimbursement of City Services During Planning/Procurement (to City)
 - \$ 1.9 MM Reimbursement of City Services During Design/Construction (to City)
 - **Net Result - \$6,717,549 Payment from City to CTRMA**

Recommended Board Action:

Authorize Executive Director to finalize and execute ILA with the City of Austin

Award a Professional Services Contract to Provide Design Services for the 290E/SH130 Direct Connectors

Agenda Item #7

Justin Word, P.E., Director of Engineering

March 30, 2016

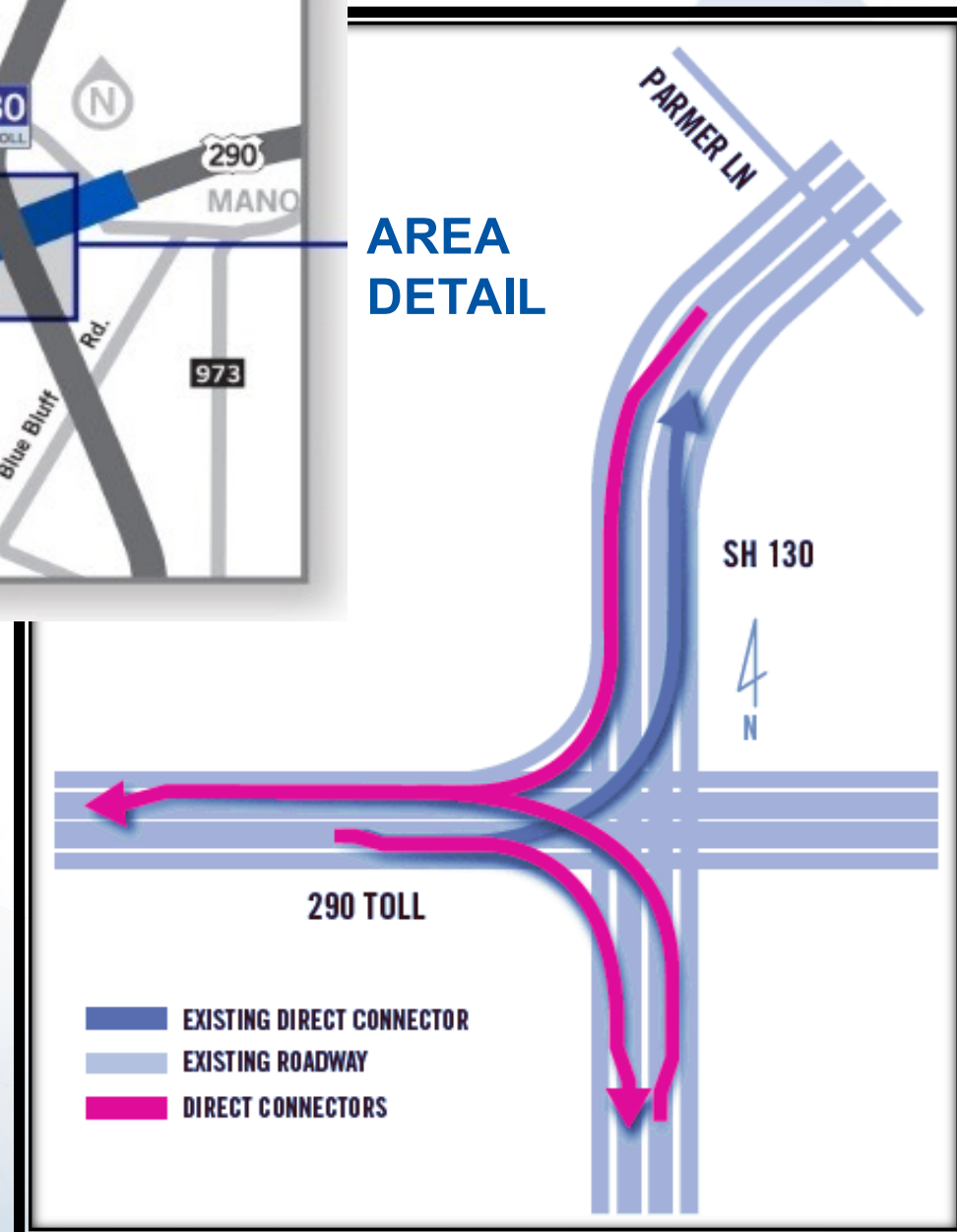


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Design Services Provider Procurement



AREA
DETAIL





• **We evaluated ten responses:**

- **American Structurepoint**
- **Huitt Zollars**
- **Binkley Barfield**
- **Kimley Horn**
- **Bridgefarmer & Assoc.**
- **Michael Baker**
- **CP&Y**
- **Parsons**
- **HDR**
- **Seiler Lankes Group**



- **Three firms were shortlisted for interviews:**
 - **Bridgfarmer & Associates**
 - **CP&Y**
 - **HDR**

Shortlist Interviews: Evaluation Criteria



**Team Organization
and Qualifications;
Approach to DBE
Utilization | 15%**

**Past Project
Experience;
References | 20%**

**Project Understanding
and Approach | 35%**

**Project Schedule and
Availability | 15%**

**The Quality of Overall
Presentation/Interview | 15%**



To Be Announced at Board Meeting

Approve an Amendment for the Contract with Zellmer McConnell for the MoPac Express Lane Education Campaign

Agenda Item #8

Steve Pustelnyk, Director of Community Relations

March 30, 2016



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Express Lane Outreach



- **There will be a driver adjustment period when the express lanes open**
- **Zellmer McConnell was procured about 18-months ago to help ensure as many drivers as possible understand the express lane concept and variable tolling**
- **The goal is to ensure the opening of the express lanes is as smooth as possible**
- **Several early outreach efforts have been undertaken to expand community awareness and address misconceptions**

Initial Outreach Program



SORRY, YOU'LL NEED A NEW EXCUSE FOR BEING LATE.

WHAT THE HECK IS HAPPENING ON MOPAC?

mobilityauthority.com

WHAT'S YOUR EXCUSE?

Click to join the Mopac conversation on Twitter

AUSTIN, MEET THE NEW MOPAC. mobilityauthority.com

SORRY, YOU'LL HAVE TO FIND A NEW EXCUSE FOR BEING LATE.

« MOPAC IMPROVEMENT PROJECT »»

When we introduce the new expanded MoPac, you'll have the option of a more reliable trip using a variably priced Express Lane, whose toll will be higher when traffic is heavy and lower when traffic is light. Studies have shown it's a system that works to keep traffic in the Express Lanes moving. It's new technology we're excited to implement in our high tech town.

We're also spiffing things up as we go, adding sound walls, bike and pedestrian bridges and aesthetic enhancements, to name a few.

Thanks for being patient, Austin.
A better MoPac is just around the corner.

www.mopacexpress.com

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“MoPac, Made Easy” Outreach



SORRY, YOU'LL NEED A NEW EXCUSE FOR BEING LATE.



WHAT'S YOUR EXCUSE? [Click to join the MoPac conversation on Twitter](#)

WHAT THE HECK IS HAPPENING ON MOPAC?



LEARN MORE [Click to join the MoPac conversation on Twitter](#)

SOON YOU'LL BE COMMUTING LIKE IT'S 1999.



#musicthatmovesyou [Click to join the MoPac conversation on Twitter](#)

AUSTIN, MEET THE NEW MOPAC.


GET ACQUAINTED HERE [Click to join the MoPac conversation on Twitter](#)

MOPAC IMPROVEMENT PROJECT

MOPAC, MADE EASY.




6 FACTS ABOUT GOING FASTER

The new MoPac Express Lanes bring the promise of a more reliable journey through this busy/bustling corridor. They use a variable tolling system that raises the toll when traffic is heavy and lowers it when traffic is light. It's advanced technology we're excited to implement in our high tech town. To see how it works, take our test drive. Shotgun!




- 1 What is an Express Lane?
- 2 What is Variable Tolling?
- 3 Who is building it?
- 4 Where do I get on and off?
- 5 What's in it for me?
- 6 What's in it for Austin?


Click here to see the enhancements we're making along MoPac.



CLICK HERE FOR EVEN MORE INFORMATION



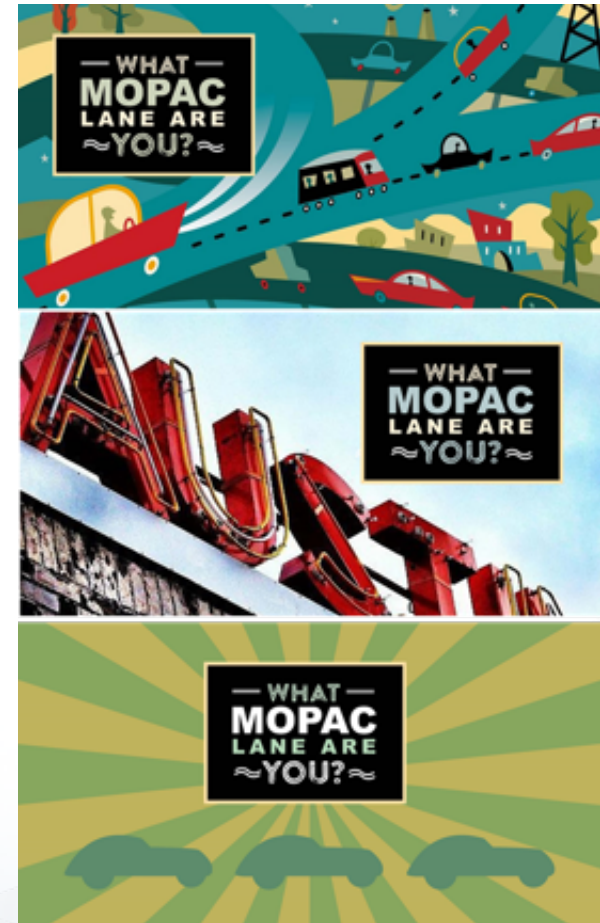
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“What MoPac Lane Are You?” Quiz



The screenshot shows the website header with the logo and navigation menu: TRAVELER INFORMATION, PROJECTS & PROGRAMS, FINANCIAL INFORMATION, BUSINESS OPPORTUNITIES, NEWS & EVENTS, ABOUT US. Below the header is a search bar and a 'Home | FAQs | Quiz | Contact Us' link. The main content area features a sidebar with 'QUIZZES AND POLLS' and 'TOLL PAYMENT OPTIONS' (TxTag, T, EZTAG, MAX). The main title is 'What MoPac Lane Are You?' with a subtitle '10 QUESTIONS · TAKEN 3,014 TIMES'. The quiz description reads: 'Austinites come in all speeds. Just like the lanes of MoPac. So tell us, which one are you?'. A prominent green 'START' button is centered. Below the quiz area are social media share buttons for Facebook, Twitter, and a menu icon. The text 'MADE WITH QZZF' is visible in the bottom right of the quiz area.



“Curious Austin” Outreach Effort



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Regional Mobility Authority

◀◀ MOPAC
IMPROVEMENT
PROJECT ▶▶

WHAT'S UP
WITH
MOPAC?



[CLICK HERE FOR EVEN MORE INFORMATION](#)

Opening Outreach Goals



- **Want to ensure saturation of target market in period surrounding initial opening**
- **Desire to reinforce outreach effort leading up to full opening**
- **Critical to minimize operational issues during opening period**
- **Opportunity to communicate value and benefits of express lanes proposed for other corridors**
- **Reuse of materials for outreach efforts on future projects**

Request for Additional Resources



- **The original plan was to allocate the entire informational outreach budget to a single opening campaign**
- **Subsequently a decision was made to implement a series of pre-opening outreach efforts**
 - To date approximately \$465,000 of the original \$950,000 contract amount has been expended
- **To ensure market saturation at initial opening and continued outreach at full opening staff is requesting a contract supplement of \$600,000 for a new contract total of \$1,550,000.**

Approve First Amendment to the Transportation Infrastructure Finance and Innovation (TIFIA) Agreement

Agenda Item #9

Bill Chapman, Chief Financial Officer

March 30, 2016



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Briefings and Reports

Agenda Items #10-14

March 30, 2016



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MoPac Improvement Project

Agenda Item #10-A

Steve Pustelnyk, Director of Community Relations

March 30, 2016



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Construction Progress



Underpass NB Express Lane



Underpass SB Express Lane



Underpass SB Express Lane



Sound Wall 16



NB Windsor Bridge



NB Westover Bridge



Sound Wall 11



Sidewalk Duval Road



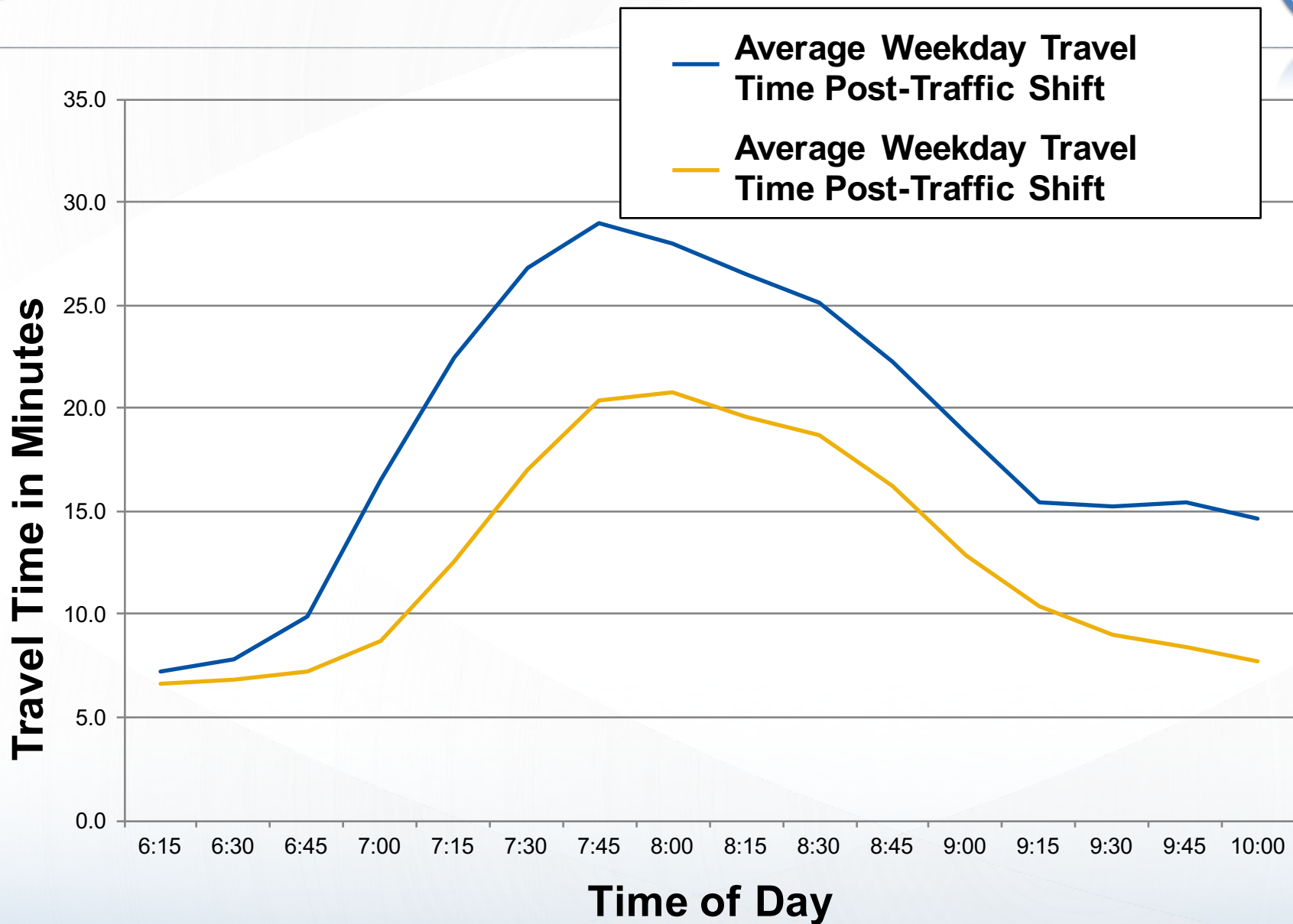
Pedestrian Bridge



Shared Use Path



MoPac Travel Time Impacts Summary – Slaughter to 10th Street Pre and Post Traffic Shift

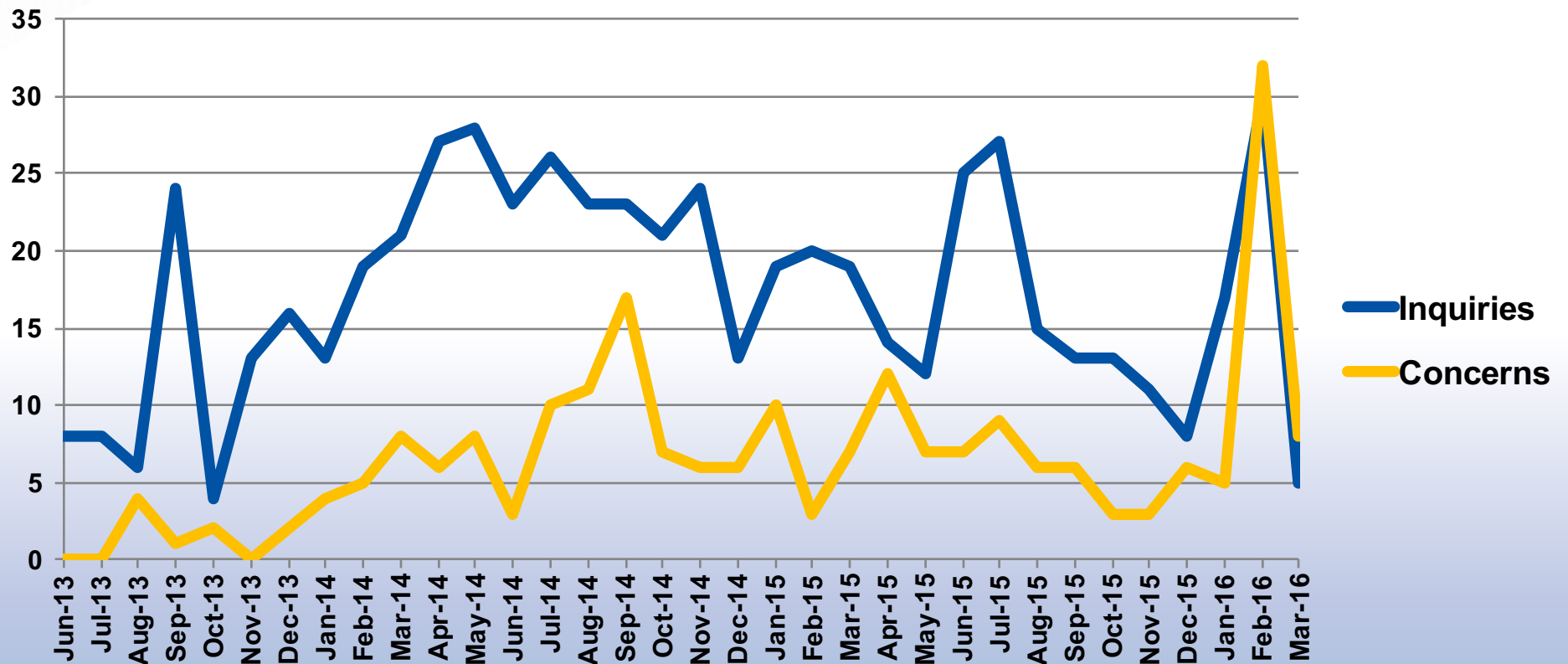


Community Input



Primary Interest Issue

- No significant issues



Upcoming Outreach Issues



- **Paving operations with numerous lane closures**
- **Construction of Sound Wall 8 along northbound MoPac between 35th Street and 45th Street**
- **Increased Nighttime Activity/Train Horns**

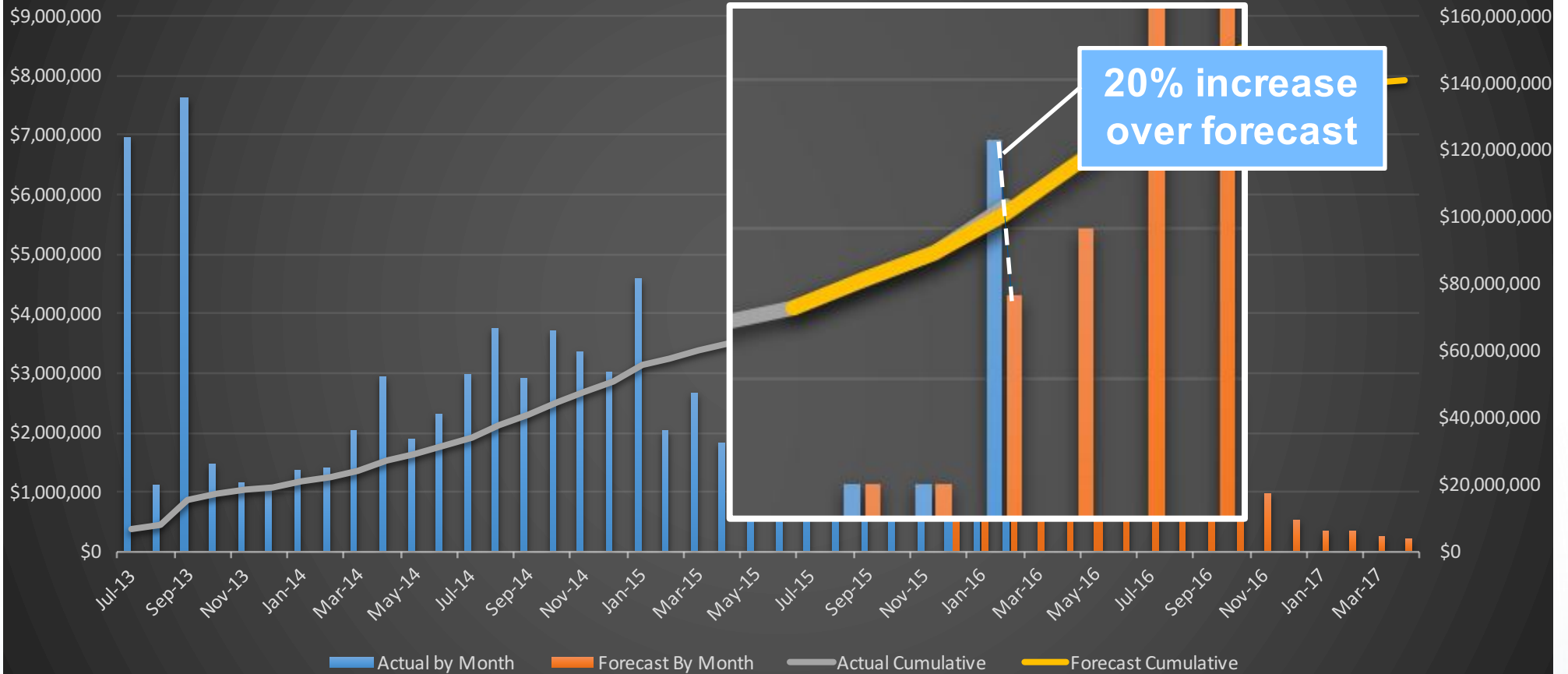
Progress Metrics



MoPac Improvement Project



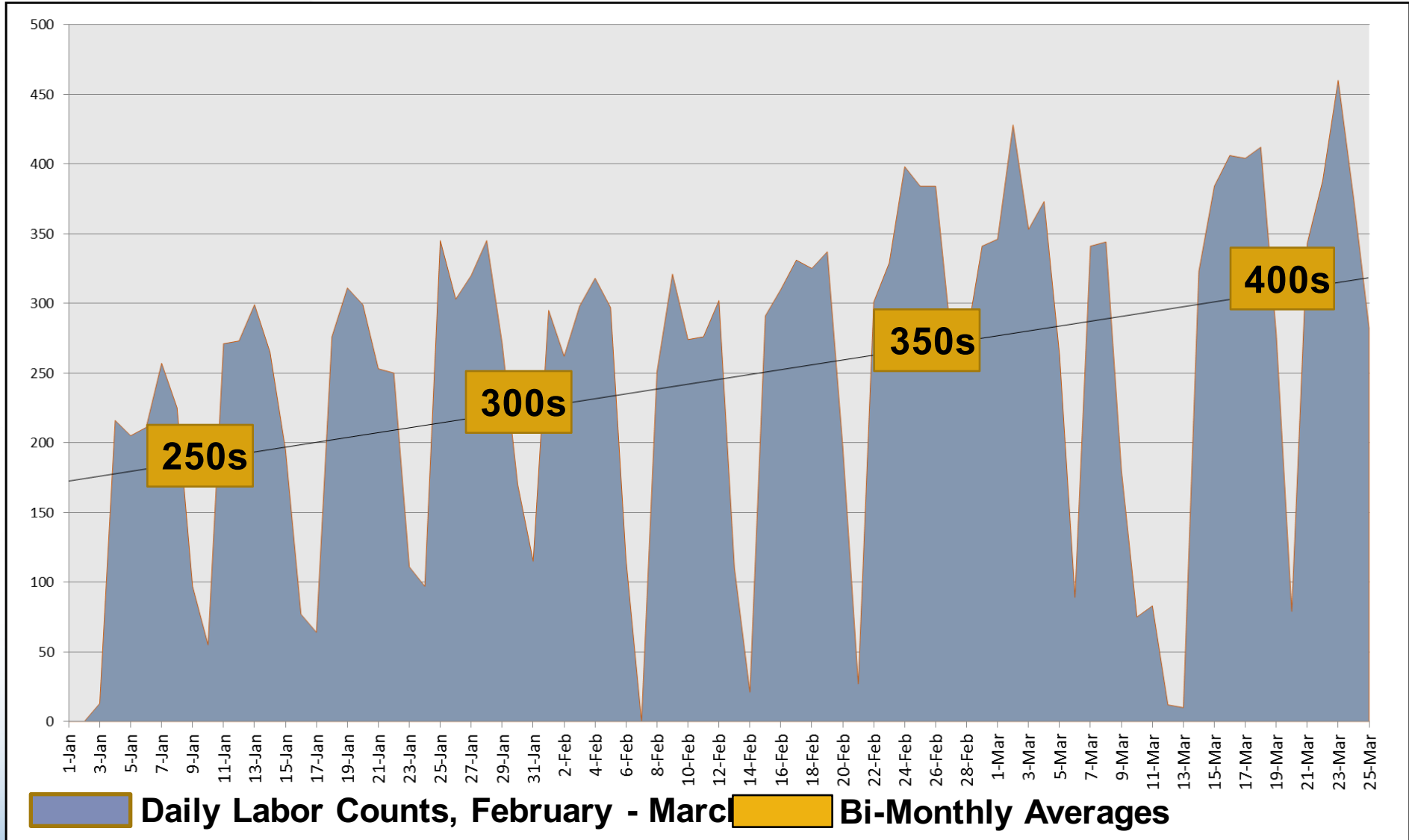
Overall Project - Draw Down Projections



MoPac Improvement Project Daily Labor Logs



Trend line analysis: Leveling off to ~ 1.7% upward slope



Express Lane Video





- **Lessons Learned from other Agencies with Express Lanes**

- Public Outreach
- Eyes on the Road
- Incident Management
- Data Collection
- Adjustment Period
 - First Managed Lanes in Region
 - Partial Opening
 - Driver Behavior



Advance Preparations



- Public Outreach
- Eyes on the Road
 - Traffic Management Center
 - CCTV / Radar Vehicle Detectors
- Incident Management
 - Combined Transportation, Emergency & Communications Center
 - TxDOT and City of Austin
 - Austin Police / Fire Department
 - Emergency Medical Services
 - Towers
- Data Collection
 - Blue Toad and Toll System
- Adjustment Period
 - Public Outreach
 - Coordination with TxDOT Toll Operations Division
 - Coordination with Third Party Pay By Mail Billing Processor



Upcoming Work and Contract Actions



Work

- Paving Operations
- Undercrossing Work
- Tolling Zones

• Contract Actions

- Change Orders
- April Board – Express Lanes Toll Policy

Briefing on 183 South Project

Agenda Item #10-B

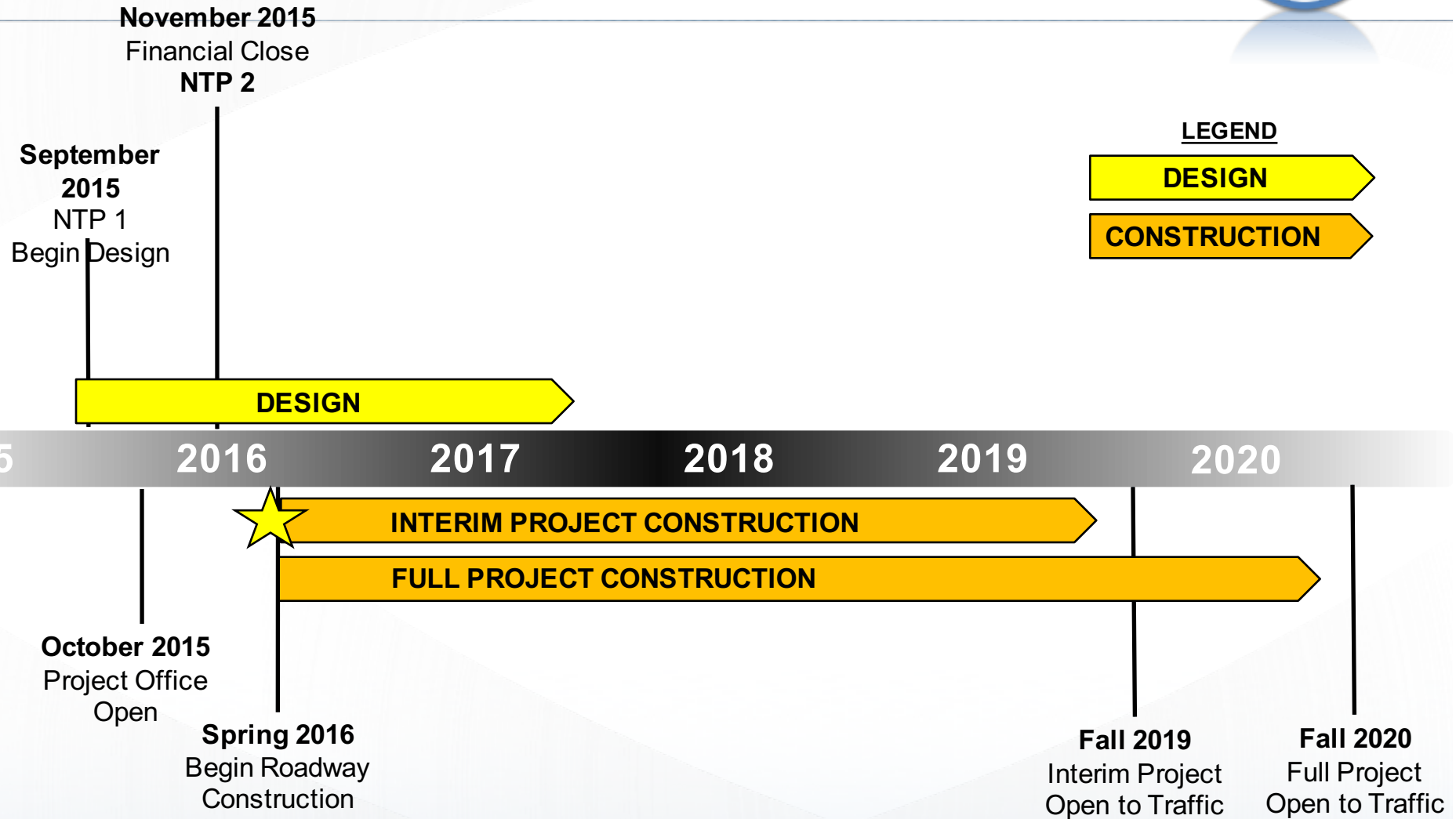
Justin Word, P.E., Director of Engineering

March 30, 2016



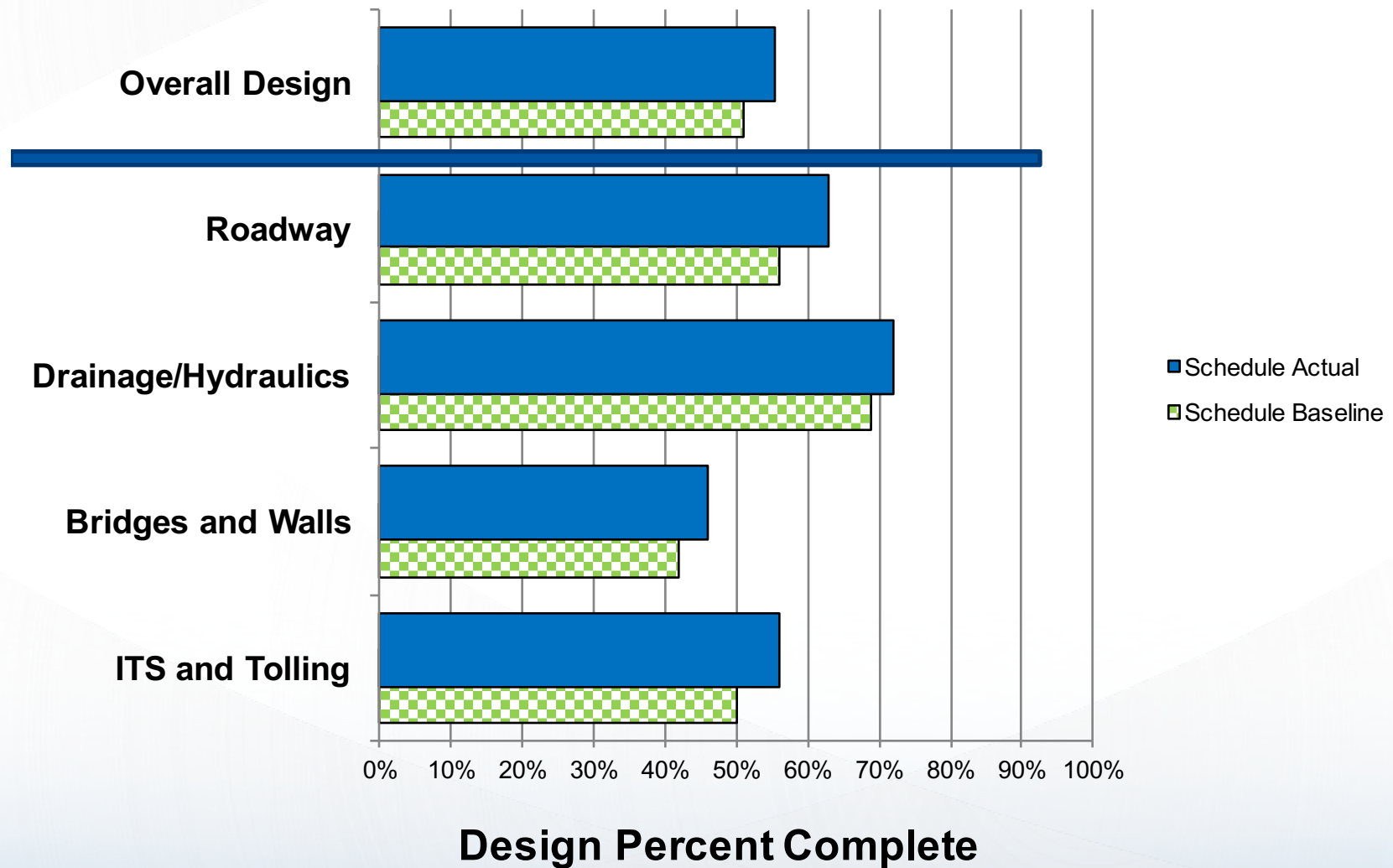
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183 South Schedule Overview



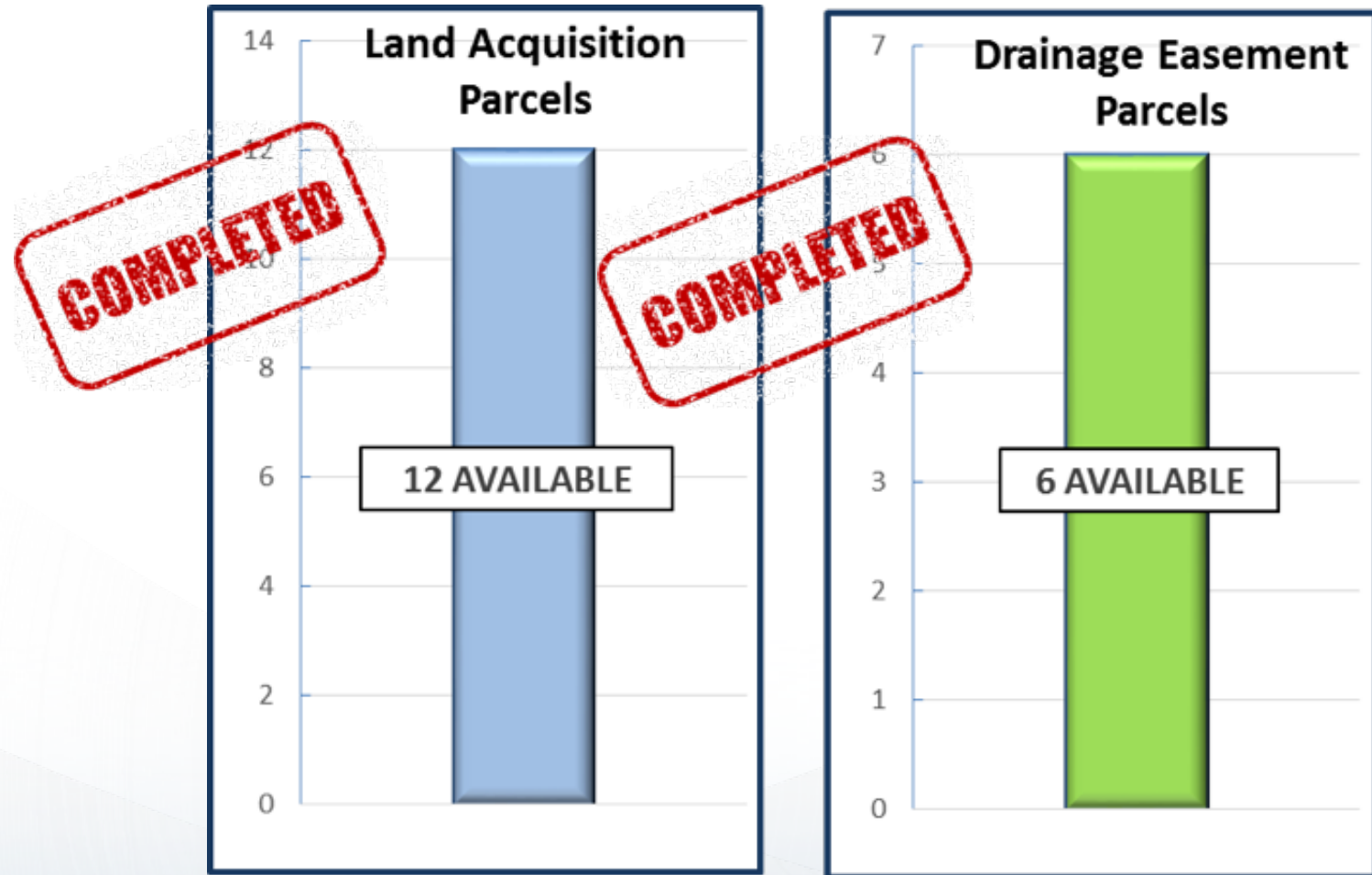


Design is on Schedule





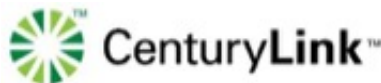
All Parcels Available For Construction



Schedule Status - Utility Relocation



Master Utility Adjustment Agreements (MUAAs)

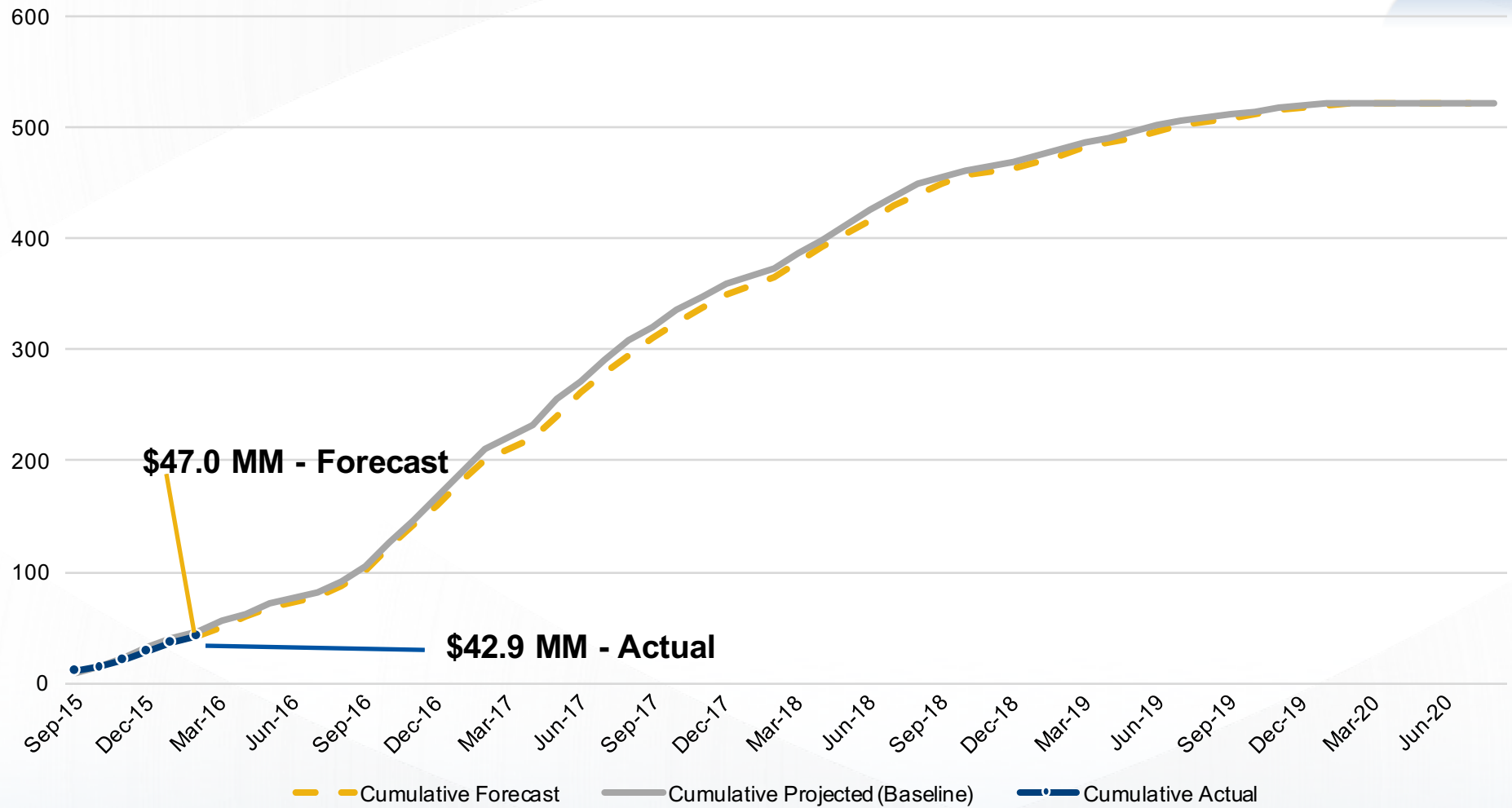


Interlocal Agreements (ILAs) with CTRMA



- Agreement's Anticipated Mid 2016 – 5 of 13 Completed
- Utility MUAAs are Responsibility of Contractor

Budget Status – Cash Flow Without Mobilization



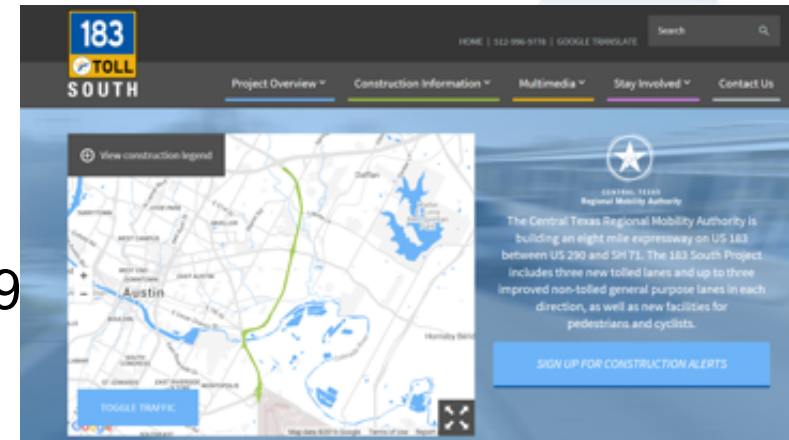


February - 13 Individual Inquiries

- Boggy Creek turnaround location
- Project Schedule
- Employment/Subcontract opportunities (9)
- Property Access During/After Const (2)

Upcoming activities

- Neighborhood Wall Workshop – March 8
- **Ground Breaking Ceremony – April 6**
- Keep Austin Beautiful Sponsor – April 9
- First Newsletter to Subscribers – April 11





Upcoming Construction

- April – Installation of Erosion Control Devices
- April – Begin Early Utility Work
- May – Begin Early Work at Springdale/Manor and MLK intersections

Efforts to prepare for construction

- Constructability Reviews
- Inspection Checklist/CQMP Review
- Oversight Team Integration

Project Photos



183 S @ Colorado River

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183 S @ Colorado River
Design Overlay



- **QUESTIONS/COMMENTS**

SH 45 SW

Agenda Item #10-C

Just Word, P.E., Director of Engineering

March 30, 2016



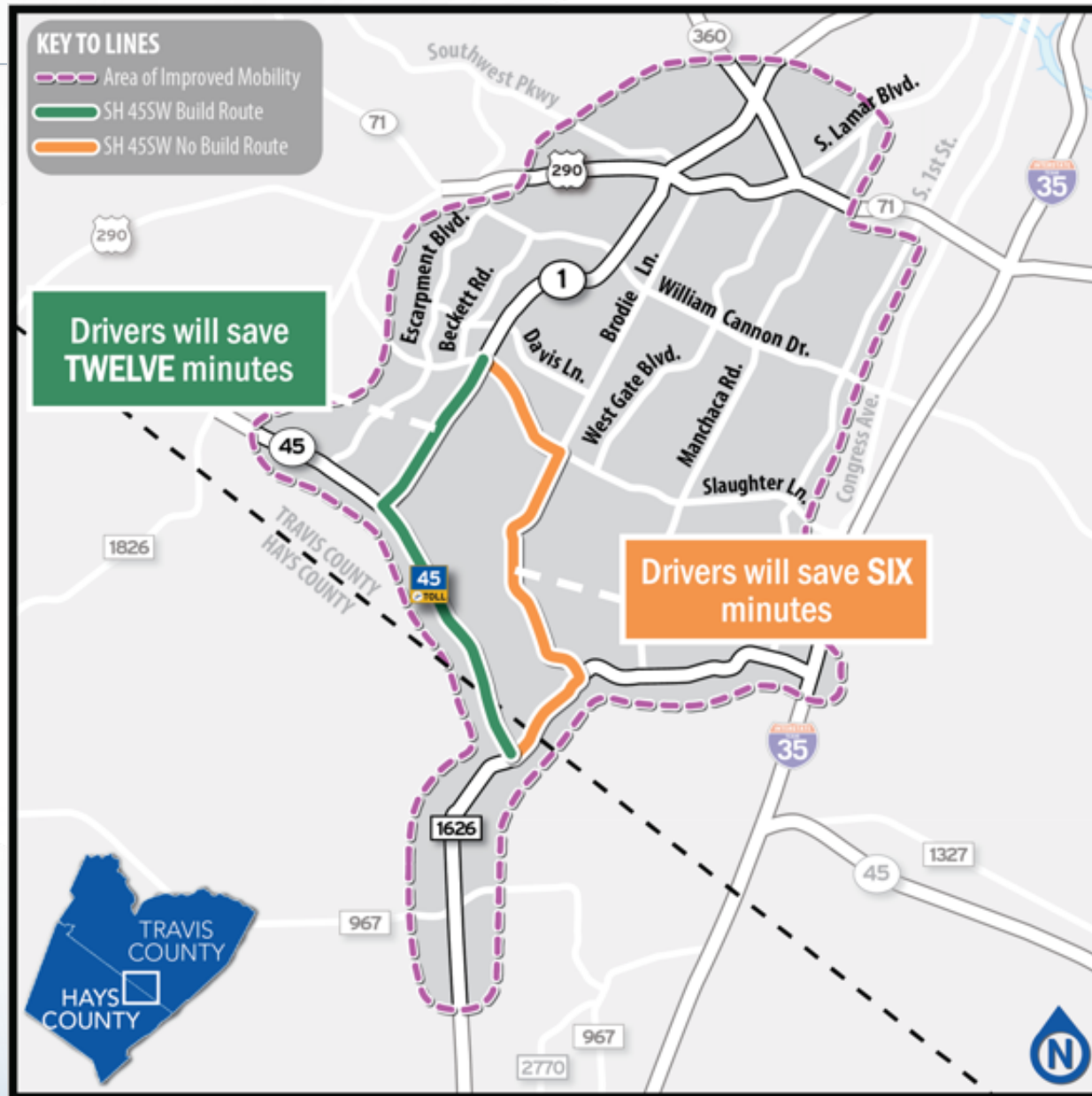
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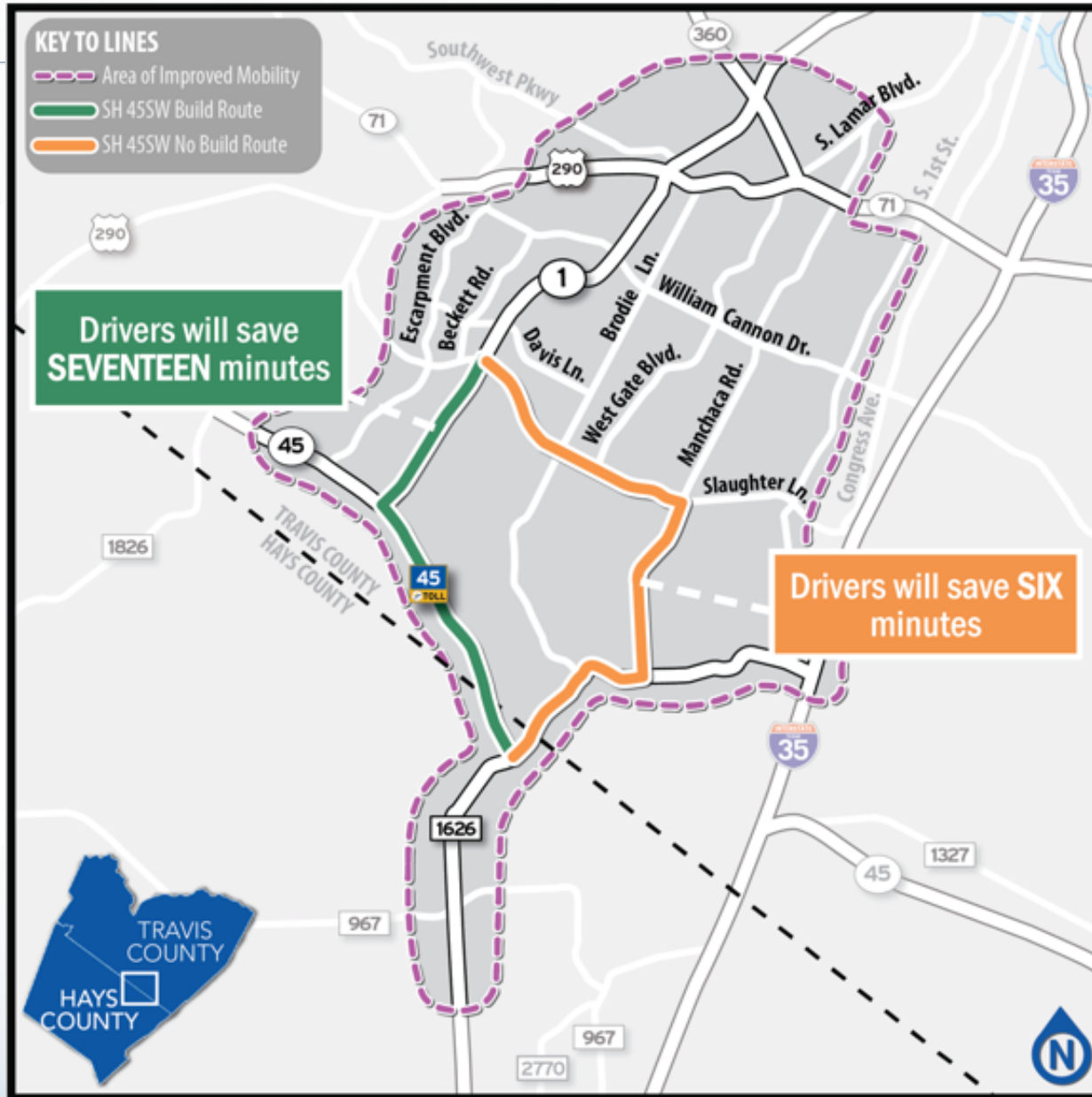
Project History

- May 1985: SH 45 Outer Parkway designated by TTC
- Aug 1989: Final Environmental Impact Statement approved
- 1989-1992: Lawsuit filed and dismissed over segmentation
- Jan 1990: Consent Decree between TxDOT and Barton Springs Edwards Aquifer Conservation District (BSEACD)
- 1999-2001: Travis and Hays County acquired ROW for SH 45 SW ROW then transferred to TxDOT
- Dec 2008: TxDOT Develops 95% Construction Plans (Non-tolled)
- May 2010: CAMPO adopts 2035 Plan, including SH 45 SW
- Mar 2014: Mobility Authority Exercises Primacy and Executes Inter-Local Agreement with Hays and Travis Counties
- Nov 2014: Mobility Authority begins preliminary design
- Mar 2015: TxDOT completes Final Environmental Impact Statement and makes Environmental Commitments to BSEACD
- Feb 2016: Lawsuit filed

Travel Time Savings – Brodie to Slaughter



Travel Time Savings – Manchaca to Slaughter



SH 45 Southwest – Project Location





Texas Commission on Environmental Quality (TCEQ)

- TCEQ requires removal of 80% of the increase in Total Suspended Solids (TSS) annual load

Permanent Best Management Practices (BMPs)

- Vegetative Filter Strips
- Water Quality Ponds
- Rock Berms

Sensitive Karst Feature Protections

- Buffer zones
- Silt Fencing
- Diversion of Runoff





1990 Consent Decree between TxDOT & Barton Springs Edwards Aquifer Conservation District (BSEACD)

- Hazardous material traps
- No access roads, driveways, or connections from Bliss Spillar to Loop 1
- Construction Procedures
 - Minimize vegetation clearing impact
 - Stormwater treatment requirements
 - Equipment limited in creek beds or near sensitive features
 - Sensitive Karst Features and Caves protection requirements
 - Hazardous material storage and equipment use requirements



2015 TxDOT Commitments to BSEACD

19 Commitments Total – 18 Compliant, 1 on-going

- Total Suspended Solids (TSS) removal rate of at least 90%
- Independent Environmental Compliance Manager (IECM)
- Use of structural stormwater best management practices (BMPs)
 - Permeable Friction Course (PFC) Pavement
 - Water Quality Ponds / Hazardous Material Traps
 - Vegetated controls (Grassy swales and vegetated filter strips)
- Use of non-structural BMPs
- Protection of Karst Features including Flint Ridge Cave
- Review and observation by BSEACD



Coordination with Local Government and Regulatory Agencies

Additional Project Enhancements

- Haul Road
- Construction phasing broken into sub-segments
- Chain-link fencing and additional protections around sensitive features
- Increased thickness of topsoil



Removal of 92% of TSS Loads

Permeable Friction Course (PFC)

- Used on majority of paved surfaces within project

Vegetative Filter Strips (VFS)

- Used where feasible along sides of roadways

Water Quality Ponds

- New batch detention ponds will be constructed (8 Total)
- Existing ponds at Loop 1 will be utilized (6 Total)

Typical TSS removal requirement (80%) would be met with only Permeable Friction Course & Vegetative Filter Strips





Sensitive Features Protective Measures

- Six cave gates are currently being installed by TxDOT
- Natural buffers (Extend 50' Min.) in all directions where practical (FEIS commitments/TWG enhancements)
- Buffer areas will be fenced with chain link fence (TWG enhancement)
- Buffer areas to include high service rock berm with silt fence and erosion control logs



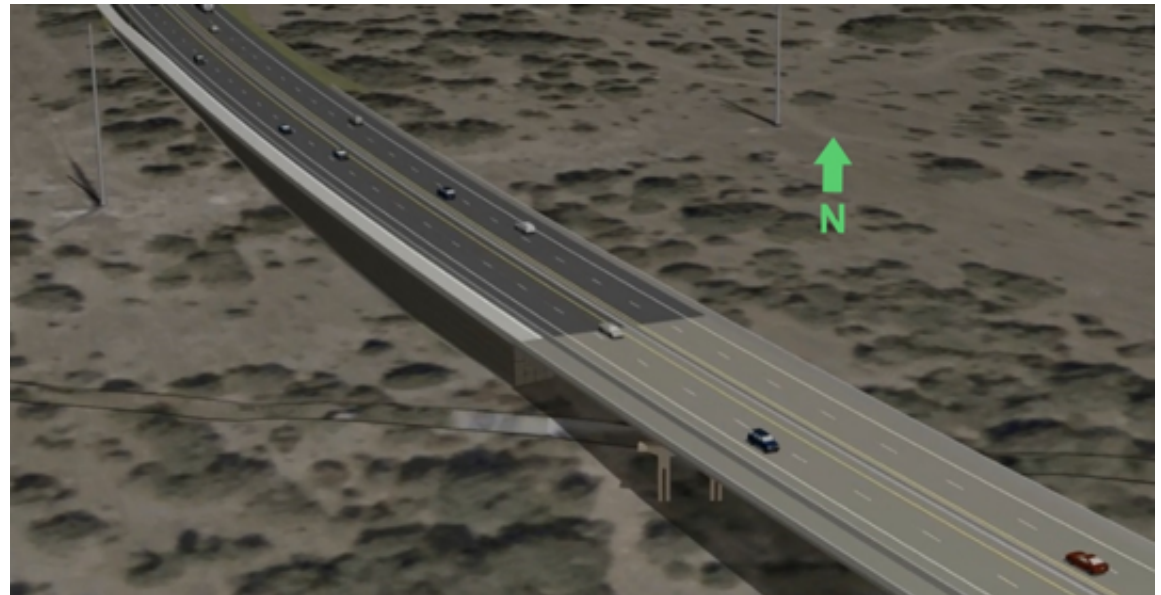


Embankment

- Roadway profile raised to minimize cut

Bridge Design

- Span sensitive features
- Water quality pond accommodation
- Minimize impact to Bear Creek



Retaining Walls

- Increased use of walls to reduce earthen slopes and minimize roadway footprint

Topsoil

- Increased thickness of topsoil for enhanced vegetative growth
- Provides stabilization and preserves water quality



Parmer Lane Extension Project

- Part of 1800 acre mixed-use development
- Switched from conventional water quality measures to bio-swales and biofiltration ponds
 - Minimized visual impact
 - Less than 20% impervious cover within ROW
- SH 45 Southwest
 - Minimized visual impact
 - Less than 20% impervious cover within ROW for SH 45 SW corridor
 - Batch detention ponds also function as hazardous material traps





Independent Environmental Compliance Manager (IECM)

- Required per Final Environmental Impact Statement
- Coordinate with Mobility Authority to ensure compliance with environmental requirements on the project
- On-site full-time during construction

Contractor Void Discovery Protocol (FEIS Commitment)

- Stop work within 50' radius
- Notify the IECM, CTRMA, TxDOT, Texas Commission on Environmental Quality (TCEQ), and Barton Springs Edwards Aquifer Conservation District (BSEACD)
- Karst Biologist and Geoscientist will evaluate the void and prepare Void Mitigation Plan
- TCEQ has one week to review and approve



Typical Edwards Aquifer Project (TCEQ Requirements)

- Includes permeable friction course, vegetative filter strips, and basic erosion & sedimentation controls
- Estimated Construction Cost: \$ 76,000,000

SH 45 SW Requirements (Consent Decree and FEIS)

- Addition of IECM, ponds, bridge additions, karst feature protections, embankment, etc.
- Estimated Construction Cost: \$ 86,000,000 (+ \$10M)

SH 45 SW Enhancements (TWG, COA, Travis County)

- Addition of increased duration due to phasing, enhanced erosion & sedimentation controls, haul road, retaining wall additions, increased soil thickness, and chain-link fencing around sensitive features
- Estimated Construction Cost: \$ 95,000,000 (+ \$9M)

Total Project Cost



Preliminary Engineering and Design	\$9,100,000
Construction	\$95,000,000
Utilities	\$500,000
System Integration	\$2,000,000
Construction Oversight	\$10,600,000
Project Contingency	\$2,800,000
Total Project Cost up to <u>\$120,000,000</u>	

Funding:	\$20 M	Travis and Hays Counties
	\$60 M	TxDOT Loan
	\$28.92 M	TxDOT Financial Assistance

Total Project Funding \$108,920,000



Cost Refinement

- Review and implement contractor outreach feedback
- Conduct value engineering meeting

Implementation

- **April Board Meeting**
 - Authorize release for Bid
 - Project Development Agreement with TxDOT
 - Inter-local Agreement with Travis County
- Advertise for Construction
- Contractor Workshop / Pre-Bid Meeting
- Contractor Pre-qualification
- Bid Opening in May
- **May Board Meeting**
 - Award for Construction
- Start of Construction Estimated October 2016
- CTRMA Conservation / Mitigation Plan

Public Outreach for Projects Under Development

Agenda Item #11

Dee Anne Heath, Director of External Affairs

March 30, 2016



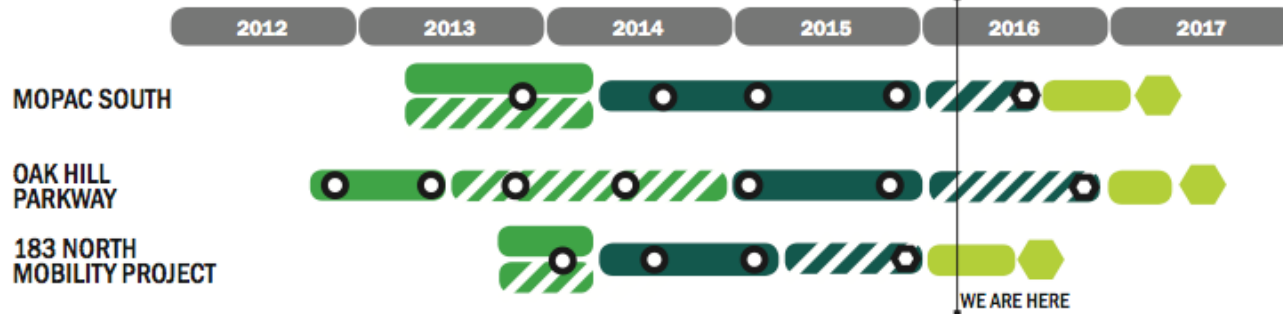
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Outreach Updates



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ENVIRONMENTAL STUDIES CURRENTLY UNDERWAY



LEGEND

- Develop & Validate Purpose & Need
- Develop & Analyze Range of Alternatives
- Analyze and Identify Recommended Alternative(s)
- Further Analyze Recommended Alternative(s) to Identify Preferred Alternative(s)
- Submittal & Review of Environmental Documentation
- Receive Environmental Decision
- Public Open House
- Public Hearing



MoPac North

RECENT ACTIVITY

Responded to stakeholder inquiries and comments about the project, significant outreach effort for multiple weekends of segment 1 lane and ramp closures

NEXT STEPS

Development of communication and marketing plan for summer opening

KEY ENGAGEMENT STATISTIC

There was an 144% increase in new visitors and a 127% increase in overall traffic to *www.MoPacExpress.com* in February



SH 71 Express

RECENT ACTIVITY

Planned for informing the public of a traffic shift that will occur in April

NEXT STEPS

Hold Public Informational Construction Update Meeting on March 23

KEY ENGAGEMENT STATISTIC

There was a 48% increase in visitors to the project website for a total of 1,274 sessions
Almost 11% of overall visitors were from the Houston area



SH 45 SW

RECENT ACTIVITY

Responded to inquiries regarding project schedule and next steps; more than double the typical number were received in February

NEXT STEPS

Continue to respond to contractor inquiries through CivCast regarding open and future RFQs

KEY ENGAGEMENT STATISTIC

The project team provided an update to the Shady Hollow HOA. Many attendees shared support for the project; several stakeholders said the project “should have been done years ago”



183 North

RECENT ACTIVITY

Public Hearing Summary Report was posted online at *www.183North.com*

NEXT STEPS

Prepare for communication regarding environmental finding

KEY ENGAGEMENT STATISTIC

February saw a spike in website visitation by about 300 visits, likely due to continuing media coverage of the CAMPO vote to amend the project description



MoPac South

RECENT ACTIVITY

Continue to analyze feedback provided through 4th Technical Work Group meeting; adjust evaluation criteria as needed

NEXT STEPS

Identify which Express Lane(s) configuration will move forward

KEY ENGAGEMENT STATISTIC

Website visitation leveled out in late 2015 and early 2016 with an average of 600 monthly visitors



Oak Hill Parkway

RECENT ACTIVITY

Ongoing stakeholder outreach and social media push

NEXT STEPS

Plan for presentations and information booths at regional events in April

KEY ENGAGEMENT STATISTIC

Web traffic who came from Twitter had a longer average amount of time spent on the site (Approx. 3 minutes and 30 seconds)

Express Lanes/Park and Ride

Agenda Item #12

Justin Word, P.E., Director of Engineering
Kyle Keahey, Project Manager HNTB

March 30, 2016



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Park and Ride Initiative



Background

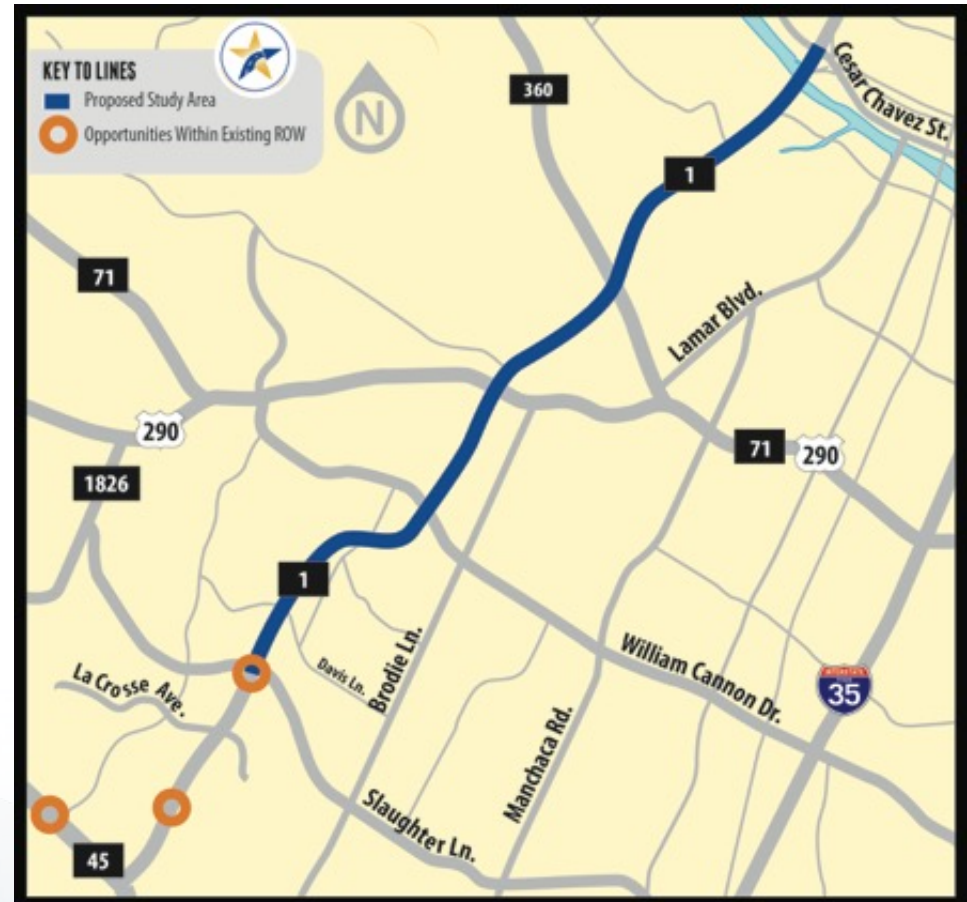
- **Proposed Express Lanes provide opportunity for reliable transit service**
- **Project Purpose addresses transit:**
 - **“Create a dependable and consistent route for transit”**
- **CapMetro and CTRMA have been exploring opportunities to improve on this transit opportunity**
 - **Park and Ride facilities to anchor service**
 - **Efficient access to/from express lanes**



Early Investigations

- Focus on MoPac South and 183 North corridors
- Explored Park and Ride opportunities within existing ROW
- Findings:
 - Limited ROW
 - Complex design
 - Significant cost
 - Safety concerns

MoPac South

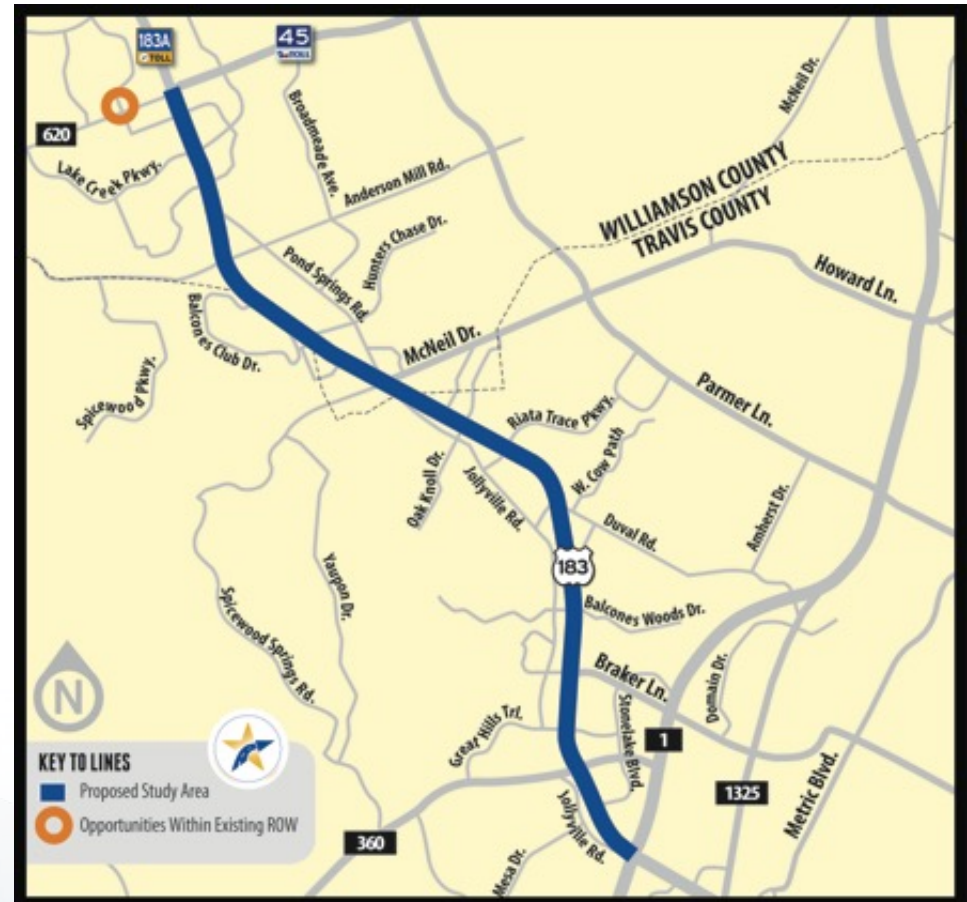




Early Investigations

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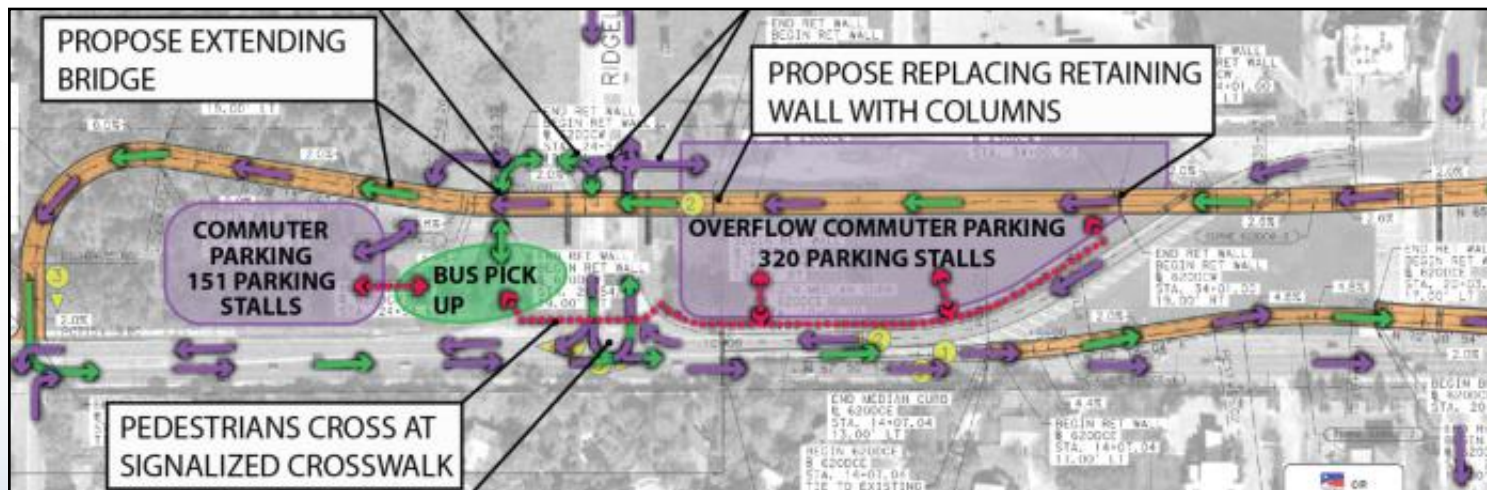
183 North





Early Investigations

- **Potential opportunities within existing ROW**
 - **South MoPac**
 - South Bay Lane
 - Escarpment Boulevard
 - **183 North**
 - **RM 620/Ridgeline**



Park and Ride Initiative



Next Steps

- **Evaluate Park and Ride options within existing ROW**
- **Advance efforts to identify and evaluate Park and Ride opportunities outside of ROW**
- **Determine which options to advance**
- **Project development schedule**
- **Begin preliminary design and environmental assessment**
- **Work with local entities to create partnerships for cost sharing/ sponsorships**

Park and Ride Initiative



Moving Forward

- **Joint efforts between CTRMA, Capital Metro, and CAMPO**
- **4-Phase Work Plan**
 1. **Develop Agreement to advance PnR Initiative**
 - **Efforts underway – April target date**
 2. **Develop Regional Park and Ride Plan**
 - **In partnership with CAMPO and Capital Metro**
 - **Obtain CAMPO support and concurrence**
 3. **Advance Park and Ride site location studies**
 - **Options within and outside existing ROW**
 - **In support of CAMPO regional efforts**
 4. **Develop Funding Strategies**
 - **Optimize opportunities from all regional mobility partners**

Park and Ride Initiative



Coordination Activities

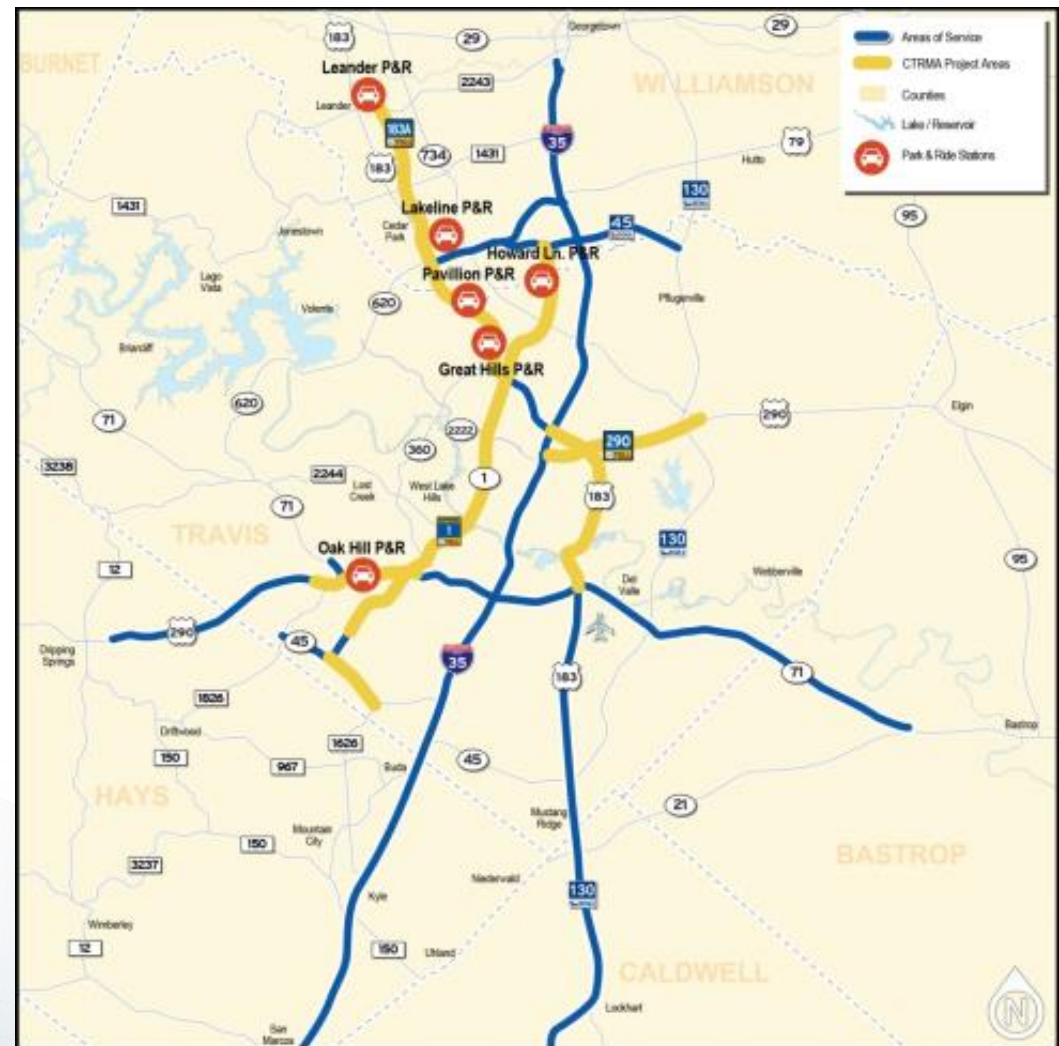
- **Regular meetings of CTRMA, Capital Metro & CAMPO leadership**
- **CTRMA Board briefing today**
- **Capital Metro Board briefing on February 22**
- **Follow-up briefings to Boards at key decision points, including CAMPO Policy Board**

Summary



Significance of Park and Ride Initiative

- **Six (6) existing Park and Ride facilities will use CTRMA Project Corridors**
- **Express Bus service at these six facilities generated 460,000 Annual Riders in 2015**

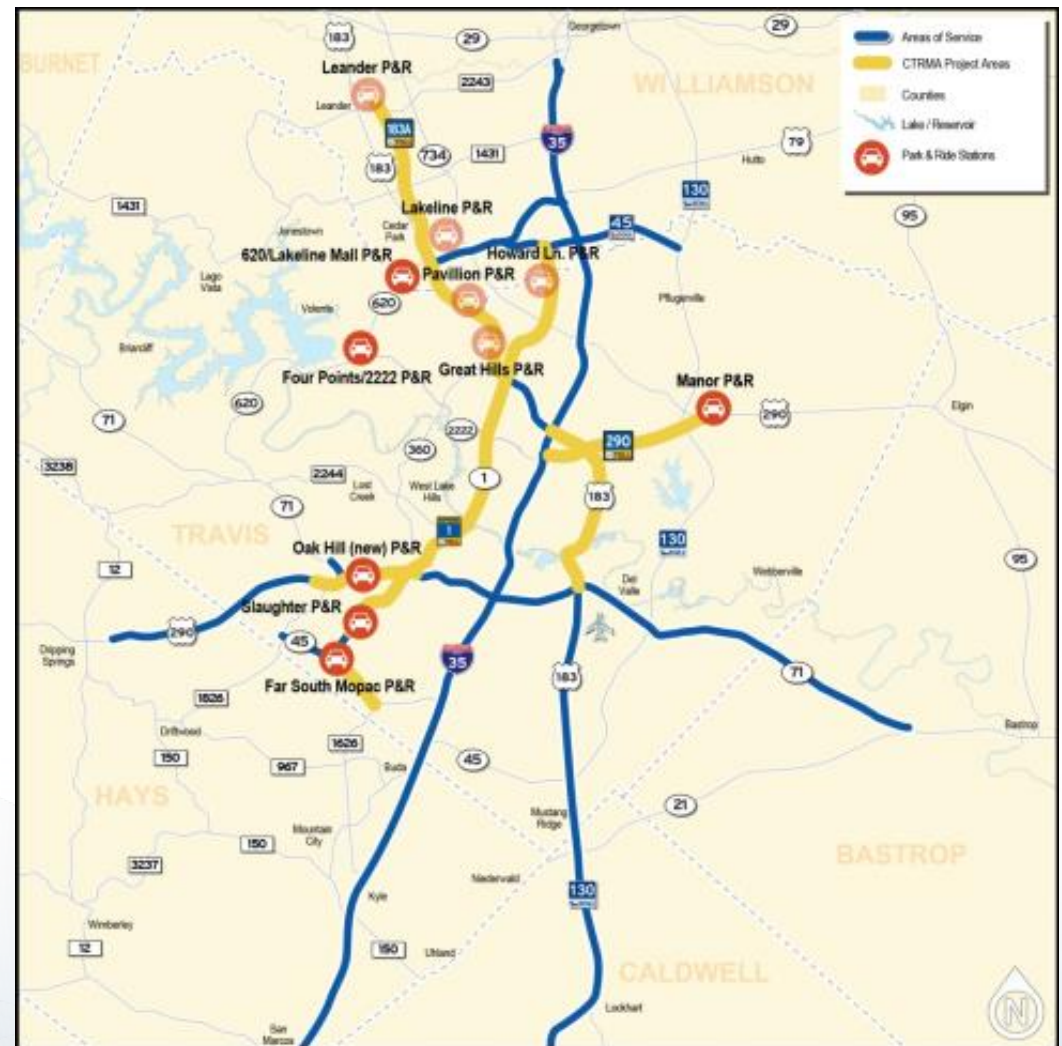


Summary



Significance of Park and Ride Initiative

- **Six (6) additional Park and Ride facilities under consideration**

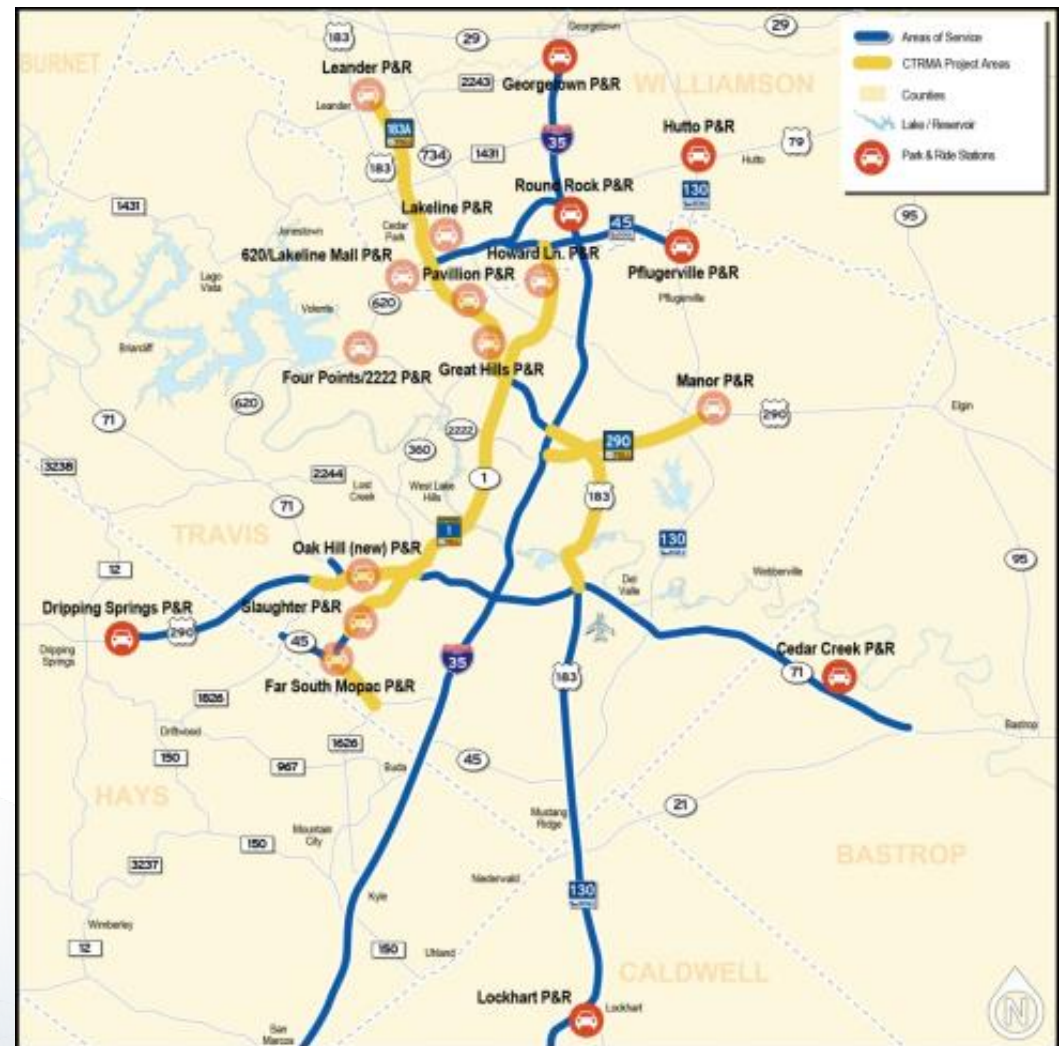


Summary



Significance of Park and Ride Initiative

- **Seven (7) other Park and Ride facilities being planned outside of Capital Metro service area**

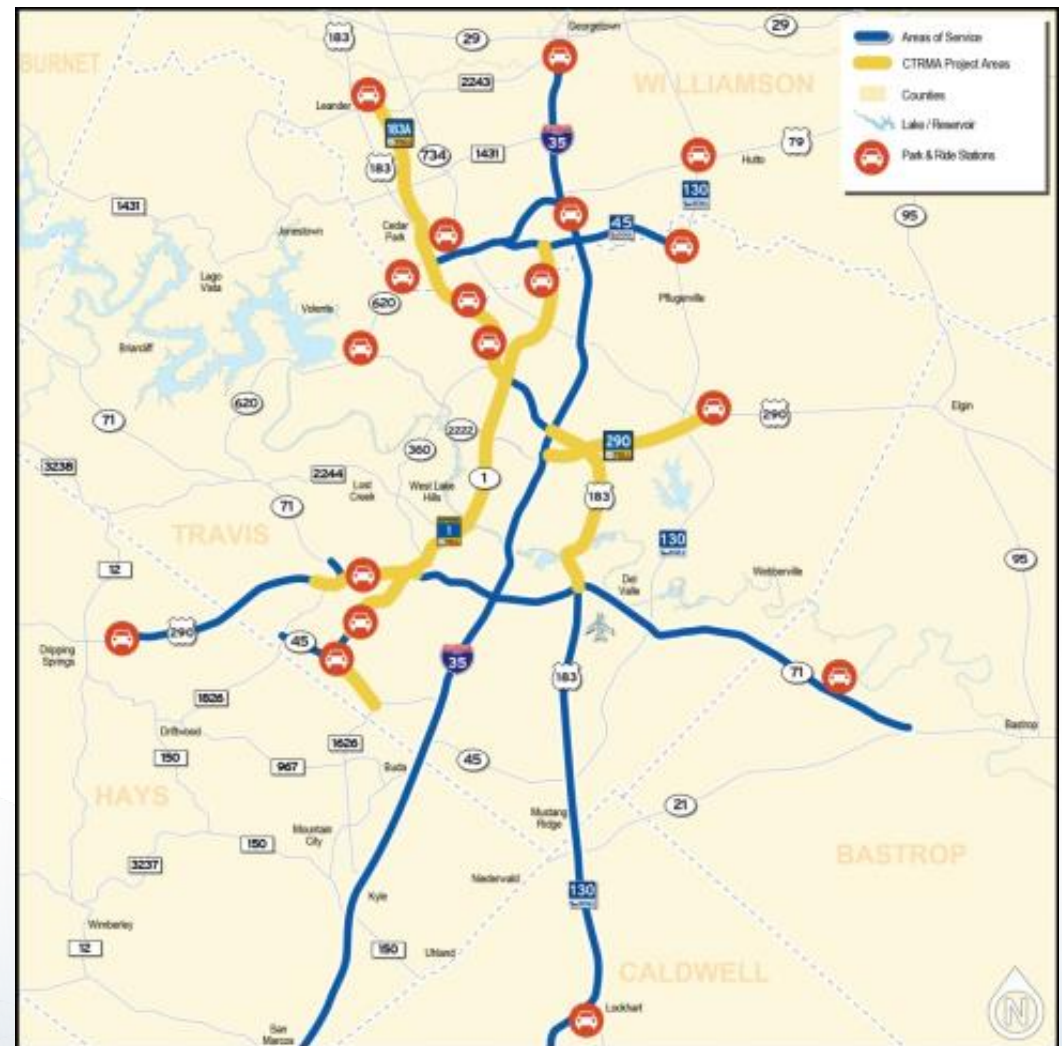


Summary



Significance of Park and Ride Initiative

- A total of 19 Park and Ride facilities using CTRMA projects



Value Pricing Pilot Program – Texas Transportation Institute (VPPP – TTI) Presentation on Project Findings

Agenda Item #13

Tim Reilly, Director of Operations

March 30, 2016



CENTRAL TEXAS
Regional Mobility Authority

Real-time Ridesharing Technology Pilot



- **Pilot approved by the Board in April 2013.**
- **Project sponsored by the Federal Highway Administration (FHWA) and performed in cooperation with the Mobility Authority, Carma Technology Corporation (Carma), Capital Area Metropolitan Planning Organization (CAMPO) and the Texas Department of Transportation (TxDOT).**
- **Purpose of the project was to evaluate the use of real-time ridesharing to verify occupancy for toll road discounts in Central Texas.**
- **Pilot successfully tested the Carma system, recruited toll road users and analyzed for potential impacts.**

Value Pricing Pilot Program (VPPP)



Estimated Cost Allocation Per Task

TASK NO.	DESCRIPTION	ESTIMATED COST
1	Pre-Implementation Plan	\$166,850
2	Recruitment	\$248,613
3	Implementation	\$442,545
4	Analyzing and Reporting	\$101,000
TOTAL		\$959,008

Funding

SOURCE	AMOUNT
Federal Grant	\$764,008
Vendor (Avego)	\$105,000
Mobility Authority	\$45,000
TxDOT	\$45,000
TOTAL	\$959,008



Real-Time Ridesharing Technology to Support Differential Tolling by Occupancy



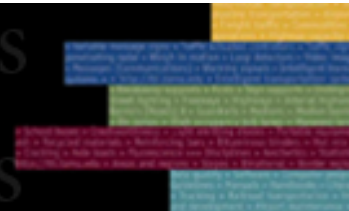
Central Texas Regional
Mobility Authority
Board of Directors
March 30, 2016

Objectives

- Can a carpooling app be used to verify vehicle occupancy?
- Do toll road discounts encourage carpooling?
- What are some implications for long-term operation?

Project Partners





What is Real-Time Ridesharing (RtR)?

Software, usually on smartphone platforms, that **match carpool partners at the time** the trip is needed, or **scheduled** for a specific time and place.

Ridesharing is distinguished from *'ride-hailing'* apps such as Uber & Lyft by limiting rider fees to the driver's cost of the trip.



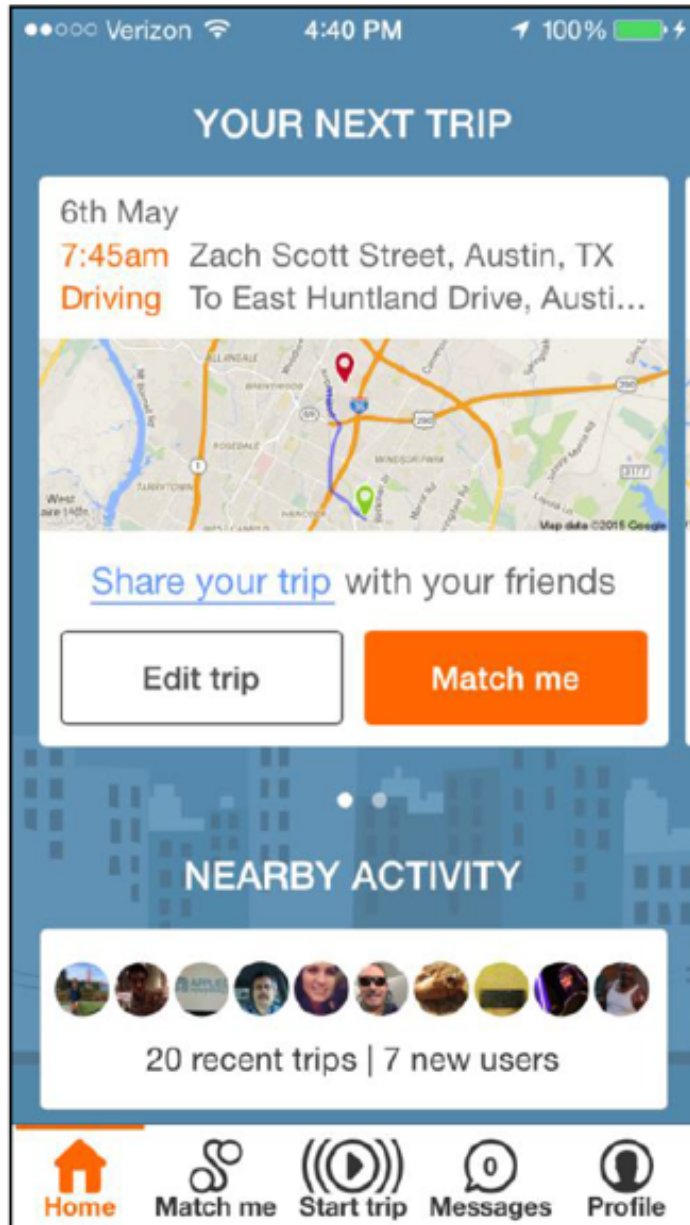
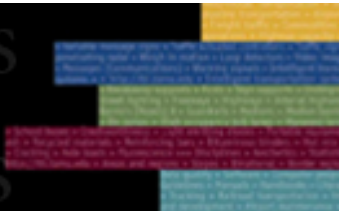


Image: Carma

Mobile Application

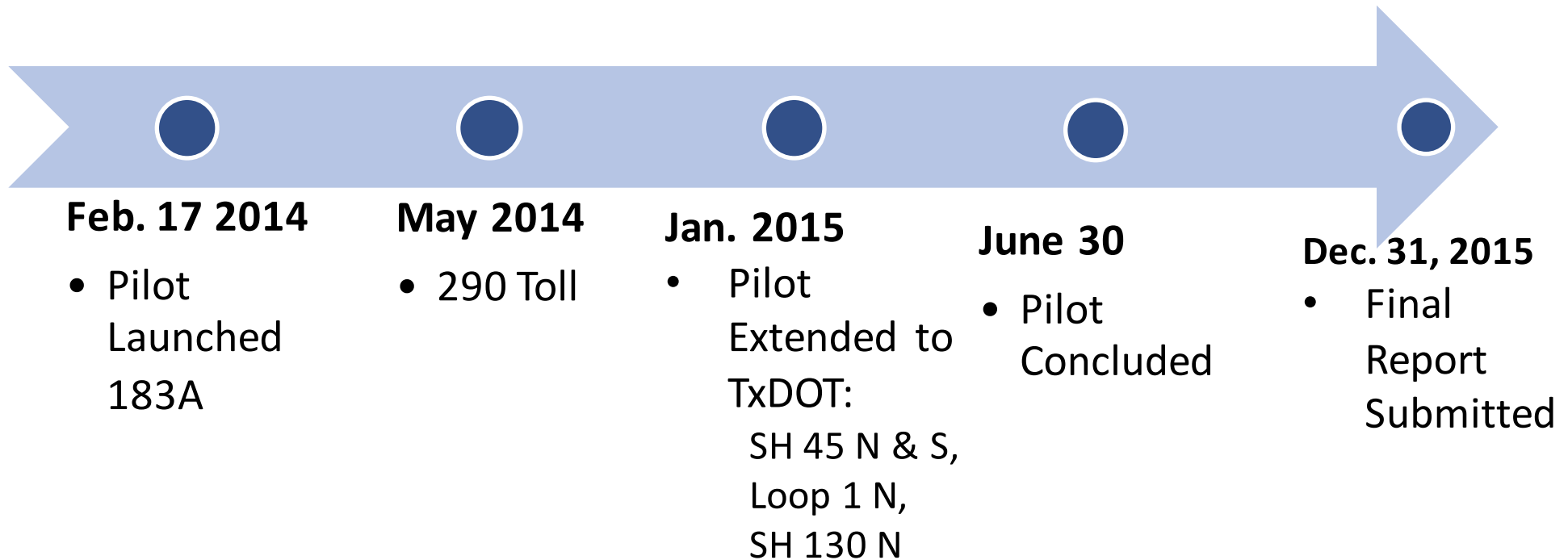
- App coordinates rides and payment
- Drivers could offer either free or reimbursed rides
 - Option of charging \$0.20 per mile, up to IRS limit
- Step-by-step process
 - Users select “plan” or “start” trip
 - Users select “driver” or “rider” mode
 - Users confirmed end of trip
 - E-mail sent confirming payment or deposit



Central Texas RtR Pilot

- Partnerships between Mobility Authority (toll operator) and Carma (rideshare and app vendor)
- Drivers and riders downloaded mobile app
- Driver + 1 passenger received 50% toll rebate;
Driver + 2 passengers received 100% toll rebate
- Rebates funded through FHWA pilot program, initially shown directly on driver's monthly TxTag statements, later credited through Carma app

Project Timeline





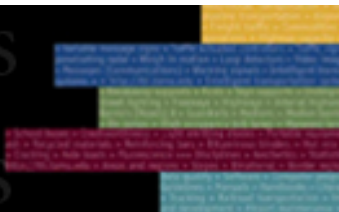
Results

- Recruitment
- Trip & Toll Analysis
- Operational Analysis

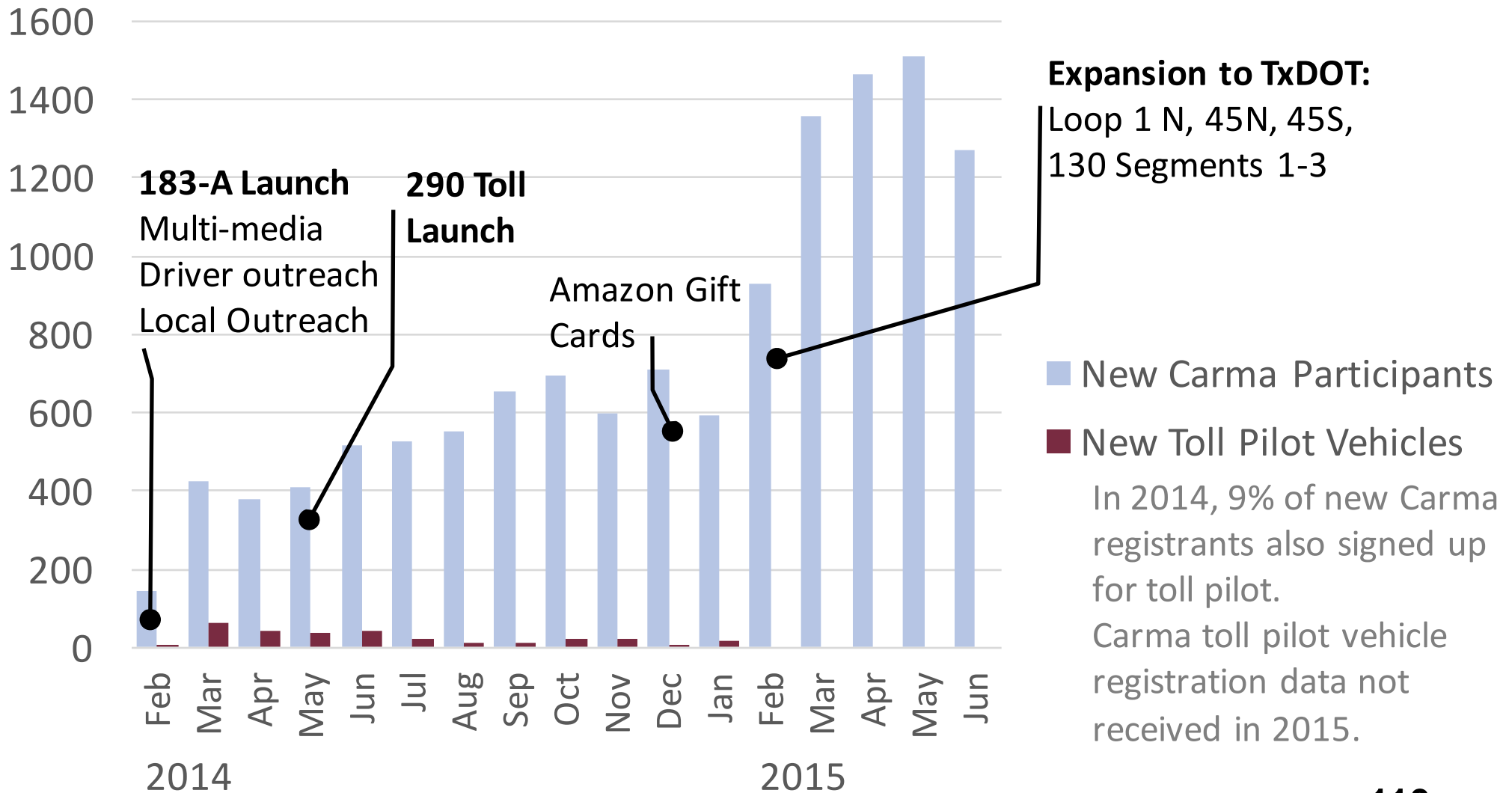
Recruitment Activities

- Neighborhood
- Major Event/Campaign
- Paid Media
- Earned Media
- Driver
- Employer
- Digital





Recruitment Results





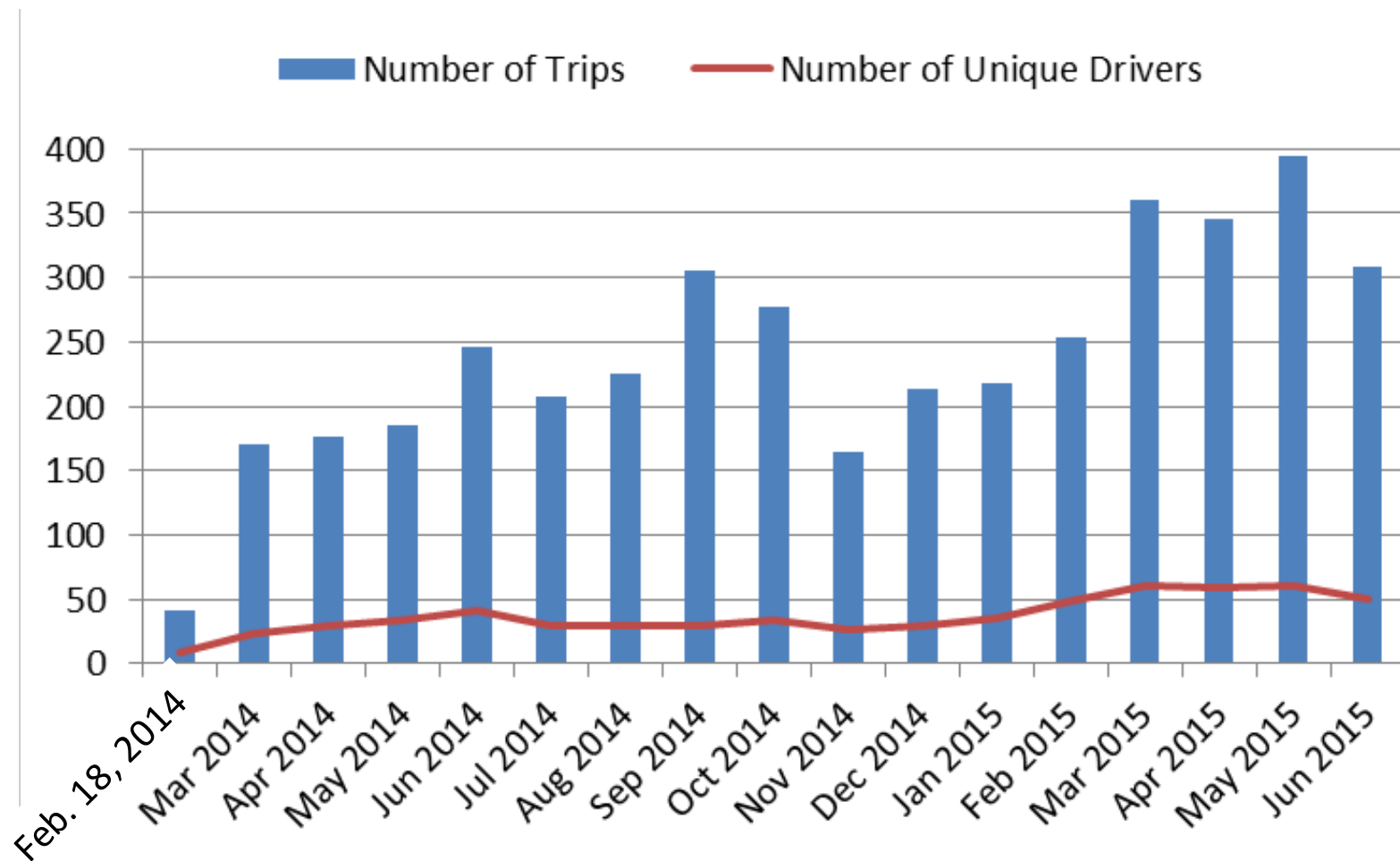
Trip & Toll Analysis-



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Feb. 2014-June 2015

Monthly # of Rebated Carma Trips and Unique Drivers on 183A Toll & 290 Toll





Trip & Toll Analysis-



Feb. 2014-June 2015

Monthly # of Rebated Carma Trips and Unique Drivers on 183A Toll & 290 Toll

- Total trips: 1,881
- Drivers: 95
- Total toll credit: \$1,963.55
- Average toll rebate: \$1.04 per trip
- 3+ Occupancy: 36%

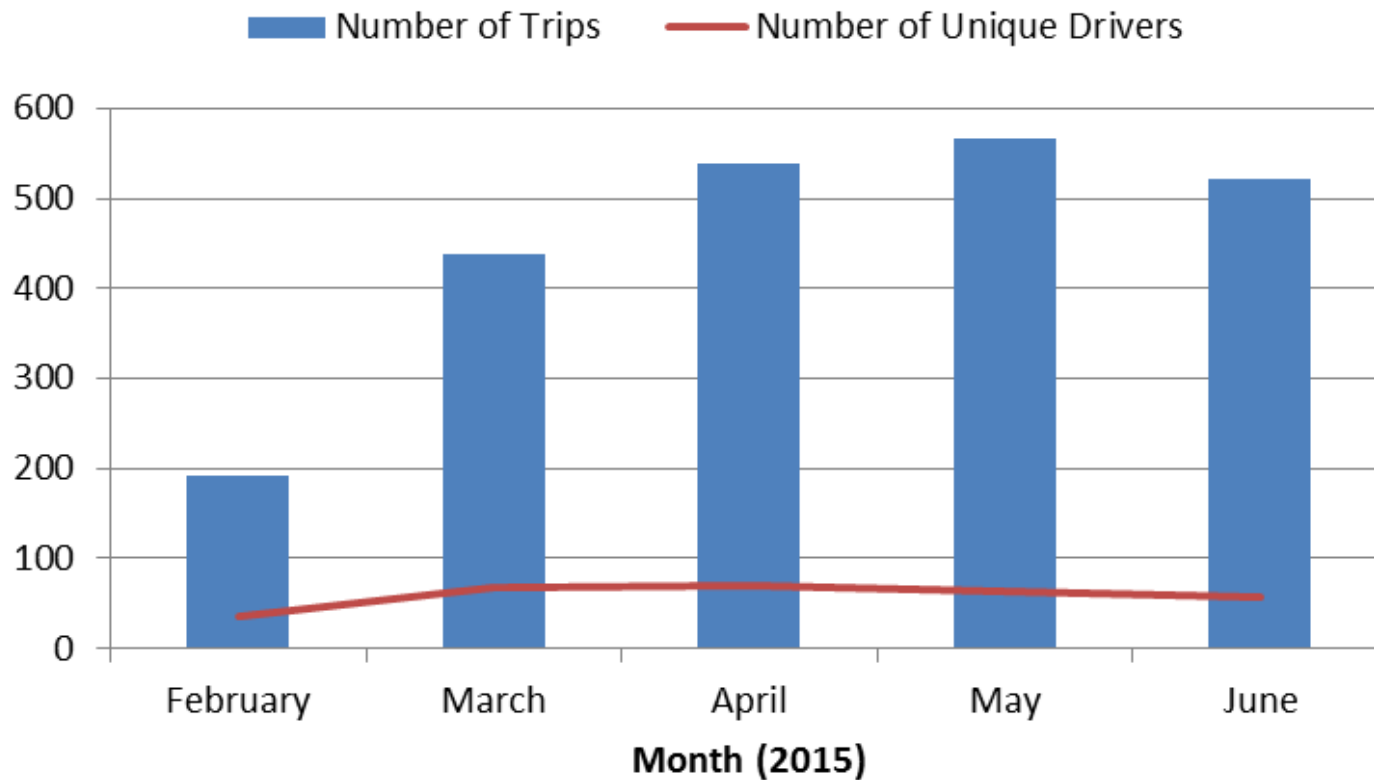


Trip & Toll Analysis- Jan.-June, 2015



TxDOT Loop 1, SH 45 N, SH 130, and SH 45 SE

Monthly # of Rebated Carma Trips and Unique Drivers on TxDOT Toll Roads





Trip & Toll Analysis-



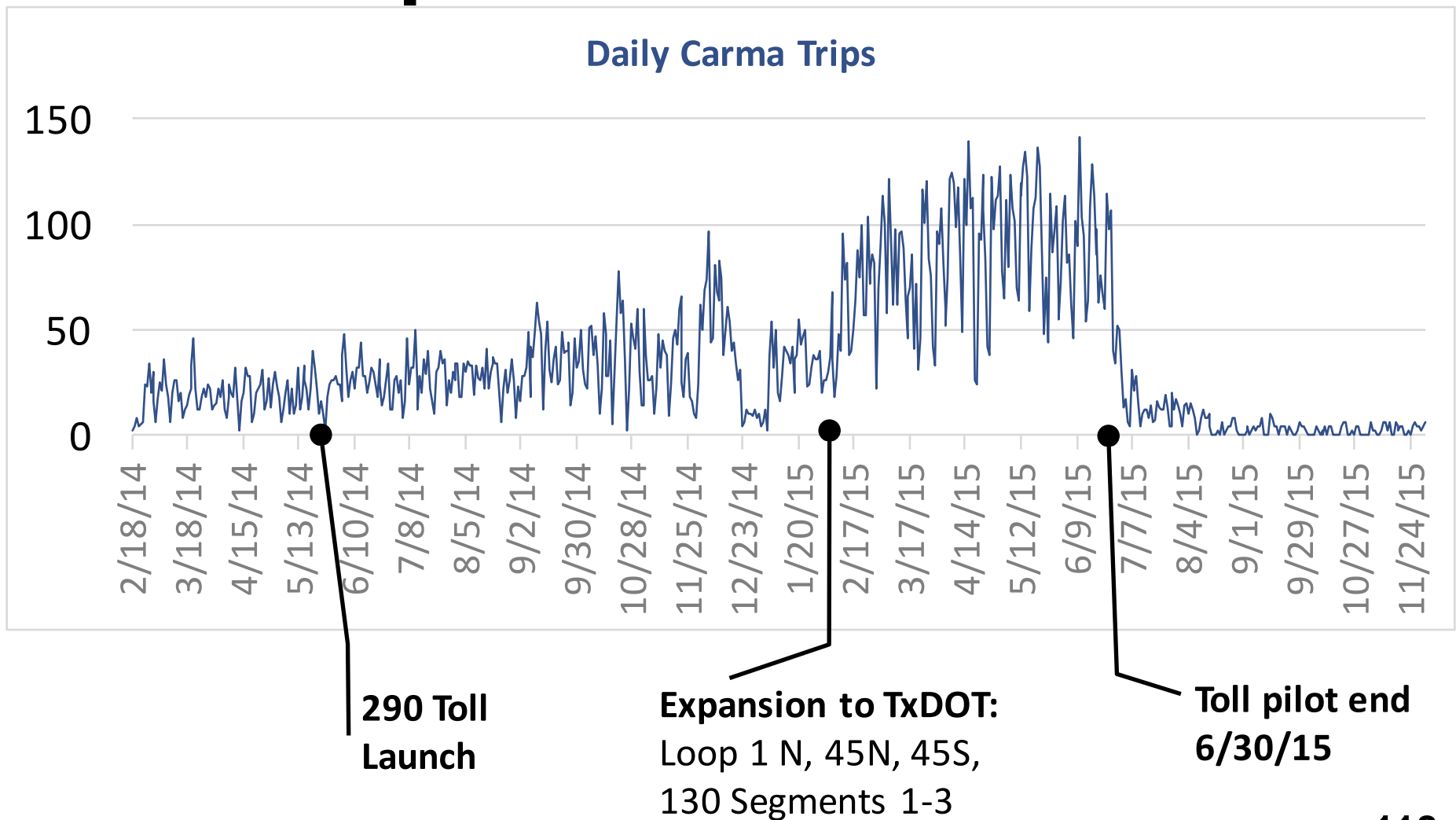
Jan.-June, 2015

TxDOT Loop 1, SH 45 N, SH 130, and SH 45 SE

Monthly # of Rebated Carma Trips and Unique Drivers on TxDOT Toll Roads

- Total trips: 2,253
- Drivers: 121
- Total toll credit: \$4,469.39
- Average toll rebate: \$2.73 per trip
- 3+ Occupancy: 45%

Operational Results





Operational Results

- No fraudulent trips detected.
- Researchers tested single occupancy trips with 2 devices, & fake account.
- Verification features could be added, if needed.



Operational Results (cont'd.)

- RtR can verify # of occupants
 - Tolling by occupancy is feasible
- Impact of pilot program to vehicle miles traveled, revenue, etc. was low
 - Fuel prices decreased \$1.40 during pilot
- Partnerships and expansions could facilitate carpooling



Questions?



Real-Time Ridesharing Technology to Support Differential Tolling by Occupancy
Greg Griffin, AICP g-griffin@tti.tamu.edu **Nick Wood, P.E.** n-wood@tti.tamu.edu

Executive Directors Report

Agenda Item #14

Mike Heiligenstein, Executive Director

March 30, 2016



CENTRAL TEXAS
Regional Mobility Authority

Executive Session

Agenda Items #15-18

March 30, 2016



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Adjourn Meeting

Agenda Item #21

March 30, 2016



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