

# January 27, 2021 AGENDA ITEM #8

Discuss and consider awarding a contract to design and construct the 183 North Mobility

Project

Strategic Plan Relevance: Regional Mobility

Department: Engineering

Contact: Mike Sexton, P.E., Acting Director of Engineering

Associated Costs: Total Project Costs estimated at \$580 Million

Funding Source: Toll revenue bonds and Transportation Infrastructure

Finance and Innovation Act (TIFIA) funds.

Action Requested: Consider and act on the draft resolution

<u>Project Description</u> - The 183 North Mobility Project will expand capacity along a nine mile stretch of US 183 between SH 45 and MoPac by adding two tolled express lanes in each direction in the median of US 183, expanding the existing US 183 to four non-tolled general-purpose lanes in each direction, and constructing a shared use path, and sidewalks between SH 45/RM 620 and MoPac. The project also includes the addition of a direct connector between the existing express lanes on MoPac and the proposed express lanes on US 183 and additional operational improvements along MoPac, including the option to add a collector-distributor road.

## <u>Previous Actions & Brief History of the Project</u> -

- On April 27, 2016, the Mobility Authority received environmental approval for the development of the 183 North Project through the issuance of a Finding of No Significant Impact by the Texas Department of Transportation ("TxDOT").
- On April 26, 2017, the Mobility Authority exercised its option as a local toll project entity to develop, finance, construct, and operate the 183 North Project.
- On January 31, 2019, the Texas Transportation Commission approved the release of \$104.2 million in federal funding for the non-tolled portion of the 183 North Mobility Project.

• On February 6, 2020, TxDOT approved an environmental reevaluation for the optional collector-distributor road along MoPac.

### **Procurement Timeline**

- March 15, 2019 the Mobility Authority issued a Request for Qualifications (RFQ) for the design and construction of the 183 North Mobility Project through a Design-Build Agreement. We subsequently received five statements of qualifications in response to the RFQ.
- May 24, 2019 Received five Statement of Qualifications
- July 24, 2019 the Mobility Authority evaluated the statements of qualifications and short-listed three Proposers to receive the draft Request for Detailed Proposals. The short-listed Proposers included:
  - o Capital Express Partners
  - o Colorado River Constructors
  - o Great Hills Constructors
- November 20, 2019 the Mobility Authority issued the Final Request for Detailed Proposals to the short-listed Proposers.
- August 18, 2020 the Mobility Authority received Proposals from the three shortlisted Proposers.

#### **Evaluation Process**

The committees (listed below) each had a specific, defined role in the evaluation process. The committees were comprised of Mobility Authority staff, consultants, and external experts.

<u>Pass/Fail and Responsiveness Committee and the Price Evaluation Committee -</u> Each Proposal was reviewed for compliance by both the Pass/Fail and Responsiveness Committee and the Price Evaluation Committee (PEC).

<u>Evaluation and Selection Recommendation Committee</u> - The compliant proposals were provided to the Evaluation and Selection Recommendation Committee (ESRC) for their review and rating. A consensus rating session was held to discuss individual ratings and determine a consensus rating from this committee.

<u>Senior Advisory Committee</u> - The consensus ratings were then presented to the Senior Advisory Committee (SAC) for review and concurrence. Once all SAC comments were addressed the SAC, ESRC, and PEC met to apply predetermined confidential weightings of the qualitative ratings and points to develop a technical

score, to reveal the price component, and to determine the price score of each individual Proposal. The technical score and price score were combined to determine the final total proposal score.

Each committee followed strict protocols and processes under oversight of the Federal Highway Administration (FHWA) and the Texas Department of Transportation (TxDOT). The resulting scores will be presented at the Board Meeting.

<u>Financing</u> -Funding to be provided through a combination of toll revenue bonds and Transportation Infrastructure Finance and Innovation Act (TIFIA) funds.

<u>Action requested</u> - Staff recommends that, conditioned on receiving concurrence from the Federal Highway Administration and TxDOT, the Board award the contract for design and construction of the 183 North Mobility Project to the Proposer with the highest final total proposal score. Staff also recommends that the Board authorizes the Interim Executive Director to negotiate and bring back to the Board a final Design-Build Contract for its approval.

Backup Provided: 183 North toll rates

Draft Resolution to be provided at the Board Meeting





To: Bill Chapman From: Bill Ihlo, Tiffany Cummings

CTRMA Stantec

File: 183N Traffic & Revenue Forecast Date: January 21, 2021

Tolling Assumptions

#### Reference: 183N Traffic & Revenue Forecast Tolling Assumptions

As per your request, this memo provides an overview of the tolling assumptions used for the latest 183N Express Lane investment-grade traffic and revenue forecasts submitted on January 15, 2021. One of the primary purposes for re-evaluating the 183N tolling assumptions was to identify toll rates that balance the revenue needs of the project with the long-term traffic impacts of COVID-19 which will likely reduce the forecasted demand along the corridor.

On the following page is a summary table that compares the 2025 tolling assumptions between the 2019 study, which was conducted before COVID-19, and the current 2021 study, which accounts for the long-term impacts of COVID-19. The 183N Project is assumed to open in 2026 but for comparison purposes, 2025 toll rates are shown. For reference, the 2021 rate per mile for the existing CTRMA System is about \$0.29/mile; in 2025, the rate per mile for the System excluding 183N would be about \$0.36/mile. The key takeaways from the table are:

- The 2025 nighttime minimum toll rates increase from \$0.52 (2019 study) to \$0.71 (2021 study). This
  equates to a full-length trip costing \$1.04 in the 2019 study and \$1.42 in the 2021 study, or \$0.13/mile
  and \$0.18/mile.
- The 2025 midday minimum toll rates increase from \$0.52 (2019 study) to \$0.94 (2021 study). This
  equates to a full-length trip costing \$1.04 in the 2019 study and \$1.88 in the 2021 study, or \$0.13/mile
  and \$0.23/mile.
- Northbound plazas in the AM, which is the off-peak direction for that time of day, are assumed to
  have minimum tolls equal to the nighttime (as described in the first bullet above). Southbound plazas
  in the PM, which is the off-peak direction for that time of day, are assumed to have minimum tolls
  equal to the midday (as described in the second bullet above). Because the SB plazas are anticipated
  to have a greater amount of traffic to manage during the PM than the NB plazas during the AM, the
  minimum toll rates are assumed to be slightly higher.
- Southbound plazas in the AM, which is the peak direction for that time of day, are assumed to have minimum tolls ranging from \$0.71 to about \$3.00 per plaza. This equates to a full-length SB trip costing between \$1.42 and about \$6.00. In the 2019 study, a full-length SB trip was assumed to cost between \$1.04 and \$5.72.
- Northbound plazas in the PM, which is the peak direction for that time of day, are assumed to have minimum tolls ranging from \$0.94 to about \$3.00 to \$5.00 per plaza. This equates to a full-length NB trip costing between \$1.88 and \$8.63 (depending on the route). In the 2019 study, a full-length NB trip was assumed to cost between \$1.04 and \$7.63.

It is assumed that the 2025 rates shown in the table approximate the opening year minimum toll rates set by time of day (and by hour for some of the peak periods). It is anticipated that these minimum rates will grow throughout the forecast as congestion increases.

Reference: 183N Traffic & Revenue Forecast Tolling Assumptions

Table 1: 183N Express Lane ETC Toll Rate Assumptions Comparison by Plaza – 2025

	2025					
	2019 Study (pre-COVID-19)			2021 Study (with COVID-19 impacts)		
	Time Period	Minimum	Maximum	Time Period	Minimum	Maximum
Toll Plaza	Avg. Toll	Hourly Toll	Hourly Toll	Avg. Toll	Hourly Toll	Hourly Toll
AM Period (6:00 AM - 10:0						
South of McNeil - NB	\$0.52	\$0.52	\$0.52	\$0.71	\$0.71	\$0.71
South of Loop 1 - NB	\$0.52	\$0.52	\$0.52	\$0.71	\$0.71	\$0.71
Loop 1 DC - NB	\$0.52	\$0.52	\$0.52	\$0.71	\$0.71	\$0.71
South of McNeil - SB	\$1.98	\$0.80	\$2.42	\$2.02	\$0.71	\$3.04
South of Loop 1 - SB	\$2.53	\$0.52	\$3.30	\$2.38	\$0.71	\$2.96
Loop 1 DC - SB	\$2.15	\$1.85	\$2.45	\$2.10	\$0.71	\$2.93
Full Length Trip (8.1 miles						
Full Length NB Trip	\$1.04	\$1.04	\$1.04	\$1.42	\$1.42	\$1.42
Full Length SB Trip	\$4.50	\$1.32	\$5.72	\$4.40	\$1.42	\$6.00
Full Length Trip (8.1 miles						
Full Length NB Trip	\$1.04	\$1.04	\$1.04	\$1.42	\$1.42	\$1.42
Full Length SB Trip	\$4.13	\$2.65	\$4.87	\$4.12	\$1.42	\$5.97
Midday Period (10:00 AM						
South of McNeil - NB	\$0.52	N/A	N/A	\$0.94	N/A	N/A
South of Loop 1 - NB	\$0.52	N/A	N/A	\$0.94	N/A	N/A
Loop 1 DC - NB	\$0.52	N/A	N/A	\$0.94	N/A	N/A
South of McNeil - SB	\$0.52	N/A	N/A	\$0.94	N/A	N/A
South of Loop 1 - SB	\$0.52	N/A	N/A	\$0.94	N/A	N/A
Loop 1 DC - SB	\$0.52	N/A	N/A	\$0.94	N/A	N/A
Full Length Trip (8.1 miles	from Lakeline	Mall Dr to Bu	rnet Rd)			
Full Length NB Trip	\$1.04			\$1.88		
Full Length SB Trip	\$1.04			\$1.88		
Full Length Trip (8.1 miles	from Lakeline	Mall Dr to Lo	op 1)			
Full Length NB Trip	\$1.04			\$1.88		
Full Length SB Trip	\$1.04			\$1.88		
PM Period (3:00 PM - 8:00						
South of McNeil - NB	\$2.50	\$0.52	\$3.63	\$2.65	\$0.94	\$3.30
South of Loop 1 - NB	\$2.90	\$0.52	\$4.00	\$4.58	\$0.94	\$5.33
Loop 1 DC - NB	\$2.03	\$0.52	\$3.58	\$2.61	\$0.94	\$3.15
South of McNeil - SB	\$0.52	\$0.52	\$0.52	\$0.94	\$0.94	\$0.94
South of Loop 1 - SB	\$0.52	\$0.52	\$0.52	\$0.94	\$0.94	\$0.94
Loop 1 DC - SB	\$0.59	\$0.52	\$0.70	\$0.94	\$0.94	\$0.94
Full Length Trip (8.1 miles	from Lakeline	Mall Dr to Bu	rnet Rd)			
Full Length NB Trip	\$5.39	\$1.04	\$7.63	\$7.23	\$1.88	\$8.63
Full Length SB Trip	\$1.04	\$1.04	\$1.04	\$1.88	\$1.88	\$1.88
Full Length Trip (8.1 miles						
Full Length NB Trip	\$4.53	\$1.04	\$7.21	\$5.26	\$1.88	\$6.45
Full Length SB Trip	\$1.11	\$1.04	\$1.22	\$1.88	\$1.88	\$1.88
Nighttime Period (8:00 PA						
South of McNeil - NB	\$0.52	N/A	N/A	\$0.71	N/A	N/A
South of Loop 1 - NB	\$0.52	N/A	N/A	\$0.71	N/A	N/A
Loop 1 DC - NB	\$0.52	N/A	N/A	\$0.71	N/A	N/A
South of McNeil - SB	\$0.52	N/A	N/A	\$0.71	N/A	N/A
South of Loop 1 - SB	\$0.52	N/A	N/A	\$0.71	N/A	N/A
Loop 1 DC - SB	\$0.52	N/A	N/A	\$0.71	N/A	N/A
Full Length Trip (8.1 miles		Mall Dr to Bu	rnet Rd)			
Full Length NB Trip	\$1.04			\$1.42		
Full Length SB Trip	\$1.04			\$1.42		
Full Length Trip (8.1 miles	from Lakeline	Mall Dr to Lo	op 1)			
Full Length NB Trip	\$1.04		-	\$1.42	-	
Full Length SB Trip	\$1.04			\$1.42		

Notes: 1) Midday and Nighttime periods were not modeled at the hourly level, therefore minimum and maximum

average hourly toll rate assumptions are not applicable.

2) Minimum and maximum hourly toll rates represent the assumed lowest and highest toll rates of the 1-hour periods modeled within the AM and PM peak periods.