



## **AGENDA MEMORANDUM**

First Reading for the City Council Meeting of January 10, 2017  
Second Reading for the City Council Meeting of January 17, 2017

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**DATE:** January 5, 2017

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| <p><b><u>Advance Funding Agreement (TXDOT) and Interlocal Agreement (RTA)</u></b><br/><b>Strategic Integration (Traffic Demand Model) Feasibility Study</b><br/><b>Bond 2014, Proposition 2 – Future TXDOT Participation</b></p> |
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**CAPTION:**

Ordinance appropriating \$368,000 of anticipated revenues from the Texas Department of Transportation (TXDOT); authorizing the City Manager, or designee, to execute an Advance Funding Agreement with TXDOT for the Strategic Integration (Travel Demand Model) Feasibility Study with a payment of \$18,400 due to TXDOT for reimbursement of direct state costs, and to execute an Interlocal Agreement with the Regional Transportation Authority (RTA) for their participation (\$55,200) in this project. (Bond 2014, Proposition 2)

**PURPOSE:**

The purpose of this item is to take the necessary administrative actions to fund the development of a traffic demand model for the City. The model will be a tool for planning future roadway capacity and other transportation needs. The majority (80%) of the funding for this effort originates with a grant from the Federal Highway Administration (FHWA). The grant funds are passed through TXDOT to the City in a process moderated by the regional Metropolitan Planning Organization (MPO). TXDOT will additionally seek reimbursement for their administrative costs (\$18,400) from the City. The local match (20%) for this grant is being shared equally between the City and the RTA.

This item will appropriate a receivable and execute an Advance Funding Agreement (AFA) with TXDOT outlining project requirements and agreeing to reimburse TXDOT in the amount of \$18,400

for administrative costs. This item also authorizes the execution of an Interlocal Agreement with the RTA that will appropriate the RTA's 50% contribution towards the local match.

## **BACKGROUND AND FINDINGS:**

Federal planning regulations require Metropolitan Planning Organizations (MPOs) to coordinate with their State to develop Metropolitan Transportation Plans (MTPs) which address future transportation demands in their region. A computer model, known as a travel demand model (TDM), is the tool States use to assist MPOs in forecasting future travel demands. TDMs analyze existing conditions from a "base" year to predict future demands in a "forecast" year (up to 30 years in the future). Streets, urban highways, socioeconomic data (population, employment, etc.), commercial vehicle surveys and air quality surveys are typical data collected, analyzed, and incorporated into a TDM.

In Texas, TXDOT's Transportation Planning and Programming (TPP) Division is responsible for preparing TDMs for MPOs. TXDOT's traffic demand computer model is referred to as the "Texas Package". TDMs are generally validated every 10 years. The last model update for the Corpus Christi Metropolitan Planning Organization (CCMPO) region, which includes Corpus Christi and portions of Nueces and San Patricio counties, occurred in 2006.

Some States develop TDMs following a four-step process that includes analysis of *trip generation* (number of trips made), *trip distribution* (where the trips go), *mode choice* (how trips are distributed amongst various modes of travel), and *traffic assignment* (which route trips take). The Texas Package does not include *mode choice* which is why MPOs for the Houston-Galveston and Dallas-Fort Worth region have taken responsibility of developing their own model. TXDOT provides the "Texas Package" for the remaining 23 of the State's 25 MPOs. MPOs for San Antonio and Austin, which are considered benchmark cities, have utilized consulting contracts to include *mode choice* and additional factors unique to their region to enhance the results of the "base" Texas Package which may use general assumptions. Enhancing the "Texas Package" permits better forecasting since consultants are able to input data unique to a specific City or region.

Federal grant funding through the CCMPO, with a local match, is available for the City of Corpus Christi to utilize a qualified consulting firm to optimize the "Texas Package" through the *Strategic Integration (Travel Demand Model) Feasibility Study* project. This affords the City an opportunity to utilize the *mode choice* process and input other "localized" data into the "Texas Package" which will result in a TDM that is specific and unique to the transportation needs of Corpus Christi and not the entire CCMPO region.

Based on projections in population growth and development trends throughout the City, there is a vested interest in ensuring existing arterials and collectors can accommodate future street capacity needs. The City of Corpus Christi has always coordinated with state, county and local agencies to develop long-term planning transportation infrastructure needs in relation to the City's urban development. Initial coordination led to the development of the Corpus Christi Transportation Plan 1963-1964 which is the foundation of the City's network of streets and highways.

This project is a collaborative effort by the CCMPO, City of Corpus Christi, RTA and TXDOT. The RTA is sharing costs since this funding opportunity is beneficial to improving their Long-Range Operations Plan and updating their transit network master plan (Transit Plan 20/20). An AFA is required between TXDOT & City/RTA with an 80/20 cost sharing split respectively since the project is federally-funded. An Interlocal Agreement between the City and the RTA documents both entities as joint partners sharing the 20% local match. It also states the City's responsibility for contracting and managing the project.

An enhanced TDM model, specific to Corpus Christi's conditions, provides a better quality framework for the decision making process for investment decisions on street (transportation) programming and expenditures for various City departments including Engineering Services, Development Services, and Street Operations. Enhanced traffic projections will assist in updating the City's Urban

Transportation Plan by providing forecasted volumes for integral arterial and collector streets and urban state highways. This more precise model will also assist in revamping existing Area Development Plans to ensure street capacity is adequate for proposed land use, planning and prioritization of street selection for the Street Preventative Maintenance Program and Capital Bond Programming, and planning of master planned streets constructed by private developers.

The consulting firm tasked with this project will be required to review existing City, State and Local transportation network plans, evaluate and validate base year assumptions from the most recent Texas Package TDM, incorporate specified data, land use and mode choice (including a transit component) into the TDM, and validate the TDM for the base year and forecast year. Deliverables will focus on supplying methodology, assumptions and results (model, GIS files, etc.), indicating to the CCMPO, City and RTA the traffic demand and projections for existing and planned streets in the City. State guidelines require the results of the study be provided to the CCMPO, but the information will be accessible to both the City and RTA.

#### **ALTERNATIVES:**

1. Execute the Advance Funding Agreement with TXDOT and execute the Interlocal Agreement with RTA. (Recommended)
2. Do not execute the Advance Funding Agreement with TXDOT and do not execute the Interlocal Agreement with RTA. (Not recommended)

#### **CONFORMITY TO CITY POLICY:**

Conforms to City Fiscal Policy.

#### **EMERGENCY / NON-EMERGENCY:**

Non-Emergency

#### **DEPARTMENTAL CLEARANCES:**

None

#### **FINANCIAL IMPACT:**

☐ Operating      ☐ Revenue      ☒ Capital      ☐ Not applicable

| <b>Fiscal Year<br/>2016-20176</b>                  | <b>Project to Date<br/>Budget and<br/>Expenditures</b> | <b>Current Year</b> | <b>Future Years</b> | <b>TOTALS</b>  |
|--|--|---------------------|---------------------|----------------|
| Budget   |  | 87,000              |                     | 87,400         |
| <b>This item – RTA</b>                             |  | <b>55,200</b>       |                     | <b>55,200</b>  |
| <b>This item - TxDOT</b>                           |  | <b>368,000</b>      |                     | <b>368,000</b> |
| Total Budget                                       |  | 510,600             |                     | 510,600        |
| Encumbered /<br>Expended Amount                    |  |                     |                     |                |
| <b>This item (TxDOT)</b>                           |  | <b>18,400</b>       |                     | <b>18,400</b>  |
| Future Anticipated<br>Expenditures This<br>Project |  | 492,200             |                     | 492,200        |
| BALANCE  |  | 0                   |                     | 0              |

Fund(s): Bond 2014, Proposition 2 Future TXDOT Participation, TXDOT, RTA

**RECOMMENDATION:**

City staff recommends approval of the Resolution to enter into the Advance Funding Agreement and the Interlocal Agreement.

**LIST OF SUPPORTING DOCUMENTS:**

Ordinance  
Project Budget  
Location Map  
Advance Funding Agreement  
Interlocal Agreement  
Presentation