Technical Advisory Committee

Tuesday, November 17, 2015

Regular Session

Item H3

Long Range Transportation Plan - Progress Update

Staff Contact: Chad Nabity, Regional Planning Director

Journey 2040 Update
November, 2015

The project is progressing on both the technical side and with establishing a framework for identifying transportation projects and priorities. The presentation to TAC will summarize this framework. Another round of Steering Committee input will be held on potential transportation solutions that address the goals.

Technical Progress

An existing conditions report was prepared that examined the condition of roads and bridges, traffic safety, traffic congestion, pedestrian travel characteristics and general need for transit. This information has provided a base line of transportation conditions and from this information locations were identified where the transportation system could be improved.

Projecting future transportation conditions is also a key part of a long range plan. Local, statewide and regional growth forecasts were reviewed in order to obtain the best available information on how population is expected to grow and also what employment sectors are expected to also grow. Projections were completed for two time periods, the year 2025 and year 2040.

The transportation planning profession has developed standards for developing models that represent traffic flows. These standards were used to build a representative street and highway model of the Grand Island area. This model was calibrated until the traffic from the model represented the levels of traffic observed from traffic counts. Then the growth forecasts for the years 2025 and 2040 were input into the model. The model then shows how much traffic is expected to increase and what roads and intersections could be expected to become more congested.

Framework for Transportation Investments

The framework for transportation decision-making included these steps:

- **Outcomes:** Defining goals and objectives that the community wants the transportation system to achieve. The goals and objectives are included as a separate handout. They have been adjusted based upon feedback
- **Performance Measures:** Based on input and data available, performance measurements have been developed to show how well a particular project addresses study goals.
- **Scenarios/alternatives:** Three draft scenarios have been developed, one for each of the three direct transportation goals for review by the TAC and the Steering Committee.

- **Priority Projects**: The next step will be to take community input as well as test some of the key projects, and develop project costs. The performance measures will be used to select key projects.

Some of the key types of projects to evaluate will be:

- Intersection capacity
- Safety projects addressing crash locations
- ITS projects such as signal coordination to improve traffic flow
- Widening street segments
- Upgrading rural streets and highways to urban/suburban standards
- Improving routes used for freight or creating by-passes to move freight out from the center part of the city
- Determine what (if any) new railroad crossings should be constructed
- Determine if there are ways to provide more direct north-south routes
- Determine what improvements are needed to improve conditions for walking and biking
- Move forward with a separate transit feasibility study to identify transit options

The next steps will be to ask these questions to the Steering Committee. The travel model will be used to show which roadway projects provide the greatest traffic benefits. The level of funds available will be estimated, as well as showing other funding options and how any new funds could be used.