1. Call to Order.

2. Safety Briefing.

3. Introduction of all current Public Transportation Advisory Committee (PTAC) members.

4. Approval of minutes from September 27, 2016 meeting. (Action)

5. TxDOT’s Public Transportation Division Director’s report to PTAC regarding public transportation matters.

6. Update on transit needs assessment work. (Action)

7. Review and discussion of areas of Texas Administrative Code under consideration for 2017 rulemaking efforts. (Action)

8. Discussion and development of PTAC Work Plan based on PTAC’s guiding principles and comments made at the January 22, 2015 meeting. (Action)

9. Public Comment – Public comment will only be accepted in person. The public is invited to attend the meeting in person or listen by phone at a listen-in toll-free number: 1-855-437-3563 [US] with attendee access code: 598 304 40. The meeting transcript will be placed on the Internet following the meeting.

10. Propose and discuss agenda items for next meeting; confirm date of next meeting. (Action)

11. Adjourn. (Action)

I certify that I have reviewed this document and that it conforms to all applicable Texas Register filing requirements.

CERTIFYING OFFICIAL: Joanne Wright, Deputy General Counsel, (512) 463-8630.
AGENDA ITEM 4
AGENDA ITEM 1: Call to Order.
Rob Stephens called the meeting to order at 1:07 P.M.

AGENDA ITEM 2: Safety Briefing (taken out of order).
Josh Ribakove gave a safety briefing for attendees at 1:17 P.M.

AGENDA ITEM 3: Approval of minutes from April 19, 2016 meeting (taken out of order). (Action).

MOTION J.R. Salazar moved to approve the April 19, 2016 meeting minutes.
SECOND Christina Crain seconded the motion.

The motion passed unanimously at 1:19 P.M.

AGENDA ITEM 4: TxDOT’s Public Transportation Division Director’s report to the committee regarding public transportation matters (taken out of order).
Eric Gleason began his report at 1:09 P.M. The report touched on TxDOT’s recent Legislative Appropriations Request (LAR); potential revisions to state formula funding rules; PTAC committee appointments; audits of TxDOT-PTN; and the National Safety Council Award for 2016, which was received by the Central Texas Rural Transit District.

Comment from J.R. Salazar

AGENDA ITEM 5: Discussion of performance based reporting (Action).
John McBeth led this discussion beginning at 1:20 P.M. All committee members participated. TxDOT-PTN Division Director Eric Gleason offered to re-engage the Texas Transportation Institute (TTI) to look again at coverage and span of service and give a presentation on those items at the next committee meeting.

No action taken.

**AGENDA ITEM 6: Discussion and development of PTAC Work Plan based on PTAC’s guiding principles and comments made at the January 22, 2015 meeting (Action).**

Rob Stephens led this discussion beginning at 1:48 P.M.

Comments from all committee members.

No action taken.

**AGENDA ITEM 7: Public Comment**

Rob Stephens introduced this item at 1:53 P.M. There were no public comments at this meeting.

**AGENDA ITEM 8: Propose and Discuss Agenda Items for Next Meeting; confirm Date of Next Meeting (Action).**

Rob Stephens initiated and led this discussion beginning at 1:54 P.M.

Proposed agenda item: Report by TTI on coverage and span of service.

The next meeting is tentatively scheduled for Thursday, January 26, 2017 – time and location TBD.

**AGENDA ITEM 12: Adjourn (Action).**

**MOTION**  John McBeth moved to adjourn.

**SECOND**  J.R. Salazar seconded the motion.

Meeting adjourned at 2:00 P.M.
AGENDA ITEM 6
Texas Transit Needs Assessment

PTN Operator's Meeting | Jan. 25, 2017

Michael J. Walk
m-walk@tti.tamu.edu
512-407-1135
Previous Transit Needs Assessment

Getting up to Threshold:
Transit Districts with and without 12-hour Weekday Service

Before Investment
9.1 million people have access to 12-hour weekday service.

After Investment
14.1 million people have access to 12-hour weekday service.

For an investment of $8.7 million annually, we can provide 5 million more people with 12-hour weekday service.

- Green: Urban Transit District meets span threshold
- Green: Rural Transit District meets span threshold
- Red: Urban Transit District does not meet span threshold
- Pink: Rural Transit District does not meet span threshold
- Gray: Counties excluded from analysis

Note:
1. For a transit district to meet the threshold, any local bus, regional bus, and general public demand-response services operated by the district must provide at least a 12-hour weekday service.
2. Population is projected to 2019 using the Texas State Data Center data in migration scenario 0.5.
Agenda

- Purpose and benefits of an improved Transit Needs Assessment (v. 2.0).
- Approach and tasks for Needs Assessment 2.0
- Project timeline.

The goals of this presentation:
- Inform you of what TTI will do for TxDOT.
- Prepare you for requests for information and feedback.
- Collect your thoughts on any serious issues in the project.
Purpose and Benefits of Needs Assessment 2.0

Needs Assessments:
- Identify any gaps between current and desired realities.
- Form foundation for resource requests.

Weaknesses of Previous Needs Assessment:
- Estimated costs using average operating cost / span hour without differentiating by mode.
- Did not use actual service areas; instead, treated all areas in a transit district as having equal service.

Purpose of Needs Assessment 2.0
- Identify areas where 12-hour weekday service doesn't exist.
- Estimate the cost to provide access to 12-hour weekday service.
- Will use actual geospatially-defined transit service coverage areas and hours of service.
  - Provides more accurate representation of varying levels of service across transit districts.
Why 12-hour Weekday Service?

- Many possible thresholds exist.
- 12-hour weekday service:
  - Recommendation from the *Transit Capacity & Quality of Service Manual (3rd edition)*.
  - Meets the need of most traditional work trips &
  - Provides some flexibility with arrival / departure times.
Purpose and Benefits of Needs Assessment 2.0

Needs Assessments:
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  - Provides more accurate representation of varying levels of service across transit districts.
Step 1: Create a Service Shapefile Geodatabase

Inventory every transit service (fixed-route, demand-responsive, flex).

Including:
- Coverage Area.
- Demand responsive = service area.
- Fixed-route = routes and stops.
- Days & Hours of Service.
### Layer 3: Commuter Bus Stops

<table>
<thead>
<tr>
<th>OBJECTID</th>
<th>Shape</th>
<th>AgencyID</th>
<th>AgencyName</th>
<th>Mode</th>
<th>StopID</th>
<th>StopName</th>
</tr>
</thead>
<tbody>
<tr>
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<td>R14</td>
<td>Fort Bend County</td>
<td>Commuter Bus</td>
<td>R14Stop01</td>
<td>Fairgrounds Park &amp; Ride</td>
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<tr>
<td>2</td>
<td>Point</td>
<td>R14</td>
<td>Fort Bend County</td>
<td>Commuter Bus</td>
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<td>Point</td>
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<td>Fort Bend County</td>
<td>Commuter Bus</td>
<td>R14Stop03</td>
<td>AMC Park &amp; Ride</td>
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<tr>
<td>4</td>
<td>Point</td>
<td>R14</td>
<td>Fort Bend County</td>
<td>Commuter Bus</td>
<td>R14Stop04</td>
<td>Galleria</td>
</tr>
<tr>
<td>5</td>
<td>Point</td>
<td>R14</td>
<td>Fort Bend County</td>
<td>Commuter Bus</td>
<td>R14Stop05</td>
<td>Greenway Plaza</td>
</tr>
<tr>
<td>6</td>
<td>Point</td>
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<td>Fort Bend County</td>
<td>Commuter Bus</td>
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<td>Texas Medical Center</td>
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</table>

### Layer 4: Flexible Transit Locations

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<th>Shape</th>
<th>AgencyID</th>
<th>AgencyName</th>
<th>Mode</th>
<th>Place</th>
<th>Operating Days</th>
<th>Operating Start Time</th>
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<td>Point</td>
<td>R14</td>
<td>Fort Bend County</td>
<td>Flexible Transit</td>
<td>Richmond</td>
<td>Mon-Fri</td>
<td>8:00 AM</td>
<td>5:00 PM</td>
<td>0</td>
</tr>
<tr>
<td>2</td>
<td>Point</td>
<td>R14</td>
<td>Fort Bend County</td>
<td>Flexible Transit</td>
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<td>Mon-Fri</td>
<td>8:00 AM</td>
<td>5:00 PM</td>
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</table>
## Example Data for the Database

### Layer 1: Demand-Response Service Area

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<th>AgencyName</th>
<th>Mode</th>
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### Layer 2: Commuter Bus Routes

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<th>OBJECTID</th>
<th>Shape</th>
<th>AgencyID</th>
<th>AgencyName</th>
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<tr>
<td>1</td>
<td>Polyline</td>
<td>R14</td>
<td>Fort Bend County</td>
<td>R14Route01</td>
<td>AMC to West Bellfort</td>
<td>Mon-Fri</td>
<td>4:40 AM</td>
<td>6:40 PM</td>
<td>6.75 hours</td>
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<tr>
<td>2</td>
<td>Polyline</td>
<td>R14</td>
<td>Fort Bend County</td>
<td>R14Route02</td>
<td>UH/AMC to Uptown/Galleria</td>
<td>Mon-Fri</td>
<td>4:40 AM</td>
<td>6:40 PM</td>
<td>6.75 hours</td>
</tr>
<tr>
<td>3</td>
<td>Polyline</td>
<td>R14</td>
<td>Fort Bend County</td>
<td>R14Route03</td>
<td>UH/AMC to Greenway Plaza</td>
<td>Mon-Fri</td>
<td>4:40 AM</td>
<td>6:40 PM</td>
<td>6.75 hours</td>
</tr>
<tr>
<td>4</td>
<td>Polyline</td>
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<td>R14Route04</td>
<td>West Bellfort to Greenway Plaza</td>
<td>Mon-Fri</td>
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<td>6.75 hours</td>
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<tr>
<td>5</td>
<td>Polyline</td>
<td>R14</td>
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<td>R14Route05</td>
<td>UH/AMC to TMC</td>
<td>Mon-Fri</td>
<td>11:00 AM</td>
<td>1:00 PM</td>
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### Layer 3: Commuter Bus Stops

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<td>0</td>
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</tbody>
</table>

The map below illustrates the different types of transit shapes:

- **Flexible Transit Shapes**
- **Fixed-Route Shapes**
- **Bus Stop Shapes**
Creating the Service Shapefile Geodatabase

1. **Create Database Structure**
   - Tables and service attributes to enable analysis.

2. **Update Existing Service Shapefiles**
   - TTI has many existing shapefiles from previous work.
   - TTI will check with transit districts and update existing shapefiles.

3. **Data Collection Protocol**
   - TTI will create a step-by-step protocol to make collecting missing service information as easy as possible.
   - Three districts will be chosen to pilot the collection protocol.

4. **Collect Service Shapefile Data**
   - Demand information:
     - Coverage area
     - Basic and Transit Service
   - Field work:
     - Routes (including any crosstown segments)
     - Stops (if already created)
     - Days and hours of service

5. **Map Data & Confirm with Transit Districts**
   - Generate service coverage maps for each transit district.
   - Email maps to districts for their review and confirmation.
Create Database Structure

Tables and service attributes to enable analysis.
Update Existing Service Shapefiles

- TTI has many existing shapefiles from previous work.
- TTI will check with transit districts and update existing shapefiles.
Data Collection Protocol

TTI will create a step-by-step protocol to make collecting missing service information as easy as possible.

Three districts will be chosen to pilot-test the collection protocol.
Collect Service Shapefile Data

- Demand responsive:
  - Coverage area.
  - Days and Hours of Service.
- Fixed-route:
  - Routes (including any closed-door segments).
  - Stops (if already created).
  - Days and Hours of Service.
Map Data & Confirm with Transit Districts

- Generate service coverage maps for each transit district.
- Email maps to districts for their review and confirmation.
Step 2: Gap Analysis

- Identify which service shapefiles have 12-hour weekday service.
- Identify which regions (with population) are not covered by AT LEAST ONE mode of 12-hour weekday service.
  - Only looking for regions currently inside the official boundaries of state-funded transit districts.
- Share gap analysis results with each transit district for discussion and confirmation.
- Estimate hours needed to expand 12-hour weekday service to gap areas.
Step 3: Cost Estimate

Accounting for Inflation
TTI will update the Transit Cost Index (TCI) to project transit operating costs into the 2020-2021 biennium.

Estimating the Service Cost in the 2020-2021 Biennium
- Use the estimated increase in hours from Step 2.
- Estimate costs of added hours of service using the *cheapest* mode for each transit district.
- Cost estimates will be based on the mode's average cost per span hour (not on zero-based budgets).
Step 4: Outcomes Analysis & Report

Outcomes Analysis

- TTI will demonstrate how Texans' access to transit and to opportunity will be improved with 12-hour weekday service.
- TTI will look for the best methods of estimating and communicating the benefit.

Final Report & Presentation

- Prepare final technical report.
- Prepare summary presentation.
- Prepare a two-page fact sheet.
Summary

The Needs Assessment 2.0 will:

- Provide a more robust, geospatial assessment of where exactly 12-hour weekday service is and is not being provided by Texas state-funded transit districts.
- Estimate the cost of providing 12-hour weekday service to all people living within the boundaries of state-funded transit districts.
- Provide an analysis of positive outcomes associated with providing 12-hour weekday service.
Texas Transit Needs Assessment

PTN Operator's Meeting | Jan. 25, 2017

Michael J. Walk
m-walk@tti.tamu.edu
512-407-1135
Get Started

- Present at PTN Semi-Annual Operators' Meeting.
- Present at Public Transit Advisory Committee.
- Collect feedback about project plan.

Jan 2017
Feb 2017

Service Shapefile Geodatabase

- Create data structure
- Create data collection protocol
- Pilot test protocol
- Collect and create service shapefiles for all transit districts
Gap Analysis & Transit Cost Index

- Perform Gap Analysis (find where 12-hour weekday service isn't but should be)
- Project transit cost inflation through 2020-2021 biennium.

Jul 2017
Aug 2017

Cost Estimate

- Based on gaps and transit cost inflation, estimate cost to provide 12-hour weekday service to all Texans in state-funded transit districts.
Outcomes Analysis

- Quantify benefits of providing 12-hour weekday service using best practices.

Sep 2017
Dec 2017

Issue Final Report & Presentation

- Technical report.
- Summary presentation.
- Two-page fact sheet.
AGENDA ITEM 8
1. Support Public Transportation

- Goal: Implement an efficient, effective, and sustainable public transportation system.
  - Objective: Strategically leverage all available resources to maximize service provided throughout the state.
    - Task: Develop consistent and transparent methods to award funds (e.g. §5310 Program, §5311 Program, and Transportation Development Credits.)
  - Objective: Increase financial stability of the state’s transit providers
    - Task: Identify, develop, and implement options to accommodate the lag in federal funding availability.
    - Task: Explore the creation of a reserve fund to provide gap funding, loans, and/or lines of credit.

- Goal: Support financial sustainability of local, state, and federal investments in the maintenance and expansion of critical transportation assets.
  - Objective: Strategic and aggressive pursuit of competitive federal grant funding.
    - Task: Develop 3-year list of capital project needs statewide.
    - Task: Develop long-term strategic plans for investment.
  - Objective: Improve individual and collective planning competencies and financial capacity within agencies.
    - Task: Develop and implement leadership forum (particularly focused on best practices for financial stability).
  - Objective: Encourage and support the recruitment, retention, and training of personnel.
    - Task: Develop innovative financing training/knowledge sharing opportunities.

- Goal: Conduct regular evaluations of finding initiatives and results to guide future direction and decision-making activities.
  - Objective: Achieve continuous service performance improvements.
    - Task: Review past program funding, develop best practices and performance metrics for investments that maximize services.
    - Task: Review past investments and develop best practices for evaluation of new fund development and its impacts on maintenance and capital.
2. Promote Coordinated Transportation

- **Goal:** Increase coordination to maximize the availability and use of transportation resources (funding, services, etc.)
  
  - **Objective:** Develop and implement an approach to the coordinated call for projects that exhibits a commitment to coordination.
    
    - **Task:** Review previous §5310, §5310, JARC and New Freedom investments under the coordinated call and evaluate coordination best practices for coordination of funding, services, and/or community participation.
    
    - **Task:** Develop metrics and funding criteria that promote best practices in coordinated calls for projects.
    
    - **Task:** Develop advance trainings that build coordinated call applicants’ understanding of the desired outcomes, requirements, and suggested approaches for a successful application.

  - **Objective:** Develop metrics that will allow evaluation of the funding formula’s consistency with the strategic values of regional coordination.
    
    - **Task:** Define strategic values for coordination.
    
    - **Task:** Develop metrics for coordination.
    
    - **Task:** Test evaluation of the funding formulas based on coordination metrics.

- **Goal:** Encourage and reward innovation.
  
  - **Objective:** Develop investment practices and grant management policies that support innovation and entrepreneurial approaches to regional coordination.
    
    - **Task:** Research and review best practices at all levels for innovation and entrepreneurial approaches to regional coordination.
    
    - **Task:** Establish metrics and goals for TxDOT-implemented best practices.

- **Goal:** Support initiatives to create sustainable communities.
  
  - **Objective:** Understand what local jurisdictions are doing to promote sustainability and the implications for public transportation in Texas.
    
    - **Task:** Research what local jurisdictions are doing to create sustainable communities.
    
    - **Task:** Evaluate research to determine possible implications for PTN.

- **Goal:** Conduct regular evaluations of funding initiatives to guide future direction and decision-making activities.
  
  - **Objective:** Achieve continuous service performance improvements.
- Task: Review past programs and develop best practices for performance-based evaluation of coordination activities, projects, and programs.
- Task: Review past investments and develop best practices for evaluation of investments via the coordinated call for projects.