AGENDA ITEM 3
Committee Members Present and Participating:
John McBeth, Chair (selected by the committee during this meeting – Agenda Item 3)
J.R. Salazar
Ken Fickes

Committee Members Participating via Teleconference:
Michelle Bloomer
Jim Cline, Vice Chair (selected by the committee during this meeting – Agenda Item 3)

TxDOT Present and Participating:
Eric Gleason, Director, Public Transportation Division (PTN)
Josh Ribakove, Communications Manager, PTN

Non-TxDOT Present and Participating:
Michael Walk, Research Scientist, Texas A&M’s Texas Transportation Institute (TTI)
James Cardenas, Research Scientist, Texas A&M’s Texas Transportation Institute (TTI)

AGENDA ITEM 1: Call to Order.
John McBeth called the meeting to order at 1:00 P.M.

AGENDA ITEM 2: Safety Briefing.
Josh Ribakove gave a safety briefing for attendees at 1:01 P.M.

AGENDA ITEM 3: Selection of a new chairperson and vice chairperson (Action).
John McBeth introduced this item at 1:02 P.M.

MOTION Ken Fickes nominated John McBeth for committee chair.
SECOND J.R. Salazar seconded the motion.

The motion passed unanimously at 1:03 P.M.

MOTION John McBeth nominated Jim Cline for committee vice chair.
SECOND Ken Fickes seconded the motion.

The motion passed unanimously at 1:04 P.M.

AGENDA ITEM 4: Approval of minutes from January 18, 2018 meeting (Action).
John McBeth opened this item at 1:04 P.M.
MOTION  J.R. Salazar moved to approve the January 18, 2018 meeting minutes.

SECOND  Ken Fickes seconded the motion.

The motion passed unanimously at 1:04 P.M.

AGENDA ITEM 5: TxDOT’s Public Transportation Division Director’s report to the committee regarding public transportation matters.

Eric Gleason began his report at 1:05 P.M. The report touched on federal funding, anticipated Commission action through June 2018, the Legislative Appropriations Request letter that PTAC will be working on over the next several months, and Transit Asset Management plans.

AGENDA ITEM 6: Follow-up presentation by Texas A&M’s Texas Transportation Institute (TTI) on Texas transit needs assessment. Committee discussion of near-term funding priorities. (Action).

John McBeth introduced this topic at 1:10 P.M. Eric Gleason provided some context for today’s presentation, after which Michael Walk (TTI) began the presentation.

Questions and comments from Eric Gleason, John McBeth, Jim Cline, Michelle Bloomer, James Cardenas, JR Salazar, and Josh Ribakove.

No action taken.

AGENDA ITEM 7: Discussion and development of PTAC Work Plan based on PTAC’s guiding principles and comments made at the January 22, 2015 meeting (Action).

John McBeth introduced this item at 1:58 P.M.

Questions and comments from Ken Fickes and Eric Gleason.

No action taken.

AGENDA ITEM 7: Public Comment

John McBeth introduced this item at 1:59 P.M.

There was one comment, from Jay Blazek Crossley, ED of Farm and City, a transit-focused nonprofit.

AGENDA ITEM 10: Propose and Discuss Agenda Items for Next Meeting; confirm date of next meeting (Action).

John McBeth initiated and led this discussion beginning at 2:02 P.M. Proposed agenda item: Discussion of today’s TTI report in the context of TxDOT’s Legislative Appropriations Request. The next meeting will be held in May. Date to be determined.
No action taken.

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

**MOTION** Michelle Bloomer moved to adjourn.

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

Meeting adjourned at 2:09 P.M.

Prepared by:  

Approved by:  

_________________________________________  
Josh Ribakove  
_________________________________________  
John McBeth, Chair
AGENDA ITEM 5
Texas Transit Geospatial Needs Assessment

Presentation
April 2018
Michael J. Walk, Research Scientist
Texas A&M Transportation Institute
Public Transit in Texas

- Public transit plays an important role
  - Nearly 30 million trips in FY2017
  - Used for medical appointments, shopping errands and work

Source: 2017 Texas Transit Rider Survey
Trip Purposes in Urban and Rural Areas

Source: 2017 Texas Transit Rider Survey
Public Transit in Texas

- For transit to continue its vital role
  - Must operate *where* and *when* needed
  - Must be funded to meet changing demands and costs
Building on Previous Needs Assessment Work

- Previous Needs Assessment from 2016
  - Sketch-level analysis
  - Assessed four types of need:
    - Span of service
    - Urban and rural gaps
    - Inflation
    - Population growth
  - Span analysis did not account for actual transit service areas
Texas Transit Geospatial Needs Assessment in 2017

- Data-driven, based on actual service areas and spans

- Goals
  - Where are places in Texas without transit service?
  - What current transit services do not meet a minimum span threshold?
  - How much would it cost to provide a minimum span of service across Texas?
    - Focusing on Texans living outside transit authority boundaries.
Needs Assessment Steps

1. Inventory of State-Funded Transit Services
2. Gap Analysis
3. Cost Estimation
Step 1: Inventory of State Funded Transit Services

- **Where:** Mapped all state-funded transit district service areas and routes
- **When:** Gathered service span data for all transit districts
- Transit districts confirmed accuracy of maps, service areas, and span hours
Identified areas without general public transit service and areas without service operating at the span threshold.

**STEP 2: GAP ANALYSIS**
Coverage Gaps

*Coverage Gap* = Places in Texas without general public transit service. Examples include urban gaps, gaps outside transit authorities, and gaps within transit districts.
Coverage Gap Analysis Results

Coverage Gap
Land Area:
13,400 square miles

Coverage Gap
Population:
3.5 M people

- Coverage Gap
- Excluded Coverage Gap
- Rural Transit District Boundary
- Areas Served by Transit Authorities
- Areas with Convenient Access to Transit Services
  - Urbanized Area Served by Urban Transit District

Texas A&M Transportation Institute
Span Gaps – 4 Models

*Span Gap* = Transit service does not meet span threshold.

<table>
<thead>
<tr>
<th>Model #</th>
<th>Title</th>
<th>Weekday Span Threshold</th>
<th>Saturday Span Threshold</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>12-hour weekday service</td>
<td>12 hrs.</td>
<td>0 hrs.</td>
</tr>
<tr>
<td>2</td>
<td>14-hour weekday service</td>
<td>14</td>
<td>0</td>
</tr>
<tr>
<td>3</td>
<td>12-hour weekday, 8-hour Saturday service</td>
<td>12</td>
<td>8</td>
</tr>
<tr>
<td>4</td>
<td>14-hour weekday, 8-hour Saturday service</td>
<td>14</td>
<td>8</td>
</tr>
</tbody>
</table>
Span Gap Analysis Results

Needed Percent Increase in Service Hours for Each Span Model

<table>
<thead>
<tr>
<th>Span Model</th>
<th>Percent of Span Hours Needed</th>
</tr>
</thead>
<tbody>
<tr>
<td>12-hour weekday</td>
<td>4.8%</td>
</tr>
<tr>
<td>14-hour weekday</td>
<td>12.5%</td>
</tr>
<tr>
<td>12-hour weekday, 8-hour Saturday</td>
<td>9.4%</td>
</tr>
<tr>
<td>14-hour weekday, 8-hour Saturday</td>
<td>17.1%</td>
</tr>
</tbody>
</table>
Span Gap Analysis Results: Demand Response

Assuming a 12-hour weekday, 8-hour Saturday span threshold
Span Gap Analysis Results: Demand Response Services

Percent of Demand-Response Services Needing More Span Hours to Reach the Span Threshold

- No hours needed: 47%
- 5 or less hours: 4%
- 5 to 10 hours: 16%
- 10 to 15 hours: 6%
- 15 to 20 hours: 6%
- More than 20 hours: 21%

Assuming a 12-hour weekday, 8-hour Saturday span threshold
Span Gap Analysis Results: Fixed/Flexible-Route Local Bus Services

Percent of Local Bus Services Needing More Span Hours to Reach the Span Threshold

<table>
<thead>
<tr>
<th>Hours Needed</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>No Hours</td>
<td>50%</td>
</tr>
<tr>
<td>5 or less</td>
<td>7%</td>
</tr>
<tr>
<td>5 to 10</td>
<td>20%</td>
</tr>
<tr>
<td>10 to 15</td>
<td>10%</td>
</tr>
<tr>
<td>15 to 20</td>
<td>8%</td>
</tr>
<tr>
<td>More than 20</td>
<td>5%</td>
</tr>
</tbody>
</table>

Assuming a 12-hour weekday, 8-hour Saturday span threshold.
STEP 3: COST ESTIMATION

Estimated the costs of providing all Texans* with a standard span of service.

*All Texans living outside of transit-authorities’ service areas or excluded coverage gaps.
Cost Estimation Procedure

- Estimate annual operating costs to fill span gaps using operating data from FY2016
- Estimate one-time and annual costs to fill coverage gaps with full span general-public demand-responsive service; include
  - Operating costs based on a regional conditions
  - Capital costs for vehicle purchases and replacement
## Span Gap Cost Estimates

($ in millions)

<table>
<thead>
<tr>
<th>Span Model</th>
<th>Current FY2016 Operating Cost</th>
<th>Additional Annual Operating Cost</th>
<th>Total Annual Operating Cost</th>
</tr>
</thead>
<tbody>
<tr>
<td>12-hour weekday</td>
<td>$208.5</td>
<td>$13.6</td>
<td>$222.1</td>
</tr>
<tr>
<td>14-hour weekday</td>
<td>$208.5</td>
<td>$31.1</td>
<td>$239.6</td>
</tr>
<tr>
<td>12-hour weekday, 8-hour Saturday</td>
<td>$208.5</td>
<td>$25.5</td>
<td>$234</td>
</tr>
<tr>
<td>14-hour weekday, 8-hour Saturday</td>
<td>$208.5</td>
<td>$43.0</td>
<td>$251.5</td>
</tr>
</tbody>
</table>

Additional costs reflect the estimated new FY2016 operating expenses if transit services were operated at the given span thresholds instead of current service levels. These costs would be ongoing.
## Coverage Gap Cost Estimates

**($ in millions)**

<table>
<thead>
<tr>
<th>Span Model</th>
<th>One-Time Cost</th>
<th>Annual Ongoing Costs</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Number of Vehicles</td>
<td>2016 Vehicle Cost</td>
</tr>
<tr>
<td><strong>12-hour weekday</strong></td>
<td>234</td>
<td>$18.3</td>
</tr>
<tr>
<td><strong>14-hour weekday</strong></td>
<td>234</td>
<td>$18.3</td>
</tr>
<tr>
<td><strong>12-hour weekday, 8-hour Saturday</strong></td>
<td>234</td>
<td>$18.3</td>
</tr>
<tr>
<td><strong>14-hour weekday, 8-hour Saturday</strong></td>
<td>234</td>
<td>$18.3</td>
</tr>
</tbody>
</table>

The one-time cost is the vehicle purchase expense for 234 vehicles, totaling $18.3 million. However, these vehicles eventually will have to be replaced, so one-sixth of the vehicle purchase cost ($3 million) is included as an annual ongoing cost in addition to the annual operating cost in FY2016 dollars.

Annual operating costs are estimated FY2016 operating expenses for general public demand-responsive service operated in all gaps at the given span thresholds.
Estimated Total Annual Costs to Fill All Gaps ($ in millions)

Current FY2016 Operating Cost = $208.5 million.

- **12-hour weekday:** $14, $6, $3, $23
- **14-hour weekday:** $31, $7, $3, $41
- **12-hour weekday, 8-hour Saturday:** $26, $7, $3, $36
- **14-hour weekday, 8-hour Saturday:** $43, $8, $3, $54

*Span Gap Operating Cost  Coverage Gap Operating Cost  Coverage Gap Vehicle Replacement Cost*

*The vehicle replacement cost does not include the initial cost of $18.3 million to purchase 234 vehicles, but reflects the ongoing financial commitment to replace 234 vehicles at the end of their useful life.*
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James Cardenas
Assistant Transportation Researcher
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Jonathan Brooks
Assistant Research Scientist

Todd Hansen
Associate Transportation Researcher
T-Hansen@tti.tamu.edu

Transit Mobility Program
Texas A&M Transportation Institute
http://tti.tamu.edu/group/transit-mobility
AGENDA ITEM 6
To: Public Transportation Advisory Committee (PTAC)

In response to PTAC’s desire to examine the committee’s Guiding Principles document with an eye toward updating it, TxDOT-PTN has prepared this packet. It contains:

- PTAC activity addressing the committee’s guiding principles 2012-2018, addressed by the following categories:
  - Rules
  - Program Guidance
  - Legislative Policies/Appropriations Requests
  - Long-range Transit Planning

- Table listing PTAC’s Goals, Objectives, and Tasks as defined by the guiding principles document, and the meeting dates when these items were addressed.
  - Note: Transcripts of all PTAC meetings are available on PTAC’s web page: https://www.txdot.gov/inside-txdot/division/public-transportation/committee.html

- PTAC’s current Guiding Principles document, for reference.
PTAC Guiding Principles Activities
(Addressed by Category)
2012-2018

Rules
• Revisions to TDC rules (adopted October 2012)
• Revisions to 43 TAC 31 rules based on MAP-21 (adopted November 2013)
• Revisions to state formula and federal programs (January-November 2017)

Program Guidance
• Presentation/Discussion of 5310
• Presentation/Discussion of 5304
• Presentation/Discussion of TDC for transit projects
• Presentation on TxDOT’s TIGER VII application and subrecipients
• Discussion of performance-based reporting for public transit

Legislative Policies/Appropriations Requests
• Discussion/Comment on proposed PTAC LAR letter to commission (July 2012)
• LAR Discussion (July 2014)
• Briefing and Discussion of federal funding authorization efforts (Mar 2015)
• TTI Presentation on the effects of urbanization on transit
• Presentation and discussion on PTAC’s LARs, past and present
• Discussion of white paper on urban growth and transit funding
• TTI Presentation on ongoing TTI Needs Assessment (2016-2018)

Long-range Transit Planning
• Long-Range Planning – Presentation/Discussion of 2040 TTP
**PTAC Guiding Principles Table**  
**2012-2018**

**PART I. SUPPORT PUBLIC TRANSPORTATION**

**Goal:** Implement an efficient, effective, and sustainable public transportation system.

**Objective:** Strategically leverage all available resources to maximize service provided statewide.

<table>
<thead>
<tr>
<th>Develop consistent and transparent methods to award funds (e.g. §5310 Program, §5311 Program, and Transportation Development Credits.)</th>
<th>Progress made in 3 areas. Bus and Bus Facility Program (5339) allocation formula was changed from one based on a rather complex calculation of relative condition to one based on each agencies proportional share of total reported vehicle miles. Negative impacts on transit district consolidation are now explicitly addressed through one time awards of Federal Rural Program funding. TDC’s are now approved by the Commission at a programmatic level and no longer require individual Commission actions on a project by project basis.</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Objective:</strong> Increase financial stability of the state’s transit providers.</td>
<td>Identify, develop, and implement options to accommodate the lag in federal funding availability. Division processes continually re-worked to minimize disruption from uncertainty with federal funding. Brief discussion at Committee on Letter of No Prejudice and Pre-Award Authority with the conclusion that statutory changes are necessary to implement.</td>
</tr>
<tr>
<td>Explore the creation of a reserve fund to provide gap funding, loans, and/or lines of credit.</td>
<td>No discussion.</td>
</tr>
</tbody>
</table>

**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.

| Develop 3-year list of capitol project needs statewide. | No discussion. |

**Objective:** Improve individual and collective planning competencies and financial capacity within agencies.


**Objective:** Encourage and support the recruitment, retention, and training of personnel.

| Develop innovative financing training/knowledge sharing opportunities. | Ongoing training and conference opportunities. Best practice panels and agency spotlights at TxDOT Semi-annual Meetings. |

**Goal:** Conduct regular evaluations of funding initiatives and results to guide future direction and decision-making activities.
**Objective:** Achieve continuous service performance improvements.

<table>
<thead>
<tr>
<th>Review past program funding, develop best practices and performance metrics for investments that maximize services.</th>
<th>Committee discussion of performance factors included in funding formulas, with a decision to leave unchanged. Clarified use of NTD as source for performance data. Brief discussions on linking new funds to performance during consideration of FY18/FY19 LAR.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Review past investments and develop best practices for evaluation of new fund development and its impacts on maintenance and capital.</td>
<td>No discussion.</td>
</tr>
</tbody>
</table>

**PART II. 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.

<table>
<thead>
<tr>
<th>Review previous §5310, §5311, JARC and New Freedom investments under the coordinated call and evaluate coordination best practices for coordination of funding, services, and/or community participation.</th>
<th>General Committee recommendation and resulting action taken by the Division to focus Regional Coordination Program investments on implementation projects rather than planning for planning’s sake. Effort to identify best practice projects with opportunities for statewide application to impact overall performance.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Develop metrics and funding criteria that promote best practices in coordinated calls for projects.</td>
<td>Continue to refine Coordinated Call evaluation criteria and description of desired projects.</td>
</tr>
<tr>
<td>Develop advance trainings that build coordinated call applicants’ understanding of the desired outcomes, requirements, and suggested approaches for a successful application.</td>
<td>Traditionally offer a combination of workshop and webinar opportunities to promote understanding of requirements and expectations in Coordinated Call.</td>
</tr>
</tbody>
</table>

**Objective:** Develop metrics that will allow evaluation of the funding formula’s consistency with the strategic values of regional coordination.

<table>
<thead>
<tr>
<th>Define strategic values for coordination.</th>
<th>Done in collaboration with Lead Agencies (2016)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Develop metrics for coordination.</td>
<td>Done in collaboration with Lead Agencies (2016-2017)</td>
</tr>
<tr>
<td>Test evaluation of the funding formulas based on coordination metrics.</td>
<td>Underway. First year award based on metrics scheduled for June 2018.</td>
</tr>
</tbody>
</table>

**Goal:** Encourage and reward innovation.

**Objective:** Develop investment practices and grant management policies that support innovation and entrepreneurial approaches to regional coordination.

<table>
<thead>
<tr>
<th>Research and review best practices at all levels for innovation and entrepreneurial approaches to regional coordination.</th>
<th>Best practice panels and agency spotlight opportunities at semi-annual meetings. Hosted two best practice workshops to increase knowledge and understanding of leading edge coordination efforts around the state.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Establish metrics and goals for TxDOT-implemented best practices.</td>
<td>No discussion.</td>
</tr>
</tbody>
</table>

**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.

| Research what local jurisdictions are doing to create sustainable communities. | No discussion. |
| Evaluate research to determine possible implications for PTN. | No discussion. |

**Goal:** Conduct regular evaluations of funding initiatives to guide future direction and decision-making activities.

**Objective:** Achieve continuous service performance improvements.

| Review past programs and develop best practices for performance-based evaluation of coordination activities, projects, and programs. | Underway. |
| Review past investments and develop best practices for evaluation of investments via the coordinated call for projects. | Updated scoring procedures. Increased funding flexibility and certainty with introduction of 2 year call for projects allowing for more comprehensive assessment of investment proposals. |
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 capitol 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 funding 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 performances 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, §5311, 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.