



**Transportation Research Board
Standing Committee on Transit Management and Performance (AP010)
Triennial Strategic Plan 2017-20
Future Outlook Statement
March 2017**

Transit managers are increasingly called on to utilize performance management to: measure performance, use the results to improve overall mobility and customer experience, and quantify the benefits of transit to stakeholders. This emphasis on performance is driven by a number of factors. These include MAP-21/FAST Act requirements to drive the use of performance information for decision-making across transportation modes, increasing expectations from customers and stakeholders for transparency and accountability, and availability of “big data” to inform decisions.

The importance of transit performance management has only increased with the rise of alternative mobility options in the private sector. Transportation Network Companies (e.g. Uber, Lyft, flexible commute services), the emergence of automated vehicles, and other demographic trends present critical issues that will determine the future of transit agencies. Transit managers and researchers need to pursue a proactive and strategic vision of transit’s

future as a mobility manager. Under this vision, they need to advance the use of new technologies and integrate data and performance management tools into their business practices.

Transit providers and researchers are strategizing how public transit will continue to be a viable mobility solution in this changing transportation landscape. Transit moves people to jobs, schools, and activities, and supports sustainability, quality of life and transit oriented development. Transit agencies are called on to demonstrate their value to public and elected officials, and performance measurement is the tool to accomplish this goal. Practice-oriented research is needed on how to utilize existing customer data, such as customer feedback/complaints, and explore new methods to measure customer experience via social media and other tools.

As transit agencies seek to improve customer satisfaction amid increased competition, system performance measures will need to evolve to reflect the customer's perspective, following the lead of highways from level-of-service to customer travel time, and take full advantage of new technologies such as fare collection data, cell phones, etc. For substantive performance improvements, the scope of performance management will also need to manage the underlying drivers of system performance such as transit asset management and back-office efficiency.

Recent changes in federal requirements for transit asset management (TAM) are a cross-cutting issue that brings the application of performance management principles to physical assets, and calls for agencies to develop customer-facing and asset lifecycle measures for managing performance, risk, and costs. Transit agencies need support in maturing their performance management programs and new asset measures to inform decision-making, investment strategies, and operations.

Just as TAM has looked to best practices in other public and private sectors to inform management of physical assets (e.g., ISO, AASHTO guides), transit agency back-office functions will need similar attention. Information technology, human resources, and procurement are areas where transit agencies are often not nimble enough to deliver new services to customers (e.g., mobile payments) or evolve to new business approaches (e.g., supply chain management). These weaknesses hinder the ability of agencies to provide quality transit service. Implementation of benchmarking and sharing best practices, with other agencies and private industry, will focus improvement efforts in this area.

Emerging, Critical, and Cross-cutting Issues

The Committee has identified three key focus areas for the next three years:

1. **Transit Performance Management** - Support the ability of transit agencies to measure system performance and apply those metrics to make decisions that improve the transit product.
 - a. **Reliable transit system performance** - Examine new approaches to measuring system performance from the customer's perspective and within transit networks, including traditional networks and those established by emerging partners. Make use of new technologies and data to improve transit service and facilitate standardization of measures to support benchmarking and sharing of best practices. Promote the use of data-driven decision support tools and advanced technologies for transit management at various levels (executive, mid-manager, front-line supervisors) to monitor/adjust performance.
 - b. **Engaging the transit customer** - Transit agencies need market research to better understand customer needs and wants. How do transit agencies retain riders and attract new ones in an age of changing technologies and demographic shifts? What big data sources are available from emerging partners that provide insights into how customers make travel choices?
 - c. **Availability of transit assets to deliver service** – Development of performance measures in support of strategic Transit Asset Management. Effective comprehensive systems that support management decision-making, selection of investment priorities, and the delivery of reliable daily operations.
2. **Quantify the Benefits of Public Transit** - The benefits that transit brings to a region are often not well documented or communicated with stakeholders. This can lead public and elected officials to undervalue transit agencies. Transit moves people to jobs, schools, and activities. Transit also supports sustainability, quality of life, local and regional economies, and transit-oriented development. Document and promote measures to quantify and communicate who benefits from transit.
3. **Modernize the Transit Agency Back Office** - Information technology, human resources, and procurement are areas where transit agencies are often not nimble enough to help their agencies deliver new services to customers (e.g., mobile payments) or evolve to new business approaches (e.g., supply chain management). These weaknesses hinder the ability of agencies to provide effective transit service. Encourage the establishment of performance measures to monitor and advance the state of the practice in these areas.

AP010 Committee Strategic Plan Goals for 2017-20

Goal 1: Advance research and the state of the practice in performance based decision-making for transit management.

Goal 2: Advance and transfer knowledge between agencies, and between research and practice.

Goal 3: Provide opportunities for experts in the industry to connect with one another and meet others interested in the field of transit.

Goal 4: Attract and engage a diverse set of new and engaged members, including young members, to the Committee through organizing thought-provoking and exciting workshops.

Actions to Achieve Strategic Plan Goals for 2017-20

Goal 1 – Advance research and state of the practice in performance based decision-making

What actions should the Committee take in 2017 to pursue this strategy?

1. **Establish collaboration online through LinkedIn to facilitate brainstorming research priorities.** Develop an electronic web-based tool for improving communication between researchers and practitioners, and to develop and refine research ideas. Pose potential problem statements with a 1-2 month interim deadline.
2. **Publicize schedule for research funding due dates.** Facilitate committee contributions.
<http://www.trb.org/ResearchFunding/RFTransportationResearchBoard.aspx#tcrp>
 - a. TCRP Synthesis topic submission due in mid-March.
 - b. The Transit IDEA program reviews proposals for funding twice a year. The deadline for submitting proposals to these review cycles are May 1st and November 1st.
 - c. TCRP Regular Projects – Problem Statements are due June 15th.
 - d. TCRP Legal Research Digest series reports on legal issues associated with transit and intermodal law – Proposed Topics are requested annually in September though may be submitted anytime
3. **Contribute to session ideas for the TRB Annual Meeting – Develop and Post Calls for Papers by May 1st.**
4. **Conduct survey of Committee Members and Friends** to identify member affiliation with other TRB Committees and/or industry organizations for opportunities for research collaboration and potential funding sources. For example, State DOT-funded research, FTA-funded research, NCHRP 20-65 (AASHTO), ACRP, etc.
5. **Monitor in the middle of the year to identify what is working.**

What actions should the Committee take during the next three years to pursue this strategy?

1. Establish Research Cycle for Committee on Transit Management and Performance

- Set a research agenda for the Committee;
- Sponsor funded research and/or collaborate with other TRB Committees, subcommittees, or task forces;
- Deliver results through funded research or Committee-sponsored activities;
- Communicate value through Committee-sponsored activities; and
- Evaluate the research program and accomplishments on an annual basis.

2. Collaborate with other committees and/or industry associations to advance research.

Who on the Committee will own these actions?

1. **Committee Research Coordinator:** Linda Cherrington l-cherrington@tti.tamu.edu

2. Members and Friends of the Committee interested in research:

Oded Cats, Henry Rosen, Nigel Wilson, Ali Touran, Yuval Hadas, Ashish Bhaskar, Nat Bottigheimer, Catherine Lawson, Steve Yaffe, Harsh Zadoo

How will we measure progress?

1. Active use of online collaboration
2. Advance suggested topics, and submit topics for funded research.
 - a. TCRP Synthesis
 - b. TCRP Problem Statements
 - c. TCRP IDEA Program
 - d. TCRP Legal Research
3. Achieve funded research - success in research topic moving forward for funded research.
4. Contribute to Calls for Papers that reflect the Committee's research priorities.

Research Ideas Suggested at 2017 Committee Meeting

1. Use of technology to improve efficiency of supervision, especially for scheduled fixed route bus
2. Measuring the performance of partnerships for public transit and ride-sourcing
3. Success of Transit Asset Management, and communicating the value
4. Use of real-time data for performance measurement

Goal 2 – Advance and transfer knowledge between agencies, and between research and practice

What actions should the Committee take during the next one to three years to pursue this strategy?

1. Bridge the gap between academic research (supply) and practitioner needs and challenges (demand).
 - **Generate meaningful calls for papers, and provide incentives to respond.** Consider advising the National Research Council (or perhaps through TRB, NAS, UCTC program, TCRP) to also consider an ‘impact factor’ to rate research and help incentivize academics to act on practical/policy research demand.
 - **Develop ideas for calls for papers a year in advance, as calls for NEW research.**
 - **Reach out to agencies, and use LinkedIn, to better understand where the research need is to inform a call for papers and new problem statements.** Push research in ‘practical and policy’ areas, e.g. more applied research.
 - **Conduct one or two small - but deep - workshops on applied research at TRB that address the benefits of a performance measurement system for a transit agency.** What is the return on investment?
 - **Develop a metric to evaluate the impact of research on the industry for transit agencies to adopt, and to encourage agencies to assign staff to follow through on original research.**
 - **Develop and support a ‘research idea source’ for graduate and PhD students as a list of industry research needs** updated by committee members and friends.
2. Assist agencies/organizations with examples and methods that demonstrate how research can and has been applied.
 - **Develop presentations or a workshop with case studies/examples of agencies explaining how they have taken (TRR/TCRP) research and applied this internally.** This could be complemented by presentations with ‘evidence’ on how performance

management led to improvements that outweigh the cost of performance management itself.

- **Examples of evidence of return on investment** could be very helpful for organization executives in agreeing to adequate resources. In many organizations, there are simply not enough resources set aside for performance management. Performance right-sizing as a theme.
- **Industrialize research.** State DOTs dedicate staff to identify and support research agendas and internalize the results of research within their departments. This approach will tighten the connection between research and practice in the transit industry.
- **Hold small workshops with an executive deep dive into only one or two topics.** The idea is similar to the MIT Transit Leader Roundtable. Examples of topics include fare payment, co-operating with TNCs, or operations management. Agencies from all sizes should be able to participate. The TransitCenter would be able to assist.

How will we measure progress?

1. Evaluate the Committee's 2017 webinar.
2. Develop an annual report of progress documenting the activities that achieve this goal.
3. Assign Committee members and friends to develop and implement a strategy for how to evaluate the impact of these activities.

Goal 3 – Provide opportunities for experts in the industry to connect and meet others interested in the field of transit management and performance management

What actions should the Committee take in 2017 to pursue this strategy?

1. **Entice contacts, and support professional relationships. Share one-page summaries of all Committee-sponsored events including workshops, lectern sessions, and Committee meetings.** Identify the research topic, speakers, goals of the workshop, and the results. Include names, affiliations, and brief description to help others to reach out to speakers when there are overlapping areas of interest.

2. **Record and disseminate the AP010 Webinar scheduled for Spring 2017.** Webinars will reach a wider audience and serve to share knowledge among agencies.
3. **Support a list serve on specific topics, such as for asset management, while acknowledging confidentiality issues.** The list serve is a means to gauge interest and a repository for developing synthesis and problem statements.
4. **Provide links between the Committee website and other relevant websites.**

What actions should the Committee take in the next 3 years to pursue this strategy?

1. **Evaluate the activities conducted 2017** to identify what works and next steps.
2. **Publish and maintain a subject matter expert list and a central repository of information.**
3. **Decide what the best channel of communication is** within the Committee and with those interested in public transit, potentially including a website, mailing list, LinkedIn group, etc. The best channel of communication has to evolve on its own. Make different options available.
4. **Expand the core representation of transit agencies at the annual meeting** and especially from agencies with new staff.
5. **Disseminate the one-page summaries, and encourage sharing:** ‘...if you know of anyone who would like to be included in this dialogue...’

Who on the Committee owns these actions?

Alla Reddy is leading the 2017 webinar, and has offered to coordinate the one-page summaries of Committee-sponsored events from 2017 TRB Annual Meeting. Alla will lead research on different communication options, and share ideas with the Committee.

How will we measure progress?

1. **Feedback on what is disseminated is critical for shaping this process as it matures from the one-year plan to the three-year plan.** This will also serve as a source for problem and synthesis statements.
2. **Evaluation of activities will be determined after the first year** and revisited every three years as part of the strategic planning process.

Goal 4 – Attract and engage a diverse set of new and engaged members, including younger members through exciting workshops

What actions should the Committee take in 2017 to pursue this strategy?

1. Start the webinar process (but not the competition due to the timing of sponsorships and TRB deadlines in August).
2. Work out the details of the program in 2017 so the program could be announced at TRB 2018 with webinars could soon thereafter.

What actions should the Committee take in the next 3 years to pursue this strategy?

1. **Identify and work with organizations that engage younger people** to reach a larger audience.
2. **Identify key skills that new members would like to gain**, but might not have access to in their current job.
3. **To teach them the skills, host a series of webinars throughout the year (2-4) that would teach them basic skills.** Use a presentation from the committee meeting. Determine the selection of topics, sponsors, etc.
4. **Set up projects or competitions to practice those skills and attempt to solve problems of practical interest** to the industry (similar to Transportation Camp). The committee would invite the winner of this competition to present at our annual meeting at TRB (since it is usually easier for young employees to attend the conference if they are a speaker). This project could also be used to build resumes and could help in an interview process.