2017 AMPO Annual Conference – Call for Presentations Submission Form

Upon completion of this form, please email it to Bill Keyrouze at bkeyrouze@ampo.org
AND Rachel Roper at rroper@ampo.org by April 14th, 2017.

NAME(s): **Jeff Pollack**

NAME OF PRESENTER(s) (*if different than above)*:

PRESENTER(s') BRIEF BIO(S) (75 words or less):
Jeffrey Pollack, Director of the Corpus Christi Metropolitan Planning Organization (MPO), is a big picture community and environmental planner who is passionate about the role of multi-modal mobility planning in the design and growth of livable communities. Jeff has a Bachelor's Degree from Northwestern University and a Master's Degree from Duke University. Jeff is a certified planner through the American Institute for Certified Planners and is an Envision Sustainability Professional through the Institute for Sustainable Infrastructure.

ORGANIZATION(s): **Corpus Christi MPO**

PHONE(s):   **XXX-XXX-XXXX**   EMAIL(s): **XXXXX@XXXX.XXX**

TOPIC/SUBTOPIC AREA(s): **Performance measures (performance-based project prioritization and evaluation of the metropolitan mobility system)**

PRESENTATION TITLE:
Performance Metrics: Making Lemonade out of State and Federal Requirements

ESTIMATED LENGTH OF PRESENTATION (*Please note: most submissions will be considered for 20-minute presentation slots. If selected, it will be included as part of a panel comprised of various proposals.)*: **Scalable. 20 minutes minimum. Could very easily be expanded to 45 minutes or more to allow for more dialogue/peer exchanges as well as more coverage of the use of performance metrics in evaluating the implementation of the MPO's Bicycle Mobility Program.**

SUMMARY OF PROPOSAL (*This is intended to give a brief overview of your proposal. Please limit your summary to 2-3 sentences.):*

The Corpus Christi MPO (CCMPO) has historically enjoyed a congenial and collaborative process for selecting transportation projects. In the face of federal and

state mandates to establish a performance basis for project selection, CCMPO created a multi-tiered evaluation framework for:

1. Quantitatively comparing—and prioritizing—capital projects proposed on existing facilities
2. Evaluating the multi-modal functionality of the metropolitan transportation system overall
3. Evaluating the implementation of its Strategic Plan for Active Mobility, Phase I - Bicycle Mobility, including use of novel Web-based tools for tracking performance metric data over time to foster transparency, engagement, and accountability.

This presentation will detail the creation and application of the CCMPO's evaluation framework, detailing the stepwise methodology by which the framework was defined, vetted, refined, and ultimately used successfully in the organization's planning process. It will include results of a real world pilot application of performance-based project selection and Bicycle Mobility Program evaluation with an emphasis on practical lessons learned.

SPECIAL NOTES *(Please list any special considerations or notes to the reviewers.):* **Please see above regarding presentation length.**

FULL DESCRIPTION OF PRESENTATION IDEA (*Please limit your description to 1,000 words.*):

Introduction
As a relatively small (~350K population) Transportation Management Area (TMA) with a notably manageable number of voting member entities (seven), the Corpus Christi MPO (CCMPO) has historically enjoyed a congenial and collaborative process for selecting transportation projects. In the face of federal (MAP-21 and FAST Act) and state (Texas House Bill 20) mandates to establish and document a performance basis for project selection, CCMPO created a multi-tiered evaluation framework for:

1. Quantitatively comparing—and prioritizing—capital projects proposed on existing facilities

2. Evaluating the multi-modal functionality of the metropolitan transportation system overall

3. Evaluating the implementation of its Strategic Plan for Active Mobility, Phase I - Bicycle Mobility, including use of novel Web-based tools for tracking performance metric data over time to foster transparency, engagement, and accountability.

This presentation will detail the creation and application of the CCMPO's evaluation framework, detailing the stepwise methodology by which the framework was defined, vetted, refined, and ultimately used successfully in the organization's planning process. This presentation will include results of a real world pilot application of performance-based project selection with an emphasis on practical lessons learned.

Evaluation Framework Overview

CCMPO's evaluation framework includes roughly 55 discrete, measurable *performance metrics* for use in evaluating progress toward four *goal areas* that the entities in the MPO have established for the region:

➢ Two-thirds of these metrics are used to **evaluate and prioritize proposed projects** in terms of eight *performance measurement topics*

➢ Two-thirds** will be used to periodically **evaluate the overall, multi-modal functionality of the metropolitan transportation system**. **One-third of the performance metrics apply to both individual project prioritization and system-wide scale evaluation.*

This framework is infinitely customizable in terms of the relative weighting of individual performance metrics and/or aggregated performance measurement topic or goal area scores:

Goal Areas	Performance Measurement Topics	Performance Metrics
Safety	Crashes	Annual total crashes (all types)
		Annual total vehicle-on-vehicle crashes
		Annual total vehicle-on-pedestrian crashes
		Annual total vehicle-on-bicycle crashes
		Annual Averages Crashes (all types)/Mile
		Annual Average Vehicle-on-vehicle Crashes/Mile
		Annual Average Vehicle-on-pedestrian Crashes/Mile
		Annual Average Vehicle-on-bicycle Crashes/Mile
	Injuries and Fatalities	Annual Total Incapacitating Injuries
		Annual Total Fatalities (all modes)
		Annual Total Pedestrian & Bike Fatalities
		Annual Average Incapacitating Injuries (all modes)/VMT
		Annual Average Fatalities (all modes)/VMT
		Annual Average Pedestrian & Bike Fatalities/VMT
System Reliability (Preservation)	Efficiency and Economic Competitiveness (Connectivity?)	Buffer Index
		Travel Delay
		Travel Time Index
		TomTom Traffic Index
		Inrix Average Annual Hours Spent in Congestion
		Level of Service (LOS)
		Volume (ADT) / design (daily) capacity ratio
		Ratio: (% r in total VMT) to (% r in population) for 5 yrs
		Total Freight Throughput (Port tonnage)
	Infrastructure Condition	Pavement Condition Index (PCI)
		On Freight Priority Network?
		Average PCI of Freight Priority Network
Multimodal Use and Opportunity	Active Mobility	On Bicycle Mobility Network?
		Bike ADT
		Miles of Cycle Track Constructed in Reporting Year
		Miles of Off-road Multi-use Trails Constructed in Reporting Year
		Miles of Bicycle Boulevards Implemented in Reporting Year
		% of RTA Stops/Stations with Bike Parking
		% of Individuals Walking to Work
		% of Individuals Cycling to Work
	Transit	Project on a Transit Fixed Route?
		Project on a High Frequency Transit Fixed Route?
		Annual Transit Boardings (fixed route)
		Annual Bike Boardings (fixed route)
		Annual Non-ambulatory Boardings (fixed route)
		Annual Transit Revenue Service Hours
Stewardship	Equity / Accessibility	Project in "Equity Target Area"?
		Project limits include direct access to school
		Project limits include direct access point to low income housing
		Project limits include direct access point to primary food resource
		Project limits include direct access to primary medical resource
		Project limits include direct access to civic institution
	Environmental Impact	Project Avoids "Environmental Target Areas"?
		Project Includes Water Quality BMP?
		Number of 8-hour Exceedances above Federal Ozone Standard

Pilot Application of Performance Metrics
In spring of 2017, CCMPO staff completed preliminary scoring of all projects in its MTP to establish a data basis for collaborative project selection in creation of a 10-year Plan (as required by Texas House Bill 20). In so much as this exercise was the first full scale application of the evaluation framework, it:

➢ Allowed member entities to see how previously identified priority project compared in terms of key individual metrics or in terms of broader Performance Topic Areas

➢ Highlighted the challenge of quantifying the benefit of a proposed project independent of the context of existing conditions

➢ Hybridized a purely quantitative approach with the CCMPO's long-standing qualitative/collaborative process for project selection

This presentation will explore each of these aspects of implementing a performance-based approach to project selection.

Bicycle Mobility Program Performance Evaluation
CCMPO's Bicycle Mobility Plan, which was presented at AMPO 2016, has been identified as a national case study by Transportation for America. This data-driven plan defines a 290-mile regional Bicycle Mobility Network that connects riders with key destinations such as schools, transit, and groceries in order to foster cycling as a viable transportation alternative.

The Plan prescribes exactly what infrastructure should be installed on every segment of the network in order to uphold the standard of safety and service that the community is seeking (per extensive stakeholder engagement). It also includes around 70 best practices related to infrastructure; education and encouragement programs; public policy and code reform; and program evaluation.

Buildout of the Bicycle Mobility Network prescribed in the Plan is underway, and CCMPO has initiated a program for evaluating three principal performance measurement topics: rider experience, bicycle demand, and safety.

This presentation of the CCMPO's evaluation framework will include a discussion of bicycle mobility performance metrics and will share lessons learned about:
➢ Acquiring performance metric data

➢ Establishing performance baselines, benchmarks, and targets

➢ Using performance data to build political support of capital investments