**NCHRP 23-07: GUIDE TO EFFECTIVE METHODS FOR SETTING TRANSPORTATION PERFORMANCE TARGETS**

**Prepared for**

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NCHRP 23-07 Effective Target Setting Implementation

The guidebook on target setting provides useful instructions to practitioners on target setting methods, including how to assess target setting options, execute recommended methods, and use the target setting process most meaningfully to improve performance. While the guide can be used on its own, increased engagement with the content and extensions to the work will help practitioners to benefit most from the guidebook. The following are possible implementation tasks to create these engagement opportunities and provide technical assistance in implementing methods. Note that each implementation task can be selected on its own or in combination with other tasks. Multiple tasks could run concurrently.

# Implementation Task Option 1: Performance Period Retrospective

Target setting for the second federal performance period was completed in 2022 (due initially in October 2022, but FHWA opened the Performance Management Form later than anticipated and gave states until December 16, 2022 to submit their 2022 biennial reports). As a result, late 2022-early 2023 will be an ideal time to ask practitioners about experiences at the end of the first performance period, lessons learned in setting targets for the second performance period, and how target setting decisions were made for the second performance period. Specific topics to explore with practitioners include:

* Lessons learned from the first to second performance periods (for applicable measures)
* How coordination, particularly MPO-State coordination, went going into and throughout the second performance period
* How practitioners ended up treating pandemic disruptions in their target setting
* How common it was for agencies to change their target setting method
* Whether agencies explored a target setting method that they did not end up using, and why they did not use it
* Whether more data was available in this round of target setting compared to the first
* If there was greater interest and understanding in target setting from agency leadership
* Plans for next steps on performance improvement in the years following target setting

The project team recommends that this retrospective research be conducted via a survey sent to practitioners nationally, followed by series of web-based meetings.

1. **Survey** – A survey would allow the team to gather consistent information on target setting practices from agencies that engaged in target setting. Email solicitations through the AASHTO and AMPO newsletters and the AASHTO Committee on Performance-based Management provide a way to reach a broad audience. Although the Federal Highway Administration (FHWA) gathers data directly from the states about the performance targets and gathers qualitative information on the techniques, the FHWA information collected is at a high-level and does not clearly delineate methods used. A separate survey would help to clarify types of methods used, data sources, and issues associated with the analysis used for setting targets. Comments and notable responses would provide a starting point for further discussions.
2. **Focus Group Discussions** – The project team would set up a series of small focus groups with performance practitioners at MPOs and DOTs. Each group discussion would include 6-8 participants and there could be anywhere from a few group discussions to enough to cover each DOT and at least one MPO from every state. Groups could focus on one performance area at a time or cut across measures if participants were involved in multiple areas. A robust response to the survey would preclude the need to speak to every agency, and instead allow the focus to be on following up to dig into the details of practices and decisions.

Estimated Cost: $50,000

Time Required: 6 months

# Implementation Task Option 2: Greenhouse Gas Target Setting

With the notice of proposed rulemaking for the greenhouse gas (GHG) measure in progress as the second performance reporting cycle begins, many practitioners are wondering what this possible new measure will mean for their agency’s performance work. Some early reports indicate that the proposed rule or similar types of rules related to reporting GHG emissions may already be affecting transportation investment decisions[[1]](#footnote-2). Questions on the new measure worth exploring include:

* What will be leadership and stakeholders’ level of interest in the measure?
* What statement will certain target levels make to stakeholders?
* What are the primary drivers of performance outcomes?
* What can agencies do to effect change in the performance areas?
* What will the proposed requirement to set improving targets mean for agencies?

The team would develop a chapter on target setting options, challenges, and considerations for the GHG measure, similar to those for other measures in the NCHRP 23-07 Guide. This work would build on recent work conducted by AASHTO to develop a GHG Performance Calculator to help support target setting.[[2]](#footnote-3) It would begin by documenting the measure requirements and data sources, as the team’s analysts develop recommended approaches to calculating and forecasting the measure, accounting for different assumptions related to vehicle travel demand and vehicle technology.

After developing these recommendations, practitioner input could be solicited through individual or small focus group interviews. Content generated by the research team’s analysis of the measure would be shared in advance and practitioners can comment on which approach they are likely to apply, challenges they expect to arise, and what has been discussed within the agency about the measure so far.

Estimated Cost: $30,000

Time Required: 4 months

# Implementation Task Option 3: Technical Assistance Workshops

While the main phase of research has engaged practitioners through webinars and discussion-based workshops, the team believes that an opportunity for detailed, technical engagement with some of the more advanced quantitative methods of target setting could benefit practitioners interested in trying them out. In addition, there could be additional in-depth conversations on the details around the policy, communication, and coordination side of setting targets.

To meet this level of engagement with the material, the team proposes a series of technical workshops with two major tracks:

1. **Technical Workshops Exploring Quantitative Methods** – These workshops would focus on the tools and data used for advanced quantitative forecasting. The format is imagined as hands-on events similar to a classroom training or office hours, where practitioners try to implement new methods for their agency and get real-time help on identifying and preparing data, running models and software, generating forecasts, interpreting results, and troubleshooting errors. Each would likely focus on only one performance area and at most two forecasting methods at a time. Data could be tailored to what is available to each participant.
2. **Qualitative Policy Discussion Workshops** – Participants that engaged with the research at every stage had a lot to discuss on the policy side of target setting, including debating the “right” philosophy of target setting (aspirational vs. realistic) and how to effectively communicate what an agency intends to convey by establishing a certain target. Public scrutiny and questions from leadership who do not always understand the nuance behind performance outcomes or target setting can make these decisions more difficult and affect practitioners’ philosophies related to setting targets.[[3]](#footnote-4)

A particularly interesting policy-focused event could include representatives from NHTSA, which has written regulation that certain safety targets must be improving, and from FHWA, which charges agencies to establish realistic targets while also proposing a greenhouse gas emissions measure that would require improving targets, along with practitioners at state DOTs and MPOs to grapple with what is really desired from targets and better understand how practitioners can or should conceptualize and make use of them. This could be a much-needed opportunity for federal regulators and state and regional practitioners to come together and get on the same page regarding the purpose of targets and the challenges practitioners face when implementing the theory and vision around target setting and performance.

Each workshop would have 8-10 participants and would be held in person. A virtual option is possible but would likely need to be shortened and creative solutions to helping participants with errors in the technical workshops explored. Content generated would include advance material to facilitate the events and a short report on notable findings. The report would summarize lessons on success in implementing different methods, practitioners’ preferences after implementing them, and helpful next steps on policy issues

Estimated Cost: $70,000 - $140,000 (assumes $20,000 to $30,000 per workshop reflecting the lower end for the Qualitative workshop and higher end for the Quantitative workshop, plus travel costs of up to about $10,000 per workshop, including travel for participants, for a total of about $30,000 to $40,000 per workshop; range assumes two workshops to four workshops)

Time Required: 8 months

# Implementation Task Option 4: Agency-Specific Technical Assistance Support

Similar to the “pilot testing” that was conducted with transportation agencies as part of the development of the NCHRP 23-07 Guide, this task would involve working with individual transportation agencies, or a set of agencies together, to support target setting for the next mid-performance report cycle. As part of this process, the research team would solicit interest in testing alternative performance target setting methods for different performance measures by working with AASHTO and FHWA. The team would then select a set of four to eight agencies for targeted technical assistance in implementing different methods for potentially adjusting the targets. The research team would work with the selected agencies to collect and/or analyze data; conduct statistical analyses, modeling, and implementation of other methods; and document the results of analyses using different methods to help inform selection of a revised target, if applicable. The support in particular could focus on helping agencies to test more advanced methods that involve development of statistical methods that account for multiple factors impacting performance. The results could be written in the form of case studies to benefit other transportation agencies.

Estimated Cost: $80,000 - $160,000 (cost per agency will depend on level of assistance needed; this estimate assumes a cost of $20,000 to $40,000 per agency)

Time Required: 8 months

# Implementation Task Option 5: Marketing and Communications

This task will turn the guide’s methods and strategies into digital outreach content that lets practitioners know about the research and guidance and explains core concepts quickly, as well as virtual and in-person outreach activities. This could include content across any media such as:

* Social media content to broadcast the guide’s availability
* Conference presentations, such as a TRB Annual Meeting session or other conference sessions
* Development of target setting methodology infographic-style documents that could be used as a quick reference on different methods for setting targets
* Development of a communications guide for practitioners with tips on how to frame targets, and how to communicate why target levels were selected, and how the agency is making changes to see performance improvement.

Estimated Cost: $15,000 - $25,000

Time Required: 3 months

# Indicators of Successful Implementation

Possible indicators of successful implementation can be further developed for any or all of the suggested implementation activities, and may include:

* Downloads of the guide
* Participation in related workshops and events
* Workshop feedback surveys
* Engagement with communications (social media, etc.)
* Downloads of communications support material

1. Brey, Jared, “Why Denver and L.A. Are Backing Away from Highway Expansions”, *Governing*, September 23, 2022. <https://www.governing.com/now/how-new-climate-rule-stopped-highway-expansion-in-denver?utm_campaign=Newsletter%20-%20GOV%20-%20Daily&utm_medium=email&_hsmi=227000687&_hsenc=p2ANqtz-_7CO6gL27p8RIt35T3pcVnL4S7mguLXxfMFwk_WOU-96jxO25wFC3t0alrMRx4M38PIs-Xdl6Ho3DtmkIjqPpgJBdmFHntd7hB2_hMfoBkvE_mdIc&utm_content=227000687&utm_source=hs_email> [↑](#footnote-ref-2)
2. AASHTO, GHG Performance Calculator, <https://www.tpm-portal.com/tool/ghg-performance-calculator-draft/> [↑](#footnote-ref-3)
3. See for instance, Duncan, Ian, “Under federal rules, ‘significant progress’ on infrastructure can mean more road deaths and decrepit bridges,” *Washington Post,* March 17, 2022. [Progress on infrastructure spending can mean more deaths, decrepit bridges - The Washington Post](https://www.washingtonpost.com/transportation/2022/03/17/infrastructure-spending-states-roads-bridges/) [↑](#footnote-ref-4)