EMPOWERING I-80 COMMUNITIES
TODAY AND TOMORROW

A5. Performance Measurement Training

Appendix A.5

I-80 Corridor System Master Plan: Performance Measurement

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I-80 CSMP Performance Measurement – Introduction

The study leadership team recognized that it was impractical and cost prohibitive to congregate all participants from the multiple working groups at a single location to discuss the development of performance measures across such a wide spectrum of disciplines and interests. In order to facilitate the discussion among as many stakeholders as possible a virtual training plan was developed and implemented over six weeks By Dr. Christopher Stream, Director School of Environmental & Public Affairs University of Nevada, Las Vegas.

The virtual training utilized adobe connect to create a virtual meeting space that allowed for visual contact between Dr. Stream and the participants, a means to display power point, and a virtual black board that provided opportunity for comments from the participants. Dr Stream used the text book and syllabus from his UNLV class to provide an overview of the evolution and purpose of performance measures in the public sector and allowed the discussion to take direction based on feedback and the expressed interest of the student/participants.

Performance measurement continues to be an initiative with varying perspectives on its implications for governing. This was readily identifiable with the range of understanding of the concepts advanced with performance measurement. Dr. Stream used Harry Hatry's comprehensive guide, Performance Measurement as a common point of reference for participant discussions. From this common point several issues surfaced based upon individual experiences with the performance measurement initiative in transportation. The purpose of performance varied among government entities and among practices within organizations. The "report card" approach was highlighted often with the sense that presenting readily achievable performance measurements accomplished the purpose of the initiative. Another dimension focused on the nature of performance measurement data. Many advocated for using data currently being captured for other purposes and reformulating for performance measurement. While this is a reasonable approach, Dr. Stream cautioned that this type of data should be integrated within the full performance measurement framework.

Yet another dimension of performance measurement issues focused on the goals and outcomes. Many participants advocated for adopting goals used as promotional incentives with individual transportation initiatives. Another perspective was to adopt goals that could be readily achieved. Dr. Stream was proficient in harmonizing the occasional discordant conversation by consistently refocusing on what the real purpose of performance measures ought to be. Simply put, he instructed the group that performance measures must measure an existing condition, provide opportunity to estimate the expected change in that condition resulting from any proposed investment strategy, and then be able to measure the observed change after implementation. Succinctly, they must measure the effectiveness of investment strategies relative to one another as well as the cost and benefits of implementation. With this intentionality, the resulting performance measures can then be used to inform decision making rather than simply purport the success of any given organization.

The participants came to understand that the creation of meaningful performance measures for the I-80 corridor would require all the elements Dr. Stream so eloquently articulated and they would also require the context that would come from each of the focused working groups. They also came to understand that the development of performance measures requires an artful balance between quantitative measurement and qualitative assessment in order to yield the most meaningful results.

The performance measures virtual training exercise demonstrated that the technological tools required to accomplish such undertaking are available, and that a skilled facilitator can achieve the same level of success as onsite training without incurring the additional costs of travel..

Transportation Performance Measurement within Changing Public Management Paradigm

Our collective experiences working with performance measurement since the passage of Intermodal Surface Transportation Equity Act (ISTEA) in 1992, over two decades ago indicate the initiative is here to stay. We involved with transportation are not alone. Overall, the use of performance measures in new public management practice continues increasing in utilization while varying across public service domains. Briefly, new public management involves efforts to harmonize accountability and flexibility in public service within the framework of leadership and organizational structure under pressures of tightening resources and increasing public expectations (Feldman & Khademian, 2001; Gruening, 2001). Performance measurement is a central tenant in new public management initiatives. Interestingly, even the practice of performance measurement varies across public service domains. This discussion provides a brief, straightforward perspective of public policy and public administration in light of the performance measurement initiative. Ultimately I offer a few observations to contemplate as we move forward with integrating performance measurement into transportation planning and the profession overall.

While a broad range of transportation professionals appeared to struggle incrementally with the implications of performance measurement, many public entities at the local, state, and federal levels continue moving forward with performance measurement. One parallel example is the Government Performance and Results Act (GPRA) enacted by Congress in 1993 which established a performance framework for federal agencies including setting strategic goals, measuring annual performance, and reporting the results (Ellig, McTigue, and Wray, 2012). The scorecard evaluation approach Ellig, McTigue, and Wray for evaluating GPRA highlighted improved performance measurement reporting and the continuing disconnect between performance measurement and public policy decision-making. Federal experiences with the GPRA serve as a bellwether for other performance measurement initiatives including those being undertaken in transportation. It is interesting to note that in the evaluation for GPRA the US DOT received compliments on their outcome oriented goals "such as safer workplaces, employment of people who were in job training programs, reduced highway congestion, and reduce transportation accidents and fatalities" (p. 15). A sign of the continuing struggle with implementing performance measurement is also highlighted in this evaluation. Transportation organizations are developing different strategic goals within federal and state departments as well as between different state departments (pp. 91 - 93). Other federal agencies also reflect these differentiated evaluation results. The federal GPRA initiative provides a reasonable touchstone for how transportation professionals might continue advancing performance measurement.

Transportation professionals involved with, and tracking of performance measurement implementation over the last two decades would reach similar conclusions: a mixed bag. Here are some personal reflections on why this may be the case. During the same two decades we have seen the nature of the transportation profession transition at the federal, state, and local levels. Our conversations shifted from system expansion toward system preservation, safety, resilience, and livability among other system indicators. During the same two decades we have seen an ever-increasing advancement of technology innovations and computer computational

capacity. We are digital. During the same two decades we were beginning to see the genuine shift in social behavior many of us had been anticipating. For example, there is a continuing reduction in overall travel among the millennial generation, 25 to 30 and younger (Davis, Dutzik, and Pacandall, 2012). To paraphrase from an ogre named Shrek, onions have layers, ogres have layers, and performance measurement has layers. To which donkey replies, what about cake-everybody loves cake. What two decades of performance measurement implementation has revealed to transportation professionals is that performance measurement is not cake and has layers.

A few examples may help. Codd and Walton (1995) provided an initial conceptualization of the transportation performance measurement endeavor in terms of ISTEA, performance measurement, and decision-making frameworks. This effort identified a foreboding of the changing nature of transportation planning data. Zietsman and Rilett (2002) exemplify this changing nature of data while evaluating performance measurement in terms of automated vehicle information (AVI) systems. AVI systems collect aggregated and disaggregated data at the vehicular level. The researchers identify advantages for the more complex disaggregated information for performance measurement than the traditional aggregated data. Wang and Jim (2006) conceptualize an elegant and thoughtful performance measurement system capitalizing on enhanced data gleaned from technological advances. While these examples highlight technology and computational capacity for performance measurement the AAA Foundation for Traffic Safety (2007) advance behavioral aspects of performance. These essays highlight the tensions between qualitative and quantitative assessment of performance including raising behavioral issues like evidence-based practice. Meanwhile, others such as Pedersen (1999) continued struggling with the nature of performance measurement in the overall transportation planning at the federal, state, and local levels. Additionally, many call for increasing public involvement in performance measurement, further challenging bureaucratic regimes. Many believe this will enhance democratic processes while enhancing public outcomes. Poister (2007) echoes this performance measurement nexus with the public while advocating for an expanding role for planning in the effort among other insightful conclusions. Indeed, there are many layers to the performance measurement onion.

As we continue to explore the implications of performance measurement for the transportation planning community, we might consider re-engaging with the seminal work of Harry Hatry: *Performance Measurement: Getting Results* (2006). Hatry provides the foundational rationale underpinning performance measurement, performance management, and continuous improvement. More importantly to the transportation community and institutions around the world, Hatry lays the initiative out in terms of process, analysis, and use. In doing so Hatry provides an insightful ongoing discussion of the nature of qualitative and quantitative information in terms of assessing genuine performance measurement of outcomes. I find this perspective missing from many of the ongoing discussions about performance measurement in transportation. There are many layers to this performance measurement onion. As a transportation professional, I am aware of the nature of quantitative data in the profession such as levels of service, percent completion, and estimated travel time. As we in the transportation profession continue integrating performance measurement into our ongoing practices we should pay attention to the layers of the onion. These types of quantified expressions of qualitative information are hallmarks in our profession. Perhaps our approach to the complex layers of the performance measurement onion should follow in this tradition while improving the practice. I

hope this discussion of performance measurement in our changing transportation practice encourages transportation planning professionals to take a leading role in the further advancement of the practice. We need to lead successful performance measurement to advance equally important flexibility and accountability in meeting the challenges of the future.

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Performance Measures and the I80 Corridor in the Western United States

Michael W. Lawson

The discussion of performance measures was integral to the development of an I80 Corridor System Master Plan for the western United States. This paper is an expression of a stakeholder's view of how that conversation occurred and what resulted from it.

A brief background is necessary to provide context. The Western I80 Corridor system Master Plan study involved participation from representatives of four state DOT's, 5 MPO's, numerous cities and counties, a diverse group of privately owned companies and corporations, as well as individual citizen stakeholders. These stakeholders were organized into working groups sharing a common interest such as wildlife, tourism, energy, etc. After each working group identified the available information of relevance, a GIS database was created and used to identify missing information and unmet needs. At this stage of the conversations the stakeholders recognized that the advocacy of any infrastructure improvement, policy initiative, or funding mechanism intended to address unmet needs would required a measure of the benefit that could be derived from any particular investment strategy.

The study leadership team recognized that it was impractical and cost prohibitive to congregate all participants from the multiple working groups at a single location to discuss the development of performance measures across such a wide spectrum of disciplines and interests. In order to facilitate the discussion among as many stakeholders as possible a virtual training plan was developed and implemented over six weeks By Dr. Christopher Stream, a performance measures instructor at UNLV.

The virtual training utilized adobe connect to create a virtual meeting space that allowed for visual contact between Dr. Stream and the participants, a means to display power point, and a virtual black board that provided opportunity for comments from the participants. Dr Stream used the text book and syllabus from his UNLV class to provide an overview of the evolution and purpose of performance measures in the public sector and allowed the discussion to take direction based on feedback and the expressed interest of the student/participants.

It was presumed that the participants already had an elementary understanding of the topic and so the purpose of the exercise was to identify the level of understanding and development of performance measures within the diverse group of stakeholder organizations and potentially identify those measures that had relevance to the I80 corridor as a whole. It became apparent early that there was a fundamental difference of opinion on the purpose of performance measure for government entities. Several of the participants expressed that they had received direction from management within their organizations to develop performance measures that were easy to measure/monitor or could utilize data already being collected, which is a reasonable approach from a fiscal point of view. However, they were also instructed to develop measures that would be easy to achieve, and that would show their agencies as being successful. In short, they were instructed to view performance measures as a necessary evil that should involve a minimum of cost and effort while still yielding a favorable "report card".

In other instances well intended participants mistook admirable and optimal outcomes as being the same as initiating a practical performance measure. A striking example was the idea that zero highway fatalities should be considered a legitimate performance measure. While Zero fatalities can be considered both a desirable and optimal outcome, any reasonable performance measure must also posses the element of actually being achievable. Considering that even the best engineering practices cannot overcome human error, the only way to actually achieve zero fatalities would be to eliminate travel completely. This might be a cost effective strategy, but it is one that is contrary to the purpose and need for transportation infrastructure in the first place. No other strategy can possibly achieve the target goal of zero fatalities and hence "zero fatalities" is not a legitimate performance measure.

Dr. Stream took the opportunity to harmonize the discordant conversation by refocusing on what the real purpose of performance measures ought to be. Simply put, he instructed the group that performance measures must measure an existing condition, provide opportunity to estimate the expected change in that condition resulting from any proposed investment strategy, and then be able to measure the observed change after implementation. Succinctly, they must measure the effectiveness of investment strategies relative to one another as well as the cost and benefits of implementation. With this intentionality, the resulting performance measures can then be used to inform decision making rather than simply purport the success of any given organization.

As a participant in the training and a member of the I80 stakeholder network, I came to understand that the creation of meaningful performance measures for the I80 corridor would require all the elements Dr. Stream so eloquently articulated and they would also require the context that would come from each of the focused working groups. I also came to understand that the development of performance measures requires an artful balance between quantitative measurement and qualitative assessment in order to yield the most meaningful results.

Interstate 80 Stakeholder Network, Performance Measurement, and Increasing the Usefulness of Scholarly Research for State and Local Government Managers

In my role as an academic and as the Director of the School of Environmental and Public Affairs, I am often asked how the scholarly work I do could be more useful to state and local government managers. I generally view the usefulness of scholarly research from three key areas: access to journals, relevancy and collaboration. These views are reflected in my work with the Interstate 80 Stakeholder Network and performance measurement.

Access to Journals
A major disconnect between the academic world and the world of the practicing professional, centers around what is "valued" between them. My "worth" as a university professor is based on my ability to publish articles in "peer reviewed" outlets. But from experience I know that government managers rarely read articles from scholarly journals. The reasons are various factors including lack of access to journal articles, concerns regarding whether the topics covered in scholarly articles are relevant to "real world" government managers, and whether information obtained from the articles can be applied to challenges or situations they encounter in their work environment.

Relevancy
One key solution that I have attempted to bring not only to my research but to the class room experience of my students is to have my work address current issues – I work hard to be aware of what the current issues are and focus my research and courses about them. It is easy for my work to be behind what the field is doing.

Collaboration with Practitioners and Practitioner Based Organizations
Another step I take to increase the value of my academic work to working government officials is to interact more with "professional" organizations. I think that participating and learning more about a professional organization and how it distributes information to its members is useful. Local conferences and symposium are another venue that may bring practitioners and academics together to discuss issues.

In my programs at UNLV, I have also employed a number of other strategies we use to facilitate interactions between practitioners, faculty, and students. These include having practitioners as adjunct faculty, having practitioners on advisory boards for graduate programs, and developing internship programs.

Also, the delivery of information has changed dramatically in the past few years. Faculty today must understand how to effectively increase usage of technology as a way to bridge the gap between academic studies and practitioners. Such examples today include podcasts, blogs, and online courses.

Conclusion
Making scholarly research more accessible and useful to government managers is not an easy task for public administration/public policy scholars; however, it is an important task. If scholarly research is to be more useful for practitioners, academics need to reach out to

practitioners, listen to what they have to say, and identify ways to be responsive to their needs and interests. My experiences with performance measurement training for the I-80 Stakeholder Network amplify these three views of the relationships between scholarship and practice. This thought to practice collaboration may bridge present performance measurement initiatives to invaluable ones of the future.

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