

Peer Exchange

VisionEval Performance-Based Planning

Summary, August 18-19 2016

LOCATION: CH2M Building, 2020 SW Fourth Ave, Suite 300, Portland, Oregon

Peer Exchange Attendees

Charles Baber, Baltimore Metropolitan Council

Brian Dunn, Oregon Dept. of Transportation

Tracey Frost, CalTrans

Bret Fusco, Delaware Valley RPC, Philadelphia

Brian Gregor, Oregon System Analytics

Jeff Harris, Utah Dept. of Transportation

Brian Hurley, Oregon Dept. of Transportation

Kyung-Hwa Kim, Atlanta Regional Commission

Tae-Gyu Kim, North Carolina Dept. of Transportation

Natarajan Janarthanan, Washington State Dept. of Transportation

Elizabeth Robbins, Washington State Dept. of Transportation

Subrat Mahapatra, SHA, Maryland Dept. of Transportation

Eddie Montejo, CH2M

Kirsten Pennington, CH2M

Amanda Pietz, Oregon Dept. of Transportation

Eric Pihl, Federal Highway Administration (FHWA)

Craig Raborn, Regional Trans. Commission of Southern Nevada

Rachel Roper, AASHTO

Tara Weidner, Oregon Dept. of Transportation

Kerri Woehler, Washington State Dept. of Transportation

Barbara Ivanov, Washington State Dept. of Transportation

Nick Fortey, FHWA Oregon Division (Did not attend)

Peer Exchange Objectives

The VisionEval Performance-Based Planning Peer Exchange explored VisionEval scenario planning tools, how they can inform performance-based planning, and how transportation agencies can leverage efforts to improve available tools. The Peer Exchange objectives were to:

- Build a support network and formal structure for the tools
- Identify needs and priorities for tool improvement and development
- Determine the future of the tools themselves and long-term support needs
- Identify potential partnerships to improve and maintain scenario planning tools

Key Peer Exchange Outcomes

- The group agreed that performance-based planning tools – and specifically VisionEval – are important for decision-making.
- The group agreed that it is best to move forward with VisionEval tools in a coordinated and open manner.
- There was a strong desire among agency representatives to use performance-based modeling tools to inform decision-making, and bolster the business case for and against particular transportation investments.
- Agency representatives identified the need for easily understandable model outputs, as decision-makers are typically not modelers. Hence, there was a clear desire for the integration of visualization and other techniques to help tell the “story” of modeling outputs.
- Network Connectivity and Life-Cycle Costs emerged as highest-ranking priorities for tool enhancements among participants. Another key priority was tool usability and user interface.

- Performance-based modeling could provide a first place to “try out” untested technologies, including those that could have a profound impact on our energy/environmental landscape. Performance-based modeling can help increase understanding around what scenarios are plausible.
- The group agreed that the next step would be to meet up in a few months, have a finalized charter and scope of work, and then kick-start a FHWA Pooled Fund Process. This would be posted on the FHWA website to solicit additional member agencies. The project would be 3 – 5 years, with annual updates. The charter should delineate between objectives of the group and objectives of the effort/tool. A one-pager should be developed to summarize key outcomes and expected products.
- Participants expressed that the most critical path should be to build a core set of performance-based modules to build a case for a value-added. Once there, the group can expand to bring more entities to the table.

Meeting Summary

DAY 1

Welcome and Introductions

Amanda Pietz, ODOT, welcomed the group to the Peer Exchange and explained that the purpose of the Peer Exchange was to share the status of tool development, identify needs and priorities for tool improvement and development, and identify potential partnerships to improve and maintain scenario planning tools.

Kirsten Pennington, facilitator, asked people to introduce themselves, their organization, and their interest in scenario planning tools. Kirsten then covered room logistics and reviewed the agenda.

Common Definition of Performance Based Planning

Amanda Pietz covered a definition of performance based planning to set the foundation for the discussion. She explained scenario planning as a performance based planning approach, and discussed why agencies would consider using scenario planning to help make decisions. She highlighted the ability to measure how policy choices affect outcomes. She also discussed how strategic planning tools, such as VisionEval, help to measure and compare different choices during a scenario planning process.

Showcase Tools and Their Applications

Kirsten described the format and purpose of the next agenda item: to provide a foundation for the Peer Exchange discussion and to identify a range of uses for the VisionEval tools. Tara Weidner provided an overview of VisionEval tools. Then DOT/MPO representatives provided presentations/case studies on how they use VisionEval tools and key outcomes. After the presentations, Kirsten facilitated a group discussion on different uses for the VisionEval tools.

Tara describe the VisionEval "family tree" (four models in a common framework allowing improvements by a community of developers). The four models are: Regional Strategic Planning Model (RSPM), Energy and Emissions Reduction Policy Analysis Tool (EERPAT), Rapid Policy Assessment Tool (RPAT), and Greenhouse Gas Strategic Transportation Energy Planning (GreenSTEP). Tara gave illustrative examples, including inputs and outputs of RSPM. She noted that it has been important to keep high-level stakeholders involved (not just the technical experts) to create a strong business case for policies and investments.

Tara then introduced the presenters, and the questions she asked them to address in regard to case studies on performance-based modeling efforts:

- **Why:** What motivated you to apply the tool in your area? What conversations is it supporting?
- **Context:** How does the effort fit into your Agency's long term planning process? Other tools?
- **Framing:** What scenarios or policies were evaluated? What were your evaluation measures? Note strengths/limitations.
- **Value:** What were the key findings and outcomes? Key value of the tool? Note strengths/limitations.
- **Future:** What are your future plans for using the tool?

Presenters included: Subrat Mahapatra - Maryland SHA, Charles Baber – BMC, Natarajan Janarthanan – WSDOT, Bret Fusco – DVRPC, Kyung-Hwa Kim – ARC, and Tara Weidner – ODOT.

Key takeaways from the presentations included:

- Often there is not enough communication among modelers, planners, engineers, the public, and decision-makers. Planning is a good start, although all of these stakeholders need to be together at the same table in order for good planning to happen.
- Goals of agencies, decision-makers, and the public are often in-line; the problem is creating a compelling business case for why they should support a given project. Agencies want to be able to say more than just “support this project because the model says so” – there needs to be a way to truly validate project recommendations.
- There is a strong desire to understand “universal” policy impacts. For example, what would be the transportation impacts if you had more educated people in the next 30 years, creating more jobs, and contributing to the tax base?
- Performance-based models might provide the only real way to achieve policy targets since effective solutions often require investments and policy changes in *several arenas* (not just reducing Vehicle Miles Traveled (VMT), for example).
- Trip-based models are methodologically immature in light of performance-based planning research and best-practices.
- There was general consensus that a new “strategic layer” is needed for planning. Performance-based measures help us think better, even as far as identifying missing links within common solutions to widespread problems.
- Performance-based measures also identification of co-benefits (such as VMT reduction/greenhouse gas (GHG) reduction).
- Agencies have noticed that in addition to vehicle impacts, people are interested in walking, social, economic impacts. Due to increasing interest in these kinds of integrations, there is now a goal to bring disparate models together. Several opportunities to bolster the model exist, including the integration of connected and autonomous vehicles. There is also a strong desire to keep this tool open-source, in hopes that researchers will further refine the model by adding water, health, and other strategic couplings.
- It is important to communicate that modeling supports the conversation, and is not THE conversation.

Kirsten led a group discussion on different uses for the VisionEval tools - generally in the categories of projects, programs, departments, and agency types – and captured the results on flip charts. The

purpose of this conversation was to inform the subsequent discussions on tool enhancements and priorities. Group discussion included the following:

- Tool uses for **projects**:
 - Capital investment impacts for specific projects
 - Investment/project specification and *categories* of investments
 - Regional plans that can be articulated and implemented at the local project level
 - Inter-agency projects – beyond just transportation
 - Economic development projects that engage local developers, Chambers of Commerce, etc.
 - Projects involving public-private partnerships
 - Freight projects
 - Bicycle, pedestrian, and transit projects
 - Transit-Oriented Development Projects
 - Bridge projects
 - System plans – beyond networks and nodes
 - Market-based planning projects
 - Modal roles, network roles, etc. as opposed to a conventional facility approach. (There was recognition by the group that it is hard to break away from this)
 - Outcome-based strategic planning
 - Projects involving federal rules and target standards (emissions, etc.)
 - Resiliency projects (seismic retrofitting, bridges, etc.)
 - Tactical plans
 - Predictive modeling efforts
 - Policy and investment screening (e.g. performance-based models can be less runtime-intensive)
 - Strategic visioning plans
 - Example: Portland’s transportation/sustainability reputation did not happen on accident – policy change came as a conscious choices about desired outcomes
 - Co-benefits can help leadership support plans/projects
 - Engineering/design/construction - can be used to facilitate collaboration between agencies
- Tool uses for **programs**:
 - Statewide modeling
 - Asset management
 - Safety
 - Performance of initiatives
 - Planning/design programs

- Programming/investment programs beyond conventional transportation funding
- Systemic versus facility approach to supporting programs
- Air quality programs
- Transportation Demand Management (TDM)
- Project prioritization
- Performance measurement programs: huge benefit in being able to more directly tie outcomes to vision, mission, goals, and objectives
- Health (variety of stakeholders)
- Modeling as a supportive process in public decision-making as a whole
 - Data-driven decisions
 - Predictive, normative, exploratory scenario planning
- Workforce development
- Pilot programs
- Tool uses for **types of agencies and departments**:
 - Regions and regional MPOs
 - Local agencies. At the local level, agencies often need to articulate value for a given project at the local level. Performance-based planning can help these agencies build a business case for a particular project
 - Statewide agencies (e.g. Departments of Health or Energy)
 - Environmental leadership
 - Elected officials, legislative leaders, or appointed boards or commissions
 - Economic development – different kinds of entities
 - Private sector: commercial; freight; Uber/Lyft/Transportation Network Companies
 - Federal Agencies
 - Communications Agencies

The group adjourned for lunch.

VisionEval Open Source Project Approach and Progress to Date

After lunch, Kirsten welcomed the group back and introduced the agenda topic. Tara provided an overview of the different phases of the VisionEval project (Phases 1 and 2, and a potential Phase 3). Rachel Roper, AASHTO, provided an update on the Phase 2 contract for VisionEval.

Tara's overview included the following points:

- The value of VisionEval is that it informs decisions to reach desired community outcomes under conditions of uncertainty and limited resources.
- The idea behind Phases 1, 2, and 3 of the VisionEval project is to create a collaborative Open Source Tool that houses an award-winning family of strategic models, in a plug-and-play fashion.
- VisionEval would be maintained and governed by a community to fund hosting and upgrades and share applications.

- The value of the tool would engender long-term support, upgrades, and outreach.
- The incentive for participation is that participants are able to help decide what aspects of the tool get prioritized, ensure the tool meets specific organizational needs, and ensure timeliness of the effort.
- Phase 1 was completed in January 2016 and resulted in a common framework proof-of-concept. Funding was from ODOT and FHWA. Products included model code, specifications, guidelines, and example modules. Phase 2 started in August 2016 and consists of a model transfer. Funding is from FHWA and administered by AASHTO. Products will include working RPAT and RSPM code in a VisionEval framework. Phase 2 Support will begin in Fall 2016 and include a submittal process. Funding will be through ODOT. Products will include a working Contributor Review Team Process and documentation. Phase 3 is a potential partner-driven operational open source project (3-5 years with annual work plans) – to be discussed in greater detail on Day 2 of the Peer Exchange.

Rachel's presentation covered the following points:

- Future focus is on sustaining RPAT, and integration of RPAT and GreenSTEP based on the VisionEval Framework
- AASHTO is interested in hearing what the DOTs/MPOs think about AASHTO's role. There are other national transportation associations that would potentially want a role in the process.
- AASHTO could be a strong "brand" to place in the tool name, to encourage partners across the country to use it.
- Marketing efforts should be made to get the tool out to university research centers and others. Transportation Research Board (TRB) conferences are important as well.

Needed Measures or Categories of Enhancements and Needs for Tool Enhancement

Kirsten walked the group through the exercise instructions and purpose of the agenda item, which was to gain feedback that would inform the work plan for Phase 3 of the VisionEval project, based on participant values and priorities. Tara first described what the VisionEval tools currently provide. Using a categories on sheets of paper fastened to the wall, the group discussed any missing categories, and identified needs for tool enhancements. The facilitators captured this discussion by adding notes to the sheets of paper with category headings. Finally, the group prioritized the identified needs, using colored dots to vote for their perceived most important needs.

The final set of categories of tool enhancements refined by attendees (in alphabetical order) included:

- Accessibility and connectivity
- Community and economic viability
- Environmental Stewardship
- Equity
- Freight
- Health
- Land Use
- Mobility
- Safety and security
- Strategic Investment
- User Experience

Attendees identified potential applications, opportunities, or constraints within each of these categories. The group's feedback is organized by category (again, in alphabetical order), as follows:

Accessibility and connectivity

- Network connectivity and pieces
- Arterials and collectors
- Network of walking and bicycling infrastructure
- Providing user efficiency
- Access between modes – multimodal trips
- Intercity connections to key destinations and demand markets (inputs)
- Intermodal travel
- First and last mile solutions

Community and economic viability

- Economic growth
- Better understanding of cost/benefits
- Quality of life implications
- Walking patterns and active travel
- Crossings and safe pedestrian facilities
- The impact of teleworking on transportation systems
- Generational trends (Gen X, Y, and millennials). Future generations?
- Sociodemographic mobility – migrants, lack of roots

Environmental stewardship

- Alternative fuels
- Environmental health, mitigation costs
- Externalized costs
- Connections to trip lengths
- Electric vehicle infrastructure
- Energy distribution
- Food
- Electric vehicles – quantification of full costs/benefits

Equity

- Housing costs and changes to land values
- Access to transportation
- Transportation options
- Food distribution

- Value of time (different for different people)
- Transit costs
- Headways and travel costs
- Fares and electronic fare collection systems
- Competition with emerging modes/options (Uber, Lyft, etc.)
- Cost to income ratios
- Tax structures and implications

Freight

- Look at long-distance freight and the commodities market
- Reliability in conjunction with congestion (congestion, dock to dock time, etc.)

Health

- Public health impacts
- Social costs
- Health care costs

Land Use

- Parking supply
- Trip lengths
- Simplified land uses
- Connection between parking and land use

Mobility

- Reliability
- Congestion
- Travel time
- Vehicle Miles Traveled (by level)
- Hours of delay
- Peak shifts
- Facility types
- Throughput – transit headways
- Managed lanes
- Intercity passenger rail
- Synthetic populations
- Connected and autonomous vehicles – think about how technology will influence infrastructure/facility types
- Shared mobility

Safety and Security

- Speeds and volumes (speed limits, etc.)
- Road Diets/Complete Streets
 - Facility treatments
 - Trigger points: right-sizing infrastructure recommendations with existing and future conditions

Strategic Investment

- Consider investment equilibrium
- Use to understand *life-cycle cost* for existing and planned facilities, including multi-modal enhancements (not just autos). Would also include the life-cycle cost of implementing policies.
- Similarly, use tools to understand the *life-cycle value* for existing and planned facilities. Can help account for externalized benefits, and help build a business case for certain projects that might “fail” conventional traffic model testing.
- How would a tool like VisionEval incorporate existing and future tax structures?
- Better accounting of costs (including externalities)
- Transit fares and ticketing
- Ability to put outputs back into model for validation/simulation purposes
- Emerging technology infrastructure-digital transportation: Geographic untethering; intermodal technology; the growing impact of teleworking
- Technology cost over time – end up overestimating since technology costs tend to drop sharply over time
- Preservation and asset management
- Nominal versus life cycle cost
- Supply/demand, funding, efficient-provision of infrastructure and services
 - Highest “cost-effective” role for a potential DOT/ agency and investment prioritization
- Plausibility of various investment scenarios
- Consideration of maintenance costs

User Experience

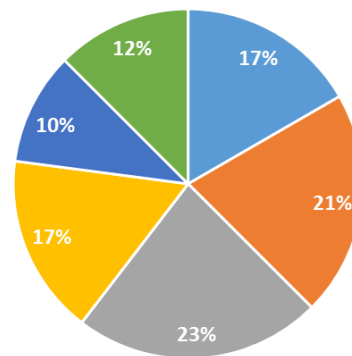
- Graphical User Interface (GUI) is extremely important
- Usability/ease of use
- Visualizations, dashboards
- It will be necessary to develop clear and useful guidance documentation/user guides to ensure users understand how the tool works and how to apply it to their needs
- Transferability
- Result interpretation and use parameters
- Clear end products

- Implications of results, appropriateness
- Update systems/process management
- Understanding inputs/metadata
- Data centralization
- Integration with other tools
- Scalability between model networks, geographies, sub-geographies

The attendees participated in an informal “ranking” of the identified needs. Each participant had five colored dots to vote for the needs they believed should be the highest priority for tool enhancement. Kirsten asked the group to make their prioritization decisions in light of the morning discussion of the range of uses for the tools – what would make the tools most useful for their organization or decision-makers?

Network Connectivity and Life-Cycle Costs emerged as the highest-ranking priorities among participants. Network Connectivity was a prevalent concern among agency representatives not only across modal boundaries, but across multiple performance areas, including transportation, land-use, environmental, and sociodemographic performance. The group repeatedly highlighted this orientation toward intermodal, interdisciplinary performance-based modeling throughout the Peer Exchange.

AASHTO Peer Exchange, August 18
Prioritization Exercise Results



■ GUI/Usability ■ Life-Cycle Cost ■ Network Connectivity
■ Visualizations ■ Integration with Other Tools ■ Transit Costs

n = 48

Using performance-based modeling tools to better understand the life-cycle costs of infrastructure and/or policy implementation also emerged repeatedly among agency representatives. Agencies expressed that although they are skilled in estimating construction costs and quantifying relatively near-term impacts; long-term benefits, maintenance requirements, or tangential impacts are harder to quantify. Agency representatives expressed a strong desire to use performance-based modeling tools to bolster the business case for particular transportation investments.

Usability and visualizations also emerged as important qualities for performance-based modeling tools. There was lengthy discussion around the importance of developing robust user documentation to ensure tool transferability and relevance across a broad institutional landscape. Agency representatives also discussed the need for easily understandable model outputs, as decision-makers are typically not modelers. Hence, there was a clear desire for the integration of visualization frameworks and storyboards to help tell the “story” of a particular modeling output.

Some agencies were concerned about the lack of equity performance measures, and that this lack of attention could constitute a modeling “blind spot.” One recommendation from the group was to encourage agencies to tap into equity measures in more creative ways, including folding these measures into conventional economic frameworks. Housing costs, for example, can have a high impact on commuting patterns and redevelopment potential. Potential equity measures included changes to land values, cost to income ratios, and tax structures (e.g. sales tax).

A similar concern was raised with regard to environmental stewardship. Similar to the way that the group discussed equity measures, the group discussed incorporating environmental stewardship performance into other performance areas, such as technology. Autonomous and Connected Vehicles, for example, are likely to impact VMT. However, it is unknown if AV/CVs will cause VMT to go up or down. Performance-based modeling could provide a first place to “try out” untested technologies, including those that could have a profound impact on our energy/environmental landscape. Performance-based modeling can help increase understanding around what scenarios are plausible.

DAY 2

Welcome Back

Kirsten welcomed the group back for the remainder of the conversation, and reviewed the agenda.

Pooled Fund Models

Eric Pihl, FHWA, defined pooled fund efforts, and provided examples of successful case studies. Key points included:

- Every Day Counts Initiative is a new set of innovations that are selected from the transportation industry and go out for formal solicitation
- Scenario planning tools for performance based planning: Strategic decision → Analysis → Programming → Implementation
- Joint Transportation Planning means that multiple MPOs and/or State DOTs work closely together to coordinate their transportation products into one document
- FHWA Transportation Pooled Funds (TPF): There is a FHWA website with useful information. There is a formal TPF process, which is traditionally funded by State Planning and Research (SPR) funds.
- Process for TPF:
 - Identify lead agency for proposed project, which is responsible for tracking expenditures, etc.
 - Technical Advisory Committee (TAC) – Each member of the project has access to a shared project management site.

The group asked Eric several questions and provided comments:

- Participant Pooled Fund Experience – Resource division decided they could fund the project but could not manage it. There are implications if a state DOT takes the role of lead agency.
 - FHWA thinks a strong TAC would alleviate work load for a state agency lead.
- MPO perspective – sees lead agency as a traditional federal-level role. However, there is good opportunity for collaboration since it reduces the financial burden of drawn-out decision making for individual DOTs and MPOs.
- Is there a way to differentiate the level of investment by individual agencies? This could be accomplished in the scope of work.
- Is there a way to leverage SHRP2 implementation dollars? FHWA thinks funding for SHRP2 is winding down, but there may be some ways to pull some remaining SHRP2 dollars into VisionEval.

- Is there any way to tap into non-transportation dollars as a consortium? Especially with higher-level coordination, it might be possible to package efforts – case for investment – for equity, health, etc. outcomes (e.g. Department of Housing and Urban Development livability grants).
- Should other organizations be brought into the fold as well, since these tools apply to more than just the transportation sector?

How do we get to a sustainable future for the VisionEval tools?

Tara presented the proposed Phase 3 charter and approach. First, a narrowed scope of work must be established among participating agencies. There will be a host to convene partners to help produce the scope of work. Tara covered costs: \$50K per year to develop the tool. Upgrades would be on the order of \$100K per year (scalable based on users).

Tara asked the group a series of questions about the charter and approach, which the facilitators recorded electronically on the projected screen. Questions focused on the following topics:

- Vision/Value
- Partnership
- Funding
- Needed efforts
- Administrative details (organizational structure, contracts, etc.)

The discussion is summarized below:

(1) Vision/Value: What are the most important objectives? What is the expected value of tool collaboration?

General:

- Need to make sure there is enough information and that it is usable
- Make sure objectives are relatable and tell the story
- *In the charter: need to delineate between objectives of the group and objectives of the effort/tool
- Up front need to define tool capability (range of uses) and what it does not do, using simple statements. Need to define the additional benefit and clear outcomes.
- Need to define assumptions
- Align to goals
- Make sure to market the “why”
- Modify the introduction to objectives section – discuss ability to be cost-effective to align with interests
- List “here’s what you can get”
- Need a “cheat sheet” – include outcomes; consider case study
- Outline direction – menu plus cost
- ARC summary (case study)
- Be clear on MPO/DOT funding asks

Review of objectives:

- Discuss the adaptability of tool
- Tools are used to set a common ground with partners; point of discussion; technical resource
- Transparency; tools help with community engagement
- Tools are used for strategic decision-making; they have implications for decisions

- Tools lend planning process support; they support performance-based planning
- Quantification of stakeholder values for all types of values
 - Practical way to operationalize in a user-friendly way
- The tools explore uncertainty in a meaningful way
- The tools cover a variety of issues for decision-making
- Ways to make assumptions more apparent; able to adjust assumptions in a user-friendly way to test “what-ifs”
- Tools provide a way to share experiences (collectively)

(2) Partnership

Responsibilities/Level of involvement: *Frequency of work plan updates, travel/meeting frequency/costs*

- Build in meeting time; Occasional in-person meetings are important
- Would be good to fund travel (state agency funds for travel are hard to come by)
- TravelWorks, PlanWorks, EconWorks – clarify the relationship
- Other potential partners: Lincoln Institute of Land Policy, TRB, Association of Metropolitan Planning Organizations, National Association of Regional Councils
- Think tanks, universities, etc. – can inform expansion of tool in the future

Funding: *multiple levels/benefits, voting/prioritization, FHWA vote (vs. ex officio), outside sources, scale to funds; SPR waived funds*

- Need to narrow scope of work to identify what participants are “buying”; identify capability of the tool, benefit to the chartered members, estimated cost
- Estimate (100-200K/yr. overall)
 - Host, etc. – 30K/yr.
 - Model maintenance – 20K/yr.
 - Upgrades – scaled based on work plan – 100K/yr.
- Would the amount of contribution vary among contributors?
 - DOTs should have the same level of contribution
 - 10K seems reasonable for MPO
 - 10K-30K seems reasonable for state DOT
 - Make consistent annual amount
- Seems like would require 10 contributors
- Question on FHWA match, SPR waived funds? PL vs others...
 - What qualifies for match
 - Need to coordinate with district administrator
- Look into granting opportunities as a consortium
- Talk to NARC, AMPO
- University Transportation Center (UTC) engagement & role

(3) Needed Efforts (work program):

Host, outreach, community forum, tool upgrades, Contributor Review Team, documentation, maintenance plan

- Keeping the tool in the tent....
- Wider audience as a community forum; national experts – more than one expert
- Outreach, education, training as critical
- Clarify where Phase 2 ends and Phase 3 begins
- Identify the data plan
- Work plan needs to be phased
- Peer review is important
- UTC dialogue (partnership)
- Need core group – then open up to others
 - Work on getting something solid; pooled fund
- Role of AMPO and NARC
 - They are waiting to see what will come out of the effort

Technical support/maintenance

- On-call technical support is important – a “helpline” – e.g. consultants or universities
- Outside folks can ask for help, but members look at and evaluate – consistent with common agenda
- Year 1 – getting the product ready to get out the door; also understanding landmines/pitfalls in implementation
 - Important – needs oversight
 - BRANDING is important (consistency with objectives)
 - Tracking of downloads and invite to forums
- Ask the experts ~ grow a community and create dialogue

(4) Administrative Details:

Organizational Structure (Lead Agency, delegating agency to administer/contract)

- Delegate to AASHTO?
 - FHWA/AASHTO discussion
- If ODOT lead, need minimal role in administration (staff capacity issue)
- Scope of work: Not just tool development, also involves communication about tool
- Nature of tool and tool “ownership” can change over time
- Whichever agency acts as lead will prefer a minimal role in administration. If they’re already running the tool, there are likely to be some capacity issues.

Bidding process (open or directed contracts/bidding process)

- Don’t need to figure out now: depends on color of \$, lead agency, and other factors
- Will some entities do pro bono? E.g. private business

Software: Apache license, GitHub, long term host

- Don’t need to figure out now

Next Steps and Adjourn

The group agreed to the following next steps:

- Development of materials to seed discussions (e.g. 1-pager outlining benefits, outcomes, and products; changes to charter and approach) – ODOT will lead, but a collaborative approach is needed
- Participants will conduct internal/partner discussions needed to identify level of support
- Tara will convene phone call with folks in room over the next 1-2 months to discuss approach & charter
- Pooled fund website – January 2017 timeframe
- Kick off project – mid-2017

ODOT thanked the participants for their attendance and high level of engagement on this important topic.