



# Transportation Planning Capacity Building Program

## Wichita Area Metropolitan Planning Organization Scenario Planning Workshop

*Sponsored by the  
Federal Highway Administration*

Location: Wichita, Kansas  
Date: June 26-27, 2018  
Host Agency: Wichita Area Metropolitan Planning Organization  
Peer Agencies: Bannock Transportation Planning Organization (Pocatello, ID)  
Metropolitan Area Planning Agency (Omaha, NE)  
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## Executive Summary

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This report summarizes a 1.5-day scenario planning workshop held June 26-27, 2018, in Wichita, Kansas, and hosted by the Wichita Area Metropolitan Planning Organization (WAMPO). The Federal Highway Administration (FHWA) sponsored this workshop under its Scenario Planning Program, which is run jointly with the Federal Transit Administration (FTA). The Scenario Planning Program is also part of the FHWA-FTA Transportation Planning Capacity Building Program. Contact information for the FHWA and WAMPO representatives involved in workshop planning as well as the workshop peers is included in [Appendix B](#) of this report.

WAMPO is the metropolitan planning organization for the Wichita metropolitan area, serving 22 cities and all or part of 3 counties in south central Kansas. WAMPO used the FHWA-sponsored workshop to introduce scenario planning concepts to stakeholders and share information about how it is currently applying a scenario planning approach. WAMPO presented draft scenarios that it developed in anticipation of using information from the scenarios to help inform its upcoming Metropolitan Transportation Plan (MTP) update. The workshop planning team designed the workshop to allow for opportunities for participants to provide feedback on the draft scenarios as well as discuss ways that scenario planning can be used to support transportation activities in the region. Workshop participants shared input through full-group, break-out, and roundtable discussions.

Two peer experts participated in the workshop and shared their agencies' experiences and insights in using scenario planning. The two peers were:

- 1) Mori Byington, Director, Bannock Transportation Planning Organization (Pocatello, ID); and
- 2) Michael Helgerson, Transportation and Data Manager, Omaha-Council Bluffs Metropolitan Area Planning Agency (Omaha, NE).

Key takeaways shared throughout the workshop included:

- Recognizing the importance of regional partners and the idea of partnership.
- Considering the most effective messaging for a scenario planning effort.
- Delivering a demo or "proof-of-concept" project to build enthusiasm.
- Balancing the challenge of scenarios' "fog of the future" with thinking proactively about the future.
- Developing agreement for both the vision as well as implementation of the vision.

The workshop provided a forum for participants to learn more about scenario planning as a tool and the ways in which it can be used. The workshop also served as an opportunity for WAMPO to share its draft scenarios and obtain initial input from participants and the peers. Post-workshop evaluations submitted by participants demonstrated that participants had found value in the workshop sessions and felt that their familiarity with scenario planning increased as a result of attending.

## Overview of the Workshop

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### Goals of the Workshop

WAMPO hosted the workshop to provide participants with an overview of scenario planning and share information about its current scenario planning activities. The workshop was hosted in partnership with the FHWA as part of the Scenario Planning Program, which is jointly run by FHWA and FTA.

As part of the workshop, WAMPO presented draft scenarios to obtain feedback from participants. Two peer experts also participated to share their agencies' stories of using scenario planning and lessons learned. In addition to the presentations, attendees took part in full-group and break-out group discussions to offer their thoughts on scenario planning applications and opportunities for implementing scenario planning in the Greater Wichita region.

## Selecting the Peers

In developing the workshop, the workshop planning team identified possible agencies that could serve as peers and share their experiences in and insights on using scenario planning. Peers were selected based on their similarities to WAMPO and the WAMPO region and their knowledge and use of scenario planning. The workshop planning team invited two metropolitan planning organization (MPO) representatives to participate as peers based on these criteria. The two peers were:

- Mori Byington, Director, Bannock Transportation Planning Organization (BTPO) (Pocatello, ID); and
- Michael Helgerson, Transportation and Data Manager, Omaha-Council Bluffs Metropolitan Area Planning Agency (MAPA) (Omaha, NE).

## Format of the Event

WAMPO hosted the 1.5-day workshop at its offices in Wichita, Kansas, on June 26-27, 2018. Twenty-seven participants attended, including the two peer presenters, FHWA staff, representatives from other local MPOs and transportation agencies, and other partners. A full list of attendees is available in [Appendix C](#) of this report.

The workshop used a combination of presentations, full-group discussions, and break-out group discussions.

On Day One, FHWA provided an overview of scenario planning, examples across the country, and available resources. WAMPO offered two presentations—the first offered a high-level snapshot of trends in the region and the agency’s current scenario planning activities, and the second focused more specifically on the draft scenarios that WAMPO had developed. WAMPO and FHWA facilitated a full-group discussion among all workshop participants to obtain feedback on the draft scenarios.

In the afternoon of Day One, workshop participants divided into small groups and discussed a series of “prompt” questions that had been identified by the workshop planning team. Participants worked in their small groups to address these questions and then reported out on the content of their discussions. The day concluded by FHWA and WAMPO reviewing the opportunities and next steps stemming from the workshop.

The two peers participated throughout Day One, contributing to the full-group and break-out group discussions and offering their perspectives. In addition, the peers formally presented during two peer presentation sessions to provide information on their agencies’ scenario planning efforts, including how they designed their efforts, the opportunities they found, the challenges they faced and ways they were able to overcome these challenges, and their lessons learned and considerations they would keep in mind for future scenario planning activities.

Day Two continued the discussions and peers’ insights from Day One but with a smaller group consisting of WAMPO staff, the peers, and FHWA staff. WAMPO also invited representatives from other Kansas MPOs to participate in in both days of the workshop, and a representative from the Greater St. Joseph Area MPO attended. The Day Two roundtable discussions focused on: 1) scenario planning tools; and 2) ways to use the outputs of scenario planning for future planning products.

The agenda for the workshop is provided in [Appendix D](#) of this report.

## Introduction

### WAMPO Background

WAMPO is the MPO for the Wichita metropolitan region, supporting 22 communities, all of Sedgwick County, and parts of Butler and Sumner counties in south central Kansas (Figure 1). There are approximately 500,000 residents in the region, including outlying rural areas.

As the MPO, WAMPO provides technical expertise on the transportation planning process and leads regional coordination for transportation investments. The agency develops the region's long-range transportation plan, known as the Metropolitan Transportation Plan (MTP), as well as manages the Transportation Improvement Program (TIP) for short-range transportation projects.

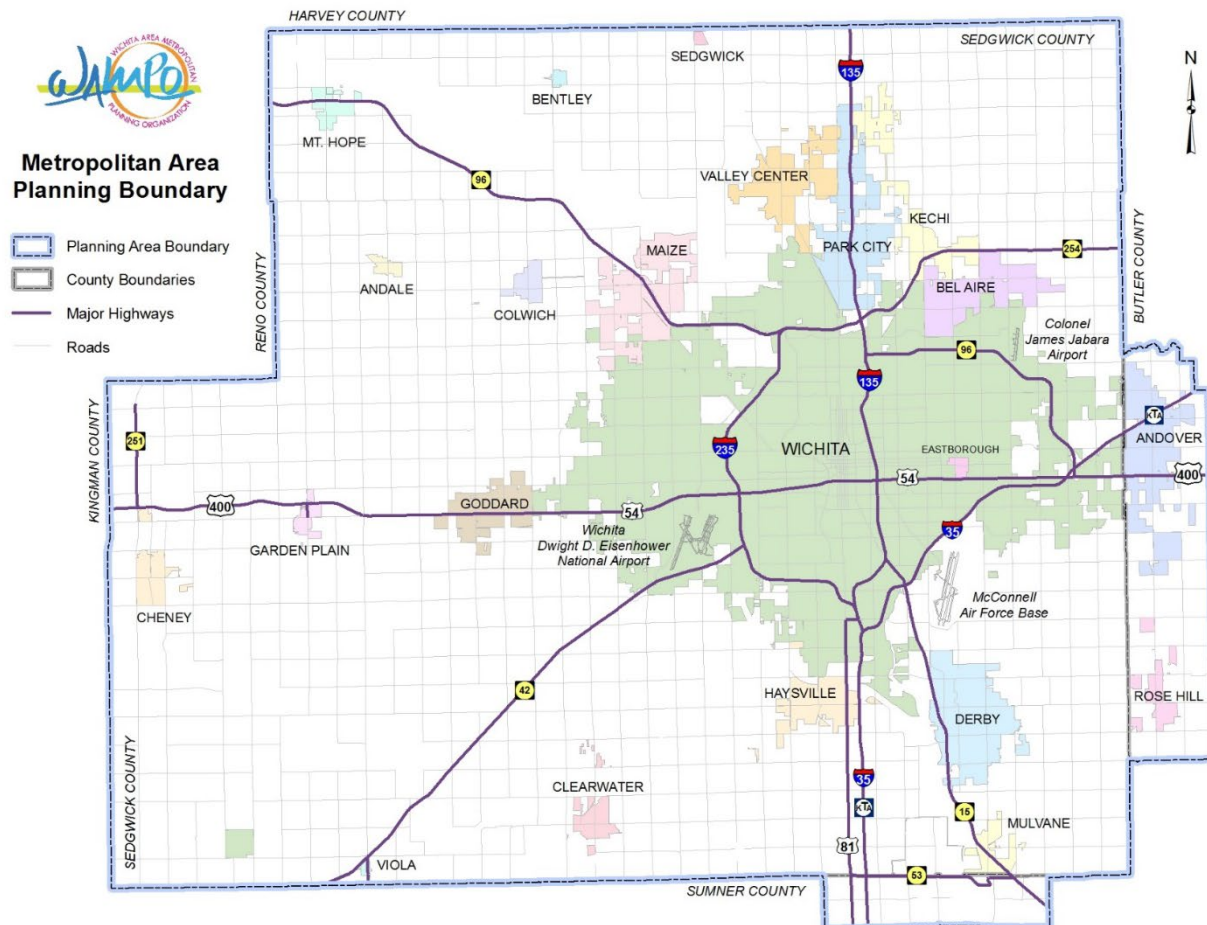


Figure 1: The WAMPO planning region covers 22 communities, all of Sedgwick County, and parts of Butler and Sumner counties in south central Kansas.

Source: WAMPO.

## Presentation and Discussion Highlights

### Welcome and Introduction

WAMPO and FHWA representatives opened the workshop and welcomed participants. Jim Thorne of the FHWA Office of Planning facilitated the event.

Phil Nelson, WAMPO Director, and Rick Backlund, FHWA Kansas Division Administrator, provided introductory remarks. Mr. Nelson thanked participants for coming and the peers for agreeing to share their agencies' scenario planning experiences. Mr. Nelson noted that the workshop was an opportunity to explore how the WAMPO region might move forward in the future. Mr. Backlund mentioned his role as an advisor to WAMPO's Transportation Policy Body (TPB) and discussed the recent focus of the TPB in thinking about the future and the role scenario planning can play. Mr. Backlund reminded participants that the scenario planning effort that WAMPO is leading is meant to spark ideas and not to direct a specific outcome.

Mr. Thorne concluded the welcome by confirming that the workshop provides a forum to talk and think about what the future might bring. He encouraged participants to think about the roles they play in their communities and how these roles can help shape and plan for the future.

## Scenario Planning Perspectives

Mr. Thorne first offered a general overview of scenario planning. Chris Upchurch, WAMPO Principal Planner, then shared information on WAMPO's current scenario planning effort and trends in the Wichita metropolitan region.

### *Overview of Scenario Planning*

Mr. Thorne opened his presentation by asking participants to consider what the future might hold for their communities. Factors to consider include the economy, demographic characteristics, energy supply and costs, communication and transportation technology, and where and how people live and work. Thinking about these and other factors can help a community envision what the future might look like. To account for these factors in the transportation planning process, transportation agencies, such as MPOs, may capture these issues in assumptions or forecasts that are regularly updated, or focus more specifically on the factors and how likely/unlikely or certain/uncertain they may be.

Mr. Thorne discussed that all of the factors are challenging, and combined, may seem even more daunting. Scenario planning is an approach to bring these factors together so that agencies can take them into consideration to allow for more informed decisions. Scenario planning is a process to talk about possible alternative futures. It is not a required process, but the most recent Federal transportation legislation recognizes scenario planning as a voluntary approach that transportation agencies may use.

In the transportation planning world, scenario planning has traditionally focused on the interactions between transportation and land use to achieve a "desired" end state (known as "normative" scenario planning). However, scenario planning is an evolving practice, and today, also includes the "exploratory" approach. Exploratory scenario planning considers "driving forces," or external forces that are highly uncertain but might impact future conditions in some way.

Mr. Thorne also shared several scenario planning examples from across the country. For example:

- The Puget Sound Regional Council used scenario planning in the Seattle region to think about and plan for how future growth might occur (e.g., thinking about what might happen if growth trends continued as planned, if growth was focused in bigger cities, or if growth was focused in smaller towns and cities). Through a public involvement process, the agency obtained feedback on the community's views of and preferences on what the future might look like. Mr. Thorne noted that the final scenario in these types of efforts often ends up being a hybrid of multiple scenarios; oftentimes, it is not about selecting one scenario but learning about the implications and policies associated with each.
- The Gainesville Metropolitan Transportation Planning Organization in Gainesville, FL, has led several iterations of scenario planning efforts to explore the relationship between transportation investments and land use decisions. The agency developed four scenarios initially (trend, compact area, town/village centers, and a radial development scenario that modified the town/villages scenario with increased development in one primary corridor) and selected a few key metrics, with the goal to keep the effort as simple as possible. The agency further used visualizations to convey characteristics of the scenarios to the public and decision makers.



- The Denver Regional Council of Governments in Denver, Colorado, applied a scenario planning approach to investigate the relationship between the region’s urban footprint and transportation investment priorities. The agency established a baseline and then created five scenarios that varied in where they fell across the spectrums (e.g., if more funding was invested in highways versus transit, if the region was more compact versus expanded).
- The Mid-America Regional Council in Kansas City, Missouri, used exploratory scenario planning to build on previous regional efforts. The agency identified categories of topics (e.g., technology, demographics, economic forces, changing climate, and public expectations) to explore how these forces might affect the future. This information then fed into the MTP and other regional plans.
- The Delaware Valley Regional Planning Commission in Philadelphia, PA, is another leader in exploratory scenario planning. In developing its scenarios, the agency worked with stakeholders to think about what each scenario, and related forces, would mean for the region and its future. The exercise was not meant to result in selecting a single, preferred scenario but rather to learn from each of the scenarios.

Mr. Thorne concluded his presentation by noting that, no matter the approach, scenario planning is about creating multiple, plausible stories about the future and trying to assess and prepare for possible future conditions. Scenario planning provides a way of considering tradeoffs among different choices and examining the impacts of driving forces. It is a way to challenge accepted beliefs and prompt creative thinking. It is also a way to get more active stakeholder involvement, encourage collaboration among different fields (e.g., transportation, land use, economic development, environment, etc.), and build awareness, which can lead to more robust and informed decisionmaking.

Lastly, Mr. Thorne shared various scenario planning resources offered by FHWA. These resources include research efforts and guidebooks, including a [six-phase framework](#) for doing scenario planning, a [guidebook](#) highlighting next generation scenario planning, and a [guidebook](#) addressing how scenario planning can advance performance-based planning and programming. All of these, as well as other, resources are available on the [FHWA scenario planning website](#).

### ***Scenario Planning at WAMPO: Trends in the Region and Overview of Current Scenario Planning Efforts***

Mr. Upchurch began by providing an overview of trends in the WAMPO region, followed by a review of WAMPO’s current scenario planning efforts. A later session focused specifically on the draft scenarios WAMPO created and sought participant feedback on the drafts; for the purposes of this report, a summary of the draft scenarios is included in this section, while the feedback provided by participants during full-group and break-out group discussions on the topic is provided later on in this report.

### ***Trends in the Region***

WAMPO has identified six key trends for the Wichita metropolitan area. Mr. Upchurch reviewed each of these trends and their related characteristics:

1. Social and demographic changes – There is a “graying” of the region, as by 2035, 1 in 5 residents will be over 65 years of age. An increasing portion of residents are “aging in place.” The region is also seeing a reduction in the size of households; by 2025, half of the households will be single-person households. Younger residents are often moving to other large metropolitan areas and stand to impact changes in the region’s development patterns through their housing preferences.
2. Need for a regional identity – There is a need to explore how the region identifies itself (e.g., whether as the Wichita metropolitan area, or an area more broadly).
3. Technology – Technological advances and shifts, such as connected and automated vehicles and more remote/home-based work, are likely to have impacts on the region’s land use patterns. More online retail purchases are also likely to impact transportation systems, particularly freight delivery and logistics.

4. Financial uncertainty – This is a nation-wide issue, as there is more uncertainty around the availability of funding in the future. Financial uncertainty is the only certainty for the future.
5. Employment demand and skills – The Wichita metropolitan area has a robust airline manufacturing sector, but this requires advanced training and skills. There is a need to retain highly skilled workers and provide access to transportation for training and employment opportunities.
6. Land use – The decreasing size of households stands to have impacts on land use patterns and the type of housing people use (e.g., potentially more interest in duplexes and apartments, and less in large, single-family houses). There will also likely be more interest in opportunities to live in the downtown core.

### ***Scenario Planning Efforts***

WAMPO started its scenario planning process by looking at the aforementioned trends. The agency also reached out to the public and other stakeholders to identify driving forces, issues and challenges, opportunities, and equity considerations. Since October 2017, WAMPO has held 24 community meetings, attended by over 260 people, ranging in age from 15 to 83 years.

Through its outreach, WAMPO heard that:

- *Key driving forces* related to funding; demographic trends; active transportation; workforce demands and skills; aging population; maintenance of good quality infrastructure; technology; the need for a regional image for economic development; and health initiatives/insurance/employee wellness.
- *Key challenges* related to finances/funding; lack of a regional plan/regional leadership/vision; safety; “brain drain”; limited public transit routes; and differences in opinions as part of an urban/rural split.
- *Key opportunities* related to the low cost of living in the region; system reliability (i.e., consistent travel times); local academic resources, including Wichita State University’s Innovation Campus and the collaboration between Wichita State University and Wichita Area Technical College; the availability of renewable energy (e.g., wind); and bicycle/pedestrian infrastructure.
- *Key matters of equity* included access to public transit; distribution of transportation services in the region; funding priorities; affordable job training access; and general affordability of transportation options.

Through its scenario planning effort, WAMPO sought to develop scenarios that responded to the region’s trends. Mr. Upchurch noted that WAMPO’s scenario planning effort leans more toward an exploratory approach. The agency aims to design the scenarios so that they are useful tools to illuminate different possible futures for the region.

### ***WAMPO Draft Scenarios***

In addition to the overview presentation discussed above, Mr. Upchurch also reviewed in depth WAMPO’s draft scenarios. The six draft scenarios are:

- Scenario 1: Maintaining Current Direction
- Scenario 2: Maintaining with Performance Targets
- Scenario 3: Urban Renaissance
- Scenario 4: Local Transportation Investment
- Scenario 5: Repurposing Existing Infrastructure
- Scenario 6: Technology as a Driving Force

Mr. Upchurch discussed the characteristics associated with each draft scenario, including trends, impacts, and responses:

- Scenarios 1 and 2 are the baseline scenarios, which assume the continuation of current trends.
- Scenario 3 explores trends related to generational changes and changing land use and transportation preferences.
- Scenario 4 considers the uncertainty of funding at the State and Federal levels and the need for leadership on transportation issues at the local and regional levels.
- Scenario 5, like Scenario 4, assumes shortfalls and uncertainty in State and Federal transportation funding. Scenario 5 envisions ways the region can respond to these uncertainties by leveraging its excess capacity and relatively slow population growth; prioritizing limited resources for the most important projects, such as freight mobility; and repurposing lanes on streets with excess capacity to accommodate other modes (e.g., transit, bicycle, pedestrian).
- Scenario 6 emphasizes the role of technology in transportation, and considers the impacts of automated vehicles, remote work, and freight logistics on the transportation system.

See [Appendix E](#) for additional information on the draft characteristics.

## Peer Approaches to Scenario Planning

During the workshop, the two peers—representing BTPO and MAPA—provided presentations on their agencies’ scenario planning activities and their insights into using a scenario planning approach. The two sessions during which the peers presented focused specifically on: 1) getting started with scenario planning; and 2) moving from application to implementation in the WAMPO region. The summary highlights themes shared during these presentations.

### *Peer Panel 1: Scenario Planning Perspectives—Getting Started with Scenario Planning*

#### **Mori Byington**

Director, Bannock Transportation Planning Organization

Mr. Byington opened his presentation by first providing an overview of the BTPO region. The region has a population of approximately 89,000 and has experienced a slow and steady growth pattern of 1 to 2 percent over the past 20 years. The City of Pocatello, located in the Portneuf Valley, was originally created by Congress in the 1870s in support of the expansion of the railroad. Today, most commercial activity and older neighborhoods are located on the valley floor, with additional residential areas in the hillsides. The City is surrounded on all sides by Federal lands, mountain passes, and Tribal lands, which can make accommodating new growth challenging. Pocatello is also home to Idaho State University.



**Figure 2: Mori Byington, BTPO Director, discusses his agency’s approach to scenario planning.**  
Source: U.S. DOT Volpe Center.

Mr. Byington discussed BTPO’s activities before formally engaging in a scenario planning process. These activities included a 2006 effort that explored how BTPO could support comprehensive regional plans that encouraged neighborhood development and a 2012 demographic update to obtain a sense of the region’s housing preferences and allocations given current growth patterns. BTPO saw scenario planning as an opportunity to focus a discussion on what is important to the region and to develop measures or indicators that could be used to track improvements.

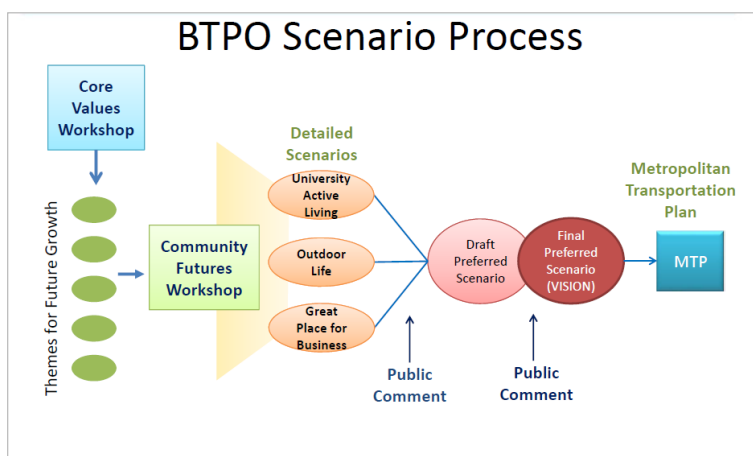
In applying its scenario planning approach, BTPO worked with stakeholders to identify desired outcomes:

- To determine a transportation vision for the Portneuf Valley;
- To incorporate community livability and sustainability principles into the metropolitan transportation planning process;
- To actively engage transportation stakeholders and other community members when exploring and developing regional planning strategies;
- To determine the cost of development (street, water, sewer); and
- To develop performance measures to track progress.

BTPO recognized that there are different approaches to scenario planning and thought through the best approach that would work for it as an agency and for the region. For example, developing multiple future visions seemed overwhelming, and BTPO considered whether the process was the same as it had done in the past with a new name. In addition, BTPO understood that it could obtain consultant assistance in the development of the scenarios but considered that this support would likely not continue to help with implementation and integration into the MTP and other plans. The tools and data needed were also a question, as BTPO wanted to use tools that would help it show and quantify changes. BTPO ultimately selected the software tool, CommunityViz, for its scenario planning effort.<sup>1</sup>

BTPO first started by holding workshops focused on core values and community futures (Figure 3). From there, it developed five scenarios—*University Town*, *Active Living*, *Outdoor Life*, *Great Place for Business*, and a trend scenario.<sup>2</sup> These detailed scenarios fed into a draft and final preferred scenario, refined through stakeholder input. The final preferred scenario became the “vision,” which ties into the MTP.

BTPO also considered ways to evaluate the scenarios. One of the data challenges BTPO faced is the region’s large Transportation Analysis Zones (TAZs), which did not have enough rich, parcel-level data to allow for detailed Geographic Information System (GIS) analyses. BTPO used CommunityViz to evaluate the results of the scenarios. The tool allowed BTPO to input external forces and then look at choices and actions as tied to the scenarios. BTPO used over 33 community performance indicators and 6 transportation system indicators.<sup>3</sup>



**Figure 3: BTPO started its scenario planning process by holding workshops, the input from which, along with later public feedback, fed into the scenarios developed.**

Source: BTPO.

<sup>1</sup> For more information on CommunityViz, please visit: <http://placeways.com/communityviz/>. Reference of this tool is provided in this report as part of the summary of the BTPO presentation; this reference is not meant to endorse CommunityViz or any particular scenario planning tools. FHWA recognizes that many tools are available and encourages agencies to use the tools that work best for them.

<sup>2</sup> Themes from the initial scenarios were: *University Town*: A community centered around a thriving academic hub tied to the people who live and work here; *Active Living*: Expanding services, facilities, and designs for an active and healthy everyday lifestyle; *Outdoor Life*: Embracing our natural setting with ready access to recreation and the outdoors anywhere you go; and *Great Place for Business*: Welcoming and supporting new employers and a robust, well-balanced economy. *Active Living* and *Outdoor Life* were later combined based on stakeholder feedback.

<sup>3</sup> Community performance indicators included land conservation; prime agricultural soils; and employment near downtown, transit, and interstate. Transportation system indicators included system-wide vehicle miles traveled, system-wide vehicle hours traveled, average trip time, average trip length, deficient roadway miles, and particulate matter emissions.

Mr. Byington shared some of the successes of and lessons learned through BTPO's scenario planning effort, including:

- **Developing a common vocabulary.** In the beginning of its scenario planning process, BTPO referred to terms that it quickly realized were not as familiar to stakeholders (e.g., “walkability,” “sustainability,” and “Complete Streets”). BTPO paused its scenario development activities to engage stakeholders about these terms and develop a common vocabulary. This was important to ensure that terminology was consistent and that people understood what others meant when particular terms were used.
- **Pursuing a multi-faced public involvement approach.** BTPO used a variety of approaches to involve the public and others in its activities, including public workshops, steering committee participation, and an online survey and website. BTPO used one of its public workshops to focus specifically on the scenario development, conducting a “chip” exercise in which participants used stickers or “chips” to identify areas of growth and markers to identify transportation nodes and connectors. BTPO worked to involve “non-traditional” stakeholders through its outreach, including health and human services representatives and real estate developers, to encourage different perspectives. Over 100 people participated in the scenario development workshop, sharing ideas as part of 8 tables (2 tables for each scenario [excluding the trend scenario]).
- **Leveraging available resources and partnerships.** Given that GIS and modeling were important parts of BTPO's effort to model the scenarios, the agency partnered with Idaho State University to leverage university resources in this field. Through this partnership, BTPO was able to obtain GIS services and help stakeholders see how data inputs affected each of the scenarios.
- **Thinking strategically about what to evaluate.** BTPO found initial challenges in choosing what to evaluate since there were so many indicators to consider. BTPO selected the indicators that it thought worked best for its process and asked stakeholders to rate the scenarios using the indicators. The goal was not to use the indicators as a “report card” but rather to demonstrate how different components of the scenarios performed better or worse than the trend. This information then fed into the development of the final, preferred scenario, which was a hybrid of the original scenarios.

## Michael Helgerson

Transportation and Data Manager, Omaha-Council Bluffs Metropolitan Area Planning Agency

MAPA is a regional council of governments (COG) that serves eastern Nebraska and western Iowa, including 5 counties, 38 towns, 19 special purpose governmental entities, and 1 city council. These 5 counties, along with 3 additional counties, comprise the larger metropolitan statistical area (MSA). Two of the counties (Douglas and Sarpy counties) make up the MPO's specific planning area, or Transportation Management Area (TMA). The region has had steady, slow growth over the past 25 years (about 1 percent population growth annually). The MSA's current population is approximately 933,316.<sup>4</sup>

MAPA started using scenario planning through its Heartland 2050 initiative launched in 2012. The effort resulted in a vision for the Heartland region that spoke to its “people, places, and resources.” Mr. Helgerson detailed the process that MAPA used to encourage active public involvement. Through the initiative, the agency was able to build new and strengthen existing relationships with 17 local governments in the MPO area, 65 in the COG area, and 85 in the MSA.



Figure 4: Michael Helgerson, MAPA Transportation and Data Manager, describes MAPA's scenario planning activities.

Source: U.S. DOT Volpe Center.

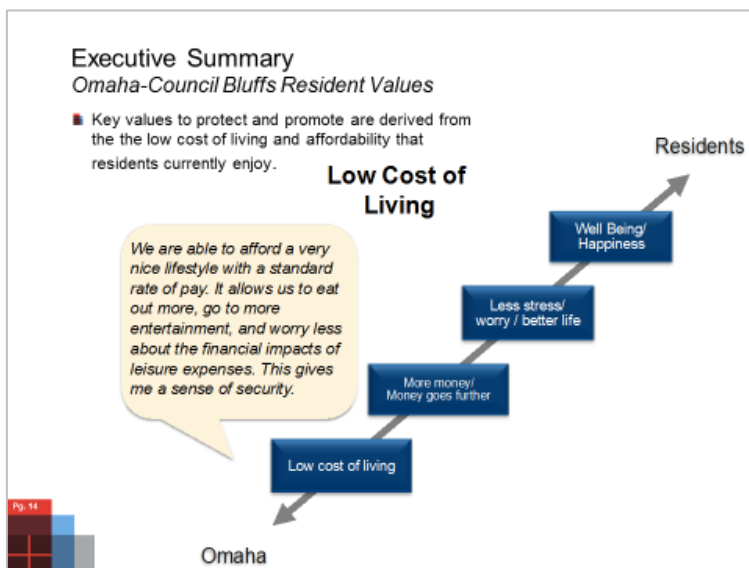
<sup>4</sup> This number reflects the 2017 census estimate for the MSA, which was the study area for the Heartland 2050 initiative. The population of MAPA's TMA is less, as it is comprised of fewer counties (Douglas and Sarpy counties). Note that the MSA is not MAPA's TMA.

MAPA first established a base case scenario and held discussions and workshops with the public and professionals in multidisciplinary fields, including safety, health, and education. The base case showed the status of the region and its trends. During the workshops, MAPA organized a “chip” game, similar to BTPO, to obtain input. MAPA also conducted a scenario survey and used these inputs to develop the Heartland 2050 vision. Mr. Helgerson estimated that the outreach effort was about 15 months and included 175 community meetings, 25 visioning workshops, and 10 values workshops; MAPA engaged 4,000 people overall, including 600 who participated in the chip game. Through this effort, MAPA hoped to engage a diverse set of stakeholders and use its outreach activities to tell a story of the region, participants’ inherent values, and participants’ preferences and thoughts on future growth in the region.

Mr. Helgerson discussed an innovative, “values laddering” approach MAPA used in its effort.<sup>5</sup> MAPA used the theory that there is a “strategic hinge” that exists, linking the attributes and benefits of life in a region to its people. MAPA focused on identifying the rational and emotional drivers of this hinge through its “values” research. Since the scenario development process was iterative, MAPA wanted to get a sense of residents’ perspectives on the region’s future. MAPA conducted a survey to ask residents about quality of life in the future, the direction of their own communities, and quality of life in the region in the future.<sup>6</sup>

Following the survey, MAPA identified and asked residents about possible strategies for the future. The top strategy of interest was coordination among local governments to ensure cooperation on issues impacting the entire region. MAPA held “values” workshops to ask participants for their perspectives and built this into the values laddering process. Through the process, MAPA started with attributes (e.g., low cost of living) and then worked to link these to benefits (e.g., more money/money goes further), emotions (e.g., less stress/worry/better life), and values (e.g., well-being/happiness) (Figure 5). This process surfaces the “strategic hinge” and allows attributes to be tied directly to emotional responses.

MAPA then focused on tying the values to action. Participants through MAPA’s outreach felt that improvements to the region’s existing elements, such as infrastructure and communities, were important for future growth in the region. The agency also used a “Smith vs. Jones” foil to show how perspectives might vary on a particular topic. For example, some residents might agree with “Smith” and



**Figure 5: Through the values laddering process, MAPA asked residents about attributes about the region (e.g., low cost of living) and built upon or “laddered” the responses provided to focus on the benefits, emotions, and values that tied back to this attribute.**

Source: MAPA.

<sup>5</sup> MAPA used a similar approach to that pioneered by Envision Utah and the Wasatch Front Regional Council for the Salt Lake City region. MAPA partnered with Heart+Mind Strategies for its values laddering process. For more information on Heart+Mind Strategies, please visit: <http://heartandmindstrategies.com/>. Reference to this company is provided in this report as part of the summary of the MAPA presentation; this reference is not meant to endorse Heart+Mind Strategies or any other similar companies. FHWA recognizes that there are many companies and organizations involved in this field and encourages agencies to use the approaches that work best for them.

<sup>6</sup> The results showed that 78 percent of respondents felt that quality of life generally in the future would improve, as opposed to the national average of 44 percent. Respondents between 18-34 years of age were most likely to believe that the quality of life in the region would increase. Sixty percent of respondents felt that they believed their community was moving in a positive direction. Seventy-one percent of respondents shared that they saw quality of life in the region being positive in the future. Higher income respondents (\$100K+) were also more optimistic about the direction of their communities and quality of life.

believe that the region should focus on new growth in outlying communities, while others might side with “Jones” in that infill development of existing areas is more preferable. While most agreed that investing in regional transportation is important, a majority (71 percent) believed that funds allocated for public transportation should be kept the same or increased only somewhat. All of this information fed into the scenarios that MAPA created.<sup>7</sup>

Using the various inputs, MAPA developed four scenarios as part of the Heartland 2050 effort:

- Scenario A, which was the trend scenario.
- Scenario B, which aggregated all of the maps created by workshop participants (90 total). The scenario envisioned tremendous growth, with over 40 percent of new growth occurring in existing urban and suburban areas.
- Scenario C, which focused population and employment growth in the urban core.
- Scenario D, which looked at allocating employment growth near urban, suburban, and rural communities to reduce long commutes and revitalize existing neighborhoods and towns.

MAPA continued its extensive public involvement activities by soliciting input through an online survey platform available through MetroQuest to obtain feedback on the scenarios and related strategies.<sup>8</sup> Approximately 500 people participated. The survey showed that, while scenarios B, C, and D were all rated highly, Scenario D was the most preferred by respondents for the region. MAPA fed this feedback into guiding principles and goals established for the Heartland 2050 effort.<sup>9</sup> These guiding principles and goals connected to the final “vision” scenario, which reflected elements of the earlier scenarios and the feedback shared by participants throughout the outreach process.

## *Peer Panel 2: Scenario Planning Perspectives—Moving from Application to Implementation*

### **Michael Helgerson**

Transportation and Data Manager, Omaha-Council Bluffs Metropolitan Area Planning Agency

In his second presentation, Mr. Helgerson described how MAPA leveraged its scenario planning into other activities. MAPA connected its scenario work with the Metro Area Travel Improvement Study, in partnership with FHWA and the Nebraska Department of Transportation (NDOT). MAPA also sought ways to integrate elements of Heartland 2050 into its long-range transportation plan (LRTP).

In the 1980s, NDOT developed an investment plan for the State’s interstate system, looking ahead 30 years. In 2013, NDOT began work to update the plan for the next 30 years through the Metro Area Travel Improvement Study. The study has three phases:

- Phase 1, which focused on modeling existing conditions and conducting predictive safety analysis (completed in August 2015);
- Phase 2, which tested different investment strategies to establish a framework for an overall State investment framework for the LRTP (completed in 2017); and

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<sup>7</sup> MAPA aggregated all of the scenario outputs developed from its outreach into the scenario tool, Envision Tomorrow, which allowed it to view participants’ preferences for allocating growth at the regional level. For more information on Envision Tomorrow, please visit: <http://envisiontomorrow.org/>. Reference of this tool is provided in this report as part of the summary of the MAPA presentation; this reference is not meant to endorse Envision Tomorrow or any particular scenario planning tools. FHWA recognizes that many tools are available and encourages agencies to use the tools that work best for them.

<sup>8</sup> For more information on MetroQuest, please visit: <https://metroquest.com/>. Reference of this tool is provided in this report as part of the summary of the MAPA presentation; this reference is not meant to endorse MetroQuest or any particular scenario planning tools. FHWA recognizes that many tools are available and encourages agencies to use the tools that work best for them.

<sup>9</sup> The guiding principles were: Equity, Efficiency, Inclusivity, and Local Control and Regional Benefit. The Heartland vision goals were: Infrastructure, Housing and Development, Economic Development, Education, Health and Safety, and Natural Resources.

- Phase 3, which involves detailed freeway alternatives evaluation and a freeway system implementation plan (in process).

Through the study, the team developed regional strategy packages and looked at existing funding sources and new possible funding strategies. The activity resulted in the selection of a preferred regional strategy package, which NDOT and MAPA then used to evaluate freeway corridor alternatives and State investments. Mr. Helgerson noted that this was NDOT and MAPA's first foray into performance measures, as they assessed each of the packages using a set of measures related to mobility, accessibility, equity, safety, and the environment. Using performance measures helped NDOT and MAPA evaluate projects more robustly and gave more certainty in terms of which corridors were likely going to be priorities. The study also led MAPA to revisit its assumptions about land use. The agency looked into opportunities to support redevelopment without affecting existing building footprints and transform vacant land and surface parking lots. Mr. Helgerson noted that this work helped connect the efforts of Heartland 2050 and frame them as part of the study, particularly in exploring the impacts of land use changes on the transportation system and services.

In his closing remarks, Mr. Helgerson discussed MAPA's "Close the Gap" Plan, which builds from Heartland 2050 and the study. Close the Gap focuses on using the region's transportation system to create more vibrant places that are better connected to employment, educational, and other opportunities. MAPA has found the plan to be a useful tool to reinforce the link between transportation and land use and anticipates further integrating the plan into the next update of its LRTP.

### ***Mori Byington***

[Director, Bannock Transportation Planning Organization](#)

Mr. Byington shared lessons learned and insights from BTPO's scenario planning process in his second presentation. He spoke specifically to the value of scenario planning that BTPO found and ways that BTPO was able to address and overcome implementation challenges. Since much of the region's funds are typically already programmed, BTPO explored how it could carry forward the preferred scenario with a limited "toolbox."

Through its effort, BTPO found that scenario planning allowed it to:

- Reshape the growth conversation from "yes, please and more" to a vision of tomorrow that incorporates capacity restraints.
- Include agencies and people not traditionally involved in the process.
- Provide a platform and measures to track progress of the plan.
- Prepare for Federal performance measure requirements.
- Realize the need for better GIS data in the region, culminating in the addition of new GIS staff across agencies in the region.

Mr. Byington also spoke to the importance of regional partnerships in implementation. BTPO engaged a variety of stakeholders, including business owners, students, housing agencies, and other interest groups. Mr. Byington noted that this outreach was helpful, especially when advocating for zoning and policy changes; in these instances, BTPO coordinated with local cities to explore possible changes and, as a result, became more involved in site plan and zoning processes.

To further implementation, BTPO updated various plans to reflect the preferred scenario, including the [Yellowstone Corridor Plan](#), which evaluates existing and future transportation issues for the region's highest-volume arterial corridor. BTPO also partnered with Pocatello Regional Transit, the region's transit provider, to integrate the scenario into the [Pocatello Regional Transit Master Transit Plan](#).



In addition, BTPO pursued “proof of concept” projects to demonstrate the vision and foster buy-in. Mr. Byington provided several examples of these projects. For example, since the region had little experience with Complete Street concepts, BTPO worked with local agencies to develop projects that demonstrated these concepts. BTPO tested improvements to Martin Luther King, Jr. Way, which runs through the Idaho State University campus (Figure 6). Mr. Byington noted that the improvements did not cost much more than if the original design had remained, but that overall, the final product looks much better visually and is heavily used by pedestrians.

In concluding his presentation, Mr. Byington summarized challenges and lessons learned that BTPO realized through its scenario planning activities. One of the primary challenges he noted is that simply having an agreed-upon vision does not mean that there will be agreement in how to implement the vision. He further noted that data requirements and the continued maintenance of data sets can often be challenging, especially for small MPOs. Furthermore, changes in staff, elected officials, and stakeholders can mean that, over time, sustained outreach is needed for a plan to carry forward; Mr. Byington recommended that MPO staff have an “elevator speech,” as people may forget details through transitions and as new staff need introductions to the process. He further suggested that agencies actively think through and define next steps, which can help incorporate scenario results into other work and better track measures and goals. Overall, BTPO found its scenario planning activities useful but recognizes that thoughtful consideration of how scenarios will be implemented is needed for an effort to be most effective.



**Figure 6: BTPO worked closely with partners to implement improvements through “proof of concept” projects, such as MLK Way above.**

Source: BTPO.

### **Interactive Group Exercises**

Throughout the workshop, participants took part in discussions to share ideas and questions on scenario planning. Day One discussions included a full-group discussion to obtain input on WAMPO’s draft scenarios and break-out group discussions focused on ways to move from applying to implementing a scenario planning approach in the region. Day Two involved two roundtable discussions during which the peers shared information about scenario planning tools and opportunities to use the outputs of scenario planning for future planning products. The following summarizes themes from the Day One and Day Two discussions.

#### ***Full Group Discussion: Input on WAMPO Draft Scenarios***

After the presentation of the draft scenarios by WAMPO, Mr. Thorne facilitated a discussion with workshop participants to ask for their initial feedback on the drafts. Feedback shared during the discussion is summarized below. Additional feedback provided by participants on the draft scenarios can be found in [Appendix F](#).

Overall, participants seemed to feel that the WAMPO was moving in the right direction for the structure of the scenarios. Feedback included:

- Participants reviewed the differences between Scenario 1 (*Maintaining the Current Direction*) and Scenario 2 (*Maintaining with Performance Measures*), and discussed the possible consolidation of these scenarios given their close alignment.
- Participants noted that the current Scenario 3 (*Urban Renaissance*), which focuses on the development of downtown Wichita, would likely take tremendous private investment and buy-in from the market. As part of Scenario 3, there may also need to be discussion about what the impacts might be on surrounding communities.

- Participants discussed updating Scenario 4 (*Local Transportation Investment*) to emphasize regional leadership. Participants felt that the scenario should include an institutional angle, in addition to a financial one. Participants also discussed whether this scenario should be integrated across the others, as funding and leadership would likely tie in to all of the scenarios.
- Participants shared whether the current title of Scenario 5 (*Repurposing Existing Transportation*) might need to be revised. Participants noted that this scenario would likely need to respond to generational changes and preferences and involve new technologies to improve infrastructure.
- Participants discussed how to best address Scenario 6 (*Technology as a Driving Force*), whether it should be its own scenario or whether the focus on technology should be incorporated across other scenarios. Participants agreed that this scenario would likely be the most transformative of all of the current scenarios and discussed how the idea of the “fog of the future” related most to this scenario. One idea raised was to have the scenario focus on technology as a way to develop new sources of revenue.

### ***Break-out Group Discussion: Moving from Application to Implementation in the WAMPO Region***

During the break-out group discussion, participants divided into five groups. Mr. Thorne presented the groups with four questions and asked each group to select and discuss up to two of the following questions:

- What do you see as the first steps for an MPO to take in using scenario planning in its transportation planning process?
- What are some key courses of action that could be used to guide future transportation planning decisionmaking in your MPO region?
- What role could WAMPO play in using scenario planning to create a long-term vision and plan for the region?
- How could scenario planning improve collaboration among local, regional, and State agencies? What public issues could benefit from the educational aspects of a scenario planning approach?

Each of the groups ended up selecting different variations of the questions to discuss. Input provided by the groups is provided in [Appendix F](#).

### ***Roundtable Discussions***

Day Two of the workshop included two roundtable discussions. Participants in the Day Two discussions included the WAMPO staff, the peers, and FHWA staff. A representative from the Greater St. Joseph Area MPO also participated. In the first discussion, participants shared thoughts on scenario planning tools. The second discussion focused on ways to use the outputs of scenario planning activities for future planning products. Key themes from the discussions are summarized below.

#### ***Scenario Planning Tools***

- ***Building a sense of ownership around scenarios, after inputting feedback into tools, can be challenging.*** MAPA noted that fostering ownership of scenarios, particularly by local jurisdictions, can sometimes be difficult. After scenarios are created, staff often use scenario planning tools to aggregate data, which can give the sense of data being put into a “black box” to yield outputs of which stakeholders are unsure. MAPA discussed how it has worked to strengthen and clarify its scenarios, so that jurisdictions have a better sense of what they represent.
- ***An exploratory approach to scenario planning allows for more qualitative inputs and can help when there is limited time and resources.*** WAMPO discussed that it is taking a more qualitative, exploratory approach to its scenario planning effort, particularly because of its available resources. Participants discussed that the MAPA and BTPO efforts took approximately 15 and 18 months respectively, and WAMPO noted that its current effort is scheduled to be about one year. An exploratory approach can help agencies apply scenario planning more quickly but does not always include as intensive analysis through data and tools.

### Using the Outputs of Scenario Planning for Future Planning Products

- **Engaging decisionmakers early on is crucial for an effort's long-term success.** Participants discussed that having buy-in from elected officials and other decisionmakers is important in integrating and implementing the results of a scenario planning effort into other planning activities. Participants noted that proactively thinking about how to “package” a scenario planning effort is a key first step. Through its Heartland 2050 initiative, MAPA found success in conveying a message of how activities would benefit the region as a whole and engaged elected officials, city administrators, directors of planning, chambers of commerce, and others.
- **Opportunities remain for integrating scenario planning formally into the transportation planning process.** Participants discussed that there are challenges in connecting projects in the MPOs' TIPs with the results of a scenario planning effort. Since the TIP is programmed at least four years out, major projects are typically already prioritized under a prior framework before a scenario planning effort might begin. Participants noted that there may be opportunities to use Federal funding (e.g., Surface Transportation Block Grant Program) to prepare for projects that connect to goals in the MTP and/or scenario effort and may later appear in the TIP.

## **Conclusion and Next Steps**

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The FHWA scenario planning workshop, hosted by WAMPO, offered an opportunity for WAMPO to learn from peer agencies about their scenario planning activities and to obtain input on the draft scenarios currently in development. Throughout the workshop, attendees participated in discussions to share ideas and questions about scenario planning generally and about WAMPO's approach.

Participants provided additional feedback through evaluation forms submitted at the end of Day One. The evaluations indicated that, while attendees were relatively familiar with scenario planning prior to the workshop, they felt that their familiarity with scenario planning increased after the workshop. Many attendees also noted that they were very involved in planning processes or community/regional decisionmaking in the region. Overall, participants appeared to feel strongly that the workshop provided them with a better understanding of how scenario planning works and how the input they shared during the event would be used moving forward.

Participants in the Day Two discussions also found value in these sessions. Day Two allowed for a “deeper dive” into particular topics to help WAMPO think through next steps for its scenario planning approach and to hear from the peers about opportunities, challenges, and lessons learned. WAMPO plans to incorporate feedback and ideas shared throughout the workshop into updates of the draft scenarios and into its approach to scenario planning.

## Appendices

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### A. About the FHWA-FTA Scenario Planning Program

The [Transportation Planning Capacity Building \(TPCB\) Program](#) is a joint venture of FHWA and FTA that delivers products and services to provide information, training, and technical assistance to the transportation professionals responsible for planning for the capital, operating, and maintenance needs of our nation's surface transportation system. The TPCB Program website ([www.planning.dot.gov](http://www.planning.dot.gov)) serves as a one-stop clearinghouse for state-of-the-practice transportation planning information and resources. This includes over 70 peer exchange reports covering a wide range of transportation planning topics.

The TPCB Scenario Planning Program, jointly offered by FHWA and FTA, advances the state of the practice in scenario planning by encouraging agencies to learn more about or apply scenario planning as part of their transportation planning activities. The program offers a range of resources for agencies interested in scenario planning or in need of scenario planning technical assistance, including on-call technical assistance, peer-to-peer sharing, and customized webinars and workshops.

## B. Key Contacts

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## C. Event Participants

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Richard	Backlund	FHWA Kansas Division
Mori	Byington	Bannock Transportation Planning Organization
Robert	Conger	City of Kechi, KS
Cory	Davis	Kansas Department of Transportation
Paul	Foundoukis	FHWA Kansas Division
Rene	Hart	Kansas Department of Transportation
Tom	Hein	Kansas Department of Transportation
Michael	Helgerson	Metropolitan Area Planning Agency
Tim	Johnson	City of Goddard, KS
Thomas	Jones	City of Park City, KS
Jeff	Lackey	TranSystems Corp.
Keith	Lawing	Regional Economic Area Partnership
Brett	Letkowski	TranSystems Corp.
Les	Mangus	City of Andover, KS
Pete	Meitzner	City of Wichita, KS
Phil	Nelson	WAMPO
Bethany	Phelps	WAMPO
John	Prather	WAMPO TAC Freight Representative
Anne	Stephens	City of Bel Aire, KS
Rachel	Strauss McBrien	U.S. DOT Volpe Center
Troy	Tabor	City of Andover, KS
Tricia	Thomas	WAMPO
Jim	Thorne	FHWA Office of Planning
Chris	Upchurch	WAMPO
Jim	Weber	Sedgwick County Public Works
Caitlin	Zibers	Greater St. Joseph Area MPO
Kristen	Zimmerman	WAMPO

## D. Workshop Agenda

Wichita Area Metropolitan Planning Organization (WAMPO)  
 Scenario Planning Workshop  
 Sponsored by the Federal Highway Administration (FHWA)  
 Wichita, Kansas

**Dates:** June 26-27, 2018

Host Agency: WAMPO

**Facilitator:** Jim Thorne, FHWA Office of Planning

Peers:

- Bannock Transportation Planning Organization (BTPO)
- Metropolitan Area Planning Agency (MAPA)

Workshop Overview:

This 1.5-day workshop, hosted by WAMPO, introduces scenario planning and its various approaches to build awareness, as WAMPO looks to incorporate a scenario planning into its upcoming Metropolitan Transportation Plan update. Peers from two peer agencies will share their agencies' experiences in using scenario planning, from how they got started to how they have implemented the results in their transportation planning processes.

Workshop Goals:

Goals include: introducing scenario planning; and sharing information about WAMPO's scenario planning activities.

### DAY ONE

Time	Session	Speaker(s)
8:00 - 8:30 am	Registration and Check-in	
8:30 - 8:45	Welcome and Introduction	<ul style="list-style-type: none"> <li>• Phil Nelson Executive Director, WAMPO</li> <li>• Richard Backlund Division Administrator, FHWA Kansas Division</li> <li>• Jim Thorne Workshop Facilitator, FHWA Office of Planning</li> </ul>
8:45 - 9:15	What is Scenario Planning?	<ul style="list-style-type: none"> <li>• Jim Thorne FHWA Office of Planning</li> </ul>
9:15 - 9:45	Scenario Planning at WAMPO: <i>Trends in the Region &amp; Overview of Current Scenario Planning Efforts</i>	<ul style="list-style-type: none"> <li>• Chris Upchurch Principal Planner, WAMPO</li> </ul>
9:45 - 10:00	BREAK	

10:00 - 11:30	Peer Presentation 1: Scenario Planning Perspectives – <i>Getting Started with Scenario Planning</i>	<ul style="list-style-type: none"> <li>Mori Byington Director, BTPO Pocatello, ID</li> <li>Michael Helgerson Transportation and Data Manager, MAPA Omaha, NE</li> </ul>
11:30 am - 12:00 pm	Scenario Planning at WAMPO: <i>Review of Draft Scenarios</i>	<ul style="list-style-type: none"> <li>Chris Upchurch Principal Planner, WAMPO</li> </ul>
12:00 - 1:00	LUNCH	
1:00 - 1:30	Full Group Discussion: <i>Input on WAMPO Draft Scenarios</i>	<ul style="list-style-type: none"> <li>Workshop Facilitator, Participants</li> </ul>
1:30 - 3:00	Peer Presentation 2: Scenario Planning Perspectives – <i>Moving from Application to Implementation</i>	<ul style="list-style-type: none"> <li>Michael Helgerson Transportation and Data Manager, MAPA Omaha, NE</li> <li>Mori Byington Director, BTPO Pocatello, ID</li> </ul>
3:00 - 3:15	BREAK	
3:15 - 3:45	Break-out Group Discussion: <i>Moving from Application to Implementation in the WAMPO Region</i>	<ul style="list-style-type: none"> <li>Workshop Facilitator, Participants</li> </ul>
3:45- 4:15	Break-out Group Report-out: <i>Moving from Application to Implementation in the WAMPO Region</i>	<ul style="list-style-type: none"> <li>Workshop Facilitator, Participants</li> </ul>
4:15 - 4:30	Recap of Day / Next Steps	<ul style="list-style-type: none"> <li>Workshop Facilitator, Participants</li> </ul>
4:30 pm	Adjourn	

## DAY TWO

Time	Topic	Speaker
8:30 - 9:00 am	Registration and Check-in	N/A
9:00 - 9:30	Review of Day One / Debrief	Workshop Facilitator, Peers, WAMPO Staff
9:30 - 10:30	Round Table Discussion #1: Scenario Planning Tools	WAMPO and FHWA Staff, Peers
10:30 - 10:45	BREAK	
10:45 - 11:45	Round Table Discussion #2: Using the Outputs of Scenario Planning for Future Planning Products	WAMPO and FHWA Staff, Peers
11:45 am - 12:00 pm	Wrap-up and Conclusions	WAMPO Staff



## E. WAMPO Scenario Characteristics

WAMPO developed six draft scenarios, which it shared during the June 26th workshop for participant feedback. The following table provides information on the scenarios. The characteristics listed are directly taken from a presentation provided by WAMPO during the workshop.

Scenario Name	Characteristics
Scenario 1: Maintaining Current Direction	<ul style="list-style-type: none"> <li>• This strategy continues the current “maintain and preserve investment” approach for the urbanized area (i.e., the status quo continues).</li> <li>• It also recognizes that local governments will continue to make their own decisions about how to invest in their infrastructure using their community's resources.</li> </ul>
Scenario 2: Maintaining with Performance Measures	<ul style="list-style-type: none"> <li>• This strategy continues the current “maintain and preserve” investment approach for the urbanized area, but refines a focus on achievement of the performance targets adopted by WAMPO, which include:               <ul style="list-style-type: none"> <li>• Travel speeds</li> <li>• Bridge condition</li> <li>• Freight</li> <li>• City of Wichita Transit Targets</li> </ul> </li> </ul>
Scenario 3: Urban Renaissance	<ul style="list-style-type: none"> <li>• Trends:               <ul style="list-style-type: none"> <li>• Generational Changes – Graying population, growing numbers of millennials and Gen-Z, more childless households</li> <li>• Changing Desires – Alternative transportation modes, denser/more urban living</li> </ul> </li> <li>• Impacts:               <ul style="list-style-type: none"> <li>• Land use changes emphasizing denser, more walkable urban neighborhoods</li> <li>• New lifestyle options decrease the flow of educated young people out of the region</li> </ul> </li> <li>• Responses:               <ul style="list-style-type: none"> <li>• Fixed route transit connects urban areas and town centers across the region</li> <li>• Transportation appropriate for surrounding land uses</li> <li>• “Complete streets” policies that accommodate all users</li> <li>• Flexibility in project type funding</li> <li>• Concentrate investments in highest impact areas</li> </ul> </li> </ul>
Scenario 4: Local Transportation Investment	<ul style="list-style-type: none"> <li>• Trends:               <ul style="list-style-type: none"> <li>• Shortfalls and uncertainties in State and Federal transportation funding</li> <li>• Leadership on transportation issues comes at the local and regional levels rather than Topeka or Washington, D.C.</li> <li>• Increased demand for freight, especially “last mile”</li> </ul> </li> <li>• Impacts:               <ul style="list-style-type: none"> <li>• New regional funding mechanism for transportation</li> <li>• Emphasis on moving freight</li> </ul> </li> <li>• Responses:               <ul style="list-style-type: none"> <li>• Cultivate regional leadership and regional identity</li> </ul> </li> </ul>

	<ul style="list-style-type: none"> <li>• New major capital expenditures must have a local commitment</li> <li>• Concentrate on investments with the greatest impact</li> </ul>
<p>Scenario 5: Repurposing Existing Infrastructure</p>	<ul style="list-style-type: none"> <li>• Trends: <ul style="list-style-type: none"> <li>• Funding issues – Shortfalls and uncertainties in State and Federal transportation funding</li> <li>• Excess capacity – Wichita has more roadway capacity than many cities</li> <li>• Slow population growth – Growth rates in the WAMPO region are &lt;1% per year</li> </ul> </li> <li>• Impacts: <ul style="list-style-type: none"> <li>• Excess transportation capacity can be both a burden to maintain and an opportunity to pare back the system</li> <li>• Freight demand will continue to grow and will drive economic development</li> </ul> </li> <li>• Responses: <ul style="list-style-type: none"> <li>• Prioritize limited resources for most important projects, such as freight mobility</li> <li>• Repurpose lanes on streets with excess capacity to accommodate transit and bike/ped use</li> <li>• Determine land use options based on available transportation infrastructure</li> </ul> </li> </ul>
<p>Scenario 6: Technology as a Transportation Driver</p>	<ul style="list-style-type: none"> <li>• Trends: <ul style="list-style-type: none"> <li>• Automated vehicles develop quickly and become a majority of vehicles</li> <li>• Remote work allows employees to live anywhere and work from home</li> </ul> </li> <li>• Impacts: <ul style="list-style-type: none"> <li>• Remote work and automated vehicles allow people to live farther from the city center, encouraging sprawl</li> <li>• Shift from car ownership to mobility as a service</li> <li>• On-demand transportation services challenge traditional transit</li> </ul> </li> <li>• Responses: <ul style="list-style-type: none"> <li>• Dedicated AV lanes increase capacity of existing roadways, reducing the need for major new highway projects</li> <li>• Transportation spending shifts from capital projects to technology and maintenance</li> <li>• Emphasize future flexibility</li> <li>• Start pilot projects early</li> </ul> </li> <li>• Determine land use options based on available transportation infrastructure</li> </ul>

## F. Full-Group and Break-out Group Discussions

The following sections summarize discussions from the full-group and break-out group portions of Day One. Content shared below may not reflect the opinions or policies of FHWA or FTA.

### *Full-Group Discussion – Feedback on Draft Scenarios*

During the full-group discussion, participants offered feedback on the draft scenarios presented.

<i>Draft Scenario Title</i>	<i>Feedback Shared During Full-Group Discussion</i>
Scenario 1: Maintaining Current Direction	<ul style="list-style-type: none"> <li>• One scenario to consider is suburban growth. Wichita is larger than New Orleans and Orlando, but the difference is region size. Sedgwick County has doubled in size between 1950 and 2000. Assuming a similar growth pattern for the next 50 years, the majority of this growth will likely not occur in the city limits of Wichita but in surrounding communities. There are also bond issues that have passed for local schools, giving these communities a competitive advantage.</li> <li>• Is it worth consolidating Scenarios 1 and 2, considering how closely they will be aligned?</li> <li>• You can step quickly from Scenario 1 to Scenario 2. The targets WAMPO has set are the status quo, which the MPO could revisit. In the end, the MPO will parse out the parts that make sense to develop a single scenario. It is helpful for the process to have both scenarios. I do not have any trouble working with it.</li> <li>• Scenario 1, for me, would be “the world is ending.” No matter how much funding the district adds for bridges, we cannot keep up. We do not have funding available for repairs. This is an open question—whether the current level of resources is adequate in maintaining the system.</li> </ul>
Scenario 2: Maintaining with Performance Targets	<ul style="list-style-type: none"> <li>• Scenario 2 would possibly address those suburbs if those became the performance targets. We have a penny tax already, of which half goes to transportation. The State also shares a portion of the State sales tax with communities. Participants noted that a one-cent sale tax in multiple communities could generate about \$150 million in funds in addition to Federal funds.</li> </ul>
Scenario 3: Urban Renaissance	<ul style="list-style-type: none"> <li>• This scenario focuses on the development of downtown Wichita. What would be the impacts on surrounding communities?</li> <li>• There is an urban/rural split. There are views of wanting to be in small communities in the metropolitan area and joining the communities for consensus; there are different priorities and needs. The chambers of commerce were all about jobs, and there was pushback in terms of growing too fast and destroying our way of life. We have those issues too. We are dealing with how to pull these together for a common movement of a region. Transportation just seems to be the connecting link of these issues.</li> <li>• If we are importing workers and exporting households, are we looking at connectivity vis-à-vis the jobs-housing balance?</li> <li>• Scenario 3 would take a tremendous private investment and buy-in from the market. We can plan all we want, but if there is no buy-in, this will not occur. The scenario talks about density and walkability; these are characteristics that generally a municipality would have to subsidize in some manner, whether it is subsidizing transit, etc.</li> <li>• Private investment takes decades, but public investment is coming along because private investment is pulling it along.</li> <li>• For planning/walkable places activities that are happening now, these can lead to Scenario 3.</li> </ul>

<p>Scenario 4: Local Transportation Investment</p>	<ul style="list-style-type: none"> <li>• Scenario 4 is missing in its title the leadership that is needed to funnel those investments. We talked about the importance of regional leadership. Private investors may have a different agenda.</li> <li>• Where is the money in all of these scenarios? Scenario 4 specifically addresses this, but is there an assumption about Federal/State funding in the other scenarios? [NOTE: WAMPO noted as a follow-up response that Scenarios 4 and 5 currently both consider reduced Federal/State funding.]</li> <li>• What if Scenario 4 was integrated into another scenario? This one seems the most realistic in implementation and funding. It could be used in collaboration with any of the others. It is not the development as much as the funding and leadership. The scenario could be focused on the urban core, technology, etc.</li> <li>• Consolidation is occurring across government, services, county/state, private sector, etc. This consolidation is in the future in all of the scenarios. I do not think we are appreciating yet how to deal with this. My assumption is that we still have city/county governments and remaining at 105 counties in Kansas. There may be an opportunity to address consolidation as part of the scenarios.</li> <li>• How do we address housing affordability in the scenarios (e.g., the costs of the “trunks” filling out to avoid checkerboard development)?</li> <li>• Part of Scenario 4 that may be more novel is the regional leadership angle. Having this is important to lead investments. Scenarios 1 and 2 may not be different enough to have two separate scenarios. The regional component could be calibrated in the other scenarios too, with Scenario 4 as the exemplar for regional leadership.</li> <li>• I would suggest changing to a regional angle for Scenario 4. The scenario could emphasize the institutional angle in addition to the financial.</li> <li>• In successful cases across the country, there was a lot of leadership. People seem to like regional transportation investment; the scenario could relate to leading regional transportation investment.</li> <li>• The role of leadership is to generate enthusiasm for funding.</li> <li>• In Scenario 4, the word “local” means locally funded and not just locally led. This is a differentiation between the other scenarios. You are losing Federal/State funding in this scenario. I would understand this as city-run and not even regional. Changing this to “regional” would be better. “Regional transportation investment” is what the scenario is.</li> <li>• Regional versus local is a key distinction. “Consolidation” is also a trigger word for the city and county.</li> <li>• While there may be a normative scenario of what we are all aiming toward, it is really about bringing the local planning processes and decisionmaking in line with regional goals. We are going to have to pay our own way, and there will need to be some organizational capacity to get this down. It would be locally funded. It is an agreement by whoever this is to pay their own way. We have had the same discussion about finding resources and not relying on Federal investments. It gets to who pays and who benefits. There is an equity component to this. When I read this scenario, we need to pay our own way. Do we have the capacity to do this? What would be necessary to achieve this?</li> </ul>
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<p>Scenario 5: Repurposing Existing Transportation</p>	<ul style="list-style-type: none"> <li>• I call this the “no pennies from heaven” scenario. No one will bail out infrastructure, and you will need to deal with repurposing the existing infrastructure. You will need to use new technology to convert old routes, neighborhoods, and infrastructure.</li> <li>• I would build upon Scenario 5. My question is about “repurposing.” Maybe “evolution” of what we do would be a better term. The scenario needs to be responsive to generational changes and societal evolution.</li> <li>• I thought we were already repurposing existing infrastructure to support walking, bicycling, and light rail.</li> <li>• I would suggest a different angle/title for Scenario 5.</li> </ul>
<p>Scenario 6: Technology as a Driving Force</p>	<ul style="list-style-type: none"> <li>• All of Kansas’s metropolitan areas should be investigating this type of scenario. We do not know the impacts here. This will be the most transformative of the driving forces.</li> <li>• My problem with Scenario 6 is that it is a factor, but I do not want [automated vehicles] to be a driving factor. Everything that gets introduced has to deal with existing systems.</li> <li>• How do you know what you do not know? By the time you implement a plan, the technology has already changed.</li> <li>• Of the scenarios we have, the one that incorporates the most suburban growth is Scenario 6; however, this is a consequence of technological development rather than as a driving force.</li> <li>• The “fog of the future” must be Scenario 6. We cannot even understand what is here in front of us.</li> <li>• Scenario 6 could focus on technology as a way to develop new sources of revenue.</li> </ul>

**Break-out Group Discussion**

During the break-out group discussion, participants in their small groups selected up to two of the questions below to discuss among themselves:

- Question 1: What do you see as the first steps for an MPO to take in using scenario planning in its transportation planning process?
- Question 2: What are some key courses of action that could be used to guide future transportation planning decisionmaking in your MPO region?
- Question 3: What role could WAMPO play in using scenario planning to create a long term vision and plan for the region?
- Question 4: How could scenario planning improve collaboration among local, regional, and State agencies? What public issues could benefit from the educational aspects of a scenario planning approach?

<i>Table Number</i>	<i>Feedback Shared During Break-out Group Discussion</i>
<p>Table 1 (<i>selected questions 3 and 4 for discussion</i>)</p>	<ul style="list-style-type: none"> <li>• For Question 3, we looked at WAMPO’s role in scenario planning in terms of activities. We are trying to define a regional strategy around transportation. You look at WAMPO’s boundaries—one county and slivers of two others that do not encompass the MSA, which does not fully encompass the labor shed. Infrastructure is such a critical piece in connecting us. How can WAMPO use scenario planning to define the region? WAMPO does not have authority beyond the communities, but they have influence.</li> <li>• For Question 4, similar to what Table 3 said, use the scenario planning process to have WAMPO facilitate these conversations and bring the</li> </ul>

	<p>technical expertise and data used to develop the scenarios to partners. Use scenario planning to define some of the realities and build up the trust of your neighbors and partners to achieve some of these costs and prioritize what is important and what we can afford. We could take scenario planning and the expertise, technical information, and data that is generated and use this for regional conversations beyond the WAMPO boundaries.</p>
<p>Table 2 (selected questions 1 and 4 for discussion)</p>	<ul style="list-style-type: none"> <li>• Stakeholders, and identifying key stakeholders, are important parts. We developed scenarios with a steering committee, but we need to go beyond this. We have the Chamber with the Special Transportation Task Force. What group do we use to identify the key stakeholders and guide the vision? Along with this, we should continue refining the scenarios so that they are easier to comprehend for a larger group and elected officials.</li> <li>• The Chamber has a South Central Transportation Coalition, which includes the cities of Andover, Goddard, and Newton. It is a big area. We also mentioned having developers, hospitals, universities, freight, and employers as stakeholders.</li> </ul>
<p>Table 3 (selected question 4 for discussion)</p>	<ul style="list-style-type: none"> <li>• We only looked at Question 4. For us, it is all about facilitating a regional conversation. Benefits are the prioritization of the regional projects. It creates a collaborative planning approach that could spread into other issues beyond transportation. There is an opportunity to engage industry and the private sector in the conversation. We could take zip code data from our employers and heat map this. This is tied to a comment this morning about the home-jobs balance. This project would be interesting information because we need to communicate to smaller communities that projects in the core are important because people are traveling here every day. (NOTE: WAMPO clarified after this feedback that it already has maps that show this information and can follow up as needed.)</li> </ul>
<p>Table 4 (selected question 2 for discussion)</p>	<ul style="list-style-type: none"> <li>• We mostly focused on Question 2. We came up with three key reasons. First, we talked about modeling and transportation demand modeling. It could be considered a broader aspect of data analysis to help with decisionmaking. It helps to have this type of data in context before you make an important investment decision. Second, WAMPO could help in harmonizing local plans and examining plans to see what was planned and what actually happened. Did we actually follow the objectives we set forth? Third, WAMPO could help with developing a shared vision/values and individual lead objectives.</li> </ul>
<p>Table 5 (selected questions 1 and 2 for discussion)</p>	<ul style="list-style-type: none"> <li>• We looked at Question 1 and thought about the funding implications of the scenarios, particularly what is required in terms of funding and spending. We compared the scenarios to our current set of regional goals. It would be helpful to identify sign posts or indicators to see if a particular scenario is coming to pass. Also document and communicate the scenarios to make sure everyone is on the same page in terms of what we are talking about.</li> <li>• For Question 2, we discussed using the MTP to help with recommendations and provide data for local decisionmaking. WAMPO could be integrated more into land use planning and development processes. These have not been strong connections traditionally. There could be an implementation schedule to show what happens at different points. Selection criteria could be used to incentivize the process.</li> </ul>

## G. Additional Resources

FHWA Scenario Planning Website

[http://www.fhwa.dot.gov/planning/scenario\\_and\\_visualization/scenario\\_planning/](http://www.fhwa.dot.gov/planning/scenario_and_visualization/scenario_planning/)

FHWA-FTA TPCB Website

<https://www.planning.dot.gov/>

FHWA Scenario Planning Guidebook

[http://www.fhwa.dot.gov/planning/scenario\\_and\\_visualization/scenario\\_planning/scenario\\_planning\\_guidebook/](http://www.fhwa.dot.gov/planning/scenario_and_visualization/scenario_planning/scenario_planning_guidebook/)

## H. Acronyms

BTPO	Bannock Transportation Planning Organization
DOT	Department of Transportation
FHWA	Federal Highway Administration
FTA	Federal Transit Administration
L RTP	Long-Range Transportation Plan
MAPA	Metropolitan Area Planning Agency
MPO	Metropolitan Planning Organization
MTP	Metropolitan Transportation Plan
NDOT	Nebraska Department of Transportation
RTP	Regional Transportation Plan
TMA	Transportation Management Area
TIP	Transportation Improvement Program
TPB	Transportation Policy Body
TPCB	Transportation Planning Capacity Building
U.S. DOT	U.S. Department of Transportation
WAMPO	Wichita Area Metropolitan Planning Organization