

Regional Livability Workshops

Executive Summary Report



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Note

Two separate documents accompany this report. Appendix A includes the detailed meeting notes from each individual workshop, and Appendix B is a separate PDF file of all workshop presentations. Information on accessing these documents is available at http://www.fhwa.dot.gov/livability/.

Cover photos, top to bottom: Boston, Atlanta, and Denver workshops

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1 Introduction

The Federal Highway Administration (FHWA) sponsored five one day Regional Livability Workshops as a part of its Strategies for Livable Communities project. The project goal is to raise awareness of transportation linkages to livability, and to provide resources to practitioners and the public to more effectively consider livability issues within the Federal transportation planning process. To meet this goal, FHWA is conducting several activities:

- FHWA developed a research paper, *The Role of FHWA Programs in Livability: State of the Practice Summary*. The paper highlights the current state of the practice in implementing livability in plans and projects, the roles of transportation agencies in advancing livability concepts, and examples of effective practices and strategies implemented around the country (see box below).
- Using this paper as a starting point, FHWA held five regional workshops to highlight current
 efforts in livability, and to identify what is needed to promote a greater understanding of
 transportation's role in livability among transportation, transit, environmental, and housing
 agencies.
- Based on workshop participants' recommendations, a livability primer, a toolbox of training
 materials, and marketing and communications plan to help support and educate transportation
 practitioners nationwide will be produced.

Section 2, Workshop Overview, summarizes the workshop process and approach. **Section 3, Workshop Results**, covers the themes discussed during the workshops: Challenges, Solutions, Creating a Livability Primer, and Communications and Marketing. **Section 4, Next Steps**, outlines post-workshop activities. Two separate documents accompany this report. **Appendix A** includes the detailed meeting notes from each individual workshop. **Appendix B** is a separate PDF file of all workshop presentations. Information on accessing these documents is available at http://www.fhwa.dot.gov/livability/.

The Role of FHWA Programs in Livability: State of the Practice Summary highlights current state of the practice in implementing livability in plans and projects, the roles of transportation agencies in advancing livability concepts, and examples of effective practices and strategies being implemented around the country. Some of the key research findings are below:

- Many agencies have implemented livability in transportation by creating safer, more balanced local and regional multimodal roadway networks while incorporating context sensitive solutions and improved design elements such as complete streets.
- Creating livable transportation systems requires an interdisciplinary approach. Few of the examples researched involved singular agencies or stand-alone community goals.
- Livable transportation plans and projects are most successful when planned in support of broader community goals.
- The majority of implementation projects occur at the local scale—often with metropolitan planning organizations and/or State partners and funding.
- Significant differences exist in the application of livability principles in rural or gateway communities, urban, and suburban areas, both in roadway issues and transit service.

The Summary also identifies several strategies for implementing livability in transportation, along with processes, performance measures, and tools currently in use. This research is intended to help facilitate continued transportation agency discussions, and to help practitioners identify key successes, lessons learned, effective planning processes, implementation tools, and other strategies for advancing livability.

¹ FHWA's livability initiative is part of the HUD-DOT-EPA Partnership for Sustainable Communities, which has outlined six livability principles, see http://www.dot.gov/affairs/2009/dot8009.htm

2 Workshop Overview

FHWA sponsored five one day Regional Livability Workshops around the United States to bring practitioners together to discuss their challenges and successes in implementing livability-related projects. The workshops drew on participants experiences to promote a greater understanding of transportation's role in livability among highway, transit, environmental, and housing agencies. The workshop goals included:

- Confirm the understanding of livability state of the practice.
- Expand key opportunities for implementing livability in transportation.
- Explore regional, community context, and topical differences.
- Identify barriers and additional tools/technical assistance needed.
- Discuss model State/regional livability strategies, programs, and projects, including regional livability plans and their relationship to other planning efforts.
- Identify communication/marketing messages, training materials, best practice examples, and framing of livability that will appeal to the broadest group of practitioners.

The workshop participants also discussed regional best practices to help develop a greater understanding of successful livability practices.

Each workshop followed the same general agenda:

- An overview presentation on *The Role of FHWA Programs in Livability: State of the Practice Summary.*
- A large group discussion on identifying challenges to livability, concluding with a voting exercise to identify the top challenges.²



Atlanta workshop brainstorming.

- Presentations and discussion by select participants about overcoming livability challenges in their specific region.
- Small group discussions on overcoming the top livability challenges, addressing the identified challenges and building on the regional presentations' lessons learned.
- Livability planning strategy presentations by select participants about successful processes in their regions.
- Presentation on draft concepts for a livability primer, including participants' feedback on what topics should be addressed.
- A large group discussion on identifying opportunities for overcoming these challenges and the
 associated supporting role of FHWA, including potential educational and outreach materials
 needed.

Workshops were held in Atlanta, GA; Kansas City, MO; Boston, MA³, Sacramento, CA; and Denver, CO. Due to higher Federal representation in Atlanta, the discussion focused on the Federal government's role in helping to advance livability, along with regional/metropolitan planning organization (MPO) issues. In Kansas City, the original emphasis was on rural and tribal issues, but many of the targeted participants were unable to attend. It was requested that the presenters, if possible, address those issues in their work. In Boston, the discussion focused more on the role that State departments of transportation (DOTs) play in advancing livability, especially in rural communities. In Denver and Sacramento, during

² Dot voting to prioritize challenges did not occur at the Atlanta, GA workshop.

³ The Boston, MA meeting was actually held in Cambridge, MA.

the small group discussions on Regional Livability Planning Strategies, facilitators asked participants to provide specific feedback on the topic areas in the livability primer, rather than the general feedback on incorporating livability into regional planning during the first three workshops. Since many participants who attended the Denver workshop were from rural areas, facilitators tailored the discussion questions to focus on livability in rural areas. Overall, participants engaged actively in discussion and appeared motivated by the discussion topics, ensuring a well-rounded and balanced representation of viewpoints.

221 participants (local, regional, State, and Federal) from 41 States participated including regional leaders in the area of livability from MPOs, transportation agencies, city and county governments, public and private developers, State DOTs, nonprofit organizations, housing, transit, environmental and resource agencies, and others. The Federal attendees were agency staff from the Environmental Protection Agency (EPA), the U.S. Department of Transportation (USDOT), and the Department of Housing and Urban Development (HUD); these organizations are partners in the HUD/DOT/EPA Partnership for Sustainable Communities (PSC). Representatives from the Centers for Disease Control and Prevention and from the National Park Service were present at select workshops. In a number of the workshops, participants mentioned that the PSC has motivated their organization to bring other agencies together to discuss issues and projects. It has provided a format for beginning conversations that otherwise were not taking place. Many of the regional presenters also mentioned PSC initiatives, support, and funding during their presentations of livability best practices.

Based on evaluation forms, the participants rated the workshops favorably. Participant suggestions were incorporated into subsequent meetings, when applicable. For example, facilitators added a one-minute, one-on-one discussion during the remaining three workshops on, "What is the single most important thing that needs to be in the primer?" Participants reviewed this change favorably. Following the Kansas City, MO workshop, facilitators divided the morning large group discussion on "Identifying Challenges to Livability" into two distinct discussions on challenges and solutions, in order to provide stronger closure to the discussion and direct participant attention to identifying solutions. Due to the high number of challenges collected during the first three workshops, facilitators used the "Identifying Challenges to Livability" discussion for the remaining two workshops as a way to draw out more detail on the wide range of challenges previously raised. A number of participants requested more information up front on the goals and intended outcomes of the workshop, as well as additional time during the workshop to discuss ongoing livability efforts with the other representatives.

The following four themes were used to organize the workshop agenda and exercises. The discussions identified several key issues in each area:

- Articulating Challenges. The major challenges facing practitioners revolve around the lack of funding flexibility, the agency barriers, and the lack of tools and performance measures to discuss and demonstrate the benefits of livability.
- Overcoming Challenges and Identifying Solutions. To help overcome the main challenges that
 practitioners face on the topic of livability, FHWA should focus on education, assist in the
 development of integrated planning and implementation processes, including developing
 materials for policymakers and the general public, and provide targeted technical assistance to
 help areas with limited resources to begin implementing livability.
- **Creating the Livability Primer.** The primer should offer guidance on how to incorporate livability into existing planning and implementation efforts at a range of geographic levels.
- **Providing Communications and Marketing Support.** To communicate livability concepts effectively, the term needs to be broadly and easily understood. Tools should include fact sheets on livability benefits and strategies, an image clearinghouse, PowerPoint presentations, and updated website and social media tools to connect with a range of age groups.

These themes are outlined in detail in the next section, and will directly influence the content and style of subsequent FHWA materials.

3 Workshop Results

Workshop participants identified a range of challenges, solutions, and communications and marketing tools that could help advance livability in transportation planning and project development. The major challenges facing practitioners revolve around the agency barriers, misperceptions about livability, the lack of funding flexibility and financial resources, the lack of tools and performance measures to demonstrate livability benefits, linking livability to project planning and implementation, and issues related to rural livability. To help overcome the main challenges, participants suggested that FHWA should focus on education, assist in the development of integrated planning and implementation processes, develop materials for policymakers and the general public, and provide targeted technical assistance to help areas with limited resources to begin implementing livability. They also suggested a livability primer that would offer guidance on how to incorporate livability into existing planning and implementation efforts at a range of geographic levels. They also identified the need for communications tools such as fact sheets on livability benefits and strategies, an image clearinghouse, PowerPoint presentations, and updated website and social media tools to connect with a range of age groups.

3.1 Challenges

The major challenges facing practitioners revolve around the following five areas:

- Interagency Barriers
- Perceptions About Livability
- Financial Resources and Leveraging Funding
- Transportation Planning and Project Implementation
- Rural Issues

Many elements in each of these challenges overlap. For example, discussions on interagency barriers are linked to funding issues, particularly across different levels of government. Some of the struggles related to funding link to how agencies are able to demonstrate the value of livability, its processes, and its outcomes. All of these challenges also relate to the transportation decisionmaking process. Specific discussions about overcoming these challenges are in subsequent sections.

3.1.a Interagency Barriers

In all meetings, much of the discussion focused on interagency barriers, in a range of contexts with different partners. These included two major types:

- Vertical and Horizontal Barriers
- Intra-agency Challenges and Interdisciplinary Barriers

Participants discussed issues with agency silos that inhibit the ability to achieve desired success in creating more livable project outcomes. One concern is that many agencies and organizations focus on their processes, instead of focusing on the desired goals—more transportation choices, well-located affordable housing,



Kansas City workshop brainstorming.

economic development promotion, community wellbeing, and resource protection. In many examples, the question of "what public good does the agency serve?" was overlooked, thus creating a barrier to collaboration across all types of public service. Participants noted that agencies do not always have a shared vision.

These barriers took many different but inter-related forms:

- At different geographic levels—such as Federal to State to regional to local interactions.
- Across different types of agencies—such as housing, transportation, environmental, development, public health, and emergency management. These also include nongovernmental organizations, such as railroads, economic/business organizations, utility companies, labor and contract unions, banks, and developers.
- Within transportation agencies and their own processes—including internal silos, as well as across the different phases of project development.

In addition, most participants articulated that all these barriers were working simultaneously to make implementation of livability goals into transportation projects more difficult.

Vertical and Horizontal Barriers. Some State governments may view livability as a local concern or multimodal enhancements as nonessential project components, so that that these concerns are not incorporated into or supported by State policies, design considerations, or projects. One issue noted was the difficulty of getting the public and decisionmakers to understand that land use and transportation decisions are joined—and without that recognition, significant barriers exist for livability. This problem is heightened by the "disconnect" between State and regional transportation planning and local land use authority. This problem works both ways. Changing a "local-only" mindset to a regional perspective can also be difficult. Many communities are concerned about protecting their economic base and their individual community's identity. In some cases, local governments do not always support regional livability initiatives through their own project selection or land use policies. When local governments do not enforce their own zoning or sidewalk ordinances, it can complicate achieving regional visions for multimodal transportation. Regional agencies may have no strong mechanism to enforce the regional commitments. Different perspectives on roadway purpose and function between local and regional planning organizations were mentioned several times in the workshops. In other situations, regional agencies and local communities do not always understand the land use context and density requirements to support regional investments in enhanced transit. Changing zoning practices at the local level continues to be difficult; new regional policy and local zoning approaches that support more livable development patterns, such as form-based codes, are not necessarily well understood and therefore not always embraced by local communities.

Intra-agency Challenges and Interdisciplinary Barriers. Within all types of transportation agencies, it was noted that interdisciplinary projects are the anomaly, rather than the norm. It is challenging to make changes needed to evolve the agency from a silo or narrow area of expertise to one that can support a broader knowledge base of multidisciplinary community planning elements. Even when silos are broken down, challenges remain for changing traditional organizational policies and procedures that have existed for decades. Sometimes these problems are between transportation professionals at State and local agencies on smaller projects, and differing agency requirements. In others, it can be a disconnect between the planning and engineering staff within an agency (intra-agency), or transportation planners and public works departments that maintain the projects after they are constructed. Another problem noted was the natural reality of politics, particularly at the State or local level in terms of election cycle policy shifts or livability being tied to different political viewpoints. Coordinated approaches take time and it can be hard to implement or sustain them in a constantly changing political climate.

3.1.b Perceptions About Livability

One critical challenge identified was how best to create support for livability initiatives and projects that support livable community outcomes. One part of this challenge was recognizing perceptions about what livability really means and how it is applied at the community level. These perceptions fall into three general categories:

- Outcomes and Benefits
- Demonstrating the Value of Livability Investments

Visualizing Livability Outcomes

Creating more livable communities can have many benefits, such as environment and resource protection, improved public health, economic revitalization, and cost effectiveness, and more. However, there are gaps in fully integrated planning approaches and analytical frameworks to quantify those broad benefits within the transportation decisionmaking process. Another challenge is how best to visualize and communicate the value of livability to different audiences, combating inaccurate perceptions, and building support for context sensitive transportation improvements to meet broader community goals.

Outcomes and Benefits. One overarching concern was that people do not fully understand the value of multimodal transportation systems that expand transportation choices, and how they can support other community goals. Whether in rural or urban regions, there are related benefits to diversifying transportation options. Those benefits and long-term value can be difficult to evaluate and communicate within the current transportation planning framework. It was mentioned that perceptions (within transportation agencies, with decisionmakers and with the general public) need to shift from a viewpoint where livability projects are considered merely as an add-on that only occurs when there is funding available, to one that sees livability outcomes as essential elements of community prosperity. This is particularly acute in times of fiscal challenge when there is a heightened need to seek ways to be smart about the location and form of development, housing options, and transportation investments and the associated energy costs of each. Participants articulated specific concerns about their interactions with policymakers and elected officials—both in garnering support for livability and multimodal projects or approving the necessary statutory changes to achieve them. It was also noted that livability-focused transportation projects have often been smaller in scale, and that smaller projects do not have the same political appeal of larger regional transportation projects. Another issue is the perception that roadway redesign that includes multimodal options can be seen as wasteful or catering to an underutilized mode since multimodal improvements are sometimes seen as luxuries. In others, the upfront costs of retrofitting existing rights-of-way to accommodate more modes (wider sidewalks, dedicated bus lanes, bikeways) present tradeoffs that seem undesirable to some, without considering longer-term value versus short-term constraints or costs. Participants noted misperceptions related to the belief that complete streets, multimodal options, or right-sizing existing roadways are unsafe, and that many people view using public transit in a negative light.

Another major theme was the long-standing economic and institutional bias toward sprawling development patterns and the car culture. These cultural issues extend into transportation agencies as well. This culture is supported by development patterns over the last 50 to 60 years, which do not support modal options beyond the car. As for land use and urban form, another challenge in both rural and suburban communities has been overcoming the mindset that walkable commercial development will reduce business visibility and customer access. Many businesses stress the importance of having highway frontage for high visibility, plentiful parking in front, and two driveways (entrance and exit) for easy customer access, but not a bus stop. Underlying many transportation decisions is the belief that it is important for economic development to have a well-connected road system for drivers; however, the economic value of multimodal accessibility has not been demonstrated to the same degree. Traffic flow and vehicle capacity/speed of vehicles is considered more important than other modes because of an automobile-dominant perspective.

Demonstrating the Value of Livability Investments. Participants noted the challenges of overcoming misperceptions about the value of more livable community outcomes. It was recognized that many practitioners have a hard time quantifying and communicating the value of livability-based decisions and project outcomes. While it is relatively easy to estimate and/or predict a project's dollar cost, defining value across a spectrum of community factors over the long term presents a significant challenge. There are many measures of effectiveness related to the safety and mobility of the transportation system for the automobile, but not yet an equal set of measures or processes to effectively weigh those against other modal options such walking, biking, or taking transit. Comparing benefits and costs of transportation

projects that incorporate multimodal components is particularly difficult when the full range of community benefits is not estimated or factored into project cost comparisons.

Demonstrating the value of livability-related improvements includes developing and using the right performance measures—and recognizing that these measures may be different across the country, in different agencies, and in different contexts. One example of more multimodal measures would be to assess accessibility and mobility for multimodal travel by looking at factors such as street or pedestrian connectivity, and mode choice. Measures tied to creating more transportation choices would help to demonstrate some of the benefits of creating more livable communities. In all workshops, participants emphasized the wide variety of benefits, such as economic development, infrastructure cost effectiveness, active transportation and its health advantages, environmental improvements, location efficiency, housing affordability, and equity. Both the need for new tools to help measure these benefits and the promotion of those tools that already exist was important to participants.

Visualizing Livability Outcomes. Workshop participants noted that applications of livability principles are often context sensitive, difficult to define, and do not follow a standard formula for implementation. This ambiguity can leave people from embracing the overall concepts. Even when the transportation planning process can quantify the tradeoffs and benefits of livability-related transportation investments, it can still be difficult to convey their value to the public or get practitioners to understand the varying project types and applications. Participants also noted that in some cases the mere use of the term livability could result in the public reacting negatively on the assumption that it means more density and being asked to give up their cars. Transportation agencies find it difficult to tie measurable results to project decisions when asked to justify their actions for livability initiatives. Participants suggested that providing a range of before-and-after photo simulations and other visualization techniques could help provide a focal point for the discussion of benefits.

3.1.c Financial Resources and Leveraging Funding

Assembling adequate financial resources to implement planned projects is a common challenge. Much of the workshop discussion focused on challenges within the current transportation funding process and programs—such as the Federal program structure (and how it is implemented at the State level), the inability of current funding mechanisms to implement broad project visions, and the need to be able to use existing funding mechanisms more flexibly. These issues fall into three general areas:

- Federal Programs
- Funding Uncertainty and Backlog
- Funding Silos

All of these elements are interwoven, and present some nuanced challenges within current transportation funding processes. Participants also noted that leveraging challenges are not limited to transportation funding alone, since livability-related planning often incorporates housing, environmental, and private development strategies that support transportation choice.

Federal Programs. Many participants remarked that the flexibility allowed by Federal transportation funding programs is not applied or permitted by State DOTs. Federal funds are often not accessible or practical for smaller, community level projects that support or promote more livable community outcomes. Examples cited included much higher planning and construction costs to meet Federal requirements on small projects (sidewalks and trails, street right sizing/, traffic calming, etc.); excessive application and monitoring requirements for smaller projects; and too many separate siloed funding programs to deliver fully integrated projects. Different agencies have different requirements at different points in time throughout the project development process. The wide variety of funding streams that could support livability-related projects are typically not released at the same time in a coordinated notice of funding or single application process. This has become more of an issue for agencies trying to integrate housing and environmental funding with transportation plans and projects. HUD and EPA funding

follows different regulations and timelines, making fully integrated projects more difficult. Agencies have different implementing regulations and reporting requirements; and the program time horizons and planning processes are different and uncoordinated. Instead of being able to apply to one source, agencies must apply to numerous funding sources. Not all agencies, particularly at the local level, are able to devote the staff resources necessary to apply to the numerous funding sources required to receive full project funding. Funding does not necessarily reach projects that could provide the greatest community benefits.

Participants in each workshop noted that transportation projects that support more livable community outcomes can become more expensive than necessary due to the extensive review and construction requirements that accompany the use of Federal transportation funding. While most regulations were instituted for good reason (i.e., financial control, environmental protection, fair wages and equity issues), the combined burden can make it especially difficult to use Federal funds on smaller projects. These extra costs can also lead to reduction in key elements, such as narrower or



Boston workshop brainstorming.

no sidewalks or planting strips due to increased right-of-way (ROW) costs. Participants noted that many smaller livability projects (under \$500,000) could be implemented in a more timely and cost effective manner but are not due to extensive requirements. Many smaller communities need help to access the different funding opportunities available to pursue livability.

Funding Uncertainty and Backlog. Workshop participants raised the issue of funding uncertainty and the backlog of infrastructure projects as another challenge to implementing projects in support of livability. The uncertainty of the current transportation funding structure, coupled with reductions in overall amounts available, seems to create challenges in advancing new multimodal transportation system improvements tied to livable community outcomes. Given the uncertainties surrounding long-term Federal transportation funding, many States target funds into maintaining the existing system. When budgets are tight and money is not available to address basic automobile-focused system needs, participants described the difficulty of justifying expenditures on new system-level investments for transit, or complete street projects that include bicyclists and pedestrians. Because the mode share for non-vehicular transportation remains low in many communities, uncertainty in funding makes it that much more difficult to garner support for these projects.

Participants noted the increasing costs associated with replacing or rebuilding aging infrastructure, given the considerable backlog of roadway repair projects. Additional costs for medians, landscaping, sidewalks or bike lanes can be perceived as nonessential. Many older bridges are in need of major structural work or replacement. Repairing or replacing these bridges is a high priority because they provide essential community access, or have major safety issues. However, adding a bike lane or sidewalk to the bridge might get "value engineered out" or the roadway landscaping that makes walking and biking more attractive and functional is left unfunded. Participants noted what seems to be an inherent system bias towards the heavy infrastructure costs to build facilities for cars and trucks, while the less expensive facilities for walking and bicycling are usually an afterthought.

When new multimodal projects or retrofits to accommodate more modes within the existing ROW are stacked against major roadway projects that have been on an area's project priority list for years, the newer multimodal investments often lose out. Participants noted overcoming longstanding transportation goals and funding priorities that placed a high value on moving cars safely and efficiently can be difficult.

It was also noted that transportation funding that is already programmed for auto-focused highway projects is not easily reallocated to support other forms of transportation that may help achieve broader livability goals. Participants noted the lack of mechanisms to effectively re-evaluate projects such as major road widening or new highways to explore whether or not they are still needed as designed, or if there are other multimodal solutions or design changes that can be incorporated. It was noted that legacy projects were developed during a time when suburban expansion favored roadways as a single purpose solution. With a shift towards livability principles and goals, many communities are now questioning whether these long awaited projects will actually address broader emerging priorities. Their legacy, which often has decades of community and agency support, makes it difficult to truly re-evaluate or change course. Participants noted that the State funding and project development process structure typically hamper efforts to reallocate dollars outside of these conventional focus areas. However, new multimodal design solutions, coupled with a network approach, can be incorporated into re-evaluation of legacy projects to show that even major highway projects can support livability.

Participants mentioned few concrete examples of inflexible funding, although it was raised frequently as an issue. Much of the discussion reflected the general perception of inflexibility or inability to apply funds for livability goals. The examples cited were not necessarily true across all States but, rather, reflected project specifics such as one State not using Congestion Mitigation and Air Quality (CMAQ) monies for pedestrian and bicycle projects.

Funding Silos. Funding streams have usually mirrored the siloed nature of most transportation agencies. Workshop participants observed that it could be difficult to get practitioners and decisionmakers to support more integrated funding solutions, due to a lack of overall funding, and the ease of focusing on single resources for single needs. Participants noted, if existing institutions could better articulate and demonstrate how transportation investments can be used to further other community goals (e.g., public health, reduced greenhouse gas emissions, housing affordability, and growth management) it may open up ways to use non-traditional funding sources to help implement more livable transportation projects. It was also mentioned transportation decisionmakers may have difficulty in seeing the value of using traditional roadway capacity funding to advance multimodal projects. Other institutional barriers also exist where multimodal plans are developed regionally, but the lack of cross-jurisdictional coalition and partnership building can hamper implementation. Plans may be developed with cross-regional input, but the projects contained in these plans are not ultimately implemented due to lack of support and funding priority at the local or State level. Participants also highlighted when regional multimodal projects are not funded at the local level, it can lead to disconnected multimodal networks that lose continuity at the jurisdictional boundary lines. Funding silos are not limited to transportation agencies. Incorporating funding from other sustainable communities partner agencies—and from their State and local counterparts—has only increased the need for improved coordination.

3.1.d Transportation Planning and Project Implementation

Many of the challenges discussed were about transportation project development issues. The challenges fall into three general areas: As with the other challenges, there are some overlaps.

- Technical Requirements
- Plan Implementation
- Transit Project Development

Technical Requirements. One common concern focused on the conflicts between creative plans that incorporated context sensitive, multimodal, complete streets designs, and existing auto-focused roadway engineering or design standards. Participants remarked that agency implementation staff often use inflexible standards as an excuse to reject innovative designs that address a broad range of livability goals. Participants also noted auto-focused roadway capacity standards may not be the most important measure when the goal is to accommodate more modes, improve safety, or lower design speeds. Participants remarked that even when flexibility is encouraged, many practitioners tend to stick with the most conservative option. Participants also mentioned that typical standards do not allow for design

variance between different community contexts as the uses, density, and activities along the roadway change. This conservative approach is often driven by concerns for safety/liability and the lack of industry comparables or examples to follow.

Workshop participants noted modeling and travel demand forecasting processes provide another technical challenge. Participants remarked that although most long-range transportation plans are based on 20- to 30-year growth projections that assume the continuation of existing patterns of development or linear growth trends, even if these base assumptions are no longer true or fit with community visions. Participants thought this can lead to long-range plans that perpetuate the status quo by continuing to build autooriented systems. Another issue raised is



Atlanta workshop brainstorming.

whether travel demand forecasting can accurately capture changing demographics and therefore changing trip patterns and future travel needs. Participants noted decisionmakers and practitioners are often over reliant on models to provide the answer rather than using them as decision support tools. Travel demand models rely on data built upon layers of assumptions; however, these model outputs can heavily influence the project decisionmaking process without acknowledgement of these major assumptions or nuances. For example, many transportation models are not sensitive to changing land use or urban form influences on travel behavior and do not account for bicycle or pedestrian trips. Even when community visioning is used, there is still an inherent bias that land use and design policies will not change vehicular travel demand toward shorter trips, more biking and walking trips, or mode shifts to transit. When conventional transportation models are used in community visioning processes, the models may not be modified to address more nuanced considerations adequately. Participants cited this can also be exacerbated by a lack of data or regional examples, or by an agency's siloed areas of expertise. In particular, it was noted there is often a lack of understanding by transportation professionals on how to integrate land use, urban design, housing, or economic development considerations into these technical planning processes to assess a broader range of livability issues effectively.

Plan Implementation. Another common challenge cited by participants relates to transportation plan implementation in support of livability. While several people mentioned the fact that it is becoming more commonplace to develop creative integrated visions and plans, these plans often do not translate easily into project programming and funding, and project design and development. It can be difficult to gain the necessary approvals and funding to implement innovative plans and projects. Participants also cited a disconnect between levels of government in understanding the relationship between transportation system planning, the MPO's Transportation Improvement Program (TIP), and project development. Policymakers typically have a greater focus on individual projects rather than interconnected, multimodal transportation networks. Participants noted for TIP projects there can be a long time between when a project is included in a plan, approval is received, and funding becomes available; this can magnify the disconnect between original concepts and actual project design. It was also noted for complex projects included within the TIP, there is a longer approval time, and more funding is generally required. A number of participants noted that projects are often moved forward more quickly when using local funding than those utilizing Federal funds, Participants believed some current transportation planning processes do not adequately consider community visions as a driving factor in the process. Participants noted if community visions and adopted local and regional plans incorporate livability principles such as complete streets and expanding transportation choices, then the transportation project development process should follow suit and include a broader assessment of multimodal alternatives at the corridor planning level. Participants mentioned when livability goal setting is not initiated up front, by the time

that project moves into the design phase, livable project elements or opportunities may be lost and the focus of the design engineers could shift to traditional roadway capacity and mobility design components.

Participants noted that the Federal project approval process is cumbersome and lengthy, and needs to be streamlined for "livability" projects. Most of the streamlining measures available are only applicable to major projects, and do not speed up small projects. In one State, participants noted it still takes an average of 5 to 8 years to build a half mile of sidewalk in a developed urban area, with no ROW takings, just easements and a Categorical Exclusion. This ties up money for years that could have been used on other livability projects, and makes it difficult for planners and decisionmakers to showcase livability projects and "sell" the livability concept to elected officials and the public.

Transit Project Development. Participants noted transit project development presents a number of challenges related to inadequate funding, developing effective land use strategies and adjacent transitoriented development (TOD), and identifying the most effective type of transit that will produce the highest community benefit. This was a particular focus in the Atlanta workshop. When compared to the levels of dedicated highway funding, transit funding is extremely low, with significant inequality among mode funding. Participants observed that the public and decisionmakers perceive (inaccurately), that roads pay for themselves, while transit requires subsidies. One participant remarked that transit route planning in the United States has resulted in systems with extensive geographic reach without full consideration of how to attract the most riders; this then requires complementary land use strategies to locate a concentration of destinations within a close walk distance to a transit station. By comparison, transit routes in Europe are planned so that riders are required to walk to the nearest transit station. When routes are spread across sprawling development patterns, network operations tend to suffer as a result. It was noted that the same effect has become an issue with school bus systems, which has required more buses and more service miles as development disperses. Participants suggested this challenge could be addressed with more support for safe routes to school programs, with more thoughtful school bus routing, and land use strategies to get housing and schools planned in a more integrated way.

3.1.e Rural Issues

Participants also cited concerns with how to communicate and apply livability principles in a rural setting. In particular, there seemed to be a desire to identify more examples and specifics to demonstrate livable transportation projects for rural areas. Participants noted there are clear differences between rural and urban contexts that need to be recognized when discussing livability. Participants also noted many of the project types most commonly associated with livability (e.g., increasing transportation choices, making places more walkable and bikable) require different strategies and designs in rural areas. While recognizing those differences, participants mentioned that many of the strategies associated with complete streets types of approaches could be used in small towns at a different scale. Another challenge cited in rural areas is the concern that there can be less institutional capacity and technical depth to go beyond basic planning. Given this limited capacity, participants noted rural area professionals may not be as knowledgeable as their urban counterparts about how to implement livability and sustainability concepts. Participants also noted the differences in the types of rural communities. Eastern rural communities and western mountain communities enjoy widely differing economic and resource bases – whether, gateway, tribal, retirement/recreational or agricultural/working lands. Some towns are more self-sufficient and support regional business centers, while others are part of a larger exurban region where residents commute long distances to work in another regional center.

Participants stated that in their experience, many rural residents view livability and sustainability as negative concepts because of the misconceptions noted above—i.e., livability only works in urban settings. Participants noted there is a need to develop approaches and tools that are more appropriate outside of urban areas. It was also noted for rural States, and for small cities and towns, there can also be a lack of capacity at a local level for livability implementation. Another set of challenges identified relates to how to retrofit State highways running through small towns. In many rural communities, the State has jurisdiction over local streets and applies highway-focused design standards to small town main streets,

and may not consider the unique concerns of a local community in its decisionmaking. There have also been concerns over ownership and maintenance of more complete streets, with landscaping maintenance and more complex snow removal required.

Another concern cited is the challenge of increasing transportation choices in rural settings. Participants noted rural transit in general is a challenge. It was noted rural transit planning needs improved coordination of on-demand service with ridesharing and scheduled in-town service. This is particularly true for rural areas where there are large segments of aging populations who are losing their ability to drive. It was cited developing transportation strategies for helping aging rural populations gain access to basic needs and services is a growing challenge. The same is true for rural low-income populations, or people with disabilities that limit their ability to drive. Participants mentioned many rural areas traded inter-town bus and rail service available 50 to 60 years ago for bigger highways and automobile-oriented transportation systems. This has limited their transportation choices. Rural livability solutions can look at how these rural multimodal systems operated in the past and the steps that can regenerate them.

3.2 Solutions

The discussions of strategies to overcome challenges varied some by region, but in general focused on the following major areas:

- Building Capacity
- Communicating and Marketing Livability
- Implementing Livable Community Outcomes
- Funding Livability Projects
- Demonstrating Benefits (Livability Metrics)

Several of these areas overlap and support each other. Workshop participants described the need for transportation agency capacity building focused on providing training in communications, livability metrics and planning strategies to better implement livability outcomes and link livable community visions to transportation projects. The need to develop metrics that demonstrate the benefits of livability was cited as necessary to support the key "proof points" in communications and marketing messages. The strategies and tactics noted for each area are interrelated, and critical to a comprehensive approach to addressing the challenges described by workshop participants.

3.2.a Building Capacity

The capacity building discussions focused on the need to retrain and educate practitioners on how to implement the livability principles within a broad range of contexts. The discussions ranged in opinion depending on whether or not participants thought planning for livability is already required or supported by existing policies and processes, or if the livability principles as defined actually require an entirely new approach. Given this range of perspectives (e.g., new processes are needed or simply better use of the existing tools/systems), the focus on capacity building addressed the following two key areas:

Developing Partnerships and Strategic Relationships. One of the big themes identified was the need for transportation agencies to develop stronger partnerships to support cross-agency collaborations, working towards defined, place-based community goals centered on livability principles. The discussion of partnerships also included a call for practitioners to take a more active role in helping communities build coalitions behind specific livability goals for their communities. One example cited was the need to engage private sector business interests, economic development agencies, or public health officials in supporting transportation projects and community outcomes.

Education and Training. Workshop participants advocated for education across a range of interested parties. External education with the public and elected officials was cited as a key need, but the capacity building discussion focused on transportation practitioners and other parties involved with

community building (i.e., transportation planners within DOTs and MPOs, local land use planners, transit agency staff, environmental staff, housing planners and economic development planners). Participants cited several examples of projects from around the country that have led to more livable community outcomes (as demonstrated in regional presentations and the *Livability in Transportation Guidebook*) but that there is no common understanding or standard of practice on how to replicate those success stories within their own agencies or communities. Capacity building and educational strategies included suggestions and methods such as:

- Creating image libraries to show "what livable places look like."
- Organizing more peer exchange or workshop events where case studies and lessons learned in implementing livability or situational management can be presented and discussed within peer groups and/or outside partners.
- Providing more guidance to governments on how Federal and State funding sources can be flexed and creatively applied in support of livable community outcomes.

3.2.b Communicating and Marketing Livability

Every workshop included significant discussions on the need for better communication and marketing of the benefits of livability and the direct connections between transportation investments and livable community outcomes. In particular, there is a need to develop key messages and proof points on the benefits of livability for transportation practitioners that would appeal to politicians and the public. Specific key messages raised by participants included:

- Strengthening the link between transportation system preservation and livable community outcomes.
- Quantifying the benefits of livability relative to the sustainability triple bottom line⁴ and return on investment.
- Reframing the Federal role as "in support of" State and local community goals.
- Reframing livability as mission critical—not something that is a luxury if money is available.

In addition to the key messages, participants discussed a range of communication strategies and tactics. These included social networking and other web-based tools to sell and disseminate information on livability to a wide audience. Additional strategies included recommendations for transportation or planning agencies to be more proactive in authoring articles or features in local publications that tie specific public investments to livable community goals. Another issue is the need to tailor communication materials to specific audiences. For example, participants cited the importance of creating messages for decisionmakers that were succinct but backed up by strong data points and technical analyses. For the general public, methods cited included the need to use more visualizations to show what livable means at the site or corridor scale.

3.2.c Implementing Projects That Achieve Livable Community Outcomes

As mentioned within the other implementation topic areas, workshop participants called for strategies to help practitioners, citizens, and decisionmakers better link livable community goals with specific transportation projects. This can be addressed in part by having better performance measures to quantify benefits, and more targeted communications strategies, but most study participants cited the importance of having clear community visions and goals in place to describe desired outcomes as a cornerstone for building support for more livable transportation project strategies.

While most communities do have a set of goals or vision statements, workshop participants noted that the most effective visions are those that emerge from a collaborative visioning, planning or scenario development process. Participants noted quite often, these efforts include a strong outreach process that

⁴ Triple bottom line refers to the practice of accounting for or integrating considerations from the three pillars of sustainability—the environment, the economy, and equity, or social/community impact.

brings together both multidisciplinary interests as well as public and private constituencies. These processes can spur lasting relationships and coalitions that ultimately help create local keepers of the vision. It was also noted when a strong vision is present, project prioritization and project delivery methods can demonstrate clear policy choices between various alternatives. This direct link helps foster identification and implementation of transportation investments in support of community goals.

Community goals reflect the unique character, values, and priorities of a given place. Participants discussed the need to better align regional, State or Federal goals in transportation and mobility with local community goals. One strategy includes documenting existing goals at each level (Federal, State, regional and local) or across differing agencies and identifying where commonalities or conflicts exist. This can help to understand the tradeoffs or policy issues that need to be considered to more effectively align transportation priorities with local livability goals.

Planning Approaches, Processes, and Policy Changes. Workshop participants noted achieving livable community outcomes through transportation investments requires coordination and integration of land use and urban design issues at the regional, corridor and site scales. While this part of the workshop discussions overlapped with the capacity building issues (e.g., the need for more education on how to conduct integrated, interdisciplinary planning), participants specifically cited the importance of better coordinating transportation corridor planning with local land use and zoning. Doing so will help to ensure that corridors have the right balance of land uses and building form (setbacks, mixture of uses and densities) to support the desired mode along the corridor. For multimodal corridors where transit is a desired strategy, participants spoke of the need to advance zoning policies by using innovative approaches such as form-based codes⁵ and different outreach strategies to garner public support for smaller lot sizes and higher densities. Participants also cited the need to create targeted incentives such as reduced parking requirements, or density bonuses to encourage the private sector to invest in locations and development patterns most conducive to multimodal transportation.

Another key issue raised by participants focused on the transportation planning process and current policies. On this topic, there was some debate (and no clear consensus) on whether or not the existing planning processes, project delivery methods, and institutions are sufficient for achieving desired livability goals. One perspective advocated for a more aggressive restructuring of the processes to more effectively incorporate the full range of comprehensive planning issues into transportation, especially those dealing with housing, land use, and economic development. Other participants thought that livability goals could be achieved with some minor adjustments to the existing processes while building capacity of existing staff in situational



Sacramento workshop discussions.

management, which is when the current context or problem determines what process will be implemented to achieve desired outcomes, not that the process dictates the outcomes. Some participants cited the need to revisit existing Federal policies, such as air quality conformity rules, which they thought tend to favor projects that increase vehicular speeds to lower emissions over projects that slow traffic and thereby encourage increased pedestrian activity. In general, there were also several suggestions to streamline the

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⁵ "Form-based codes address the relationship between building facades and the public realm, the form and mass of buildings in relation to one another, and the scale and types of streets and blocks." Form-based Codes Institute. www.formbasedcodes.org/what-are-form-based-codes

⁶ Based on the definition available at www.allbusiness.com/glossaries/situational-management/4957759-1.html

environmental review times for project development processes for those efforts that demonstrate strong livability outcomes.

One suggested solution is to better link project delivery with community visions through design guidelines and standards. There are numerous examples in practice of how to create more livable transportation infrastructure, such as the Institute of Transportation Engineers/Congress for New Urbanism guidebook for urban thoroughfare design, *Designing Walkable Urban Thoroughfares: A Context Sensitive Approach*, or the National Complete Streets Coalition's *Complete Streets for Older Adults* (http://www.ite.org/css/). An important strategy in incorporating more livable design considerations into the transportation project delivery process is to create more universally accepted standards that demonstrate the safety of streets when designed for all users. The need was also identified for network connectivity and access standards, to require connections between roads in adjacent developments, and for multimodal network system design to ensure a balance of local and regional accessibility that supports livable community design.

3.2.d Funding Livability Projects

While some participants stated a desire to create livability-specific funding streams and sources, a majority of participants seemed to favor finding ways to fund projects that support community livability goals through existing revenue streams. Supporting the latter viewpoint were the numerous examples and personal anecdotes of how specific projects were funded by creatively flexing Federal funds or leveraging other non-transportation-based funding streams to support place-based livability projects. One example cited was from the Chicago Complete and Green Streets Initiative that combined traditional local transportation funding with environmental funds to transform the physical design of streets to better accommodate a range of modes, while including creative green streetscape solutions as stormwater management strategies. In the Chicago example, the City opted not to use Federal dollars because they did not think they could accomplish their ultimate goals within the Federal funding requirements and timing constraints. Another funding issue raised by participants was the need to shorten the timeframes for project development and environmental reviews for smaller projects under a certain size limit (e.g., under \$5M). One example cited was for an MPO to "swap" Federal dollars for local funds with fewer strings attached; this could include the MPO providing Federal dollars to a toll authority for Interstate improvements, in return for the Toll Authority providing an equivalent amount for use on smaller local projects that could be built more quickly under local regulations. Another suggested creative funding strategy included establishing a concierge role for MPOs within a region to become the funding coordination experts to help local governments find and match up a wide array of funding sources to local livability project needs. There is a need to demonstrate how the array of existing Federal transportation dollars (from CMAO to Surface Transportation Program funds) could be used in conjunction with other Federal sources such as HUD's Community Block Development Grant funds, Federal Transit Administration's (FTA) Joint Development funds, EPA brownfield dollars, and other programs to fund projects that achieve broader livability goals. A final theme was to support more outcome-based approaches vs. project-based funding. The recent HUD Sustainable Community grant process was cited as an example of this approach.

In addition to the desire to better align, utilize and leverage public funds, most workshop participants also advocated for a more proactive approach to engaging the private sector in funding transportation projects in general. From exploring more Public Private Partnerships, to advancing innovative funding strategies to seek value capture for private developments within transit-oriented developments (TODs), almost all participants seem to agree that the private sector can be engaged more directly in helping to advance more livable community outcomes given the link these projects often have to increases in property values.

3.2.e Demonstrating Benefits (Livability Metrics)

Another major solution and implementation theme from the workshops included the need to develop better methods, tools, and metrics for quantifying benefits and fully considering these benefits as part of the transportation planning process. The need for better metrics was cited not only as a method to help support communications and marketing strategies, but also as a way to guide technical analyses in regional and corridor land use and transportation planning. Quite often, the decisionmaking process for transportation priorities relies on very traditional measures oriented towards reducing congestion. Workshop members cited the importance of new livability measures to ensure that the full range of transportation strategies (and modes) could be considered along with the potential opportunities specific transportation investments may provide for addressing other community goals such as affordable housing, economic development, or smart growth.

Given the length of time for project development and delivery, participants suggested that all projects in the pipeline should be routinely re-evaluated against livable community goals. This is especially important for those legacy roadway projects that may have been on the books for years. Addressing this issue requires new ways of evaluating project needs and solutions, which could be aided by broader performance measures and new livability metrics.

Workshop participants also focused on specific recommendations for the types of metrics or performance measures that would be most helpful in supporting better decisionmaking and garnering support for livability. These included:

- Cost benefit analysis that incorporates the concept of triple bottom line to better account for the long term considerations and return on investment.
- More tools/analysis to demonstrate the full costs of transportation (e.g., Housing + Transportation Affordability Index).
- More direct ways of linking sustainable and thriving economies with more livable transportation systems.
- Technical analyses and tools aimed at better illustrating tradeoffs of different community futures through transportation and land use scenarios.
- Ways to quantify the long term benefits of multimodal transportation systems vs. Single-Occupancy-Vehicle-based systems, specifically on health, economic development and jobs creation, both absolute and per capita terms.
- Multimodal accessibility indices that demonstrate the benefits of more compact, walkable and transit oriented communities relative to proximity of amenities/destinations within a shorter vehicle trip, walk trip, bike trip or transit ride.
- Better travel demand and trip analysis tools to more accurately reflect benefits of compact design on trip chaining, park-once concepts, walking and biking trips and TOD.
- Revised environmental impact analysis that support the same level of long term environmental sustainability, but better accommodate flexibility.

In addition to the tools, methods and metrics, study participants also cited the importance of building libraries of anecdotal and visual evidence of livable community performance in terms of imagery and testimonials.

3.3 Creating a Livability Primer

Building on the capacity building and communications themes discussed, participants confirmed the need to develop a livability "how to" booklet or primer. During the first two workshops, this discussion was open ended, with general questions about the types of tools or documents that might be needed. In the later workshops, draft livability primer concepts were presented for more specific feedback. While there were varying opinions about the format for the primer, there was consensus that something was needed to provide more guidance on how to better incorporate livability considerations into the transportation planning and project delivery processes. Several participants suggested a web-based format that could be downloaded from a livability website where other resources and online discussion groups would be

available. An executive summary or fact sheet should be developed to help practitioners develop the "livability how to" elevator speech on key ingredients, strategies, and desired outcomes.

The majority of participants wanted the primer to present methods and strategies for incorporating livability into existing plans and processes, rather than requiring a new layer of planning requirements on top of existing practice. During earlier workshop discussions, participants noted that planning for

livability is just another step in the evolution of the transportation planning process. In order to make the primer resonate with practitioners, it should clearly demonstrate this evolution, and describe the rationale for "why livability, and why now" (i.e., tying it to key community issues/goals).

Participants thought that the primer also needs to distinguish itself as guidance on new practices, not just an inventory of existing best practices. It should provide guidance on how livability applies to a broad audience. including rural communities. There is a common



Denver workshop discussions.

misperception that livability requires changing lifestyles and moving to an urban area, or one with transit options. The primer should present clear information on what livability means in the full range of community contexts from rural to suburban to urban. It should address planning processes such as visioning and scenario planning, and how to integrate transportation planning processes with livability planning issues (housing, environment, and economics). It should focus on a variety of implementation strategies, and address flexibility in funding and leveraging strategies. Specifically, how can existing revenue sources be more broadly utilized and applied, and how can new sources be brought into funding a broader range of livability projects at the regional, site, or corridor scales?

Participants also talked about the need to describe an integrated planning process that can engage multi-disciplinary viewpoints without bogging down an already time intensive project development process. The implementation and programs content should include more accountability and monitoring, with performance-based programs to assess progress against stated community goals. It should include guidance on developing data, methods, and tools to quantify livability benefits and incorporate them into policy and transportation investment decisionmaking. Some participants suggested the need for the planning process to better incorporate implementation strategies up front—i.e., know the funding sources and/or partnerships that will be required to implement projects and build those considerations into the planning process. Participants also thought the primer should speak to ways in which leadership, tenacity, and follow-through can be fostered within existing institutions.

Participants asked for the primer to provide guidance on how to develop key messages, communication strategies, and outreach techniques associated with the transportation planning and project development process. They thought it should include talking points and big picture messages that can be supported by local data, stories, and visualizations.

3.4 Communications and Marketing

During the extensive discussions on communication and marketing, participants noted that there is a general lack of understanding of how livability principles apply to the transportation planning and project delivery process. They identified the need for materials that can help people understand and apply the livability principles to plans, programs, and projects. In particular, they identified a need to develop messages on the benefits of livability for transportation practitioners that would also appeal to elected officials and the public. Participants suggested several key communications and marketing themes, to be incorporated into a variety of marketing materials. Objectives included developing resources for key transportation officials, educating local elected officials, staff, and the general public about livability benefits, promoting success stories, and incorporating livability into new and existing FHWA training courses. Suggested audiences included a variety of local, regional, State, and Federal agency staff, policymakers, and the public. Key messages included the importance of multimodal investments and livability; livability as a local, regional, State, and Federal concern; incorporating context sensitive approaches; incorporating greater choice in transportation and housing; and livability as the next evolution of transportation planning processes.

As with the primer, participants felt it was important that the products be accessible in both electronic and print form. Customization was also very important. Many of the practitioners wanted the ability to modify the products as necessary in their work, but recognized that fully developed "stock" products were also very useful. The summary below lists the desired objectives of the communications and marketing efforts, the audiences, messaging, and the potential products identified by participants.

Objectives. The participants suggested key objectives for FHWA to include as they promote livability and create different training and marketing materials (collectively called "the toolbox"). FHWA should focus on the following:

- Develop resources for key transportation officials (MPOs, State DOTs, local, and FHWA/FTA field staff) to help incorporate proven livability solutions into new plans and projects; with secondary use by partner agencies.
- Educate local elected officials, staff, and the general public about the benefits of livability initiatives (economic, health, environmental) and successful approaches.
- Acknowledge and promote success stories to all audiences.
- Incorporate livability components into new and existing FHWA training courses, as appropriate.

Audiences. Since livability is very interdisciplinary and one crucial challenge was interagency barriers, it is important that these products reach many different audiences, including:

- MPOs
- State DOTs
- FHWA Division Offices and Federal Partner Agencies
- Local Governments
- Policymakers/Decisionmakers
- Planning and Project Implementation Staff
- Rural Communities
- General Public

Compelling Messages. In all workshops, the importance of strong and relevant messaging was repeated. Some of the most popular messages are:

- Importance of multimodal investments and livability (articulating the different co-benefits and need for livability to be integral, not added on).
- Livability as a local, regional, State, and Federal concern—not just a local concern.
- Valuing situational management and bottoms-up/context sensitive approaches in transportation planning.

- Livability means greater choice in transportation, housing, and other community priorities, and enhancing quality of life.
- Planning for livability is the next evolution of our transportation planning processes. New features include the more integrated perspective, Federal support, and its response to present day community challenges such as demographic shifts, desire to decrease reliance on foreign oil, changing market demand for housing, climate change issues, and other factors.
- Importance of not having agency-specific livability messages but rather having livability messages and documents include sponsorship by all agencies in the Partnership.

In addition to objectives, audiences, and messages, many suggestions for specific products arose as listed in the box below. This includes the confirmed products, potential products, and potential topics of interest (format undefined). Many of these ideas will be incorporated in the livability primer, but some will require additional work as part of the marketing toolbox development, including specific layout/design, or other adaptations/edits.

Communication and Marketing Products Suggested in Workshops

Potential Products

- Engineer-based education/targeted materials.
- Timeline that shows how all the three partnership agency planning timelines/requirements would align if coordinated.
- Specific policy and decisionmaker education packets.
- Sample livability job descriptions.
- Livability management systems.
- Performance measures matrix/menu.
- Media kits.
- PowerPoint presentations.
- Focus group messaging on livability (identifying which messages work for which groups)
- Multimodal performance measure promotion(existing tools).
- Scenario planning and visualization support—off the shelf adaptations.
- Clearinghouse (website).
- Peer exchanges & online networks (especially if people cannot travel).
- FAQs/fact sheets on the topics below.
- Brochures/road show materials.
- Image and video library, available and searchable online.
- More dynamic website.
- Hypothetical case studies and projects.

Specific topics of interest (format to be determined)

- Demonstrate the benefits of livability—economic, health, environmental FAQs.
- Leverage funding, workarounds in current process across partnership agencies. (specifically explaining HUD and EPA funding), and dealing with maintenance
- Cultivate State DOTs as partners.
- Affect land use and zoning without that authority what incentives can be used?
- Articulate/Support a broad-based public process in a cost effective manner.
- Promote livability in rural areas—challenges, capacity needs, different applications
- Create a legacy project filter process.
- Articulate the role of agencies (State DOTs, MPOs, local, Federal, division offices) in livability.
- Identify pitfalls—lessons learned and steps to avoid, authored by organizations that have been successfully implementing livability.
- Research and promote ways to change the project prioritization process to support livability. Create a success story technical memorandum, based on workshop examples.
- Promote livability performance measures—menu of options, data availability/sources, how to link to regional planning and project evaluation.

4 Next Steps

The results of the regional workshop outreach will be the foundation for developing tools and materials for organizations and communities around the country who are interested in pursuing or advancing livability in transportation efforts. Next steps for this project include the following:

- Develop a toolbox of training materials on livability with a marketing plan. Based on input from workshop attendees on training needs, and direction from FHWA, a suite of training materials will be developed, using a recognizable design theme and common elements.
- **Develop a livability primer**. Create a livability primer based on insights from the workshop. This primer will provide guidance to State DOTs, MPOs, Rural Planning Organizations, and regional/local land use agencies to integrate regional transportation, land use, housing, economic development and environmental planning to achieve desired livable community outcomes.
- Develop additional materials. Workshop participants also identified several needs for technical
 assistance, training, research, guidance, and tools that could help them implement livabilityrelated plans and projects.