Improving Collaboration and Consensus Building in the Coordination of Access Management and Land Use in Corridor Planning


ROGER W. HOWE
Research Scientist

Final Report VCTIR 15-R20
### Abstract:

The success of access management depends on the coordination of access management planning and land use planning, but the Virginia Department of Transportation (VDOT) has control over access management in Virginia and cities and counties adjacent to a road in Virginia have control over land use; as a consequence, consensus is needed if access management and land use are to be adequately coordinated. Virginia’s Commonwealth Transportation Board asked that VDOT increase and improve the collaboration with localities along Virginia’s Corridors of Statewide Significance (CoSS) in order to improve the coordination between access management planning and land use planning.

The purpose of this study was to determine the approach that VDOT could take to increase collaboration and to improve the quality of collaboration and consensus building in the planning for the CoSS and also for the principal arterials not included in the CoSS. The study examined and analyzed the literature on collaboration and consensus building and examined several case studies of attempts to incorporate collaboration in transportation planning.

The study concluded that despite the fact that the incorporation of a fully collaborative process in the negotiations between VDOT and localities along the CoSS and along the principal arterials that are not part of the CoSS is not feasible at this time, collaboration could be incorporated in negotiations wherever it is deemed useful and feasible to do so. The study also concluded that the use of professional facilitators to facilitate meetings would go a long way toward ensuring that the engagement among VDOT, local governments, and all stakeholders along all of these corridors would be as collaborative as possible in the current environment.

The recommendations of the study are as follows:

1. At a minimum, where feasible, VDOT’s Transportation and Mobility Planning Division (TMPD) should hire professional facilitators to organize and lead planning meetings for the CoSS and for the principal arterials not included in the CoSS that involve negotiations among VDOT and local governments, stakeholders, and citizens. The TMPD’s on-call transportation planning consultant contracts and, in appropriate situations, contracts for specific studies should include provisions for the consultant to be able to provide professional facilitator services when needed. It is important to ensure that the facilitators used are properly trained and have experience facilitating meetings among state departments of transportation and local governments, stakeholders, and the public.

2. Where feasible, the TMPD should also use professional facilitators to assist in achieving consensus among stakeholders along the principal arterials that are not included in the CoSS.
FINAL REPORT

IMPROVING COLLABORATION AND CONSENSUS BUILDING
IN THE COORDINATION OF ACCESS MANAGEMENT AND LAND USE
IN CORRIDOR PLANNING

Roger W. Howe
Research Scientist

In Cooperation with the U.S. Department of Transportation
Federal Highway Administration

Virginia Center for Transportation Innovation and Research
(A partnership of the Virginia Department of Transportation
and the University of Virginia since 1948)

Charlottesville, Virginia

June 2015
VCTIR 15-R20
DISCLAIMER

The contents of this report reflect the views of the author, who is responsible for the facts and accuracy of the data presented herein. The contents do not necessarily reflect the official views or policies of the Virginia Department of Transportation, the Commonwealth Transportation Board, or the Federal Highway Administration. This report does not constitute a standard, specification, or regulation. Any inclusion of manufacturer names, trade names, or trademarks is for identification purposes only and is not to be considered an endorsement.

Copyright 2015 by the Commonwealth of Virginia.
All rights reserved.
ABSTRACT

The success of access management depends on the coordination of access management planning and land use planning, but the Virginia Department of Transportation (VDOT) has control over access management in Virginia and cities and counties adjacent to a road in Virginia have control over land use; as a consequence, consensus is needed if access management and land use are to be adequately coordinated. Virginia’s Commonwealth Transportation Board asked that VDOT increase and improve the collaboration with localities along Virginia’s Corridors of Statewide Significance (CoSS) in order to improve the coordination between access management planning and land use planning.

The purpose of this study was to determine the approach that VDOT could take to increase collaboration and to improve the quality of collaboration and consensus building in the planning for the CoSS and also for the principal arterials not included in the CoSS. The study examined and analyzed the literature on collaboration and consensus building and examined several case studies of attempts to incorporate collaboration in transportation planning.

The study concluded that despite the fact that the incorporation of a fully collaborative process in the negotiations between VDOT and localities along the CoSS and along the principal arterials that are not part of the CoSS is not feasible at this time, collaboration could be incorporated in negotiations wherever it is deemed useful and feasible to do so. The study also concluded that the use of professional facilitators to facilitate meetings would go a long way toward ensuring that the engagement among VDOT, local governments, and all stakeholders along all of these corridors would be as collaborative as possible in the current environment.

The recommendations of the study are as follows:

1. At a minimum, where feasible, VDOT’s Transportation and Mobility Planning Division (TMPD) should hire professional facilitators to organize and lead planning meetings for the CoSS and for the principal arterials not included in the CoSS that involve negotiations among VDOT and local governments, stakeholders, and citizens. The TMPD’s on-call transportation planning consultant contracts and, in appropriate situations, contracts for specific studies should include provisions for the consultant to be able to provide professional facilitator services when needed. It is important to ensure that the facilitators used are properly trained and have experience facilitating meetings among state departments of transportation and local governments, stakeholders, and the public.

2. Where feasible, the TMPD should also use professional facilitators to assist in achieving consensus among stakeholders along the principal arterials that are not included in the CoSS.
INTRODUCTION

The motivation for this study was a question from the Assistant Division Administrator for Land Development in the Transportation and Mobility Planning Division (TMPD) of the Virginia Department of Transportation (VDOT): “How can we make corridor access plans locality-friendly?” He offered the following clarification of his question:

What I am looking for is a better way to engage localities in the process of preparing corridor plans (or corridor access management plans) so that they actively support the process (and the outcome) through their land use decisions.

What I’m looking to avoid is VDOT creating plans that only VDOT works toward implementing, with localities sitting on the sidelines (neutral) or, worse yet, making decisions that actively undermine implementation (Hofrichter, 2013).

VTrans2035 and the Virginia Corridors of Statewide Significance

In 2009, House Bill 2019 (Virginia Acts of Assembly, 2009) mandated that Virginia’s long-range transportation plan provide an assessment of needs for all Virginia Corridors of Statewide Significance (CoSS). These corridors were defined as “an integrated, multimodal network of transportation facilities that connect major centers of activity within and through the Commonwealth and promote the movement of people and goods essential to the economic prosperity of the state.”

In VTrans2035, the state’s long-range transportation plan, 11 CoSS were defined by major highway facilities “with five of the corridors running along an Interstate and the remaining six defined by a U.S. highway” (Office of Intermodal Planning and Investment, 2010); however, the corridors also included parallel roadways and other modal facilities such as rail lines, transit services, ports, and airports. In the update to VTrans2035, the CoSS consisted of five interstates and seven arterial highways: the designated interstates were I-64, I-66, I-77, I-81, and I-95, and the designated arterials were Routes 13, 17, 29, 58, 220, 234, and 460 (Office of Intermodal Planning and Investment, 2013). To be designated a CoSS, the corridor must have the following characteristics:

- multiple modes and/or extended freight corridor
• connection among regions, states, and/or major activity centers

• high volume of travel

• unique statewide function and/or fulfillment of statewide goal (Office of Intermodal Planning and Investment, 2013).

An analysis of the CoSS was undertaken in VTrans2035 to provide general strategies for guiding transportation investments along each corridor:

Potential corridor strategies were developed for each corridor. The common strategies across all corridors relate to transit and rail improvements and improving the efficiency of the existing system with ITS, access management, improved land use patterns, and TDM measures (Office of Intermodal Planning and Investment, 2010).

On December 17, 2009, the Commonwealth Transportation Board (CTB) accepted VTrans2035 and resolved “that the Office of Intermodal Planning and Investment shall under the direction of the Secretary of Transportation develop an action plan to implement the VTrans2035 recommendations” (CTB, 2009).

The Route 29 Corridor Study and Access Management

The development of master plans to turn the strategies in VTrans2035 into specific improvements was determined to be the next step in the CoSS process (Office of Intermodal Planning and Investment, 2010), and on the same day that the CTB accepted VTrans2035, it accepted VDOT’s final report regarding the Route 29 corridor study (VDOT, 2009), intended as “a corridor-wide study that would develop a blueprint for the corridor to serve as a framework for future transportation improvements in the Route 29 Corridor and for other Corridors of Statewide Significance” (CTB, 2009):

NOW THEREFORE, BE IT RESOLVED, that the Commonwealth Transportation Board hereby accepts the Consensus Strategies and Goals of the Route 29 Corridor Study Final Report set forth above, and directs the Virginia Department of Transportation (VDOT) and the Department of Rail and Public Transportation (DRPT) to use the corridor-wide strategies and goals discussed in Chapter 3 of the report as a high-level guide for local and regional planning within the Corridor; and to work with the localities, planning district commissions, metropolitan planning organizations and transit agencies along the Route 29 Corridor in implementing them (CTB, 2009).

In the final report, Route 29 Corridor Study, VDOT (2009) refers to these strategies and goals as “consensus themes.” They were developed as part of the workshops and the local government and public information meetings for the study (VDOT, 2009). A fundamental consensus reached during this study that serves as a basis for these corridor-wide strategies and goals is that “land use and transportation planning should tie together to support the roadway’s functionality” (VDOT, 2009). The complete list of strategies and goals is as follows:

• access point control
• access/connection type
• enhanced overall mobility and reduced congestion
• expanded travel mode choices
• corridor planning for land use and transportation
• enhanced stewardship role for VDOT to preserve transportation investment
• preservation of the integrity of the corridor as a statewide scenic resource (VDOT, 2009).

Since all transportation facilities in the Route 29 corridor are shared by all of the communities on the corridor, it is important that these communities coordinate with each other and with VDOT with regard to the roadway and land use plans that directly or indirectly have an effect on all forms of transportation in the corridor (VDOT, 2009). The following actions were intended to support this component of the Route 29 corridor vision:

• All localities and planning organizations along the corridor should adopt the findings of the Route 29 corridor study.

• Implementation of the Route 29 corridor vision should be coordinated by the planning districts in the corridor in such a way that the implementation is context sensitive and takes into account local conditions.

• Ultimately, the plan should evolve into “a corridor-wide implementation plan that provides additional specifics on both transportation and land use plans that support the Study.”

• Local comprehensive plans should be modified “to support both the Study as well as cross-jurisdictional implementation plans” (VDOT, 2009).

Since Route 29 involves a substantial investment by Virginia, “it is imperative that VDOT take a bigger role in reducing the extent to which various actions, including increases in the number of access points on Route 29, continue to degrade the functionality and safety of this important investment” (VDOT, 2009). In order to support this imperative, there is a need to do the following:

• Strengthen access management regulations.

• Increase partnerships between VDOT and local governments in land use planning to minimize the pressure to add new access points on Route 29.

• Provide incentives to local governments to develop and implement land use and land access plans that minimize new access and/or require appropriate types of access (VDOT, 2009).

It is clear that access management plays an essential role in VDOT’s vision of the way to maintain the functionality of Route 29.
Corridor Studies

The CTB’s resolution regarding the Route 29 corridor study directed VDOT and the Virginia Department of Rail and Public Transportation (DRPT) to do the following:

. . . work closely with a Subcommittee of this Board to develop and present a draft process to the Board by April 1, 2010, for Route 29 and future corridor studies, that addresses the cited insufficiencies [of the Route 29 corridor study] and positions the Board to lead in developing consensus among the affected localities, planning district commissions, metropolitan planning organizations and transit agencies along the corridor (CTB, 2009).

The insufficiencies cited by the CTB of the Route 29 corridor study, which the CTB referred to as a blueprint for all future corridor studies, were as follows:

- The Blueprint fails to include several recommendations of the consultant team that were removed prior to presentation to the Board, some of which were apparently initially opposed or favored by the localities affected, which removal the Board views was premature.
- Some controversial specific improvements were included as preliminary recommendations despite the fact that the scope of the study did not include conducting new traffic modeling or gathering new traffic data on specific improvements that might allow their potential benefits to be compared to their significant adverse impacts.
- The lack of foregoing data and time constraints precluded the public and local elected officials from having the opportunity to fully understand and comment on specific proposed improvements.
- The foregoing problems limited the Board’s ability to adequately evaluate many of the specific improvements included in the Study’s preliminary recommendations and to play a leadership role in developing consensus on some of the specific improvements (CTB, 2009).

On May 19, 2010, Koelemay (a member of the CTB) made a presentation to the CTB titled Process for Studying Corridors of Statewide Significance, which developed a process for studying the CoSS that was to be used to develop corridor master plans for each corridor. The CTB directed that “future studies on the Corridors of Statewide Significance, as defined in VTrans2035” follow the process outlined in Koelemay’s presentation (CTB, 2010).

The process developed by the subcommittee and presented by Koelemay (2010) has five steps:

**Step 1: Pre-Study Activities**

- Include information from prior statewide planning efforts.
- Focus specific analysis at the broad corridor level and at key geographic areas within the corridor.
- Establish a steering committee to guide the study.
- Include a professional facilitator as part of the study team.
- Lay groundwork for the study, including local and stakeholder participation.
**Step 2: Corridor Vision and Planning Framework**

- Bring together the collaborative efforts of state, local, and other stakeholders. This collaboration is needed to apply the broader statewide CoSS goals of VTrans to the specific corridor.
- Simultaneously develop strategies that respect local and stakeholder objectives.

**Step 3: Technical Analysis**

- Conduct an analysis of the broad corridor-wide level first, followed by more geographically refined analyses as defined over the course of the study.
- As part of the collaborative effort, develop alternatives (emphasis on problem solving through creative “out-of-the-box” design solutions).
- Conduct more detailed analysis, as needed, to focus on particular geographic areas.

**Step 4: Coordination and Study Completion**

- Conduct workshops and meetings with local governments and stakeholders to refine study recommendations.
- Use professional facilitation to capture all of the input and to ensure that the objectives of all participants are considered.
- Place emphasis on reaching consensus solutions for the final recommendations.

**Step 5: Project Advancement and Implementation**

- Develop and adopt corridor master plan.
- Revise local comprehensive plans.
- Identify funding.
- Conduct detailed location studies.
- Construct project and/or implement non-construction recommendations (policies, legislation, rule or procedural changes).

**Corridor Master Plans**

Koelemay made another presentation to the CTB on June 15, 2011, that included a sustained discussion of and recommendations for master plans for the CoSS. This presentation, titled *Report and Recommendations of the CTB Subcommittee on the Route 29 Corridor*, stated that the primary function of these corridors is to carry long-distance traffic: “In order for these corridors to serve this function, the ability of travelers and goods to move safely and efficiently must be preserved and given priority over other functions that these corridors serve, such as access” (Koelemay, 2011).

Koelemay’s presentation also made clear that even though there would be a need to accommodate new development along the corridors, “the location, spacing, and design of entrances, street intersections, median openings, traffic signals, and transit amenities must be
addressed in the Corridor Master Plan to preserve the facility for through travel and to serve future developments” (Koelemay, 2011). Further, the preservation of the corridors for through traffic would take place largely through effective land use and transportation planning, which was to be embodied in local corridor master plans (CMPs), and effective allocation of planning, primary highway construction, and transit funds by the CTB (Koelemay, 2011). According to Koelemay, the initial step in developing CMPs was as follows:

VDOT and DRPT will develop a memorandum of understanding (MOU) with localities along the CoSS. The MOUs will establish a common goal to preserve the corridors, and indicate a dedication by all parties to work together to achieve this goal through the coordinated development of CMPs, as well as an ongoing commitment to support corridor preservation prior to the development and implementation of the CMPs (Koelemay, 2011).

After the memorandum of understanding had been developed, VDOT and DRPT would help the localities along the CoSS develop local CMPs. It was important that localities review CMPs every 5 years and that CMPs took into account the following:

- corridor-wide studies related to each CoSS, VDOT’s Access Management Regulations for Principal Arterials, and DRPT’s Transit Service Design Guidelines
- the existing surface transportation plan, statewide rail plan, and transit and travel demand management (TDM) development plans and existing comprehensive plans to determine the potential for increased and/or expanded rail, transit, and TDM solutions
- future growth patterns, land use zoning and policies, and the designation of urban development areas in localities that have designated them in their comprehensive plans
- the comprehensive plans and the local CMP of the adjoining localities along the corridor
- access locations and design configurations that serve future nodal development (coordination with land use planning would be of key importance for this aspect of the CMP)
- planned access points for future land uses along the corridor along with proposed design concept(s) for the access
- the potential to implement multimodal transportation solutions
- properties fronting on the corridor that also have access to connecting roadways using the connecting roadway as their primary means of access
- lots subdivided from an existing parcel using the entrance of the parent parcel for access to the corridor
- public input on the draft CMP before final approval or adoption (Koelemay, 2011).
Other Arterial Corridors

The studies and resolutions described previously focused on the CoSS. Even though the other principal arterials in Virginia do not meet all of the criteria for inclusion in the CoSS, they are similar in function to the arterials included in the CoSS; as a consequence, coordinating land use planning and access management planning for these arterials is also important for VDOT. Managing access to these arterial corridors is critical to preserving their operational capacity.

Problem Statement

The success of access management for corridors is largely dependent on land use planning that supports access management. The 2003 Transportation Research Board’s *Access Management Manual* put the point this way:

Access management is difficult to accomplish through access permitting or roadway improvements alone. A successful access management program involves careful attention to access issues when land use and development decisions are made. Comprehensive plans, subdivision regulations, zoning, and the development review process all play a central role in determining access outcomes (Transportation Research Board, 2003).

Koelemay (2011) stated that concerning the CoSS, “[t]he preservation of the corridors for through traffic will take place largely through effective land use and transportation planning,” and this is also true for the other arterial highways in Virginia that do not meet the criteria for inclusion in the CoSS. With throughways, consistent access management along the entire corridor becomes important, which is why the CTB documents and the presentations by Koelemay described earlier emphasized corridor studies and corridor management plans.

Along the CoSS and other principal arterials, VDOT must try to ensure that land use planning and VDOT’s access management plans are coordinated. However, VDOT has no authority over land use planning. In response to the question whether CMPs could be enforced, a Virginia assistant attorney general stated that although agencies had the authority to develop CMPs, it would be difficult to force localities to implement them and thus there was the need to build consensus with localities (Route 29 Subcommittee, 2010).

The coordination of access management and local land use planning along corridors will require collaboration among VDOT, localities, metropolitan planning organizations (MPOs), planning district commissions, stakeholders, and the public in order to achieve consensus. (From this point on, the term *stakeholders* is used to refer to all of these groups, i.e., to everyone who has a stake in the planning for a corridor.) The CTB directed VDOT to collaborate with stakeholders along the CoSS in order to achieve the necessary coordination. The themes of collaboration and consensus building run throughout the proceedings of the CTB and the proceedings and publications of the Route 29 Subcommittee. The presentation on corridor studies made by Koelemay (2010) to the CTB was particularly clear on this issue. His presentation clearly emphasized collaboration, consensus building, and the use of professional facilitators.
Although the CTB did not address the principal arterials that are not included in the CoSS, the use of collaboration in the interest of consensus building should also be useful in the coordination of access management planning and land use planning along these corridors.

The issue for VDOT is how to increase and improve collaboration between VDOT and all stakeholders along the CoSS and other arterial corridors in order to achieve consensus on the coordination of access management planning and land use planning. Improvements in collaboration would also likely lead to a process that was more locality-friendly and thus more likely to succeed in achieving the necessary coordination between access management and land use planning.

**PURPOSE AND SCOPE**

The purpose of this study was to determine the best approach VDOT can take to increase collaboration and to improve the quality of collaboration and consensus building in the planning for the CoSS and for the principal arterials not included in the CoSS.

The scope of the study was limited to an examination and analysis of the literature on collaboration and consensus building and an examination of several case studies of attempts to incorporate collaboration into transportation planning.

**METHODS**

To determine how VDOT could increase and improve collaboration in the planning for the CoSS and the other principal arterials not included in the CoSS, a measure or metric of collaboration was needed. A literature search was conducted using the Transportation Research Board’s online database TRID and the Google Internet search engine using key words such as collaboration, consensus building, professional facilitation, and professional mediation. The literature review focused on determining whether or not there was a widely accepted consensus on the nature of collaboration.

The study focused on an examination of the literature beginning in 1981, which marked the publication of *Getting to Yes* (Fisher and Ury, 1981). The influence of the ideas concerning collaboration and consensus building in *Getting to Yes* has shown up throughout the literature since its publication. One of the developments reflected in this literature was the refinement of the notions regarding collaboration and consensus building. A truly or fully or genuinely collaborative process or a true or genuine consensus building process has certain essential characteristics. In the literature, a process that merely incorporates collaborative elements here and there is generally not considered a fully collaborative process.

In an effort to provide a basis for showing how VDOT could increase and improve collaboration and consensus building in the planning for the CoSS and principal arterials not
included in the CoSS, the following five tasks were undertaken, all of which were based on an examination of the literature.

1. *The concepts in Getting to Yes (Fisher and Ury, 1981) were examined in some detail.* These concepts provided a basis for generalizations about the nature of collaboration as it is currently viewed. *Getting to Yes* did not focus on transportation planning. It focused in a general way on how to negotiate to achieve consensus; however, the material examined in Tasks 3 and 4 was heavily influenced by *Getting to Yes*, and it does focus on transportation planning.

2. *The roles of facilitators and other consensus building professionals were determined.* One of the important issues to be examined was whether and how much facilitators could help achieve consensus between VDOT and stakeholders.

3. *The conflicts between different approaches to transportation planning were determined.* These conflicts were relevant to the question of whether VDOT would be able to adopt a fully collaborative planning process in its attempt to incorporate its access management goals along the CoSS.

4. *The concept that collaborative engagement in transportation planning would be better at achieving the goals that the current legally required methods of engagement are supposed to achieve was examined.* This was directly relevant to the question of whether collaborative efforts to achieve consensus would be better than the current legally required methods of engagement for achieving VDOT’s access management goals along the CoSS and the other principal arterials.

5. *Selected case studies that illustrate various collaborative approaches to transportation planning were examined.* The case studies examined were taken from *Transportation for Communities* (n.d.), a website that is a product of SHRP 2 Capacity Project C01: A Framework for Collaborative Decision Making on Additions to Highway Capacity (ICF International and URS Corporation, 2014). These cases are similar in that the departments of transportation (DOTs) extended the range of interests of all stakeholders that they were willing to consider in making transportation decisions.

**RESULTS**

**Consensus Building and Collaboration**

The literature on consensus building and collaboration was substantial. This section focuses on literature that (1) has a central and important place in the literature, and (2) contains ideas that are representative of important lines of thought found again and again throughout the literature.
Getting to Yes: Negotiations Based on Interests

The most influential book on consensus building and collaboration during the last 35 years was *Getting to Yes* (Fisher and Ury, 1981). This book has had an enormous influence on the literature on consensus building and collaboration.

Fisher and Ury (1981) stated that any *method* of negotiation may reasonably be evaluated by three criteria:

1. It should produce a wise agreement.
2. It should be efficient.
3. It should improve or at least not damage the relationship between the parties.

They defined a wise agreement as “one which meets the legitimate interests of each side to the extent possible, resolves conflicting interests fairly, is durable, and takes community interests into account” (Fisher and Ury, 1981). They believed that negotiating from positions does not often lead to such an agreement; to the extent that the focus of the negotiators is on positions, insufficient attention is devoted to accommodating the underlying interests of the negotiators. Further, they believed that positional bargaining is not efficient: “In positional bargaining you try to improve the chance that any settlement reached is favorable to you by starting with an extreme position, by stubbornly holding to it, by deceiving the other party as to your true views, and by making small concessions only as necessary to keep the negotiation going” (Fisher and Ury, 1981). Since the other side tries to do the same thing, this makes it difficult to reach a settlement quickly. Further, positional bargaining often becomes a battle of wills, and this can endanger the ongoing relationship between the parties involved in the negotiations.

Fisher and Ury (1981) provided an alternative to positional bargaining:

- Focus on interests not positions.
- Separate the people from the problem.
- Invent options for mutual gains before making a decision.
- Insist that the result be based on an objective standard.

Focus on Interests Not Positions

It is important to distinguish between positions and interests: “Interests motivate people; they are the silent movers behind the hubbub of positions. Your position is something you have decided upon. Your interests are what caused you to so decide” (Fisher and Ury, 1981). Positional bargaining often results from the fact that the negotiators imagine that what separates them—and thus what needs to be resolved—is a difference of positions; however, Fisher and Ury stated that this often leads to an impasse rather than a resolution: “the basic problem in negotiation lies not in conflicting positions, but in the conflict between each side’s needs, desires, concerns, and fears” (Fisher and Ury, 1981). They stated that people often mistakenly assume that if the other side’s positions are opposed to their positions, their interests must also be opposed; however, it is often the case that the interests of both sides are merely different, not incompatible (Fisher and Ury, 1981). The opposing side has many interests, and the most
powerful interests are basic human needs: “security, economic well-being, a sense of belonging, recognition, and control over one’s life” (Fisher and Ury, 1981). Since the purpose of negotiating is to serve interests, it is important to talk about interests:

It is your job to have the other side understand exactly how important and legitimate your interests are. . . . You can be just as hard in talking about your interests as any negotiator can be in talking about his [or her] position (Fisher and Ury, 1981).

**Separate the People From the Problem**

Fisher and Ury (1981) stated that negotiators always have two interests: (1) the desire to reach an agreement that satisfies their substantive interests, and (2) their relationship with the other side. However, the relationship between the negotiators often becomes entangled in the negotiations over substantive issues. Fisher and Ury (1981) stated that if the negotiators see the negotiation as a battle of wills over positions, it will aggravate the entangling process; however, they did not believe that maintaining a good working relationship and dealing with a substantive problem were necessarily in conflict. They stated that it is important to separate the people from the substantive issue and to deal with the people problems directly.

Fisher and Ury (1981) stated that the best way to address people problems is to anticipate them and address them before they become problems. In cases in which this has not been possible, most people problems can be classified as problems of perception, problems of emotion, or problems of communication: “Where perceptions are inaccurate, you can look for ways to educate. If emotions run high, you can find ways for each person involved to let off steam. Where misunderstanding exists, you can work to improve communication” (Fisher and Ury, 1981). For example, with respect to perceptions, people’s perceptions can be a source of conflict: “Fears, even if ill-founded, are real fears and need to be dealt with. Hopes, even if unrealistic, may cause a war. Facts, even if established, may do nothing to solve the problem” (Fisher and Ury, 1981). Finally, it is essential to address problems without seeming to attack the people with whom the negotiations are taking place (Fisher and Ury, 1981).

**Invent Options for Mutual Gains Before Making a Decision**

Fisher and Ury (1981) stated that even in the best of circumstances, inventing options does not come naturally to most people involved in negotiations. There are four major obstacles that inhibit the invention of options: (1) making a premature judgment; (2) searching for the single answer; (3) assuming there is a fixed pie; and (4) thinking that “solving their problem is their problem.” Making a premature judgment about the value of a proposed answer is commonly the reason for the absence of a large number of possible answers. Searching for a single answer leads to short circuiting “a wiser decision-making process in which you select from a large number of possible answers” (Fisher and Ury, 1981). Assuming a fixed pie, i.e., assuming there are opposing sides arguing for positions that are mutually exclusive and that if one wins the other must lose, precludes a mutually beneficial negotiation. Finally, whether negotiators reach an agreement that accommodates their interests is often contingent on whether the agreement addresses the interests of the other side, which means that it is important to avoid thinking that solving the problem of the other side is just *their* problem (Fisher and Ury, 1981).
It is important to try to discover shared interests, which are present in every negotiation; stressing the shared interests can make negotiation smoother and more amicable (Fisher and Ury, 1981). It is also important to be clear about the differences in the negotiators’ interests because dovetailing the differences in interests often leads to a solution: In dovetailing, “[l]ook for items that are of low cost to you and high benefit to them, and vice versa” (Fisher and Ury, 1981). As an example, the authors provided a fable about two sisters who fight over an orange. Finally, they decide to cut the orange in half. One sister eats the fruit and discards the peel, and the other uses the peel in baking and throws away the fruit (Fisher and Ury, 1981). This fable reflects a failure to dovetail interests. If the sisters had made their respective interests clear, it would have been possible to dovetail their interests, which would have led to one sister receiving all of the fruit and the other all of the peel.

Fisher and Ury (1981) believed it is important to try to invent ways to make the opposing side’s decision as easy as possible: “Impressed with the merits of their own case, people usually pay too little attention to ways of advancing their case by taking care of interests on the other side” (Fisher and Ury, 1981). Once the interests of the other side are discerned, “your task is to give them not a problem but an answer, to give them not a tough decision but an easy one” (Fisher and Ury, 1981). To invent an option that at least increases the possibility of a satisfactory decision, it is necessary to evaluate the option from the other side’s point of view. Fisher and Ury (1981) emphasized that creative inventing is crucial to negotiating: “In a complex situation, creative inventing is an absolute necessity. In any negotiation, it may open doors and produce a range of potential agreements satisfactory to each side. Therefore, generate many options before selecting among them.”

**Insist That the Result Be Based on an Objective Standard**

Fisher and Ury (1981) emphasized the cost of positional negotiations based on what each side is willing to do. They stated that the way around this is to find some basis independent of the will of either negotiator, and that way is to base decisions on objective criteria: “In short, the approach is to commit yourself to reaching a solution based on principle, not pressure. Concentrate on the merits of the problem, not the mettle of the parties. Be open to reason, but closed to threats.”

Fisher and Ury (1981) stated that negotiations based on a battle for dominance between negotiators threaten the relationship that exists between them: “It is far easier to deal with people when both of you are discussing objective standards for settling a problem instead of trying to force each other to back down.” Basing the decisions in a negotiation on objective criteria means that the negotiators will have to develop the criteria to be used and determine how to use them in the negotiating process. Fisher and Ury (1981) suggested the following possibilities for objective criteria: market value, precedent, scientific judgment, professional standards, efficiency, costs, moral standards, what a court would decide, equal treatment, tradition, reciprocity, etc. They emphasized that “objective criteria need to be independent of each side’s will” and also practical. Objective criteria should apply to both sides equally, and the test of reciprocal application can be used to determine if this is the case; for example: “If a real estate agency selling you a house offers a standard form contract, you would be wise to ask if that is the same standard form they use when they buy a house.” It is also important to use fair procedures
for resolving conflicting interests in a negotiation: “Consider, for example, the age-old way to divide a piece of cake between two children: one cuts and the other chooses. Neither can complain about an unfair division.” The use of fair procedures may lead to results that are unequal; however, genuinely fair procedures provide for equal opportunity for each side (Fisher and Ury, 1981).

*One Final Note: The Best Alternative to a Negotiated Agreement*

Fisher and Ury (1981) stated that it is very important to be clear about the best alternative to a negotiated agreement. If the reason someone negotiates is to produce better results than can be had by not negotiating, the best alternative to a negotiated agreement is the standard by which any proposed agreement should be measured: “That is the only standard which can protect you both from accepting terms that are too unfavorable and from rejecting terms it would be in your interest to accept” (Fisher and Ury, 1981).

*The Role and Importance of Professional Consensus Building Practitioners*

Consensus building is not an effort to produce unanimity, it is an effort to produce overwhelming agreement, and this kind of effort is often required where conflicts have arisen as a result of differences in values, perceptions, and/or interests. In consensus building, participants work together to create an agreement despite the fact that they have differences over the content of the dispute, have different interests and values, and may see the dispute differently. Progress in resolving the dispute “is usually not built on efforts to conform all participants’ interests to a single, shared sense of the nature of the dispute and its characteristics, but rather by building options that meet each participant’s interests and values” (Elliott, 1999). Processes designed to achieve consensus achieve legitimacy:

- by involving those directly affected by a decision in the process of developing the decision
- by conducting their dialogues in an open and inclusive manner
- by searching for agreements that speak to all the interests involved (Elliott, 1999).

Typically, there is a variety of possible barriers that might prevent negotiators from achieving consensus. For example, one institutional barrier to successful negotiations is that the institution is itself a party to the dispute. Any number of attitudes, emotions, or behaviors, such as distrust or bias or hostility or threats and accusations, may block the possibility of successful negotiations, and sometimes the positions of the negotiators have simply become inflexible. The inability of negotiators to communicate clearly may also block the possibility of successful negotiations. If the negotiations involve a large number of disputants or are concerned with a large number of issues, some of the participants may find that their concerns are not adequately addressed. Finally, if negotiators’ rights and responsibilities are not defined or are disputed, this may lead to questions about how to proceed with the negotiations (Elliott, 1999).
Professional consensus building practitioners typically participate in these often complex negotiations, and they play a critical role in the effort to achieve consensus. Consensus building practitioners identify barriers to communication and negotiation by designing and implementing a process for resolving a dispute. They also help the negotiators develop options, which is an important factor in achieving consensus (Elliott, 1999). Consensus building practitioners also encourage communication among participants in a negotiation by helping to build working relationships among them. In a consensus building process, consensus building practitioners typically are responsible for (1) the initiation and design of a consensus building process; (2) impartial management of meetings that enables participants to focus on substantive issues and goals; (3) intervention in a negotiation to help the disputing parties resolve differences; and/or (4) determination of the causes of recurring conflict and the design of systematic interventions (Elliott, 1999). The consensus building practitioners who fulfill these roles are commonly designated conveners, facilitators, mediators, and dispute systems designers. A consensus building practitioner may be skilled in all or only one of these functions. The roles of the facilitator and the mediator may seem similar; however, *facilitation* is a way of helping groups work together *in meetings*, whereas *mediation* is a way of helping parties deal with strong disagreements: “While facilitators do most of their work ‘at the table’ when parties are face-to-face, mediators are often called upon to work with the parties before, during, and after their face-to-face meetings” (Susskind et al., 1999).

There are three core elements in a consensus building effort: (1) substance, (2) relationships, and (3) process. Consensus building practitioners typically carry out a number of core tasks in dealing with each element. Elliott (1999) provided a summary of the common core tasks:

With respect to substance, professional practitioners must do the following:

- Understand the concerns and interests of the stakeholders.
- Establish a work plan or agenda.
- Identify and create a common understanding of the issues and review the context of the dispute.
- Design a process for generating new potential solutions and separate this process from the task of evaluating the resulting alternatives.
- Help participants assess the impacts of alternatives.
- Help participants alter the options so that participants thereby seek to increase benefits to multiple stakeholders by identifying opportunities for joint gain.
- Help ensure that participants create a workable implementation plan.
- Help participants evaluate the outcomes of an implemented agreement.
With respect to relationships, practitioners must do the following:

- Seek to promote more effective communication among disputants from the outset of a consensus building process.

- Identify the individuals and groups whose interests are at stake or whose agreement may be necessary to resolve the dispute.

- Manage face-to-face negotiations by formalizing the ground rules of negotiation, which consist of rules for the process, agenda, participants’ behavior, and obtaining participants’ commitment to negotiate.

- Build the participants’ capacity to engage in meaningful negotiation since the participants may have little negotiating experience.

With respect to process, practitioners help define how a process should be structured, and for Elliott (1999), “[t]he process emerges from the context.”

Planning Styles in Conflict

During the period 1995 to 2000, Innes and Gruber studied the planning efforts of the San Francisco Bay Area’s Metropolitan Transportation Commission (MTC). The 500-page study report is titled *Bay Area Transportation Decision Making in the Wake of ISTEA: Planning Styles in Conflict at the Metropolitan Transportation Commission* (Innes and Gruber, 2001). The purpose of the study was twofold:

1. to see how the agency “was implementing the Intermodal Surface Transportation Act of 1991”

2. to find “the degree to which the collaborative planning group that the Metropolitan Transportation Commission had set up, the Bay Area Partnership, was producing decisions that were regional rather than parochial in perspective” (Innes and Gruber, 2005).

The study relied on observation, open-ended interviewing, and document review, and the goal was “to understand in-depth the decision-making dynamics of one of the nation’s leading Metropolitan Planning Organizations” (Innes and Gruber, 2005). During the course of the study, the authors observed that the participants in the planning process engaged in different styles of planning, which they labeled (1) the technical bureaucratic style, (2) the political influence style, (3) the social movement style, and (4) the collaborative style. They examined the nature of the styles and the way that the participants who engaged in each style interacted during the proceedings of the MTC (Innes and Gruber, 2005). Similar characterizations of different styles of planning are common in the literature, even though they are sometimes given different names and the dividing lines between the styles are not always drawn in the same place.
According to Innes and Gruber (2005), the technical/bureaucratic style is a version of the rational/technical style that is the foundation of what is commonly taught to practitioners: “Planners are neutral advisors who provide objective information, typically in quantitative form, to inform and convince decision makers about the best choices.” However, this style of planning often fails to work in this fashion: “information all too often fails to influence or misses the point that decision makers care about” (Innes, 1998). In addition, decision makers sometimes cannot agree on goals, which makes it difficult for planners to bring their expertise to bear on a specific goal or set of goals. As a result of difficulties of this sort, “[a]nalysis may be divorced from decision making, and technical planners may find themselves attached to bureaucracies providing documentation for proposals that are all but decided already on the basis of criteria other than the capacity of the policy to advance public goals” (Innes and Gruber, 2005). So, in effect, technical planners sometimes serve as technical/bureaucratic planners.

What Innes and Gruber (2005) called the political influence style is not a style taught to professional planners or policy analysts or even considered a style of planning by most of these practitioners; however, it often plays a dominant role in many policy arenas. This style depends on personal loyalty between the leader and those benefitting from the leader’s agenda: “It depends on promises being kept and the existence of a system of rewards (in transportation, typically projects) that can be distributed to players to induce them to support the overall package” (Innes and Gruber, 2005). According to the authors, although some kinds of information were important to political planners, they did not need information about how best to solve regional problems or about what was cost-effective. What they wanted was something that would show the value of what they proposed and something that would keep funding proposals from being challenged. Political planners “needed information to help in selling the program to the public, raising funds, and getting support for the agency” (Innes and Gruber, 2005). A good regional plan for those who supported the political influence style of planning would be one that was the sum of the individual interests of all of the most powerful players rather than one that was a vision for the region.

According to Innes and Gruber (2005), the social movement style originated outside the normal government planning agencies with people who felt excluded from the normal planning processes: “In this style, individuals and organizations join together around a vision, in opposition to mainstream policy. Their goal is to convert people to support this vision and to make their collective voice powerful enough to force a response” (Innes and Gruber, 2005). With the social movement style, a good plan is one that implements the group’s vision (Innes and Gruber, 2005).

The following is a typical view of the collaborative style of planning (Innes and Gruber, 2005):

- Stakeholders representing the different interests meet for face-to-face dialogue.
- Stakeholders collectively work out a strategy to address shared problems.
- Participants work through joint fact finding and agree on a problem, mission, and actions.
Further, successful collaborative planning is conditional on the following:

- The dialogue must be self-organizing.
- What people say must be sincere, comprehensible, accurate, and a legitimate representation of the participants’ interests.
- The participants must represent diverse interests, and decisions must be made only when all, or most, agree.

Under these conditions, “collaborative planning can produce a shared vision, innovative solutions, and motivations for collective action” (Innes and Gruber, 2005). With the collaborative style, a good plan “is one that responds to the interests of all stakeholders and creates joint benefit” (Innes and Gruber, 2005).

During the 5-year period during which Innes and Gruber observed the way proponents of these styles interacted in the decision-making dynamics of the MTC planning process, the four styles came into conflict for a variety of reasons, among which was the fact that the proponents of the different styles had different views about what constituted a good plan, what information should be used to develop the plan, and who should participate in the planning process. The adherents of each style were also convinced of the practicality and morality of their particular approach:

- The technical/bureaucratic style reflected a belief in the possibility and importance of providing objective information to those who make decisions.
- The political influence style reflected a faith in the legitimacy of political processes and of elected officials.
- The social movement style reflected a belief in a vision and the justice of a cause.
- The collaborative style reflected a belief that what was right was what an informed, inclusive, and empowered set of stakeholders could work out through dialogue (Innes and Gruber, 2005).

This led to various kinds of conflicts. For example, political influence planners sometimes felt that technical staff were politically naïve, and since executive staff operating as political planners often had control over the final content of reports, they asked technical planners to revise reports to ensure they would support their political approach. As a consequence, since technical planners were supposed to take directions from the political planners, this often meant that they were not able to undertake the technical analyses they thought were needed. On the other hand, technical planners thought the information used by social movement planners was biased, and social movement planners were skeptical of the information used by technical planners. Since social movement planners were interested in policies—as opposed to projects—they were frequently in conflict with political influence planners, who regarded projects as fundamental to
the success of their approach. The technical/bureaucratic, political influence, and social movement styles all proved to be obstacles to collaborative planning in the following ways:

- Social movement planners were more comfortable with those who shared their values and sometimes confrontational with those who did not—although at times they did collaborate.

- The desire of technical planners to control data often stymied collaborative efforts. When partners [stakeholders] wanted to participate in the design of performance measures, technical staff made it clear they had already decided what to use.

- Technical staff not only resisted using qualitative questions to assess proposals, they also seemed genuinely not to understand how they could work.

- [Technical] staff also resisted the [qualitative] questions because they implied values, whereas the partners [stakeholders] thought that incorporating values was the point. In collaborative planning, values are on the table, whereas they are not in technical planning.

- The collaborative style was in constant conflict with the political style because a collective decision could undermine the legitimacy of political deal making (Innes and Gruber, 2005).

**Reframing Public Participation for the 21st Century**

In *Reframing Public Participation for the 21st Century*, Innes and Booher (2004) stated that much of the problem with planning—and the public participation associated with it—was an attitude commonly held about the relationship between the people and the government: “Today we are trapped in seeing public participation as involving citizens on the one hand and government on the other. This simplistic duality underlies the debates and encourages adversarial participation.” They stated that the way out of this dysfunctional arrangement was to make public participation collaborative, i.e., include citizens, organized interests, profit and nonprofit organizations, planners, and public administrators. “It is a multidimensional model where communication, learning and action are joined together and where the polity, interests and citizenry co-evolve” (Innes and Booher, 2004).

According to the authors, typically there are five reasons given to justify engaging the public as part of the planning process:

1. It allows “decision makers to find out what the public’s preferences are so these can play a part in their decisions.”

2. It improves “decisions by incorporating citizens’ local knowledge into the calculus.”

3. It advances “fairness and justice.”
4. Public participation provides legitimacy for public decisions.

5. Planners and public officials engage the public because the law requires it (Innes and Booher, 2004).

According to the authors, the legally required methods of public engagement used throughout the United States seldom achieve these goals and collaborative methods are better able to achieve them.

Techniques for public engagement such as public hearings, written public comments on proposed projects, the use of citizen-based commissions (such as planning and zoning commissions), boards of directors for public agencies, advisory committees, and task forces are all part of the public decision process required by law. However, the hearing and public comment processes often consist of one-way communication between the public and agency or elected officials. Even in cases where there is some back-and-forth between the members of these groups, the problem is that these groups are made up of elites and consequently do not typically have a great diversity of voices and interests (Innes and Booher, 2004).

Typical procedures for review and comment in the United States also commonly put the public in the position of simply reacting to, for example, new regulations or plans or decisions that have been proposed. Although there is typically no restriction on the type of comment that can be offered, there is often no dialogue and the resolution of the issues raised is left up to the government agency (Innes and Booher, 2004).

According to Innes and Booher (2004), collaborative participation differs from these common legally required methods of public engagement in that genuine dialogue is at its core. The authors stated that there are three keys to the success of these collaborative approaches to planning:

1. *Dialogue is fundamental to the success of this approach:* “When an inclusive set of citizens can engage in authentic dialogue where all are equally empowered and informed and where they listen and are heard respectfully and when they are working on a task of interest to all, following their own agendas, everyone is changed” (Innes and Booher, 2004).

2. *Almost all of the participants in the cases of collaborative planning examined in the literature agreed that they built new professional and personal relationships during the course of the collaborative effort:* “They [the participants] came to understand each other’s perspectives and in most cases built considerable trust” (Innes and Booher, 2004).

3. *Collaborative, networking processes contribute to building institutional capacity.* Institutional capacity is a combination of social, intellectual, and political capital:

   As this capital grows and spreads through collaboration into interlocking circles and networks, the civic capacity of a society grows and participants become more knowledgeable and competent, and believe more in their ability to make a difference (Innes and Booher, 2004).
The authors concluded that if the conditions for authentic dialogue are met, “genuine learning takes place; trust and social capital can be built; the quality, understanding and acceptance of information can be increased; jointly developed objectives and solutions with joint gain emerge; and innovative approaches to seemingly intractable problems can be developed.” Citizens participate either as individuals or through representatives of their interests, and all citizens are represented, not just the most organized or the angriest or those with the narrowest interests. Innes and Booher (2004) further stated that if the dialogue is done well, then “even when someone does not like the final result they may accept the fairness of the decision if they have had some impact on the final package,” and if “they can see what their impact is because of the transparency of the dialogue and the openness of the conclusions.”

The authors summed up the differences between the methods legally required in the United States and collaborative approaches in the following way:

- one-way talk vs. dialogue
- elite or self-selected vs. diverse participants
- reactive vs. involved at the outset
- top-down education vs. mutually shared knowledge
- one-shot activities vs. continuous engagement
- use for controversial choices vs. use for routine activities (Innes and Booher, 2004).

They stated that collaborative methods serve the purpose of public engagement better than the common legally required methods because they allow decision makers to develop a more accurate notion of the public’s preferences, which results from the fact that “participants are more representative and have more opportunity to provide thoughtful, informed input than in the standard required methods.” This increased accuracy is made possible because collaborative methods allow decision makers to incorporate “citizen knowledge into the collaboratively arrived at recommendations because citizens can place their knowledge in the larger context of what the experts and planners know and vice versa” (Innes and Booher, 2004).

Innes and Booher (2004) stated that institutional change will be required if collaborative methods are to be incorporated fully in the public engagement process. They thought it would be hard to incorporate collaborative processes in a major way unless the barriers to the use of collaborative processes are addressed. These barriers include, for example, entrenched institutions of public decision making, elected officials who fear loss of their authority, groups who lack the resources to participate, the lack of collaborative skills among planners and citizens, and the costs of staffing collaborative efforts.

Case Studies

Overview

The website Transportation for Communities (n.d.) provides a systematic approach for reaching collaborative decisions about adding highway capacity that enhance the environment, the economy, and the community and improve transportation. It identifies key decision points in
four phases of transportation decision making: long-range transportation planning, corridor planning, programming, and environmental review and permitting. As stated previously, the website is a product of SHRP 2 Capacity Project C01: A Framework for Collaborative Decision Making on Additions to Highway Capacity (ICF International and URS Corporation, 2014).

The primary focus of the website is a decision guide that outlines the structure of key decisions common to all transportation agencies. The guide is designed to show why collaboration is necessary, what is needed to support it, and how to make the changes necessary for a truly collaborative process. It is also designed to show how “to systematically build collaboration into transportation decision-making by allowing the right people to be at the table at the right time with the right information.”

The three cases described in this section are from Transportation for Communities (n.d.):

1. Oregon I-5/Beltline Highway Interchange
2. Wasatch Front Region, Utah: Regional Transportation Plan
3. Idaho’s Transportation Vision.

These case studies are similar in that the DOTs extended the range of interests of all stakeholders they are willing to consider in making transportation decisions.

Oregon I-5/Beltline Highway Interchange

This case study is titled Oregon I-5/Beltline Highway Interchange: Structured Decision Making Using Community Values As Performance Measures (“Oregon I-5/Beltline,” 2010). I-5 in Oregon runs north-south through the Eugene-Springfield area, with Beltline Highway intersecting it east-west. Eugene is west of I-5, and Springfield is east of it. The I-5/Beltline interchange was originally a cloverleaf with circular loop ramps, which in 1970 carried approximately 20,000 vehicles per day. In 2000 it carried 93,000 vehicles per day, and in 2015 it is projected to carry 120,000 vehicles per day. This interchange serves large, regionally significant commercial and manufacturing centers.

The Oregon Department of Transportation (ODOT) I-5/Beltline improvement project was motivated by the functional deficiencies of the interchange, which included geometric, operational, and safety deficiencies. Geometric deficiencies included weaving and spacing issues, and operational deficiencies included the problems associated with the geometric deficiencies exacerbated by the relationship of the interchange with the nearby Gateway/Beltline intersection. The proximity of this intersection to the I-5/Beltline interchange caused congestion during peak commuter periods. As a result of these geometric and operational deficiencies, there were safety deficiencies.

Eugene and Springfield had different ideas about land use, growth, and transportation infrastructure. Eugene wanted to control growth and wanted more emphasis on pedestrian/bikeway facilities. Eugene viewed I-5 as a barrier to alternative modes of transportation. From Springfield’s point of view, the I-5 interchange provided interstate travelers access to major employment centers and numerous traveler-related businesses.
Although progress had been made on a set of alternatives for the interchange and the Gateway/Beltline intersection, “ODOT recognized that an improved public involvement process was necessary to further develop the alternatives in the EA [environmental assessment] and gain the support of all stakeholders, both public and private.” Communities near the interchange identified a variety of other concerns including the fact that increased traffic levels diminished livability in the vicinity of the interchange and led to additional noise, degraded air quality, and other associated issues. It became clear from interviews “that livability and community interests were just as important to stakeholders as transportation performance.” As a consequence, ODOT thought it had to deal with a variety of issues, all of which were identified by stakeholders and the public in interviews:

- avoiding an interruption to commercial activities during construction
- avoiding a reduction in access to particular adjacent businesses
- supporting future economic development in the area
- maintaining the characteristics of the freeway-oriented commercial area that is appealing to interregional freight movers and other travelers
- balancing needs of future facility users and businesses against impacts on current adjacent land uses
- realistically assessing the role transit can play in meeting transportation needs in the Gateway area
- considering the nonconstruction costs that differentiate alternatives such as right-of-way costs and nonmonetary social and environmental costs
- minimizing profiles in order to reduce impact on existing businesses
- improving pedestrian and bicycle features
- improving safety for vehicles, pedestrians, and bicyclists
- integrating future transit station and pedestrian access to buses
- addressing the potential relocation, noise, and community disruption to residents of the Patrician Mobile Home Park
- addressing traffic congestion that limits the access of people in neighborhoods adjacent to the project to the local street system
- addressing noise and air quality in neighborhoods adjacent to the project.
In order to develop a decision-making process, interviews were conducted with stakeholders “to gather input on project issues, scope of work, decision making, and public and agency outreach.” The stakeholder interviews revealed several issues of concern: “community impacts, the need for an integrated citizen working group, and the need for a clear decision-making process that ensured local representatives would make the final decision on project elements that would have community impacts.” As a result of the stakeholder interviews, ODOT developed an “eight-step decision-making process for the I-5/Beltline interchange project.”

1. formulation of management structure and decision-making process
2. definition of transportation problem
3. development of alternative evaluation framework
4. formulation of alternatives
5. threshold screening of alternatives
6. selection of alternatives for the environmental assessment
7. environmental assessment
8. selection of alternative and revised environmental assessment.

In Step 2, it was decided that the definition of the problem should not be limited to transportation issues but rather that “ODOT should integrate community issues into the problem definition.” The development of evaluation criteria in Step 3 was the most innovative feature of the entire decision-making process, and their development was a natural consequence of the decision to integrate community issues into the definition of the problem. Step 3 consisted of the establishment of two sets of criteria: threshold criteria and evaluation criteria. The threshold criteria identified the minimum conditions of acceptance:

- consistency of interchange and intersection form with American Association of State Highway and Transportation Officials (AASHTO) geometric design forms
- consistency with applicable federal regulations and the policies in the Oregon Highway Plan
- ability to implement the alternative in phases and improve safety
- compliance with FHWA interstate access policy.

Alternatives that could not meet these criteria were eliminated from further consideration.

The Stakeholders’ Working Group (one of the three management teams created in Step 1) “established criteria to evaluate the performance of feasible alternatives against the full range of stakeholder values, and then used the criteria to rank the alternatives.”

Using input from the first public open house, the group brainstormed a list of about 40 criteria in five broad categories, including cost, implementation, transportation, safety, and the natural environment and human environment. After further consideration, the group suggested six additional criteria to qualitatively evaluate the impacts: the alternatives had to be able to be phased; improve safety for all modes; accommodate the commercial district and provide access to businesses; accommodate alternative modes such as pedestrian, bicycle, and transit; and minimize
property displacement. The phasing and safety criteria were both thresholds and evaluative criteria. All alternatives had to improve safety and be implementable in phases (“Oregon I-5/Beltline,” 2010).

The Stakeholders’ Working Group developed 26 evaluation criteria and performance measures for each criterion. The general categories were as follows: cost, transportation and safety, natural environment, implementation, and the human environment. Where possible, the performance measures were quantitative. The development and use of criteria for the human environment as a tool for developing alternatives was the most innovative feature of this decision-making process.

Examples of the “human environment” criteria and their performance measures included the following:

- **neighborhood cohesion**, with performance measure of number of residential areas split/bisected

- **light/glare impact to neighborhoods**, with performance measure of linear feet of changed roadway adjacent to residential-zoned properties and motels/hotels

- **residential noise**, with performance measure of high, medium, or low based on volume, speed, distance, elevation, length of frontage, distance roadway moved closer/farther away, etc., in relation to 20-year “no-build.”

Wasatch Front Region, Utah: Regional Transportation Plan

This case study is titled *Regional Transportation Plan 2007-2030 (Wasatch Front Regional Council, Utah)* (“Regional Transportation Plan,” 2010).

The Wasatch Front Regional Council (WFRC) is the designated MPO responsible for developing area-wide, long-range transportation plans for Salt Lake, Davis, and Weber counties in Utah. This case study focused on the processes used in the development of the Wasatch Front regional transportation plan (RTP).

A 10-step process was used to develop the 2030 RTP:

1. overview or problem identification
2. visioning
3. system needs assessment
4. system alternatives development
5. evaluation of alternatives
6. project selection and phasing
7. financial plan
8. recommended improvements
9. plan impacts and benefits
10. plan implementation.
Three of these steps used a screening process: system needs assessment, evaluation of alternatives, and project selection and phasing. The screening process is integrated with the entire process from visioning through project development in that principles determined in the visioning process are actually applied in the later stages.

WFRC partnered with the Mountainland Association of Governments and Envision Utah to engage the public in an 18-month visioning process. The process included 13 workshops and 4 open houses, and it involved more than 1,000 participants from all parts of the community and government. The purpose of the process was to establish a vision for the future of the Wasatch Front. The result of the process was a set of growth principles and a preferred land use and transportation network for the Wasatch Front that were used to guide the development of the RTP. These growth principles and the land use and transportation networks, which were a product of an extensive public involvement process, show in this case the way that the public affected policy.

In the visioning process, the screening process is integrated with other planning activities, particularly land use planning:

The alternatives at this stage are scenarios and not project specific or even transportation specific. They reflect the “vision” of what the transportation system should be within the region.

Four scenarios were developed in the Vision document: (1) business as usual, (2) transit station villages, (3) interconnected network of complete streets, and (4) centers of employment. The scenarios were examined against the transportation network to determine what effect each would have on the system and the needs that would arise for each (“Regional Transportation Plan,” 2010).

From these scenarios, three system-wide alternatives were developed:

1. **vision alternative:** a combination of the earlier 2004-2030 RTP and the results from the Wasatch Choices 2040 visioning exercise

2. **freeway alternative:** a transportation system emphasizing freeway and freeway-based bus rapid transit

3. **arterial alternative:** a system emphasizing arterials and arterial-based streetcars.

These alternatives were screened using the following measures: construction costs; transit passenger miles; vehicle miles traveled; transit proportion of work and college trips; traffic volumes in constrained critical corridors; person-hours by auto; weighted transit speeds; home-based work auto speeds; auto delay; improvements to geographic choke points; transit access to major activity and mixed-use centers; auto access to major activity, mixed-use, and infill areas; freight center-to-freeway access; employment access for disadvantaged populations; households and employment potentially affected; potential impacts to historic neighborhoods; potential impacts to disadvantaged populations; air quality; and potential impacts to environmentally critical lands. The vision alternative was selected and became the framework within which the 2030 RTP was refined.
The objective of the last part of the screening process was to refine the system concept into a list of defined projects and to place time horizons on each project:

This was done for highway projects and transit projects, with each having separate selection and phasing criteria. For highway projects, traditional individual project measures were considered when defining a project characteristic and helped to define project width, length, functional class, general alignment, and interchange location. The congestion management process (CMP) was applied to determine if any needs could be resolved through travel system management (TSM) or travel demand management (TDM) strategies, such as signal coordination, access management, carpooling, and telecommuting. Projects that had needs that could not be satisfied by TSM or TDM strategies were advanced and evaluated by local and UDOT scoring criteria (“Regional Transportation Plan,” 2010).

Idaho’s Transportation Vision

This case study is titled Idaho’s Transportation Vision: An Inclusive Process Brings Together Stakeholders to Create a Shared Vision (“Idaho’s Transportation Vision,” 2010). In 2000, the director of the Idaho Transportation Department (ITD) saw the need for a vision to help guide future development:

The goal of the vision was to find out what the public wanted in transportation. The director clarified that he did not want another long-range plan; rather, he wanted a short and concise vision developed in a process that included widespread public involvement. To further encourage broader thinking, the vision did not have political or economic restraints. The vision was initiated as a way to find out what people wanted and what their concerns were (“Idaho’s Transportation Vision,” 2010).

ITD initiated a process to create Idaho’s transportation vision through 2034. The process involved academics, public and private sector participants, resource agencies, and the public. To begin the process, ITD sponsored a symposium of more than 200 participants that included ITD executives and mid-management employees and other transportation stakeholders. During the symposium, a variety of transportation professionals with different specialties presented information about the future of transportation and its impact on Idaho. Some of the key concerns of the participants were as follows:

- The transportation vision should be understood and shared across the state and with other stakeholders.
- A visioning process should incorporate forecasting activities.
- Technology should be embraced and used effectively and efficiently.
- ITD should build on its relationships with the public, MPOs, and elected officials at the local, state, and federal levels.
- A flexible, proactive, and innovative approach to work and risk taking should be supported in the future.

After the symposium, ITD broadened its outreach:
The department then met with its own planning staff, district managers, and executive leadership to receive their input. Next, the department conducted a statewide random telephone survey to provide focus points for regional and statewide workshops for invited transportation stakeholders. At these workshops, the department used town hall polling, mapping, and dynamic real-time scenario planning of alternative investment patterns to help participants visualize the different possibilities for Idaho’s future (“Idaho’s Transportation Vision,” 2010).

This approach was innovative in so far as it invited dialogue between so many different types of stakeholders. The vision of the way the Idaho transportation system should look 30 years in the future provides a foundation of ITD’s long-range planning.

The full visioning process was as follows:

2. Idaho Transportation Vision 25 Years and Beyond
3. Establish Vision Management Team
4. Golden Thread Workshop
   - Affirm Approaches
   - Develop Building blocks
5. Research and Development
   - Modal/Division Reports and Stakeholder Database
   - Statewide Public Opinion Survey
   - Communications Plan and Website Development
6. Regional Workshops
   - Affirm Building Blocks
   - Develop regional Visions
   - Use Town Hall Polling
   - Develop Common Futures
7. Transportation Future Search
   - Meld Common Futures
   - Develop Shared understanding across all Stakeholders
8. Transportation Summit
   - Policies and Scenarios
   - Challenges and Opportunities
   - Implementation Strategies
9. Synthesize Data and Outputs.
10. Performance Measures Workshop
    - Measures for Vision Success
12. Implementation Strategy Workshop
13. Final Vision Document Review and Comment

One of the most innovative features of this visioning process was the use of MetroQuest, an interactive visualization software package designed to provide analysis of regional scenarios during the regional workshops and to create and evaluate alternative scenarios in real time based on input from stakeholders. The need for something such as MetroQuest became apparent from stakeholders’ comments at the symposium, which showed that tools were needed to help stakeholders (1) understand the implications of alternatives, (2) communicate with each other in a collaborative environment, and (3) make use of the best technology to forecast alternatives.
The use of MetroQuest made it possible to create and evaluate alternative scenarios on the basis of input from stakeholders. The process involved the following five steps:

1. Stakeholders are polled to determine their priorities and values.

2. A 30-year current-trend scenario for the region is reviewed, and its performance is compared to the priorities expressed in Step 1. The use of MetroQuest makes it possible to “project the impacts of policies decades into the future and allow participants to witness the impacts of future scenarios presented through a series of map animations, graphs of over 100 performance indicators, images, and other visualizations.” MetroQuest provides outputs covering “transportation (e.g., congestion, safety, vehicle miles traveled, modal split, and travel times), land use, air quality, infrastructure costs, taxation, greenhouse gas emissions, ecological preservation, waste, water, energy, housing demographics, and economic growth.”

3. Using wireless keypads, stakeholders vote on policy options in transportation, land use, housing, environmental management, and economic development. The scenarios developed are compared “with the current-trend scenario and are evaluated against the values and priorities expressed in Step 1.”

4. This process, which may involve evaluating many scenarios, goes on until a desired future scenario is created. This capacity to evaluate scenarios instantly is a direct result of the capacity of MetroQuest to create scenarios instantly.

5. After stakeholders have “homed in on a preferred scenario” that best meets “their collective priorities,” the discussion of an implementation plan begins.

According to the authors of this case study, the combination of town hall polling and MetroQuest “contributed significantly to the success of the visioning process” in as much as it allowed the stakeholders to do the following:

- register their values and priorities anonymously
- visualize the outcome of collaborative scenario choices instantly
- score alternatives against their own priorities
- work together to develop a common vision (“Idaho’s Transportation Vision,” 2010).

**DISCUSSION**

**Collaboration vs. Participation**

Currently, through its public engagement procedures, VDOT makes an effort to discern and to accommodate the interests of all stakeholders. The current legally required approach to public engagement requires VDOT to encourage and make provision for public participation; however, this does not thereby result in a fully collaborative process. VDOT, along with all
other state DOTs, must work within the confines of federal and state legal requirements for public engagement, which at this time provide very little room for truly collaborative approaches.

One point is especially important to note here and is made repeatedly in the literature on collaboration: There is a distinction between a genuinely collaborative process and methods of public engagement that merely encourage people to participate in a process. This point was made especially forcefully by Arnstein (1969): “There is a critical difference between going through the empty ritual of participation and having the real power needed to affect the outcome of the process.”

There is a consensus in the literature on collaboration about what makes a process collaborative, and although some of the current legally required methods of public engagement contain elements of collaboration, none is fully collaborative. For example, nowhere in the literature on collaboration does anyone describe the current legally required participation strategies, such as open meetings in which attendees are allowed to make comments, as collaborative. It may seem counterintuitive to say that allowing people to participate in a process in which they are allowed to state their interests and objections is not collaboration, but it is easy to see that this may be the case in the following scenario of two people (Person A and Person B) negotiating to solve a problem that they both. In the scenario, Person A articulates what the problem is. This is obviously very important because it will certainly affect the range of possible solutions. Persons A and B are both allowed to express the full range of their interests—that is, the interests that they would like to be accommodated in the final solution. However, only Person A is allowed to determine which of the interests described are important enough to be a factor in the final decision, and only Person A is allowed to make the final decision. In this scenario, Person B was allowed to participate but was not allowed to be a true partner or collaborator. Thus, in the literature, even if Person A agreed to accommodate all of Person B’s interests in the final decision, Person B would still not be considered a collaborator. Real collaborators have significantly greater power than those who simply participate. They have a say in how the problem is to be articulated (which is a way of saying that they have a say in what the problem is), and they have a real say in the final decision.

The public engagement process described in Route 29 Corridor Study (VDOT, 2009) is designed to allow all stakeholders to make their views known, which is one form of participation. The study lists the following elements in this public engagement process:

- The initial listening tour determined (1) the “common goals of the stakeholders throughout the entire corridor”; (2) the “regional goals of the stakeholders within the major rural and urban regions”; and (3) the “local goals of the citizens within each locality.”

- The final listening tour meetings allowed citizens “to provide input for the Route 29 Corridor Blueprint—A Vision for the Future” and ensured that “everyone had a chance to hear the same consistent messages that were presented to the localities and stakeholders during the initial listening sessions.”
• The regional planning forums were organized “to help facilitate cross-jurisdictional discussions between community leaders.” The attendees of these forums developed “a vision plan for the future of the corridor that included overall transportation, land use, and multi-modal options” and “policies and direction regarding the corridor’s future.”

• The citizen information meetings maintained “open communication with key study stakeholders” and helped “build consensus with various governments and citizens along the corridor.”

• The Route 29 website and E-Bulletin provided “regular and frequent communication with key constituents,” “maintained momentum for the study in between meeting dates,” and served as a “key communication vehicle for important study news/announcements” (VDOT, 2009).

The process is similar to public engagement processes that occur all over the United States, in part because they adhere to federal and state legal requirements that govern their character. There are two fundamental thrusts to the approach described here: (1) VDOT wants to make sure that all stakeholders along the Route 29 corridor are “aware of the study and VDOT’s goals and objectives for the outcome of the study”; and (2) VDOT wants to capture as much citizen input as it can on “a number of themes central to the Route 29 Corridor Study.” The effort described in these passages to ascertain the views and the interests of all of the stakeholders and to try to accommodate them is valuable and commendable, but this effort would be only one part of a collaborative process.

By contrast, in the Oregon I-5/Beltline case study, although ODOT solicited stakeholder participation in an effort to discern their interests, it did not leave the matter there. First, it accepted a range of stakeholder interests as performance measures, which extended beyond the usual transportation performance measures. Second, it allowed stakeholders a say in the final decision concerning which alternative to choose for the redesign of the I-5 interchange. It ensured that local representatives would make the final decision on project elements that would have community impacts. So, in this case, the stakeholders were not simply encouraged to participate, they were given the power to affect the outcome.

The definition of a collaborative process in the literature might seem too limited. After all, in the description of the public engagement process in Route 29 Corridor Study (VDOT, 2009), there are repeated accounts of discussion—of give and take—between VDOT and the participants in many meetings, and it sounds as if the discussions led to some agreements. So, why would it be incorrect to call the participation described in the Route 29 study report collaborative? The answer is that participation and collaboration are different in important ways. The CTB asked that the decisions regarding the coordination of land use plans and VDOT’s access management plans for the CoSS be based on a consensus by VDOT and all stakeholders, and a consensus is an agreement between people who have the power and authority to make the agreement. Currently, if stakeholders want VDOT to accommodate an important interest that they have, it will be VDOT that makes the final decision whether to accommodate it. Even if VDOT were to accommodate all of the interests of the stakeholders along the corridor, the
authority to make this accommodation currently rests solely with VDOT; as a consequence, this decision—this accommodation—would not, using the standards described in the literature, be considered a consensus.

It is of fundamental importance that the parties participating in a collaborative process see it as legitimate. For the stakeholders along these corridors, the legitimacy of a collaborative process will be contingent on the way the process is carried out. Elliott (1999) stated that the legitimacy of a collaborative process is contingent on the following:

- involving those directly affected by a decision in the process of developing the decision
- conducting dialogues in an open and inclusive manner
- searching for agreements that speak to all the interests involved.

It is important that all of the stakeholders see the process as legitimate, and whether they see it as legitimate will be crucial in determining whether they continue to participate, and that they continue to participate is critical to the long-term interests of VDOT and the long-term interests of all of the stakeholders.

Stakeholders are likely to participate in the corridor planning process and to support the process actively if they see it as collaborative and if they see it as legitimate in the sense described previously. Whether they would support the outcome of a collaborative process through their land use decisions would depend on how transparent and how collaborative the process was and, of course, whether they felt that their interests had been adequately accommodated. With a collaborative process, in any given case, it will depend on whether an agreement speaks to all the interests involved. Since the interests of VDOT and all of the stakeholders along the corridors are strongly interdependent, it makes sense to use a collaborative process to accommodate these interests.

One final point needs to be made about supporting the outcome of the process. In some cases the outcome of a collaborative process will be supported by all participants in the negotiations, and in some cases it will not. The use of a collaborative process does not guarantee an outcome satisfactory to everyone involved; a collaborative process makes it possible to reach an outcome that satisfactorily addresses all participants’ interests. Innes and Booher (2004) made an interesting and perceptive observation about the recognition of the legitimacy of a collaborative process: If the dialogue is done well, then “even when someone does not like the final result they may accept the fairness of the decision if they have had some impact on the final package” and if “they can see what their impact is because of the transparency of the dialogue and the openness of the conclusions.” In a backhanded way, the fact that some participants could accept an outcome of a collaborative process even though they did not like it is a powerful endorsement of the process. As a consequence, even though the process cannot guarantee an outcome favorable to everyone, the process itself bears a heavy burden. To some extent, this is like the legal system, which cannot guarantee an outcome but, nevertheless, provides a system and a process that are intended to be unbiased and fair.
The Collaborative Process As Founded on Interests

Innes and Gruber’s account (2005) of a collaborative process is typical of what is found in the literature:

- Stakeholders representing the different interests meet for face-to-face dialogue.
- Stakeholders represent diverse interests.
- Stakeholders collectively work out a strategy to address shared problems.
- Stakeholders work through joint fact finding and agree on a problem, mission, and actions.
- Decisions are made only when all, or most, agree.

This is general, and the phrase “agree on a problem, mission, and actions” rather obscures the role of negotiation, which is how the participants come to an agreement; however, it does emphasize the idea of stakeholders with different interests engaged in a dialogue that is designed to work out collectively “a strategy to address shared problems.” It is worth looking at this from the perspective of Getting to Yes (Fisher and Ury, 1981) with its focus on the fundamentals of negotiation.

According to Fisher and Ury (1981), a focus on interests is at the core of collaborative negotiations; they emphasized that the most powerful interests are basic human needs. The focus on interests goes hand-in-hand with the goal of collaboration: a solution that provides gains for all participants. The focus on interests opens the door to the possibility of mutual gains. Elliott (1999) put this especially well when he described the nature of progress in a negotiation: “Progress is usually not built on efforts to conform all participants’ interests to a single, shared sense of the nature of the dispute and its characteristics, but rather by building options that meet each participant’s interests and values.”

Even though the goal of consensus is to accommodate all participants’ interests, it is important to note that any notion that anyone could ensure the achievement of a specific goal merely by engaging in a collaborative process is misguided. Anyone engaged in collaborative negotiations may have specific interests that they hope will be accommodated through the negotiations, and like everyone else involved in the negotiations, VDOT should pursue its interests during the negotiations; however, the collaborative process by itself cannot ensure that anyone’s specific goals will be part of the final consensus. Ideally, all participants in a collaborative process should endeavor to find a way to accommodate everyone’s interests. It is, of course, an option for VDOT or anyone else to drop out of the negotiations if they think that their interests will not be served by it. As Fisher and Ury (1981) pointed out, anyone who negotiates must always bear in mind their best alternative to a negotiated agreement. However, a significant part of the motivation for this study was a desire to avoid the consequences of VDOT and localities along the CoSS and other arterial corridors acting independently.
Obstacles to the Incorporation of a Fully Collaborative Process Into the Planning for the CoSS and Other Corridors

The four studies on collaboration and consensus building described in this report were chosen because they are representative of common—and important—lines of thought in the literature, and they are unequivocal about the benefits and importance of collaboration and consensus building; however, as the studies by Innes and Booher (2004) and Innes and Gruber (2005) pointed out, there is a long list of obstacles that any transportation agency—including VDOT—would face in any attempt to incorporate a fully collaborative process into transportation planning.

Some of the obstacles listed by Innes and Booher (2004) and by Innes and Gruber (2005) are surmountable if addressed appropriately; for example, planners and citizens could be trained in collaborative skills; money could be provided for staffing collaborative efforts; and disadvantaged groups could be provided with resources that allow them to participate. These resources might include—among other things—transportation to meetings and training. However, obstacles such as well-entrenched institutions of public decision making and elected officials who fear loss of their authority, etc., are for obvious reasons much harder to change. Further, it is easy to imagine how intractable the conflicts between planning styles will be in as much as the adherents of each style are typically “convinced of the practicality and morality of their particular approach” (Innes and Gruber, 2005). To the extent that these obstacles and conflicts cannot be overcome, they are almost certain—at least for the time being—to be an insurmountable obstacle to the adoption by VDOT of a fully collaborative planning process for the CoSS or any of the other principal arterials.

Incorporation of Selective Collaborative Processes in Corridor Planning

It is possible that collaborative processes can be incorporated on a more limited scale in corridor planning. The three case studies from Transportation for Communities (n.d.) described earlier showed different approaches to doing this. The discussion that follows is largely concerned with cases that focus on the interests of all stakeholders and that, in a variety of ways, attempt to accommodate those interests.

The public engagement process that was used in the Idaho Transportation Vision case (“Idaho’s Transportation Vision,” 2010) seems to be a serious effort to discover the interests of many different types of stakeholders. However, a vision is more than simply a collection of interests; it is the product of negotiations between—in this case—a very large number of people and organizations with different interests; overlapping interests; conflicts between interests; and, no doubt, interdependent interests.

So what is collaborative about Idaho’s process? First, there is the dominant focus on discovering the interests of a very wide variety of people and organizations. However, this process is more complicated than that would suggest because of the use of MetroQuest. The need for something such as MetroQuest became apparent from stakeholders’ comments that showed that tools were needed to forecast alternatives and to help stakeholders understand the
implications of alternatives. Such a tool would also help participants communicate with each other in a collaborative environment. The use of MetroQuest made it possible to create and evaluate alternative scenarios on the basis of input from stakeholders. After stakeholders were polled to determine their priorities and values, a review of the performance of a current-trend scenario for the region was compared to the results of the poll of the stakeholders. MetroQuest can project the impact of policies decades into the future, and this allowed participants to vote on the various policy options. Overall, the process using MetroQuest may involve evaluating many scenarios, and it goes on until a desirable future scenario is created (“An Interactive Regional Scenario Analysis,” 2010).

So the participants went from a relatively straightforward acknowledgment of their interests to an exercise in which they evaluate scenarios based on their interests. As a consequence, the final vision is a product of many participants systematically working their way through a large number of scenarios and multiple variations of those scenarios—all the while evaluating each variation on the basis of their individual interests and values. The process using MetroQuest forced everyone to begin to prioritize their interests and values as each new variation was presented.

The case of Wasatch Front’s RTP (“Regional Transportation Plan,” 2010) had strong collaborative elements:

1. It focused on the interests of the community—assuming that the participants in the visioning process did actually represent the interests of the wider community.

2. A number of alternative solutions were developed.

3. The choice of a final solution was based on an extensive set of objective criteria that were, in effect, performance measures.

This case study strongly suggests that the visioning process was a collaborative process; however, it does not make clear how much the participants in the visioning process were involved in making the decisions that followed the process, neither does it make clear the origin of the performance measures. The extent to which this process was collaborative depends partly on what happened after the visioning process. Who decided how to use the results of the visioning process? Did the participants in the visioning process come up with the alternatives from which the final choice was to be made? Did they determine which performance measures to use?

Of the case studies described in this report, the Oregon I-5/Beltline case study (“Oregon I-5/Beltline,” 2010) comes closest to incorporating a fully collaborative process. All of the cases described in this report reflect serious efforts to discern the interests of stakeholders; however, in only the Oregon I-5/Beltline case was some of the decision-making power clearly placed in the hands of the stakeholders. There are several things to note about the approach taken by ODOT:
• The fact that Eugene and Springfield had different interests was a serious complication for ODOT. However, it appears that ODOT made a real effort to give both of them a say in the approach to be taken in redesigning the interchange.

• The fact that interviews showed that livability and community interests were just as important to stakeholders as transportation performance is significant. The fact that ODOT decided to take these results seriously and followed up on them could be seen as the beginning of a collaborative approach.

• ODOT followed up by allowing stakeholders a real role in the decision-making process. The stakeholders had expressed a desire for a decision-making process that ensured that local representatives would make the final decision on project elements that would have community impacts.

• The decision-making process created by ODOT was a sophisticated and considerate response to the interests and concerns of the stakeholders. The decision-making process allowed the redefinition of the transportation problem at the request of the stakeholders to include community issues, and it allowed the development of a modified approach to the evaluation of alternatives, which followed directly from including community issues in the definition of the problem.

• This modified approach made it possible to evaluate the performance of the design alternatives against the full range of stakeholder values. This was the most innovative part of this process. ODOT allowed the Stakeholders’ Working Group to create new performance measures based on an extended range of interests and values—chosen by the stakeholders, not by ODOT. To allow this extended range of interests (and values) to be incorporated into performance measures was a way of ensuring that they were taken into account in the evaluation of alternatives.

All three of these case studies reflect a sincere desire to discern the interests of all of the stakeholders; however, ODOT’s approach to addressing the I-5/Beltline Highway Interchange went a step further than the others. It extended the range of stakeholders’ interests it was willing to allow to be considered, and it placed some of the decision-making power in the hands of the stakeholders, and this seems to have been a serious effort to establish as collaborative a process as possible under the circumstances.

The Need for Professional Facilitators

The case studies summarized in this report are merely examples of different approaches, and, as such, they may provide useful ideas for incorporating collaborative processes into corridor planning; however, successful efforts to build consensus usually require collaboration and in many cases—if not most cases—benefit from the guidance of experienced professional facilitators (and/or other consensus building practitioners) to bring them to a successful conclusion. So, although these sample cases can provide suggestions for ways to proceed, it is important to remember that even when organized and led by professional facilitators (or other
consensus building practitioners), each process must be set up to take into account the unique features of each individual case. The professional practitioner must take many factors into account such as the particular issues of the case, the particular circumstances, the people involved, the kinds of conflicts that will need to be resolved, etc.; thus, the collaborative process “emerges from the context” (Elliott, 1999).

The CTB accepted the draft *Process for Studying Corridors of Statewide Significance* and directed that future studies of the CoSS follow the process outlined in that document, which included recommendations to include a professional facilitator as a participant in the pre-study activities and in the coordination and completion of the study where the facilitator would be responsible for ensuring that all input was captured and that the objectives of all participants would be considered (CTB, 2010).

Despite the fact that currently there are insurmountable barriers to the implementation of a fully collaborative process in the negotiations with the stakeholders along the CoSS and other arterial corridors, it is worth looking at the role that professional facilitators could usefully play in the more limited collaborative approaches that remain open to VDOT to help it achieve its access management goals. The use of professional facilitators in negotiations with individual localities along a corridor or with all of the stakeholders along an entire corridor would likely ensure that the negotiations would be as collaborative as current conditions allow.

As can be seen from Elliott’s views described in this report, negotiations are often complex undertakings that can be derailed in many ways. Elliott (1999) stated: “Experienced practitioners help stakeholders to build consensus by identifying existing barriers to effective negotiation and communication, assessing the structure and extent of a dispute, designing and implementing dispute resolution processes, and helping parties to develop options and reach consensus.”

The obstacles to the successful conclusion of collaborative negotiations are obstacles that any consensus building practitioner is likely to face, and Elliott (1999) pointed out the need to overcome them and the possibility that they can be overcome; however, there is no guarantee in any particular case that the professional practitioner will be able to overcome them.

Typically, there is a variety of possible obstacles that might prevent negotiators from achieving consensus. For example, one institutional barrier to successful negotiations is that the agency is itself a party to the dispute. Any number of attitudes, emotions, or behaviors, such as distrust, bias, hostility, or threats and accusations, may block the possibility of successful negotiations, and sometimes the positions of the negotiators have simply become inflexible. The inability of negotiators to communicate clearly may also block the possibility of successful negotiations. If the negotiations involve a large number of disputants or are concerned with a large number of issues, some of the participants may find that their concerns are not adequately addressed. Finally, if negotiators’ rights and responsibilities are not defined or are disputed, this may lead to questions about how to proceed with the negotiations (Elliott, 1999). This formidable array of obstacles is by itself an indication of the level of skills required by professional facilitators.
Any number of these obstacles could prove to be obstacles to VDOT’s achieving its access management goals along the CoSS and the other principal arterial corridors throughout the state, and this makes it very clear just how useful professional facilitators would be to VDOT and to everyone else engaged in the negotiations. A wide range of complex skills is needed to keep negotiations on track. Apart from the tasks that professional facilitators are required to accomplish, one of the most compelling reasons to hire a professional facilitator is the importance of having someone who is neutral. People are more likely to trust the judgments of a facilitator whom they regard as neutral, and this is critical to the fairness of the process. Facilitators cannot ensure a particular outcome; rather, they are guardians of the process, and if the integrity of the collaborative process is maintained, there is at least the possibility that consensus will be achieved. Whatever the results of a particular collaboration, it is not likely that participants will feel ownership of the results if they do not feel that they have ownership of the process.

CONCLUSIONS

- **Although the CTB has made it clear that they want the coordination of access management planning and land use planning along the CoSS to be a more collaborative process, there is a large number of significant obstacles that VDOT would have to overcome before it would be able to incorporate a fully collaborative planning process along the CoSS or any other arterial corridor.** Some of the obstacles could be overcome; however, there are institutional and statutory barriers that are likely to remain in place for some time, and as Innes and Booher (2004) pointed out, there are serious conflicts between the different styles of planning that are likely to be very difficult to overcome. As a consequence, at this time, the incorporation of a fully collaborative process in the attempt to coordinate access management planning and land use planning for the CoSS or for other principal arterials is not feasible.

- **VDOT could improve the coordination of access management and land use planning by incorporating some collaborative processes—i.e., consensus building—in planning for the CoSS and other principal arterials.** For example, VDOT could try to make meetings with all of the stakeholders along the corridors as collaborative as possible. The contribution of a facilitator might greatly increase the chances that a meeting will be productive, and the CTB has asked that professional facilitators be used; however, it is also the case that professional facilitators are important because people collaborate in order to achieve consensus, and facilitators are trained to keep these collaborative processes on track so that consensus can be achieved.

- **Experienced professional facilitators could provide valuable assistance to VDOT in developing an approach to incorporating more collaborative practices in the planning for the CoSS and other principal arterials.** They could be useful for a variety of reasons:

  — They can serve as neutral leaders of meetings, and their neutrality would be an important factor in encouraging all participants in the meeting to believe that the process will be fair, which, of course, is important for getting people to participate in a way that is likely to be productive.
— Their training and experience make them adept at dealing with “people problems,” which can easily derail a meeting in many different ways.

— Their training and experience make it possible for them to customize the approach to be used in a meeting based on who the participants are, the kinds of conflicts that must be addressed, the critical issues that must be addressed, etc.

— Facilitators (and, perhaps, other consensus building practitioners) who are experienced in leading negotiations between state DOTs and local governments and other stakeholders are knowledgeable about the different collaborative techniques that can be used for successfully engaging everyone involved in the negotiations and can judge which techniques would be most likely to succeed in a particular context given the individuals and organizations involved.

— The employment of facilitators would provide VDOT (and all of the stakeholders involved in corridor planning) with individuals who could oversee and guide the process of incorporating collaboration and consensus building into the planning for the CoSS and other arterial corridors.

— The use of facilitators would very likely ensure that the engagement between VDOT and all of the stakeholders along the CoSS and other arterial corridors will be as collaborative as possible in the present circumstances.

• In the long run, it would be useful for VDOT to engage a knowledgeable and experienced professional consensus building practitioner who could oversee VDOT’s efforts to incorporate collaboration in corridor planning. This person could—in a pinch—facilitate a meeting or mediate a dispute; however, as previously indicated, it is generally not considered a good idea to have an employee of one side in the negotiations facilitate a meeting or mediate serious disputes for the obvious reason that there would be an inevitable suspicion of bias. This person’s job would instead be focused on overseeing VDOT’s collaborative efforts, which would, no doubt, involve hiring facilitators, overseeing their work, and reviewing their work in an effort to determine which of them would continue to be used. Facilitation is likely to be an essential part of efforts to achieve greater collaboration, and the success of the negotiations with all of the stakeholders along the CoSS or any of the other arterial corridors is important to VDOT’s corridor management plans, so it would be very useful to have a knowledgeable and experienced person lead this effort.

RECOMMENDATIONS

1. At a minimum, where feasible, VDOT’s TMPD should hire professional facilitators to organize and lead corridor planning meetings involving negotiations between VDOT and local governments, stakeholders, and citizens. The TMPD’s general on-call transportation planning consultant contracts and, in appropriate situations, contracts for specific studies should include provisions for the consultant to be able to provide professional facilitator
services when needed. It is important to ensure that the facilitators who are used are properly trained and have experience facilitating meetings between state DOTs and local governments, stakeholders, and the public.

2. **VDOT’s TMPD should also use facilitators to assist in achieving consensus with stakeholders along the principal arterials not included in the CoSS.**

**BENEFITS AND IMPLEMENTATION**

**Benefits**

VDOT would likely receive a number of benefits by trying to achieve consensus with all of the stakeholders along the CoSS and other principal arterials using collaborative methods. The use of a more collaborative process would almost certainly be seen as a friendlier process by most—if not all—of the stakeholders along the corridors, and one likely result would be improved relations between VDOT and all of the participants who take part in the process. This may have long-term benefits for VDOT with respect to its desire to improve the coordination of access management planning and land use planning along arterial corridors, and it could make it more likely that VDOT’s access management plans will be successful. Facilitators could play an important role in this process: People collaborate in order to achieve consensus, and facilitators help make that process successful. The hiring of professional facilitators represents the principal cost of implementing the recommendations of this study.

**Implementation**

As an initial step in the process of implementing the recommendations of this study, a pilot project is being developed in which professional facilitators will be used to facilitate meetings between VDOT and all stakeholders in the New Baltimore area along U.S. 29 in VDOT’s Culpeper District. The stakeholders include Fauquier County, business owners, land developers, and Civil War historic preservation groups.

The first organizational meeting between researchers at the Virginia Center for Transportation Innovation and Research, VDOT Culpeper District staff, and professional facilitators from the Institute for Environmental Negotiation at the University of Virginia took place in May 2015. During this meeting, VDOT staff from the Culpeper District, including the Warrenton Residency, described in a general way some of the issues that need to be addressed in the New Baltimore area. These include a lack of stakeholder consensus about improving safety and preserving access in this area and about the historic significance of some of the areas through which Route 29 runs. Another important result of this meeting was a list of provisional goals of the pilot project:
• Develop criteria for transportation improvements in the New Baltimore area through a process of mutual education among VDOT, Fauquier County, and local stakeholders.

• Improve safety and efficiency on Route 29 and the intersections with adjoining roads as much as possible with improved design.

• Address community concerns in the planning process.

• Develop a plan that can be enacted and sustained with specific improvements that Fauquier County and VDOT support.

• Develop a process for collaborating with localities that can be used as a model for addressing similar issues in other parts of the state.

• Evaluate the success of the pilot project.

This pilot project thus has two fundamental goals:

1. Develop a long-range transportation plan for the area adjacent to Route 29 in the New Baltimore area of Fauquier County in the Culpeper District.

2. Analyze and evaluate the negotiating process—especially the role and the efficiency of the professional facilitators—to see whether the recommendation in this report to use professional facilitators leads to a negotiating process that is both friendlier and more likely to achieve consensus than the methods currently used.

ACKNOWLEDGMENTS

The author acknowledges the assistance of the following reviewers whose efforts significantly improved the report: Amy O’Leary, Robert Hofrichter, Paul Grasewicz, Rick Youngblood, Noah Goodall, and Linda Evans.

REFERENCES

An Interactive Regional Scenario Analysis (MetroQuest) (Idaho and Calgary). Transportation Research Board of the National Academies, Washington, DC, 2010.


Hofrichter, R.W. *Email to Roger Howe,* 2013.


Virginia Acts of Assembly.  Chapter 670: An act to amend and reenact § 2.2-229, 15.2-2232, 33.1-12 and 33.1-23.03 of the Code of Virginia, relating to the Statewide Transportation