

**LONG-RANGE
TRANSPORTATION PLANNING
IN UTAH:
SUMMARY OF RESEARCH RESULTS FROM
INTERVIEWS AND FOCUS GROUPS**

FINAL REPORT FROM PHASE II OF THE
2003 UTAH DEPARTMENT OF TRANSPORTATION
(UDOT) BENCHMARK STUDY



Natural Resource and Environmental Policy Program
Institute for Outdoor Recreation and Tourism
Department of Environment and Society
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Logan, Utah

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2003 Utah Department of Transportation (UDOT)
Benchmark Study*

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The Utah Department of Transportation

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TRANSPORTATION ACRONYMS USED IN THIS REPORT

AASHTO – American Association of State Highway and Transportation Officials

ADA – Americans with Disabilities Act

AOGs – Association of Governments

CMPO – Cache Metropolitan Planning Organization

CSS – Context Sensitive Solutions

DEQ – Department of Environmental Quality

DWR – Division of Wildlife Resources

EIS – Environmental Impact Statement

FHWA (FHA, *sic*) – Federal Highway Administration

FTA – Federal Transit Administration

HOV – High-Occupancy Vehicles

MAG – Mountainland Association of Governments

MPO – Metropolitan Planning Organization

NEPA – National Environmental Policy Act

PIC – Public Involvement Coordinators

STIP – Statewide Transportation Improvement Program

TIP – Transportation Improvement Program

UDOT – Utah Department of Transportation

UTA – Utah Transit Authority

VMD – Vehicle Miles Driven

WFRC – Wasatch Front Regional Council (1st MPO in state)

WSTO – Western States Transportation Officials

I. INTRODUCTION

The purposes of the 2003 UDOT Benchmark Study conducted by Utah State University (USU) are to provide the Utah Department of Transportation (UDOT) with information for use in its statewide, long-range transportation plan and to provide benchmark data for tracking trends over time. The study was conducted jointly by the Institute for Outdoor Recreation and Tourism and the Natural Resource and Environmental Policy Program, which are both administered through the Department of Environment and Society in the College of Natural Resources at Utah State University. The 2003 UDOT Benchmark Study involved two phases and the USU research team produced two final reports, one for each phase of the research project.

Phase I consisted of gathering representative, statewide, baseline data through use of a telephone survey administered to the general population of the state. The ten-minute telephone interviews covered five basic topics: 1) current transportation uses and concerns; 2) future preferences for transportation alternatives; 3) familiarity with UDOT and its planning and decision processes; 4) past involvement in transportation planning; and, 5) demographic and stakeholder group characteristics. A total of 2,561 interviews were completed with a response rate of 60%. Results are representative at the 95% confidence level at +/-2 points for the state and +/-4 points for each UDOT Region. Findings are summarized for the whole state, for each of the four UDOT Regions, and for respondent subgroups based on key demographics (e.g., age and gender), stakeholder representation (e.g., respondents with special transportation needs, public transit users, bicycle riders or pedestrians, and past participants in UDOT decision making), and attitudinal characteristics (e.g., level of trust). The report for Phase I is titled *Long-Range Transportation Planning in Utah: Summary of Research Results from a Statewide Telephone Survey*, by Douglas Reiter, Dale Blahna, Steven Burr, and Christina Klien, June 2003.

In Phase II of the 2003 UDOT Benchmark Study, the USU research team conducted semi-structured, face-to-face interview and focus-group sessions with people inside UDOT (17 interviews; 4 focus groups) and external to the organization (14 interviews; 5 focus groups). The people participating in these 40 different information-gathering sessions were key stakeholders identified in collaboration with UDOT staff, and were selected to supplement the public involvement and stakeholder group outreach effort that UDOT conducted. A total of 98 participants were involved in these USU-conducted sessions. Internal participants included Utah Transportation Commissioners, UDOT administrators, public information coordinators, and regional maintenance staff. External participants included regional transportation and planning organization directors, natural resource and environmental agency staff, and representatives of four special interest groups (persons with disabilities, bicyclists, environmental groups, and advocates for persons with low incomes). This report focuses on presenting the research results from Phase II of the study.

II. METHODS AND PROCEDURES

Phase II consisted of an open-ended process for gathering more focused, in-depth information from people specifically selected for their involvement in, knowledge of, or concern about transportation planning. Information was gathered from these people through use of key-informant interviews and focus groups. The advantage of Phase II is that it can provide insights into topics not well suited to more structured surveys. Thus, it provides a nice complement to the research results presented in the Phase I report.

The information-gathering sessions focused on questions pertaining to transportation planning, the long-range transportation plan, UDOT's image, the role of other entities in transportation planning, and UDOT's organizational structure and effectiveness. USU researchers utilized semi-structured interview questions. The specific process of each session differed, depending upon whether it was an individual interview or a focus group.

The process used for *interviews* included: one interviewer per interview; interview information was recorded both by hand-written notes as well as a tape recorder; and, interviews were scheduled for about two hours each. The process used for *focus groups* included: two facilitators per session; sessions were recorded both by hand-written notes as well as a tape recorder; facilitators led in a round of introductions, noted their affiliation with Utah State University, and clarified their role as contractors to UDOT; focus groups were generally kept small (6-10 people); and, ground rules were set before the focus groups began.

In both types of sessions, an explanation for the research was given to the participants and they were asked for informed consent to participate before the session continued. The explanation given for the research was along these lines:

“UDOT is in the process of developing a statewide long-range transportation plan and would like input from a variety of stakeholders affected by transportation decisions. UDOT has hired USU to conduct a number of meetings across the state to help it identify issues, needs, preferences and goals for transportation in Utah over the next 25 years. You have been asked to participate in this focus group because you have been identified as individuals having a special interest in Utah's transportation system and its future.”

Four sets of questions or protocols were developed corresponding to the four types of sessions: 1) internal individual interviews, 2) internal focus groups, 3) external individual interviews, and 4) external focus groups (see Appendix A). These protocols consisted of semi-structured questions. All of the major question categories were asked, but the specific wording and prompts differed depending on the actual content and flow of the sessions. “Probes” and follow-up questions were asked as time permitted or in an effort to get more detailed responses to the primary questions. Additionally, other questions were asked by the interviewers or scribes, depending on the flow and content of the session.

The data gathered in Phase II were analyzed largely through the use of thematic and content analysis of the texts from the interview and focus group sessions. The first step in this analysis involved transcribing the tapes of the sessions. Most members of the USU research team then read through the set of “raw” transcripts and discussed the major themes they saw arising from the material. Next, a more detailed thematic coding scheme was developed. The transcripts of several sessions were coded by different members of the research team (i.e., coders), differences between the codes they assigned to sections of textual material were discussed, and the coding scheme was refined. These coders worked through several iterations of coding the same sessions to clarify the meaning of various codes and to establish inter-rater reliability, which ensures that different coders mark the same sections of text with the same codes. Finally, a master list of the pages of text on which all of the codes were located was produced. This organization of the coded textual material was used by the authors to write this report. The report writing task involved further organization, interpretation, and analysis as the authors analyzed the themes embedded in the texts and pieced together the story of what the participants, collectively, had to say about transportation planning in Utah and the statewide, long-range transportation plan.

Because of the nature of the textual material gathered from the interviews and focus groups, this report summarizes these comments in a general, qualitative way. Results cannot accurately be reported in a tabulated or statistical fashion because the questions were not asked in a systematic fashion or order. However, since a relatively standard set of topics was discussed in these sessions, some generalizations are made about the relative importance of various issues and the differences of opinion that were expressed. Quotes are used to illustrate some points that are best made using the participants’ own voices and to give readers a sense of the richness of the textual data.

III. RESEARCH RESULTS

Six major themes emerged from analysis of the interview and focus group transcripts.

III. A. Theme 1: Challenges Involved in Comprehensive and Innovative Transportation Planning

The first major theme that emerges from the Phase II interview and focus group data concerns the challenges, dilemmas, and problems involved in doing comprehensive and innovative transportation planning. In general, these challenges were perceived as having to do with changes occurring in the transportation context in Utah, coordination difficulties related to the separation of planning functions between different tasks and different agencies, technical and political complexities involved in the transportation planning process, and the need for a paradigm shift in thinking about transportation issues to meet future needs.

III. A. 1. Transportation Planning Context in Utah

Utah's rapid population growth was often mentioned by participants as one of the key factors influencing the transportation planning context. They noted that rapid growth places additional demands on the transportation system which causes congestion, particularly in highly-used corridors and at key interchanges. The rate of growth was seen as problematic because transportation agencies cannot keep pace in responding to new infrastructure demands and have difficulty staying "ahead of the curve." In particular, people often noted that vehicle miles driven (VMD) were increasing at a faster rate than population growth, and both were increasing at a much faster rate than the increase in highway capacity. Providing new infrastructure to meet growth in transportation demand makes it hard for UDOT to allocate sufficient resources to system maintenance needs. Quite a few people thought we would never again see the level of transportation service we have now or even had a few years ago. In addition to the Wasatch Front, several other high growth areas were seen to have pressing transportation needs, such as Southwestern Utah, Cache Valley, Tooele, and the Wasatch Back.

Suburban sprawl was seen as a major challenge for transportation planners. Participants were often critical of large developments that occurred distant from existing infrastructure because of the expectations on the part of the developers or new communities that UDOT would provide the roads. As one person noted, "Government should spend their money where it would do the most number of people the most good. So money should be spent in areas that are already developed for road improvements, rather than in new developments for a few new homes." Another person said, "It is not the responsibility of every taxpayer in the United States to subsidize the right of people to live farther away from their work places."

Quite a few people noted that transportation demands are changing and diversifying, some of which is directly related to the state's economy. Utah's attempt to better position itself in national and international markets has made all forms of transportation

increasingly important as a key infrastructural component underpinning economic development. With industry working more on a “just-in-time delivery” basis, avoiding congestion in the transportation infrastructure becomes critical to the state’s economic future.

Some participants cited specific examples of connections between Utah’s economy and transportation needs. The laying of utility and communication lines in transportation corridors is an important issue for UDOT and other land management agencies. Rural areas have seen an increase in heavy truck traffic related to coal development, methane gas wells, and hauling of mill tailings, as noted by many of UDOT’s own regional employees. Increased tourism in southern Utah places much demand on state roads and is connected in some places to an increase in off-road vehicle traffic, which can make access routes and staging areas in need of increased attention from UDOT. Major interstate highways, particularly the I-15 corridor that carries traffic from Mexico to Canada, have experienced increased volumes of traffic in the wake of the North American Free Trade Agreement (NAFTA). This interstate traffic causes certain maintenance problems for UDOT employees in rural areas because truckers in a hurry often dispose of trash improperly and do not use designated rest stops. The transportation of certain types of potentially hazardous cargo through heavily-used urban traffic corridors is also of concern to some people.

In addition to the economy, the other major factor influencing changes and diversification in transportation demand is public expectations for system-wide and intermodal solutions. While most people admitted private automobiles and roads would still be important components of transportation well into the future, many participants noted people are beginning to see that there are alternatives to private automobiles that include buses, rail, walking, trails, and bicycles. They thought alternative forms of transportation would be acceptable and effective in many Utah communities, especially in densely populated areas.

Legal requirements for addressing environmental concerns were often mentioned as a major factor shaping the current transportation planning context. Opinions varied as to whether these requirements were justified or not, but most people agreed the requirements add time and cost to a transportation project, increase the planning effort, and make transportation agencies vulnerable to lawsuits if the requirements are not met. Thus, compliance with environmental laws was seen as necessary, but whether or not UDOT had complied with the spirit and the letter of various environmental laws in particular circumstances was often an issue that elicited much commentary. In particular, environmental groups were quite critical of UDOT, especially regarding the agency’s handling of the Legacy Highway project. Some people also criticized contractors for not following environmental requirements and UDOT for not monitoring the work of those contractors well enough to ensure environmental compliance.

The environmental issues most people thought posed the greatest legal constraints to transportation planning were air quality and wetlands, primarily because of the clout of the federal Clean Air Act and Clean Water Act and the state’s fear of putting federal

highway funding in jeopardy. Those who spoke about air quality thought it would become the major constraint on Utah's ability to construct roads in the future and was already driving the need to look at forms of transportation other than the automobile in major urban areas. As one person put it, "Air quality is a manifestation of growth, but it is also a manifestation of how you design transportation."

Those who spoke about wetlands were generally concerned about areas around the Great Salt Lake and were interested in trying to preserve wetlands rather than having to mitigate for wetland loss. One person suggested that wetland mitigation needed to be part of the transportation planning process and thought a large "mitigation bank" on the shores of the Great Salt Lake should be acquired (where it could be added to in the future) in order to avoid the problems involved in having small, scattered wetland mitigation projects that become less functional as development happens around them.

The other legal requirements people identified as affecting the transportation planning context were social justice/anti-discrimination concerns and addressing disability needs, although these requirements generally were not seen as posing the same legal threat as environmental requirements. One person pointed out federal law prohibits discrimination against minority populations, elderly, and low income people in transportation planning. To determine if they are affected, UDOT is required to look at census data, travel time, and accessibility to transportation. Legal requirements for addressing disability needs generally involve making transportation facilities handicap accessible and meeting certain design criteria. The people who addressed social justice and disability issues thought UDOT needed to better understand the needs of these user populations and needed to address their concerns throughout the process of designing, maintaining, and operating transportation systems.

III. A. 2. Transportation Planning Tasks

The rapidly changing context within which transportation planning occurs makes predictions necessary for long-term planning difficult, which led many people to comment on the need for flexibility in the planning process so transportation planners could respond and adapt to unexpected changes. This issue was addressed mostly by people within UDOT or the transportation community. Other participants who commented on this issue were generally sympathetic to difficulties transportation planners face and, thus, were not necessarily critical of UDOT in this regard.

One of the biggest frustrations expressed by transportation planners was the inability to predict where and when development would occur. General growth trends were seen as quite predictable, but knowing the specific locations where growth would create transportation demand is what they need for longer term planning. These type of comments were typical: "Accuracy in knowing what project we need to do is the most critical element of the plan because oftentimes what we project to happen doesn't really happen;" and, "We don't have a crystal ball to tell us what will happen in the future, and population ends up growing somewhere unexpected." Developments at Eagle Mountain, Saratoga Springs, and Syracuse were cited as a few instances where transportation

planners were caught off guard. Some participants said they wanted to better understand future development of natural resources in rural Utah and the associated transportation needs and wanted more foresight to avoid problems with utilities.

Changes that were beyond their control, and their inability to predict those changes, were particularly troublesome to transportation planners because these put planners in a reactive mode and sometimes force them to compromise on what they feel might be the best transportation solution from a strategic design or engineering standpoint. Because of this, participants often commented on the need for more fluid and adaptable planning procedures and the need for UDOT to be able to change directions quickly. However, such a situation creates the dilemma of putting more proactive, longer-term planning processes in potential conflict with shorter-term responsiveness that can be seen as primarily reactive from a planning point of view.

Several participants noted that flexibility in transportation planning often is inhibited by several factors: restrictions on project funding sources; the time needed to go from conceptualization to engineering to construction of projects and get through all of the associated permitting; and, the planning task being underfunded. In addition, the public expects to see projects completed once they have been identified and prioritized. One person pointed out that local project plans are generally not responsive to changes when a longer range plan comes out and that projects are generally completed even if they no longer make sense because of “political pull from people who are more concerned about making money than they are about what is best for the community.” Another person said, “People get an idea in their mind, and they lock into it, and so it almost precludes reconsideration of options in a more contemporary sense as the time approaches.”

Perhaps the biggest challenge in terms of transportation planning tasks involves the issue of sequencing. Several people noted sequencing is particularly important as transportation planners start to think more in terms of an intermodal system because it is often best for certain elements of the system to precede others, both from a design as well as from the end-user point of view. However, getting project politics, prioritization, funding, planning, and permitting on one particular part of the transportation system to sequence logically from the point of view of the system as a whole was recognized as being very difficult. The National Environmental Policy Act (NEPA) process was seen by some participants as complicating the situation, since it is generally done at a project level and has the ability to alter the design and timing of pieces of the transportation system that may have been conceptualized to fit in a particular way into the whole. In addition, some of the most critical conceptual decisions in transportation planning, e.g., identification of potential transportation corridors, are often made many years in advance of actual project planning and design and prior to implementation of detailed NEPA analyses. One participant noted because UDOT cannot acquire transportation corridors or wildlife habitat for mitigation purposes far in advance of projects being built, conflict with landowners and environmental groups is almost assured once they get to the point of building a highway. Environmental participants pointed out one of the reasons the Legacy Highway Environmental Impact Statement (EIS) was deemed inadequate by the courts had to do with this very issue of project sequencing.

III. A. 3. Separation of Transportation and Other Planning Functions

Another element making transportation planning difficult has to do with jurisdictional and decision-making separation between different planning tasks and different planning agencies. In particular, participants discussed three main areas of separation: between different transportation planning entities, between transportation planning and land-use planning, and between transportation planning and natural resource planning.

Separation Between Different Transportation Planning Entities

The different “transportation planning fields” were discussed by most participants, who generally characterized transportation planning entities as being from the municipal level, the Metropolitan Planning Organization (MPO) or regional level, the state level, and the federal level. In addition, the distinction between UDOT and the Utah Transit Authority (UTA) was referred to often, with most participants having a fairly clear idea of the respective areas of responsibility of these two organizations. In general, participants talked about the separation of transportation planning functions as being appropriate. However, they noted that this creates challenges in terms of working toward a joint understanding of transportation needs and vision for the future.

Several explanations were offered for why transportation planning is not more integrated. Sometimes the explanation involved the practical limitations of time and money to do as effective a job of integration as people would like to do. More often, the explanations related to the various transportation entities having different organizational cultures, legislative mandates, funding sources, mind sets, agendas, missions, and constituents, and to the fact that these entities do not fully understand each other in these regards. Some people commented that infighting, protectionism, turf battles, and personality conflicts got in the way at times. Past conflicts between UDOT and UTA, between UDOT and the Wasatch Front Regional Council (WFRC), and within and among the MPOs were mentioned by a few participants. These conflicts had mostly to do with identifying the boundaries of their planning authorities and accessing or distributing transportation funding. One person involved in regional transportation planning noted small communities still sidestep the project prioritization process of the MPOs and go directly to Congressional representatives to lobby for their own projects, which can make integration hard even at a local level.

Nevertheless, almost all of the participants talked about the need for different transportation entities to work more closely together in order to achieve the proper balance between the system-wide transportation needs and the more site-specific needs of local communities. While past and current conflicts over areas of responsibility were noted by some participants, most of them were optimistic about the ability of transportation entities to coordinate better in the future. Participants recognized gains could be realized from such coordination, including information sharing, better planning efforts, elimination of duplication, and efficient use of scarce resources. One person involved in regional transportation planning said that transportation entities within the

state were working more closely together because Utah's Congressional delegation wanted them to develop a common agenda and common criteria for projects. They had not always done so in the past and it sometimes created confusion in their attempt to secure federal transportation funding.

Separation Between Transportation Planning and Land-use Planning

The lack of integration between transportation planning and land-use planning was an issue raised often by participants. Many people within the transportation community discussed the frustrations involved in trying to protect transportation corridors to meet future needs only to have development occur in ways they had not anticipated due to lack of coordination between people involved in zoning, land-use permitting, and infrastructure development. In particular, UDOT and other transportation planners are often caught off guard by local land-use decisions that have tremendous implications for transportation planning, especially when subdivisions or commercial development occur before roads and infrastructure are in place.

Various entities were identified as being responsible for contributing to this problem. Some participants said that UDOT needed to get closer to local governments and their planning efforts in order to avoid being surprised. Other participants complained about a lack of vision in community planning and said that community planners needed to be more conscientious about the burden land-use decisions place on the transportation system and be better about informing UDOT of their land-use plans. One person pointed out that local community planners worry more about property tax base and revenues while UDOT worries more about mobility and moving people around, and it is hard to reconcile the two different perspectives. Many participants blamed developers for a lack of cooperation, even to the point that the developers are secretive and use code names for big developments, such as with the Tooele Wal-Mart Distribution Center. The idea of having new development help pay the cost of road building or improvements was often suggested as an idea worth exploring.

A few people noted MPOs have a role to play in helping cities realize that although the growth may occur overnight, the road improvements will not. One MPO person thought they needed to tell the cities, "Listen, if you overload a certain interchange because you're allowing a developer to come in, you have to realize you're going to live with a lower level of service or you may even have to help do something to augment the improvements that are necessary for that interchange." He added, "You know, it's not fair to put that burden back totally on the state and say, 'Hey, you know, we build it and they come, and now you do something about it.'"

Some participants took a broader and longer term view of this problem and argued that integrating land-use planning and transportation planning is critical to avoid suburban sprawl, manage growth, promote infill, and design sustainable communities. They noted the ability to expand the road system and build out to accommodate growth was becoming more limited, especially in light of people's concerns about open space, livable communities, and general environmental and quality-of-life issues. Thus, the integration

of transportation planning with land-use planning was seen as important both conceptually and practically for helping people to think about as well as address growth issues more effectively.

Separation Between Transportation Planning and Natural Resource Planning

The separation between transportation planning and natural resource planning is reinforced by the facts that transportation planners and natural resource planners engage in very distinctive types of professional tasks and activities and also work for various types of agencies that are usually located in entirely different departments of state or federal government. Comments from participants about this separation and the need for integration were generally focused in two different directions depending on whether those participants were primarily thinking about the development of natural resources or the preservation of natural resources.

For those who approached this issue primarily from the standpoint of natural resource development, their comments were quite similar to some of the comments made in reference to the need for integration between transportation and land-use planning. The main point that was raised concerned the need for transportation planners to be aware of industrial or commercial development of natural resources that would likely place different demands on the transportation infrastructure due to an increase in the amount and weight of shipments of natural resources from areas such as mining or harvesting sites to processing facilities. The recent increase in energy development and associated truck traffic in rural Utah was given as an example.

Those who approached this issue primarily from the standpoint of natural resource preservation had different concerns. They were primarily concerned about the impacts of transportation infrastructure (mostly roads) on wildlife and plant species, sensitive areas (wildlife habitat, migration routes, sensitive soils), and general environmental quality (e.g., salt from road maintenance affecting water quality). Wildlife planners were particularly concerned about the timing and nature of the interaction they had with transportation planners, recognizing that the sooner they were involved, the more chance they had to deal with alignment alternatives and not just site-specific mitigation measures. One wildlife planner pointed out that in terms of road infrastructure, what is safe for people is not necessarily safe for animals. This person also talked about how keeping wildlife off roads was an important vehicle safety issue, but making roads impervious to wildlife migration could pose serious risks to whole wildlife populations. In terms of general environmental issues, a public land planner talked about the need to coordinate with transportation planners and utility providers along transportation-utility corridors in order to minimize environmental impacts from surface disturbances (during road maintenance and laying of pipelines and cables).

III. A. 4. Interface Between Politics and Planning

Another general challenge for doing comprehensive and innovative transportation planning is the interface between politics and planning. This interface was described as

problematic in several respects. Participants pointed out that UDOT must respond to the Governor's Office and support his agenda (as an administrative agency, it is part of the executive branch), which may be different than the agenda that comes out of the transportation planning process. MPOs do not have that same concern, although some of them have their own lobbyists in Washington D.C. to promote their agendas. Cooperation within the MPOs was said to work pretty well unless mayors and county commissioners do not get what they want. Cities that feel they have been ignored often send local politicians and lobbyists to Washington D.C. or meet with their Congressional representatives when they are in Utah to try to get their projects funded. One MPO representative said he always hopes that the top prioritized project coming out of Congress is not one that was not even on a Transportation Improvement Program (TIP), but it seems to happen every year. Land development is driven by market factors, and powerful private interests sometimes exert political influence with local officials (e.g., to get their needs prioritized or obtain zoning variances) that can undermine longer term comprehensive public planning efforts. One person pointed out that UDOT can lose big when a private developer negotiates to come to Utah, UDOT starts making accommodations for them (bigger access roads, signage, etc.), and the development never materializes, as was the case with Micron in the Alpine area.

One participant talked about the consolidated planning grant, which is a pilot program approved by Congress in about a dozen states. This pilot program is designed to try and get some of the politics out of the transportation planning process. In Utah, this brings together UDOT, UTA, and the four MPOs. Normally, MPOs hope to get their projects into UDOT's long-range plan but there is a lot of pressure to get projects funded through different sources. The hope is that the consolidated plan would discourage people from trying to get funding for projects that were not part of the transportation plan. Under the consolidated planning grant, if a project is not part of the transportation plan, it does not get funded. Or, if it is later made part of the plan, another project might not get funded, so that the budget given to the state stays financially balanced. The effect of this program would be to have people at the state level make the trade-offs in light of limited funding instead of having those decisions made in Washington D.C. If this pilot program is successful, Congress may mandate it for all states.

III. A. 5. Need for a Paradigm Shift in Transportation Planning

Some of the participants explained the current transportation planning challenges within a broader historical context. A few people noted that Salt Lake City used to have rail infrastructure, but it was dismantled. They bemoaned the fact that the city had to spend a lot of money to try and reinstall that type of system when it had been there in the past. Many people referred to the fact that transportation planning over the past fifty years focused almost solely on road building, and western communities grew around the automobile. Now, however, many of them see the need for a paradigm shift in transportation planning to create a good intermodal transportation system and provide a diversity of transportation options.

Good transit alternatives were seen as a key component of the paradigm shift, particularly given some of the geographic constraints along the Wasatch Front that create a narrow, north-south transportation corridor between the Wasatch Mountains and the Great Salt Lake and Utah Lake. Many people recognized the importance of transit, particularly to urban areas, and the need to make significant investments in this form of transportation. One participant noted that a lot of people are starting some paradigm shifts and said that, in the past, we planned to move “x” amount of people north and south, and figured out how many lanes of highway that would take. Now, some people are starting to think in terms of a “people moving problem” instead of a “car moving problem,” and they are looking at alternative modes for moving those people, such as mass transit. Another participant noted, “Transit will be the future of getting somewhere in a timely manner.”

Many participants, including ones both inside and outside of UDOT and the transportation community, said the state needs to make a commitment to supply mass transit along the Wasatch Front, but this needs to be accompanied by a change in mindset and behavior on the public’s part to demand and use transit. This person’s statement expressed a common sentiment:

“Maybe people need to sit in parking lot freeways as buses and trains go by. Maybe that will change their attitudes... We can’t just keep on building roads. There’s not enough money or space for it, and our environment cannot keep up with it either.”

Another participant dealt with both the supply and demand sides of the issue in this statement:

“People say ‘transit is no good, I’m not going to use it.’ Of course it isn’t any good because we made it no good. If we make it good, people will use it, as proved by TRAX. TRAX is a resounding success. Why? Because it simply duplicates all of those things that people expect from a good transportation system. It’s got speed, reliability, and a level of convenience used frequently.”

A paradigm shift in transportation planning was seen as difficult to bring about, but some people recognized it was necessary to meet the challenges of Utah’s rapidly growing transportation demand. Quite a few participants said it was already starting to occur, and pointed to what they perceive to be a growing demand for intermodal transportation solutions. Some of them said attitudes and behavior are changing, people are more willing to live near where they work, and they are beginning to see the cultural benefits of living in downtown urban areas. People are also beginning to understand the expenses incurred upon society (financially, socially, and environmentally) of living 30 miles from work, friends, and amenities. Another person thought increasing gas prices would be the driver of a lifestyle change in relation to transportation.

Thus, many participants recognized that transportation planning in the state of Utah is at a critical juncture. Some of them noted that Utah is behind many other states in the way it is approaching transportation planning, but they also noted that Utah could look to

other states that are further along in having to deal with similar challenges for transportation ideas and examples.

III. B. Theme 2: Coordination and Leadership in Transportation Planning And Partnerships

The second major theme coming out of data from the Phase II interviews and focus groups deals with the idea of coordinating efforts in transportation planning, a critical element for providing a comprehensive transportation system able to meet the needs of a diverse group of users. This theme includes people's comments on the importance of coordinating transportation planning, how such coordination might be structured, how coordination could be achieved through different ways of functioning, and where the leadership role for such comprehensive planning should lie. Also included are a few examples of both successful and unsuccessful attempts at coordination.

III. B. 1. Importance of Coordinating Transportation Planning

Most participants felt greater coordination in transportation planning is important and necessary, particularly to deal with the challenges involved in the separation between the various entities involved in transportation in Utah. Coordination was seen as beneficial because it allows people to look at various options for creating a more efficient and comprehensive transportation system. Since funding and jurisdictional responsibilities differ from agency to agency and location to location, coordination is practically required to create a seamless transportation system. Several more specific reasons were mentioned for why coordinated transportation planning is important: to better integrate various forms of transportation; to serve the needs of diverse users and stakeholders; to use limited resources efficiently; and, to use limited resources equitably.

Integrating various forms of transportation was discussed by many of the participants, who thought the road infrastructure needed to be coordinated much better with intermodal needs. UDOT personnel expressed the desire to be perceived as more than just road builders, and the department is starting to look at alternatives to building new roads and to consider new forms of transportation. In looking ahead, one person said, "It's a new generation where you just can't drive your car everywhere if you want to get there in a timely manner." In particular, UDOT is interested in working more closely with UTA. "We have to coordinate with their [UTA's] planning activities if it deals with solving transportation issues be it highways or mass transit or alternative modes of transportation," commented one UDOT employee. UDOT has to "be able to look beyond our own sights," said another employee. An example highlighting the need for coordinated planning between UDOT and UTA is the park-and-ride facilities connecting arteries that UDOT is responsible for to UTA commuter rails and bus transportation. If the system is to be successful, those two modes of transportation need to connect perfectly.

Coordinated transportation planning was also seen as important by participants because it can help transportation providers better serve the needs of diverse users and stakeholders

of the transportation system. UDOT employees felt their organization must understand transportation problems and needs throughout the state even though that may be difficult. “It’s a balancing act for UDOT to take care of the needs across the state.” Some participants felt coordination with land-use agencies, counties and cities, and MPOs is essential to meet a variety of human and resource needs. A specific example that was given of where coordination between UDOT, an MPO, and local municipalities could work better is on Highway 89/91 between Smithfield and Wellsville. Due to the high volume of traffic on this highway running through Cache Valley, and the existence of too many access points, Highway 89/91 is experiencing some serious safety issues, with some people commenting that the highway has become too dangerous.

Several participants pointed out that transportation planning coordination was needed to meet the needs of special user groups. For example, the disabled community felt that a better coordinated effort between UDOT and UTA would improve bus stop accessibility for the blind and eliminate some of the problems with knowing whom to call when they have complaints about bus stop issues. The focus group members representing low income people expressed concern about jurisdictional issues when it comes to accepting responsibility for the safety of railroad crossings. Children who walk alone to and from school may need to cross railroad tracks on a state highway, and the concern was raised that no one is exercising responsibility for making those crossings safe. People in the bicyclists focus group pleaded for better coordination between UDOT, UTA, and the University of Utah to provide more and better bicycle lanes through the University of Utah campus, which they claim is the largest single bicycle destination in the state.

Another reason coordination in transportation planning was seen as important by participants is to make the best and most efficient use of available resources, such as money, personnel, and expertise. Planning is seen as key to allotting a finite amount of funds. “If money weren’t an issue, growth wouldn’t be an issue. It’s that constant ebb and flow of growth versus meeting the demands of growth, and at the same time managing what you have and making sure that it works,” as noted by one UDOT employee. Coordinating efforts with other agencies can make more resources available, since many different people with a wide variety of areas of expertise and professional backgrounds are involved in the larger transportation community. Another UDOT employee summed it up this way, “We need to look at all the resources available to us and utilize whatever resources we can” to serve the people “to the best of our ability.” Partnering with other land managers can save on engineering and mobilization of resources. When two projects are put under one contract, it saves the taxpayers money and often avoids questions concerning jurisdiction.

Using resources equitably was also thought to be enhanced by better transportation coordination. Several groups noted their dissatisfaction with what they perceived to be inequities in the use of transportation funding, which oftentimes was thought to be brought about by political influence in the planning process. For example, people from highly populated urban areas would say they are not getting the services they are entitled to get because they have high volumes of transportation demand, number of lane miles, number of cars, etc. In the rural areas, people feel the gasoline taxes they pay

disproportionately and unfairly go to support projects in urban areas. Special needs user groups and those who rely primarily on public forms of transportation felt their needs were not adequately addressed, and that the transportation community was much more in tune with needs of automobile users. The reason that some participants thought better coordination would help to overcome these perceived inequities was that it would be harder for their concerns to fall through the administrative cracks if the various agencies involved were working together with a primary focus on the system as a whole.

III. B. 2. How to Coordinate Transportation Planning - Structure

Since the need for better coordination in transportation planning was well recognized, one of the key issues that came up in many of the discussions was how to make it happen. Participants thought one of the ways to coordinate transportation planning was through a structural reorganization of transportation agencies. While participants generally thought this was a good idea in the abstract, they were more reluctant to recommend a specific reorganization strategy for the agencies in Utah. People within the Utah transportation community indicated that cultural and political issues, as well as past conflicts between transportation agencies, made transportation restructuring a difficult and touchy issue to discuss. However, there was a general positive feeling among participants that coordination, in some form or another, could be facilitated through structuring the relationships between transportation providers differently. Three main ways to structure coordination into transportation planning were mentioned by participants: create one transportation agency; retain different transportation agencies but create a coordinating umbrella mechanism; or, have one agency take the lead in transportation planning but separate agencies would continue to exist.

Some participants suggested bringing transportation planning under one agency's authority (either an existing agency or a newly created one) by basically collapsing all existing agencies with transportation responsibilities into one "single-bodied coordination." The current state of transportation planning, with separate agencies bearing separate responsibilities, was cited as a hindrance to offering a truly multi-modal transportation system. The "whole thing can be coordinated better at a higher level than when separate people are trying to coordinate," noted one participant. Another participant called it "one-stop shopping, where you don't take a specific modal perspective." Participants realized it would not be an easy task to meld different agencies into one, and they spoke of the need for leaders with a more open mind set to go ahead and take that step. A specific area where coordination was suggested is in the relationship between UDOT and UTA. Bringing UDOT and UTA together under one agency was seen as positive because it would bring the expertise from both agencies together, encourage a focus on intermodal transportation planning, and possibly reduce or eliminate competition for funds. The two agencies could move in the same direction and integrate their concepts and techniques to create a more comprehensive transportation system.

Other participants mentioned that those agencies now responsible for transportation should remain separate but that they should all work under one coordinating mechanism

that is distinct from any of them, sort of “an over-arching transportation agency.” These participants acknowledged that many groups work on transportation issues in the state, such as UDOT, UTA, MPOs, WFRC, and others. Even though each entity has its own area of interest and responsibility, it is absolutely necessary for them to be “talking to each other” instead of competing with each other. Such a structure “may eliminate passing the buck” between agencies for transportation problems. For example, the disabled community is concerned with accessibility to transit lines. UTA buses are accessible but getting to them poses a problem because no entity wants to take responsibility for making the property surrounding the transit lines accessible. Some centralization to transportation planning might alleviate these sorts of problems. In another instance, it was mentioned that UDOT should concentrate on roads since highways are still so important in Utah and since that is UDOT’s area of expertise. However, this was said in the context of the importance of coordinating with the other transportation entities to have a working, multi-modal transportation system.

Still other participants felt that one agency should take the lead in transportation planning but that all existing transportation agencies should remain separate from each other with their own defined areas of responsibility. The main reason given for such a structure was that it would make the transportation system more efficient in the future. “Chaos” could be avoided if planning and building of infrastructure were coordinated. Several participants said that UDOT should take this lead role while others said that some other entity needed to be created. The environmental community expressed some concern about having one agency take control of transportation in the state. If such an agency were to be headed by a political appointee, UTA and transit systems might be at a disadvantage since they have generally been less favored by the political power structure in Utah.

III. B. 3. How to Coordinate Transportation Planning - Function

Participants were generally more enthusiastic about suggesting ideas for how transportation agencies could function differently in order to promote coordination than they were about recommending ways to restructure transportation agencies to achieve this same objective. Several ideas were offered for how coordination among transportation agencies could be furthered in a functional way: better communication and information sharing, better cooperation, partnership arrangements, and cost sharing agreements.

The main suggestion participants made about functioning differently is to have better communication and information sharing. People within UDOT felt that there needs to be more communication between UDOT and UTA, MPOs, city and county governments, and the public. Communication among the different entities dealing with transportation was considered vital and participants said those entities should meet regularly to voice their concerns to each other, to know what everyone else is doing, and to find mutual solutions to problems. This “big picture” look at things needs to happen, especially when tradeoffs are involved, so compromise can be sought when interests and ideas clash. Participants often cited the fact that MPOs operate independently of UDOT, but their

Transportation Improvement Programs (TIPs) must be integrated into the Statewide Transportation Improvement Program (STIP). A few people mentioned that UDOT has annual meetings with the WFRC and the Cache MPO to ensure the lines of communication remain open. An agenda is set up ahead of time and UDOT brings personnel who can answer specific questions that appear on the agenda. Another example was cited in which information sharing could save a lot of time and money; the Wasatch Front has created a 30-year plan that UDOT could actually use as a resource for its own planning. A basis for good communication is good relationships. One participant mentioned that new engineers should be people who can build relationships and have vision, and not just be people with good engineering skills and professional tenure.

People external to UDOT also felt that those responsible for transportation planning should be talking to each other more often and that they should also be talking to those responsible for community planning. Involving more people at the community level would help to alleviate the concern Utahns have about being “over-planned and over-regulated.” The communication that occurs between Mountainland Association of Governments (MAG) and the WFRC was cited as a good example of communication. Participants external to UDOT also saw a need for better communication between UDOT’s planning section and other divisions within UDOT. The specific example cited was the need for the long-range plan to be a product produced with the input of all divisions and regions of UDOT.

A representative from one of the state land management agencies gave specific ideas on how to make coordination work through better communication between UDOT and other agencies in the state. He suggested communication needs to happen at three levels: management level, programmatic level, and regional level. At the management level, there should be “some sort of a vision that transpires back and forth at that level.” The programmatic level is where “the real communication takes place” among those who make programmatic decisions. At the regional level, “the battle is joined” and decisions are applied. “If those three tiers of communication are able to have some interconnectedness but largely operate on their parallel, distinct bases, then I think what we have is the making of a successful interagency operation.”

A related suggestion for how transportation coordination could be facilitated functionally was through better cooperation, which differs from communication and information sharing in that this concept captures the spirit in which the agencies need to work together. Participants from within UDOT talked a lot about cooperation between UDOT and UTA with the ultimate shared vision of making highways and transit work better in relation to each other. While the practical driver for this cooperation may be recognition that transit will play an increasingly important role in the future, tackling the issue of intermodal transportation connections with a spirit of cooperation was seen as the only way to really make it work well. A few UDOT employees felt that UTA provided an unpredictable system, but for the most part there seemed to be a willingness to cooperate more with UTA to create a truly intermodal system. For example, some participants said park-and-ride facilities need to be convenient to those using light rail if the system is to work in an intermodal sense. Another example was given of UDOT and UTA needing to

cooperate when TRAX crosses state highways. Since there is often a transit component in UDOT projects, better cooperation with UTA to find out what would be reasonable was seen as important. “Those gears [between UDOT and UTA] have to absolutely be working together at the planning level,” said one participant. In general there was a sense that cooperation through shared goals and responsibilities, not only with UTA but also with other transportation agencies and local officials, is necessary to find and meet the greatest needs.

Some participants referred to the role that forming partnerships could play in facilitating transportation coordination. Partnerships were perceived by these participants as slightly more structured or formal relationships than the relationships facilitated by communication, information sharing, or cooperation, and ones in which some mutual benefit was to be had by all partners. When it came to partnership arrangements, participants from outside UDOT were somewhat focused on mass transit while those within UDOT took a broader look at possible partnerships. UDOT personnel talked of partnering with developers to provide infrastructure at key interchanges or access roads because of the mutual benefit to be gained; UDOT could use funding from private developers and those developers could realize increased property values. Also mentioned was partnering with other agencies for reasons of public safety, air quality, and economic development. Partnering with communities, non-governmental organizations (NGOs), or non-profit organizations was also discussed as a good route to take when funds for a project are limited. Example of these types of partnerships were the Parley’s Crossing project, and the trail between Midway and Heber which was built by UDOT in partnership with Mitsubishi, which wanted the favorable environmental publicity.

Various participants talked about the provision of transit options as being a fruitful arena for the development of partnerships. They suggested UDOT could become more multi-modal by accommodating transit where it is appropriate, such as in urban areas. Not only should UDOT include transit in the plans it develops, in their opinion, but MPOs should also. They thought transit should never be added to a plan in a “last ditch effort.” While UDOT is seen by some to be in the best position to be the leader of comprehensive transportation planning, the “job” is considered to be big enough that it “deserves sharing” in a partnership with UTA. Participants from both UDOT and UTA noted that the two agencies had started to work together to use each other’s legislated powers (e.g., UDOT has condemnation power, UTA has taxing power) in order to partner on building a better transit system.

Participants touched briefly on the idea of cost sharing agreements relative to funding for highways and transit as a functional means to enhance coordination in transportation planning. Opinions on this issue were somewhat mixed; some people thought limited funding was a way to bring people together to cost share while others were more protective of their own financial resources precisely because of funding limitations. Some differences of opinion were noted between participants internal and external to UDOT, particularly in relation to funding for transit. One UDOT employee stated, “Our critics in the legislature think we should be spending UDOT money on commuter rail. UTA has that responsibility.” Some of the external participants thought it would be

helpful if UDOT would give some of their highway funding to build a light rail. Quite a few participants explained that the way the system currently works, federal planning money is split into money for highways and money for transit, but that there is a movement to consolidate those two funding sources to make it easier to switch money between the categories. State funds, however, cannot be transferred between different categories of transportation projects. This change toward consolidated planning grants in federal transportation funding is seen as a positive way to facilitate cost sharing between different forms of transportation.

III. B. 4. Leadership in Statewide Transportation Planning

Another important consideration in terms of coordinating efforts in transportation planning is the role of leadership, and which transportation agency is in the best position to exercise that leadership in order to encourage more comprehensive transportation planning. Even though some participants expressed reservations about it being the transportation leader, all participants conceded that UDOT had an important role to play in transportation planning in Utah.

While a few participants within UDOT thought the department could exercise transportation leadership in the short run until a new agency emerges, the overwhelming sentiment within UDOT is that the department should be given the leadership role in statewide transportation planning for a variety of reasons ranging from legal to practical to agency survival. The legal reasons UDOT employees cited for their department being the transportation leader deal with the fact that UDOT is dictated by federal law and processes to be a transportation coordinator. When a highway is being considered, alternative solutions must be examined, which requires coordination with other agencies. “When it gets right down to it, UDOT has the responsibility to do it. So we have to do it,” said one employee. Another UDOT employee thought Utah needed a new state law to put UDOT in charge of all transportation.

The practical reasons UDOT employees thought their department should be the transportation leader stem from the idea that transportation planning cannot go in 20 different directions. One participant gave the analogy of a circulatory system. If the main veins and arteries are not working, then all other smaller veins and arteries and capillaries tying into the main system will not function either. UDOT therefore has to lead the effort to make sure all forms of transportation work together. “UDOT is the key,” according to one employee. Several UDOT participants admitted that the agency sees itself as moving more and more in the direction of becoming a transportation leader, and is committed to doing things the right way. One of the examples given by an internal participant of doing things right was the compromise concerning the realignment of Highway 36 in Tooele County that was worked out with the town of Erda, which otherwise would have been displaced by one of the proposed alignments.

Agency survival was another basis for UDOT employees’ opinions that their department should be the transportation leader in the state. They recognize that UDOT cannot remain primarily a highways department. As one employee stated it, “Eventually we will

become the 500-pound dinosaur that everyone's going to kill and say, 'We're done with you. We've gone a different direction. You haven't changed, so we're changing you.' You know we need to be the leader. Otherwise we become extinct."

Some participants external to UDOT felt that UDOT could and should take the lead role in coordinating the state's transportation planning, saying things like "they could easily do it" or "they're the obvious choice." However, several participants external to UDOT were more critical of UDOT and would perhaps prefer another entity take on the role of transportation leader, maybe some sort of advisory committee. The main reason they did not want UDOT to be the transportation leader is because of its image as a roads and highways department. They do not perceive it to be "well-rounded" enough to take on such a role, and they do not think it has "enough experience in the other areas of transportation to be effective as the overall coordinator." Another reason seems to be people's perception of UDOT's poor approach to customer service. The role of transportation coordination would require good public representation and consideration of different needs. One person pointed out, "I don't think that state government attitude... which is sort of one-size-fits-all...works in the service industry kind of environment." Other participants noted that it would be inappropriate for UDOT to take on all transportation planning duties for the whole state for political as well as technical reasons.

However, UDOT is lauded for being "on the right track" by identifying that there needs to be this kind of coordination going on statewide. Several people suggested that there needs to be an integrated agency in charge of statewide transportation planning that would include the MPOs or Association of Governments (AOGs) in order to foster better coordination with local communities. They certainly saw a key role for UDOT in such an organization.

III. B. 5. Specific Examples of Coordination Between Different Transportation Entities

During the interviews and focus groups several specific examples were given of coordination that had either worked well or not so well. These examples reinforce the need for and benefits of coordination in transportation planning.

Examples of coordination that did not work well were given by participants from inside UDOT. One example was the Legacy Highway. UDOT staff said they coordinated with UTA and the Army Corps of Engineers, and felt that they had done all that was required of them. However, environmental groups as well as the courts did not think UDOT had sufficiently looked at other means of transportation or adequately addressed some of the environmental issues involved in that proposed project.

A second example of the lack of coordination that was offered by people within UDOT dealt with a situation in one of the regions where too many access points had been permitted on a highway that caused dangerous conditions. In that situation, a bypass road had been planned that would have taken traffic off the road with multiple access points, but the local community took actions that encouraged businesses, subdivisions and a

school to locate in that area before any access management was put in place, eventually making the road unsuitable as a bypass.

Several positive examples of coordination in transportation planning were cited. The largest point of pride within UDOT seems to be the coordination surrounding the Olympics. The Department had a limited time frame in which to prepare the transportation system, but I-15 and TRAX were successful due to close coordination between UDOT and UTA. This coordination was helped, obviously, because there was a common goal among the different entities and there was enough funding to do things properly. Both intra- and inter- agency cooperation helped keep the streets clear of snow because snow plows from different regions and entities kept on plowing snow, even across jurisdictional lines. Participants noted, however, that this sense of cooperation is unfortunately disappearing, and old problems regarding the lack of coordination are returning again.

The joint planning committee involving UDOT, UTA, WFRC, and MAG was cited a few times as being an example of successful coordination. This committee, which uses a teamwork process, has helped to ensure consistency between transportation plans from the different entities. The move to mesh the two categories of federal planning funding for transit and highways, mentioned above, is a cooperative process among UDOT, UTA, and four MPOs. Access management problems in Cache Valley are being looked at jointly by UDOT and Cache Valley Metropolitan Planning Organization (CMPO). This was seen as positive because local jurisdictions are no longer “left out of the loop.” It helps to “improve coordination between those wanting accesses on state highways, the cities in which those accesses are being requested, and the state whose road it impacts.”

III.C. Theme 3: Engaging the Public in Transportation Planning

The third major theme that emerged during Phase II was the need for engaging citizens in transportation planning and project implementation. The protocol included one question that directly asked participants, “What do you see as some of the challenges UDOT faces when implementing effective public involvement?” This question was usually followed up with questions related to how UDOT could effectively include the public in planning or project decisions. External participants were also asked for examples of specific past experiences. This section focuses on results related to people or group representatives who are volunteering to provide input in public participation activities or outreach efforts conducted by UDOT or the informal dealings of UDOT with the public.

III. C. 1. Challenges and Effectiveness of Public Involvement

Virtually all of the participants spoke of the need for and value of public involvement, but many challenges were also discussed. Both internal and especially external respondents said the biggest challenge to public involvement is actually getting the public to participate. Apathy, time availability, and the perception that transportation issues will not directly affect them were cited as the major reasons the public does not participate. Some typical comments from Utah Transportation Commissioners include, “the public

doesn't seem interested" and "we've held public meetings with just UDOT people there." One Transportation Commissioner said:

"The tendency is for the public to just sit back and complain, but not get involved. I've been to a lot of open houses, but no one shows up. We need to keep having these, of course, and letting everyone know about them, but generally the people who come are those who are looking at having a road in their backyard or some other major concern."

Thus, the primary problem from the department's perspective is that most people do not see how or why they may be directly influenced by a UDOT decision, and so they do not participate, there are just too many other things competing for peoples' time and attention. This is particularly problematic for long-range planning efforts. As one internal participant put it:

"I think one of our biggest challenges is to try to involve people in long-range planning. It's easy to involve people in short-range things because they see the immediate impact. [But] as soon as you mention that the environmental document is going to be complete in two to three years and actual construction is a long way down the road, you lose interest immediately."

This participant also pointed out that methods have to be developed for dealing with this problem. Related to the processes of public involvement, a few internal participants said it is difficult to design proper forums and to accommodate everyone. UDOT participants and representatives of planning organizations tended to point to the difficulties involved when vocal minorities dominate public involvement efforts.

The perception of external stakeholders is somewhat different. They tend to put less emphasis on low levels of citizen participation, and much more emphasis on past problems or experiences with UDOT's public participation efforts. Some people, especially representatives of bicyclists, persons with disabilities, and low income service groups, simply feel involvement opportunities are not well advertised or are held at inconvenient times or places. However, comments from some of the special interest groups and land management agency participants indicate the problems may be deeper and potentially rooted in UDOT's culture. These comments include some of the most pointed and emotional statements made during the Phase II interviews.

In particular are the charges that public input is typically ignored, that decisions are made before public involvement is obtained, and that public involvement is merely treated as a procedural requirement. These are primarily concerns of special interest groups, but several land management agency respondents directly or indirectly echoed these same concerns. For example, one participant from a land management agency said, "Public involvement is done for no other reason than to 'check off a box' [as he put it] in the process." Another person said, "I think UDOT, like all other agencies, has probably been guilty of using public involvement, and then the analysis process, to rationalize a decision that the Transportation Commission or Transportation Commissioners have already

made.” However, in referring to a couple of specific examples, this respondent also said, “[But] my experience here in [this division] is that I don’t believe they feel that’s the right way to be doing business, and they did really good with their public involvement.” Even though UDOT has made some very positive changes in its public involvement efforts in the past year or two, these comments indicate that opinions of the agency that were formed in response to past actions linger, affect people’s current impressions of and interactions with the agency, and require concerted and meaningful efforts to overcome.

Special interest group representatives, however, were less equivocal. Representatives of bicyclists, the disabled, and environmental groups all had long and often angry exchanges about UDOT not using input provided in formal or informal settings. For example, representatives for bicyclists and persons with disabilities gave several examples pertaining to both UDOT and UTA where they called one or both agencies several times about safety and design problems and were told it was the other agency’s responsibility, or that the changes could not be made due to cost (even for brand new facilities that should have had the design standards in the first place), or they were treated “rudely,” “ignored,” or “stonewalled.” Environmental group participants gave several examples, such as Legacy Highway, where they felt their comments “were totally ignored.” One person made the statement, “They don’t really seem to have any interest in aesthetic or environmental issues when it comes right down to it. . . . They may give it lip service, but that’s about all.” This exchange occurred later in the same meeting:

Respondent 1: “There is at least a working perception that UDOT really doesn’t value public opinion. They tend to do kind of the letter of the law, the minimum of what we call the public involvement process, which . . . discourages people who might be interested in participating.”

Respondent 2: “Well I think nine times out of ten you hear why they can’t do what you’re suggesting so you still feel like it hardly matters if you comment because you’re always going to be told why they can’t do that.”

In general, the perception of the special interest group stakeholders is that public involvement processes need to be developed to show input really is being used. As will be discussed below, this was also an important point made in relation to the question, *How could UDOT improve its public involvement processes?* Situations where input was ignored were used several times by environmentalists and participants with disabilities to justify the use of lawsuits as a public involvement “tool.” One respondent stated, “The only way we have any influence is if they think we are going to sue, or we have sued and gotten settlements.” Ironically, this situation was also used by one internal respondent as a reason for not doing public involvement.

Concerns about the actual use of public involvement were also echoed by some internal participants, but they were always quick to add that things are getting better, especially in the last three years. As one UDOT employee put it, public involvement in the past had been “absolutely pathetic, no one would come unless a project impacted their lives” but now, “we are doing a lot better. . . . better at asking them what they want and telling people what is going to happen and how it will impact them.” Another employee said:

“Well, I think we are really on the starting edge of making decisions using a wiser approach. And, I think public involvement in all decision-making processes for any governmental agency is vital. They’ve given us a responsibility, but that doesn’t mean they know that. We don’t go out and grab their input. We’ve done some wonderful things. We’re just finishing the public involvement piece on what should be built on 123rd South between 7th East and the state highway. And, a lot of those decisions were based on public input. They wouldn’t have been the engineering decision, but they were a community decision.”

It was not just internal participants who felt things have been getting better in recent years; all land management and planning agency representatives who participated in the study also felt UDOT’s public involvement efforts have been improving in recent years. Reasons for this improvement include: changes in upper administrative personnel who have a more open and collaborative leadership style; the addition of Public Involvement Coordinators (PICs) in each region; reduced emphasis on public hearings and increasing use of smaller, more personal public involvement forums; appointments of staff liaisons between UDOT and other agencies; the new Context Sensitive Solutions (CSS) initiative; and, UDOT personnel attending the meetings of other groups and organizations.

The responses of the special interest groups, however, ranged from an attitude that things are improving slightly but have a long way to go, to representatives of persons-with-disabilities and environmental groups who see no improvement at all in this area. Participants of one focus group in particular had very negative perceptions in this regard and, in no uncertain terms, indicated that they thought UDOT had been unresponsive to their concerns and needs and that management changes in the last few years had not produced any substantive improvement.

While this was a minority opinion across all the groups and individuals, the depth of feeling and even anger expressed by these participants, and to a lesser extent by all the special interest group stakeholders, was striking. Some of the reasons given for the poor or ineffective public involvement included: the existence or even “arrogance” of the engineering or “expert” mentality; the difficulty of getting public involvement in urban areas; UDOT’s reliance on public hearings to get public input (although a couple of environmentalists said they *preferred* formal public hearings to small group meetings and workshops); the perception that decisions are made before public involvement is undertaken (discussed above); and, structuring public involvement in such a way as to get certain types of feedback or to avoid conflict. Related to conflict avoidance, an external participant stated:

“Absolutely, I think there’s room for improvement. I don’t think UDOT has been transparent very much at all, and I think that transparency included having your perceived worst enemy at the table. I understand that there have been attempts by UDOT to exclude certain groups of people that have been adversarial with them in the past. Big mistake. The people you want at the table are the people that give you the biggest problems so that you can have a conversation, and their

perceptions are not based on mythology and rumors. They're based on facts, and vice versa."

This sentiment was echoed by an internal respondent who noted:

"I think there's fear at times on UDOT's part that they don't want a pep rally, and they don't want people getting together. Sometimes they've been a little hard to manage and got out of control, so they restructured away from some of that. I do think there are times when that's not all bad, where people get a chance to hear what other people think or feel about an issue. The problem with that is some personalities tend to dominate those meetings. People don't feel comfortable expressing themselves. So we're trying to hit a balance and trying to make sure that the public's interests are heard."

Several other internal participants pointed to "vocal minorities" at meetings, continuation of the engineering culture, and conflict avoidance as being barriers to effective public involvement. Regarding barriers due to the "expert mentality," one UDOT PIC said, while things were getting better:

"I think it's just like everything else ... I think there's still people within UDOT that are resistant to public involvement and a lot of the CSS because they see it as being more efficient to just be the experts and go out and build that road."

This same employee also pointed out budget and staff time are often inadequate for effective public involvement:

"We're kind of like lone wolves. We don't have a budget and we don't have a staff. And we rely on other managers to implement the things that we're trying to do as public involvement coordinators, so you can imagine that that is a real challenge sometimes. It depends on who the manager is and whether they buy into it and whether they actually see that it's a benefit to them. It's a battle. It's getting better, [but] it's up and down. [And] there's a lot more that needs to be done internally to make the whole thing function well. And of course, that's reflected in what the public perceives, too."

Despite the pessimism of some interest group stakeholders, and the potential barriers to effective public involvement, nearly all respondents expressed support in the abstract and agreed that public involvement is critical for increasing public trust and reducing historical animosities.

III. C. 2. Recommendations for Public Involvement

Many of the recommendations for improving the effectiveness of public involvement reflect the traditional literature on this subject. People said public input needs to be early, frequent, representative, and taken seriously. To engage the public more effectively, their input needs to be solicited in ways that facilitate two-way communication, provide real

opportunities to influence decisions, and encourage members of the public to talk with each other. Most participants felt there should be less emphasis on public hearings and greater use of small group workshops, focus groups, personal contacts, electronic means of communication (e.g., Internet and websites), and representative methods of soliciting public input (e.g., surveys). Finally, UDOT needs to be more proactive in soliciting input (e.g., extending personal invitations and directly contacting people), be willing to embrace conflict, and work *with* adversarial groups rather than avoiding them. In addition, UDOT should attend meetings of other groups or organizations rather than just focusing on their own public involvement efforts. While these were generally accepted ideas, many people provided additional insights. There were also some important differences between internal and external participants.

Getting representative input was a common theme in both internal and external interviews. However, internal participants and representatives of planning organizations tended to view this as a factor of balancing the input of the “vocal minorities” with that of the “silent majority” by using surveys, door-to-door contacts, and more personalized, small group forums, rather than impersonal and often contentious public hearing formats.

In contrast, external stakeholders and land management representatives viewed representation more as a factor of hearing and understanding the public’s perspectives better. No stakeholder group exemplified this better than the low income service representatives, who explained in great detail why low income and ethnic minorities do not and cannot participate very often in the UDOT public involvement efforts, and why they have a much more vested interest in UDOT decision making than people realize. These barriers include language, education, job, poverty, cultural stereotypes, and, ironically, transportation. Comments from some focus group members included:

“We have a very, very high Spanish-speaking population, and if we pass something out that is printed in English, it would be meaningless to them”;
“Legal notices are written generally far above the literacy level of the population”;
“Many people that have a low income have a really hard time advocating for themselves.”

Yet lower income residents have a greater level of dependence on traffic safety and crosswalks, public transit for shopping and work, flexible transportation alternatives to get to multiple jobs, rotating shifts or day care, and the like. Also, the service providers we spoke with said they have never seen planning or outreach documents directly related to the needs of low income or minority residents. One participant stated:

“I just happen to have a copy of the UDOT *Strategic Direction*, and I was looking in here to see if they make reference to low income or disabled any place, and they don’t anywhere in an area called customer focus and also performance, evaluation, quality service. That’s not to say that UDOT is insensitive to those issues. I wonder if this [would] become more a part of the mission, if it would become more of an important aspect of planning, if it were simply stated [in UDOT’s strategic direction].”

Thus, representation has both macro population-level and micro stakeholder-level scales.

Likewise, participants discussed the importance of obtaining public involvement input early and often in decision making or planning processes. They also commented on the importance of actually *using* that input. For example, while internal groups used Legacy Highway as an example where much input was obtained, environmentalists and land management agency representatives claimed the input was obtained *after* critical decisions were made. As one external participant put it:

“There are projects, and Legacy is probably a good example, where I think people just had it in their minds where they wanted it to go, where they wanted it put. They took the input, but I think their minds may have been made up prematurely. I think you have to have a plan when you go to the public to generate a dialog.”

Thus, early and often may be meaningless unless the public involvement is taken seriously and it has a real opportunity to influence final decisions. So there is both a quantitative and qualitative aspect to public involvement. As one PIC described it:

“...a big part of my job is to involve the public early and often. I think that also a part of that is showing them how we’re using their input. That’s one thing I don’t think we do too well... We listen to folks at these public meetings, but they don’t really see how their input is being implemented into a project. And I think if they saw more of their ideas implemented and saw how we addressed those, I think that would give them more courage and more confidence to continue the process. I know the public’s perception is the government is going to do what they’re going to do regardless of what I say. That’s a hard stereotype to break because I think that’s the way it has been a lot in the past. I think if they see that we are truly listening and that we are doing everything that we can to implement their ideas and suggestions into the project, it will inspire them more.”

Other respondents spoke in terms of improving trust and the agency’s image with the public as a result of taking public involvement seriously. This is not to say that all stakeholders get what they want in a plan or project decision. That is an impossible criterion to meet. However, it is important that input is taken seriously and that there is feedback to the groups explaining why and how the input was used or not used. This suggests there must be an *iterative* approach to public involvement with feedback that goes well beyond legal requirements and many of the traditional public involvement procedures.

A topic where there is a major difference in the perceptions of internal and external participants is the role of information and education as public involvement “tools.” While the participants generally agreed informational efforts can be improved, internal participants were much more likely to say that “educating the public” is an important direction for public involvement, and in almost every instance this was followed by “educating the legislature.” A qualitative difference in these findings also exists. Most of the internal comments related to education implied that the public needs to be educated

in order to help them better understand the reasons for UDOT projects, reduce opposition or increase support for the job UDOT is doing, improve the department's image, or increase public and legislative support for funding UDOT projects. These comments tended to reflect a relatively unidirectional and somewhat self-serving role of education in public involvement activities. This theme was especially popular with maintenance staff. For example, in discussing incorrect perceptions people have about their jobs, one of the maintenance staff said:

“I think another thing we need to concentrate on, I know it costs a lot of money, but [it's] advertising. The public needs to know how important it is to be educated on what we really do. These people need to realize what we do and what it takes.”

A participant in another meeting stated he wanted legislators to “get with me in the snowplow.”

An internal participant discussing UDOT funding in general said:

“Money is probably the biggest problem. The whole thing revolves around having enough resources. Trying to ensure that priorities are identified is always a rather interesting process. Sometimes the public and legislature don't understand the state's real needs. It's a challenge for UDOT to make sure technical aspects are understood by the public when priorities are set. For example, when UDOT does repairs on I-15 before expanding local streets. This is necessary because highways are more important for the general public's transportation needs than local roads are. We need to better educate the public on why road repairs are so important.”

Another internal respondent spoke about the need to keep information clear, non-technical, and basic so it can be understood by the public.

External participants, on the other hand, especially planners and resource management agency and environmental group representatives, also discussed the need for public education, but the reason was to help citizens provide more useful and insightful input into planning. Several stakeholder groups pointed to the need for UDOT to also be educated on factors like community values and preferences, and accessibility problems and standards. From this perspective, the role of education in public involvement activities should be based on shared learning rather than on “educating the public.” For example, the external respondent who mentioned he thought UDOT had made up its mind about Legacy Highway prior to the public participation effort and needed to listen better to what the public was saying, also said, “Educating the public is a challenge too, [but] if you're going to have public participation you need to have a public that is educated on what you're talking about.”

An interesting twist on the need for more public education that was voiced by a variety of both internal and external participants was getting the public to understand the need for public transportation alternatives. Three Transportation Commissioners observed that

they had originally been opponents of TRAX, but are now strong supporters and would like to see TRAX and other public transit options emphasized all along the Wasatch Front. Many respondents, both inside and outside of UDOT, voiced similar attitudes but pointed out that there is a lack of support among the general public related to these options and the sooner the public can get behind them, the better. They said movement in this direction will require increased public education and improved planning tools. For example, one resource agency specialist said this requires a lot more planning “than the laissez-faire, western mentality has been willing to accept.”

Regarding specific methods to better engage the public, the most common response by both internal and external participants was that UDOT needs to be more proactive in contacting and soliciting input from a variety of stakeholders. This point was consistently made by the Transportation Commissioners and state and regional UDOT directors, and most planning and resource management agency representatives. As one UDOT employee put it, “At the long-range planning level, engaging people in a meaningful discussion is one of the most important things we have to do.” He also said this will require going through several cycles of showing how public input was used, and UDOT must establish trust with the public, and show them “if they get engaged in planning, they will get what they want.” Another employee kept referring to stakeholders as “customers” UDOT needs to listen to, and said it is not possible to “over communicate” with those customers.

Several external participants pointed out that a proactive outreach effort should include stakeholders that have disagreed with UDOT on past issues. They thought UDOT should conduct public involvement activities “even if they don’t have to.” These suggestions would help address the problem of trying to avoid conflict, which was discussed above. In addition, special interest group stakeholders felt UDOT representatives should make an effort to get on the agendas of other organizations to provide information *and* get feedback from the members of those organizations. Key considerations in this effort were facilitating two-way communication (and several respondents emphasized the need to generate a “dialog”), reducing the emphasis on public hearings, and using a variety of other public involvement forums depending on the issues, stakeholders, or type of involvement needed. For example, one external participant with a lot of public involvement experience had this advice:

“We tell folks that we’re going to listen, we’re going to try to understand, and we’re going to incorporate whatever we can into the final decision, and we have to deliver the whole way through. We’ve got to show them at the end that their issues were at least considered within the process... You know, we’ve basically bagged the concept of public hearings. My experience is they’re a waste of time... so we’ve kind of switched to, and I think it’s had some success, a workshop setting.”

Most participants who made forum recommendations agreed with this assessment that smaller group settings, hands-on workshops, and similar activities are much preferable to formal hearings. Some participants, including a few in the environmental focus group,

however, disagreed with this philosophy. They want to retain the formality of the hearing setting because they think it is important for participants to hear each others views.

While there were many recommendations for improving public involvement as noted above, in the final analysis, face-to-face methods in small group settings, where citizens feel comfortable and there is opportunity for dialog, tended to be the most common recommendation by both internal and external participants. This was especially true for those in planning or with natural resource or environmental agency backgrounds. As one UDOT employee noted, “The smaller the group the better the feedback, because we’re able to maybe personalize it a little more and it’s also pushing us to go out to them rather than holding a meeting and they come to us.” A member of a regional maintenance crew took it one step further when he said it makes more sense for one UDOT employee to go out to 500 homes and meet one-on-one with people, than to try and “make 500 people come to us.” Another internal respondent stated:

“You can’t skip those [hearings] because they’re federally mandated. [But] it seems to be the more grassroots you go the more trust we create and better communication. Exactly what that is, whether that’s a chamber of commerce... a PTA... a small civic group like a neighborhood community, talking with their representative and things like that...that’s where I think we should be going, but again, that’s where the money and time comes in—it takes more time. And it will cost up front but, in the long run, I truly believe it will have more benefit.”

Several respondents agreed with this assessment and pointed out that it was impossible to conduct an economic cost-benefit analysis of public involvement because the benefits are often intangible, and that works against the use of public involvement activities in the agency. Planners pointed out this work cannot be done with only one public involvement coordinator per region. Other people with public involvement responsibilities need to be located in each regional office, and they should have good working relationships with residents in the local towns and communities. There also must be consistency in the contacts; several respondents gave examples of times when mixed messages were sent by different UDOT contacts, which caused public relations problems for the agency. All of this, however, will take time, money, and dedication by administrators.

The effectiveness of Transportation Commissioners’ meetings as a forum for public involvement had mixed reviews. Several internal participants said one of the primary functions of Transportation Commissioners meetings is to allow public comment on projects and funding. However, another person noted, “Transportation Commissioners’ meetings draw out people and we get input, but often that input has been heard before. Once in a while we get surprised by something.”

Finally, perhaps the most creative public involvement “forum” was suggested by a participant who described an innovative process used by UTA where they worked with a community involvement team comprised of local citizens who provided direct input to contractors on the light rail project between downtown Salt Lake and Rice Eccles

Stadium. The citizen group even decided on quarterly incentive bonuses for the contractors based on their assessment of the work. This participant noted:

“They had a lot of motivation to be tough about it because it was their homes and businesses being impacted. It worked very well, actually. The contractor performed at 90% typically and got most of the bonus, and the people we dealt with in the neighborhood were happy... They were satisfied they had some measure of control over their destiny when such an impactable project was taking place on their doorstep. I think UDOT could do more of that.”

This speaks to the need for using more truly collaborative public involvement methods. The innovative public involvement efforts of the future may need to blend into the types of activities and arrangements that are generally only used with agencies and other partners that have formal project or planning authority with UDOT.

III. D. Theme 4: UDOT’s Public Image and Its Relationships With Other Entities

The fourth theme addressed during Phase II of the study was UDOT’s current image as a transportation department, and how internal and external participants viewed UDOT’s relationship with outside entities. Participants internal to UDOT were asked to name other agencies involved in transportation planning and to discuss the roles they played. External participants were asked to discuss their current relationship with UDOT, including what areas they thought were beneficial to both parties, and what areas they thought needed improvement. In their discussions about their relationships with UDOT, many of the external participants reflected on how that relationship has evolved over the past few years.

III. D. 1. UDOT’s Public Image

Many participants in the study, both internal and external, felt that UDOT’s public image has improved over the last 10 to 15 years, with the greatest improvements in the last two to three years. Although some participants still perceive UDOT to be “big, with a lot of legs, and unapproachable,” that image, in some people’s minds, is being replaced with an image of a large but more accessible organization. Part of the change in image has to do with the decentralization of the organization. People have found the decentralization efforts to be an effective method for establishing more personal relationships among UDOT personnel and local officials and residents, which in turn has improved communication between UDOT and the communities it works in. As one person put it, “it puts faces in front of the public.” Decentralization is seen as helping UDOT to be more in touch with local needs and concerns and more effective in getting people to participate in the planning process.

Part of the improved image also has to do with UDOT being perceived as a more open and inclusive organization. This study, along with the process of inviting individuals and focus groups to comment on the long-range plan and the strategy for developing it, was

used as one example of UDOT trying to include more of the public in their planning and decision-making processes. A few people attributed the improvement to the hiring of Public Involvement Coordinators, although many participants were not aware UDOT had hired these coordinators.

Another factor which played into UDOT's improved image was the effort put forth in preparation for the 2002 Winter Olympic Games. Comments were made regarding how well UDOT did in keeping the public informed of where and when construction was taking place and, although the construction was seen as an inconvenience, it helped public perception that UDOT made an effort to let people know what to expect. Some people noted the technology is now in place for UDOT to continue its efforts to keep the public informed of construction projects, which hopefully will help maintain the improved public relations. Another important point brought up regarding preparations for the 2002 Winter Olympics Games was the increased coordination efforts of all state transportation entities during that time. A person working in another agency stated:

“Yeah, we worked very hard and very together on that for a number of years, actually, and very cooperatively. We weren't territorial about it. I think it came together marvelously. Each allowed the other to do it, to perform in their area of expertise.”

Another individual discussed how UDOT, the cities, and the counties worked together to coordinate snow removal, and how well that worked for all involved.

Lastly, the concept of Context Sensitive Solutions (CSS) has boosted UDOT's image in the state by bringing the Department together with concerned and impacted communities to discuss how specific projects will be adapted to their areas. The concept appears to be well understood and appreciated by both external and internal study participants. CSS is seen by internal participants as a low cost way for UDOT to build relationships with communities by better understanding their individual needs instead of just looking at capacity. External constituents see CSS as a progressive program that acknowledges the impacts roads have on a community and the need to be sensitive to what the community really wants. As one participant stated:

“I've been involved for some time on the 3500 South rebuild, where they talk about Context Sensitive planning, and that's the first time they've done that. It's a good idea. To assume that the communities want to have input, and have important input, is a real good assumption to make.”

Although there were many positive statements regarding the improved image of UDOT within the state, there was some criticism of UDOT as well. The most common one was UDOT continues to be perceived as a roads department by the public and that this image will be hard to shake. A few participants also mentioned that UDOT is sometimes seen as arrogant and narrow minded, unable to see the big picture and how alternative modes of transportation fit into it. Some people perceived this problem to be a result of UDOT's history of being dominated by engineers, especially in upper management where

decisions are being made. A few of those who commented on this tendency felt engineers were inclined to forget about or downplay the impacts road construction has on people and the environment, and instead emphasize the benefits of roads and ignore alternatives to their proposals. One participant stated, “UDOT is one of the oldest, timed-and-grayed agencies in Utah. It is engineer-oriented, and engineers like pavement.”

Some people also felt the only reason UDOT has become more open and inclusive is due to lawsuits and scrutiny from the courts and the Federal Highway Administration. This was exclusively the impression of external participants in the study. One person summed up these thoughts with this statement, “The administrative penalty, the court rejects, the Legacy EIS, you know, that sort of thing, gets their attention.

III. D. 2. UDOT’s External Relationships

Responses from external participants to the question, *How would you characterize the current relationship between your organization and UDOT* were quite variable. While many state and federal agencies saw an improvement in their relationship with UDOT, other entities have seen deterioration.

Federal and State Agencies and UDOT

As previously mentioned, most of the federal and state agencies felt strongly that their relationships with UDOT had significantly improved over the last few years. Many of them noted that although there had been “bumpy spots” in the past, they, as well as UDOT, have been making an effort to improve communication. Part of this effort includes educating each other on their agencies’ objectives and responsibilities as mandated by both federal and state legislation. These mandates can limit the flexibility each agency has in regard to their ability to compromise, which adds stress to these relationships. As one federal agency person stated, “I think it’s all government, and I think the process is just probably pretty much the same, you know, just to continue working together to do a better job.”

In discussing the improvement in their relationships with UDOT, one federal employee gave an example of how the relationship has been improving. This person observed that, in the past, UDOT was inclined to wait until the last minute to apply for necessary permits when doing projects that would affect wetlands, and then acting annoyed at the agency when environmental analyses were needed, blaming them for the resulting project delays and increased costs. This attitude was seen as counterproductive and sometimes resulted in lawsuits to prevent UDOT from going ahead with projects that did not meet federal guidelines. This agency person noted the culture has been changing over the past few years, and UDOT has become more receptive to the agency’s help and more responsive to legal requirements. The relationship has improved greatly, and both agencies have a clearer understanding of each others’ roles and responsibilities.

This improved relationship and greater sensitivity on the part of UDOT to other state and federal agencies was expressed over and over again. Most of these agencies

stated they had a close, participatory, and friendly relationship with UDOT. A couple of comments that best sum up these relationships with UDOT are:

“Our relationship with UDOT is a close one. It’s a very friendly and cooperative one.”

“I would say we have a very good working relationship with UDOT. It’s very open.

It’s very participatory. They invite us to participate on everything from planning studies to commissioners meetings. We have a lot of interaction on the project level and planning level. So, I feel very positive about them.”

MPOs and UDOT

One study participant noted the Governor had created the MPOs to serve as the transportation planning bodies for the urban areas in Utah. This has required them to work closely with UDOT, which has resulted in the agencies becoming partners not only in planning but also on projects. All of the MPOs expressed a similar sentiment, that their working relationship with UDOT has become more of a partnership over the years. They emphasized the importance of these relationships for meeting the needs of their communities. A few concerns were expressed that some of the relationships have a competitive element to them, and it would be better if that could be eliminated. Another conflict noted was personality clashes between some MPO and UDOT personnel. People felt this would be worked out over time. Also, while most of the internal participants felt the MPOs should be a part of the state’s planning process, one interviewee found that concept “a bit scary,” because he feared it would give the MPOs too much voice in UDOT’s state planning efforts.

UTA and UDOT

Most participants who discussed the relationship between UTA and UDOT saw a strong need for a close working relationship between them, even though funding for the agencies comes from different sources. Many of these same people felt UTA and UDOT have been successful in their working relationship, and participants were able to supply numerous examples of where the agencies have successfully collaborated. In discussing their relationship with UDOT, the UTA representative observed:

“UDOT builds roads that our buses travel on. We always talk about transportation as a shared responsibility, a shared solution. We’re there not to replace the automobile, but to complement or supplement the transportation network in those areas where public transit can serve the community as well or better than automobiles.”

A second factor discussed in regards to this relationship was the importance of coordination between the two entities in planning for the future. A number of people, both internal and external participants in the study, felt it was important for the state to consider all alternatives when doing transportation planning, and that the two agencies working together would enhance that possibility.

Many members of the general public do not understand the different roles UTA and UDOT play. Some study participants, especially those involved in the person's with disabilities and low income focus groups, expressed concerns relating to UTA's responsibilities, assuming they were UDOT's responsibilities. For example, many of the concerns expressed by both of these groups had to do with where bus stops were located and their accessibility for individuals within these groups. Most of the people participating in these focus groups thought UDOT was solely responsible for constructing and maintaining bus stops. This same confusion arose regarding which streets were the responsibilities of UDOT and which were a county's or city's responsibilities. Participants stated they often felt they got the runaround from the various agencies and were always being told it was someone else's responsibility. This was especially a concern for the group with disabilities, who have a need for curb cuts of adequate length, smooth sidewalks, and access to buses and roads. They complained when there were problems in any of these areas, or too many different jurisdictions were involved and they were never sure who they should talk to.

Cities and Counties and UDOT

The relationship between UDOT and the cities and counties was primarily discussed by UDOT participants, most likely because no current city or county officials participated in the study. Most of these internal participants discussed the importance of including local officials at the planning table and the need to improve communications and relationships at this level. A few of them discussed the importance of communities keeping UDOT informed on land-use plans, so that big developments do not result in UDOT being taken by surprise and consequently being unable to meet communities' needs.

Special Interest Groups and UDOT

Those who were most discontent in their current relationship with UDOT were the special interest groups. These end user groups, consisting of people with disabilities, bicyclists, environmental groups, and advocates for low income citizens, stated they have not seen any improvement in their relationship with UDOT. Some of them noted things have progressively deteriorated. One person stated, "It seems like their reputation is on the down swing. Not that they had a good reputation to begin with." Most of the participants in these focus groups felt UDOT only complied with regulations pertaining to their concerns when they were forced to through lawsuits or threats of lawsuits. One person mentioned that some of the environmental groups hold more sway with UDOT because UDOT knows they will be sued if they ignore them. Individuals within the disabled group frequently mentioned UDOT's lack of concern in meeting the Americans with Disabilities Act (ADA) requirements and Section 504 of the Rehabilitation Act. They noted that compliance with ADA from the beginning would alleviate a lot of lawsuits and save the state money by avoiding having to retrofit. The bicyclists were of the opinion that the only reason UDOT hired a bicyclist/pedestrian coordinator was because they were required to do so by federal law, not because they truly wanted a better relationship with these groups.

In addition, members of these external focus groups felt that although UDOT goes through the motions of public involvement and getting their input, it is only because federal law requires it for funding, not because they care about what these groups have to say. The environmental groups, the persons with disabilities, and the bicyclists strongly expressed that they do not feel heard. They feel UDOT invites them to give their input, and their thoughts and ideas are dutifully written down by UDOT employees, but no follow through ever occurs. Some of the bicyclist group suggested that one of the main problems for them is that the coordinator is not given any authority to promote their needs.

Many of the external focus group participants expressed a high level of frustration with the issue of not feeling UDOT's decision-makers really cared about what they had to say. Members of the group with disabilities gave numerous examples of concerns they had already expressed to UDOT, but to which nobody seemed to be listening. These concerns included curb cuts that were not wide enough for wheelchairs to fit through, streets that had been repaved so often the asphalt was four inches higher than where the sidewalk meets the street, resulting in a lip that could potentially topple a wheelchair backwards (one participant said this had recently happened to him), and street lights with walk signals timed so short it was dangerous for a blind person or a person walking with a cane to cross. The bicyclist group had their own complaints, including how grates are laid in the streets vertically rather than horizontally and the way rumble strips are designed on some roads, resulting in extremely dangerous ruts that can cause bicyclists to be thrown from their bikes onto busy roads or into ditches. Many members of these groups expressed their concern that roads are very unsafe for anyone not in an automobile or bus. Pedestrians, bicyclists, and especially disabled people feel very vulnerable on Utah's roads.

Some members of the environmental and persons-with-disabilities focus groups noted that many of the problems regarding noncompliance with federal laws have to do with work performed by contractors, and that UDOT needs to be more conscientious about overseeing the quality of the contractors' work. One person noted UDOT appears to be more concerned with their relationship with contractors than with finding alternative ways of doing things and doing them right. Another participant noted contractors are almost always having to come back and redo their work to bring it into compliance with ADA requirements. It was suggested that all contractors should be made familiar with ADA requirements, and UDOT should make meeting ADA requirements part of every contract.

A lack of trust in their relationship with UDOT was another main theme in the external focus groups' concerns. This was expressed by some of the external interviewees as well. One of the bicyclists noted that he just assumed he would be treated badly by UDOT and was often made to feel like a second-class citizen because he didn't drive an automobile. One member of the disabled group noted that UDOT often uses the excuse that they don't have the funding to do something that would improve transportation quality for people with disabilities. That person expressed skepticism about this excuse, noting UDOT seems to have plenty of money for other projects. On the issue of trust, a

member of the environmental focus group stated, “By not having open disclosure and not being transparent, they have created suspicion about their motives and about their allegiances and alliances with other state entities and local governments.” On the flip side, however, an employee of UDOT noted they do not feel they can trust environmental groups because they are always suing UDOT. An individual from another government agency who has observed a lack of trust in UDOT’s relationship with certain factions of the public stated, “I’ve tried to advise them over the years that this is a problem you have. It’s holding you back. It’s keeping you from being as good of an organization as you could be. Why don’t you fix it?” Many of the internal interviewees also discussed the importance of public trust in what UDOT does. Some of them felt UDOT had made strides in improving their trust level with other agencies and local officials, but further work was needed to gain the trust of the general population.

Suggestions for Improving Relationships

A number of participants had ideas on how UDOT could improve its relationships with entities the Department works with and with the public, and on how they could increase the level of trust with these groups. One of the suggestions was that UDOT should always follow through on what they say they will do. As one participant noted, “Trust is built when you see sincerity in actions that corroborates sincere thought on the part of UDOT employees. Sincere behavior, truth, and honesty; this behavior builds trust.” Another suggestion was that UDOT make a stronger effort to follow not only the letter but also the spirit of federal laws, such as NEPA and ADA. One person with a disability would like to see UDOT have, as part of its mission statement, a goal that states the department will be in complete compliance with ADA. It was suggested that in order to do this UDOT decision-makers must make it a priority for the agency. A member of the bicyclist group requested UDOT adopt design standards that do not create barriers for bicyclists. For example, currently there are roads where six-foot shoulders suddenly converge to 18 inches on either side of an overpass. Lastly, some participants emphasized the importance of open and honest communication. One federal agency employee summed it up this way, “It seems like communication and personal relationships between agency representatives are really where the solutions happen.”

III. E. Theme 5: Assessment of UDOT as an Organization

Many of the comments people made during the interviews and focus groups dealt with UDOT as an organization. This issue was a discussion topic for the internal sessions, with questions focused on what people thought was effective about UDOT as an organization and what they thought UDOT might do differently to increase its effectiveness. While specific questions about UDOT as an organization were not posed in the external sessions, this issue came up frequently as people discussed long-range transportation planning and their relationships with UDOT. Everyone was asked their opinion about the mission and role of UDOT, so this is also a context in which discussion about UDOT as an organization occurred.

III. E. 1. Understanding of UDOT's Mission

UDOT's current mission statement reads: "Provide a quality, economical transportation system that is safe, reliable, environmentally sensitive, and serves the needs of the traveling public, commerce, and industry."

People had various understandings and opinions about the mission of UDOT. Much of the variation in what people thought about UDOT's mission was related to the fact that UDOT used to be the Department of Highways, but became the Utah Department of Transportation in 1976, at which time the scope of its authority changed. Some of the variation in responses was related to whether or not people felt UDOT had actually changed its focus over time to become more comprehensive in its approach to transportation planning.

The most common understanding of UDOT's mission by most people external to the organization is that it is responsible for planning, constructing, and maintaining state highways and streets, and some of them said UDOT coordinates the entire highway system. No one questioned UDOT's authority in road building, and many people were complementary of UDOT's engineering competencies. Some participants internal to UDOT noted that other people still see the Department as a roads department, and they admitted that is still pretty much UDOT's main focus. One person commented, "I think it's hard to change that image because the majority of the people in the state know them by highways... It's going to take a long time before the public recognizes them as the Department of Transportation serving all forms of transportation." Another person noted that when talking with Congressional people about highways, they normally ask what UDOT says, and when discussing transit issues, they ask what UTA says. "So even our federal partners kind of make that separation and put UDOT in the box with highways," said one participant. A few people who thought UDOT should be acting in an expanded capacity as a transportation provider nevertheless characterized UDOT as, "an engineer's world, focused on putting a lot of pavement down."

The most common understanding of UDOT's mission by most people internal to the organization, and by some people external to the organization, is that it is a more comprehensive transportation provider and plays a key role in the statewide transportation system. In this respect, people used phrases like "provide quality transportation," "satisfy customer demands," "ensure the safety of the traveling public," and "quality transportation today, better transportation tomorrow" (one of UDOT's mottos that can be found on its web site). Quite a few people referred to the fact that UDOT has some role to play in all forms of transportation in the state including roads, transit, aviation, and trails.

The current leadership in UDOT refers to a "four-legged transportation stool," with the stool being the main transportation driver and the legs being the key functions of UDOT. The four legs of the transportation stool are: maintain and preserve the existing infrastructure; maximize output and efficiency from the system; ensure the safety of users of the transportation system; and build capacity to meet the needs of the future. This

concept was referred to by several people from within UDOT and reflects the agency's current image of its mission.

A number of people talked about UDOT's mission in terms of "moving people and goods through the transportation system." The emphasis in these comments was on making sure transportation flows smoothly, getting people from one place to another safely and reasonably expediently, and managing mobility to benefit the economy. The emphasis in this view of UDOT's mission is that the department helps manage how the transportation system functions. The following quote illustrates this point:

"We want to be seen as kind of integrated with transit and everybody should be working together, and we don't want to just be seen as road builders. We want to be seen as folks that move people and goods, and we're not the only agency that's involved in doing that. But we want to be seen as being open to transit, to all types of transportation that are available... you know, that's our goal to understand how we can more effectively move people and goods and not just be seen as road builders, an agency that's just looking to build new roads and maintain those, but more the movement of people and goods."

III. E. 2. Organizational Leadership

The executive leadership within UDOT is generally perceived quite positively and thought to have the capability to institute change and tackle many of the transportation challenges that the department faces. This opinion was expressed by employees of the organization as well as people outside UDOT. UDOT's current upper administration was characterized as "future-oriented," "responsible," "able to appropriately delegate responsibilities," and "top quality." People were generally complimentary of the top administrators because they are perceived to be moving the department forward in a positive direction, willing to make changes, and interested in serving the public. These administrators were often given credit for the openness and positive change that many people perceive to be going on in the department currently.

Leadership and direction for UDOT is also provided by the Transportation Commissioners. Participants noted the Utah Transportation Commission, whose members are politically appointed, has authority to prioritize funding and spending for transportation-related projects, set policy direction for the department and exercise some oversight, and solicit public input into transportation decision-making. The opinion of one of the Transportation Commissioners was that the commissioners used to have too much oversight over UDOT and it hindered the department. He added that a good balance of power between the two entities was necessary and it is moving in that direction.

Opinions about the effectiveness of the Transportation Commissioners' leadership were mixed. Some people complimented them for holding meetings around the state, for being attentive and responsive to public concerns, for participating in the meetings of the MPO advisory boards, and for trying to keep in touch with UDOT's regional offices and

their concerns. Other people thought the Transportation Commissioners' decision-making was sometimes too politically motivated, the Transportation Commissioners were oftentimes too involved in project details and needed to be more focused on giving UDOT policy direction, and that the Commissioners lacked expertise in NEPA and sensitivity to environmental compliance.

III. E. 3. Organizational Structure and Function

Several issues concerning the internal operations of UDOT were discussed by participants. These comments mostly had to do with how the agency is structured and people's evaluation of the departmental reorganization that occurred in the mid-1990s. The related but somewhat distinct issue of how the department functions was also addressed. Most participants who discussed these issues said positive changes had occurred in the way UDOT is structured and the manner in which it functions, but a few suggestions for improvement were offered.

Some individuals noted that UDOT has gone through past internal changes in regards to the balance between centralization and decentralization. Most people perceive that, at the present time, decision-making authority is more decentralized in the four regional offices. For the most part, participants thought that allowing the regional offices to have more autonomy was appropriate and effective, enabling them to better address needs in their parts of the state. One person pointed out that a "regional approach is wonderful because it provides opportunities to build relationships. Relationships are going to be the key to our success in involving communities, in involving all stakeholders." Another person said UDOT needed to minimize the image of "big government" and get down to the level of the general public. A UDOT official said he is proud of employees who interact with customers on a regular basis and decentralization helps with that. The financial benefits of centralization may look good, but it is necessary to look at the bigger picture and consider time and efficiency gained with a more decentralized approach, said another person. However, a few participants admitted the need for some centralization, particularly of specialized functions, such as bridge engineering. One person did complain that decentralization had caused inconsistencies between the regions in the way things are done. Thus, most participants recognized that having a proper balance between centralization and decentralization was an important issue, and that certain functions were best handled either on a centralized or decentralized basis.

In terms of how the department functions, some participants talked about the need for more internal integration between various divisions or functions within UDOT. In particular, participants suggested better integration needed to occur between the Planning Division and other divisions, between the environmental and engineering people, and between the construction and maintenance portions of the department. A person internal to the department said the "silos need to be broken down." A person external to UDOT commented it is such a big organization that "oftentimes I get the feeling that the left hand doesn't know what the right hand is doing." By way of example, this person said, "I think their right-of-way and encroachment people are so busy doing the things that

they are doing that it is really hard [for them] to see anything off to the side. I'm not sure they know what anybody else in UDOT is doing.”

Other issues in terms of organizational functioning were mentioned. Several people commented that they thought the department was getting better at efficiently managing people and other resources, and that some redundancies were eliminated in the internal reorganization a few years ago. Some people complimented UDOT on its greater use of technology, particularly in terms of traffic information boards over the freeways and use of “Intelligent Transportation Systems,” but one area badly in need of technological improvement is accounts and billing. Being able to submit billings electronically and having faster payment turn-around is of concern to MPOs and local communities who are stretched thin financially and cannot wait for the length of time it takes to get their reimbursements from UDOT for work or projects completed. The use of electronic procedures in this area was thought to be a way to improve that function.

III. E. 4. UDOT's Organizational Culture

Participants often discussed the organizational culture of UDOT. Many participants internal to UDOT were cognizant of their agency's long history of being focused on road building, were aware of how UDOT is perceived by people outside the department (as noted above in section III.E.1), and were accepting of the internal changes occurring within the organization. They often commented that new ways of thinking about transportation do not come easy or fast because it involves changing a deeply ingrained agency culture that has generational aspects to it.

People primarily characterized the culture of UDOT as one dominated by an engineering mentality and framework. UDOT's engineering perspective was characterized as being too narrowly focused on constructing the transportation infrastructure and being less concerned about how people use it or what people want from it. While most people talked about this in a negative light, someone noted that the dominance by engineers was not bad in the past when the agency had a different mission: “Their training matched really well with building the interstate freeway system across the country. And that was to put a heck of a lot of pavement down. And that worked really well.”

However, UDOT's ability to engage the public and transition to more intermodal transportation thinking was seen by participants as inhibited by this engineering culture. In part this was said to be due to some arrogance on the part of engineers in considering themselves to be the transportation experts. The most polite comment on this tendency was stated this way:

“I am not an engineer. But I worked in an engineering world. And I can understand that engineering training is rigorous. And like anyone's training, there is some training that is held in higher esteem than other training. And if your training was not quite at the same level as their training, then you may not hold the same respect, you know. And so, that can have an impact on relationships and decision making, if one training is held to more importance than another training.

And so that was the problem when UDOT became a department of transportation when formerly they were a highway department.”

Some UDOT people admitted the agency’s collective training and skills are limited. As one UDOT employee admitted:

“We are great engineers. We are not public communicators. We can engineer the heck out of something, but we don’t necessarily know how to describe what we’re doing or how to communicate that. And I still think we’re unsure if we really want to ask for input for something that we’re engineering because we’re the experts. Why does an expert need to ask someone what they think or get input into the process? But there again, how do we become experts? We need to learn how to become a true communicating agency. Not just a public involvement coordinator. Not just a communications office, but as a department – how to communicate better.”

Some people talked about how entrenched the engineering culture is within UDOT because the organization is heavily staffed with engineers and so these are the people that tend to get promoted or reassigned to new tasks as needs arise. One person who had a long history working in UDOT said that engineers were regularly promoted into management positions and this was not always the best decision. Several people pointed out that engineers are particularly bad at integrating a human component into their thinking and, thus, are not very good managers, as illustrated by one person’s statement:

“When engineers run the business they leave the human part out. In fact, human beings can often be an impediment to getting ‘the business’ done. People need to talk to people. They need to understand and have a human connection about these major kinds of issues, and planning is clearly one of those. So, if they were going to be effective statewide, they need to keep themselves located in an environment where they have human beings who are interacting with local planning agencies and political entities and others.”

The constraints that the engineering culture imposes on UDOT were said to be quite common in transportation departments around the country. Participants generally admitted it is hard to change the agency when people within it are used to operating under a framework that has been in place for a long time. They referred to the difficulties of “moving people out of their comfort zones,” of convincing and reorienting them to doing things differently, and of transforming their way of thinking. A few people internal to UDOT admitted that some employees are still struggling with the new direction within UDOT and it was just going to take time and some staff turnover before change would really occur.

III. E. 5. Personnel Issues

Several issues related to personnel management were part of people’s assessment of UDOT as an organization. Some common themes were raised by people who were both

internal and external to UDOT: the agency is stretched too thin financially; UDOT employees have to work hard to do as much as they can with limited resources; and, the department loses well-trained employees to the private sector or to other agencies. These themes relate directly to the challenges UDOT faces in terms of highway system reaching capacity and the need to maintain existing infrastructure while growing the system.

UDOT employees elaborated on the theme of “being stretched too thin” in some detail, emphasizing they had done about as much as they could to economize in the face of budget cuts and that further cuts would start impacting the level of service they could give to the public. UDOT employees talked about having more work to do, having greater responsibilities, having to meet greater needs, and having to work overtime. People specifically mentioned the shortage of staff to review permits, the public involvement coordinators having no staff or budgets, the real estate people being “maxed out,” and employees in rural areas having to cover much more territory than the MPOs yet having their budgets cut. A few employees talked about there being a morale problem in the wake of wages not even keeping up with increasing benefit costs. Interestingly enough, UDOT employees expressed great pride in their work, so their frustrations seemed more to do with the inadequate time and money that limits their ability to do a good job and that does not adequately reward their efforts.

Other specific issues of concern to UDOT employees had to do with the fairness of status and pay differentials for construction versus maintenance work, and for training and advancement related to academic training versus the acquisition and enhancement of practical, job-related skills. Part of this relates to the engineering culture within UDOT. People who do not have college degrees and whose jobs focus more on the practical aspects of road construction and maintenance do not feel they get the same respect as people with college degrees who are in design and engineering. Several people commented on the fact that UDOT needed to acknowledge input from the “rank-and-file” and make them feel like part of the solution. One person noted that “some of the people who have the lower jobs have some of the best ideas.”

Participants external to UDOT had a different set of specific concerns. The concern mentioned most often was turn-over within the agency. This makes it difficult for someone from outside UDOT to get consistent and reliable assistance, and several people expressed frustration with not knowing who to call, or having to deal with someone different every time they did call. Someone suggested that UDOT needs a more structured system for addressing this turnover, especially when people retire, and should make sure there is some overlap so that the person leaving can train the person coming in. Another suggestion was that the agency should think more about cross-training so people acquire skills that give them broader perspectives and greater awareness of the bigger transportation picture.

One other area of particular concern to some external participants was UDOT’s staffing in the realm of environmental positions. One person took UDOT to task for putting engineers in environmental positions:

“My other pet peeve with them is in the way they set up their organization, their environmental office. If you go over there and look at it and see who works in their environmental office and what their background is, they’re all engineers. And I’ve told them for years, “You’re gonna get no respect, you’re going to be the Rodney Dangerfield of the environmental offices around the state because you have nobody that knows the environment in your office.’ And they keep telling me, ‘Well, we’re an engineering organization.’ [Our organization] has woken up and has hired a bunch of rabid environmentalists to diversify the agency’s attitude. UDOT has no environmental ethics at heart.”

Several other suggestions were made on how UDOT could be more effective at addressing environmental aspects of the department’s work: have an environmental coordinator in each of the regional offices; evaluate project engineers on how well their projects comply with environmental laws; and place a UDOT person in the Army Corps of Engineers’ office full time to deal specifically with transportation-related issues.

III. F. Theme 6: Long-Range Transportation Plan

The rationale for the USU research effort that involved conducting interviews and focus groups was to gather information that would provide input for the statewide, long-range transportation plan. Most of these sessions revolved around discussions pertinent to transportation planning, in general, or to the long-range plan, in particular. Consequently, most of the participants anticipated that the concerns they articulated, as outlined in the previous five themes, would be incorporated in some way into the long-range transportation planning effort.

This theme covers comments that pertain more specifically to the long-range plan. Participants offered some explicit recommendations in terms of the process of developing the plan, the content of the plan, and the anticipated outcomes of the plan.

III. F. 1. Process of Developing the Plan

The process by which UDOT develops the long-range transportation plan was considered an important issue by many participants. Of particular concern to them was how UDOT coordinated with other transportation providers and involved the general public in the discussion. When asked what needed to be included in the plan, one of the commissioners simply said, “If it involves all the right people, then it will help us direct funds and set priorities. We don’t know all the problems we have.” The importance of the process also was noted in another person’s statement:

“...it’s not the plan itself, but it’s the act of putting it together that’s the most important part. The plan itself is good, but it’s a piece of paper. The actual putting it together is more important because it creates an awareness of what the needs are and gets people involved. There’s a lot of coordination and, really, I think the assembly probably is more important than the plan itself.”

People recognized that the processes of inter-agency coordination and public involvement take time. A few people noted that UDOT seemed to be in a hurry to complete the plan and was not giving enough emphasis to the process component of the planning effort. As one external participant person explained it:

“I think UDOT does a really good job, especially at the policy level. But when they embark on a process, such as this long-range plan, it’s kind of like they are developing it and they don’t have time to complicate it with ideas from other agencies, like ours....They have this whole process laid out, and I said, ‘Well have you talked to any of the MPOs about it?’ And he says ‘No, we haven’t had time.’ Well, in reality, their long-range plan is going to have this big blank when it comes to the MPO areas....But we could learn so much from each other. The trouble is [they have] this time frame...and so [coordination] just slows it down. I don’t think they have adequately involved any of us in this long-range plan.”

Other participants representing agencies which already have long-range plans in place talked about the value of UDOT coordinating with them in the process of developing their plan. This coordination would help them to find the interface between their agencies’ plans and identify the influence the plans have on each other. When asked in what way UDOT’s long-range plan would be most useful to him, one MPO Director said,

“It would do a couple of things. With the state’s long-range plan, we would want to coordinate our plan with their plan. We would want to make sure that we are both going in the same directions, that we are both trying to accomplish the same goals. We both may have the same goal, but we may be going about it in a manner that would not benefit one another. That’s probably the biggest thing. In their long-range plan they would obviously be identifying improvements that they would be making over the next 20-25 years. It would help us to know what those were, then we wouldn’t have to necessarily concentrate our efforts in those same areas....It certainly would have an impact on what our future plans would be.”

The importance of UDOT coordinating its long-range plan with those of other agencies was mentioned by other participants as well. For example, a plan is in place that shows the location of and identifies the protection measures needed for historic resources in the state. In the past, these historic resources have been negatively impacted by highway construction projects because UDOT has not coordinated closely enough with the State Historic Preservation Office by using its historic/cultural resources management plans. Other similar concerns were expressed by those who manage wildlife habitat, wildlife migration corridors, wetlands, and scenic corridors.

One other general suggestion concerning the long-term transportation planning process was that UDOT should give high priority to extensive internal and external review of the draft plan and allow enough time for effective review to occur. Participants said UDOT should be certain to circulate the draft plan among those key stakeholders and interest groups identified earlier in the planning process as well as make a concerted effort to bring the draft plan to the attention of the general public. Some people suggested UDOT

might want to post the long-range plan on its website with a feedback mechanism to allow Internet comments to be submitted. Then, UDOT needed to be prepared to take the feedback seriously in revising the draft plan and explain whether or not, and in what ways, it used the feedback it received.

Several other suggestions about the long-range planning process were more specific in nature. One person from within UDOT talked about the need for coordination between the centralized and regional planning efforts of UDOT. This person cited the fact that local people, who were used to dealing with the regional offices of UDOT, were confused about the separate public outreach efforts that the central office of UDOT was doing for the statewide, long-range plan. He thought public input should be filtered through local governments, who would then work with the regional offices of UDOT to provide input for the statewide planning process.

Another specific suggestion about the long-range planning process had to do with information gathering and sharing. Many participants felt UDOT needed to make a greater effort to gather information applicable to transportation from the various government long-range plans already in place, especially from ones that have already incorporated public input and review. Examples of such plans are those produced by other state agencies, federal land management and regulatory agencies, Native American tribes, and cities and counties throughout the state. In addition, those participants who thought UDOT needed to be more proactive, rather than reactive, to changes that directly and indirectly affect transportation in Utah suggested that UDOT find and utilize more information that would help it predict change. The area of change mentioned most often was population growth and the development supporting it. Internal UDOT expertise should then be relied upon to interpret how that information could be used for better, more strategic transportation planning. Examples of agencies that could provide good information on population growth trends include the Governor's Quality Growth Commission, Envision Utah, or the Growth Prediction Office of the U.S. Census Bureau.

Some people suggested that UDOT review what other states are doing in terms of transportation planning to find good ideas that might work in Utah. The way that Minnesota and Georgia allow buses to use emergency lanes when traffic is backed up was raised as an example of how to facilitate public transportation even when money is not available to build dedicated bus lanes on some highways. In regards to looking for good ideas, one of the commissioners said,

“It’s also important to look at what other states are doing and what solutions they’ve developed. For example, AASHTO (American Association of State Highway and Transportation Officials) and their subsidiary, WSTO (Western States Transportation Officials) are groups we compare notes with. Last year, we met in Texas and they have a big plan for building a huge transportation system. They’ve dedicated one set of rails for goods and another for people. They’re also putting in a separate highway for trucks only. Now, they have much bigger cities than we have, but it’s good to look at what others are doing and how they are trying to solve their transportation problems.”

Similarly, another person thought the key to educating Utah's citizens about intermodal transportation options was to use real examples from other places. This person advocated "bringing in examples of other cities where it works, showing films, pictures, testimonials. . . . Those kinds of things will help a lot. Modeling a city after another city will often help a lot. Salt Lake City tried to emulate San Francisco and it had a huge influence. So, [we could] try to model ourselves after mass transit cities in Germany or Sweden."

One other specific suggestion about the process of developing the long-range plan was to solicit UDOT employee input and not make the long-range plan just an activity of the Planning Division. Many internal and a few external participants mentioned the need for UDOT to involve more of its employees at different organizational levels and with diverse expertise in the preparation of the plan, and then to keep them involved in the periodic reviews and possible modifications of the plan. Some UDOT employees indicated they felt left out of the long-range planning process but thought they had valuable input that would make the plan more effective. In talking about incorporating their expertise, one UDOT employee said: "And the quote here is, 'True greatness consists of being great in little things.' And I think sometimes upper management . . . coming up with some big idea usually will fail if they don't include the people who are down doing the work." Examples of employees who participants said should be, but are often not, included in the planning effort were the regional public involvement coordinators, maintenance personnel, and those at the technical level who have specific knowledge related to the longevity or maintenance requirements of road surface types or various forms of equipment. Participants suggested UDOT should develop a strategy to use innovative methods to get and keep employees involved in the long-range plan, similar to those used with the general public.

In sum, many participants addressed the importance of the process for developing the long-range transportation plan. They pointed out the need for UDOT to allow adequate time for the planning process in order to gather information from diverse groups and organizations, establish good inter-agency coordination and effective public involvement, and ensure the draft plan is properly reviewed. Participants generally agreed that if the process of developing the plan is complete, thorough, and legitimate, it would add credence and validity to the plan itself.

III. F. 2. Content of the Plan

In terms of the content of UDOT's statewide, long-range transportation plan, people talked about their overall vision of the plan, the framework that it should provide for thinking about transportation needs, and some of the specific issues that the plan should address.

Vision of the Plan

Some people view UDOT's long-range transportation plan as the document that will start to chart a new future for transportation in Utah. They hope it will promote the paradigm shift toward a more intermodal transportation system through policies, goals, and an investment strategy that will make that happen. Some people with this vision of the plan see it as part of an overall effort to connect land-use, natural resource, community, and transportation planning to create more sustainable communities. One participant said the plan should be more "expansive" and include "touchy-feely" issues like community values and the connection between quality-of-life concerns and transportation, while his colleague said it should talk about transitioning toward alternative fuels and new technologies that will help with energy conservation and air quality. In this regard, some participants recommended that the plan include specific goals such as reducing VMD and specific strategies for meeting the needs of special user groups who are not well served by the present transportation system.

Another, perhaps more focused view of the long-range transportation plan is that it is a document that will provide a master list of projects that are needed over the next twenty years, and more information on their prioritization, timing, nature, and cost. One of the commissioners said the plan would be useful, "to help us formulate the STIP, and to help us anticipate needs better. This would help us put more projects into the necessary channels earlier so we don't have to back up and retrace our tracks." Several people pointed out that it would be important to balance two separate aspects of such a project list: the "preservation plan" (identifying maintenance, improvement, or reconstruction projects for the existing infrastructure); and, the "capacity plan" (projects that would expand the capacity of the system). Most people said safety was an element that needed to be built into all of the projects, as illustrated by this quote: "Well, in that plan I would hope that they would cover the safety issues. Safety has to be one of the foremost challenges for UDOT to make sure that the projects deal with various aspects of safety across the system."

From the perspective of most people within UDOT, a long-range plan has several benefits. In general, the plan would help the agency to manage its resources and employees more efficiently. The agency could better identify and prioritize long-term maintenance needs and larger-scale construction projects, beyond those normally identified in the current three- to five-year planning horizon of the STIP. Related to this is the idea that the agency would better be able to plan for equipment needs over the years to facilitate predicted maintenance requirements. Identifying training needed for current employees to enable them to perform better in such areas as public involvement, which will become increasingly important in the future, was another frequent response. Also seen as a benefit of a long-range plan was being better able to stipulate qualifications for new employees in order for them to deal with changes occurring in the state, such as accelerating population growth, that can have far-reaching impacts on transportation planning. Finally, developing innovative ways to get new kinds of funding, with more flexibility as to how it can be spent to meet changing transportation needs, and supplementing funding received through traditional channels and spent in traditional ways, were also mentioned.

Framework for Thinking About Transportation Needs

Many participants did not have a clear vision of the content of the long-range transportation plan. Nevertheless, they were able to articulate what they thought the plan should do in terms of providing a framework for decision-making in transportation planning. In this regard, they referred to the plan as providing a “blueprint,” “guidelines,” “roadmap,” or “direction” for addressing Utah’s transportation problems. They think it should be reflective of the transportation needs, tell people what they should be focusing on, provide a rationale for decisions, and lay out possible strategies for addressing transportation problems. They want the plan to help Utah get out in front of the challenges that it faces in transportation planning.

Some participants are looking to the plan for solutions to transportation problems. In answer to the question about what should be in the plan, one of the commissioners articulated this view:

“There ought to be solutions within that plan to solve, as best we can, our most immediate and pressing transportation needs throughout this state. There needs to be solutions and answers to the problems that have been identified and that we’re aware of. Having said that, it will take a number of different types of solutions, different components to the solutions. We have to make sure we coordinate with the various interests that will bring those solutions to the table. We don’t want to be so turf-oriented or so narrow in our perspective that we can’t look at what’s the best interest and the long-term goals and solutions for the system of our state. We don’t want to forget who we serve and who we’re working for and what we’re trying to solve here. We’re not trying to protect the agency. I don’t think we should worry about trying to protect the agency’s future or whatever. We have to look beyond that and look for what’s really right for our citizens when we try to solve [transportation problems].”

Other participants see the long-range transportation plan as a document that could be used to guide discussions about transportation planning and that might lay out various choices and trade-offs that the public needs to make. One person stated it this way:

“Some of the things that I think would be different for UDOT to do would be to educate the public about transportation options instead of like...being reactive. Try to go out there and lay out options for people and say, ‘This leads to this, but you can choose this and it leads to another future.’ And, ‘Where do you want to lead to?’ ‘What is your grand plan?’ So that they can work in concert with these folks instead of just reacting to whatever happens.”

Recognizing that future needs are hard to predict and that the long-range plan needs to be flexible enough to respond to change, quite a few participants thought the plan should lay out criteria and strategies by which transportation decisions would be made. In particular, establishing criteria for how to prioritize projects was mentioned. People thought this was necessary to mediate the influence of politics in planning, but also to

coordinate long-term strategic considerations with the need for more short-term responsiveness to change. Some participants mentioned that the plan should lay out strategies for establishing better relationships and for coordinating planning efforts with other entities in the state involved in transportation planning. They also thought strategies for staying connected with key transportation stakeholders and the general public were important to include. In these senses, the statewide long-range transportation plan would incorporate more explicit goals and objectives for how UDOT intends to engage in the on-going task of transportation planning.

Specific Issues the Long-Range Plan Should Address

Participants offered some suggestions on specific issues they thought the long-range plan should address. These issues included corridor preservation, project prioritization, project sequencing, air quality, transportation funding, and a variety of issues related to the interface of transportation planning with other types of planning.

Corridor Preservation:

Corridor preservation was the specific issue that came up most often, especially among those in the transportation community. From a planning point of view, it is critical that corridor preservation be dealt with in advance of development pressures, thus making it an important, long-range planning issue. Many participants advocated that the long-range plan needs to lay out strategies for corridor preservation, but they also noted that this is a very tough planning issue because of a combination of legal difficulties involving the interface with NEPA, coordination with local governments that control land-use planning, and limitations on current funding that make it hard to get out ahead of the issue.

Excerpts from interviews with two participants external to UDOT illustrate the importance and also the difficulties of the corridor preservation issue. The first is from someone in another transportation agency who, in response to a question about what needed to be included in UDOT's long-range plan, said:

“Well, it would be great for UDOT to have a corridor plan and particularly in their case... UDOT should aggressively pursue advanced right-of-way preservation. That is a big issue, especially for UDOT. I started my career as a transportation planner 30 years ago... I was a highway planner... We always had great plans, but the plans required the preservation of right-of-ways. And, they required the cooperation of local government to do that, and almost a total reliance on the intelligence and goodwill of local government. The problem was that, even though we had a great plan, local governments were often at different levels of sophistication. Sometimes they could preserve and protect right-of-ways and sometimes they simply couldn't. They didn't have the policy mechanisms to do it because they were too small, and many opportunities were lost because right-of-ways that had been set aside in the plan were encroached upon. So, one of the big issues for UDOT is the advanced preservation of right-of-ways. It flies in the face, a little bit, of the NEPA environmental rules because it's hard to go

out and preserve right-of-ways when you are supposed to maintain a certain objectivity, in that [process], about what you are going to do in a corridor. The two things don't go very well together.”

In response to the same question, another person, who has worked with UDOT on long-term planning in order to help the department identify transportation corridors that avoid significant impacts to wildlife, commented:

“But there is a huge jump in the UDOT planning process between long-range and a project about to go. How and when and how frequently the resource agencies can and should interface between those two ends of the spectrum and timing is an area that needs further discussion and work. What we found with the North Corridor Study, for example, was that we could identify early on important resources and, you know, preferences, and UDOT was willing to listen to those, the communities less so. But because there was no funding and no real decision mechanism, the cities and counties were not willing to zone right-of-ways. And of course, if you did zone a right-of-way, this is occurring before NEPA and so there's a decision there that hasn't had public involvement. And yet, if you don't save a right-of-way, you end up with bigger problems. At the other end of the spectrum, when the project is almost done or when right-of-ways have been bought which occurred some place in between, by the time we get to a project near the construction phase, when it is undergoing NEPA, the options have all been foreclosed, the route has been chosen, and often the right-of-way has been purchased, and so the options are very reduced and limited.”

Project Prioritization:

Quite a few participants talked about the need to prioritize projects in such a way that the long-range plan could be implemented within foreseeable budget constraints. Most people involved in transportation planning admitted there will never be enough money to meet all of the transportation needs that have been identified. One official noted:

“It's not a wish list... because the needs are tremendous but the resources are not, and the plan really identifies what we can afford to do. Here's the prioritized top 20% or 30%, and this is what goes in the plan. The other 70% we're not going to put out. If we do, we've got to do some horse trading and kick one out and put one in so that we don't exceed that cap... It's a tool for prioritization with expenditure in mind.”

Many participants said the long-range plan should include the strategy or rationale UDOT is using to prioritize projects and then include a list of prioritized projects for the next 20 years in the plan. One person referred to the long-range plan as “the top of the filter for prioritizing project plans.” Criteria that participants suggested using to prioritize projects include safety concerns, how well a project meets current and anticipated transportation needs, the scope of the project, and consideration of financial constraints related to the project. With all of these considerations being equal, some participants suggest that, first, attention should be paid to maintenance of the existing system over new capacity.

Particular attention should be paid to how well short-term plans, with funding in place, correlate to the long-range plan. In other words, some participants feel that the long-range plan should include projects identified and funded in short-term plans as well as the longer term maintenance and larger scale construction projects. Several participants suggested that the Context Sensitive Solutions (CSS) approach to individual projects be expanded to fit into the strategy for prioritizing projects in the long-range plan. They felt that this approach is the best guidance UDOT could adopt in all of its dealings by considering if the project in question addresses the transportation needs of a specific community, would be an asset to that community, and is sensitive to and compatible with the natural and built environment surrounding it.

Participants were aware that future events might create the need for flexibility in the prioritization of projects, especially when it comes to long-term maintenance or large-scale construction projects. A specific example that was mentioned is the access road into the Eagle Mountain development, which will be inadequate to handle the anticipated traffic once the development is completed. This road is not currently on UDOT's three-year to five-year planning horizon. Many participants felt a change in the safety aspect of a highway, such as is the current situation with Highway 6 between Spanish Fork and Price, should qualify that highway for more immediate attention, moving it up in priority in the long-range plan. Preservation or enhancement of community amenities is another reason several participants felt could be used to justify a change in the priority of projects identified in the long-range plan. An example given was the increasing need to provide a truck bypass around the community of Moab, even though no project is yet in the planning stages.

Project Sequencing:

Several participants said the long-range plan should include a strategy that ensures better timing and sequencing of events required in support of both short-term and long-term projects. Participants felt that this would allow UDOT enough time to "do things right." This would apply to new construction, involving such things as corridor identification and acquisition, environmental and social impact analysis, mitigation measures, public involvement, and the other aspects of good planning. It would also apply to maintenance projects where, for example, a major concern should be adhering to the Americans with Disabilities Act.

Air Quality:

Several people said the long-range plan needs to address air quality issues. More specifically, the plan needs to show the amount of pollution that can be emitted from Utah's stationary and mobile sources and still allow the state to stay within federal guidelines. Balancing of where pollution comes from is done in a conformity trade-off analysis, which needs to be analyzed in partnership with the Division of Air Quality. While air pollution is a big issue for MPOs because they do transportation planning for the urbanized areas, UDOT needs to look at this issue on a statewide basis. Several participants were convinced that air pollution would be the single biggest factor affecting transportation planning, as well as growth, in the future.

Transportation Funding:

Given all of the transportation needs that people foresee, particularly as Utah moves towards a more intermodal system, one of the big questions participants raised was how Utahns were going to pay for future transportation needs. In relation to this, participants thought UDOT needs to pay particular attention to the long-range plans of other transportation providers and how those plans coordinate with UDOT's proposed long-range plan. They also said UDOT needs to pay close attention to the role alternative forms of transportation can play in meeting transportation needs for all citizens of the state. The department needs to take whatever steps necessary to gain more flexibility in how it can spend funds received from the federal level, e.g. pass through from the Federal Highway Administration (FHA), in order to support these alternate forms of transportation. UDOT should also indicate in the plan how it intends to develop or pursue new and innovative forms of funding. One example mentioned by several participants involved UDOT putting in place the mechanism to accept funds from developers for projects that have not been prioritized in statewide public planning processes and for improvements such as bicycle lanes and walking paths within and accessing their developments.

Other Specific Transportation Issues:

Participants commented on a variety of other issues that they thought should be included in the plan. One person talked about the importance of integrating open space, viewsheds, and public-land access considerations into transportation planning because of their relationship to quality-of-life concerns and defining community landscapes. Several people talked about having the plan identify wildlife migration corridors, sensitive species and habitats, and important water quality and watershed conditions that transportation planners needed to take into account. Another issue mentioned was the need for explicit analysis of environmental justice concerns and of the connections between planning in the areas of transportation, low-income housing, and job creation in cities. The specific needs of various areas were mentioned, such as the need to look ahead to having a freeway or another major transportation corridor through Cache Valley.

III. F. 3. Anticipated Outcomes of the Plan

Participants anticipated several different outcomes of the long-range plan. In general, they perceived that it has the potential to be a useful guide to transportation decision making in Utah over the next 20 years, especially if it is built on public involvement, fairly incorporates people's concerns, and is given some kind of "official existence" through having the Transportation Commission vote on it. Some people pointed out that a 20-year statewide plan serves as a tool to encourage citizens to think more strategically about the state's future transportation system and to engage them earlier in transportation project planning.

One aspect of the long-range plan that many participants mentioned specifically in the context of the difficulty of predicting development is the need for flexibility and adaptability over the life of the plan. Several participants used the term "dynamic" when describing the ideal long-range transportation plan. They thought UDOT should have as

part of the plan an internal monitoring and evaluation strategy for the plan. In addition, they thought it would be desirable for UDOT to have periodic external reviews of the long-range plan. These internal and external reviews would be aimed at giving UDOT the ability to adapt and change aspects of the plan as needed, so it would continue to be an effective document for guiding transportation decisions. This periodic review would accomplish two things. First, it would give the plan the “dynamic” quality most participants favor. Second, it would reduce the need for major changes in preparing the next major plan in 20 years.

IV. SUMMARY AND CONCLUSIONS

In Phase II of the 2003 UDOT Benchmark Study, the research team conducted semi-structured, face-to-face interviews and focus group sessions with people inside UDOT (17 interviews; 4 focus groups) and external to the organization (14 interviews; 5 focus groups). The participants were key stakeholders identified in collaboration with UDOT staff, and were selected to supplement the stakeholder group outreach effort. A total of 98 participants were involved in these sessions. Internal participants included Utah Transportation Commissioners, as well as UDOT administrators, public information coordinators, and regional maintenance staff. External participants included regional transportation and planning organization directors, natural resource and environmental agency staff, and representatives of four special interest groups. These information gathering sessions focused on questions pertaining to transportation planning, the long-range transportation plan, UDOT's image, the role of other entities in transportation planning, and UDOT's organizational structure and effectiveness. Six major themes emerged from these data.

Addressing the challenges involved in comprehensive and innovative transportation planning is the first major theme. The challenges are related, in part, to the Utah context, which is characterized by rapid growth, changing and diversifying transportation demands, greater public expectations for system-wide and intermodal solutions, and legal requirements for meeting environmental and social justice concerns. The rapidly changing context within which transportation planning occurs makes the predictions necessary for long-term planning difficult, which led many people to comment on the need for flexibility in the planning process so it can be responsive and adapt to unexpected changes. Other elements that make transportation planning difficult have to do with jurisdictional and decision-making separation between land-use planning and transportation planning, and between the different private and public sector entities involved in transportation planning. Many people discussed frustrations involved in trying to protect transportation corridors to meet future needs only to have development occur in ways they had not anticipated due to lack of coordination between people involved in zoning, land-use permitting, and infrastructure development. In particular, UDOT and other transportation planners are often caught off guard by local land-use decisions that have tremendous implications for transportation planning, especially when subdivisions or commercial development occur before roads and infrastructure are in place. The need for better coordination and information sharing between different transportation entities, especially UDOT, MPOs, UTA, cities, and counties, was commented on frequently, and the lack of these connections was seen as having to do with different organizational cultures, legislative mandates, funding sources, and past conflicts related to turf battles or personality issues. The interface between public and private sectors was described as problematic because land development is often driven by market factors and powerful private interests that can exert political influence with local officials and undermine longer term comprehensive planning efforts. The last relevant issue discussed is the need for a paradigm shift in thinking about transportation issues to meet future needs, which includes good transit alternatives and changing attitudes and behaviors of the general public.

The second major theme has to do with *coordination and leadership in transportation planning and partnerships*. Given the challenges previously mentioned, coordination of transportation providers was recognized as the most critical element for providing a transportation system that integrates various forms of transportation, services the needs of diverse users and stakeholders, and uses limited resources efficiently and equitably. Opinions varied on how this coordination should be facilitated and who should exercise leadership. Most people thought UDOT was a key player, some people suggested UDOT should be the leader, others thought another state agency should take on that function, and a few people thought UDOT's powers should be expanded (funding flexibility, zoning power, assuming functions of other entities). However, most people were cautious about centralizing transportation planning and preferred that various functions remain decentralized because this was perceived as the way to best stay in touch with local needs. People thought UDOT's coordination role could be achieved through better communication, partnership arrangements, cost sharing agreements, and the like.

Engaging the public in transportation planning was the third main theme. People said that public input into transportation planning needs to be early, frequent, representative, and taken seriously. To engage citizens more effectively, their input needs to be solicited in ways that facilitate two-way communication, provide real opportunity to influence decisions, and are inclusive of all concerned stakeholders. Specific suggestions (some of which UDOT is implementing) included: use of different types of public forums (e.g., small group workshops and stakeholder focus groups instead of formal hearings); UDOT staff participating in meetings held by other groups; greater use of new technologies and electronic forms of communication (especially the Internet); and, being more proactive in contacting the general public and soliciting people's opinions (surveys; door-to-door visits; extending personal invitations). Some differences between internal and external participants surfaced. Participants internal to UDOT said it is hard to get the public involved, especially in planning because of the long time horizons, but noted that people tend to be more concerned and involved at the project level, particularly when projects affect them directly or immediately. Many of them believe public involvement is important, necessary, and helpful, but internal confidence in the public involvement process needs to be developed because some people within UDOT think it gives unfair voice to vocal minorities. Participants external to UDOT were critical, skeptical, or cautiously optimistic about UDOT's public involvement efforts. Some of them commented that UDOT often ignores their input or structures public involvement to avoid conflict. They also noted that the current engineering culture can serve as a barrier to effective public involvement. Interestingly, while both internal and external respondents thought public involvement was important for educational purposes, they differed on who they thought needed to be educated and the focus of the educational information. Internal participants thought the public and state legislature needed to be educated about challenges the department confronts; external participants thought UDOT needed to be educated about the needs of various constituencies and more innovative ways to do things.

The fourth main theme relates to *UDOT's public image and its relationships with other entities*. The overall impression participants gave was of improvement in these areas. Many people said UDOT is making positive changes by implementing new thinking and creating a different atmosphere internally and by exhibiting a greater openness and sensitivity externally. These changes were attributed, in part, to hiring public involvement coordinators, the Olympic experience, and the Context Sensitive Solutions initiative. Others were less positive about the perceived changes in UDOT's public image, and gave credit for these changes to lawsuits and scrutiny from the courts and Federal Highway Administration. Some respondents discussed their concern with the UDOT contractors, stating they found them difficult to work with, and there was a perception contractors were interested only in constructing projects without concern for longer term maintenance and planning issues, or compliance with pertinent federal laws such as the ADA or NEPA. Suggestions on ways to continue fostering positive relationships with other entities included: more information sharing; consistent follow-through by UDOT employees; following both the letter and spirit of pertinent federal laws; and, open and honest communication. While positive change was lauded, UDOT must still deal with its long history of being perceived by others as an "engineer-dominated organization" focused solely on road-building and characterized by a "narrow, expert-oriented perspective." Some participants still perceive UDOT as a highways department and noted it will be hard for it to evolve organizationally and incorporate intermodal perspectives. Significant differences in the views of external participants working with state and federal agencies and those of special interest groups (such as persons with disabilities, bicyclists, environmentalists, and low income citizens) were found. Participants from state and federal agencies had a much better image of UDOT and their current relationship with UDOT personnel. Special interest groups remain suspicious of UDOT's motives and they do not feel they are able to have a trusting, effective relationship with UDOT.

An assessment of UDOT as an organization was the fifth main theme. People internal to UDOT said positive changes had occurred in the department's structure and functioning, but noted there is still a need for more internal integration, effective and timely communication, and balance between centralization and decentralization. In particular, some of them thought that the Planning Division needed to be better integrated with other divisions, that the construction and maintenance portions of the department needed to work more closely together, and that regional and the state offices needed to coordinate but regional offices should be the main liaisons with local entities because they better understand local needs. Most internal participants were well aware of their own history, of how UDOT is perceived by people outside the department (as noted above), and of the internal changes that are occurring. They often commented that change will not be easy or fast because it involves a deeply ingrained agency culture that has generational aspects to it. The new leadership in UDOT is generally perceived quite positively and thought to have the capability to institute change and to tackle many of the department's challenges. The main challenges the department faces relate to the highway system reaching capacity, maintaining existing infrastructure while growing the system, being stretched thin financially and in terms of employee responsibilities and work loads, and losing well-trained employees to the private sector. Issues of concern to employees had to do

with the fairness of status and pay differentials for construction versus maintenance work and for training and advancement related to academic training versus the acquisition and enhancement of practical, job-related skills. UDOT employees expressed great pride in their work and frustration with the inadequate time and money that sometimes limits their capabilities.

The sixth and last main theme has to do with the specific needs of the statewide *long-range transportation plan*. Many people felt the process used to develop the plan was as important as the content of the plan itself. Most participants viewed the plan as a document that could provide strategic direction but that needed to be flexible over time with frequent reviews and updates. Participants thought the plan should pay close attention to the role of alternative forms of transportation, should take into account land-use and transportation planning perspectives, and should integrate with the planning efforts undertaken by other transportation providers and by land and resource management agencies. In particular, integrating UDOT, UTA, and MPO plans was mentioned quite often, as was the need to correlate long-term planning with the need for short-term flexibility. The sequencing of corridor acquisition, environmental impact assessments, and NEPA analyses were noted as other important issues that needed to be addressed. Increasing the use of innovative transportation planning programs (e.g., the Corridor Preservation Program) was noted by participants with regional planning responsibilities.

APPENDIX A:

Interview and Focus Group Protocols

UDOT Project - Questions for *Internal Interviews*

A. Introduction... *I would like to thank you for taking the time to do this interview with me. I would also like to assure you that all information you share with me today will be kept in strict confidence, and your name will never be used during the analysis or documentation of the results of these interviews. Before we begin, do you have any questions about the interview process?*

1. To start, could you tell me what your role is within UDOT?

B. UDOT's Image and Role of Other Groups... *My first set of questions are very general and their purpose is to get your thoughts on the current mission of UDOT, the role other organizations play in Utah's transportation system, and what you think UDOT needs to do in the future.*

1. What, in general, do you think is the mission or job of UDOT?
2. Describe the formal responsibilities other organizations outside of UDOT have in transportation planning.
 - 2a. What do you see as UTA's formal role in transportation planning? - *This is only applicable in Regions 1, 2, and 3*
 - 2b. What do you see as the role of city and county governments?
 - 2c. What do you see as the role of the Metropolitan Planning Organizations?
3. One of UDOT's stated goals is to move from the role of being simply a "Highway Department" to a more comprehensive role as the coordinator of all transportation systems in the state of Utah. Do you think this is a realistic goal?
 - 3a. *(If no)* - Why not?
 - 3b. *(If yes)* - What would you recommend they do to meet this goal?

C. Transportation Planning and the LRTP... *This next set of questions deals with long range planning for Utah's future transportation needs, how UDOT can best meet those needs, and the role other groups may play in that process.*

1. In what ways do you think the transportation needs of the state are changing [in your region]?
 - 1a. Describe the role you see UDOT playing in meeting Utah's future transportation needs.

- 1b. What types of problems do you think UDOT faces in planning or implementing future projects?
2. Public participation is part of the planning and project decision-making process. What do you see as some of the challenges UDOT faces when implementing effective public participation?
 - 2a. Describe the ways in which UDOT coordinates its activities with other agencies involved in transportation planning and give your evaluation of that coordination.
 - 2b. What relationship, if any, do you see between UTA and UDOT in meeting Utah's future transportation needs? - *This is only applicable in Regions 1,2, and 3*
 - 2c. Describe ways in which UDOT works with the public and special stakeholder groups. How well do you think this is going?
3. As you are probably aware, UDOT is involved in developing a long-range transportation plan for the state. What do you think needs to be included in this plan?
 - 3a. In what ways would the plan be most useful to you?

D. UDOT as an Organization... *My last set of questions focuses on the organizational structure of UDOT and what you, as an employee of UDOT, think are some of the strengths and weaknesses of the organization.*

1. In what ways is UDOT particularly effective as an organization? (Probe: What makes you particularly proud to work for UDOT?)
2. Are there things that UDOT could do differently that might increase its effectiveness?
3. Evaluate the way that UDOT is currently structured and how it functions as an organization. By that I mean, describe for me what you see as some of UDOT's main characteristics of the agency.
4. UDOT is in the process of trying to make some significant changes, which is often difficult for large organizations. What recommendations would you offer UDOT to help institute change in a way that would be most helpful for the agency?

UDOT Project - Questions for *Internal Focus Groups*

A. *UDOT's Image and Role of Other Groups* (30 Minutes)... *In this first set of questions we would like you to spend about thirty minutes discussing your thoughts on the current mission of UDOT, the role other organizations play in Utah's transportation system, and any thoughts you might have on UDOT's effectiveness as an organization.*

1. What, in general, do you think is the mission or primary job of UDOT?
2. Describe the formal responsibilities other organizations outside of UDOT have in transportation planning.

(Probe: What do you see as UTA's formal role in transportation planning? - *This is only applicable in Regions 1,2, and 3*)

(Probe: What do you see as the role of city and county governments?)

(Probe: What do you see as the role of the Metropolitan Planning Organizations?)

3. One of UDOT's stated goals is to move from the role of being simply a "Highway Department" to a more comprehensive role as the coordinator of all transportation systems in the state of Utah. Do you think this is a realistic goal?

3a. (*If no*) - Why not?

3a. (*If yes*) - What would you recommend they do to meet this goal?

B. *Transportation Planning and the LRTP*. (60 Minutes)... *In this next section we would like you to focus more on UDOT's planning process and its relationships with other groups involved in transportation planning.*

1. In what ways do you think the transportation needs of the state are changing [in your region]?

(Probe: Describe the role you see UDOT playing in meeting Utah's future transportation needs.)

(Probe: What types of dilemmas (problems, barriers) do you think UDOT faces in planning for future projects?)

2. Public participation is part of the planning and project decision-making process. What do you see as some of the challenges UDOT faces in trying to implement effective public participation?

(Probe: Describe the ways in which UDOT coordinates its activities with other agencies involved in transportation planning and give your evaluation of that coordination.)

(Probe: What relationship, if any, do you see between UTA and UDOT in meeting Utah's future transportation needs?)

(Probe: Describe the ways in which UDOT works with the public and special stakeholder groups. How well do you think this is going?)

3. As you are probably aware, UDOT is involved in developing a long-range transportation plan for the state. What do you think needs to be included in this plan?

(Probe: In what ways would the plan be most useful to you?)

C. UDOT as an Organization (30 Minutes)... *We'd like to spend the last part of this meeting discussing the organizational structure of UDOT and what you think are some of their greatest strengths and weaknesses.*

1. In what ways is UDOT particularly effective as an organization?

(Probe: What makes you particularly proud to work for this organization?)

2. Are there things that UDOT could do differently that might increase its effectiveness?

(Probe: Evaluate the way that UDOT is currently structured and how it functions.)

(Probe: UDOT is in the process of trying to make some significant changes, which is often difficult for large organizations. What recommendations would you offer UDOT to help institute change in a way that would be most helpful for the agency?)

UDOT Project - Questions for *External Interviews*

A. Introduction... I would like to thank you for taking the time to do this interview with me. I would also like to assure you that all information you share with me today will be kept in strict confidence, and your name will never be used during the analysis or documentation of the results of these interviews. Before we begin, do you have any questions about the interview process?

1. To start, could you tell me what your role is within (name of organization)?

B. UDOT's Image and Relationships with Other Groups... This first set of questions is very general. Their purpose is to get your thoughts on the current mission of UDOT, and to understand the relationship, if there is one, between UDOT and (name organization).

1. What, in general, do you think is the mission or job of UDOT?
2. How would you characterize the current relationship between (name of organization) and UDOT?

If the respondent states there is a relationship, ask...

- 2a. What do you think are the most beneficial aspects of that relationship for your organization and UDOT?
- 2b. What do you think are areas of the relationship that could be improved?

If the respondent states there is no relationship, ask...

- 2c. Do you see the potential for a partnership between (name of organization) and UDOT?
- 2d. What conditions do you think would be necessary to make the partnership successful?

C. Transportation Planning and the LRTP... This last set of questions deals with long range planning for Utah's future transportation needs and ways in which UDOT can help meet those needs.

1. As you are probably aware, UDOT is involved in developing a long-range transportation plan for the state. What do you think needs to be included in this plan?
 - 1a. What are the changing needs of the state (your group)?
 - 1b. In what ways would the plan be most useful to you?

2. Public participation is part of the planning and project decision-making process. What do you see as some of the challenges UDOT faces in trying to implement effective public participation?
 - 2a. What have been your past experiences in dealing with UDOT?
 - 2b. *[If the respondent mentions problems then ask...]* How could UDOT address the problems you mentioned?
3. One of UDOT's stated goals is to move from the role of being simply a "Highway Department" to a more comprehensive role as the coordinator of all transportation systems in the state of Utah. Do you think this is a realistic goal?
 - 3a. *(If no)* - Why not?
 - 3a. *(If yes)* - What would you recommend they do to meet this goal?

UDOT Project - Questions for *External Focus Groups*

A. *Introduction and introductions.*

1. Tell me about your group and your group's general interest in transportation issues.

B. *UDOT's Image and Role of Other Groups* (60 Minutes)... *In this first set of questions we would like you to spend about thirty minutes discussing your thoughts on the role of UDOT and the responsibility other organizations have in meeting the transportation needs of the state of Utah.*

1. What are your expectations in regards to UDOT's mission or job?
2. Have you (or your organization) been involved in transportation planning in the past?

2a. If yes, how?

3. How would you characterize the current relationship between your organization(s) and UDOT?

(Probe: What do you think are the most beneficial aspects of that relationship for your organization(s) and for UDOT?)

(Probe: [*If they mention problems...*] What do you think could be done to improve the relationship?)

(Probe: Do you see the potential for a partnership (or increasing the partnership potential) between UDOT and (name of organization)?)

(Probe: What conditions do you think would be necessary to make the partnership successful?)

C. *Transportation Planning and the LRTP...* (60 Minutes) *This last set of questions deals with long range planning for Utah's future transportation needs and ways UDOT could meet those needs.*

1. As you are probably aware, UDOT is involved in developing a long-range transportation plan for the state. What do you think needs to be included in this plan?

(Probe: What are the changing needs of the state [your organization] that needs to be addressed in the plan?)

(Probe: In what ways would the plan be most useful to you?)

2. Public participation is part of the planning and project decision-making process. What do you see as some of the challenges UDOT faces in trying to implement effective public participation?

(Probe: What has prevented you from participating in UDOT projects in the past?)

(Probe: What have been your past experiences in dealing with UDOT?)

(Probe: *[If they discuss problems then ask...]* How could UDOT address the problems you mentioned?

(Probe: How do you want to participate in UDOT projects?)

3. One of UDOT's stated goals is to move from the role of being simply a "Highway Department" to a more comprehensive role as the coordinator of all transportation systems in the state of Utah. Do you think this is a realistic goal?

(Probe: *If no* - Why not?)

(Probe: *If yes* - What would you recommend they do to meet this goal?

APPENDIX B:

List of Interviewees and Participants in Focus Groups

LIST OF INTERVIEWEES AND PARTICIPANTS IN FOCUS GROUPS

Internal Interviewees:

Steven Bodily, Transportation Commissioner
Carlos Braceras, Deputy Director
Glen Brown, Transportation Commissioner
Hal Clyde, Transportation Commissioner
Tracy Conti, Region 3 Director
Geoff Dupaix, Region 3 Public Involvement Coordinator
Dal Hawks, Region 4 Director
Ahmad Jaber, Region 1 Director
Myron Lee, Region 4 Public Involvement Coordinator
Jerry Lewis, Transportation Commissioner
Andy Neff, Region 1 Public Involvement Coordinator
John Njord, Executive Director
Randy Park, Region 2 Director
Evelyn Tuddenham, Region 2 Public Involvement Coordinator
Kent Warnick, Transportation Commissioner
Jan Wells, Transportation Commissioner
Bevan Wilson, Transportation Commissioner

Internal Focus Groups:

Region 1 Maintenance Focus Group (Ogden) - 8 participants
Region 2 Maintenance Focus Group (Salt Lake City) - 7 participants
Region 3 Maintenance Focus Group (Orem) - 9 participants
Region 4 Maintenance Focus Group (Price) - 15 participants

External Interviewees:

Jon Callender, Kennecott Land
Brooks Carter, Army Corps of Engineers
Chuck Chappel, Wasatch Front Regional Council
Lowell Elhmer, St. George Metropolitan Planning Organization
Jim Gass and Jay Aguilar, Cache Metropolitan Planning Organization
John English, UTA General Manager
Bill James, Utah Division of Wildlife Resources
Grace Jensen, Bureau of Land Management
Lucy Jordan, U.S. Fish and Wildlife Service
Tom Knowlton, Envision Utah
Harlan Miller, Federal Highway Administration
Dan Nelson, Mountainland Metropolitan Planning Organization
Roger Roper, State Historic Preservation Office
Chip Sibbersen, USDA Forest Service

External Focus Groups:

Persons with Disabilities Representatives (Salt Lake City) - 8 participants

Bicyclists Representatives (Salt Lake City) - 5 participants

Utah Department of Environmental Quality (Salt Lake City) - 4 participants

Environmental Group Representatives (Salt Lake City) - 4 participants

Low Income Representatives (Salt Lake City) - 7 participants