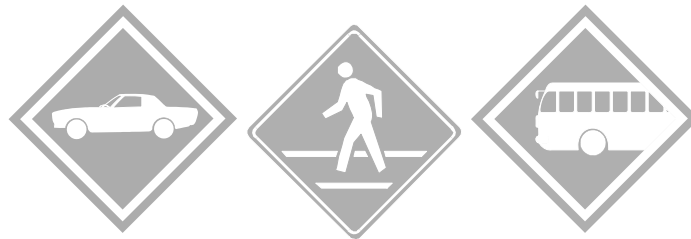


**LONG-RANGE
TRANSPORTATION PLANNING
IN UTAH:
SUMMARY OF RESEARCH RESULTS FROM
A STATEWIDE TELEPHONE SURVEY**

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



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

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From A Statewide Telephone Survey***

*Final Report from Phase I of the
2003 Utah Department of Transportation (UDOT)
Benchmark Study*

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The Utah Department of Transportation

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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 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). This report describes the design and sampling method along with survey results and conclusions from this statewide telephone interview sampling component (Phase I) of this research project.

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). The report for Phase II is titled *Long-Range Transportation Planning in Utah: Summary of Research Results From Interviews and Focus Groups*, by Joanna Endter-Wada, Judith Kurtzman, Michael Butkus, Dale Blahna, and Christina Klien, June 2003.

II. METHODS

Researchers at Utah State University utilized input from UDOT planning staff to develop a telephone survey instrument in November and December of 2002. Discovery Research Group, Inc. of Logan, Utah, was contracted to conduct the survey. The survey questionnaire was designed to collect data from the general public (*basic* survey) as well as additional data from selected key stakeholders (*extended* survey for those with special transportation needs, those with low trust in UDOT to develop fair statewide transportation plan, and those who have had experience with transportation planning). The survey was pre-tested for three iterations before finalizing the survey questions. The final basic questionnaire consisted of about 30 questions and took an average of 10 minutes to complete and the extended survey had about 50 questions and took 12 minutes (Appendix A).

A random sample of Utah households with listed telephone numbers was selected and stratified by UDOT's four Maintenance Regions (Figure 1), proportional by county population size within the regions. Because of low population and the large geographic area of Region 4, it was over-sampled by a factor of about three. The telephone interviews were conducted in January 2003. If the interviewer failed to contact a respondent due to non-answer or busy signal, contact was attempted up to five times. One adult over the age of eighteen in each household was interviewed. The number of contacts made was 4,331 with 2,561 completed interviews for a response rate of about 60%. Results are representative at a 95% level of confidence to +/- 2.2 points for the state and about +/- 4.0 points for each region.

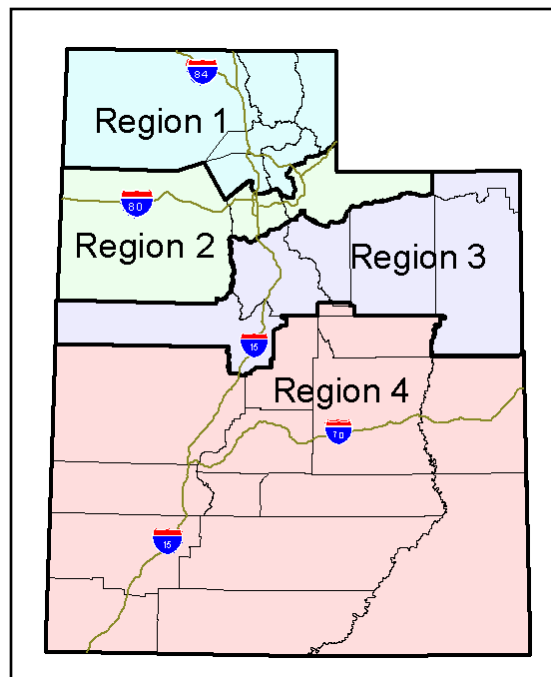


Figure 1: State of Utah, UDOT Maintenance Regions.

Sample sizes compared to Utah population figures from the 2000 Census are shown below. To compensate for over-sampling in Region 4, the statewide results were weighted so that the state sample contains responses proportionate to the population in each region.

- **State of Utah**
Adult population: 1,514,471
Sample size: 2,561
Weighted sample: 2,005 (Region 4 adjusted by 0.33)
- **Region 1**
Adult population: 578,763
Sample size: 550
- **Region 2**
Adult population: 672,159
Sample size: 889
- **Region 3**
Adult population: 284,405
Sample size: 426
- **Region 4**
Adult population: 171,384
Sample size: 696

Statistical analysis of key variables by subgroups was also conducted. Those subgroups consisted of respondents residing in the different UDOT management regions, age categories (18 to 24 years old, 25 to 44 years old, 45 to 64 years old, and 65 years and older), gender, those with special transportation needs, those with low levels of trust, those having past participation in transportation decision making, bicycle/pedestrian users, and public transportation users. Contrasts reported in the following text are significant at $p \leq .01$ levels.

III. RESULTS

III. A. General Sample Characteristics

The sample has about 59% adult females compared to the 2000 Census of 51% adult females residing in Utah. Region 4 has the largest percentage of females sampled (64.7%), followed by those sampled in Region 3 (60.8%) and Region 1 (58.9%) (Table 1). Average age of sample participants is 45.4 years old (median = 44 years old), with Region 4 having the highest median (48 years old) and Region 3 the youngest (42 years old). Region 2 has the largest percent of adults between the ages of 18 and 24 (17.3%) and Region 4 has the lowest (9.9%). Region 4 also has the largest percent over the age of 64 (22.3%) compared to Region 1 (17.5%), Region 2 (13.8%), and Region 3 (15.9%). These results would tend to suggest that the sample has a slight overrepresentation of women and respondents over 45 years old, which is typical in this type of telephone survey research.

Table 1: Gender and age of respondents.

	Region 1	Region 2	Region 3	Region 4	Statewide
Male	41.1%	44.2%	39.2%	35.3%	41.5%
Female	58.9%	55.8%	60.8%	64.7%	58.5%
18 to 24 years	10.6%	11.9%	17.3%	9.9%	12.3%
25 to 44	37.3%	40.9%	35.8%	32.2%	38.1%
45 to 64	34.5%	33.5%	31.0%	34.7%	33.4%
65 and up	17.5%	13.8%	15.9%	22.3%	16.2%
Mean age	45.9 years	44.7 years	44.3 years	48.7 years	45.4 years
Median age	46.0 years	43.0 years	42.0 years	48.0 years	44.0 years

III. B. Types of Transportation Used

Regarding the types of transportation used at least once a week, statewide 97.7% of respondents said they use a car, truck or van, 2.6% use a motorcycle, 11.3% use bus or light rail, 13.2% bicycled and 25.4% walked (Table 2). Only 0.5% indicated no transportation modes and well over one-third (37.3%) used multiple modes. Almost one-third (32.7%) indicated they bicycle or walk or do both at least once a week. In Region 2, 16.8% used public transportation compared to 10.6% in Region 3, 6.7% in Region 1, and only 1.6% in Region 4. Region 4 has the largest percentage of those who walk at 30.7%.

Table 2: Type of transportation used at least once a week.¹

Transportation Mode	Region 1	Region 2	Region 3	Region 4	Statewide
Car, truck, or van	97.5%	98.0%	96.9%	98.6%	97.7%
Motorcycle	3.1%	1.9%	3.5%	2.6%	2.6%
Bus or light rail	6.7%	16.8%	10.6%	1.6%	11.3%
Bicycle	12.0%	13.6%	12.7%	15.5%	13.2%
Walk ²	22.9%	25.8%	24.4%	30.7%	25.4%

¹ Percentages sum to greater than 100% due to multiple transportation modes selected by respondents.

² Actual question read was “Do you walk to work, to shop, or to other destinations (Does not include walking for fun or recreation; does include walking to school, to church, walking kids to school, etc.)?”

III. C. Importance of Transportation System to Quality of Life

Respondents were asked to rate 16 statements having to do with the importance of transportation to their quality of life. Prior to reading the statements, the respondents were told, “The state transportation system includes forms of travel such as buses, cars, bicycles, walking, and commuter trains.” They were then asked to respond to these items as “very important, moderately important, slightly important, or not important.” Statewide results are shown in Tables 3 through 6. All 16 items were rated as moderately or very important by over half of the respondents.

The statements concerning safety (e.g., for drivers, pedestrians, and cyclists) and access (e.g., travel time between destinations) (Table 3), affordable transportation costs, timely road maintenance, and clean air (Table 4) were very important for about

60% to 90% of the sample. Alternative transportation choices (e.g., interconnected system of roads, public transportation, bicycling, and walking routes) were rated as very important to about half of the respondents (Table 5). Of less importance to respondents' quality of life (but still rated as important) are access for recreation opportunities, tourism, and aesthetic issues (Table 6).

Table 3: Safety and access items importance to quality of life.

Statement	Not Important	Slightly Important	Moderately Important	Very Important	Average ¹
Safety for drivers, pedestrians, and cyclists	1.0%	1.4%	7.6%	90.0%	3.9
A safe bus or public transit system	8.7%	7.3%	21.6%	62.4%	3.4
Easy access to work, shopping, and other regular destinations	2.2%	3.4%	19.8%	74.6%	3.7
Transportation of consumer goods by truck and rail	3.5%	7.3%	27.1%	62.1%	3.5
Travel time between destinations	3.9%	6.2%	29.7%	60.2%	3.5

¹ Average scores are calculated on a scale where 1 = Not Important, 2 = Slightly Important, 3 = Moderately Important, and 4 = Very Important.

Table 4: Economic, efficiency, and environmental items importance to quality of life.

Statement	Not Important	Slightly Important	Moderately Important	Very Important	Average ¹
Affordable transportation costs	3.7%	2.9%	18.2%	75.2%	3.7
Timely road maintenance and repair	1.3%	2.3%	17.7%	78.7%	3.7
Clean air by reducing automobile and truck exhaust emissions	2.6%	4.8%	24.5%	68.1%	3.6

¹ Average scores are calculated on a scale where 1 = Not Important, 2 = Slightly Important, 3 = Moderately Important, and 4 = Very Important.

Table 5: Alternative transportation items importance to quality of life.

Statement	Not Important	Slightly Important	Moderately Important	Very Important	Average ¹
Commuter bus or rail system between cities and towns	9.4%	9.5%	28.0%	53.1%	3.3
An interconnected system of road, public transportation, bicycling, and walking routes	6.1%	10.8%	32.1%	50.9%	3.3
Walking and bike paths	10.4%	13.3%	33.0%	43.3%	3.1

¹ Average scores are calculated on a scale where 1 = Not Important, 2 = Slightly Important, 3 = Moderately Important, and 4 = Very Important.

Table 6: Aesthetic, tourism, and recreation items importance to quality of life.

Statement	Not Important	Slightly Important	Moderately Important	Very Important	Average ¹
The appearance of our major roads and highways in town	3.0%	9.2%	39.0%	48.9%	3.3
A quality transportation system to provide opportunities for tourism in the state	5.8%	10.7%	36.9%	46.5%	3.2
Traveling to outdoor recreation areas	6.3%	11.9%	36.6%	45.2%	3.2
Highway waysides and rest areas	4.4%	12.8%	38.5%	44.2%	3.2
Scenic overlooks along roads and highways	9.2%	17.3%	41.5%	31.9%	3.0

¹ Average scores are calculated on a scale where 1 = Not Important, 2 = Slightly Important, 3 = Moderately Important, and 4 = Very Important.

Further statistical comparisons between public transportation users and non-users, as well as between the bike/ped and non-bike/ped groups, revealed significant differences. Using independent sample t-tests, mean scores for the public transportation users and bike/ped users were significantly higher than their corresponding non-user counterparts for the following four items: 1) having a safe bus or public transit system; 2) having an interconnecting system of routes for different transportation modes; 3) having walking and bicycle paths; and 4) having commuter bus or rail system between cities and towns.

Further analysis also revealed regional differences between respondents. In comparing the importance scale mean scores between each region, 13 of the 16 quality of life statements have statistical differences (Table 7). Respondents from Region 4 think safety for transportation users is slightly less important than those in Region 2 and a safe public transit is less important than those in each of the other regions. Easy access to work is also less important to those in Region 4 than Regions 1 and 2, and travel time between destinations is less important for those living in Region 4 than for those in the other regions. Clean air from reducing automobile and truck exhaust is less important in Region 4 than Regions 1 and 2 and also less important in Region 3 than Region 2. An interconnected system of routes for different transportation modes, bike and walking paths, and commuter transit system is less important in Region 4 than for each of the other regions. Also, a commuter transit system is less important for respondents in Region 3 than for those in Region 2.

Table 7: Quality of life statements mean score statistical comparisons by regions.^{1,2}

Quality of Life Statement	Region 1	Region 2	Region 3	Region 4
Safety for drivers, pedestrians, and cyclists*	3.85	3.89 ₄	3.86	3.80 ₂
A safe bus or public transit system**	3.41 ₄	3.49 _{3,4}	3.33 _{2,4}	2.95 _{1,2,3}
Easy access to work, shopping, and other major destinations**	3.67 ₄	3.70 ₄	3.66	3.55 _{1,2}
Transportation of consumer goods by truck and rail*	3.49	3.45 ₄	3.45 ₄	3.59 _{2,3}
Travel time between destinations**	3.47 ₄	3.52 ₄	3.47 ₄	3.22 _{1,2,3}
Clean air by reducing automobile and truck exhaust emissions**	3.56 ₄	3.66 _{3,4}	3.51 ₂	3.45 _{1,2}
Commuter bus or rail system between cities and towns**	3.29 ₄	3.37 _{3,4}	3.19 _{2,4}	2.77 _{1,2,3}
An interconnected system of road, bicycling, and walking routes**	3.25 ₄	3.35 ₄	3.27 ₄	3.06 _{1,2,3}
Walking and bike paths**	3.05 ₄	3.17 ₄	3.07 ₄	2.89 _{1,2,3}
The appearance of our major roads and highways in town*	3.36	3.31 ₄	3.31 ₄	3.45 _{2,3}
A quality transportation system to provide opportunities for tourism in the state*	3.20	3.31 ₃	3.15 ₂	3.21
Traveling to outdoor recreation areas*	3.17	3.25 ₃	3.11 _{2,4}	3.28 ₃
Highway waysides and rest areas**	3.25	3.21 ₄	3.13 ₄	3.36 _{2,3}

¹ Mean scores were tested using ANOVA procedures. Statements with statistically significant differences between the regions' means are denoted by a single asterisk (*) at $p \leq .01$ and by a pair (**) at $p \leq .001$.

² Regions' statistically mean differences were revealed using Tukey's post hoc test. A subscript next to the mean score denotes the region whose score it differs from (ex., 3.5₄ in the cell for Region 2 means that the statement mean score for Region 2 is significantly different than the score for Region 4).

III. D. Satisfaction With and Concerns About Transportation in Utah

When the respondents were asked how they would rate their satisfaction with the state transportation system, about 80% of those surveyed in each region indicated they were very satisfied or satisfied (Table 8). More than 10% of those in Regions 2 and 4 are very satisfied while only about 3% or less in each region indicated they were very dissatisfied. Statewide, respondents between the ages of 45 to 64 were more likely to be dissatisfied or very dissatisfied (20.2%) than those between the ages of 18 to 24 (7.5%), 25 to 44 (12.3%), or those older than 64 (12%).

Table 8: Overall satisfaction with state transportation system.

	Region 1	Region 2	Region 3	Region 4
Very satisfied	8.3%	12.0%	9.3%	11.5%
Satisfied	69.7%	71.4%	71.7%	68.6%
Neither satisfied or dissatisfied	4.4%	3.3%	5.7%	4.8%
Dissatisfied	14.8%	11.3%	10.5%	11.9%
Very dissatisfied	2.8%	2.0%	2.9%	3.2%

Respondents were read the following statement describing UDOT’s responsibilities: “UDOT is responsible for constructing and maintaining state highways, freeways, and state roads through towns, but not local neighborhood streets.” Respondents were asked to keep this in mind when asked to rate the overall condition of state highways and freeways. Between about two-thirds and three-quarters of respondents in each region think state highways and freeways are in good or excellent condition (Table 9). Almost one-third in Region 4 (30.2%) thinks the roads are in fair or poor condition compared to about 24% in Regions 1 and 2 and 22.2% in Region 3. A majority in each region rated the roads as “good.”

Table 9: Overall condition of state highways and freeways.

Respondents’ Rating	Region 1	Region 2	Region 3	Region 4
Excellent	13.1%	14.4%	14.4%	11.7%
Good	61.8%	61.4%	63.4%	58.1%
Fair	21.8%	22.0%	18.4%	25.1%
Poor	3.3%	2.2%	3.8%	5.1%

When asked about the amount of emphasis UDOT places on different types of transportation, at least two-thirds of respondents in each region (65.8% in Region 1, 67.5% in Region 2, 72.9% in Region 3, and 68.2% in Region 4) think UDOT places the right amount of emphasis on highways and other types of transportation (Table 10). More than one-fifth of the respondents in Regions 1 and 2 think there is too much emphasis on highways compared to about 14% in the other two regions. Those older than 64 are less likely to think there is too much emphasis on highways (12.4%) than the other age groups (range between 18.2% to 21.2%). Respondents who have participated in transportation planning were more likely to say there is too much emphasis on highways (25.1%) than those without experience (17.1%), and non-participants were more likely to say there is the right amount of emphasis on both (70.1%) than participants (59.6%). Those who bike or walk as a mode of transportation were less likely to say there is too much emphasis on other types of transportation (9.0%) than non-walkers/bikers (14.9%) and more likely to say too much emphasis on highways (21.5% compared to 17.4%). Similarly, those who use a form of public transportation at least once a week were more likely to say there is too much emphasis on highways (28.4%) than non-users (17.6%), and less likely to say too much emphasis on other types of transportation (6.7%) than non-users (13.8%).

Table 10: Respondents’ opinion on UDOT’s transportation policy emphasis.

Does UDOT place:	Region 1	Region 2	Region 3	Region 4	Statewide
Too much emphasis on highways?	20.9%	20.7%	14.2%	14.7%	18.8%
Too much emphasis on other types of transportation?	13.3%	11.8%	13.0%	17.1%	13.0%
The right amount of emphasis on highways and other types of transportation?	65.8%	67.5%	72.9%	68.2%	68.2%

Respondents were also asked about their primary concerns about transportation in Utah. About 12% indicated they had “no concerns” and 3% “did not know.” The remaining respondents (n = 2,194) gave 4,113 answers. The most frequently mentioned issue were concerns related to road construction and maintenance (28.9% of all responses). Almost 10% of the respondents specifically mentioned they would like to see better repairs to damaged roads. Other frequently mentioned maintenance/construction items included better snow removal and transportation construction geared to accommodate population growth.

The next most frequently mentioned issue involved items dealing with public transportation (19.1% of all responses). Some of those concerns include establishing or extending commuter rail along the Wasatch Front (295 respondents) and establishing more bus stops or routes or simply making public transportation more convenient (87 respondents). Safety issues were also a concern (17.2% of responses). More than 10% simply said “safety,” but others were more specific and mentioned bad or aggressive or unsafe drivers, and there were 52 respondents who indicated there were dangerous roadways needing attention.

Another issue relates to traffic congestion (14.2%). More than 10% indicated there is too much congestion or it needs to be reduced. Nearly that many also said there are too many people or cars or traffic. There were also 52 respondents who mentioned a way to reduce congestion or accommodate the large number of commuters is to emphasize alternative transportation modes. Other transportation issues include access issues (5.7%) (e.g., easier or more direct access into cities), costs (5.6%) (e.g., more efficient expenditures), and environmental (5.4%) (e.g., improve air quality).

When examining the issues of concern first mentioned by respondents by UDOT Regions some interesting contrasts begin to emerge. Safety concerns were more frequently mentioned by those in Region 4 (21.5%) than those in Region 1 (11.3%), Region 2 (14.7%), and Region 3 (16.3%). Congestion was more frequently mentioned by those in Region 1 (21.4%), Region 3 (19.5%), and Region 2 (17.2%) than those in Region 4 (12.5%). Only 2.7% in Region 4 mentioned an environmental concern first compared to 7.0% in Region 2. Another interesting contrast is in the realm of public transportation where 26.0% of the respondents in Region 1, 22.7% in Region 2, and 17.4% in Region 3 mentioned it as a first response compared to only 9.6% in Region 4.

III. E. Special Needs/Accessibility

Respondents were asked if they or any member of their family need transportation or equipment to meet special needs associated with physical disabilities, age, or other special needs. Of the 2571 respondents, 183 (7.1%) said yes. Those 183 respondents were then asked if they had experienced problems meeting their transportation needs and 57 (31.2%) said yes. Those 57 were then asked to describe the problems. Ten respondents did not give an answer or gave an answer unrelated to the question, and the other 47 described a total of 57 transportation related problems.

The most frequently mentioned problem area had to do with physical or institutional access barriers (49.1% of responses). Some of those problems dealt with people in wheelchairs or using walkers encountering structural obstacles or mechanical restraints (e.g., lack of wheelchair lifts). There were several who mentioned the lack of transportation options in rural areas and several more thought the proximity of transportation hubs (e.g., bus stops) were too far apart. The next most frequently mentioned problem area dealt with public transportation (29.8%). Some of these concerns included lack of routes or buses and inconvenience or scheduling problems, including lack of buses when needed, taking too long to get places, and not enough routes. Another area of concern was in the realm of public transportation providers' personnel, with two people frustrated with rude or offensive employees and one person indicating personnel need better training on how to deal effectively and sensitively with people with disabilities.

All 183 special needs respondents were asked to express their ideas on how UDOT can better meet its objective of helping to provide fair and equal access. Of those, five did not want to comment, 47 said they did not know, and another 11 gave comments unrelated to the question, resulting in a total of 120 respondents who gave 167 responses. Of the 120, 23 respondents (19.2%) indicated they thought UDOT was already doing a good job in meeting this objective. Most frequently mentioned ideas dealt with expanding services (22.2%) including 13 people who want TRAX services expanded and 13 who would like to see better service in rural areas. Another six respondents mentioned more routes and four would like to see the purchasing and cancellation of transportation passes made more convenient. Other responses dealt with improving accessibility (19.8%), including addressing structural and mechanical barriers, providing better wheelchair and walker access, more transit stops, and increased awareness of elderly needs. An additional 28 responses (16.8%) dealt with keeping expenses and costs low and another seven specifically addressed infrastructural improvements (e.g., restrooms, road improvements, and shelters at stops). There were also 18 comments (10.8%) that dealt with informational needs and personnel training. Eleven respondents think brochures and signs need to be regularly updated to correspond with transportation system changes and another four thought personnel need better training.

III. F. Perception of UDOT and UDOT Decision-Making Process

When asked how familiar they were with UDOT, 64.6% of respondents in Region 4 indicated somewhat or very familiar compared to 76.3% in Region 2 and about 71% in both Regions 1 and 3 (Table 11). Respondents in Region 2 are more likely to be very familiar (23.9%) than those in the other regions (about 15%). It should be noted more than one-third of the Region 4 respondents (35.5%) are not familiar or had only heard of UDOT once or twice, compared to 28.4% in Region 1, 23.8% in Region 2, and 29.4% in Region 3 (Table 11). Respondents between the ages of 18 to 24 are less likely to be very familiar (10.0%) than those in the older age categories (25 to 44, 18.2%; 45 to 64, 23.1%; and over 64, 19.0%). Men are also more likely to be very

familiar (22.7%) than women (16.2%), and those who have experience participating in transportation planning are more than twice as likely to be very familiar (33.3%) than those without that experience (15.1%).

Table 11: Familiarity with Utah Department of Transportation.

	Region 1	Region 2	Region 3	Region 4
Not familiar	12.4%	10.7%	13.4%	16.7%
Heard of them once or twice	16.0%	13.1%	16.0%	18.8%
Somewhat familiar	57.1%	52.4%	55.2%	49.9%
Very familiar	14.5%	23.9%	15.5%	14.7%

When asked how familiar they are with UDOT’s decision-making process, only about one-quarter of the respondents in each region indicated they are somewhat or very familiar and about half said they are not at all familiar (Table 12). About 3% or less in Regions 2, 3, and 4 indicated they were very familiar and only 1.6% in Region 1.

Table 12: Familiarity with UDOT’s decision-making process.

	Region 1	Region 2	Region 3	Region 4
Not familiar	47.3%	46.1%	47.9%	52.4%
Heard about it once or twice	26.5%	27.3%	27.9%	23.9%
Somewhat familiar	24.6%	23.5%	21.6%	20.9%
Very familiar	1.6%	3.2%	2.6%	2.7%

III. G. Information Sources and Providing Comments

When asked how they receive information about UDOT, a majority both statewide and for each region indicated television reports (about 70%) and newspaper articles (51.0% or greater) (Table 13). The next most frequently mentioned sources are radio reports and family or friends. About half the respondents in Regions 1, 2, and 3 mentioned radio reports compared to 38.4% in Region 4. Only about 9% in Region 4 indicated the Internet compared to about 16% to 17% in the other three regions. Statewide only about 10% indicated public meetings and 13% said newsletters. However, 14.6% in Region 4 indicated public meetings compared to 7.4% in Region 3 and about 10% in Regions 1 and 2.

Table 13: Sources used to receive information about UDOT.¹

Information Source	Region 1	Region 2	Region 3	Region 4	Statewide
Television reports	69.0%	72.8%	68.5%	68.4%	70.0%
Newspaper articles	59.4%	59.0%	51.0%	52.0%	56.4%
Radio reports	49.4%	51.1%	49.8%	35.2%	48.2%
Family or friends	38.8%	38.3%	37.2%	38.4%	38.8%
At work	21.7%	24.0%	18.3%	21.9%	22.9%
Internet or e-mail	16.0%	16.8%	15.6%	8.9%	15.4%
Newsletters	13.5%	14.9%	11.6%	10.7%	13.3%
Public meetings	10.2%	10.3%	7.4%	14.6%	10.2%
None	3.6%	2.3%	3.6%	4.5%	3.1%

¹ Percentages sum to greater than 100% due to multiple information sources selected by respondents.

When asked their *preferred* method to *receive information*, the most frequently mentioned sources in each region are television, newspaper, and newsletter (Table 14). Public meetings were the least mentioned source in each of the regions along with the Internet or e-mail. When asked the *preferred* sources to *provide comments* on transportation decision-making, mail questionnaires, Internet questionnaires, and telephone were most frequently mentioned in each region (Table 15). Public meetings were a preferred source for 10.4% respondents in Region 4 compared to about 7% to 8% of respondents in other regions.

Table 14: Preferred sources to receive information about transportation decision-making.

Information Source	Region 1	Region 2	Region 3	Region 4
Newspaper	30.2%	24.2%	26.0%	27.2%
Television	28.9%	32.1%	30.7%	33.8%
Newsletter	19.0%	19.7%	20.0%	20.6%
Radio	11.5%	9.5%	11.0%	6.1%
Internet or e-mail	6.8%	9.2%	7.9%	5.8%
Public meetings	2.4%	4.4%	4.0%	4.9%
None	1.3%	0.9%	0.5%	1.6%

Table 15: Preferred sources to provide comments on transportation decision-making.

Information Source	Region 1	Region 2	Region 3	Region 4
Mail questionnaire	39.4%	36.1%	32.6%	40.0%
Internet questionnaire	29.0%	32.5%	31.4%	21.4%
Telephone	21.3%	21.5%	24.9%	24.7%
Public meeting	7.9%	7.2%	7.2%	10.4%
Personal meeting	1.5%	0.9%	2.2%	1.6%
Other ways	0.9%	1.7%	1.7%	1.8%

III. H. Perception of UDOT's Responsiveness and Fairness

Respondents were also asked to rate UDOT's responsiveness to the public as either excellent, good, fair, or poor. A majority of the respondents in each region thought UDOT's responsiveness to the public is good or excellent (Region 1, 52.9%; Region 2, 59.5%; Region 3, 62.0%; and Region 4, 58.2%) (Table 16). Respondents in Region 2 were more likely to rate the responsiveness as poor (8.5%) than Region 3 (4.4%), Region 1 (6.6%), and Region 4 (6.2%). Respondents who indicated they had low trust in UDOT to develop a fair statewide transportation plan were more likely to rate UDOT's responsiveness as poor (36.7%) and fair (48.6%) than those with moderate or high trust (2.0% poor, 32.6% fair). Also, those who have experience with transportation planning are less likely to rate the responsiveness as good (46.2%) and more likely to rate it as poor (10.9%) than those without such experience (53.3% good and 5.8% poor).

Table 16: UDOT's responsiveness to the public.

Respondents' Rating	Region 1	Region 2	Region 3	Region 4
Excellent	5.8%	7.5%	4.6%	7.2%
Good	47.1%	52.0%	57.4%	51.0%
Fair	40.5%	32.1%	33.6%	35.7%
Poor	6.6%	8.5%	4.4%	6.2%

When asked the amount of trust respondents have in UDOT to develop a fair statewide transportation plan, a majority in each region indicated a moderate amount of trust (Region 1, 70.6%; Region 2, 67.3%; Region 3, 73.3%; and Region 4, 70.6%) (Table 17). Region 2 has the largest percent of respondents with low trust (15.1%) followed by Region 1 (14.0%), Region 4 (13.7%), and Region 3 (10.1%). Region 2 also has the largest percentage with high trust (17.6%) compared to Region 3 (16.5%), Region 1 (15.7%), and Region 4 (15.3%). Respondents aged 45 to 64 are more likely to have a low level of trust (19.7%) than those 18 to 24 (5.2%). Also, those who have participated in transportation planning are also more likely to have low trust (18.4%) than non-participants (12.4%). However, it should be noted younger participants were less likely to have participated in transportation planning.

Table 17: Level of trust in UDOT to develop fair transportation plans statewide.

Trust Level	Region 1	Region 2	Region 3	Region 4	Statewide
High	15.7%	17.6%	16.5%	15.3%	16.6%
Moderate	70.6%	67.3%	73.3%	70.6%	69.6%
Low	13.8%	15.1%	10.1%	14.0%	13.7%

Of the 2561 respondents, 339 (13.2%) indicated they had a low level of trust. Those respondents with low trust were asked about the reason they felt that way, and four did not want to comment, ten gave comments unrelated to the question, and 15 indicated they did not know. The remaining 310 respondents offered 408 responses. The most frequently mentioned reasons (25.0%) had to do with the issue of UDOT

not planning effectively. Specifically, 24 respondents (7.7%) feel UDOT wastes time and money due to poor planning, and 14 (4.5%) think the freeway system is inefficient. Another 13 feel internal bureaucracy or agendas inherently inhibit good planning. The next most frequently mentioned reasons (18.1%) dealt with public relation issues with 34 respondents (11.0%) saying they were not informed or involved in decision making. Another 29 (9.4%) felt UDOT dismissed public opinion or comments and 11 (3.5%) felt there is poor dissemination of information. Almost 16% of the comments addressed specific projects such as Legacy Highway and public transit. Another 10.3% of the comments dealt with UDOT failing to plan for rural areas and another 7.1% had to do with UDOT wasting time or money (19 respondents cited poor quality of work or maintenance). Other areas of concern involved general distrust of government agencies, concerns related to road safety, and UDOT failing to respond in a timely matter when contacted.

The 339 respondents with a low level of trust were then asked for suggestions for UDOT to address their concerns. When asked what their ideas were, 16 did not want to comment, 21 gave comments unrelated to the question, and another 85 indicated they did not know, for a total of 217 respondents offering 259 responses. More than one-third of the responses (39.4%) are about listening to the public's concerns and engaging the public in the decision making process, with 50 respondents (23.0%) saying UDOT needs to consider and listen to public input and 31 (12.0%) saying there needs to be better dissemination of information. Another 38 responses (14.7%) dealt with specific projects (e.g., public transit, Legacy Highway, and expanding light rail). Other ideas included more efficient expenditures of both time and money (10.4%) (e.g., better workmanship and using quality materials), improvements to planning efforts (17.8%), and the need to address rural needs and concerns when planning (6.2%).

III. I. Participation in Transportation Decision-Making

Respondents were asked if they had participated in transportation decision making in one or more of five different ways: 1) put name on mailing list to receive newsletters, updates, or other information; 2) attend meetings of UDOT Transportation Commission; 3) contact transportation officials to find out about specific public transportation involvement opportunities; 4) write or e-mail a transportation official; and 5) volunteer to serve on a citizen focus group or citizen's advisory committee.

Of the 2,561 respondents, 552 (21.6%) indicated they had participated in one or more of these ways. Region 2 had the greatest percentage of participants with 36.4% followed by Region 4 (30.4%), Region 1 (19.4%), and Region 3 (13.8%). Statewide, less than 4% said they had served on a citizen advisory committee and almost 9% put their name on mailing list and wrote or e-mailed a transportation official (Table 18). Almost 11% of Region 4 respondents indicated they had contacted transportation officials to find out about public involvement opportunities. The lowest participation method in each region was by volunteering to serve on a citizen advisory committee.

Those 18 to 24 years old were less likely to participate (15.4%) than the overall sample (21.6%). Those with special transportation needs were more likely to participate (35.9%) than those without those special needs (20.4%), and those with low trust were more likely to participate (29.1%) than those with moderate or high trust (20.4%). Also, those who use public transportation at least once a week were more likely to participate (28.6%) than non-users (20.1%) and similarly, the biker and walker group was more likely to participate (26.6%) than the non-biker/walker group (18.4%).

Table 18: Ways respondents have participated in transportation decision-making.

	Region 1	Region 2	Region 3	Region 4	Statewide
Put name on mailing list to receive newsletters, updates, or other information	7.8%	10.5%	5.4%	9.9%	8.8%
Attend meetings of UDOT Transportation Commission	6.5%	6.9%	6.3%	9.3%	7.0%
Contact transportation officials to find out about specific public transportation involvement opportunities	7.8%	7.3%	6.3%	10.5%	7.6%
Write or e-mail a transportation official	8.5%	9.2%	7.5%	8.6%	8.7%
Volunteer to serve on a citizen focus group or citizen's advisory committee	3.3%	3.3%	3.6%	5.7%	3.4%

When asked if their participation was as an individual or to represent an organization, 81.9% said as an individual and 18.1% indicated an organization. About two-thirds (66.1%) of the past participants indicated they were satisfied their input was considered during the planning process with similar results for each region (Region 1 at 65.4%; Region 2 at 62.2%; Region 3 at 69.7%; and Region 4 at 69.6%). When asked why respondents felt satisfied (n = 392), more than half (51.8%) of the responses dealt with fairness of participation proceedings (e.g., UDOT listened to and considered input, and public and UDOT made decisions together). Another response category dealt with respondents obtaining favorable results (22.2%) (e.g., problems or concerns were addressed and the suggestions were followed up on). Other reasons were in the realm of good communication with UDOT (13.3%), with respondents indicating their questions were answered, their information needs were met, or UDOT made an effort to communicate successfully.

Of the 552 people who had participated in transportation decision making, 187 (33.9%) indicated they were not satisfied and offered 212 reasons for this sense of dissatisfaction. The most frequently mentioned response concerned a lack of fairness

in participation proceedings (41.5%). Individual responses included the sense the agency had made up its mind ahead of time or public meetings were taking place only to satisfy procedural requirements. Others felt their concerns were not addressed and some had the feeling they were powerless as individuals to influence results. The next most often mentioned reason for dissatisfaction dealt with unsatisfactory response to concerns (31.1%) (e.g., unclear or no response to concerns and problems raised were not addressed). There were several respondents who are dissatisfied because they felt a non-local agency does not care about local concerns, and several others felt UDOT has no interest in their input.

III. J. Priority of Transportation Needs

Respondents who indicated they have special transportation needs, have a low level of trust, and/or have transportation planning experience (35.0%, n = 896) were asked to prioritize 16 aspects of transportation needs in terms of allocating limited funds. They were asked what priority they would rate the items on a priority scale of one to five with 1 = very low and 5 = very high priority. Results are shown in Tables 19 to 21.

The highest rated item is improving the safety of highways and freeways, where more than half of respondents (53.8%) thought this should be a very high priority and only 2.4% a very low priority (Table 19). Other high priority items were in the realm of maintenance, where 39.3% thought maintenance and rehabilitation of bridges and highways should be very high and 30.2% rated increasing capacity for snow removal and salting as very high. In the area of alternative transportation, 38.6% think increasing opportunities for mass transit should have a very high priority (5.4% said very low), but only 17.3% think adding more bike and pedestrian pathways should be a very high priority (12.3% said very low).

Table 19: Funding priority for safety, maintenance, and alternative transportation improvements.

What priority would you give:	Priority Rating (1 = Very Low Priority and 5 = Very High Priority)					Mean ₁
	1	2	3	4	5	
Improving the safety of highways and interstates?	2.4%	3.8%	12.2%	27.8%	53.8%	4.3
Maintenance and rehabilitation of highways and bridges?	2.2%	2.4%	21.6%	34.5%	39.3%	4.1
Increasing capacity for snow plowing and salting highways and interstates?	4.3%	7.7%	28.5%	29.3%	30.2%	3.7
Increasing opportunities for mass transit?	5.4%	8.6%	22.5%	24.9%	38.6%	3.8
Adding more bike and pedestrian pathways?	12.3%	16.4%	33.3%	20.6%	17.3%	3.1

¹ Mean score (average) calculated on a priority scale where 1 = Very Low Priority and 5 = Very High Priority.

Also ranked high were items dealing with traffic improvements with 43.3% saying reducing traffic congestion should have a very high priority (Table 20). Moderately high traffic improvement items are reducing flow on existing highways and interstates (27.9% very high) and reducing commuting times (29.6% very high). Environmental improvement items were also given moderately high priority ratings (reducing air pollution from traffic with 39.9% very high and 5.3% very low and reducing the environmental impact of transportation projects with 28.4% very high and 6.8% very low).

Table 20: Funding priority for reduction of traffic and environmental improvements.

What priority would you give:	Priority Rating (1 = Very Low Priority and 5 = Very High Priority)					Mean ¹
	1	2	3	4	5	
Reducing traffic congestion?	4.2%	4.4%	16.9%	31.2%	43.3%	4.1
Reducing traffic flow on existing highways and interstates?	5.5%	6.6%	29.0%	31.0%	27.9%	3.7
Reducing commute times?	5.8%	10.1%	29.0%	25.5%	29.6%	3.6
Reducing air pollution from traffic?	5.3%	5.9%	20.6%	28.3%	39.9%	3.9
Reducing the environmental impact of transportation projects?	6.8%	9.7%	29.5%	25.6%	28.4%	3.6

¹ Mean score (average) calculated on a priority scale where 1 = Very Low Priority and 5 = Very High Priority.

Expanding capacity items were also rated as being high priorities. Improving and expanding capacity to keep people moving had a mean value of 4.0 with 36.2% rating it as very high, and improving and expanding capacity to keep freight and goods moving also had a mean of 4.0 with 33.2% rating it as very high (Table 21). Fewer respondents thought adding more passing lanes should have a very high priority (24.0%). Minimizing costs of transportation projects was also rated high with 39.0% saying it should have a very high priority and only 2.3% indicating the priority as very low. Essentially rated as neutral are improvements to benefit tourism and recreational travel in the state. Improving care and maintenance of scenic overlooks had a mean score of 3.0 (12.1% very high priority and 8.7% very low priority), and adding more waysides and rest areas on highways had a mean of 2.9 (13.7% very high priority and 13.8% very low priority).

Table 21: Funding priority for expansion, economizing, and tourism improvements.

What priority would you give:	Priority Rating (1 = Very Low Priority and 5 = Very High Priority)					Mean ¹
	1	2	3	4	5	
Improving and expanding capacity to keep people moving?	2.4%	5.0%	22.6%	33.8%	36.2%	4.0
Improving and expanding capacity to keep freight and goods moving?	1.7%	5.0%	22.8%	37.3%	33.2%	4.0
Adding more passing lanes on highways?	8.4%	13.1%	31.2%	23.3%	24.0%	3.4
Minimizing costs of transportation projects?	2.3%	5.4%	24.8%	28.6%	39.0%	4.0
Improving care and maintenance of scenic overlooks?	8.7%	22.3%	37.4%	19.5%	12.1%	3.0
Adding more waysides and rest areas on highways?	13.8%	23.1%	34.0%	15.5%	13.7%	2.9

¹ Mean score (average) calculated on a priority scale where 1 = Very Low Priority and 5 = Very High Priority.

In examining the priority mean scores by regions, several contrasts were revealed. Using ANOVA tests of statistical significance, seven of the sixteen priority statements have mean score differences at $p \leq .01$ (Table 22). Responses in Region 4 have lower mean scores than in each of the other three regions in terms of the priority given to increasing opportunities for mass transit and reducing commuting times. Region 2 responses have a significantly higher mean for adding more bike and pedestrian pathways than those in Region 4. Regions 1 and 3 have a higher mean when asked the priority of reducing traffic congestion than Region 4. For both environmental statements, reducing air pollution from traffic and reducing the environmental impact of transportation projects, the Region 2 mean score is significantly higher than respondents in Region 4. Region 4 respondents place a higher priority on adding more passing lanes on highways than those in Regions 1 and 2. Also, the responses in Region 3 had a significantly higher mean than the responses in Region 2 in terms of adding more passing lanes.

Table 22: Priority statements mean score statistical comparisons by regions.^{1,2}

Priority Spending Statement	Region 1	Region 2	Region 3	Region 4
Increasing opportunities for mass transit**	4.01 ₄	3.99 ₄	3.86 ₄	3.48 _{1,2,3}
Adding more bike and pedestrian pathways*	3.04	3.26 ₄	3.31	2.98 ₂
Reducing traffic congestion*	4.22 ₄	4.06	4.17 ₄	3.86 _{1,3}
Reducing commute times**	3.83 ₄	3.74 ₄	3.85 ₄	3.24 _{1,2,3}
Reducing air pollution from traffic**	3.88	4.09 ₄	3.96	3.70 ₂
Reducing the environmental impact of transportation projects**	3.59	3.82 ₄	3.54	3.33 ₂
Adding more passing lanes on highways**	3.31 ₄	3.22 _{3,4}	3.61 ₂	3.63 _{1,2}

¹ Mean scores were tested using ANOVA procedures. Statements with statistically significant differences between the regions' means are denoted by a single asterisk (*) at $p \leq .01$ and by a pair (**) at $p \leq .001$.

² Regions' statistically mean differences were revealed using Tukey's post hoc test. A subscript next to the mean score denotes the region whose score it differs from (ex., 3.5₄ in the cell for Region 2 means that the statement mean score for Region 2 is significantly different than the score for Region 4).

IV. SUMMARY

Utah residents believe transportation is very important to their quality of life, and they are generally satisfied with the transportation system, highway conditions, and existing mix of highways and other types of transportation. Concerns primarily involve construction/maintenance and safety issues statewide, and congestion and public transportation needs in northern Utah. Access, cost, and environmental issues are also of concern to the residents of the state, with air pollution the primary environmental concern. In general, the more politically charged issues of transportation costs, environmental quality, and bike/pedestrian and recreation access emerged as important, but these are secondary issues according to the results from both quantitative and open-ended questions on the survey. This indicates these are concerns of the general public, but not as central or as critical to transportation planning as the more traditional concerns of construction, maintenance, and safety. The two exceptions to this are the need for mass transit and need to reduce air pollution, which are particular concerns in the more urbanized parts of the state.

The picture is a bit more mixed regarding familiarity with UDOT and its decision-making processes. While about 70% of Utahns feel somewhat or very familiar with UDOT, only about 25% feel somewhat or very familiar with UDOT decision-making processes. Similarly, 22% have actually participated in past UDOT planning or project decisions. This indicates there are two very different levels of citizen involvement: a relatively high number (about one-fifth) are quite active and aware, while most residents (about four-fifths) are basically unaware of UDOT decision-making processes and participate very little, if at all.

Perceptions of trust and responsiveness are also mixed, but generally positive. Most Utahns (about 70%) have a moderate level of trust in UDOT to develop fair transportation plans, and the number of those with a low level of trust are about as equal to the number of those with a high level of trust (about 15% each). Most respondents rated UDOT's responsiveness to the public as fair to good, with a similar number rating it as either poor or excellent (5% to 9%, depending on the region). Of the 22% of respondents who have actually participated in UDOT planning or decision-making, about two-thirds felt their input was actually considered.

Several open-ended questions provided respondents with the opportunity to give suggestions for improving participation and perceptions of trust and responsiveness. First, most people get their information about UDOT from mass media accounts and word of mouth. While television and newspapers remain important preferred sources of information, more people would like to get information from newsletters and the Internet than currently do, and they would like to provide input via mail questionnaires, the Internet, and by telephone. Public meetings, the most traditional form of public involvement, and even personal meetings, ranked quite low as preferred ways to get and provide information. Most people are not activists and seem to prefer impersonal ways to provide input. Since law requires public meetings,

our results indicate a need to go beyond the legal requirements for public involvement and to diversify the UDOT outreach effort.

Responses to open-ended questions also indicate a shift in the general purpose or objectives of UDOT's public involvement efforts may be needed to recognize the importance of the *process* of public involvement as well as the *content* per se. For example, for reasons why people were satisfied or not satisfied their input was considered, about twice as many responses addressed the public involvement process, or the perceived *fairness* of the process, compared to the number of responses related to the actual outcome or decision. Recommendations for addressing low levels of trust were dominated by comments about public relations and the need to listen to the public as opposed to specific decisions with which respondents disagreed, like "Legacy Highway" or the need for more mass transit. These results mirror the literature on "procedural justice" that indicates most public involvement efforts focus on the desire to get content or opinion-oriented input, but that the amount and specific methods of public involvement are equally important. Key factors of procedural justice are the process must be transparent, the methods must be viewed as fair, and the agency must be open-minded and explain how and why the public input was or was not used. To meet these objectives, there must be a diversity of input methods, and the process must be iterative and responsive. It also means public involvement efforts are an end in and of themselves, and not just to meet the procedural requirements or to obtain content on specific planning or project decisions.

IV. A. Regional, Subgroup, and Stakeholder Differences

There were some interesting differences in the responses from different regions. Region 4 respondents were slightly more likely than other respondents to rate the condition of highways as poor or fair, and to say they were not familiar with UDOT decision-making processes. Region 1 and 2 residents were slightly more likely than other respondents to say too much emphasis is placed on highways, and less likely to say they felt their input was used in the planning process. However none of these differences were statistically significant and may simply be an artifact of sampling. Statistically significant findings were southern Utah residents (Region 4) are less likely to use mass transit than residents of the other regions, and residents of Region 2 tend to be more familiar with UDOT, which may be due to the 2002 Winter Olympic Games. Region 4 respondents are also less likely to say an interconnected system of different transportation modes and a commuter transit system are important to their quality of life than those in the other regions. Similarly, when asked about funding priorities, Region 4 respondents rated increasing mass transit opportunities lower than the other regions. In open-ended responses, residents of northern Utah were more likely to be concerned with mass transit, congestion, and air pollution, while residents in Region 4 were less likely to say they would like to receive information or provide input via the Internet.

Due to the large number of potential analyses, demographic and stakeholder subgroup analyses were only run for the primary quantitative variables: importance of

transportation issues to quality of life; familiarity with UDOT and UDOT's decision-making processes; overall satisfaction with the transportation system; perceptions of highway conditions; the emphasis on highways *versus* other types of transportation; and the trust, responsiveness, participation, and funding priority questions.

There was only one gender difference: males were more likely to be familiar with UDOT than females. There were many differences of opinion for respondents in different age categories, however. Respondents in the youngest (18-24 years old) and oldest (over 64 years old) age categories are less familiar with UDOT, and less likely to have participated in UDOT decision-making compared to young adults and middle aged respondents (25 to 64 years old). Older respondents were also less likely to feel there is too much emphasis placed on highways compared to other forms of transportation. And finally, respondents in the 45 to 64 age categories are less satisfied with the state transportation system than all other respondents, and they have lower trust levels than 18-24 year olds.

The lack of awareness and participation of 18 to 24 year olds is understandable; they have less experience in transportation issues, and probably less interest (at least compared to dating, starting jobs, and raising children) or need to be involved in highway and road decisions. And the skepticism of middle-aged respondents is understandable for the opposite reasons. This needs to be addressed with UDOT outreach efforts. But the lack of awareness and participation of older Utahns is a surprise. Certainly, these citizens would have the most experience with highways and transportation issues, and as they get older, one would expect a greater vested interest in having a diversity of transportation alternatives available. Furthermore, past studies have shown retirees are often more active and involved in civic affairs than working people because they have more time available and they are healthier and have more discretionary income than at any time in the past. It is possible older citizens are more linked to vehicle travel and traditional transportation approaches than other age groups, because they are most familiar with these, especially in western cities and towns where mass transit and other alternatives have not been available. If this is the case, it presents a special need for UDOT information and education programs. As the population of Utah ages, residents in the older age categories will *need* alternative forms of transportation. And since it appears younger and middle-aged adults appear more open (at least slightly) to transportation alternatives, the acceptability of non-traditional transportation alternatives may be increasing in Utah. This conclusion is similar to the findings related to respondents with special transportation needs.

We found that 7% of all Utah households (43,137) have at least one family member with special transportation needs, and one-third of those have had trouble meeting those needs. Most of these problems are related to accessibility, physical barriers, scheduling, information availability, and cost issues. A few people noted agency personnel are not responsive to their needs. These issues need increased attention, because this stakeholder group is becoming an increasing force in transportation—over one-third (36%) have participated in transportation planning (about 15,000

persons statewide), compared to 20% of those without special transportation needs. This number is likely to increase as the population and number of older residents increases in future years.

Another important stakeholder group consists of residents who use bicycles or walk as a form of transportation. While we could not get an estimate of the number who are *dependent* on walking or biking, we did find approximately one-third of Utah adults walk or bike as a form of transportation on a regular basis (at least once per week). This is a very large number of people (about 500,000 persons), and they are also more likely than non-bike/ped respondents to have participated in transportation planning and decision-making (27% compared to 18%). Predictably, the main concern of the bike/ped group is they feel there is too much emphasis on highways, compared to other forms of transportation.

IV. B. Conclusions

Extrapolating our findings to the general population, over one-fifth of Utah adults, or about 333,000 persons (based on the 2000 Census) have participated in transportation planning in one or more of the five ways identified in the survey. Past participants are especially likely to be middle aged, familiar with UDOT, be walkers or bikers, have a low level of trust, rate UDOT's responsiveness as being "poor," feel UDOT places too much emphasis on highways, and have someone in their family with special transportation needs. This should come as no surprise to UDOT staff who have been responsible for public involvement effort.

These results indicate UDOT is reaching a lot of Utahns, and many of these participants are satisfied they are being heard and most are satisfied with the transportation system and road conditions in the state. A few of the participants are not, and they seem to have very specific concerns that are personally relevant. These needs are important for UDOT to consider, and although these will become more important in the future, these are not necessarily reflective of most Utahns. Often it is advocates and disgruntled citizens who participate in public involvement efforts. While it is important for both information gathering and public relations reasons to provide these input opportunities, especially since so many state residents participate, most Utahns are still primarily dependent on the automobile and generally satisfied with the job UDOT is doing. Most people feel UDOT should continue to focus on traditional concerns (especially construction and maintenance) and do not see the need for a major overhaul in the UDOT mission. However, public transportation, congestion, transportation costs, and environmental quality are also important concerns that can be at least partially addressed with interconnected, multi-modal transportation options of which the general public may not be aware. The extent to which these options may become acceptable to the average, non-activist Utah resident, will depend on the quality, amount, and specific processes of education, outreach, and participation, and the types and effectiveness of partnerships UDOT implements to meet those needs in the coming years.

APPENDIX A:

2003 UDOT Benchmark Telephone Survey Instrument

2003 UDOT BENCHMARK TELEPHONE SURVEY**(Basic Survey)**

Hello, my name is _____. I am calling for Utah State University and we are conducting a survey of Utah residents about transportation issues in the state. This is a survey and I am not trying to sell anything. Your answers will help state officials allocate your tax dollars for transportation needs more efficiently. The survey should only take a few minutes.

Are you 18 years or older?

(IF NO, ASK TO SPEAK TO AN ADULT WITH THE MOST RECENT BIRTHDAY AND REPEAT INTRODUCTION.)

- 1) Which of the following types of transportation do you use at least once a week?

(YES/NO ANSWERS. READ RESPONSES.)

Do you use a car, truck, or van?

A motorcycle?

Do you use bus or light-rail (TRAX)?

Ride a bicycle?

Walk to work, to shop, or other destinations?

(DOES NOT INCLUDE WALKING FOR FUN OR RECREATION.

DOES INCLUDE WALKING TO SCHOOL, TO CHURCH, WALKING KIDS TO SCHOOL, ETC.)

- 2) How familiar, are you with the Utah Department of Transportation or UDOT?

Are you: (READ RESPONSES.)

Very familiar,

Somewhat familiar,

Heard of them once or twice, or

Not at all familiar?

- 3) The state transportation system includes forms of travel such as buses, cars, bicycles, walking, and commuter trains, and so it affects everyone's quality of life. How important to your quality of life is: (READ LIST. ROTATE)

Travel time between destinations? Would you say "very important, moderately important, slightly important, or not important?"

(REPEAT SCALE ONCE OR TWICE)

A safe bus or public transit system?

An interconnected system of road, public transportation, bicycling, and walking routes?

Safety for drivers, pedestrians, and cyclists?

Affordable transportation costs?

Traveling to outdoor recreation areas?

Scenic overlooks along roads and highways?

Easy access to work, shopping, and other regular destinations?

Timely road maintenance and repair?

Highway waysides and rest areas?

Clean air by reducing automobile and truck exhaust emissions?

The appearance of our major roads and highways in town?

Walking and bike paths?

Transportation of consumer goods by truck and rail?

A quality transportation system to provide opportunities for tourism in the state?

Commuter bus or rail system between cities and towns

- 4) Overall, how would you rate your satisfaction with the state transportation system today? Are you: (READ RESPONSES. ALLOW FOR "NEITHER SATISFIED OR DISSATISFIED RESPONSE" (3) BUT DON'T READ.)

Very Satisfied (1),

Satisfied (2),

Dissatisfied (4), or

Very Dissatisfied (5)?

- 5) What are your primary concerns about transportation in Utah? (OPEN ENDED, PROBE FOR UP TO THREE RESPONSES BY ASKING "IS THERE ANYTHING ELSE?" DO NOT READ LIST. KEEP ALL RESPONSES OPEN ENDED. DON'T USE PREDETERMINED LIST.)

- 6) Do you or any of your family members need types of transportation or special equipment to help people with physical disabilities, age, or other special needs? (THIS IS THE FIRST FILTER QUESTION. IF THE RESPONDENT ANSWERED YES, THEY WILL BE ASKED TO COMPLETE ITEMS IN THE EXTENDED SURVEY.)

No

Yes (IF YES,) What type of transportation or special equipment is that?

(IF YES, THE NEXT TWO QUESTIONS ARE PART OF THE EXTENDED SURVEY TO BE ASKED OF THE RESPONDENTS WHO INDICATED THAT THEY NEED TRANSPORTATION AVAILABLE FOR PEOPLE WITH SPECIAL NEEDS OR PHYSICAL DISABILITIES. IF NO, GO TO QUESTION #7.)

E1) Have you experienced any problems meeting those transportation needs?

No

Yes (IF YES,) Can you tell me what those problems were?

(PROBE TRYING TO DETERMINE WHEN, WHERE, HOW OFTEN.)

E2)The Utah Department of Transportation wants all people to have access to the state's transportation system regardless of age, income, special needs, or disabilities. What ideas do you have that would help UDOT meet this objective?

(OPEN ENDED. PROBE FOR UP TO THREE RESPONSES, "IS THERE ANYTHING ELSE?")

Next, I have some questions about the Utah Department of Transportation. UDOT is responsible for constructing and maintaining state highways, freeways, and state roads through towns, but not local neighborhood streets. So, when answering the following questions, please keep these types of roads in mind.

7) Overall, how would you rate the condition of state highways and freeways?
(READ RESPONSES.)

Excellent,

Good,

Fair, or

Poor?

8) From which of the following sources do you receive information about UDOT? (READ LIST BY ITEM AND CHECK ALL THAT APPLY.)

Newspaper articles?

Radio reports?

TV reports?

Internet or E-mail?

Family or friends?

At work?

Public meetings?

Newsletters?

- 9) How familiar are you with UDOT's decision making process? Are you:
(READ RESPONSES.)
Very familiar,
Somewhat familiar,
Heard about it once or twice, or
Not at all familiar?
- 10) How would you prefer to receive information about transportation decision making? (READ LIST AND ASK RESPONDENT TO PICK ONE.)
Public meetings,
Newsletters,
Internet or E-mail,
Newspaper,
Radio, or
TV?
- 11) What is the most convenient way for you to provide comments or feedback on transportation decision-making activities?
(READ LIST BY ITEM. ASK RESPONDENT TO PICK ONE.)
Mail questionnaire,
Public meeting,
Internet questionnaire,
Personal meeting, or
Telephone?
Other ways? _____
- 12) How would you rate UDOT's responsiveness to the public?
(READ RESPONSES.)
Excellent,
Good,
Fair, or
Poor?
- 13) Based on what you know or have heard about UDOT, how much trust do you have in the department to develop fair transportation plans statewide?
Do you have a:
(READ RESPONSES. THIS IS THE SECOND OF THREE FILTER QUESTIONS FOR EXTENDED SURVEY QUESTIONS.)
High level of trust,
Moderate level of trust, or
Low level of trust?

(THE NEXT TWO QUESTIONS ARE PART OF THE EXTENDED SURVEY TO BE ASKED OF THE RESPONDENTS WHO INDICATED THEY HAVE A LOW LEVEL OF TRUST WITH UDOT DEVELOPING FAIR TRANSPORTATION PLANS STATEWIDE. IF NOT, GO TO QUESTION #14.)

E3) Can you tell me the reasons for this low level of trust?
(OPEN ENDED. PROBE FOR UP TO THREE REASONS.)

E4) Can you think of anything UDOT can do to address your concerns?
(OPEN ENDED. PROBE FOR UP TO THREE REASONS, "IS THERE ANYTHING ELSE?")

14) In your opinion, does UDOT place:
(READ RESPONSES.)

- 1) Too much emphasis on highways,
- 2) Too much emphasis on other types of transportation, or
- 3) The right amount of emphasis on both highways and other types of transportation?

(THE NEXT QUESTION IS THE THIRD FILTER QUESTION. IF THE RESPONDENT ANSWERS YES TO ONE OR MORE OF THE FOLLOWING ASPECTS OF PUBLIC PARTICIPATION, THEN THOSE RESPONDENTS WILL BE ASKED QUESTIONS IN THE EXTENDED SURVEY.)

15) There are various ways citizens of Utah may participate in the transportation decision-making process. Have you ever participated by:
(READ LIST. ROTATE.)

Putting your name on a mailing list to receive newsletters, updates, or other information?

Yes No

Attending meetings of the UDOT Transportation Commission?

Yes No

Contacting transportation officials to find out about specific public involvement opportunities available in your area?

Yes No

Writing or e-mailing a transportation official?

Yes No

Volunteering to serve on a citizen focus group or citizen's advisory committee?

Yes No

(THE NEXT TWO QUESTIONS ARE PART OF THE EXTENDED SURVEY TO BE ASKED OF THE RESPONDENTS WHO INDICATED THEY HAD PARTICIPATED IN SOME FORM OF TRANSPORTATION PLANNING.)

E5) Did you participate as a private citizen or were you representing a group or organization?

Individual

Organization

(IF GROUP,) What group or organization were you representing?

E6) Were you satisfied that your input was considered during the planning process?

Yes (IF YES,) Why is that? _____

No (IF NO,) Why not? _____

(Remaining Extended Survey)

(THE REMAINDER OF THE QUESTIONS ARE TO BE ASKED OF ALL EXTENDED SURVEY PARTICIPANTS.)

E7) UDOT planners consider different aspects of transportation needs when deciding how to allocate limited funds. What priority should the following items have for funding on a priority scale of one to five where 1 = very low priority and 5 = very high priority. What priority would you give: (ROTATE. READ LIST.)

Improving the safety of highways and interstates?

Adding more bike and pedestrian pathways?

Improving and expanding capacity to keep people moving?

Reducing air pollution from traffic?

Improving and expanding capacity to keep freight and goods moving?

Reducing the environmental impact of transportation projects?

Adding more passing lanes on highways?

Maintenance and rehabilitation of highways and bridges?

Reducing traffic flow on existing highways and interstates?

Increasing opportunities for mass transit?

Reducing commute times?

Increasing capacity for snow plowing and salting highways and interstates?

Minimizing costs of transportation projects?

Improving care and maintenance of scenic overlooks?

Reducing traffic congestion?

Adding more waysides and rest areas on highways?

(AFTER READING PRIORITY ITEMS, PROBE FOR ANY ADDITIONAL ITEM BY ASKING “IS THERE ANY OTHER ITEM THAT UDOT SHOULD CONSIDER AND HOW WOULD YOU RATE THAT ITEM ON THE PRIORITY SCALE?”

(Basic and Extended Survey)

I have just a few more questions.

16) Are you a member of a civic organization or interest group that has concerns about transportation issues in Utah?

Yes No

(IF YES,) What is that organization’s name? _____

17) Gender (IDENTIFY BY VOICE.) ____ Male ____ Female

18) What county do you live in? (USE PRE-CODED LIST.) _____

19) What is your zip code? _____

20) In what year were you born? _____

(CLOSING)

These are all the questions I have. Thank you for your time. If you are interested in viewing the results of this survey, it will eventually be posted on the UDOT web site at www.udot.utah.gov/. The website also contains more information about the transportation planning process.