

**VOLUME III, SECTION VIII.
RESEARCH DETAIL**

This section presents details of the research in the following parts:

A. MEASUREMENT

- A1. Attitude Scale
- A2. Interview and Questionnaires
- A3. Supplementary Interviews

B. SUMMARY STATISTICS

- B1. Summary Statistics for MPOs Combined
- B2. Mean Quality and Effectiveness Response by Location
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C. INTERVIEW RESPONSE

- C1. Categories of Interview Responses and Percentages
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**VOLUME III, SECTION VIII.
A. MEASUREMENT**

- A1. Attitude Scale. This part of the report summarizes the factor analysis of the original 17 items generated to measure the overall quality of the process. The factor structures, reliabilities, and final scale are presented.
- A2. Interview and Questionnaires. This part presents the mailed questionnaire and the interview created to assess the effectiveness of the MPO process. The questions correspond to specific issues identified in our scope of work, and which we were directed to explore.
- A3. Supplementary Interviews. This part contains two interview forms that were developed to obtain information on two issues:

First, the perception of MPO participants in multiple MPO regions, regarding the advantages or disadvantages of multiple MPOs. Along with questions in the instruments administered to participants in single MPO regions, this interview produced data reported in Section VIII, C of this report.

Second, the perception of a limited number of observers, not associated directly with the MPOs, but in positions to comment on their effectiveness. These responses were media affiliated, or academic, or business people with transportation planning expertise. These points-of-view were collected simply to check on the general tone of the interviews from the different MPOs.

A1. ATTITUDE SCALE

Seventeen items were written to assess respondents' attitudes toward the overall operation of the MPO process. Principal components analyses were used to determine whether these items represented a single or more than one underlying construct. Principal components analysis is a statistical method that operates by identifying item sets with similar inter-item correlations. Items that correlated more highly with items in that set than with other items form a component, also called a factor. Principal components analyses were conducted for surveys, for interviews, and by location, with no differences in results that affected scaling of the items. Therefore, the results of the principal components analysis of the aggregated data set are presented here. Results suggest a single factor underlies items 1 through 15. Attitude was computed by averaging responses across items 1 through 15. (A sample of the Attitude Survey is located in Volume III Appendix.)

Table A1 Principal Components Analysis of Attitude Scale for Aggregate Data
(N of items = 17)

Item Number	Principal Component Loading		
	Factor 1	Factor 2	Factor 3
ITEM 7	.83	.13	.01
ITEM 5	.81	-.15	-.04
ITEM 2	.81	-.09	.09
ITEM 6	.79	.12	.01
ITEM 11	.78	.14	.02
ITEM 13	.75	-.23	-.07
ITEM 10	.75	.19	.07
ITEM 4	.72	-.06	.12
ITEM 14	.71	.23	.01
ITEM 8	.71	-.27	-.09
ITEM 15	.71	.20	-.16
ITEM 12	.70	.10	-.04
ITEM 9	.69	-.18	.12
ITEM 1	.63	-.12	.04
ITEM 3	.61	-.35	-.12
ITEM 17	.25	.77	.19
ITEM 16	-.05	-.19	.96

Once the component underlying item responses was determined, the internal consistency reliability of the attitude scale was computed for surveys, interviews, and by site. These values of Cronbach's alpha are presented in Table A2. Reliability of the attitude score was high for all sites and for both methods of data collection.

Table A2. Reliabilities for Attitude Scale (N of items = 15)

	N	Alpha
Total	326	.9378
Survey Group	186	.9366
Interview Group	140	.9396
Location		
Dallas	109	.9346
Phoenix	86	.9281
Seattle	57	.9235
Denver	72	.9210

Descriptive statistics for the attitude scale are presented in Table A3.

Table A3. Descriptive Statistics for Attitude Scale

	Variable	N	Mean	SD
Total	Attitude	347	4.16	.80
Dallas	Attitude	112	4.51	.69
Phoenix	Attitude	90	3.73	.81
Seattle	Attitude	63	4.36	.67
Denver	Attitude	80	3.98	.78

Differences between Survey and Interview Respondents

Comparisons of the responses of survey and interview respondents were conducted to determine whether method of data collection had significant effects on the data. Groups were compared for all quantitative variables common to the two instruments. No differences in attitude scale score were found.

Metropolitan Planning Organization Attitude Survey

The following is a brief survey of the attitudes of individuals who are in a position to observe the operations of MPO's. There are no right or wrong answers to this survey. Regardless of what you think, you can be sure that there are others who will agree with you. Please rate all the items. When you have finished, please look back over the items one more time, to see if you have left any items unrated. Please circle the scale interval that best represents your feeling about your MPO.

1. The people involved in the MPO process usually are focussed on broader goals, rather than individual agendas.

Strongly Agree: Agree: Agree more than disagree: Disagree more than agree: Disagree:
Strongly disagree

2. The MPO process is free of favoritism.

Strongly Agree: Agree: Agree more than disagree: Disagree more than agree: Disagree:
Strongly disagree

3. Often decisions are made in advance and simply confirmed by the MPO process.

Strongly Agree: Agree: Agree more than disagree: Disagree more than agree: Disagree:
Strongly disagree

4. In the MPO process, everyone has an equal opportunity to influence decisions.

Strongly Agree: Agree: Agree more than disagree: Disagree more than agree: Disagree:
Strongly disagree

5. The MPO process gives some people more than they deserve, while shortchanging others.

Strongly Agree: Agree: Agree more than disagree: Disagree more than agree: Disagree:
Strongly disagree

6. The MPO process responds fairly to the needs of its members.

Strongly Agree: Agree: Agree more than disagree: Disagree more than agree: Disagree:
Strongly disagree

7. Decisions made in the MPO process are based on fair criteria.

Strongly Agree: Agree: Agree more than disagree: Disagree more than agree: Disagree:
Strongly disagree

8. In the MPO process, some people's "merits" are taken for granted while other people are asked to justify themselves.

Strongly Agree: Agree: Agree more than disagree: Disagree more than agree: Disagree:
Strongly disagree

9. In the MPO process, strings are being pulled from the outside which influence important decisions.

Strongly Agree: Agree: Agree more than disagree: Disagree more than agree: Disagree:
Strongly disagree

10. The criteria for allocations are fair.

Strongly Agree: Agree: Agree more than disagree: Disagree more than agree: Disagree:
Strongly disagree

11. The criteria for allocations are fairly applied.

Strongly Agree: Agree: Agree more than disagree: Disagree more than agree: Disagree:
Strongly disagree

12. In the MPO process there is sufficient opportunity to challenge decisions.

Strongly Agree: Agree: Agree more than disagree: Disagree more than agree: Disagree:
Strongly disagree

13. In discussions about decisions or procedures, some people are discounted because of the organization they represent.

Strongly Agree: Agree: Agree more than disagree: Disagree more than agree: Disagree:
Strongly disagree

14. The decisions made in the MPO process are consistent.

Strongly Agree: Agree: Agree more than disagree: Disagree more than agree: Disagree:
Strongly disagree

15. MPO decisions are based on accurate information.

Strongly Agree: Agree: Agree more than disagree: Disagree more than agree: Disagree:
Strongly disagree

16. The distribution of highway dollars by the state to the metropolitan area is adequate.

Strongly Agree: Agree: Agree more than disagree: Disagree more than agree: Disagree:
Strongly disagree

17. The distribution of transportation funds by the MPO should be based on the transportation needs of the entire metropolitan area.

Strongly Agree: Agree: Agree more than disagree: Disagree more than agree: Disagree:
Strongly disagree

If you have any further comments on the items above please identify the number and attach a separate sheet with your comments. Thank you.

A2. Interview and Questionnaire

MPO _____

Interviewer _____

Informed Consent

This research study examines the operation of the Metropolitan Planning Organization (MPO), as it affects transportation planning in your region. The research focuses on the degree to which the process of the MPO meets the transportation resource needs of the metropolitan area. As you may know, under federal law, MPOs act in cooperation with the local transit operator and the state government to plan and distribute federal funds for certain transportation projects within their boundaries. In performing this function, the MPO identifies regional transportation needs, develops criteria for determining which transportation projects meet those needs, and allocates federal transportation funds on the basis of these processes. With these general statements in mind, we would now like to ask you some questions about your MPO.

1. In which years were you involved with this MPO?

_____ (years)

2. What role do you, or did you, play in this MPO?

3. Most recently, did/do you represent: Central city____ Inner suburb____ Outer suburb____ County____ Small town____ State Transportation Agency____ Regional Transit Agency____ Environmental Group____ Other_____

4. Job: Politician____ Engineer____ Planner____ Staff____ Other_____

1. Did/do you participate in the MPO process: daily____ weekly____ monthly____ quarterly____

6. How well do you feel you understand (or understood) the transportation planning and funding process? Very well____ Generally____ Moderately____ Poorly____ Very Poorly____

7. With what part of the overall transportation planning and allocation process are you most familiar?

8. What percentage of overall transportation dollars, distributed under the TIP in your metropolitan area, is primarily controlled by:

1. The state _____% 2. The MPO _____%

9. Do the elected officials in the MPO process adequately reflect the needs of the Metropolitan area as a whole, or do they focus on the interests of the organizations they represent?

10. Is the (MPO) process able to meet rapidly changing transportation needs? Yes____ No____

(Probe respondent's perceptions of rapidly changing needs.)

11. How well do the MPO and the regional transit agency work together?

12. How well do the MPO and the State Department of Transportation work together?

13. How well does the MPO process satisfy your needs in the following areas:

(a) Additional transportation capacity _____

(b) Roadway construction _____

(c) Operational and safety improvements _____

(d) Investment in transit and bus service _____

(e) Investment in bicycle and pedestrian facilities _____

14. How desirable or acceptable to you is the idea of having multiple MPOs operating within your metropolitan area?

15. Do you believe the way TIP criteria are established or applied is fair? (Probe: If you have a basis for comparing your answer to question #18 from a longer time perspective, please comment on whether you think your answer would have changed over time.)

16. Is there a single group of participants in the (MPO) decision making process that holds the power to decide critical issues? No____ Yes____ If Yes, who are they?

17. Do you think the process used by the State Department of Transportation to allocate transportation dollars is better or worse than the MPO process?
Better_____ Worse_____

18. Many people talk about “fairness” as an important criterion for how good a process is. Take a moment to think about what fairness means to you... What do you think fairness is?

19. According to your view of fairness, how fair is the process used by (MPO)?

Fair ____; ____; ____; ____; ____; ____; ____; unfair (Card display)

20. Now I'd like you to think about some specific incidents or happenings in your experience with (MPO). Think of a time when you thought to yourself: "This is a good process; it's fair; it works." Think about it. Can you remember such a time? (Once affirmed) Tell me about it.

21. How often do situations that you think of as fair happen in the process of (MPO)?

Daily / Weekly / Monthly / Several times a year / Almost Never

22. Now think of a time when you thought to yourself: "This is not a good process. It's not fair. It isn't working". Think about it. Can you remember such a time? (Once affirmed) Tell me about it.

23. How often do situations that you think of as unfair happen in the process of (MPO)?

Daily / Weekly / Monthly / Several times a year / Almost never

24. To what extent do you believe the institutional structure and decisional process in this MPO meets the long-term transportation needs of this region?

25. If you could change one thing that would make the (MPO) process, in your opinion, better, what would you change?

26. (Follow up, unless obvious) What would that change or accomplish?

27. Knowing what this research is about, and what we're trying to find out, what would you tell me that I should know, but I haven't asked you about?

(Ending: Thank you - Results postcard - Take Backs)

Additional Comments: _____

11. This MPO meets rapidly changing transportation needs:

Extremely	Generally	Fairly	Fairly	Generally
Extremely				
Well ____	Well ____	Well ____	Poorly ____	Poorly ____
Poorly ____				

Additional Comments: _____

12. How well do the MPO and the regional transit agency work together?

Extremely	Generally	Fairly	Fairly	Generally
Extremely				
Well ____	Well ____	Well ____	Poorly ____	Poorly ____
Poorly ____				

Additional Comments: _____

13. How well do the MPO and the State Department of Transportation work together?

Extremely	Generally	Fairly	Fairly	Generally
Extremely				
Well ____	Well ____	Well ____	Poorly ____	Poorly ____
Poorly ____				

Additional Comments: _____

14. How well does the MPO process satisfy your needs in the following areas:

a. Additional transportation capacity

Extremely	Generally	Fairly	Fairly	Generally
Extremely				
Well ____	Well ____	Well ____	Poorly ____	Poorly ____
Poorly ____				

b. Roadway construction

Extremely	Generally	Fairly	Fairly	Generally
Extremely				
Well ____	Well ____	Well ____	Poorly ____	Poorly ____
Poorly ____				

c. Operational and safety improvements

Extremely _____ Generally _____ Fairly _____ Fairly _____ Generally _____
Extremely _____
Well _____ Well _____ Well _____ Poorly _____ Poorly _____
Poorly _____

d. Investment in transit and bus service

Extremely _____ Generally _____ Fairly _____ Fairly _____ Generally _____
Extremely _____
Well _____ Well _____ Well _____ Poorly _____ Poorly _____
Poorly _____

e. Investment in bicycle and pedestrian facilities

Extremely _____ Generally _____ Fairly _____ Fairly _____ Generally _____
Extremely _____
Well _____ Well _____ Well _____ Poorly _____ Poorly _____
Poorly _____

15. How desirable or acceptable to you is the idea of having multiple MPOs operating within your metropolitan area?

Extremely _____ Generally _____ Fairly _____ Fairly _____ Generally _____
Extremely _____
Acceptable _____ Acceptable _____ Acceptable _____ Unacceptable _____ Unacceptable _____
Unacceptable _____

Additional Comments: _____

16. The public's impact on decisions coming from this MPO is:

Too little _____ About right _____ Too much _____

Additional Comments: _____

17. The TIP criteria seem to me: Fair _____: _____: _____: _____: _____: _____: _____: _____: Unfair

Additional Comments: _____

18. In this MPO, a single group of participants has the power to decide critical issues:

False _____ True _____ If "True", which group of participants?

19. To me, the thing that is most important in judging whether a process is fair or not is:

20. Using my own definition of fairness, I would rate this MPO process as : (check over scale interval)

Fair ___: ___: ___: ___: ___: ___: ___: ___: Unfair

Additional Comments: _____

21. To what extent do you believe the institutional structure and decisional process in this MPO meets the long-term transportation needs of this region?

Extremely	Generally	Fairly	Fairly	Generally
Extremely				
Well ___	Well ___	Well ___	Poorly ___	Poorly ___
Poorly ___				

Additional Comments: _____

22. If I could change one thing that would make this MPO process better, it would be:

23. The thing you haven't asked about, but you probably need to know how I feel about it, is:

Thank you for your help!

A. 3 Supplementary Interviews

MULTIPLE MPO QUESTIONNAIRE

MPO _____

Interviewer _____

Informed Consent

This research study examines the operation of the Metropolitan Planning Organization (MPO), as it affects transportation planning in your region. The research focuses on the degree to which the process of the multiple MPO meets the transportation resource needs. With these general statements in mind, we would now like to ask you some questions about your MPO.

1. My Metropolitan Planning Organization is _____
2. In which years were you involved with this MPO? _____ (years)
3. What role do you, or did you, play in this MPO?

4. Most recently, did/do you represent: Central city____ Inner suburb____ Outer suburb____
County____ Small town____ State Transportation Agency____ Regional Transit Agency____
Environmental Group____
Other_____
5. Job: Politician____ Engineer____ Planner____ Staff____
Other_____
6. Did/do you participate in the MPO process: Daily____ Weekly____ Monthly____
Quarterly____
7. What is your understanding of the reason your region has multiple MPOs?

8. How well do multiple MPOs coordinate with each other?

9. In your opinion, how effective are multiple MPOs in addressing the larger regional issues such as:

a. Air quality issues _____

b. Major investment studies _____

c. Transit projects _____

10. What are the major benefits of having multiple MPOs, versus a single MPO, in meeting a region's transportation planning needs?

11. Are there any disadvantages of having multiple MPOs, versus a single MPO, in meeting a region's transportation planning needs?

12. If it were up to you, would you prefer a single MPO or multiple MPOs for this region?

Single _____ Multiple _____

Please explain/elaborate your choice

13. What would you tell me, that I should know, but I haven't ask you about?

14. Can you give us the name and telephone number of someone who is not part of the MPO process, but who would be knowledgeable enough to comment on the process?

Thank you for your help!

MPO LOCAL OBSERVER INTERVIEW

MPO _____

Date: _____

Interviewer : _____

Interviewee: _____

Go over Informed Consent

1. How long have you been interested in this region's transportation planning process?

2. In what ways, or through what means, have you become familiar with this MPO's transportation planning process?

3. What are the one or two clearest impressions you have formed about the strengths of this MPO's transportation planning process?

4. What are the one or two clearest impressions you have formed about the weaknesses of this MPO TPP?

5. Taken as a whole, do you think this MPO's TPP is more validly described by the strengths _____ or weaknesses _____?

6. How would you characterize the attitudes of your associates, at least those who are somewhat familiar with transportation planning issues, concerning the structure and/or processes of this MPO?

7. What else can you tell us that will help us understand how well this MPO addresses regional transportation planning needs?

Permission