

**A PROFILE OF THE TRANSPORTATION  
RESEARCH FORUM'S MEMBERSHIP**

**by**

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**May 1991**

**UGPTI Staff Paper No. 104**

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## **ABSTRACT**

The objective of this report is to provide baseline information about the composition of the TRF membership and their attitudes about TRF services and costs. In order, services were ranked the *Journal of the Transportation Research Forum*, membership directory, annual meeting, newsletter, and chapter services. Most members felt that the costs were about right.

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# A PROFILE OF THE TRANSPORTATION RESEARCH FORUM'S MEMBERSHIP

## INTRODUCTION

The Transportation Research Forum (TRF) is an independent organization of some 700 transportation professionals in the United States. A sister organization, the Canadian Transportation Research Forum, has over 300 members. The purpose of the TRF is to encourage research and exchange of information and ideas related to local, inter-city, and international transportation, including passenger and freight transportation and logistics.

The Transportation Research Forum provides five major services for its members. They are a newsletter, a membership directory, the *Journal of the Transportation Research Forum (JTRF)*, chapter activities, and sponsorship of the annual meeting.

The TRF has an active and involved membership. The National Council of the TRF is currently developing a strategic plan to help it continue to meet the professional goals of its membership. The purpose of this report is to provide baseline information about the composition of the TRF membership and their attitudes about TRF services.<sup>1</sup> Specifically, three areas will be addressed. First, a demographic portrait of the TRF members will be developed. Second, TRF members' attitudes about the services of the TRF will be presented. Third, their attitudes about the costs of TRF services will be presented. The report ends with preliminary conclusions about TRF's membership.

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<sup>1</sup>The opinions are solely those of the author and do not reflect any positions of the TRF National Council.

## RESEARCH DESIGN

The primary source of data for this work was a mail survey of 200 members of the TRF. The questionnaire consisted of 25 questions (see Appendix A). It gathered information about demographic variables, services of the TRF, participation at national meetings, beliefs about costs, and interest in research.

The survey was originally designed by a team of students in a marketing research class at Moorhead State University.<sup>2</sup> A critique of the questionnaire was provided by several members of the National Council. The survey was conducted in February 1991.

A random sample of 400 members from the TRF was drawn. With 200 respondents, the response rate was 50 percent. Given the short time frame to complete the survey, the response rate is judged to be adequate.

## A DEMOGRAPHIC PROFILE OF TRF MEMBERS

Seven demographic variables were included in the survey. They are years in TRF, years in transportation, type of work, mode, type of traffic, age, and gender.

The majority of TRF members (53.5 percent) have been in the organization for less than ten years (Table 1). The mean years in TRF is 9.8 years, the median is 8 years, and the mode is 1 year. This suggests that the TRF continues to attract new members. The typical TRF member has been involved in transportation for 20 years (Table 1). Thus, an average TRF member spends 10 years in transportation before joining the TRF.

Most of the TRF members (85.5 percent) are from one of four domains of employment, academe, consulting, carriers, and government (Table 2). Academe and consultants each account for 26.8 percent of total membership. Almost 17 percent of the

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<sup>2</sup>The author thanks Mike Ballweber, Scott Bosch, Michelle Couch, Lois Greisen, Glen Menze, Mark Nelson, Steve Reule, Faye Schwartzengerger, and Kent Sylvander for their assistance in this project.

TABLE 1. Frequency Distribution of Years in TRF and Years in Transportation, 1991

Years	Years in TRF		Years in Transportation	
	Percent	Cumulative Percent	Percent	Cumulative Percent
Less than 5	33.8	33.8	6.1	6.1
5- 9	19.7	53.5	4.5	10.6
10-14	17.2	70.7	17.7	28.3
15-19	13.1	83.8	15.6	43.9
20-24	8.6	92.4	22.8	66.7
25-29	3.1	95.5	11.6	78.3
Over 29	<u>4.5</u>	<u>100.0</u>	<u>21.7</u>	100.0
Mean	9.8 years		20.7 years	
Median	8 years		20 years	
Mode	1 year		20 years	

TABLE 2. Frequency Distribution for Employment of TRF Members, 1991

Employment	Frequency	Percent	Cumulative Percent
Academic	53	26.8	26.8
Consultant	53	26.8	53.6
Carrier	33	16.7	70.3
Government	30	15.2	85.5
Industry Association	9	4.5	90.0
Retired	7	3.5	93.5
Other	<u>13<sup>a</sup></u>	<u>6.5</u>	<u>100.0</u>
TOTAL	<u>196</u>	<u>100.0</u>	

<sup>a</sup>Other includes shippers, students, legal, and suppliers.

members are from carriers, while 15.2 percent are from government. Other members come from industry associations (such as the ATA, RCCC, or the AAR), shippers,



students, legal, suppliers, and retired transportation professionals. While the TRF has a significant membership from carriers, very fewer shippers (3.5 percent) are members. Retirement does not mean that the association with TRF ends; 3.5 percent of the members are retired transportation professionals.

TRF's membership reflects a wide diversity on the basis of modes worked in or studied. Almost 60 percent of TRF's members have rail related work (Table 3). The other modes - intermodal, motor carrier, air, water, and transit - range from 27 to 38 percent. Only one respondent reported work in pipelines. Most of the TRF members work in more than one mode. People working in rail and transit are the least likely to have multimodal responsibilities. About 36 percent of those working in rail only work in rail, while 28 percent solely work in transit. For the other four modes, less than 23 percent of the people only work in that mode.

TABLE 3. Frequency Distribution for Modes of Work, 1991<sup>a</sup>

Mode	Some Work in This Mode		Only Work in This Mode	
	Frequency	Percent	Frequency	Percent
	118	59.9	44	36.4
Intermodal	75	38.1	12	15.7
Motor Carrier	66	33.5	11	16.7
Air	53	26.9	12	22.6
Water	53	26.9	6	11.3
Transit	53	26.9	15	28.3

<sup>a</sup>Does not total to 100 percent because respondents could select more than one mode.

The types of traffic hauled or studied also display considerable variation. Almost 45 percent of the membership works in freight only, while 14 percent solely work in

passenger traffic (Table 4). About a third of the TRF members work with both types of traffic.

TABLE 4. Frequency Distribution for Type of Traffic Hauled or Studied, 1991

Type of Traffic	Frequency	Percent	Cumulative Percent
Freight	89	44.9	44.9
Passenger	28	14.1	59.0
Both	67	33.8	92.8
Not Applicable	<u>14</u>	<u>7.1</u>	<u>99.9</u>
TOTAL	<u>198</u>	<u>99.9<sup>a</sup></u>	

<sup>a</sup>Total does not equal 100 percent because of rounding.

Most of TRF's membership (60.3 percent) ranges in age from 40 to 59 years old (Table 5). The average age is 48.8 years. Approximately 20 percent are under 40 years and another 20 percent are over 60 years. In contrast, the proportion of members under 40 years old in the American Society of Transportation & Logistics is almost 40 percent.

On the basis of gender, the proportion of women in TRF is low. Only 7 percent of the members are women. In part, this may reflect the relatively few women working as transportation professionals.

Based on employment, two general observations can be made. First, there seems to be a general consensus that a strength of the TRF is the diversity of its membership. By most measures, TRF has a diverse membership. There is a wide variety on the basis of experience, employment, modes worked, and age. Given this diversity, there should be opportunities for interaction among and between different types of transportation

TABLE 5. Relative Frequency Distribution for Age of TRF and ASTL Members

Age	Transportation Research Forum	American Society of Transportation & Logistics <sup>1</sup>
	Percent	
Under 35	9.8	21
35-39	10.3	18
40-44	17.0	16
45-49	21.7	12
50-54	15.4	11
55-59	6.2	11
Over 59	<u>19.6</u>	<u>11</u>
TOTAL	<u>100.0</u>	<u>100</u>
MEAN	48.8	

<sup>1</sup>ADAPTED FROM: Jerman, R.E. and R.A. Anderson, "American Society of Transportation and Logistics Membership Profile," *Transportation J.*, 28(4):4-12, 1989.

professionals. Second, ways should be considered to expand the membership in at least three areas - women, students, and shippers - to further increase the diversity of the TRF.

### MEMBERS' ATTITUDES ABOUT TRF SERVICES

Members were asked to rate the five major services offered by the TRF in the range from "Extremely Useful" to "Of No Use". A numeric value from 1 to 5 was assigned to the five categories, with 1 being assigned to "Extremely Useful". Thus, the closer the value to 1, the higher the value of the service to TRF members.

Overall, all the services received favorable ratings (i.e., a rating less than 3.0). The *JTRF* received the most favorable rating, with a mean of 2.04 (Table 6). Almost 73 percent of the respondents consider it to be extremely useful or useful. The order of the other four services was directory, annual meeting, newsletter, and chapter activities.

TABLE 6. Mean and Frequency Distribution for Attitudes About TRF Services, 1991

TRF Service	Mean	Level of Agreement (in percent)				
		Extremely Useful	Useful	Somewhat Useful	Of Little Use	Of No Use
<i>JTRF</i>	2.04	30.3	42.3	21.9	5.1	0.5
Directory	2.25	20.3	44.3	26.6	7.8	1.0
Annual Meeting	2.46	22.9	33.5	25.0	12.2	6.4
Newsletter	2.57	6.2	46.1	33.7	12.4	1.6
Chapter Activities	2.86	12.0	29.3	28.8	19.9	9.9

Chapter activities received the least favorable rating with a mean of 2.86. Almost 30 percent of the membership considered chapter activities to be of little use or no use.

Given the diversity of TRF's membership, the attitudes about services were considered in greater detail by analyzing differences among demographic groups. Paired T-tests were performed for six demographic variables. The first three variables - years in TRF, years in transportation, and age - were split at the median. Members were classified as being belonging to local or interest chapters. A local chapter is one of the 13 chapters found in concentrated geographic areas. The interest chapters are International Transportation, Agriculture and Rural Transportation, Personal Computer Users, High Speed Ground Transportation, Cost Analysis, and Aviation Transportation. On the basis of employment, the members were defined to be either academic or other. The academic category included the four student respondents. Finally, members were also classified on the basis of residence. Residence was from either the Northeast Corridor or other. The states in the Northeast Corridor included Connecticut, Maryland, Massachusetts, New Jersey, New York, Pennsylvania, Virginia, and the District of Columbia.

Some confusion may arise in the paired T-test analysis because of the interaction among three demographic variables, chapter, work type, and residence. The composition of the membership in the Northeast Corridor differs sharply from that in the rest of the country. Almost 70 percent of the membership in the Northeast Corridor is in local chapters from nonacademic employment (Table 7). In contrast, the academic community plays a larger role in the other states, where more people are also organized in interest chapters.

TABLE 7. Crosstabulation of Membership by Work Type, Residence, and Chapter

Work Type	Type of Chapter by State		
	Northeast Corridor		
	Local Chapter	Interest Chapter	Overall
Academic	15.18 %	4.46 %	19.64 %
Other	<u>69.64 %</u>	<u>10.72 %</u>	<u>80.36 %</u>
Overall	84.82 %	15.18 %	100.00%
	Other States		
	Local Chapter	Interest Chapter	Overall
Academic	9.09 %	30.68 %	39.77 %
Other	<u>34.09 %</u>	<u>26.14 %</u>	<u>60.23 %</u>
Overall	43.18 %	56.82 %	100.00%

### *JTRF*

Overall, members find the *JTRF* to be the most useful service. There are significant statistical differences for four of the demographic variables. At the 95 percent confidence level, there was a significant difference on the basis of employment and

residence (Table 8). At the 90 percent confidence level, there was a significant difference on the basis of years in transportation and chapter.

TABLE 8. Paired T-Test for Attitudes About the *JTRF*, by Demographic Variables, 1991

Category	Mean	Standard Deviation	Sample Size	T-Value
<b>Overall</b>	2.04	0.88	196	
<b>Years in TRF</b>				0.91
Less than 8	2.09	0.91	96	
8 or more	1.98	0.85	100	
<b>Years in Transportation</b>				1.80 <sup>b</sup>
Less than 20	2.16	0.94	86	
20 or more	1.94	0.82	110	
<b>Age</b>				0.25
Less than 48	2.02	0.88	99	
48 or more	2.05	0.88	97	
<b>Chapter</b>				1.97 <sup>b</sup>
Local	2.12	0.87	129	
Interest	1.87	0.89	67	
<b>Employment</b>				5.82 <sup>a</sup>
Academic	1.56	0.66	57	
Other	2.23	0.89	139	
<b>Residence</b>				4.01 <sup>a</sup>
NE Corridor	2.25	0.92	110	
Other	1.77	0.75	86	

NOTE: <sup>a</sup> and <sup>b</sup> denote significance at the 95 and 90 percent levels of confidence, respectively.

As expected, the academic community placed a higher value on the *JTRF* (1.56) than others (2.23). The rating for the nonacademic community suggests that they also

find the *Journal* to be a very valuable service. Chapter members from interest chapters rate the *JTRF* slightly higher than those from local chapters, 1.87 versus 2.12. The difference on the basis of residence may be explained by the interaction among work type, residence, and chapter. Finally, those with more experience rated the *JTRF* as being more important than those with less experience. Those with more experience may be attracted by the *Journal's* reputation for publishing applied work.

Most of the membership reported that they read the *Journal*. Twenty percent read the entire *JTRF* and 39 percent read most of it. Another 37 percent read selected articles, while only 4 percent do not read any articles.

By a wide margin, the *Transportation Journal* is the favorite other transportation journal of TRF's members (Table 9). Following that journal, the preference for other transportation journals is the *Transportation and Logistics Review*, *Transportation Quarterly*, the *Journal of Business Logistics*, the *Journal of Transport and Economic Policy*, the *Transportation Practitioners Journal*, and the *Transportation Law Journal*. The majority of the members do not even see these other six journals.

### **Membership Directory**

TRF members rated the membership directory as the second most important service. At the 95 percent confidence level, there was a statistical difference by years in transportation, years in TRF, and employment (Table 10). The more experienced transportation professional and those with a longer association with TRF rated the directory as more important than those with less experience. With experience, professionals develop networks. The academic community is geographically diverse. For all three groups, the membership directory may be a convenient means to locate other professionals with similar interests.

TABLE 9. Mean and Frequency Distribution for Readership of Journals by TRF Members, 1991

Journal	Mean	Level of Readership (in percent)		
		Read It	Scan It	Don't See It
<i>Transportation Journal</i>	2.26	20.2	33.7	46.1
<i>Transp. and Logistics Rev.</i>	2.47	15.0	22.8	62.2
<i>Transportation Quarterly</i>	2.58	11.4	19.7	68.9
<i>J. of Business Logistics</i>	2.65	8.8	17.1	74.1
<i>J. of Trans. &amp; Econ Policy</i>	2.69	6.2	18.1	75.6
<i>Transp. Practitioners J.</i>	2.70	7.3	15.0	77.7
<i>Transportation Law J.</i>	2.77	4.1	14.5	81.3

### Annual Meeting

Overall, TRF members rated the annual meeting as the third most important service of the TRF. At the 95 percent confidence level, there was a statistical difference on the basis of employment and residence, while years in transportation was significant at the 90 percent level (Table 11). There was a sharp difference between the means for academic (2.00) and nonacademic (2.65). For much of the academic community, the annual meeting is the only time that they get together during the year. The interaction among chapter type, work type, and residence may explain why those from other states and interest chapters rate the meetings higher than the other members.

Over the past five years, an average of 34 percent of the membership has attended the annual meetings (Table 12). The largest participation by members has been at the Williamsburg meeting in 1989 and Seattle in 1986, both with about 38 percent attending. In a typical year, 16 percent of the members present papers, 10 percent participate on panels, and 12 percent have articles published in the *JTRF*.



TABLE 10. Paired T-Test for Attitudes About the TRF Membership Directory, by Demographic Variables, 1991

Category	Mean	Standard Deviation	Sample Size	T-Value
<b>Overall</b>	2.25	0.90	192	
<b>Years in TRF</b>				2.22 <sup>a</sup>
Less than 8	2.40	0.89	93	
8 or more	2.11	0.90	99	
<b>Years in Transportation</b>				2.11 <sup>a</sup>
Less than 20	2.40	0.98	84	
20 or more	2.13	0.82	108	
<b>Age</b>				0.88
Less than 48	2.31	0.99	98	
48 or more	2.19	0.81	94	
<b>Chapter</b>				0.04
Local	2.25	0.88	127	
Interest	2.25	0.95	65	
<b>Employment</b>				2.03 <sup>a</sup>
Academic	2.04	0.83	53	
Other	2.33	0.92	139	
<b>Residence</b>				0.44
NE Corridor	2.28	0.93	109	
Other	2.22	0.87	83	

NOTE: <sup>a</sup> denotes significance at the 95 percent level of confidence.

The majority of the members (70.8 percent) think that the timing of the meeting should be left the same (Table 13). Three reasons were given by those wishing to change the time of the meeting. Eighteen thought it should change because of conflicts with other meetings, in particular, the Council of Logistics Management (CLM). One person pointed out that most transportation organizations hold their meetings in the fall and that the spring might attract more crossover members. Nine persons cited business

TABLE 11. Paired T-Test for Attitudes About TRF Annual Meeting, by Demographic Variables, 1991

Category	Mean	Standard Deviation	Sample Size	T-Value
<b>Overall</b>	2.46	1.16	188	
<b>Years in TRF</b>				1.24
Less than 8	2.57	1.14	90	
8 or more	2.36	1.17	108	
<b>Years in Transportation</b>				1.33
Less than 20	2.58	1.17	80	
20 or more	2.36	1.15	108	
<b>Age</b>				0.13
Less than 48	2.47	1.21	94	
48 or more	2.45	1.11	94	
<b>Chapter</b>				1.70 <sup>b</sup>
Local	2.56	1.15	123	
Interest	2.26	1.15	65	
<b>Employment</b>				3.64 <sup>a</sup>
Academic	2.00	0.95	56	
Other	2.65	1.19	132	
<b>Residence</b>				2.51 <sup>a</sup>
NE Corridor	2.64	1.18	106	
Other	2.22	1.09	82	

NOTE: <sup>a</sup> and <sup>b</sup> denote significance at the 95 and 90 percent levels of confidence, respectively.

conflicts, while six were concerned about the weather. One person noted that there will be conflicts regardless of the timing of the meeting.

Most members (62.8 percent) prefer that the TRF continue its policy of rotating the location of the meetings (Table 13). However, over 30 percent felt that the meetings should routinely rotate to the Northeast Corridor or Washington, DC. Those members thought it should rotate every two to three years. Some members mentioned that it is

TABLE 12. Frequency Distribution of Participation at Annual Meetings

Year	Location of Annual Meeting	Were you a member of TRF?	Did you attend the annual meeting?	Did you present a paper at the meeting?	Did you serve on a panel at the meeting?	Was your paper published in the <i>JTRF</i> ?
Percent of Respondents Answering Yes						
1990	Long Beach	93.5	32.2	15.6	11.1	10.6
1989	Williamsburg	84.9	38.0	16.0	8.0	15.3
1988	Toronto	74.6	29.1	14.9	7.8	9.2
1987	San Antonio	68.3	33.1	18.1	10.2	11.0
1986	Seattle	63.5	38.1	16.1	14.4	11.9
Weighted Mean			34.0	16.0	10.2	11.7

TABLE 13. Timing and Location of the TRF Annual Meeting, 1991

Schedule/Location	Percent	Comment
<b>Timing of Annual Meeting</b>		
Kept the Same (Oct to early Nov)	70.8	
Held Before October 1	10.4	
Moved to Mid-November	6.8	
Other	<u>12.0</u>	6 prefer summer, 4 spring, 2 Dec/Jan
TOTAL	<u>100.0</u>	
<b>Location of Annual Meeting</b>		
In a different city each year	62.8	
In the same city each year	2.0	2 prefer DC, 1 prefers Tampa
Rotate with Washington, DC	21.4	Rotate every three years
Rotate with Northeast Corridor	9.7	Rotate every two years
Indifferent	<u>4.1</u>	
TOTAL	<u>100.0</u>	

easier to justify attendance in these locations because they always have additional business in Washington, D.C.

### **TRF Newsletter**

TRF members rated the TRF newsletter the fourth most important service. With an overall mean of 2.57, it still has a strong favorable rating (Table 14). At the 95 percent confidence level, there was a statistical difference by years in transportation and age. As with the membership directory, the older, more experienced transportation professional rated the newsletter more important than those with less experience. At the 90 percent level, there was a statistical difference by employment. The academics rated the newsletter slightly higher (2.40) than those from other employment (2.64).

### **Chapter Activities**

Chapter activities was rated as the least important of the five services provided by the TRF. Its overall mean of 2.86 is near the mid-point value of somewhat useful (Table 15). There is a difference at the 95 percent confidence level in the ratings of chapter activities by the three interrelated demographic variables, chapter, employment, and residence.

The greatest difference in the rating of chapter activities is by chapter. Persons from local chapters rated the service 1 full point higher than those from interest chapters (2.52 versus 3.52). Given the distinct character of the two types of chapters, the differences in the ratings seem plausible. Chapter activities are also more important in the Northeast Corridor than in other states. In part this may arise because the TRF was originally established as a local chapter in New York. Local chapters soon followed in other cities in the Northeast Corridor. In addition, recall that 85 percent of the members in the Northeast Corridor belong to local chapters, as opposed to only 43 percent in the rest of the country (Table 7). Thus, the higher rating in the Northeast probably arises as a result of history and present membership patterns. Finally, nonacademic members

TABLE 14. Paired T-Test for Attitudes About the TRF Newsletter, by Demographic Variables, 1991

Category	Mean	Standard Deviation	Sample Size	T-Value
<b>Overall</b>	2.57	0.85	193	
<b>Years in TRF</b>				1.22
Less than 8	2.49	0.77	95	
8 or more	2.67	0.84	98	
<b>Years in Transportation</b>				2.43 <sup>a</sup>
Less than 20	2.73	0.90	86	
20 or more	2.43	0.78	107	
<b>Age</b>				2.45 <sup>a</sup>
Less than 48	2.71	0.92	98	
48 or more	2.42	0.74	95	
<b>Chapter</b>				0.37
Local	2.59	0.86	128	
Interest	2.54	0.83	65	
<b>Employment</b>				1.77 <sup>b</sup>
Academic	2.40	0.72	53	
Other	2.64	0.88	140	
<b>Residence</b>				0.46
NE Corridor	2.55	0.87	110	
Other	2.60	0.81	83	

NOTE: <sup>a</sup> and <sup>b</sup> denote significance at the 95 and 90 percent levels of confidence, respectively.

rated chapter activities higher than those from academe (2.72 versus 3.24). This may arise from the interaction among employment, residence, and chapter.

### MEMBER'S ATTITUDES ABOUT COSTS

Members were also asked to rate the costs associated with the annual meeting and membership in the range from "Much Too High" to "Too Low". A numeric value from 1 to

TABLE 15. Paired T-Test for Attitudes About TRF Chapter Activities, by Demographic Variables, 1991

Category	Mean	Std Deviation	Sample Size	T-Value
<b>Overall</b>	2.86	1.17	191	
<b>Years in TRF</b>				0.33
Less than 8	2.89	1.16	93	
9 or more	2.84	1.18	98	
<b>Years in Transportation</b>				1.43
Less than 20	3.00	1.23	84	
20 or more	2.76	1.10	107	
<b>Age</b>				0.89
Less than 48	2.94	1.21	97	
48 or more	2.79	1.13	94	
<b>Chapter</b>				6.13 <sup>a</sup>
Local	2.52	1.05	126	
Interest	3.52	1.11	65	
<b>Employment</b>				2.86 <sup>a</sup>
Academic	3.24	1.16	54	
Other	2.72	1.14	137	
<b>Residence</b>				4.06 <sup>a</sup>
NE Corridor	2.58	1.09	109	
Other	3.24	1.16	82	

NOTE: <sup>a</sup> denotes significance at the 95 percent level of confidence.

4 was assigned to the four categories, with 1 being assigned to "Much Too High". As the mean becomes closer to 1, the members perceive less of a bargain.

Overall, the majority of the members did not find serious problems with the costs associated with membership or the annual meeting. With a mean of 2.87, the cost of the annual membership fee was judged to be the best value (Table 16). Almost 79 percent of the respondents said that the annual membership fee was priced about right. More members felt that the registration fee for the annual meeting and the hotel room rates at

TABLE 16. Mean and Frequency Distribution for Attitudes About TRF Costs, 1991

Costs of TRF Service	Mean	Level of Agreement (in percent)				
		Much Too High	Too High	About Right	Too Low	No Opinion
Annual Membership Fee	2.87	2.0	12.2	78.7	3.6	3.6
Annual Meeting Registration Fee	2.46	12.2	29.9	50.3	3.0	4.6
Hotel Room Rate	2.58	4.6	33.5	55.8	2.5	3.6

the annual meeting were overpriced. Yet in both cases, simple majorities felt that these activities were priced about right.

#### Annual Membership Fee

There was no difference in the feeling about annual membership fees by any of the six demographic variables. However, many differences arise on who pays for the annual membership. Overall 45.6 percent of the members have their fee paid by their employer, 41.5 percent of the members pay their annual membership from their own pocket, and 12.8 percent pay from self-employment income (Table 17).

A Chi-square analysis using the same six demographic variables found statistical differences for all variables but residence. The most significant difference occurred by employer. Over 75 percent of the academic members pay their membership fee from their own pocket (Table 17). In contrast, only 29 percent of those from nonacademic employment pay their annual membership fee from their own pocket. The breakdown is about the same on the basis of years in TRF, years in transportation, and age. In each case, the employer pays the cost for about 55 percent of the younger or less experienced

TABLE 17. Crosstabulation for Method of Payment TRF Annual Membership Fees, by Demographic Variables, 1991

Demographic Variable	Chi-Square	Who Pays Your TRF Annual Membership? (in percent)		
		Employer pays cost.	From my own pocket.	From self-employment income.
<b>Overall</b>		45.64	41.54	12.82
<b>Years in TRF</b>	11.70 <sup>a</sup>			
Less than 8		56.99	36.56	6.45
8 or more		35.29	46.08	18.63
<b>Years in Transportation</b>	5.92 <sup>b</sup>			
Less than 20		53.57	39.29	7.14
20 or more		39.64	43.24	17.12
<b>Age</b>	8.89 <sup>a</sup>			
Less than 48		54.00	39.00	7.00
48 or more		36.84	44.21	18.95
<b>Chapter</b>	7.70 <sup>a</sup>			
Local		51.52	34.85	13.64
Interest		33.33	55.56	11.11
<b>Employer</b>	35.40 <sup>a</sup>			
Academic		22.64	75.47	1.89
Other		54.23	28.87	16.90
<b>Residence</b>	0.29			
Northeast Corridor		47.27	40.00	12.73
Other		43.53	43.53	12.94

NOTE: <sup>a</sup> and <sup>b</sup> denote significance at the 95 and 90 percent levels of confidence, respectively.

members as opposed to about 37 percent for the more senior members. The difference on the basis of chapter is difficult to understand. Employers pay the cost for 52 percent of the members from local chapters, but only 33 percent for the interest chapters. This may arise from the interaction with employer.



### Annual Meeting Costs

The overall mean for the cost of the annual meeting registration fee was 2.46 suggesting that members find the cost to be somewhat too high (Table 18). At the 95percent level, there was a statistical difference on the basis of chapter, employment, and residence.

The greatest difference is on the basis on employment. Academic members felt that the meeting registration fee was too high (mean of 2.09) compared to nonacademic members (2.61). Members from interest chapters felt that the fee was too high (2.23) compared to those from local chapters (2.58). In both cases, the groups that placed a higher value on the meeting thought that the meeting registration fee was more overpriced.

Overall, the employer pays the meeting registration fee in full for 53 percent of the members and in part for 10 percent of the members (Table 19). About 25 percent of the members pay the meeting fee from their own pocket, while the other 12 percent pay from self-employment income. A Chi-square analysis found statistical differences on the basis of years in TRF, years in transportation, age, and employer.

As with the annual membership fee, the most significant difference occurred for employer. About 38 percent of the universities pay the cost of the annual meeting in full, as opposed to 59 percent for members from nonacademic employment (Table 19). The breakdown is about the same on the basis of years in TRF, years in transportation, and age. In each case, the employer pays the full cost for about 64 percent of the younger or less experienced members as opposed to about 43 percent for the more senior members.

Some of the academic members pointed out that their universities limit the amount that can be paid for registration fees. In addition, many universities prohibit

TABLE 18. Paired T-Test for Attitudes About TRF Annual Meeting Registration Fee, by Demographic Variables, 1991

Category	Mean	Standard Deviation	Sample Size	T-Value
<b>Overall</b>	2.46	0.76	188	
<b>Years in TRF</b>				1.03
Less than 8	2.52	0.67	90	
8 or more	2.41	0.82	98	
<b>Years in Transportation</b>				0.28
Less than 20	2.48	0.71	79	
20 or more	2.45	0.79	109	
<b>Age</b>				0.48
Less than 48	2.44	0.77	94	
48 or more	2.49	0.74	94	
<b>Chapter</b>				3.08 <sup>a</sup>
Local	2.58	0.69	126	
Interest	2.23	0.83	62	
<b>Employment</b>				4.02 <sup>a</sup>
Academic	2.09	0.85	54	
Other	2.61	0.66	134	
<b>Residence</b>				1.86 <sup>b</sup>
NE Corridor	2.55	0.72	107	
Other	2.35	0.79	81	

NOTE: <sup>a</sup> and <sup>b</sup> denote significance at the 95 and 90 percent levels of confidence, respectively.

payment of annual registration fees. Others noted that the cost of the TRF meeting seems especially high when compared to the CLM, which offers an academic discount for its meeting. Given that more academic members must pay the cost from their own pockets, their concern over the level of costs becomes more understandable.

TABLE 19. Crosstabulation for Method of Payment TRF Annual Meeting Registration Fees, by Demographic Variables, 1991

Demographic Variable	Chi-Square	Who Pays Your TRF Annual Membership? (in percent)			
		From my own pocket	From self-employment income	Employer pays in full.	Employer pays in part.
<b>Overall</b>		24.86	11.86	53.11	10.17
<b>Years in TRF</b>	8.38 <sup>a</sup>				
Less than 8		20.93	8.14	63.95	6.98
8 or more		28.57	15.38	42.86	13.19
<b>Years in Transportation</b>	8.57 <sup>a</sup>				
Less than 20		20.78	6.49	64.94	7.79
20 or more		28.00	16.00	44.00	12.00
<b>Age</b>	10.88 <sup>a</sup>				
Less than 48		20.22	5.62	62.92	11.24
48 or more		29.55	18.18	43.18	9.09
<b>Chapter</b>	1.56				
Local		23.28	13.79	53.45	9.48
Interest		27.87	8.20	52.46	11.48
<b>Employer</b>	28.32 <sup>a</sup>				
Academic		30.77	3.85	38.46	26.92
Other		22.40	15.20	59.20	3.20
<b>Residence</b>	6.22				
Northeast Corridor		24.21	11.58	58.95	5.26
Other		25.61	12.20	46.34	15.85

NOTE: <sup>a</sup> denotes significance at the 95 percent level of confidence.

## CONCLUSIONS

All five of the major services provided TRF were judged to be useful by the TRF members. In descending order of importance, they are *JTRF*, the membership directory, the annual meeting, the newsletter, and chapter activities. The cost of the annual

membership is judged to be about right by most members. There is some feeling that the registration fee for the annual meeting is too high. Five general comments are offered. First, TRF's membership is diverse by most measures. However, if the TRF wishes to further increase diversity, steps should be taken to increase recruitment of women, shippers, and students.

Second, the paired T-test analysis of TRF services by six demographic variables suggests there are at least two distinct elements of the TRF. In the Northeast Corridor, nonacademic members outnumber academic members by a four-to-one margin (Table 7). Almost 85 percent of the members from the Northeast Corridor belong to local chapters. The TRF of the Northeast Corridor is characterized by local chapter activities. Services such as the annual meeting take on less importance because these members have a steady diet of programs throughout the year.

In the rest of the country, there is more balance in the membership. Nonacademic members outnumber academic members by only a three-to-two margin (Table 7). More members belong to interest chapters (57 percent) than local chapters (43 percent). Activities of a national scope (i.e., the *JTRF* and the annual meeting) take on a greater importance than chapter activities for this element of TRF.

Third, location of membership is not an important factor for the ratings of the other two TRF services, the membership directory and the newsletter. Rather, the value of these services depends on professional work experience and employment. In general, the more experienced transportation professional member and the academic members find greater value from these services. The more experienced member may find value from these services as a means of fostering networking. The academic member may find that these services are a means of linking a geographically separated group.

Fourth, most members prefer the present timing of the meeting. Some feel that steps should be taken to avoid conflicts with other transportation meetings. There is some support to regularly rotate the meetings to locations in the Northeast Corridor or more specifically, Washington, DC. Members stated that it is easier to justify attendance because they of additional business in DC.

Finally, there is not a great concern over the level of membership or annual meeting registration fees. However, there is a concern on the basis of who pays the membership. Some universities prohibit the payment of membership fees while others limit the reimbursement for registration fees. Thus, more academic members pay these fees from their own pocket.

**APPENDIX A**  
**TRF MEMBERSHIP QUESTIONNAIRE**

## TRANSPORTATION RESEARCH FORUM QUESTIONNAIRE

1. How do you value the following basic services offered by TRF? (please circle one response for each service)

TRF SERVICE	EXTREMELY USEFUL	USEFUL	SOMEWHAT USEFUL	OF LITTLE USE	OF NO USE
Newsletter	1	2	3	4	5
Membership directory	1	2	3	4	5
<i>Journal of the Transportation Research Forum</i>	1	2	3	4	5
Chapter activities	1	2	3	4	5
Annual meeting	1	2	3	4	5

2. The TRF annual meeting has been held in a different city each year. Would you prefer that the meeting be held: **(select one)**

- A. IN A DIFFERENT CITY EACH YEAR
- B. IN THE SAME CITY EACH YEAR (please specify) \_\_\_\_\_
- C. ROTATE IN AND OUT OF WASHINGTON, D.C. ON A REGULAR BASIS  
(rotate in and out every \_\_\_ YEARS)
- D. ROTATE IN AND OUT OF THE NORTHEAST CORRIDOR ON A REGULAR BASIS  
(rotate in and out every \_\_\_ YEARS)
- E. OTHER (please specify) \_\_\_\_\_

3. Do you feel that the timing of the TRF annual meeting should be: **(select one)**

- A. KEPT THE SAME (mid October to early November)
- B. HELD BEFORE OCTOBER 1ST
- C. MOVED TO MID-NOVEMBER
- D. OTHER (please specify) \_\_\_\_\_

4. If you suggested that the meeting time be changed, what is your reason?

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5. Do you plan to attend the TRF annual meeting in 1991? **(select one)**

- A. DEFINITELY YES
- B. UNCERTAIN AT THIS TIME
- C. DEFINITELY NOT

6. Please indicate the level of your participation in TRF activities for the following years.

Year	Location of annual meeting	Were you a member of TRF?	Did you attend the annual meeting?	Did you present a paper at the meeting?	Did you serve on a panel at the meeting?	Did you have a paper published in the <i>JTRF</i> ?
1990	Long Beach	YES	YES	YES	YES	YES
		NO	NO	NO	NO	NO
		UNCERTAIN	UNCERTAIN	UNCERTAIN	UNCERTAIN	UNCERTAIN
1989	Williamsburg	YES	YES	YES	YES	YES
		NO	NO	NO	NO	NO
		UNCERTAIN	UNCERTAIN	UNCERTAIN	UNCERTAIN	UNCERTAIN
1988	Toronto	YES	YES	YES	YES	YES
		NO	NO	NO	NO	NO
		UNCERTAIN	UNCERTAIN	UNCERTAIN	UNCERTAIN	UNCERTAIN
1987	San Antonio	YES	YES	YES	YES	YES
		NO	NO	NO	NO	NO
		UNCERTAIN	UNCERTAIN	UNCERTAIN	UNCERTAIN	UNCERTAIN
1986	Seattle	YES	YES	YES	YES	YES
		NO	NO	NO	NO	NO
		UNCERTAIN	UNCERTAIN	UNCERTAIN	UNCERTAIN	UNCERTAIN

7. Do you read the *Journal of the Transportation Research Forum*?

<input type="checkbox"/> MOST OF IT	<input type="checkbox"/> SOME OF IT	<input type="checkbox"/> A FEW ARTICLES	<input type="checkbox"/> NONE OF IT
-------------------------------------	-------------------------------------	---	-------------------------------------

8. What other journals do you read on a regular basis?

- |   |                                  |                                  |                                       |
|---|----------------------------------|----------------------------------|---------------------------------------|
| <i>Transportation Journal</i>                   | <input type="checkbox"/> READ IT | <input type="checkbox"/> SCAN IT | <input type="checkbox"/> DON'T SEE IT |
| <i>Transportation and Logistics Review</i>      | <input type="checkbox"/> READ IT | <input type="checkbox"/> SCAN IT | <input type="checkbox"/> DON'T SEE IT |
| <i>Journal of Business Logistics</i>            | <input type="checkbox"/> READ IT | <input type="checkbox"/> SCAN IT | <input type="checkbox"/> DON'T SEE IT |
| <i>Transportation Law Journal</i>               | <input type="checkbox"/> READ IT | <input type="checkbox"/> SCAN IT | <input type="checkbox"/> DON'T SEE IT |
| <i>Traffic Quarterly</i>                        | <input type="checkbox"/> READ IT | <input type="checkbox"/> SCAN IT | <input type="checkbox"/> DON'T SEE IT |
| <i>Transportation Practitioners Journal</i>     | <input type="checkbox"/> READ IT | <input type="checkbox"/> SCAN IT | <input type="checkbox"/> DON'T SEE IT |
| <i>Journal of Transport and Economic Policy</i> | <input type="checkbox"/> READ IT | <input type="checkbox"/> SCAN IT | <input type="checkbox"/> DON'T SEE IT |
| Other (please specify _____)                    | <input type="checkbox"/> READ IT | <input type="checkbox"/> SCAN IT | <input type="checkbox"/> DON'T SEE IT |



9. The registration fee for the TRF annual meeting is approximately 250 dollars. In your opinion, is the annual registration fee: **(select one)**

<input type="checkbox"/> MUCH TOO HIGH	<input type="checkbox"/> TOO HIGH	<input type="checkbox"/> ABOUT RIGHT	<input type="checkbox"/> TOO LOW	<input type="checkbox"/> NO OPINION
--	-----------------------------------	--------------------------------------	----------------------------------	-------------------------------------

10. The TRF membership fee is 60 dollars. Student membership is 30 dollars per year. In your opinion, is the annual TRF membership fee: **(select one)**

<input type="checkbox"/> MUCH TOO HIGH	<input type="checkbox"/> TOO HIGH	<input type="checkbox"/> ABOUT RIGHT	<input type="checkbox"/> TOO LOW	<input type="checkbox"/> NO OPINION
--	-----------------------------------	--------------------------------------	----------------------------------	-------------------------------------

11. The room rate in the hotel that the TRF annual meeting is held is approximately 100 dollars per night for single occupancy. In your opinion, is the hotel room rate: **(select one)**

<input type="checkbox"/> MUCH TOO HIGH	<input type="checkbox"/> TOO HIGH	<input type="checkbox"/> ABOUT RIGHT	<input type="checkbox"/> TOO LOW	<input type="checkbox"/> NO OPINION
--	-----------------------------------	--------------------------------------	----------------------------------	-------------------------------------

12. Many members fly to the TRF annual meeting. In your opinion, are the transportation costs to the TRF annual meeting: **(select one)**

<input type="checkbox"/> ALWAYS A PROBLEM	<input type="checkbox"/> SOMETIMES A PROBLEM	<input type="checkbox"/> RARELY A PROBLEM	<input type="checkbox"/> NO OPINION
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13. Who pays your TRF membership fee? **(select one)**

- A. I DO OUT OF MY OWN POCKET.
- B. I DO FROM SELF-EMPLOYMENT INCOME.
- C. MY EMPLOYER FULLY COVERS THE MEMBERSHIP FEE.
- D. MY EMPLOYER PARTIALLY COVERS THE MEMBERSHIP FEE.
- E. OTHER (please specify) \_\_\_\_\_

14. Who pays your TRF Annual Meeting registration fee? **(select one)**

- A. I DO OUT OF MY OWN POCKET.
- B. I DO FROM SELF-EMPLOYMENT INCOME.
- C. MY EMPLOYER FULLY COVERS THE MEMBERSHIP FEE.
- D. MY EMPLOYER PARTIALLY COVERS THE MEMBERSHIP FEE.
- E. OTHER (please specify) \_\_\_\_\_

15. How long have you been a member of TRF? \_\_\_\_\_ YEARS

16. How long have you been working in transportation? \_\_\_\_\_ YEARS

17. Which affiliation best describes your tie to TRF? (*select one*)

- |                          |                              |                          |                      |
|--------------------------|------------------------------|--------------------------|----------------------|
| <input type="checkbox"/> | ACADEMIC                     | <input type="checkbox"/> | INDUSTRY ASSOCIATION |
| <input type="checkbox"/> | GOVERNMENT                   | <input type="checkbox"/> | CONSULTANT           |
| <input type="checkbox"/> | CARRIER                      | <input type="checkbox"/> | RETIRED              |
| <input type="checkbox"/> | SHIPPER                      | <input type="checkbox"/> | STUDENT              |
| <input type="checkbox"/> | OTHER (please specify) _____ |                          |                      |

18. Which mode of transportation best describes your work? (*select all that apply*)

- |                          |                              |                          |         |
|--------------------------|------------------------------|--------------------------|---------|
| <input type="checkbox"/> | AIR                          | <input type="checkbox"/> | RAIL    |
| <input type="checkbox"/> | INTERMODAL                   | <input type="checkbox"/> | WATER   |
| <input type="checkbox"/> | MOTOR CARRIER                | <input type="checkbox"/> | TRANSIT |
| <input type="checkbox"/> | OTHER (please specify) _____ |                          |         |

19. What type of traffic do you haul or do you study? (*select one*)

- |                          |    |                |
|--------------------------|----|----------------|
| <input type="checkbox"/> | A. | FREIGHT        |
| <input type="checkbox"/> | B. | PASSENGER      |
| <input type="checkbox"/> | C. | BOTH           |
| <input type="checkbox"/> | D. | NOT APPLICABLE |

20. Which chapter(s) are you a member of? \_\_\_\_\_

21. What other professional organizations do you belong to? \_\_\_\_\_

22. What city and state do you live in? \_\_\_\_\_

23. How old are you? \_\_\_\_ YEARS

24. What is your gender?     \_\_ MAN     \_\_ WOMAN

25. Please share any other observations you have about your membership in the TRF (feel free to attach additional sheets).