TECHNICAL ASSISTANCE
REPORT

SURVEY OF VDOT'S INTERNAL TRANSPORTATION PLANNING CUSTOMERS

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Virginia Transportation Research Council
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INTRODUCTION

During the spring of 2000, a survey was conducted of external VDOT transportation planning customers. These external customers included town, city, and county planners; MPOs, PDCs, and groups with a strong interest in planning, such as the FHWA. The results of the survey showed customers have a strong interest in strategic, long-range planning; this and other findings are documented in the VTRC report *Customer Evaluation of the Transportation Planning Services of the Virginia Department of Transportation.*

VDOT's Transportation Planning Division (TPD) and subsidiary field offices also have a number of *internal* customers in the form of districts and divisions. Accordingly, a survey of division and district administrators was conducted during February and, again, in April 2001 to determine

- how internal customers prioritize these services (e.g., which ones are most important)
- how internal customers rate the services they receive from the TPD.

For this document and survey, *transportation planner* includes the central office TPD and district level planners who report to district administrators. In short, *for this survey only*, one can state that *VDOT transportation planner, Transportation Planning Division,* and *VDOT district planner* are synonymous. Areas of opportunity that are listed for *TPD* may, at the TPD's administrator's discretion, also be suitable for district level planners.

DESCRIPTION OF THE SURVEY AND RESPONDENTS

There were three main differences between how this internal customer survey was conducted and how the previous external customer survey was conducted. *First*, the sample size was smaller for this internal survey with a total of 61 responses (44 from districts and 17 from divisions). *Second*, the categorization of services was different: the internal survey used 25 project and planning level services recommended by the TPD Division Administrator rather than seven broad categories used in the external survey. (The reason for using this particular categorization is that it meshes with the types of services the internal customers are likely to recognize. A possible way of linking the two different sets of categories is shown in Appendix C.) *Third*, the questions focused on VDOT's planning units (district level planners as well as the central office transportation planning division) rather than VDOT as a whole.

The survey instrument is shown in Appendix A. For each of the 25 project and planning level services shown in Appendix A and repeated in Table 1, respondents were asked to indicate, on a scale from 1 to 7, two opinions:

1. *satisfaction* with the service (1 = poor, 4 = average, 7 = excellent)
2. *importance* of the service (1 = none, 4 = average, 7 = critical).

Respondents were also asked to indicate how often they use these transportation planning services, whether they come from the central office or the districts, and whether they had any additional comments regarding how transportation planning services are delivered.

The survey was mailed to each division and district administrator with the cover letter shown in Appendix A, and each respondent was also contacted by telephone and asked either to fill out the survey or to appoint an assistant who could complete the survey on behalf of the division or district. Follow-up emails and/or telephone calls with the traffic engineering and environmental divisions provided additional insights regarding the traffic count program and the preparation of a project's purpose and need.

The respondents did not necessarily believe that all 25 transportation planning services applied to their division or district (see Table 1). The "number" columns show the diversity of respondents. For example, there were three respondents from residencies in the Bristol District; one respondent had comments on 10 services, one on 17, and one on all 25.

Table 1: Number of Planning Services for Which a Respondent Had an Opinion

Division	Number	District	Number
Construction (Steve Edwards)	20	Bristol Residencies	10, 17, 25
Data Management (Ann Austin/Murali Rao)	7	Culpeper District	21
Environmental (Kimberly Spence)	25	Culpeper Residencies	4,6,6,16,19
Environmental (Chris Collins)	7	Fredericksburg District	2,13,22
Internal Audit (David Kelly)	0	Fredericksburg Residencies	18
ITS (Keith Barron)	1	Hampton Roads District	1,7,8,9,12,25,25
Location and Design (Patsy Napier)	3	Hampton Roads Residencies	4,14,16,22
Maintenance (Larry Trachy)	25	Lynchburg District	13, 25
Management Services (Brad Johnson)	3	Lynchburg Residencies	0
Materials Division (Mahamed Elfino)	3	Northern Virginia District	13,18
Programming and Scheduling (H. W. Chenault, Jr.)	6	Richmond District	8, 14,18
Programming and Scheduling (Craig Ahlin)	4	Richmond Residencies	5,10,10,12,12
Programming and Scheduling (Dave McGhee)	2	Salem District	25
Right of Way (Stuart Waymack)	6	Salem Residencies	20,20,22
Secondary Roads (Dane Lewis)	25	Staunton District	16
Structure & Bridge (Mal Kerley)	2	Staunton Residencies	7,25
Traffic Engineering (Larry Caldwell)	6		

Six divisions did not complete a survey but did explain why. Fleet Administration (Bill Colavita) and Human Resources (Patty Bauguss) noted that the survey was not applicable to them. Administrative Services (Leonard Lao), Information Technology (Ellett Pollard), Equipment (Erle Potter), and Safety and Health (Wayne Varga) replied they never use transportation planning services.

RESULTS

Summary of Short Answer Survey Results

For each service, Table 2 lists the mean *satisfaction* rating, the mean *importance* rating, and the *sample size* when stratified by division, district, or combined. For clarity, Table 2 was sorted by overall importance such that the most important services, according to internal customers, are listed first.

Importance of Services

It is evident that the sample size was larger for services that respondents tended to think were more important. This was no great surprise, except that it accentuates the view that for this type of survey, the fact that a respondent does not respond should be taken as a strong signal that the service is less important than would have been the case had a respondent answered. Thus, for services such as undertake freight, passenger ferry, transit, and other multimodal studies, the fact that only 17 persons in VDOT indicated any importance for that service is as significant a finding as the fact that its mean importance rating was a 4.2 (the second lowest rating in importance of all the services).

The most critical services according to customers include preparing traffic volume forecasts (both at the project level and at the planning level), assisting with the development of the Transportation Improvement Program (TIP) in the MPO areas, developing long-range plans, assisting with site plan reviews, and assisting with the transportation component of local transportation plans. On these services, districts and divisions largely agree in terms of importance, except that districts value the site plan reviews much more than divisions do. In fact, the three most important services for districts and divisions are identical: traffic volume forecasts (system level and project level) and the TIP in MPO areas.

Yet there are some services where districts' and divisions' responses differ substantially in terms of importance. When both the mean importance rating and the number of respondents who chose to rate the service at all are considered, there were seven services for which there was more than a point difference between the ratings by districts and divisions: in all cases, districts thought the services were more important. The three biggest discrepancies were

1. conduct/assist site plan reviews
2. undertake freight, passenger ferry, transit, and other multimodal studies
3. sponsor technical training courses.

There were rating discrepancies for four other services (attend project development meetings, integrate GIS-based databases into the planning process, assist/conduct consultant studies, and undertake corridor and park and ride lot studies). Probably the most significant discrepancy is with site plan reviews, which ranked as the fifth highest service in terms of importance for districts yet was third from the bottom, in terms of importance, for divisions. The other critical difference is the use of GIS, which received a 5.5 for importance from districts yet only a 4.2 from divisions.

Table 2: Services Sorted by Importance

Divisions				Districts				Overall				Transportation Planning Service
Satisfaction		Importance		Satisfaction		Importance		Satisfaction		Importance		
n	mean	*n*	mean	*n*	mean	*n*	mean	*n*	mean	*n*	mean	
6	5.2	6	6.2	36	4.9	38	5.9	42	5.0	44	6.0	Prepare traffic volume forecasts
7	5.1	7	6.1	32	5.0	33	5.8	39	5.0	40	5.9	Prepare traffic volume forecasts (Project Level)
8	4.4	8	6.0	18	5.2	19	5.8	26	4.9	27	5.9	Assist with the development of the Transportation Improvement Program in the MPO areas
8	4.8	8	5.4	34	5.0	36	5.8	42	4.9	44	5.7	Develop long range plans
3	3.3	4	3.5	27	4.7	28	5.8	30	4.5	32	5.5	Conduct/assist with site plan reviews
6	4.5	7	5.3	30	5.2	32	5.5	36	5.1	39	5.5	Assist with the development of the transportation component of local transportation
5	5.2	5	5.4	14	4.8	15	5.3	19	4.9	20	5.3	Assist with air quality studies and analyses
5	4.8	5	4.2	20	3.8	22	5.5	25	4.0	27	5.3	Integrate GIS based databases into the planning process
4	4.3	5	4.4	30	5.1	32	5.4	34	5.0	37	5.2	Assess and comment on project design features
7	3.4	7	4.7	24	4.3	26	5.3	31	4.1	33	5.2	Develop project cost estimates and revenue estimates for input in long range planning and project programming documents
4	4.8	5	4.2	23	5.0	25	5.4	27	5.0	30	5.2	Assist/conduct consultant studies
6	4.2	7	5.4	16	4.7	18	5.1	22	4.5	25	5.2	Review and comment on policy guidance documents
5	5.0	5	4.8	22	4.6	22	5.3	27	4.7	27	5.2	Provide technical assistance with the travel forecasting process
7	4.9	7	5.4	34	4.8	36	5.1	41	4.8	43	5.1	Provide other transportation data
5	4.4	7	4.7	19	4.2	20	5.3	24	4.2	27	5.1	Integrate ITS into the planning process
4	3.8	6	4.0	27	5.0	29	5.3	31	4.8	35	5.1	Undertake corridor, park and ride lot, and other special studies
3	5.0	4	3.8	32	5.1	32	5.3	35	5.1	36	5.1	Attend project development meetings
3	4.7	4	3.8	11	4.0	13	5.4	14	4.1	17	5.0	Sponsor technical training courses
4	5.5	5	5.0	19	4.7	21	4.9	23	4.8	26	4.9	Participate in project value engineering studies
5	4.4	5	5.0	15	3.9	16	4.9	20	4.0	21	4.9	Assess new transportation modeling software and processes/procedures
4	6.0	5	4.4	10	4.6	11	5.1	14	5.0	16	4.9	Assist/conduct legislative studies
5	4.2	6	4.2	17	4.4	20	4.8	22	4.3	26	4.7	Assist with the development and implementation of enhancement projects
6	4.7	7	4.6	26	4.9	26	4.6	32	4.8	33	4.6	Review plans for the provision of bicycle and pedestrian facilities
2	4.5	4	2.8	13	4.8	13	4.7	15	4.7	17	4.2	Undertake freight, passenger ferry, transit, and other multimodal studies
5	3.8	6	3.8	29	4.4	32	4.2	34	4.3	38	4.1	Develop bicycle and pedestrian plans

n is the number of people that responded to the question for the particular service

Satisfaction with Services

Overall, respondents were most satisfied with attending project development meetings and assisting with the development of the transportation component of the local transportation plan (both with scores of 5.1 of 7 for satisfaction). Close behind in terms of satisfaction were assisting/conducting legislative and consultant studies, traffic volume forecasts, and commenting on project design features (scores of 5.0). As shown in Figure 1 there appears to be some correlation between the satisfaction of a service and the importance of a service. The range of satisfaction levels was relatively narrow; most services had a mean between 4.1 and 5.0 in terms of satisfaction.

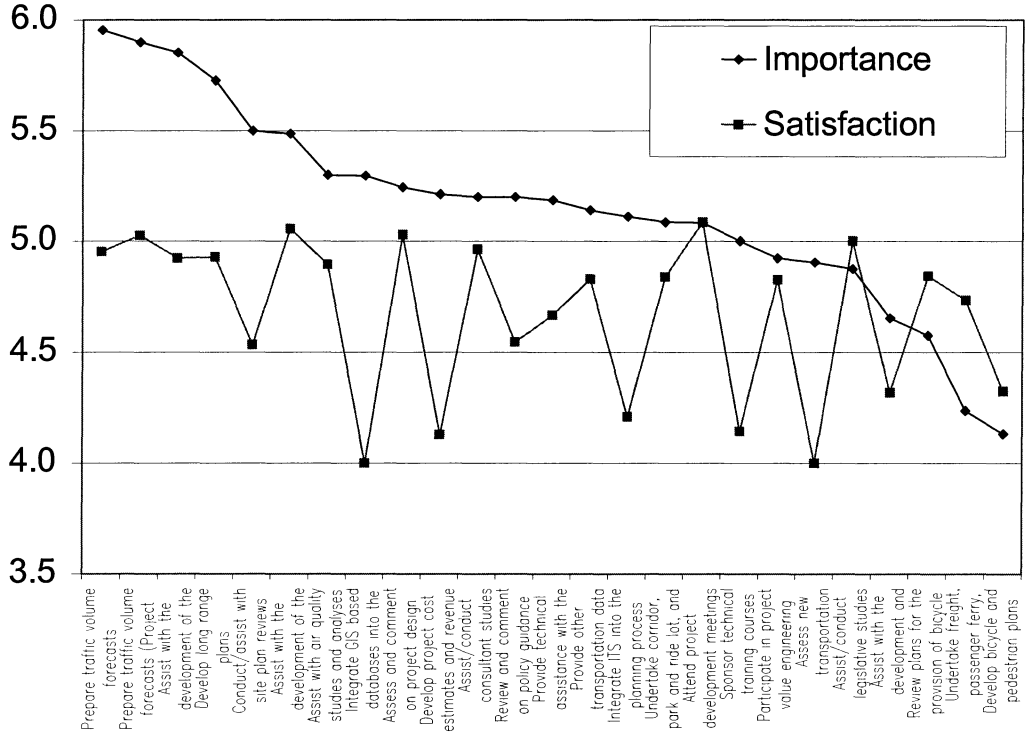

Figure 1: Comparison of Importance and Satisfaction for Each Service

However, a more relevant heuristic might be to compare services where the importance of the service is more than 1 point higher than the satisfaction with the service. Three services fall into this category, meaning these may be services where resources could be allocated to improving satisfaction, listed in order of overall importance:

1. providing traffic volume forecasts (at the system level)
2. integrate GIS-based databases into the planning process
3. develop project cost estimates and revenue estimates for input in long range planning and project programming documents.

Four other services have between 0.90 and 1.00 points difference between satisfaction and importance: conduct/assist with site plan reviews, assist with the development of the TIP in MPO areas, integrate ITS into the planning process, and assess new transportation modeling procedures/processes.

For districts only, there was more than a 1-point difference between satisfaction and importance for several other services not shown in the list:

- conduct/assist site plan reviews
- integrate ITS into the planning process
- sponsor technical training courses
- assess new transportation modeling software and processes/procedures.

Several of these interests from the district, such as conduct/assist site plan reviews and sponsor technical training courses, echoed either findings from the external customer survey or comments made by PDC staff during the TPD/PDC meetings held over the past year. For divisions only, there were two services—assist with the development of the TIP in the MPO areas and review/comment on policy guidance documents where the satisfaction was also 1 point lower than the importance rating. (Somewhat surprisingly, there were three services where divisions rated "satisfaction" more than 1 point higher than "importance"—attend project development meetings, assist/conduct legislative studies, and undertake freight, passenger ferry, transit, and other multimodal studies.)

How Services Are Used by Districts and Divisions

Districts tend to use planning services at least monthly and, on average, a bit more often than divisions. In terms of whether they receive these services from the central office or the districts (or both), there is, as one would expect, a clear split. Districts tend to get services from the district, whereas divisions tend to get all or most services from the central office. Figure 2 compares the frequency with which districts and divisions use transportation planning services, and Figure 3 illustrates the source of these services. Perhaps the one piece of information that should be noted in Figure 3 is that some district level respondents get services only from the central office. It should also be clarified that some of the "district" respondents include persons with the residencies.

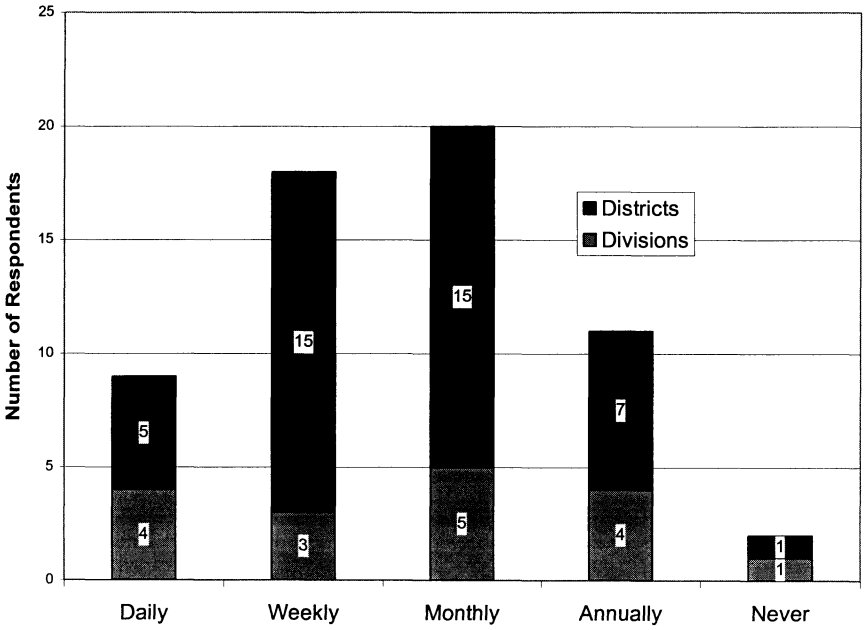

Figure 2: Frequency with Which Respondents Use Transportation Planning Services

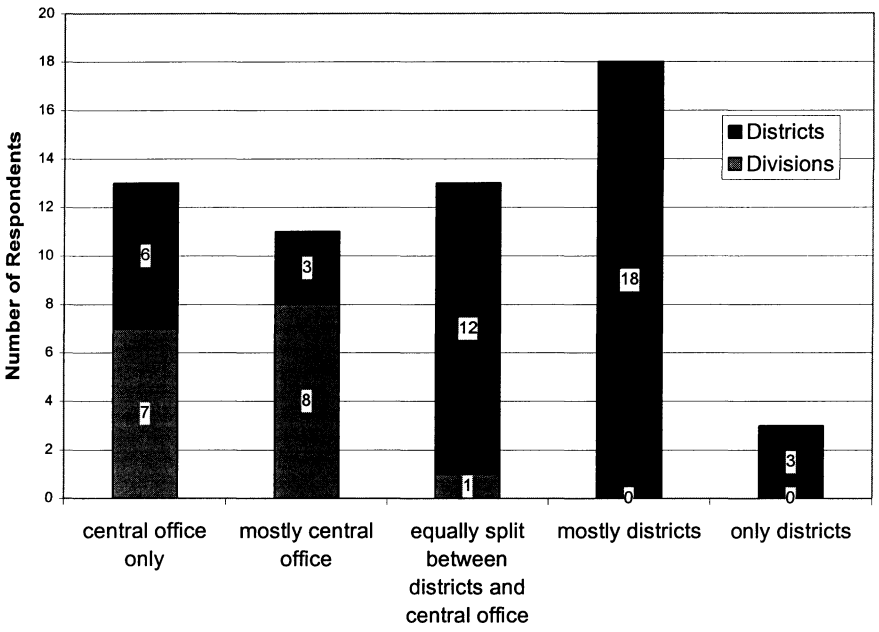

Figure 3: Source of Transportation Planning Services for These Respondents

District Breakouts

It simply did not make sense to analyze the data by district with an exceedingly small number of samples (e.g., two respondents for the Lynchburg District). There, were, however, some districts that had a respectable representation of five or more respondents: Culpeper (six respondents), Richmond (eight respondents), and Hampton Roads (11 respondents). Satisfaction and Importance, respectively, for those three districts are shown in Table 3. For ease of comparison, the services are listed in the same order as they were in Table 1.

In terms of importance, there is general agreement between Table 1 and 3. Notable exceptions are integrate GIS based databases into the planning process and integrate ITS into the planning process, both of which spiked at 6.0 as being most important for the Richmond District, and assist with air quality studies and analyses, which scored a 7.0 for the Culpeper District. This last observation, however, is based on only one respondent—which illustrates the perils of a small sample size. In terms of satisfaction, the Richmond District showed a 3.3 for a service it thought important (integrate GIS into the planning process).

Table 3 should probably not be used as an absolute guide as to where TPD should focus its efforts, but it shows an opportunity for the central office and district planners to focus resources for district customers who receive planning services. For example, nine respondents from Hampton Roads scored "prepare traffic volumes" as having a mean satisfaction rating of 4.3 (which is relatively low compared to the ratings that that district gave to other services) yet this service is relatively important for that district. Should VDOT invest resources in improving traffic volume forecasts for that district, then perhaps, as suggested by external customers, future evaluations could determine whether customers saw an improvement in these traffic volume forecasts.

Table 3: Services Sorted by District (where districts had 5 or more respondents)

Culpeper District				Hampton Roads District				Richmond District				Transportation Planning Service
Satisfaction		Importance		Satisfaction		Importance		Satisfaction		Importance		
n	mean	*n*	mean	*n*	mean	*n*	mean	*n*	mean	*n*	mean	
4	5.0	4	5.5	9	4.3	9	6.0	6	5.2	8	5.9	Prepare traffic volume forecasts
4	5.0	4	5.0	7	5.1	7	5.9	6	4.8	7	6.1	Prepare traffic volume forecasts (Project Level)
1	5.0	1	5.0	3	5.0	3	5.0	3	5.0	3	6.0	Assist with the development of the Transportation Improvement Program in the MPO areas
2	5.0	3	5.3	9	4.9	9	6.0	6	5.2	7	5.6	Develop long range plans
4	6.0	5	5.8	9	4.6	9	5.4	5	4.8	5	5.6	Conduct/assist with site plan reviews
3	5.7	4	5.5	7	5.1	7	4.9	4	4.3	5	5.4	Assist with the development of the transportation component of local transportation
1	6.0	1	7.0	3	5.0	3	5.0	3	4.7	3	5.3	Assist with air quality studies and analyses
2	5.5	3	4.7	4	3.3	4	5.5	3	3.3	3	6.0	Integrate GIS based databases into the planning process
4	6.0	4	6.0	6	5.2	6	5.3	5	4.6	6	5.2	Assess and comment on project design features
2	5.0	2	5.0	5	4.6	5	4.8	3	4.7	4	5.0	Develop project cost estimates and revenue estimates for input in long range planning and project programming documents
3	5.3	4	5.0	5	4.6	5	5.0	2	5.5	3	4.7	Assist/conduct consultant studies
2	5.0	3	5.0	5	5.0	5	4.8	0	--	0	--	Review and comment on policy guidance documents
4	5.0	4	4.8	4	4.5	4	5.0	2	5.0	3	5.3	Provide technical assistance with the travel forecasting process
5	5.4	5	5.2	9	5.3	9	5.2	4	4.5	6	5.2	Provide other transportation data
2	4.0	3	4.3	5	4.6	5	5.4	1	4.0	1	6.0	Integrate ITS into the planning process
2	5.0	2	5.0	8	5.5	8	5.3	4	5.5	5	4.6	Undertake corridor, park and ride lot, and other special studies
3	6.0	3	5.3	8	5.3	8	5.3	3	5.3	3	5.0	Attend project development meetings
1	5.0	2	5.5	4	4.3	4	5.3	0	--	0	--	Sponsor technical training courses
1	5.0	1	5.0	4	5.0	5	5.0	3	5.0	3	4.7	Participate in project value engineering studies
3	4.7	4	4.5	3	3.7	3	4.7	0	--	0	--	Assess new transportation modeling software and processes/procedures
1	4.0	2	4.0	2	3.5	2	3.5	0	--	0	--	Assist/conduct legislative studies
2	4.5	2	4.5	4	3.8	4	3.8	3	5.3	4	5.3	Assist with the development and implementation of enhancement projects
2	6.5	2	6.5	6	5.7	6	4.3	3	4.3	3	3.3	Review plans for the provision of bicycle and pedestrian facilities
0	--	0	--	5	5.4	5	5.2	1	6.0	1	2.0	Undertake freight, passenger ferry, transit, and other multimodal studies
3	4.0	4	3.8	8	5.1	8	4.3	4	4.3	6	3.8	Develop bicycle and pedestrian plans

Free Responses

Free responses are shown in Appendix C. Some of these responses were quite helpful; for example, the traffic engineering response eliminated a lot of confusion that had existed with some of the flowcharts: in a nutshell, the Transportation Engineering Division (TED) has responsibility for obtaining current traffic counts, whereas TPD has responsibility for obtaining projected (future) traffic counts. Such an allocation of responsibilities seems reasonable, given that very different skill sets are involved (e.g., with current counts one wants to focus on day-to-day tasks of sampling and collecting data, whereas with forecast counts one needs to focus on the urban travel demand forecasting process or other techniques that make projections based on both current counts and expected land use changes). Several comments emanate from the free responses:

- *TED and TPD could coordinate corridor improvements*, given that TPD looks at capacity needs and TED looks at safety related needs. The Virginia Transportation Development Plan could be a tool for doing this relatively quickly.

- *TPD could use the existing counts provided by TED to develop a tool to give existing levels of service.* In practice, TED pointed out that TPD has some expertise that can be helpful with TED's traffic count information system. Perhaps such coordination could be a stepping-stone to TPD using its own planning information system to give real time levels of service.

- *TPD could coordinate projects with the MPOs* to make MPO-generated data (or data used by the MPOs in developing suggested projects for the TIP) available to VDOT. The division making this suggestion implied that a stronger linkage between VDOT and the MPOs could be beneficial, provided that TPD was actively involved in the TIP project development rather than only "processing" lists of projects.

- *TPD could assist environmental division staff with producing a project's purpose and need.* In a previous telephone conversation that was not part of this survey, an Environmental Division representative noted that that division needed both accurate traffic counts and a better understanding of a project's purpose and need (e.g., safety [alignment, geometry], capacity [the road cannot accommodate current or forecasted traffic] and to have this need explained in lay terms.

- Several persons do not know that these services are available or believe they do not apply to them; thus, *TPD may wish to educate VDOT customers as to what planning services are available from either central office or district planners.*

Finally, a Hampton Roads District respondent pointed out one service not included on the survey—the conveyance of surplus property once construction is complete. Over the telephone, this respondent explained that VDOT has a large amount of right of way left over from previous projects. After VDOT has completed construction, it may be the case that excess right of way can be:

- adjoined to adjacent properties,
- returned to cities (or counties), or
- retained for future construction projects.

Communication with TPD can show which option is most appropriate—if VDOT is not going to need the property for future projects, then steps can be taken to place the property in private or municipal hands. (A challenge that is currently faced is determining the value of some of these parcels.) This service was not included in the original survey.

LIMITATIONS OF THE SURVEY

Because of the small sample size, the survey should not be interpreted as a definite prioritization of all services. Instead, its chief value is that it offers insights of internal customers that, when coupled with other types of evidence, illustrate some areas of opportunity for TPD. Consider two examples:

1. Overall, the survey results indicate that the most important service is the preparation of traffic volume forecasts at both the planning and project level. It would be naïve simply to decide to invest resources in improving Virginia's traffic count data based solely on this survey. Other evidence, however, such as comments from the external survey, the flowcharts prepared by VDOT's Quality Assurance and Strategic Management Division, and anecdotal comments made by VDOT staff corroborates this view that providing accurate traffic volumes (current and future) is a critical service that would benefit a variety of customers. Thus, obtaining accurate counts and projections can be outlined as an area of opportunity where TPD and TED could invest some staff.

2. It would be incorrect to make a decision about the importance of "assist/conduct consultant studies" to divisions, given that only five divisions answered that question! However, given that the five divisions gave a low importance rating of 4.2, compared with the fact that 25 district respondents answered the question and gave a higher importance rating of 5.4 (and that a similar pattern occurred for a few other services), one can infer that there are some services where districts and divisions will prioritize the importance of services very differently.

SUMMARY OF KEY FINDINGS

1. Of the 25 services shown, sample sizes ranged from 16 to 44 respondents per service. If one stratifies by district or division, sample sizes range from 11 to 38 respondents (districts) or 4 to 7 respondents (divisions), respectively. Thus, insights, rather than statistically defensible findings, are what can be gained from interpreting these internal customer survey results.

2. The most important service, according to internal customers, is the preparation of traffic volume forecasts. The TED comments also support improving this service.

3. The next four important services, overall, are the development of the TIP in the MPO areas, the development of long range plans, site plan reviews, and the development of the transportation component for local transportation plans.

4. Districts rank the importance of site plan reviews much higher than do divisions.

5. Districts rank both the sponsorship of technical training and the integration of ITS into the planning process as more important than divisions. As with Finding 4, this division-district discrepancy distinction matters because it shows a need articulated by district respondents that might not be evident from solely division respondents.

6. Although there is a weak link between the importance of a service and its satisfaction level, there are four services that are ranked high in importance overall and are ranked at least 0.9 points higher for importance than satisfaction:

   - developing traffic volume forecasts
   - assisting with the development of the TIP in the MPO areas
   - integrating GIS based databases into the planning process
   - developing project cost estimates and revenue estimates for input in long range planning and project programming documents.

   The comments from the Programming and Scheduling Division support the observation that better coordination with the MPOs is needed. For clarification, as shown in the free response section, the interest of Programming and Scheduling appears to be in the coordination or transfer of funds as listed by MPOs; for example, updates to the Virginia Transportation Development Plan that make use of Congestion Mitigation and Air Quality (CMAQ) funds.

7. There were slightly more respondents who gave a rating for importance than who gave a rating for satisfaction. In such instances, this may indicate that there are respondents who believe they have enough knowledge to realize that a service is important but do not actually receive the service or do not receive it often enough to evaluate its delivery. Some free responses support this sentiment, where it was noted that services either do not apply or were not known to be available.

STAFFING AREAS OF OPPORTUNITY

1. Resources should be allocated to improving traffic volume forecasts, from the angles of obtaining current counts (in coordination with TED) and obtaining better forecasts. Comments by TED, findings from this internal customer survey, and the results of the external customer survey support this recommendation.

2. Resources should be allocated for site plan reviews for the districts, given both the districts' interest (from this internal survey) and the importance of site plan reviews for external customers (from the external survey).

3. District respondents—including persons based at the residency—expressed a strong interest in services that seem to have a technical training theme: integration of ITS into the planning process, sponsorship of courses, and technical assistance with the travel forecasting process. To say that this definitely means all district staff want technical training is perhaps reading too much into the 44 district responses, but it is certainly an area of opportunity that may be explored.

4. Resources should be allocated to coordinating with MPOs, given the high level of importance of the TIP according to the internal customer survey, the relatively low level of satisfaction (especially from divisions that gave a satisfaction rating of 4.4), the importance of MPOs in the TEA-21 legislation, and TPD's desire for improved relations with MPOs and PDCs. The interest in the transportation component of the local transportation plan—and the requisite cooperation between VDOT and localities—supports this suggestion.

5. Given the district level interest in assessing and commenting on project design features, combined with TED's willingness to collaborate more on coordinating corridor studies, an opportunity for TPD staff that might focus on district issues is to integrate corridor studies that require both planning and engineering input.

6. Although the suggestion comes from only one source—a TED free response in Appendix B—it is a valid one: in addition to staff who address traffic volume forecasts (see Suggestion 1), resources can be devoted to developing an information system that makes level of service information (based on these forecasts and current volumes) available to VDOT staff and external customers, such as MPOs.

7. A separate VTRC study (Turochy, Hoel) is tentatively finding that states which devote staff to project cost estimation have increased customer satisfaction with cost estimates. Given internal customers' moderate importance (5.2) but relatively low satisfaction (4.1) with this service, developing accurate project cost estimates might be another area of opportunity.

8. Some customers in the free responses expressed an interest in these planning services. VDOT may wish to consider advertising their availability to its internal customers.

APPENDIX A

SURVEY OF INTERNAL VDOT TRANSPORTATION PLANNING CUSTOMERS

January 16, 2000

TO: VDOT Division Administrators
VDOT District Administrators

SUBJECT: Short Survey of Potential Transportation Planning Services

The Virginia Transportation Research Council is assisting with a study of VDOT's statewide transportation planning environment. Earlier this year, we surveyed some of our key external customers and partners to ascertain how well we are meeting their needs. The findings of that survey were very enlightening, so much so that the Study Team has decided to expand the survey to address and include transportation planning's internal customers and partners.

VDOT's transportation planners would like your help in determining how they can improve the services they provide. In short, I would like your input on how planning within VDOT satisfies your needs. Thus, it would be appreciated if you would ask a member of your staff who is familiar with the planning process to complete the enclosed survey. The survey results will be used to identify the areas where additional planning staff may be most productive. Although the survey is multiple choice, you are welcome to give any additional comments that you believe are necessary.

For the purposes of this survey, please consider "transportation planners" to include both TPD and planners within the districts.

Please return your completed survey, either by email or fax, no later than Friday, February 2, to

Ann McDaniel
Virginia Transportation Research Council
530 Edgemont Road
Charlottesville, VA 22903
(804) 293-1954 (voice)
(804) 293-1990 (fax)
McDanielMA@vdot.state.va.us

Sincerely,

Ken Lantz
Transportation Planning Division

Potential Transportation Planning Division Services for VDOT

For each service shown below, please circle the appropriate numbers that indicate your *satisfaction* with the service and the *importance* of the service to your division or district. If you do not use a particular service, then leave that row blank.

	Service	*Satisfaction* with the Service Poor Average Excellent							*Importance* of the Service None Medium Critical						
Planning Services	Develop long range plans	1	2	3	4	5	6	7	1	2	3	4	5	6	7
	Develop bicycle and pedestrian plans	1	2	3	4	5	6	7	1	2	3	4	5	6	7
	Prepare traffic volume forecasts	1	2	3	4	5	6	7	1	2	3	4	5	6	7
	Provide other transportation data	1	2	3	4	5	6	7	1	2	3	4	5	6	7
	Provide technical assistance with the travel forecasting process	1	2	3	4	5	6	7	1	2	3	4	5	6	7
	Integrate ITS into the planning process	1	2	3	4	5	6	7	1	2	3	4	5	6	7
	Integrate GIS based databases into the planning process	1	2	3	4	5	6	7	1	2	3	4	5	6	7
	Assess new transportation modeling software and processes/procedures	1	2	3	4	5	6	7	1	2	3	4	5	6	7
	Assist/conduct consultant studies	1	2	3	4	5	6	7	1	2	3	4	5	6	7
	Assist/conduct legislative studies	1	2	3	4	5	6	7	1	2	3	4	5	6	7
	Review and comment on policy guidance documents	1	2	3	4	5	6	7	1	2	3	4	5	6	7
	Assist with the development of the transportation component of local transportation plans	1	2	3	4	5	6	7	1	2	3	4	5	6	7
	Sponsor technical training courses	1	2	3	4	5	6	7	1	2	3	4	5	6	7
	Assist with the development of the Transportation Improvement Program in the MPO areas	1	2	3	4	5	6	7	1	2	3	4	5	6	7
	Assist with air quality studies and analyses	1	2	3	4	5	6	7	1	2	3	4	5	6	7
	Undertake corridor, park and ride lot, and other special studies	1	2	3	4	5	6	7	1	2	3	4	5	6	7
	Develop project cost estimates and revenue estimates for input in long range planning and project programming documents	1	2	3	4	5	6	7	1	2	3	4	5	6	7
	Undertake freight, passenger ferry, transit, and other multimodal studies	1	2	3	4	5	6	7	1	2	3	4	5	6	7
	Conduct/assist with site plan reviews	1	2	3	4	5	6	7	1	2	3	4	5	6	7
	Assist with the development and implementation of enhancement projects	1	2	3	4	5	6	7	1	2	3	4	5	6	7
	Other: _____	1	2	3	4	5	6	7	1	2	3	4	5	6	7
	Other: _____	1	2	3	4	5	6	7	1	2	3	4	5	6	7
Project Services	Attend project development meetings	1	2	3	4	5	6	7	1	2	3	4	5	6	7
	Review plans for the provision of bicycle and pedestrian facilities	1	2	3	4	5	6	7	1	2	3	4	5	6	7
	Assess and comment on project design features	1	2	3	4	5	6	7	1	2	3	4	5	6	7
	Participate in project value engineering studies	1	2	3	4	5	6	7	1	2	3	4	5	6	7
	Prepare traffic volume forecasts	1	2	3	4	5	6	7	1	2	3	4	5	6	7
	Other: _____	1	2	3	4	5	6	7	1	2	3	4	5	6	7
	Other: _____	1	2	3	4	5	6	7	1	2	3	4	5	6	7

Potential Transportation Planning Division Services for VDOT

(Continued from Previous Page)

Name: _____

Division or District: _____

I use transportation planning services: ____daily ____weekly _____monthly ____annually ___never

I receive such services from:
____only the central office
____mostly the central office and a little from the districts
____equally split between the central office and the districts
____mostly the districts
____only the districts

Please return the completed survey by Friday, February 2, to

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Page 2 of 2

APPENDIX B

DATA ENTRY CAVEATS

There were three anomalies in the survey responses where the responses did not fall into the given categories. Here is how each of those points was addressed:

- One division (Programming and Scheduling) had three respondents each complete the survey. It could be argued that the proper thing to do is average that division's responses and include that as only one unit. However, a division's willingness to complete a survey is a rough surrogate for that division's dependence on TPD (and vice versa), thus, it can be argued that such a division's response should carry more weight. Accordingly each of the three Programming and Scheduling responses was counted as a single data point. Similarly, the Environmental Division had two respondents complete the survey. The same mentality was used with district responses: each response was counted equally, with the motivation being that if a district had enough interest in transportation planning to complete two responses, then such a district's overall response should carry more weight than a district that has only one response.

- For the second to the last question "I use transportation planning services daily, weekly, monthly, annually, or never," the Construction Division had indicated "daily, weekly, monthly, and annually." Accordingly, since the question was framed to represent all services for TPD, that answer was changed to "daily," as noted on the spreadsheet. For that same question, the Culpeper District had indicated "daily and monthly." Accordingly, the answer was changed to "daily" as noted on the spreadsheet. A respondent who noted "varies" was simply not included in the total.

- The Bedford residency had marked for the last question that they received services from "only the central office" and "mostly the central office and a little from the districts." The response was changed to the latter category "mostly the central office and a little from the districts." Similarly a Hampton Roads District respondent had marked that they received services from "equally split between the central office and the districts" (for the interstate, urban, and primary systems) and "mostly the districts" (for the primary and secondary systems). Their response was also consolidate to the latter category of "mostly the districts." A respondent who wrote "some of both" was not included in the total.

To verify that the spreadsheet was accurate, the computations for one service, "prepare traffic volume forecasts," were checked by hand.

APPENDIX C

FREE RESPONSES

Traffic Engineering Division

- TED depends heavily on TPD for traffic volume forecasts for construction project design. I am asking around for the level of satisfaction, but have not heard any complaints.

- TED depends on TPD to conduct highway needs assessments, and including safety needs identified by TED in appropriate lists of needs. These may include long-range plans, the STIP, and other studies.

- One area of interest to us that deserves greater effort is in conducting corridor studies that consider the need for both capacity and safety improvements. My impression is that TED identifies spot improvements that are safety needs, and that TPD identifies spot improvements that are congestion needs, as independent efforts. We might want to consider a team approach to corridor studies that focuses on relatively low cost spot improvements that could be funded quickly through the Virginia Transportation Development Plan, or Secondary System Six Year Plans.

- Another area we want to emphasize is the analysis of the operations of the transportation system primarily looking at existing levels of service. This goes into the phone conversation I had with John Miller on Thursday about TED collecting traffic count data, and TPD analyzing the count data. I suggest working together to present this information within VDOT. TPD's planning information system may be the vehicle for this, where we supply a link to the traffic count data, and they provide results of the level of service analysis, that we both may use in identifying needed improvements. TED's emphasis on improvements is on near-term spot improvements, where TPD may focus on the major projects that add significant capacity.

Programming and Scheduling Division

When developing the VTDP, information from the MPO is absolutely critical. The CMAQ and R-STP funds must be shown as the MPO has listed them. Many times, particularly in the NOVA and Richmond non-attainment areas, CMAQ and R-STP funds from previous years are transferred to other projects without our knowledge. This causes problems when we go to reconcile the VTDP. When we discuss these issues with TPD planners, they seem lost most of the time, and don't seem to understand the process themselves. There is definitely a lack of communication. When dealing with these planners, particularly those in NOVA, they seem to be acting as agents of the MPO, rather than agents of VDOT. We feel that a coordination meeting between TPD, programming divisions, and the MPO, and held here in the CO, would help facilitate this process and help to improve communications.

Information coordinated through TPD with the MPO is inadequate. Correspondence relating to the programming and scheduling of projects including allocations and transfer of funds is seldom forwarded to the divisions in a timely manner—if at all to the divisions responsible for taking action. It appears TPD involvement is limited to processing the TIP for

approval. There needs to be a better understanding internally and with the MPO as to what is required and expected. TPD needs too be more responsive to internal requests as well.

[This division also listed "coordination on MPO projects" as a service, rating a 2 for satisfaction and a 5 for importance.]

Internal Audit Division

This division listed "provide transportation data, documents, and responses for audits" as a service, rating a 6 for satisfaction and a 5 for importance.

Location and Design Division

This division listed two other services:

- coordinate corridor studies, with a "7" for satisfaction and a "6" for importance
- gather information from previously completed studies, with a "7" for satisfaction and importance.

Comments from the Richmond District

Many of the services listed below sound very desirable to me. However, I cannot recall utilizing many of them and thus have not filled out a rating. I am not certain why these services have not been fully utilized (for example: Provide technical assistance with the travel forecasting process, Assess new transportation modeling software and processes/procedures, Undertake freight, passenger ferry, transit, and other multimodal studies, etc.). Perhaps I have not taken the time to request the services. In any event, one of the main things I have learned by filling out this survey is the broad breadth of services offered within the agency for transportation planning.

I appreciate the opportunity to comment.

Comments from a Richmond District Residency

In the rural area where I am located, I have had very limited with Transportation Planning Division.

Comments from a Culpeper District Residency

Most are not applicable for the residency.

Comments from the Hampton Roads District

One of the functions of the Hampton Roads District Right of Way/Property Management section is to convey surplus and residue property that remains after the construction of our roadway projects. Before the conveyance can occur, Right of Way solicits recommendations from our district planning office concerning future projects and the impact the conveyances may have on this future construction. Planning recommendations are a vital part of this decision making process.

APPENDIX D

POSSIBLE LINKAGE BETWEEN INTERNAL AND EXTERNAL SURVEY CATEGORIES

This internal survey with 25 services was organized differently than the internal survey with 7 categories of services. While the correspondence between the two is not perfect, it is possible to link services from one survey to services from the next. The table gives one way of linking the services.

Transportation Planning Service for the Internal Customer Survey	Transportation Planning Service For the External Customer Survey
Prepare traffic volume forecasts	Conduct passenger planning
Prepare traffic volume forecasts (Project Level)	Conduct passenger planning
Assist with the development of the Transportation Improvement Program in the MPO areas	Perform strategic, long-range transportation planning.
Develop long range plans	Perform strategic, long-range transportation planning.
Conduct/assist with site plan reviews	Perform site plan reviews
Assist with the development of the transportation component of local transportation	Perform strategic, long-range transportation planning.
Assist with air quality studies and analyses	Answer questions and provide technical assistance
Integrate GIS based databases into the planning process	Provide assistance with modeling and quantitative analysis
Assess and comment on project design features	Answer questions and provide technical assistance
Develop project cost estimates and revenue estimates for input in long range planning and project programming documents	Answer questions and provide technical assistance
Assist/conduct consultant studies	Serve as a liaison between your organization and different VDOT work units.
Review and comment on policy guidance documents	Answer questions and provide technical assistance
Provide technical assistance with the travel forecasting process	Provide assistance with modeling and quantitative analysis
Provide other transportation data	Serve as a liaison between your organization and different VDOT work units OR Provide assistance with modeling and quantitative analysis [depending on whether the role is to obtain or to integrate data]
Integrate ITS into the planning process	Perform strategic, long-range transportation planning.
Undertake corridor, park and ride lot, and other special studies	Conduct passenger planning.
Attend project development meetings	Serve as a liaison between your organization and different VDOT work units.
Sponsor technical training courses	Serve as a liaison between your organization and different VDOT work units OR Provide assistance with modeling and quantitative analysis [depending on whether the role is to administer or teach the course]
Participate in project value engineering studies	Answer questions and provide technical assistance
Assess new transportation modeling software and processes/procedures	Provide assistance with modeling and quantitative analysis
Assist/conduct legislative studies	Answer questions and provide technical assistance
Assist with the development and implementation of enhancement projects	Answer questions and provide technical assistance
Review plans for the provision of bicycle and pedestrian facilities	Conduct passenger planning
Undertake freight, passenger ferry, transit, and other multimodal studies	Conduct freight planning
Develop bicycle and pedestrian plans	Conduct passenger planning