

Report on Stakeholders Analysis

FAST-TRAC Phase III Deliverables

- #5 One Set of Stakeholder Readings
- #6. Final version of the Stakeholders' Questionnaire
- #7. Stakeholders' Analysis Report

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FAST-TRAC Project

Phase III Reports #5-7

- 5. One Set of Stakeholder Readings**
- 6. Final version of the Stakeholders' Questionnaire**
- 7. Stakeholders' Analysis Report**

Submitted by Public Sector Consultants (PSC), Inc.

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#6. Final version of the Stakeholders’ Questionnaire

#5. One Set of Stakeholder Readings

Phase III Reports #7

Stakeholders' Analysis Report

ABSTRACT

This study was undertaken to identify and evaluate criteria by which the public, and certain stakeholder groups within the public, will judge the merits of the FAST-TRAC system. Over a period of two years, three surveys were conducted to obtain specific information from stakeholders about various aspects of the system and its impact on the problems associated with adverse traffic conditions. Phase III concludes the study.

EXECUTIVE SUMMARY

This third and final round of stakeholder interviews continued to identify and clarify stakeholder perceptions and concerns regarding the FAST-TRAC system. The majority of stakeholders continue to give the project passing grades; perceptions of certain key aspects of the project, however, have fallen slightly over its lifespan.

Stakeholders continue to express support for the concept of using technology to help alleviate some of the adverse aspects of modern day traffic conditions. When asked what they liked about the FAST-TRAC system, the majority responded that they appreciated the intent of the system which is to sense actual traffic conditions in real-time and adjust the signalization timing and flow of traffic accordingly. Many respondents pointed out however, that the system is still experiencing technical malfunctions from time to time; these glitches are seen to generate confusion and frustration.

Other aspects of the system that stakeholders expressed concern over deal with the costs of maintaining the system after the experimental phases are over, and perceptions that the benefits of the system were represented as greater than what has been the experience of many. These notions are especially prevalent among government administrators and one of the major media outlets in Oakland County. Some negative unintended consequences have been observed by a minority of stakeholders, among them is a perceived higher incidence of running red left-turn signals; others are motorists avoiding intersec-

tions by cutting through parking lots on comers to make turns and making U-turns out of the left turn lane, apparently out of frustration.

Stakeholders have not changed their estimation of overall traffic conditions significantly over the two-year period of the study assigning scores near the midpoint of a 0-10 scale for all three regions of the county. Stakeholders believe that the northern portion of the county has the best traffic conditions of the three regions; in Phase III they rated it at 5.67. Central Oakland County has trailed the other regions in this category, but it posted a slight gain over the past year moving from 4.39 to 4.54.

Phase III interviews found that 50 percent of the stakeholders believe that FAST-TRAC has had a positive impact on the problem of traffic congestion and nearly 40 percent believe that it has had no impact on this question. A year ago nearly 70 percent of respondents opined that the system had reduced traffic congestion, while 26 percent believed it had no impact.

FAST-TRAC did, however, score significantly better among stakeholders in Phase III over Phase IIB with regard to its perceived impact on traffic safety. Phase IIB found that a third of those polled felt that FAST-TRAC had actually reduced traffic safety in the region. Slightly more than 40 percent felt that it had increased safety, with 26 percent believing that it had no impact on this variable. Phase III data indicate that only 3 stakeholders (11 percent) now believe that FAST-TRAC is a negative factor in traffic safety and two-thirds believe that it has had a positive impact on the question. Twenty percent believe that the system had no impact.

Roughly 40 percent of all respondents in both surveys believed that FAST-TRAC has reduced the amount of time it takes for auto travel; nearly forty percent each time believed that it has had no impact. Twenty percent of Phase III stakeholders believe that FAST-TRAC has added to the time it takes them to travel in the car; stakeholders in Phase IIB who believed this to be true comprised about 12 percent of the sample.

Participants' confidence in FAST-TRAC's ability to positively impact traffic conditions fell significantly from Phase IIA to IIB but data from Phase III indicate that it has leveled off. While stakeholders have readjusted downward their expectations of FAST-TRAC's ability to reduce traffic congestion since the first survey, they still believe that the system will have a net positive effect in helping to improve overall traffic conditions. On a 0-10 scale, stakeholders currently believe that FAST-TRAC will improve county-wide traffic conditions (over what they presently are on the same scale) by 1.16 points. This figure is virtually identical to the findings (1.13) found in Phase IIB. Stakeholders estimated that FAST-TRAC could improve county-wide traffic conditions by nearly two points (1.81) in the Phase IIA survey.

When measured against the universe of other traffic congestion solutions, the percentage of the role stakeholders believe FAST-TRAC should play, came down slightly over time. Stakeholders groups in Phase IIA thought that FAST-TRAC technology should comprise roughly one-third of the efforts to mitigate the adverse aspects of traffic congestion. In Phase IIB, respondents believed that its technology should only make up 25 percent of the total mix of potential solutions to congestion. The percentage

that interviewees assigned to the same question in Phase III was virtually the same as the previous period (22.3).

The degree to which stakeholder expectations of FAST-TRAC have been met has fallen slightly over the past year. Phase IIB found 25 of 34 people stating that the technology had met or exceeded their initial expectations. In Phase III, the number answering affirmatively to the question dropped to 21.

Although slightly less so than in the past, a majority of interviewees continue to support the concepts represented by FAST-TRAC technology. When asked if they were currently predisposed to be supportive or unsupportive of the system, more than 80 percent of the stakeholders declared themselves to be supportive of it; six respondents are currently unsupportive. These findings contrast with those from Phase IIB where only one person was unsupportive; better than 97 percent at that time were supportive of the technology.

Overall, FAST-TRAC continues to register with people as a worthwhile tool, but over time the perceived efficacy of the system has slightly readjusted downward. A majority of the stakeholders hold out hope that a fully implemented and properly functioning system could make a positive difference on traffic conditions in Oakland County.

A. OVERVIEW OF ACTIVITIES

Between July 1994 and January 1995, Public Sector Consultants, Inc. (PSC), conducted Phase IIA of the Oakland County FAST-TRAC Project; 54 individuals were interviewed in 19 stakeholder groups to ask them questions about traffic conditions in Oakland County and to what extent they believed FAST-TRAC technology would affect them

The goal of Phase IIA was to establish a starting point for each stakeholder group against which to measure changes in perceptions of FAST-TRAC technology over time. Phases IIB and III built upon the initial impressions of the project and have documented the perceptual changes that occurred.

In Phase IIB, PSC tracked perceptions of the individuals in the stakeholder groups by conducting telephone interviews with them during the fall of 1995. While every effort was made to interview all of the original 54 stakeholders in Phase IIA, a total of 40 were interviewed for Phase IIB. The reduced number of interviews in this longitudinal study resulted from the fact that four stakeholders have changed jobs and left the area during the 18 months from the beginning of phase IIA, and an additional nine have declined to participate further in project activities.

Phase III project activities continued to monitor and document stakeholder impressions of FAST-TRAC. Thirty-four stakeholders were interviewed; six declined additional participation in the study.

B. METHODOLOGY

In order to provide accurate longitudinal information-comparing “apples to apples”-data from stakeholder groups in Phase III represent only those participants whose responses we were able to obtain in both Phase IIA and Phase IIB. For the sake of accuracy and continuity across the entire project time line, the stakeholder groups suffering from attrition in Phase III have been reconfigured reflecting only the data available from all time periods.

Interviewees were asked a series of key questions across all the three phases of the project; among them are the following:

1. Based on their own personal experiences, all interviewees were asked to state their specific positive and negative feelings about the FAST-TRAC system. Abbreviated stakeholder responses are shown in Exhibit A.
2. In Phase IIA and IIB, interviewees were asked to rate actual traffic conditions in three geographic regions of Oakland County in relation to their desired traffic conditions on a scale of 0 to 10, with 10 representing their ideal. In Phase III, interviewees were reminded of their answers to this question for the first two phases and asked to assess traffic conditions at the present time. For these questions, Oakland County was divided into the following three regions:

South - the area north of 8 Mile road up to and including I-696

Central - the area north of I-696 up to and including M-59

North - the area north of M-59

A separate rating was given for each section of the county. The results are shown in Exhibits B and C.

3. All interviewees were asked to assess the impact of FAST-TRAC on traffic congestion, traffic safety, and travel times. The results are shown in Exhibit D.
4. Interviewees were asked to indicate the degree to which they now believed that FAST-TRAC would help move traffic conditions toward or away from their ideal conception of traffic patterns in the three geographic areas of Oakland County. The stakeholders' evolving perceptions of the ability of FAST-TRAC to impact traffic conditions are shown in Exhibits E and F.
5. As a follow-up to a key question in previous phases, interviewees were asked to indicate the percentage that they now believed FAST-TRAC should comprise in the universe of traffic congestion solutions. Exhibit G illustrates stakeholder group composite scores for Phases IIB and III, and the degree to which they may have changed over time. A ranking of stakeholder group perceptions for this question is also shown.
6. Stakeholders were asked to identify the degree to which they were supportive or unsupportive of FAST-TRAC. Exhibits H1 and H2 illustrate these findings.
7. Interviewees were asked if the FAST-TRAC system had met their expectations to date. Further data on this question are shown in Exhibit I.

C. MAJOR FINDINGS OF PHASE III INTERVIEWS

I. Stakeholder Appraisal of FAST-TRAC

Stakeholders have now had the benefit of observing the FAST-TRAC system for an extended period of time. Individual stakeholders and stakeholder groups have had differing types of exposure to the system and its effects, due mainly to their respective occupational duties.

Overall, a single positive theme prevailed through the three stakeholder interviews.

- When asked what they like about FAST-TRAC, a majority of the respondents opined that the system uses technology to attempt to adjust the timing of traffic signals lights based on the individual traffic flow circumstances present at those lights at any given time. This finding is similar to what was expressed by stakeholders in Phase IIB. Many people qualified their answer by saying that the technological concept is a good one as long as the technology is operating the way it is supposed to. This caveat was expressed in Phase IIB as well. Most people realize that the traffic congestion problem is caused by an explosion in population and development growth in Oakland County and that the capacity of the existing road system is overburdened. It is, however, recognized that it would be very expensive, and in some areas, physically impossible to build a way out of the problem. The concept of using properly functioning technology to help alleviate some of the problems associated with the over-capacity of the transportation infrastructure is seen in positive terms.

The other major positive theme from Phase IIB was that FAST-TRAC helps to address the notion of free flowing traffic. This idea was their most commonly expressed desired ideal traffic condition, but at a lesser level than the previous time period.

When stakeholders were asked what they disliked about the FAST-TRAC system, many themes were mentioned. Among them were:

- There continues to be a certain amount of lingering concern over the technical glitches in the system.
- The issue of the initial costs for the system and future maintenance costs concern many, especially government administrators and the media.
- The benefits of the system **may** have been oversold to various sectors of the communities involved with the project. Many stakeholders expressed the opinion that the results, to date, of the FAST-TRAC project do not coincide with what they were told on the front-end by project planners.
- Some unintended negative consequences are; the practices of tailgating at, and eventually running through, red left-turn traffic signals. According to some, these situations may also be on the rise. Others have noticed **motorists** cutting through corner parking lots to **make** turns or pulling out of the left turn line to make a U-turn instead of waiting for the lights. A few interviewees mentioned that it seemed to be harder to enter onto a main thoroughfare from a subdivision now.
- The general motoring public may still not be as fully aware as they need to be in order to trigger the traffic signal changes with the FAST-TRAC system; the system's effectiveness may be compromised by drivers who don't know to pull up to a certain spot in line, or to close ranks so that the hardware can sense their presence.

2. Stakeholder Assessment of Current Traffic Conditions

Congestion was the traffic problem stakeholders found most vexing in Phase IIA interviews. Over the two year time period, the perceptions of the overall traffic situation have not changed significantly. This

is important because growth in Oakland County since the study started two years ago has entailed an increase in the number of vehicles on the roads.

At all three time periods, stakeholders were asked to assign a numerical value between 0 and 10, with 10 representing their ideal traffic conditions, to the current traffic conditions in three regions of Oakland County. As is illustrated in Exhibit B, stakeholders assigned a county-wide traffic condition average of 5.00 during phase IIA. A slightly lower 4.87 average was obtained in Phase IIB. Phase III found the county-wide average rising slightly to 5.15 for all stakeholders which suggests a slight increase in feelings that things are better.

Stakeholders believe that the northern portion of the county has better traffic conditions than the other two regions; it rates a 5.76--up from 4.87 in Phase IIB. Traffic conditions in southern Oakland county are rated by interviewees at 5.13 at present. A year ago they assigned a 4.76 to the area. Central Oakland County has trailed the other two regions in each phase, but it too, has posted minuscule gains over the preceding twelve months moving from 4.39 in Phase IIB to 4.54 at the moment.

Exhibit C shows the changes in traffic conditions as detected by each stakeholder group over all three phases of this study. County-wide, representatives from the following stakeholder groups feel traffic conditions have gotten worse between Phases IIA and IIB: automotive (-.83), citizen/consumer representatives (-.75), environmentalists (-.42), trucking concerns (-.33), government administrators (-.33), and university professionals (-.33). The stakeholder groups registering the largest positive change in county-wide traffic conditions are developers (2.0), police (1.0), and seniors/handicapped (.75). Transit officials and homeowner/community representatives believe that county-wide traffic conditions have improved by a margin of .67 on a scale of 0-10.

3. Stakeholder Perception of FAST-TRAC Impact on Traffic Congestion, Safety, and Travel Times

Phase III saw a decline from Phase IIB in stakeholders' perception of the positive impact that FAST-TRAC is making on traffic congestion. As Exhibit D shows, 17 stakeholders (50 percent of those interviewed) currently believe that the system has either slightly or greatly reduced congestion. Thirteen people (nearly 40 percent) now believe that the system has had no impact on congestion. Three stakeholders (11 percent) opined that traffic congestion has increased because of FAST-TRAC. In Phase IIB, however, 24 interviewees (70 percent) believed that FAST-TRAC had reduced traffic congestion with only one person of the mind that congestion was worse because of it. Twenty-six percent of those interviewed believed that it had no impact on the congestion situation.

FAST-TRAC did, however, score significantly better among stakeholders in Phase III over Phase IIB with regard to its perceived impact on traffic safety. Phase IIB found that a third of those polled felt that FAST-TRAC had actually reduced traffic safety in the region. Slightly more than 40 percent felt that it had increased safety with 26 percent believing that it had no impact on this variable. Phase III data indicate that only 3 stakeholders (11 percent) now believe that FAST-TRAC is a negative factor in traffic safety and two-thirds believe that it has had a positive impact on the question. Twenty percent believe that the system had no impact.

The passage of time between Phases IIB and III did little to alter stakeholder perceptions of the impact that FAST-TRAC has had on travel times in Oakland County. Roughly 40 percent of all respondents in both surveys believed that FAST-TRAC has reduced the amount of time it takes for auto travel; nearly 40 percent each time believed that it has had no impact. Twenty percent of Phase III stakeholders believe that FAST-TRAC has added to the time it takes them to travel in the car; stakeholders in Phase IIB who believed this to be true comprised about twelve percent of the sample.

4. Stakeholder Confidence Level of FAST-TRAC's Ability to Positively Impact Traffic Conditions

In Phases IIA, IIB, and III, stakeholders were asked to give their opinion on the effect the FAST-TRAC system might have on traffic conditions for the three geographic regions in Oakland County. After each stakeholder stated their assessment of current traffic conditions for each region on a 0-10 scale with 10 being the ideal, they were asked to predict by how many points on a similar scale might FAST-TRAC move traffic conditions toward or away from the ideal. The county-wide results are found in Exhibit E.

While interviewees have readjusted downward their expectations of FAST-TRAC's ability to reduce traffic congestion over the course of this study, they still believe that the system will have a net positive effect in helping to improve overall traffic conditions. In fact, there is no difference between stakeholders' perceptions on this issue from Phase IIB to Phase III. It should be kept in mind that, at the time of the IIA interviews, FAST-TRAC was not operational. Interviewee responses about the system at that time were based on information presented to them by an introductory video tape by the interviewer and other information that they may have received about the project on their own. Since that time the system has been implemented and interviewees have had real-world experience with it.

In Phase IIA, stakeholders initially believed that implementation of FAST-TRAC technology could move the state of existing county-wide traffic conditions in a positive direction, over and above what they thought conditions were then by nearly two points (1.81) on the 0-10 scale. Although stakeholders overall still believed that the system would still positively impact the state of traffic conditions, Phase IIB saw a significant fall-off in stakeholder confidence of the system's ability to do so. Respondent estimation fell from the 1.81 in Phase IIA to 1.13 in Phase IIB. Overall, stakeholder opinion in

Phase III about the system's future ability to improve traffic conditions county-wide leveled off at the previous plateau (1.16.)

Throughout the study, stakeholders have believed that FAST-TRAC could impact the southern and central regions of the county more than the northern section. Respondents in Phase III indicated that they believe FAST-TRAC technology could improve traffic conditions in southern Oakland County by 1.26 points on a scale of 0- 10. They estimate that conditions in the central portion of the county could be improved by 1.25 points while thinking that the north would only benefit by .96.

5. Stakeholder Perception of FAST-TRAC as a Percentage of the Total Solution to Traffic Congestion

Stakeholders groups in Phase IIA thought that FAST-TRAC technology should comprise roughly one-third of the efforts to mitigate the adverse aspects of traffic congestion. This percentage dropped in Phase IIB; respondents believed that the technology should only make up 25 percent of the total mix of potential solutions to congestion. The portion that interviewees assigned to the same question in Phase III was virtually unchanged, overall, coming in at 22.3.

As shown in Exhibit G, those stakeholder groups expressing the largest drop-off from Phase IIB to Phase III were trucking concerns (-25 percent), government administrators (-16.5 percent), and developers and senior/handicapped registering a decline of 10 percent each. Five groups now hold a slightly higher estimation of FAST-TRACY as a percentage of the universe of solutions to traffic congestion. The emergency vehicle operator group adjusted its estimation upward by 15 percent, government planning personnel by 9.33 percent, transit officials by 4.0 percent, homeowner/community group by 1.67, and transportation professionals by 1.25.

The K-12 education group believes that FAST-TRAC should comprise 50 percent of the solution to traffic problems. The homeowner/community group

and trucking companies believe that it should be at least 40 percent of the answer. These three groups ranked the highest in this perception in Phases IIB and III.

Two groups think that the technology could be 30 to 39 percent of the solution: automotive professionals and emergency vehicle operators. In the 20 to 29 percent bracket were seniors/handicapped, transit operators, government planners, chambers of commerce, and transportation professionals. Citizen/consumers weighed in at 15 percent. The lowest scores assigned to this question-10 percent or less-came from the following stakeholder groups: the media, the police, university professionals, environmentalists, government administrators, and developers.

Again, in this round of interviews, the majority of people acknowledged that FAST-TRAC can only do so much; the larger problem is one of explosive growth in areas where the transportation infrastructure is severely overburdened. When fully implemented and properly functioning, FAST-TRAC technology does have a role to play according to respondents because of the high cost of road expansion projects. During the time period of real-life experience with FAST-TRAC (Phase IIB to III), stakeholders overall were essentially unchanged as to their opinion about the percentage that the technology should play as opposed to other potential solutions to traffic problems.

6. Current Stakeholder Predisposition Towards FAST-TRAC

Although slightly less so than in the past, a majority of interviewees continue to support the concepts represented by FAST-TRAC technology. When asked if they were currently predisposed to be supportive or unsupportive of the system, more than 80 percent of the stakeholders (28 of 34) declared themselves to be either slightly or very supportive of it; six respondents currently are either somewhat unsupportive or very unsupportive. These findings contrast with those from Phase IIB where only one person was unsupportive; better than 97 percent at that time were supportive of the technology.

Individual stakeholder responses to this question for Phases IIB and III are shown in Exhibits H1 and H2. The one person (an environmentalist) who was unsupportive of the technology in Phase IIB has now moved into the somewhat supportive column. Moving in a negative direction on the support/non-support issue were both members of the government administrator group, and one member each from the following groups: police, government planning personnel, citizen/consumer, and the media.

It may be worth noting that the groups that have experienced the most direct contact from the general public (i.e., receive the most complaints) about the FAST-TRAC system--government administrators, police, and the media--hold the most negative opinions about the project's merits. The administrators are especially vexed by the perceived burdens of taking over financial responsibility for the system after the experimental phases are concluded. Members of these groups expressed the opinion that the system's benefits were "over-hyped" by project planners at the outset of the experiment and, to a certain extent, continue to be so today.

Overall, however, most people continue to believe that if the system is fully implemented and functioning properly, FAST-TRAC is a positive step towards reducing traffic problems.

7. Stakeholder Expectations of FAST-TRAC

Stakeholders were asked to assess whether their expectations of FAST-TRAC had been met. In Phase IIB, 25 of the stakeholders answered affirmatively to this question; the expectations of eight people had not been met. Phase III saw a slight decline in the number people whose expectations had been met, from 25 to 21; the number of those whose expectations were not met correspondingly rose from 8 to 13. Selected comments on this issue appear in Exhibit I.

This finding is relatively consistent with the notion among a sizable minority of the stakeholders interviewed that they initially believed, correctly or incorrectly, that the benefits of the system were going to be greater than what they have experienced to date.

FAST-TRAC STAKEHOLDERS

Stakeholder Group Key for Exhibits A and I

- 1. Delivery Services**
- 2. Trucking Companies**
- 3. Emergency Vehicle**
- 4. Business--Chambers of Commerce**
- 5. Business--Companies**
- 6. Real Estate/Developers**
- 7. Automotive**
- 8. Government Administrators**
- 9. Police**
- 10. Government Planning**
- 11. K-12 Education**
- 12. University Professional**
- 13. Citizen/Consumer**
- 14. Media**
- 15. Homeowner/Community**
- 16. Transportation Professional**
- 17. Seniors/Handicapped**
- 18. Transit Operators**
- 19. Environmental**

Exhibit A

Stakeholder Groups

Number	Letter	Likes	Dislikes
2	A	It works with traffic signals to help move traffic. Left hand turn allows traffic to go before and after light. It has done a lot for traffic flows.	When coming the opposite way against traffic, you have to wait a long time at the light. I've noticed some people getting frustrated at lights and pulling out of line because they think it is broken.
3	A	I don't see that much improvement; It's hard to comment.	Nothing.
4	A	It improves safety. Experimentation into non-traditional traffic management is good. It is a business development opportunity for traffic management industry in the area	Not being able to measure the difference it makes. It has limitations. Not sure it is cost beneficial.
4	B	It increases safety. The hope is that it will see my vehicle and light will change.	I'm never sure it knows I'm there at night when no one else is around.
6	C	I've seen the system around the Silverdome work; its able to read traffic patterns and change.	I've seen the system get in an unsynchronized mode; it becomes an impediment to traffic flow. For the people who have learned to time the lights, FT disrupts them. When the traffic is heavy, change of lights and movement of cars is not that great.
7	A	It is the cutting-edge of technology, offering hope that the situation is getting better with existing infrastructure	Nothing
8	A	I believe in the premise, but it has never worked the way it was purported to do.	It costs the county \$700,000 for maintenance. This cost will be Troy's next year and will have to be reflected in taxes. The old system cost \$75,000; we wouldn't have to raise taxes with it. It has created a safety hazard--tailgating at lights
8	B	If it were to operate as promised, I like the demand management aspect of it--higher demand, more traffic flow. But that is not what is happening.	I don't like the expense of it or the slow signal sequencing of it--it's built into the software. I don't think it's reliable. It operates on a fixed-time base, not demand, but still doesn't achieve progression as well as on a regular MDOT system.
9	B	I like the left turn arrows. If you are moving in the direction of little traffic, FT works. There are reduced traffic accidents at left turns	Long cycles at intersections. The expectation was that FT would move traffic through the city at a faster rate; it hasn't done so.

10	A	I like it when it works well; it provides extra time at a light for extra cars. The demand/response premise is good.	There is frustration. It is hard to keep up with localized maintenance problems. It seems to be a high maintenance type of system.
10	B	FT is able to adjust signalization to actual conditions.	FT is not fully implemented; it has taken a long time
10	C	It does apparently recognize traffic flow, but it still needs adjustments.	It's a very sophisticated system, but hasn't been working well. Rush hour--non-flow conditions--doesn't adapt as well as it was purported to do. Initial high expectations were more than FT could deliver. I'm concerned about long-term maintenance costs.
11	A	I like left turn arrows and the way it moves traffic. There are less accidents.	Is someone actually watching? One bus sat through 7 straight lights; only three cars were let through in the 2 straight ahead lanes. Doesn't seem to be consistency in Troy; certain times traffic is heavy and lights aren't adjusted.
11	B	I like the ability to adjust to for traffic conditions. It does provide for a safer road system; volumes of traffic are coordinated better. Left turns are managed better through FT.	Occasionally, the light goes through cycle 4-5 times before it lets me turn left; I don't know if it's a malfunction or if it's operating correctly. People don't understand FT; driving public needs to be re-educated.
11	C	It helps to move traffic; people don't have to sit for long periods of time. It helps with congestion.	A lot of the public don't know what FT is; people bad-mouth things they don't know about. There seems to be mass confusion. Even here, some of the bus drivers don't know.
11	D	It moves traffic better. I like the new left turn system; sometimes it is a longer wait, but it isn't a predetermined time.	Nothing
12	C	When traffic is at a smaller volume, the lights are better synchronized and traffic flows better. But, in heavy traffic and rush hour, there is no difference.	Friends tell me that they have a hard time getting from their subdivisions onto main roads.
13	A	Nothing	Comments I hear from the public: FT is a waste of government time and money and wasting their time. I usually don't hear good things.
13	B	It should be the goal of transportation systems to optimize performance with most economical use of resources. If FT can alleviate major road construction, save money, reduce impacts and pollution, and improve fuel efficiency, it's good.	Sensors on the road don't always trip it.

14	B	The timing of lights is usually an improvement over old system. If it is working, FT cuts travel times in certain directions; Most of the time I can make left turns faster than in non-FT areas.	Blinking red situation is not in effect everywhere. People don't completely understand it. There wasn't enough public education on the front end. Media didn't understand it all; it was explained one way, but it works another.
14	C	There is nothing to like about it. It's a great idea on paper, but it's a bewildering thing for motorists.	It's more difficult to walk; many people aren't aware it's in place. A car needs to be in the right place for system to read it--it's tricky. People have trouble getting from side streets onto major roads. Tailgating is encouraged on left turns.
15	A	The high-tech, dynamic signaling that senses traffic flow and adjust signals accordingly.	Nothing
15	B	I like the double left turn phase on the same turn	When the timing is off, it makes people mad. People are not obeying the signals--some are turning on solid red left and cutting through parking lots to turn comers. FT system works, but the fault lies with the people disregarding the system.
15	D	I like how rapid it responds to congestion in any given area--how fast it reprogram traffic directions. Ali-scout should offer different tones and voices.	Nothing
16	A	It is another tool to help motorist deal with congestion; it does work in certain areas. It makes for safer driving.	Today, I don't dislike anything about FT. It got a bad reputation in the public eye when it was advertised to be THE solution to congestion, but it is only a piece.
16	B	The sheer pleasure of being able to correct a signal problem from the office; I used to spend more time on the road, this makes my time more productive. The overview of the network is immensely broadened.	We're still trying to live down the past marketing efforts to get buy-in. There are still technical bugs. I don't blame RCOG or vendors, but it is frustrating with the time it takes to fix certain problems (Avon/Dequindere has no amber light)
16	C	The preference it gives to traffic demands	It increases travel time for the old shortcuts
16	D	I like the fact that FT itself is tied to optimizing signals through technology. We need to get the most out of the existing road system by managing it. FT has improved traffic safety.	Things are still questionable. It can't be everything to everybody; the perception was that it was going to fix everyone's problems. I have to constantly defend it and its costs.
17	A	The left turn situation seems to work better; the timing is better.	Nothing

17	C	If there are no cars , you don't have a red light as long. The concept is great it is the roads that are bad. FT can't do everything	They need to improve night time hours; put on red blinking light at Avon and Rochester Roads and Hamlin and Rochester Roads
18	A	It is an effective way to manage traffic in highly congested areas. It has increased safety. There were some problems, but they have been corrected. It saves road building.	Nothing
18	C	It constantly monitors traffic and makes adjustments versus the old way. It is very difficult to monitor these things in a changing environment but, its better than what it could have been.	I'm not sure if it is as responsive as it needs to be; I have heard there is a lag time in serialization. It is not as dynamic as it could be. The technology is good but, you still need adequate human staffing; there are too many subjective things.
19	A	I like that an effort is being made to improve traffic flow on existing roads. The solution is not widening roads. I would like to see the system optimized before expansion.	It had glitches but, it was flexible; I view it as an experiment. A good effort to evaluate it needs to be done; once you spend the dollars and get it installed it may not be worth the money. Only time will tell.
19	B	Flexibility in the timing of the lights based on actual traffic situations; the Ali-scout in-car device helps with being in the right lane at the right time-- I liked that	It reduces the pressure or political will to reduce transportation problems; we need to stop subsidizing the use of cars

Exhibit B

Stakeholder Assessment of Current Traffic Conditions by Region

	Phase IIA	Phase IIB	Phase III	Change III - IIA
South Oakland Co.	4.90	4.76	5.13	0.23
Central Oakland Co.	4.37	4.39	4.54	0.17
North Oakland Co.	5.72	5.46	5.76	0.05
Total Co. Average	5.00	4.67	5.15	0.15

Exhibit C

Stakeholder Group Assessment of Current Traffic Conditions by Region

Stakeholder Group	SOUTH					CENTRAL					NORTH					County Average Change
	IIA	IIB	III	change IIB- IIA	change III- IIA	IIA	IIB	III	change IIB- IIA	change III- IIA	IIA	IIB	III	change IIB- IIA	change III- IIA	
2 Trucking	7.00	5.00	5.00	(2.00)	(2.00)	3.50	3.50	3.50	0.00	0.00	2.50	2.50	3.50	0.00	1.00	(0.33)
3 Emergency Vehicle	3.00	3.00	3.00	0.00	0.00	5.00	6.00	5.00	1.00	0.00	6.50	6.50	7.00	0.00	0.50	0.17
4 Chambers'	5.50	5.50	6.00	0.00	0.50	5.00	5.00	6.00	0.00	1.00	6.50	6.50	6.50	0.00	0.00	0.50
6 Developers	5.00	3.00	7.00	(2.00)	2.00	4.00	6.00	7.00	2.00	3.00	7.00	7.00	8.00	0.00	1.00	2.00
7 Automotive	3.00	3.00	3.00	0.00	0.00	3.00	3.00	2.00	0.00	(1.00)	5.50	4.00	4.00	(1.50)	(1.50)	(0.83)
8 Gov't Admin.*	7.00	6.00	7.00	(1.00)	0.00	5.50	3.25	4.25	(2.25)	(1.25)	6.00	8.00	6.25	2.00	0.25	(0.33)
9 Gov't Police	3.00	3.00	3.00	0.00	0.00	3.00	4.00	4.00	1.00	1.00	3.00	3.00	5.00	0.00	2.00	1.00
10 Gov't-Planning*	4.67	4.67	4.67	0.00	0.00	5.00	5.00	5.00	0.00	0.00	5.33	5.33	5.33	0.00	0.00	0.00
11 K-12 Education'	4.75	5.00	6.25	0.25	0.50	5.50	5.00	5.25	(0.50)	(0.25)	5.63	5.88	5.50	0.25	(0.13)	0.04
12 University Prof.	6.00	6.00	6.00	0.00	0.00	3.00	2.00	2.00	(1.00)	(1.00)	7.00	7.00	7.00	0.00	0.00	(0.33)
13 Citizen/ Consumer'	5.00	5.00	5.00	0.00	0.00	4.50	4.00	3.50	(0.50)	(1.00)	7.25	6.00	6.00	(1.25)	(1.25)	(0.75)
14 Media	6.00	6.00	6.00	0.00	0.00	6.00	6.00	6.00	0.00	0.00	7.25	7.25	7.25	0.00	0.00	0.00
15 Homeowner/ Community	3.33	4.00	4.00	0.67	0.67	5.33	6.33	6.00	1.00	0.67	7.00	5.66	7.67	(1.34)	0.67	0.67
16 Transportation Prof.'	5.63	5.50	5.63	(0.13)	0.00	3.50	3.00	3.75	(0.50)	0.25	7.25	6.25	6.25	(1.00)	(1.00)	(0.25)
17 Seniors/ Handicapped	4.75	6.50	6.50	1.75	1.75	5.75	6.50	6.50	0.75	0.75	5.75	5.50	5.50	(0.25)	(0.25)	0.75
18 Transit*	6.50	7.00	7.50	0.50	1.00	4.50	4.50	5.50	0.00	1.00	4.50	4.50	4.50	0.00	0.00	0.67
19 Environmental*	3.25	2.75	2.75	(0.50)	(0.50)	2.25	1.50	2.00	(0.75)	(0.25)	3.25	2.00	2.75	(1.25)	(0.50)	(0.42)
Total Average	4.90	4.76	5.13	(0.14)	0.23	4.37	4.39	4.54	0.01	0.17	5.72	5.46	5.76	(0.26)	0.05	0.15

Exhibit D**FAST-TRAC Impact on Traffic Congestion, Safety, and Travel Times****Phase IIB**

	Reduced Greatly	Reduced Slightly	No Impact	Increased Slightly	Increased Greatly
Traffic Congestion	3	21	9	1	0
Traffic Safety	3	a	9	14	0
Travel Times	0	15	14	4	0

FAST-TRAC Impact on Traffic Congestion, Safety, and Travel Times**Phase III**

	Reduced Greatly	Reduced Slightly	No Impact	Increased Slightly	Increased Greatly
Traffic Congestion	2	15	13	1	2
Traffic Safety	1	2	7	19	4
Travel Times	0	14	13	5	2

Exhibit E

Stakeholder Group Confidence Level in FAST-TRAC Ability to Impact Traffic Conditions by County Region

	Phase IIA	Phase IIB	Phase III	III - IIB	County Change III-IIA
South Oakland Co.	1.95	1.23	1.26	0.04	(0.68)
Central Oakland Co.	1.91	1.18	1.25	0.07	(0.66)
North Oakland Co.	1.56	0.97	0.96	(0.01)	(0.60)
Total Co. Average	1.81	1.13	1.16	0.03	(0.65)

Exhibit F

Stakeholders Perception of FAST-TRAC Ability to Impact Traffic Conditions by Region

STAKEHOLDER	SOUTH					CENTRAL					NORTH					County Average Change
	IIA	IB	III	Change II-	Change III-	IIA	IB	III	Change II-	Change III-	IIA	IB	III	Change II-	Change III-	
				IIA	IIA				IIA	IIA						
2 Trucking	1.00	0.25	3.00	(0.75)	2.00	1.00	1.00	3.00	0.00	2.00	1.00	3.50	3.00	2.50	2.00	6.00
03A Emergency Vehicle	2.00	1.00	1.00	(1.00)	(1.00)	1.50	1.00	0.00	(0.50)	(1.50)	1.50	1.00	0.00	(0.50)	(1.50)	(4.00)
4 Chambers	0.50	0.00	0.00	(0.50)	(0.50)	1.00	0.00	1.00	(1.00)	0.00	0.00	0.00	0.00	0.00	0.00	(0.50)
04B	2.50	2.50	2.00	0.00	(0.50)	2.00	0.00	2.00	(2.00)	0.00	1.00	1.00	1.00	0.00	0.00	(0.50)
6 Developers	2.50	1.00	0.00	(1.50)	(2.50)	0.50	1.00	0.00	0.50	(0.50)	2.00	1.00	0.00	(1.00)	(2.00)	(5.00)
7 Automotive	1.00	3.00	1.00	2.00	0.00	1.00	3.00	1.00	2.00	0.00	1.00	3.00	1.00	2.00	0.00	0.00
8 Gov't Admin.	2.00	1.00	0.00	(1.00)	(2.00)	4.50	1.00	0.00	(3.50)	(4.50)	5.00	1.00	0.00	(4.00)	(5.00)	(11.50)
08B	0.50	2.00	2.00	1.50	1.50	0.50	2.00	1.50	1.50	1.00	1.00	2.00	3.00	1.00	2.00	4.50
9 Gov't Police	5.00	1.00	2.00	(4.00)	(3.00)	1.00	0.00	1.00	(1.00)	0.00	1.00	0.00	1.00	(1.00)	0.00	(3.00)
10 Gov't-Planning	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	0.00	1.00	1.00	0.50	0.00	(0.50)	0.50
10B	1.00	0.00	2.00	(1.00)	1.00	2.00	0.00	2.00	(2.00)	0.00	6.00	0.00	2.00	(6.00)	(4.00)	(3.00)
10C	3.00	1.50	1.00	(1.50)	(2.00)	4.00	1.50	0.00	(2.50)	(4.00)	3.00	0.00	1.00	(3.00)	(2.00)	(8.00)
11 K-12 Education	6.00	0.00	2.00	(6.00)	(4.00)	7.00	0.00	3.00	(7.00)	(4.00)	4.00	0.00	2.00	(4.00)	(2.00)	(10.00)
11B	1.00	1.00	0.00	0.00	(1.00)	1.00	2.00	1.00	1.00	0.00	1.00	1.00	0.00	0.00	(1.00)	(2.00)
11C	3.50	2.00	2.00	(1.50)	(1.50)	2.00	2.00	1.00	0.00	(1.00)	3.00	2.00	2.00	(1.00)	(1.00)	(3.50)
11D	3.00	2.00	2.50	(1.00)	(0.50)	3.00	2.00	1.00	(1.00)	(2.00)	2.50	2.00	0.50	(0.50)	(2.00)	(4.50)
12 University Prof.	1.00	1.50	1.00	0.50	0.00	2.00	1.50	0.00	(0.50)	(2.00)	0.00	1.00	0.00	1.50	0.00	(2.00)
13 Citizen/ Consumer	3.50	0.50	1.00	(3.00)	(2.50)	0.00	0.50	1.00	0.50	1.00	0.00	0.50	0.00	0.50	0.00	(1.50)
03B	0.50	1.00	1.50	0.50	1.00	1.50	1.50	1.00	0.50	(0.50)	0.50	1.00	2.00	0.50	1.50	2.00
14 Media	1.00	2.00	0.50	1.00	(0.50)	1.50	2.00	1.00	0.50	(0.50)	1.00	1.00	0.00	0.00	(1.00)	(2.00)
14C	0.00	1.00	(1.00)	1.00	(1.00)	0.00	1.00	(1.00)	1.00	(1.00)	0.00	1.00	(1.00)	1.00	(1.00)	(3.00)
15 Homeowner/ Community	4.00	2.50	2.00	(1.50)	(3.00)	2.00	1.00	1.00	(1.00)	(1.00)	0.00	1.50	2.00	1.50	2.00	(1.00)
15B	5.50	0.50	5.00	(5.00)	(0.50)	5.00	0.00	5.00	(5.00)	0.00	2.00	0.00	2.00	(2.00)	0.00	(0.50)
15D	1.00	1.01	2.00	0.01	1.00	1.50	2.00	2.00	0.50	0.50	2.00	1.00	1.00	(1.00)	(1.00)	0.50
16 Transportation Prof.	0.00	0.00	2.00	0.00	2.00	1.50	2.00	1.50	0.50	0.00	0.00	0.00	1.00	0.00	1.00	3.00
16B	0.50	1.00	0.00	0.50	(0.50)	2.00	1.00	2.00	(1.00)	0.00	1.50	1.00	1.00	(0.50)	(0.50)	(1.00)
16C	3.00	0.00	0.00	(3.00)	(3.00)	3.00	0.00	0.00	(3.00)	(3.00)	2.50	0.00	0.00	(2.50)	(2.50)	(8.50)
16D	1.00	1.50	2.00	0.50	1.00	1.00	2.50	4.00	1.50	3.00	1.00	2.50	1.00	1.50	0.00	4.00
17 Seniors/ Handicapped	2.50	1.50	0.00	(1.00)	(2.50)	2.50	1.50	0.00	(1.00)	(2.50)	1.50	1.00	0.00	(0.50)	(1.50)	(6.50)
17C	2.00	2.00	1.00	0.00	(1.00)	2.00	2.00	1.00	0.00	(1.00)	0.50	0.00	1.00	(0.50)	0.50	(1.50)
18 Transit	0.75	2.00	1.00	1.25	0.25	1.00	2.50	1.00	1.50	0.00	1.00	2.50	2.00	1.50	1.00	1.25
18C	2.00	1.00	2.00	(1.00)	0.00	2.00	0.00	2.00	(2.00)	0.00	2.00	0.00	2.00	(2.00)	0.00	0.00
19A Environmental	2.00	2.00	1.00	0.00	(1.00)	2.00	1.00	2.00	(1.00)	0.00	2.00	0.00	1.00	(2.00)	(1.00)	(2.00)
19B	1.50	1.50	0.50	0.00	(1.00)	1.50	0.50	0.50	(1.00)	(1.00)	1.50	0.50	0.50	(1.00)	(1.00)	(3.00)
average	1.95	1.23	1.26	(0.72)	(0.68)	1.91	1.18	1.25	(0.74)	(0.66)	1.56	0.97	0.96	(0.59)	(0.60)	(1.95)

Exhibit G
FAST-TRAC Percentage of Total Traffic Congestion Solution per Stakeholder Group
Highest to the Lowest

ranking for III	ranking for II	Stakeholder	III	Difference (III - IIB)
1	2	K-12 Education	50.00	(6.25)
2	3	Homeowner/Community	45.00	1.67
3	1	Trucking	40.00	(25.00)
4	14	Emergency	30.00	15.00
5	5	Automotive	30.00	(3.00)
6	4	Seniors/Handicapped	27.50	(10.00)
7	7	Transit	26.50	4.00
8	13	Gov't.-Planning	24.33	9.33
9	6	Chambers	24.00	(1.00)
10	9	Transportation	22.50	1.25
11	10	Citizen/Consumer	15.00	(2.50)
12	16	University	10.00	0.00
13	15	Gov't-Police	10.00	0.00
14	11	Media	10.00	(5.00)
15	17	Environmental	5.00	(1.00)
16	12	Developer6	5.00	(10.00)
17	6	Gov't Admin.	5.00	(16.50)
		Total Average	22.34	(2.66)

By Amount of Change

ranking for III	Stakeholder	III	Difference (III - IIB)
1	Emergency	30.00	15.00
2	Gov't.-Planning	24.33	9.33
3	Transit	26.50	4.00
4	Homeowner/Community	45.00	1.67
5	Transportation	22.50	1.25
6	Gov't.-Police	10.00	0.00
7	University	10.00	0.00
8	Environmental	5.00	(1.00)
9	Chambers	24.00	(1.00)
10	Citizen/Consumer	15.00	(2.50)
11	Automotive	30.00	(3.00)
12	Media	10.00	(5.00)
13	K-12 Education	50.00	(6.25)
14	Seniors/Handicapped	27.50	(10.00)
15	Developers	5.00	(10.00)
16	Gov't Admin.	5.00	(16.50)
17	Trucking	40.00	(25.00)
	Total Average	22.34	(2.88)

Exhibit H1

Predisposition Towards FAST_TRAC
All Stakeholder Groups
Phase IIB

Stakeholder		Very Supportive	Somewhat Supportive	Somewhat Unsupportive	Very Unsupportive
1 Delivery Services					
2 Trucking	A.		X		
	C. NA				
3 Emergency Vehicle	A.		X		
	C.		X		
4 Chambers	A.		X		
	B.	X			
5 Business Companies	A.		X		
	B.	X			
6 Developers	C.	X			
7 Automotive	A.		X		
8 Gov't Admin.	A.	X			
	B.		X		
9 Gov't-Police	B. NA				
	C.	X			
10 Gov't-Planning	A.		X		
	B.	X			
	C.	X			
11. K-12 Education	A.	X			
	B.	X			
	C.		X		
	D.	X			
12 University/Prof.	C.		X		
13. Citizen/Consumer	A.		X		
	B.		X		
14. Media	B.		X		
	C.		X		
15 Homeowner/ Community	A.	X			
	B.	X			
	D.	X			
16 Transportation Prof.	A.	X			
	B.	X			
	C.		X		
	D.		X		
17 Seniors/ Handicapped	A.		X		
	C.	X			
18. Transit	A.	X			
	B.	X			
	C.	X			
19. Environmental	A.		X		
	B.				X
TOTAL		19	18	0	1

Exhibit H2

Predisposition Towards FAST-TRAC
All Stakeholder Groups
Phase III

Stakeholder		Very Supportive	Somewhat Supportive	Somewhat Unsupportive	Very Unsupportive
2 Trucking	A.	X			
3 Emergency Vehicle	A.		X		
4 Chambers	A.		X		
	B.	X			
6 Developers	C.		X		
7 Automotive	A.		X		
8 Gov't Admin.	A.			X	
	B.				X
9 Gov't-Police	B.			X	
10 Gov't-Planning	A.		X		
	B.	X			
	C.			X	
11 K-12 Education	A.	X			
	B.		X		
	C.		X		
	D.	X			
12 University/Prof.	C.		X		
13 Citizen/ Consumer	A.			X	
	B.		X		
14 Media	B.		X		
	C.			X	
15 Homeowner/ Community	A.	X			
	B.	X			
	D.	X			
16 Transportation Prof.	A.	X			
	B.		X		
	C.		X		
	D.		X		
17 Seniors/ Handicapped	A.		X		
	C.	X			
18 Transit	A.	X			
	C.	X			
19 Environmental	A.		X		
	B.		X		
TOTALS		12	16	5	1

Exhibit I
Stakeholder Expectations of FAST-TRAC

Stakeholder Groups

Number	Letter	Met Exp?	Expectation Comments	Additional Comments
2	A	Yes	I'm in the Auburn Hills area; it has a lot of traffic. FT has helped.	You can't fit 10 gallons of water in a 5 gallon pail. As population increases you need to make new roads.
3	A	No	I'm not really involved or noticed any difference.	It's hard to judge if it's not on a more wide-scale basis. If it's only in certain cities there is a block in the next one that doesn't have it.
4	A	Yes	I'm not sure I had any expectations when FT was installed. the volume of traffic has increased; it is hard to measure apples to apples	Desirable locations attract traffic; you can't have it both ways. I don't think we'll ever get from A to B in 2 minutes. There are limits to the infrastructure and public transit. I'm somewhat supportive of FT, but it's a matter of return on investment
4	B	No	About 75% of the time I wait at lights not knowing if it has seen me.	It's worth putting in other communities.
6	C	Yes	Because I know what the system is supposed to do around the Silverdome. I don't know how it works in Troy.	I don't think benefits have outweighed the costs, but FT is really an experimental process and its difficult to know. On game days at the Silverdome, the lights are operated manually.
7	A	Yes	It's moving the needle forward information-wise	There is no net gain in travel times because the benefits of FT are mitigated by the increased volume of cars. Without FT traffic jams would be worse than they are.
8	A	No	It was presented as a great tool; we looked forward to having it and being leaders in the country. It hasn't worked out that way. I like the RCOC people, but the system isn't working. I have defended it for years, but how many glitches can we take?	Many communities don't have FT so their citizens didn't recognize that blinking turn light is at the front of the cycle or that you have to pull up to a line to trip light. People are running red lights. FT continues to be oversold.
8	B	No	FT impedes traffic flow. It is not really a time-actuated system. It appears to be beyond control to achieve traffic progression.	It was an experiment and experiments sometimes fail. Stop trying to overcome deficiencies that are obvious and trying to prove a theory that has been disproven. Costs overcome benefits.

9	B	No	Expectations were high: move traffic faster. FT hasn't done that.	FT would have more success in rural areas and areas of light traffic.
10	A	No	FT has fallen short; it hasn't really created the improvement hoped for. It is far less than a fail-safe system.	My impression is still somewhat positive--when the system is working--but the popular impression is negative. I think you have to stay with it though.
10	B	Yes	Traffic congestion problem is really a result of bad land use decisions.	Troy can't expect a signalization program to undo bad land use decisions of the past. FT is cost effective in that it is cheaper than building new five-lane roads.
10	C	No	It doesn't work all that well in non-flow conditions. The protected left turn lanes could have been done without FT	I would surprised if other communities will opt to get FT in the future; I don't see that benefits outweigh the costs. Future maintenance costs will be high; breakdowns will occur.
11	A	Yes	It's not FT's fault, but there is more traffic on the roads. It has cut down on injuries and accidents.	There is inconsistency; drivers drive the same route every day at the same time, the traffic load is the same, but the lights are timed differently. Additional use of U-turns at intersections would help.
11	B	Yes	We have a lot of growth; FT is working. We can't build ourselves out of the problem; we need to use technology.	C/B? I don't have a good understanding; there were significant costs, I assume, but I haven't really seen anything in the paper about C/B. FT manages traffic better, but the increase in growth negates improvements.
11	C	Yes		I'm somewhat supportive of FT as long as it continues to get better. When it first started out it was bad, but now it is better. The benefits outweigh the cost so far.
11	D	Yes	It moves traffic faster where I drive; there are less interruptions.	I think it is cost beneficial, but I don't remember the costs. There aren't too many solutions to traffic congestion.
12	C	Yes	It counts traffic that flows through the intersection, not the cars in line. There are too many cars on the road in both directions.	We need mass transit in Detroit metro area. Oakland County has built itself into a comer.
13	A	No	I expected more positive public input. People thought it would let them go faster.	Traffic tie-ups are a regional problem. FT is very costly; the C/B ratio is not good
13	B	Yes	I didn't have too many expectations to begin with.	FT is a good idea if C/B can be justified if it can save major expenditures for new roads.

14	B	No	We were led to believe that FT would have a more drastic impact; that it would have a quicker reaction time to change. Expectations were too high.	C/B? I don't know. What kinds of funds could be documented? I'm interested in finding out.
14	C	NA	It's a good theory but not practical.	Education on the front end would have helped considerably. The newspaper was unaware of the need to educate the public about it. We are best off without it, but we have already spent the money on it. The general public is growing more restless about it.
15	A	Yes	The expectation was to improve traffic flow and safety--that has been done. It is a good system, I'm glad Troy was chosen for the pilot project. We are pro-active and that is good.	Before FT, people timed the lights; now you have to pay more attention. C/B? It is a good deal.
15	B	Yes	Mostly, yes; but the timing kinks still need to be worked out.	The traffic volume is up and the roads are not designed to deal with it. C/B?--if it saves lives, it is worth it.
15	D	Yes	I'm glad its been done; you won't know if something will work out unless you try it--unless it's terribly expensive.	I can't answer a C/B question because I don't know all of costs and safety information
16	A	Yes	As far as my organization goes, it has met expectations. There is mobile traffic and less serious crash opportunities. Less right angle crashes. FT is designed to do that. The future is high-tech stuff.	
16	B	Yes	My expectations weren't that high to begin with. The peak hours that are bad aren't going to get much better; off-peak hours are better, however.	FT is buying time; we don't have the road capacity--additional road capacity is the biggest piece of the solution. FT was over-hyped at buy, in. Pols thought that adaptive system meant fast micro changes to system; now they need a scapegoat and it's FT
16	C	Yes	All the things I expected to happen did happen. Nobody was going to happy even though things may have improved, you may not know it because of all the complaining--just because its a new system.	
16	D	Yes	I'm still waiting, however, to find out the official impact; I'd like some definitive information.	It is useful as one more tool in the fight. There is no question that FT was oversold as far as what it could do.
17	A	No	It could be better; there are so many cars on the road, I don't know if FT can handle it.	I can't answer a cost/benefit question because I don't know what it has cost the taxpayers.
17	C	Yes	Because changes were made when they were needed and people complained {left turn in particular).	I'm more supportive of FT now than I was going into it.

18	A	Yes	The goals were to increase safety, improve traffic flow, and decrease travel time. It worked.	Benefits outweigh the costs. The project was not oversold by proponents, but people have gotten overblown expectations; our society is used to instant gratification. People outside of the Troy area appreciate it more than the locals.
18	C	No	I'm not sure about the implementation of it. My perception is that the hardware is in place but, the software isn't dynamic enough, traffic flows are very dynamic, software work needs to be done.	Benefits outweigh the costs, but you have to look at the long term when things are in full swing because of all of the up-front R & D costs. It's better than building roads.
19	A	Yes	I didn't have high expectations.	
19	B	Yes	I wasn't expect much but it is better than I first executed. IVHS is an oxymoron.	

Appendix A

FAST-TRAC STAKEHOLDERS Interviewed for Phase III Report

1. Delivery Services

- A. NA

2. Trucking Companies

- A. Greg Reefer, Reefer Peterbilt, Auburn Hills

3. Emergency Vehicle

- A. Dan Ret, American Medical Response (formerly Paramed, Inc.,) Bloomfield Hills
Communications Supervisor

4. Business--Chambers of Commerce

- A. Gayla Houser, Troy Chamber of Commerce
President
- B. Susan Rothfuss, Auburn Hills Chamber of Commerce

5. Business--Companies

- NA

6. Real Estate/Developers

- C. Eric Walker, Pontiac Silverdome
Interim Director

7. Automotive

- A. Fred Hoffman, Chrysler Tech Center
Government Affairs Executive

8. Government--Mayor/Commissioner

- A. Mayor Jean Stine, City of Troy
- B. Frank Grestenecker, Troy Planning Department
Troy City Manager

9. Government--Police

- B. Lt. Joe Quisenberry, Rochester Hills Police

10. Government--Planning

- A. Laurence Keisling, Troy Planning Department
- B. Patricia Goodwin, Rochester Hills Planning Department
Director
- C. Glenn Schoonfield, Auburn Hills Planning Department
Assistant City Manager for Building Services

11. K-12 Education

- A. Jane Molett, Troy Schools
Supervisor
- B. Bob Matouka, Rochester Schools/Facilities & Transportation Operations
Director of Facilities & Transportation
- C. Mary Shank, Transportation Dispatcher, Rochester Hills
Transportation Building
- E. Dr. John Schultz, Rochester Schools
Superintendent

12. University Professional

- C. Jay Monroe, Lawrence Tech University, Southfield
Security Supervisor

13. Citizen/Consumer

- A. Mike Richardson, Road Commission for Oakland County
Department of Citizen Services
- B. Larry Deck, Regional Citizens League

14. Media

- B. Dave Varga, Observer & Eccentric, Rochester Hills
Editor
- C. Neil Munro, Oakland Press, Pontiac
Editor

15. Homeowner/Community

- A. Eric Ross, Council of Troy Homeowners Associations
McNeely & Lincoln Associates, Inc.
- B. Peggy Perry, Former Employee of Traffic Safety Advisory Committee
- D. Sandy Bonkosky, Former Employee of Homeowners Assoc., Rochester

16. Transportation Professional

- A. Frank Cardimen, Traffic Improvement Association of Oakland County
President
- B. Steve Dearing, Engineering Services, Rochester Hills
City Traffic Engineer
- C. Robert Lavoie, Nowak & Fraus Corporation, Pontiac
Consulting Engineer
- D. Carmine Palombo, SEMCOG, Detroit
Director of Transportation

17. Seniors/handicapped

- A. Carla Vaughan, Troy Senior Community Center
- C. Marye Miller, Older Persons Commission, Rochester
Director

18. Transit

- A. Dan Dirks, SMART, Detroit
Director of Planning & Service Development
- C. Ronald Ristau, SMART, Oakland Terminal, Troy
Manager of Service Development

19. Environmental

- A. Peggy Johnson, Huron-Clinton River Watershed Council, Rochester Hills
- B. Jim Bush, East Michigan Environmental Action Council, Detroit

Phase III Reports #6

Final version of the Stakeholders' Questionnaire

IVHS Questionnaire

Phase III interviews

1. We spoke to you first on _____, and then again on _____. At those times you rated actual traffic conditions for three sections of Oakland County in relation to your desired traffic conditions on a scale of 0-10, with 10 being the ideal.

a. For the southern section of Oakland County, you rated actual traffic on a scale of 0-10 a _____, in the second interview you gave it a rating of _____. Where on the scale would you rate actual traffic conditions in that area today? _____

Please describe your opinions/views of traffic conditions.

b. For the central section of Oakland County, you rated actual traffic on a scale of 0-10 a _____, in the second interview you gave it a rating of _____. Where on the scale would you rate actual traffic conditions in that area today? _____

Please describe your opinions/views of traffic conditions.

c. For the northern section of Oakland County, you rated actual traffic on a scale of 0-10 a _____, in the second interview you gave it a rating of _____. Where on the scale would you rate actual traffic conditions in that area today? _____

Please describe your opinions/views of traffic conditions.

2. Please indicate the extent of the impact FAST-T&AC has had on your (business, city, service, etc.). Would you say it has had a very positive impact, somewhat positive impact, no impact, somewhat negative impact or very negative impact?

- | | | |
|----|--------------------------------|---|
| a. | Very positive impact | 1 |
| b. | Somewhat positive impact | 2 |
| c. | No impact | 3 |
| d. | Somewhat negative impact | 4 |
| e. | Very negative impact | 5 |

3. Based on your professional experience with FAST-TRAC, what impact do you think FAST-TRAC has had on traffic congestion?

- | | | |
|----|--------------------------|---|
| a. | Reduced greatly | 1 |
| b. | Reduced slightly | 2 |
| c. | No impact | 3 |
| d. | Increased slightly | 4 |
| e. | Increased greatly | 5 |

4. What impact do you think FAST-TRAC has had on traffic safety?
- a. Reduced greatly 1
 - b. Reduced slightly 2
 - c. No impact 3
 - d. Increased slightly 4
 - e. Increased greatly 5

5. What impact do you think FAST-TRAC has had on travel times?
- a. Reduced greatly 1
 - b. Reduced slightly 2
 - c. No impact 3
 - d. Increased slightly 4
 - e. Increased greatly 5

6. In the first and second interview we asked what degree you believed FAST-TRAC technology would move traffic conditions toward or away from the 10 on our zero to 10 scale. We would like to ask you that same question today. Please answer in light of your knowledge of FAST-TRAC and your experience with the system the past two years, including what you may have learned through articles or driving experiences provided by this project.

a. In the first interview you rated actual traffic conditions in the southern region of Oakland County a _____ on a scale of 10. In the second interview you rated actual traffic conditions a _____. Today you rated actual traffic condition a _____. Will FAST-TRAC in the future move that rating **toward** the ten or away from the 10?

- i. Toward 1
- ii. Away 2

By how many points?

Please describe your opinions/views of traffic conditions.

b. You rated actual traffic conditions in the central region of Oakland County a _____ on a scale of 10. In the second interview you rated actual traffic conditions a _____. Today you rated actual traffic condition a _____. Will FAST-TRAC in the future move that rating toward the 10 or away from the ten?

- i. Toward 1
- ii. Away 2

By how many points?

Please describe your opinions/views of traffic conditions.

c. You rated actual traffic conditions in the northern region of Oakland County a _____ on a scale of 10. In the second interview you rated actual traffic conditions a _____. Today you rated actual traffic condition a _____. Will FAST-TRAC in the future move that rating toward the 10 or away from the ten?

- 1. Toward 1
- ii. Away 2

By how many points?

Please describe your opinions/views of traffic conditions.

7. From the point of view of your professional position, and given your experience to date, what do you like about the FAST-TRAC system?

What do you dislike about FAST-TRAC?

8. The following is a question we asked in the first and second interview, which we would like to update now. If you have a pie which represented all of the total solutions to traffic congestion, what percentage of the pie would be represented by FAST-TRAC? _____

9. How often do you hear about FAST-TRAC? Daily, weekly, monthly, bimonthly, semi-annually, annually, never.

- a. Daily 1
- b. Weekly 2
- c. Monthly 3
- d. Bimonthly 4
- e. Semiannually 5
- f. Annually.. 6
- g. Never 7

10. From what sources do you receive your information about FAST-TRAC?

Have your sources of information changed since the first interview?

- a. Yes 1
- b. No 2

11. Has FAST-TRAC met your expectations thus far? 1
- a. Yes 1
 - b. No 2

Why or why not?

12. Given what you now know and have experienced with FAST-TRAC technology, what is your predisposition toward it? Would you say you are very supportive, somewhat supportive, somewhat unsupportive or very unsupportive!
- a. Very supportive 1
 - b. Somewhat supportive 2
 - c. Somewhat unsupportive 3
 - e. Very unsupportive 4