

**B. MEETING SUMMARIES FOR THE OCTOBER 19, 1993 AND
FEBRUARY 9, 1994 PUBLIC INFORMATION MEETINGS**

One Corporate Center, 7401 Metro Boulevard
Minneapolis, Minnesota 55439

Telephone: (612) 835-6411
Fax: (612) 835-7376



Engineers
Planners
Consultants

BI-STATE ST. LOUIS AREA IVHS PLANNING STUDY

PUBLIC INFORMATION MEETING SUMMARY

2:00 p.m., October 19, 1993

This public information meeting was held on Tuesday, October 19, 1993 at the Missouri Highway and Transportation Department (MHTD) District 6 office in Town and Country. A total of 20 people registered (see attached sign-in sheet) and picked up the handout materials (attached).

PART A - PROJECT OVERVIEW

MHTD District 6 Engineer J.T. Yarnell began the meeting at 2:10 p.m. by welcoming everyone. He expressed MHTD's strong support of efforts to improve the freeway system in the greater St. Louis metropolitan area and introduced MHTD Project Manager Dale Ricks, who explained the goals and schedule for the project, the Bi-State St. Louis Area Intelligent Vehicle Highway Systems (IVHS) Planning Study. Ricks explained that a consultant team headed by Edwards and Kelcey, Inc. had been hired and would be conducting today's meetings. After a short presentation, most of the meeting would be devoted to comments and questions from the audience.

Ricks then introduced Leonard Levine, Assistant to the President of Edwards and Kelcey and former Commissioner of the Minnesota Department of Transportation, who chaired the meeting. Levine explained that a short presentation about the project would be made first, followed by comments/questions from the audience. He described his experiences in Minnesota, a recognized leader in the IVHS area, and stressed how important public input is to the project and how it will be used in developing recommendations. Levine introduced Edwards and Kelcey Project Manager James Giblin, who introduced the other consultant team members who were also present:

Gary Rylander	Edwards and Kelcey
David Roper	Roper & Associates
William Bunte	Crawford, Bunte, Brammeier
William Heyse	David Mason & Associates

Giblin then gave a brief explanation of what "traffic engineering" and "IVHS" are, and that it is not all "star wars" high technology but rather mostly common sense. He and Roper then gave a slide presentation covering: a project overview; goals and schedule; IVHS in general; incident management; motorist information; the need to move people rather than just (mostly) single-occupant vehicles; volume/capacity ratio for freeways; delays at flow breakdown and the drop in capacity from 2,000 vehicles per hour per lane to around 1,300; and how each

minute of lane blockage/restriction causes 4-5 minutes of delay in off-peak periods (the ratio is several hundred, or more, to one in peak traffic periods).

Giblin indicated that IVHS can help improve air quality, noting that the St. Louis area is an ozone non-attainment area. He noted that construction and maintenance work can seriously affect traffic flow and that IVHS can be used to improve operations. The handout materials (attached yellow papers), which consisted of a one-page IVHS overview, a listing of the 27 IVHS user services and sub-services, and a St. Louis area map of freeway and arterial routes, were discussed. He explained that a strategic plan will be developed by next spring, and that would include an early deployment plan--actions that can be taken relatively quickly and should yield significant benefits. He noted that the next set of public information meetings, at which some preliminary recommendations will be made, will be held on Wednesday, January 5, 1994.

Donna Day of the East-West Gateway Coordinating Council gave an overview of the council's role as the metropolitan planning organization, and that this project was consistent with their ongoing transportation planning efforts for the St. Louis metropolitan area. Giblin then went over, in detail, the one-page IVHS/freeway management summary in the handout materials, describing the various system components and the role they play in the overall strategy. Ricks noted that national statistics show that 60 percent of traffic congestion is due to incidents, while 40 percent is recurring. Roper commented that most of that 60 percent is due to minor incidents such as stalled vehicles and minor fender-benders, not the spectacular crashes typically covered by the media.

PART B- COMMENTS AND QUESTIONS FROM THE AUDIENCE

At this point, Levine opened the floor to comments and questions from the audience. For ease of reference, each has been numbered and presented in sequential order. As these are summary notes and not a verbatim transcript, all remarks have been paraphrased.

1. I feel the initial focus should be on large problems resulting from incidents because it would be more cost-effective. I am a member of an incident management group and want to see how well that works, prior to getting into big dollars for addressing recurring congestion. RESPONSE: Incident management is a major focus of this study. MHTD is now trying motorist assist patrols (IDOT has had them for many years). Potential solutions will be ranked by cost and short-medium-long term recommendations will be made.
2. How much of what the Traffic Information Center (TIC) will do is available now in the area, and why are these things not being done now? RESPONSE: There is no focal point now for the many types of traffic data now available, and much simply isn't available. We want to get everyone on board and get a broad dissemination of the information. FOLLOW-UP: My community is now forming a Traffic Management Authority (TMA) that will be the first in the state. We can't get MHTD to re-time some traffic signals along a really congested route, and we don't know why. We would like

data on how it can be done. RESPONSE: Re-timing traffic signals is very labor intensive and can be a costly process. While re-timing can often result in a 20-25 percent improvement, that isn't always true, particularly if traffic demand far exceeds capacity. Ricks commented that congestion management is a new role for MHTD; there previously hasn't been much money available for operations, though the federal ISTEA legislation now authorizes additional funds.

3. What have other states' success ratio been with incident management? RESPONSE: The program is aimed at congestion relief, not safety per se. The number of incidents has not been significantly reduced, but the resulting delay has been greatly reduced. Typical benefit/cost ratios for motorist assist patrols have been 10:1 to 15:1, despite their high cost. Levine commented that accident investigation sites in Minneapolis have been very successful, though they are education intensive.
4. How can ramp volume/access control work well--doesn't it back traffic onto the arterial street and create greater/equal problems there? RESPONSE: With ramp metering, more traffic is handled on both the entrance ramp and the freeway mainline that without it--even though it may not seem that way. A coordinated decision making effort to accommodate the diverted traffic has worked well in other areas.
5. Are the effects of freeway closure due to an incident taken into account in the planning process? RESPONSE: The computer evaluates the alternative diversion routes and selects where the traffic should be routed. It then monitors conditions on the diversion route(s) and makes real-time adjustments as needed.
6. I agree that cooperation among agencies is essential. Local communities are willing to work to deal with recurring congestion. My city monitors one interchange with a camera and puts it on cable television. RESPONSE: That's good; by creating a focal point for metro area traffic data, many others can receive current traffic information.
7. My question concerns network optimization versus demand modeling. Local research shows < 10 percent gain in capacity due to ramp metering. Constraints placed on the model show that some arterials are not well utilized. How is this taken into account? RESPONSE: The computer evaluates many possible routes and after real-time polling, it selects the route(s) to use. Routes can change as needed so as to not overload any one route. There is no longer a "typical day" for traffic flow, but 90 percent of the time the diverted traffic can be handled. FOLLOW-UP: But no one knows what the driver is going to do--this is the weak link in modeling. RESPONSE: True, we can't be sure what drivers will do, but demand can be fairly well estimated; the critical thing is managing the traffic demand. FOLLOW-UP: Will the optimization routine algorithm be static and therefore need to be revisited regularly? RESPONSE: No, because the control is real-time and demand responsive, it will adjust for long-term changes such the relocation of a major employer.

8. An approach to "ratchet" capacity upward may work, but why not increase auto occupancy? Wouldn't that be the most cost-effective? Isn't cheap parking downtown a major cause of low auto occupancy? RESPONSE: Yes, increasing auto occupancy is important and very cost-effective if it can be done; there has been limited and spotty success because it is very difficult to change attitudes towards ridesharing and transit usage. The personal automobile is very difficult to compete with, offering convenience, flexibility, security and status/image. Many people want to have their car available during the day even though they rarely, if ever, use it. In Los Angeles, high-occupancy vehicle (HOV) lanes have in some locations increased auto occupancy to 1.48-1.6 persons/vehicle from 1.18, so it can be done. But Los Angeles is much different from St. Louis, of course. With respect to increasing parking fees, it should be carefully considered because in other cities it has driven businesses from downtown to the suburbs.
9. I have concerns about high-occupancy vehicle (HOV) lanes. Elsewhere, there have been many violations in HOV lanes and ridesharing in St. Charles County is dropping. I believe that an HOV lane on I-70 will not work. RESPONSE: Violation rates for HOV lanes vary around the country, the highest incidence being where the lane is a standard freeway lane not physically separated from the mixed traffic lanes. In Washington, DC and Minneapolis-St. Paul, for example, HOV compliance has been very good. In Minneapolis, parking garages were built over the I-394 freeway with direct ramp connections and carpools using that freeway pay only \$10/month for parking. Criteria for selecting freeways where HOV lanes should be successful are being developed as a part of this study.
10. Last year, the Poplar Street Bridge was resurfaced and there were major delays. Many inter-city truck drivers still used the bridge, despite advance signing and HAR advisories, even though they could have bypassed downtown. Why? Also, can a higher speed limit be posted on an HOV lane as an incentive to rideshare? RESPONSE: Why the trucks did not bypass the congestion is a good question. As far as speeds in an HOV lane, experience shows that traffic will travel as fast as it wants to, irrespective of the posted limit. The key to a successful HOV lane is to keep it free flowing at all times while the adjoining mixed lanes are congested. To really get people's attention and get encourage their use, the HOV lane has to save people at least 8 minutes.
11. What is the timetable for this project? RESPONSE: The planning study will be completed by the end of April, 1994. There is no implementation schedule yet--funding needs to be secured. At this point, we would guess that implementation could begin sometime in 1996, if funding is available.
12. Has Bi-State Development, operator of the new Metrolink light rail transit (LRT) line, been contacted for input to this study? Bi-State has no money, so how could they implement any recommendations? RESPONSE: Yes, Bi-State is a part of the study. We will be looking at possible funding sources. FOLLOW-UP: Also, HOV lanes in Houston have decreased travel times and been successful. RESPONSE: There are numerous

success stories around the country. The key is to keep in mind that there is no simple solution--rather, a family of solutions is needed, tailored to the specific metropolitan area.

13. How will this study impact highway construction? RESPONSE: Basically, highway construction has stopped. High costs, environmental regulations and changes in public attitudes have effectively changed things forever. For example, the Century Freeway was just opened in Los Angeles, decades in the making (and many years in court). It is very likely the last new urban freeway to ever be built in the U.S. Freeway rehabilitation and reconstruction which promotes ridesharing and transit use, but not single-occupant vehicles, is the current policy and that will continue. The public must understand this, and MHTD has a good public affairs group that will be helpful in getting this message out. Roper stressed that congestion management works, and as an example he cited CALTRANS' successful experience with an extensive congestion management program during the 1984 Olympics in Los Angeles; despite peak period traffic counts being down only about two percent, the freeways were essentially congestion free.
14. Has any comparison of accident rates been done in Los Angeles in order to lower auto insurance rates? RESPONSE: No such study has been done. In LA, they found that the AM peak shifted 35 minutes earlier, while the PM peak is unchanged. Truck volumes are down and that helped reduce accidents, as well. Ricks commented that, on a national basis, IVHS can reduce accidents--projections of a 20 percent reduction look promising. FOLLOW-UP: One signalized intersection in Creve Coeur has a bad accident problem, and the new TMA is intended to get everyone involved in helping solve the problem.
15. What would the cost of a simple, minimum IVHS program be? RESPONSE: Levine suggested that dollars not be cited at this meeting because it is so early in the process, and out of context could hurt the chances for implementation. Giblin stated that if put in the context of new freeway construction, the costs are low. Roper pointed out that the new Century Freeway in Los Angeles cost about \$100 million per mile. It was noted that a recent study estimates that delay now costs motorists in the St. Louis metro area about \$1 million per day, whereas the construction cost for IVHS averages about \$1 million per mile (costs for maintenance and operations control are additional). Roper noted that there are low-tech strategies and techniques that can be employed initially, such as compiling incident reports by cellular phone and using expanded motorist service patrols (80 percent of incidents in Chicago are reported by these patrols).
16. What does it cost to re-time a traffic signal? RESPONSE: If current turning movement count data are available, it could be done for around \$1,000 per intersection. But chances are this intersection is interconnected with other nearby signals, and the system has to be look at as a whole. Ricks mentioned that sometimes traffic demand so far exceeds capacity that re-timing has no significant effect. FOLLOW-UP: There is a privately funded (Monsanto) traffic signal near Olive Blvd. and I-270 that stops the

mainline whenever anyone approaches on the private road. This doesn't make any sense, but we can't get the timing changed. It's been counted and studied by East-West Gateway, but nothing changes and we're very frustrated. RESPONSE: Ricks indicated that he did not know the history but would like to discuss this situation with the questioner after the meeting.

There being no further comments or questions from the audience, Levine thanked everyone for attending and indicated that a summary of this meeting will be prepared so that it could be taken into account in the study. He noted that another public information meeting would be held this evening at 7:30 p.m. Levine also reminded everyone that a second set of public information meetings would be held on Wednesday, January 5, 1994, at which some preliminary recommendations would be presented. Notices will be sent and a newspaper ad placed, with the exact times and location, in December.

The meeting concluded at 4:15 p.m.

Prepared by,

A handwritten signature in black ink, appearing to read "Gary F. Rylander", with a long horizontal flourish extending to the right.

Gary F. Rylander
Edwards and Kelcey, Inc.

Attachments

PUBLIC INFORMATION MEETINGS
October 19, 1993
2:00 p.m. and 7:30 p.m.

On behalf of the Missouri Highway and Transportation Department (MHTD) and Illinois Department of Transportation (IDOT), the Edwards and Kelcey project team is pleased to welcome you to today's public information meeting regarding this regional study.

BI-STATE ST. LOUIS AREA
INTELLIGENT VEHICLE-HIGHWAY SYSTEM
PLANNING STUDY

FOR FURTHER INFORMATION

Two St. Louis-based engineering firms are assisting Edwards and Kelcey with the study: Crawford, Bunte, Brammeier; and David Mason & Associates. Also a part of the project team is Farradyne Systems, Inc. of Rockville, Maryland. For further information, please contact:

William F. Bunte or
Cynthia L. Borchers
Crawford, Bunte, Brammeier
(314) 878-6644

James M. Giblin
Edwards and Kelcey, Inc.
(800) 253-9527 ext. 315

BACKGROUND

Over recent years, roadways in the greater St. Louis area have become more congested. The need for a traffic management system is more acute today due to:

- Congestion due to Inadequate Capacity
- Limited Ability to Build New Highway Lanes
- Greater Competition for Limited Funds

The most common remedy for congestion has been to build additional lanes on existing highways. Widening a roadway often requires the purchase of additional right-of-way, utility relocations, and certain agency permits (e.g. wetlands; stream encroachment; hazardous waste) which are often difficult and time consuming to obtain. Instead, management of congestion can be achieved by enacting a well-planned control and monitoring system.

The freeway management plan to be developed in this study will incorporate proven Intelligent Vehicle-Highway System (IVHS) strategies and technologies that will result in increased vehicle speeds, improved air quality, reduced energy consumption, increased system efficiency, and improved safety.

Included in the evaluation will be Advanced Traffic Management Systems (ATMS) and Advanced Traveler Information Systems (ATIS) technologies, as well as high-occupancy vehicle (HOV) lanes. Also included in the study are the evaluation and integration of the existing roadside call boxes, highway advisory radio and emergency traffic patrols currently operated by IDOT and/or MHTD. Specific strategies for the staged implementation of a freeway management plan will be developed, along with staffing requirements and a recommended organizational structure. Potential new funding sources will also be identified.

A major element of the study involves identifying and inventorying the goals and expectations of transportation users in the greater St. Louis area. In order to prepare a plan around which a broad consensus of support can be developed, the opinions of a wide cross-section of interested and affected parties are being solicited by questionnaire, public meetings and/or personal contact. The final products include a strategic deployment plan and conceptual plans for the freeway management plan.

FREEWAY TRAFFIC MANAGEMENT SYSTEM

A freeway traffic management system is comprised of guiding, informing and controlling components which are interconnected to a Traffic Information Center (TIC) by the latest in communications technology. Benefits include:

- Better use of available roadways.
- Diverting traffic to alternate roadways with sufficient excess capacity.
- Timely dissemination of current traffic information to the public.
- Improved air quality.

Simply stated, freeway traffic management systems are typically comprised of 8 distinct elements that interrelate as follows. If an incident (crash, stalled vehicle, etc.) occurs, the **Detection System** recognizes an increase or decrease in vehicle flow and speeds. This information is sent, via the **Communications System**, to an operator at the **Traffic Information Center**. The operator uses the **Video Monitoring System** to look at the roadway and visually identify the incident. The operator then sends messages to the **Variable Message Signs** and **Highway Advisory Radio**. These messages alert motorists to the situation and suggest diverting to alternate route(s). The operator then arranges for the timing of traffic signals along diversion routes to be adjusted for the added traffic and **Ramp Metering** rates to be adjusted, as necessary. The system components are explained below.

Traffic Information Center (TIC) - The TIC is the focal point of the freeway management system. It houses the computers, communications equipment, video switching equipment and display monitors that are required to operate the system. When an incident is detected and verified, a scenario of different re-routing patterns will be presented to the operator by the master computer. The operator will then activate the appropriate response plan, and if necessary, send the proper emergency response equipment to the scene of the incident.

Detection System - The Detection System monitors the volume and speed of traffic along the freeways and other affected roadways. Two types of detectors are often used: loops and radar. Loop detection uses inductive loops that are laid into cuts in the roadway surface, while radar detectors are mounted on

bridges, signs and pole. Speeds and the number of vehicles are measured and transmitted to the TIC. A sudden increase/decrease in levels may signify that an incident has taken place.

Communications System - The communications cable is the "backbone" of the system. Fiber optic cable is typically used to provide the high-capacity communication of data and video. A glass or plastic fiber carries a signal generated by light-emitting diodes or lasers.

Video Monitoring System (CCTV) - Closed Circuit Television (CCTV) cameras are mounted on 40-55 foot poles strategically placed to survey the roadway, allowing the TIC operators to identify the nature of a reported incident. The operator can then notify the appropriate response teams (fire, ambulance, etc.), thus reducing the length of time that the incident adversely affects traffic.

Variable Message Sign (VMS) System - Variable Message Signs (VMS) are traffic control devices used for traffic warning, regulation, routing and management, and are designed to inform motorists of important information of traffic conditions. Placed at key locations, all VM signs are connected to the TIC via the Communications System.

Highway Advisory Radio (HAR) System - HAR utilizes low power transmission signals that will be broadcast to motorists along designated sections of freeway. Motorists are advised when up-to-date information is available and what station they should listen to for that information.

Control of Traffic Signals Along Diversion Routes - When a diversion plan is required, the TIC will either adjust (or communicate with the appropriate agency that controls) the operation of signalized intersections along the diversion route so that the signals can better accommodate the added traffic being diverted from the freeway.

Ramp Metering System - The primary goal of a ramp metering system is to manage the flow of vehicles entering the freeway. The ramp metering system consists of installing traffic signals to "meter" the flow of traffic onto the freeway at critical entrance ramps, thus reducing congestion and travel time, increasing speeds, improving safety on the freeway and improving air quality.

BI-STATE ST. LOUIS AREA IVHS PLANNING STUDY

IVHS USER SERVICES AND SUB-SERVICES

- 1. Pre-Trip Travel Information (transit, driver and ridesharing)**
- 2. En Route Driver Information**
 - Driver Information**
 - In-Vehicle Signing**
- 3. En Route Transit Information**
- 4. Traveler Services Information (yellow pages, etc.)**
- 5. Route Guidance (includes general service plus commercial vehicle and HAZMAT-specific guidance; does not include emergency vehicle-specific)**
- 6. Ride Matching and Reservation (car/van pool, HOV control, etc.)**
- 7. Incident Management (excludes emergency vehicle management service)**
- 8. Travel Demand Management (regulatory, mode change, parking control, emissions detection, etc.)**
- 9. Traffic Control (includes transit priority and HOV priority)**

BI-STATE ST. LOUIS AREA IVHS PLANNING STUDY

IVHS USER SERVICES AND SUB-SERVICES

- 10. Electronic Payment Services (parking, transit fares, toll collection, congestion and highway pricing, etc.)**
- 11. Commercial Vehicle Pre-clearance (includes roadside access to carrier, vehicle and driver records, International Border Pre-clearance)**
- 12. Automated Roadside Safety Inspections (automated inspection facilities)**
- 13. Commercial Vehicle Administrative Processes**
 - Electronic Purchase of Credentials**
 - Automated Mileage and Fuel Reporting and Auditing**
- 14. On-Board Safety Monitoring (includes driver, vehicle and cargo)**
- 15. Commercial Fleet Management (includes motor carrier and intermodal terminal operations)**
- 16. Public Transportation Management**
 - Operations of Vehicles and Facilities**
 - Planning and Scheduling Services**
 - Personnel Management**

BI-STATE ST. LOUIS AREA IVHS PLANNING STUDY

IVHS USER SERVICES AND SUB-SERVICES

- 17. Personalized Public Transit (paratransit, route deviations, etc.)**
- 18. Emergency Notification and Personal Security**
 - **Driver and Personal Security**
 - **Automated Collision Notification**
 - **HAZMAT Incident Notification**
- 19. Public Travel Security**
- 20. Emergency Vehicle Management**
 - **Fleet Management**
 - **Route Guidance**
 - **Signal Priority**
- 21. Longitudinal Collision Avoidance**
 - **Rear-End Crash Warning and Control**
 - **Autonomous Intelligent Cruise Control**
 - **Cooperative Intelligent Cruise Control**
 - **Head-On Crash Warning and Control**
 - **Passing Warning (on two-lane roads)**
 - **Backing Crash Warning**

BI-STATE ST. LOUIS AREA IVHS PLANNING STUDY

IVHS USER SERVICES AND SUB-SERVICES

- 22. Lateral Collision Avoidance**
 - Lane Change/Blind Spot Crash Warning and Control
 - Lane Keeping Warning and Control
- 23. Interstate Crash Warning and Control**
- 24. Vision Enhancement for Crash Avoidance (inclement weather and at night)**
- 25. Impairment Alert**
 - Impaired Driver Warning and Control Override
 - Vehicle Condition Warning
 - In-Vehicle Infrastructure Condition Warning (infrastructure-based warning in En Route Travel Advisory service)
 - Integrated Warning Systems
- 26. Pre-Crash Restraint Deployment**
- 27. Fully Automated Vehicle Operation (Automated Highway System)**

PLEASE SIGN IN

10-19-93 PUBLIC INFORMATION MEETING 2:00 p.m.

<u>Name</u>	<u>Representing</u>	<u>Telephone</u>
D. A. Schuber	FWGCC	314-421-4220
Jim Plumb	MHTD	(314) 526-2906
BRUCE LARSON	UNION ELECTRIC	314 554-2631
Pati Trout	TMA CREUR COEUR	314-569-9336
JILL MILLER	SWB TELEPHONE	314-957-1773
Fred Schwartz	Bennis + McDonnell	816 822-3372
A. Chris Chiodini	MHTD-Planning	314-526-3502
TOM OCKER	SOUTHWESTERN BELL	314-949-1301
Joe Pasponnie	Dept of Highways + Traffic	314 854 6522
Ed Heubner	Text	968 1987
Walt H. Handshull	City of St. Peters	447-4440 ^{EX 302}
Ken Kohl	St. Louis Traffic	768-2806
Donna Day	EAST-WEST GATEWAY	421-4220
J. T. YARNELL	MHTD	340-4200
Mike Pritchett	ZDOT	(618) 346-3213
LINDA GETZ	SEN FRANC MOTOR	454 2115
TEE BAUR	BAUR PROD.	434-3700
ROD HAFEMEISTER	BELLEVEUE NEWS-DEMOCRAT	(618) 234-1004 ^{EX 563}
Ken Coy	MHTD	340-4317
Chris Haly CHRIS HANSLER	PFRC	553-5845

One Corporate Center, 7401 Metro Boulevard
Minneapolis, Minnesota 55439
Telephone: (612) 835-6411
Fax: (612) 835-7376



Engineers
Planners
consultants

BI-STATE ST. LOUIS AREA IVHS PLANNING STUDY

PUBLIC INFORMATION MEETING SUMMARY

7:30 p.m., October 19, 1993

This public information meeting was held on Tuesday, October 19, 1993 at the Missouri Highway and Transportation Department (MHTD) District 6 office in Town and Country. A total of 18 people registered (see attached sign-in sheet) and picked up the handout materials (attached).

PART A - PROJECT OVERVIEW

MHTD Project Manager Dale Ricks began the meeting at 7:35 p.m. by welcoming everyone. With one exception, the remainder of the "Project Overview" presentation was the same as the 2:00 p.m. meeting earlier in the day (refer to that meeting summary for details). Donna Day of the East-West Gateway Coordinating Council was unable to attend this meeting, so Ricks gave an overview of the Council's role as the metropolitan planning organization and explained that this project was consistent with their ongoing transportation planning efforts for the St. Louis metropolitan area.

PART B - COMMENTS AND QUESTIONS FROM THE AUDIENCE

At this point, Levine opened the floor to comments and questions from the audience. For ease of reference, each has been numbered and presented in sequential order. As these are summary notes and not a verbatim transcript, all remarks have been paraphrased.

1. People are going to be opposed to auto tagging, like credit card tracking. The most successful approach is to keep the private sector involved as much as possible--not government. RESPONSE: We are seeing more public-private partnerships and that is very much the case with IVHS, so you can expect that to be the case here.
2. Were the air pollution reductions shown in the slides for New Jersey's MAGIC project actually achieved? St. Louis only has an ozone problem, and that was not shown on the slide. RESPONSE: Since the MAGIC system is just now being installed, the values shown are forecast reductions, not measured values.
3. The St. Louis area has many local units of government. Ladue and Creve Coeur, for example, simply will not permit diversion from the freeways to their arterials. There are very few parallel arterials in the area, as well. The many river crossings also limit options. How will you deal with this? RESPONSE: The St. Louis constraints and problems you describe really are similar to those in other metropolitan areas. It's not just a question of diversion; rather, by getting the word to motorists at home and at

work, demand can be lowered so there is less traffic to divert. In Los Angeles, CALTRANS met with every city to cooperatively work out alternative routes. Some communities were more receptive than others, but by taking the time to communicate and explain the situation these things were worked out. With respect to the limited number of alternative routes, that makes planning even more important than when there are many routes available, and makes behavior modification more critical. Teamwork is critical, and a Minneapolis-St. Paul reconstruction example was cited, where 96 different agencies were involved.

4. I have an asthma problem--why not have vehicles with dual carburetors that would permit natural gas to be burned? The federal government hasn't suggested this, but a tax credit could be used to encourage it. Also, maybe local governments should give credit to firms that use staggered work hours. And why not use a rubber-tired train that runs on the freeway, rather than light rail transit where fixed, steel tracks are used? RESPONSE: Burning natural gas has not been economical. Tax breaks have been used to promote various strategies, though the implementation of staggered work hours has not been one of them.
5. There's lots of stuff on the shelf, we should see if they'll work here. HOV lanes, toll roads, etc. work well elsewhere and I'm happy to see it coming here. I would like to know what's happening five miles down the road. Allen Barkledge is the only one we can get traffic information from, but it isn't always reliable. I'm a charter bus operator and just this morning they told of an incident and blockage near me, but it wasn't there when I got there. RESPONSE: Accurate, timely information is critical. Outdated or inaccurate data leads to a loss of credibility. Advance motorist information is one of the most important elements of this plan. The traffic data can be sent over phone lines to anyone with a computer. There would no charge for the data; the only cost would be the hook-up charge. The data can also be targeted to specific users with only the data they find useful, such as for buses. By organizing all of the data at a central point, the system and the users are both benefiting. In construction zones, MHTD is now using changeable message signs programmed by cellular telephone in order to get real-time traffic information out to motorists.
6. When HOV lanes have been proposed for St. Charles County in the past, the reaction from MHTD has been a negative one. I have heard presentations from East-West Gateway about how to achieve air quality attainment. Why is IVHS not being touted by others as a means to obtain attainment, and how long would it take to achieve attainment--how much benefit would there be? RESPONSE: MHTD is very interested in looking at the "big picture" and where HOV lanes fit. In 1989-90, MHTD undertook a study of HOV facilities, but found that the need then was not very strong, particularly compared to other metropolitan areas (where congestion is much worse). But now, congestion in the St. Louis area is costing an estimated \$1 million per day and MHTD is firmly committed to reducing congestion. A strong consensus of support needs to be present in order to proceed, both with specific projects and in order to obtain funding from the legislature. Air quality modeling in conjunction with East-West Gateway is being done, but it's very expensive. FHWA requires such work for before and after analyses, but at this point there are no specifics.

7. I am not an engineer but a freeway user. Just what has MHTD been doing? On I-270, why not put a changeable message sign on the Blanchette Bridge? Missouri is so backward that it won't be easy explaining to people what to do. Don't put speed limits on signs--paint them on the pavement--older people are always looking down at the road. In Pennsylvania, there are signs when you enter the state warning of the penalties for speeding--why not here? RESPONSE: None required.
8. How much did the Minnesota IVHS program cost? RESPONSE: The first federal grant was for \$1 million, then a second grant for \$3-4 million was obtained. There are too many elements to easily count. For example, the very successful highway helper program is funded out of several different budgets.
9. How do you calculate cost-effectiveness? Test beforehand? The number of additional people moved? Drop in pollution levels? RESPONSE: The key is a reduction in delay, with fewer secondary accidents and lower fuel consumption. The benefits of these types of improvement are hard to track because the benefits go to the citizens and are not revenue to some government agency. The experience in Los Angeles is similar to that in other metro areas, benefit/cost ratios of 15:1 to 16:1. Motorist service/assist patrols have been found to be 14:1 to 18:1. There are models to predict cost-effectiveness. We will obtain an accurate breakdown for the Minnesota IVHS experience and make it available.
10. Is this an isolated analysis, or will other non-capital intensive options that might be more cost-effective (such as carpooling, vanpooling, staggered work hours) be evaluated? RESPONSE: Incentives to shift travel modes are important to examine. For example, in Los Angeles HOV lanes can be justified based only on carpool usage; having transit use the lanes is a plus. The important principle is that HOV lanes must always be free-flowing, to encourage diversion from congested mixed use lanes.
11. Rush hour traffic will always be a problem as long as it's free. Envisions a file server with dial-up option. Cable companies could use it to target geographical areas. Someone else might customize data in other ways and home computers could also gain access. RESPONSE: All of this can be done now, the technology exists. A computer can also be programmed to call you at home to advise you of delays along your regular travel route. TV stations in some cities show graphic displays in the morning rush hour. In Los Angeles, a map of traffic conditions is sent by fax to major employers so it can be posted on the board as people head home. And in Great Britain, there is a pager unit that punches up the latest data and beeps when it receives a change in information.
12. Is there a timetable for this project? RESPONSE: The project is a 12-month study, with updates about every two months for a project guidance committee. The final report will be completed in late April, 1994, and is 90% federally funded. The project is not tied to the federal funding cycle, but will be implemented in stages, most likely starting in 1995 or 1996. The St. Louis area will really benefit from the latest computer technology--it is much cheaper and more powerful than even a few years ago, and has shrunk in size so that the Traffic Information Center (TIC) can occupy a relatively small room. Another advantage is that system architecture design can start with basically a

"clean sheet", rather than having to integrate a myriad of conflicting and competing elements that are incompatible technically. Very few states have spent large sums of money for regional IVHS planning studies, and it shows--MHTD and IDOT are taking the best approach for St. Louis, which will be on the "cutting edge" of IVHS but not the "bleeding edge". Ricks commented that MHTD and Kansas DOT are in the preliminary stages of a similar study for the Kansas City metropolitan area, which should start in early 1994.

13. CB radio was a big deal in the 1970's. What would be wrong with having everybody on a specific highway tune to a different channel to get traffic information. There would be conflict and each route would have information specifically tailored to it. RESPONSE: CB radio is not a realistic option, for several reasons. Not everyone has a CB radio, while there is an AM radio in nearly every vehicle. Many motorists travel more than one freeway and would have to change back and forth on a CB radio. Also, many people would have to be trained. AM radio has proven to be one of the most cost-effective methods of disseminating traffic information, when gathered at a central point, the TIC. For more route specific data, highway advisory radio (HAR) can be used (and is used today in the St. Louis area). The important point is that no one specific means can be used to solve this problem--rather, the solution will be an integrated mixture of various strategies, techniques and technology.
14. I have tried tuning my car radio to 5:30 AM, and it is usually unintelligible (a second person in the audience agreed). What's the problem? RESPONSE: IDOT's HAR system which uses the 5:30 AM frequency is not easy for them to monitor and maintain. In other parts of the country, HAR works very well. This study will look at how to modify and improve the use of HAR in the St. Louis area.

There being no further comments or questions from the audience, Levine thanked everyone for attending and indicated that a summary of this meeting will be prepared so that it could be taken into account in the study. He also reminded everyone that a second set of public information meetings would be held on Wednesday, January 5, 1994, at which time some preliminary recommendations would be presented. Notices will be sent and a newspaper ad placed, with the exact times and location, in December.

The meeting concluded at 9:40 p.m.

Prepared by,



Gary F. Rylander
Edwards and Kelcey, Inc.

Attachments

PLEASE SIGN IN

10-19-93 PUBLIC INFORMATION MEETING 7:30 p.m.

<u>Name</u>	<u>Representing</u>	<u>Telephone</u>
Chuck Gross	State Rep, Dist. 18	947-7893
Paul Sechtman	Kenneth Balk's Ass	576-2021
Thomas C. Tucker	Chester Field Police	537-3000
Dwight McComb	FHWA	708 206-3226
Leonard Bradley	ATSS	(314) 389-7445
Bill Schierholz	ChemTech	314 966 9801
Pete Olson	FHWA	217-492-4634
Arnold O Fink		747 78-11
DARAN CHURCHICH	CONSOLIDATED COMMUNICATIONS	217-235-4435
Tom Darnold	Sverdrup	436-7600
Ray L. Wilshire	Kimley-Horn	214/770-1300
Eric Harris	Self + L&C TWP LP	314 838 1776
THOMAS E. BARTA	FRED WEBER INC	314 344 0070
T. Joseph Marking	Burns & McDonnell	314/ ⁸²¹ 731 9016
Gary E. Westad	ST. CHARLES COUNTY	(314) 441-7186
JD HUBER	HCI	314 427-2727
Harold G Brooks	Public	314-256-9564
G. O. SANDSTEDT	COMMERCIAL DATA, INC	314-776-1130

One Corporate Center, 7401 Metro Boulevard
Minneapolis, Minnesota 55439

Telephone: (612) 835-6411
Fax: (612) 835-7376



Engineers

Consultants

BI-STATE ST. LOUIS AREA IVHS PLANNING STUDY

PUBLIC INFORMATION MEETING SUMMARY

2:00 p.m., February 9, 1994

This public information meeting was held on Wednesday, February 9, 1994 at the Engineer's Club of St. Louis, 4359 Lindell Blvd., St. Louis. A total of 30 people were in the audience, though only 28 registered (see attached sign-in sheet), and picked up the handout materials (attached).

PART A - PROJECT OVERVIEW

MHTD Project Manager Dale Ricks began the meeting at 2:05 p.m. by welcoming everyone. He explained the goals and schedule for the project, the Bi-State St. Louis Area Intelligent Vehicle Highway Systems (IVHS) Planning Study. He explained that the project final report may be delayed from April, 1994 to May due to a potential public-private partnership in the communications area that is being explored.

Ricks explained that a consultant team headed by Edwards and Kelcey, Inc. (EK) had been selected to undertake the study and would be conducting today's meetings. He noted that after a short presentation, most of the meeting would be devoted to comments and questions from the audience. Ricks then introduced Jim Giblin, EK Project Manager who chaired the meeting, and Gary Rylander, EK Deputy Project Manager. Giblin explained that a short presentation about the project would be made first, followed by comments/questions from the audience and an opportunity for everyone to state their opinions on priorities.

Giblin gave a brief explanation of "traffic engineering" and "IVHS", and noted that urban areas can no longer build enough roadways to eliminate congestion. A freeway management plan is being developed in order to better manage traffic. He explained how IVHS technologies collect traffic data and that information is used to determine how well traffic is moving and to locate incidents. The traffic data is also made available to the public to help them plan their trips, through the media, cable TV, traffic information kiosks in office buildings and shopping centers, etc. He discussed how incidents and accidents have a major impact on traffic safety and flow, and for this reason having an incident management plan is important.

PART B - COMMENTS AND QUESTIONS FROM THE AUDIENCE

At this point, Giblin opened the floor to comments and questions from the audience. For ease of reference, each has been numbered and presented in sequential order. As these are summary notes and not a verbatim transcript, remarks have been paraphrased. Responses are by Giblin unless noted otherwise.

1. On I-55 north of Butler, there is a bridge construction sign that is not clear. RESPONSE: Giblin gave an example of how a changeable message sign would help guide traffic in the area.
2. Why would this IVHS technology be better than a traffic helicopter? RESPONSE: The time required to detect an incident is much shorter than it would be by helicopter or airplane, which fly fixed routes and are restricted near the airport. Detectors can identify an incident in two minutes or less; it also is not difficult to tell the difference between recurring (regular) congestion and incident-related congestion. The other advantage of IVHS technology is that prompt visual confirmation gets the proper emergency response equipment on the scene faster.
3. How far can a closed circuit television (CCTV) camera see? RESPONSE: Usually about two and one-half miles in each direction when mounted 40-55 feet in the air. Pan-tilt-zoom control allows the operator to the camera as required. Color CCTV camera technology has been improving rapidly and are they now becoming the standard.
4. How much IVHS technology is currently in place? RESPONSE: A limited amount--IDOT has had highway advisory radio, motorist aid call boxes, and emergency patrol vehicle service for many years; MHTD has recently begun limited motorist assist patrol service. Ricks commented that there really isn't only one solution; rather, a group of actions tailored to the St. Louis area is what will work.
5. Is this a standard system architecture so it works across the country? RESPONSE: Yes, this is similar to other applications. The automobile manufacturers are also involved.

At this point, Giblin used an overhead transparency of handout material to explain the project schedule, that public information meetings were held on October 19, 1993, and a series of focus group meetings were held in January, 1994.

6. Has anyone looked at blending modes? For example, someone would drive a car onto a smart highway or rail line, like with cargo distribution. RESPONSE: Yes, it is being explored, but it is many years off.
7. I drive I-55 north, and crossing Lindbergh Blvd. traffic is driving at high speed. It seems that all of the problems are at exits. RESPONSE: These concerns can be addressed by the freeway management system and enforcement.
8. I think ramp metering is a bad idea, a big thumbs down. Diamond interchanges are problems. RESPONSE: Experience elsewhere has shown that ramp metering can be very effective in improving freeway capacity and reducing accidents.

At this point, Giblin used an overhead transparency of handout material to discuss the public concerns that were expressed at the October public information meetings.

9. I don't know why anyone would want to use transit. It's slow as molasses and not convenient. RESPONSE: It is difficult to get people to use transit if they have an automobile available. IVHS technologies can be used to improve information about transit schedules, when the next bus/train will arrive, etc.
10. Traffic laws have high violation rates around here. "No Turn on Red" violations are common, for example. What can government do about this? RESPONSE: This is a difficult enforcement issue.
11. Why don't people use turn signals? Why do they drive 45 mph in the left lane? RESPONSE: None required.
12. Do carpool lanes really work? Where, besides California? RESPONSE: They can work, and do in high congestion parts of the country. Carpool, or HOV, lanes need to be segregated from mixed traffic lanes to work well; this increases HOV capacity and reduces violations. An HOV-3 (persons required) example was given.

At this point, Giblin used overhead transparencies of handout material to explain the concerns expressed in the focus group meetings and the types of IVHS user services related to the Early Implementation Plan (EIP). He went over each item listed on the questionnaire, and used overhead transparencies of Figures 8 and 8a of the draft System Architecture document to explain how the communications would be structured and traffic data would be disseminated free of charge.

13. Why not charge for the traffic data? Let truckers pay for it. RESPONSE: People are paying for it, one way or another, but it is to everyone's advantage to make the information widely available. The best way to do that is to make it "free" to use. We all benefit if truckers are able to avoid congested routes.
14. Isn't the Traffic Information Center (TIC) the heart of the system? RESPONSE: Yes. Some system elements would work without the TIC, but would be less efficient.
15. We have heard about the Los Angeles success story of carpooling during the 1984 Olympics, but you can't force people to rideshare. RESPONSE: No, we can't, but ridesharing should be made as attractive as possible to encourage people to do so.

At this point, Giblin asked attendees to take ten minutes to fill out the EIP questionnaire by ranking the top three IVHS user service categories, from their perspective. The questionnaires were collected and tabulated, with the following results:

1. Traffic Information Center
2. Motorist Assist Patrol/Emergency Patrol Vehicle service
3. Motorist Aid Call Boxes

**Bi-State St. Louis Area IVHS Planning Study
February 9, 1994 Public Information Meeting Summary (2:00 pm)**

Page 4

A complete summary of the rankings, showing the number of votes for first, second and third priority, is attached.

16. How far down the list was ridesharing? RESPONSE: Well down the list, about eighth.
17. How can you tell how cost-effective the system implementation turns out to be? RESPONSE: "Before" and "after" studies are required and will be conducted.
18. Let's not just talk about this--can it be done? RESPONSE: Yes it can, if the funding can be secured. The EIP includes elements that can be implemented within about a six month period.
19. Isn't it less safe to four people in one car? Doesn't increase your potential liability? RESPONSE: Having four people in a car means there are fewer vehicles out on the road, making fewer trips. Therefore, there are fewer conflicts and less exposure.

There being no further comments or questions from the audience, Ricks thanked everyone for attending and indicated that a summary of this meeting will be prepared so that it could be taken into account in the study. He noted that another public information meeting would be held this evening at 7:30 p.m.

The meeting concluded at 3:45 p.m.

Prepared by,



Gary F. Rylander
Edwards and Kelcey, Inc.

Attachments

BI-STATE ST. LOUIS AREA IVHS PLANNING STUDY

PROJECT SCHEDULE

- PUBLIC INFORMATION MEETINGS HELD
OCTOBER 19, 1993

- FOCUS GROUP MEETINGS HELD IN
JANUARY AND FEBRUARY, 1994
 - SPECIAL EVENT OPERATORS
 - COMMERCIAL VEHICLE OPERATORS
 - MAJOR EMPLOYERS
 - COMMUNICATIONS COMPANIES
 - PARKING GARAGE/LOT OPERATORS
 - TRANSIT OPERATORS
 - MISSOURI HIGHWAY PATROL AND
ILLINOIS STATE POLICE

- PUBLIC INFORMATION MEETINGS HELD
FEBRUARY 9, 1994

- PUBLIC PRESENTATION OF RESULTS
APRIL 13, 1994

BI-STATE ST. LOUIS AREA IVHS PLANNING STUDY

PUBLIC CONCERNS:

- **CONGESTION**
- **IMPROVE PUBLIC TRANSIT**
- **GOOD LINKAGE BETWEEN AUTOMOBILES AND TRANSIT**
- **MANAGEMENT OF HIGH TECH SOLUTIONS BY GOVERNMENT**

BI-STATE ST. LOUIS AREA IVHS PLANNING STUDY

FOCUS GROUP CONCERNS:

- **NEED FOR INFORMATION SO THAT PEOPLE CAN MAKE THEIR OWN DECISIONS**
- **ACCOMMODATE DELIVERIES**
 - **PICK-UP**
 - **DROP OFF**
- **LOSS OF TIME AT WEIGH STATIONS**
- **TRAFFIC CONTROL DURING CONSTRUCTION AND MAINTENANCE WORK**

**BI-STATE ST. LOUIS AREA
IVHS PLANNING STUDY**

EARLY IMPLEMENTATION PLAN QUESTIONNAIRE

<u>RANK</u>	<u>IVHS USER SERVICES</u>
3	<u>2/2/5</u> MOTORIST AID CALL BOXES
	<u>0/0/1</u> WEIGH-IN-MOTION
5	<u>0/6/2</u> HIGHWAY ADVISORY RADIO (HAR)
	<u>0/0/2</u> CABLE TV TRANSPORTATION CHANNEL
2	<u>5/4/6</u> MOTORIST ASSIST PATROLS/ EMERGENCY PATROL VEHICLES
6	<u>0/5/2</u> HIGHWAY ADVISORY TELEPHONE
4	<u>1/4/3</u> INTERSTATE ROUTE DIVERSION SIGNS
1	<u>18/3/2</u> REGIONAL TRAFFIC INFORMATION CENTER
8	<u>1/2/1</u> RIDE SHARING/TELECOMMUTING/FLEX--TIME
	<u>0/10/0</u> PUBLIC-PRIVATE PARTNERSHIPS
	<u>0/1/1</u> INFORMATION KIOSKS
7	<u>1/1/3</u> CONSTRUCTION/MAINTENANCE WORK DATABASE
	_____ OTHER (write in) _____
	_____ OTHER (write in) _____

B1-STATE ST. LOUIS IVHS
PUBLIC INFORMATION MEETING

Feb 9, 1994 2:00

<u>Name</u>	<u>Representing</u>	<u>Telephone</u>
LES EASH	SELF	849-8736
Mike Pritchett	ILL. D.O.T.	(618) 346-3273
Mike Stagg	FHWA	(314) 636-7104
Tom KAISER	DRIVER	9666270
Larry Welty	MHTD	340-4100
Jim Murray	MHTD	340-4202
Jim WHITE,	COUNTY POLICE	889-2111
Tom Brooks	FHWA	314-636-7109
GARY ELWEST, 1)	St. CHARLES COUNTY	(314) 441-7186
Linda Wilson	MHTD	340-4117
JOE LaBonne	Private citizen	618-624-6786
Omar Feeler	Sverdrup Civil	770-4519
Mary Kay O'Malley	Sverdrup Civil	770-4089
Keith Hinkebein	Sverdrup Civil	770-4917
Louis Spranaitis	5621 So. Bdwy	353-5878
Don Gayou	self	994-9059
DEWEY BROWN	City of Florissant	839-7643
CHARLES WHELAN	PUBLIC	487-4791
Don Spencer	St. Louis County	854-6502
DONNA DAY	EAST. WEST GATEWAY	421-4220
BOB HUDSON	HCI	427-2727
Mike Geiser	Chesterfield	537-4738
Mike Peck	Chesterfield	537-4740
Ken Cox	MHTD	340-4317

Mike James
Beth Dare

MHTD
MHTD

340-4321
340-4315

Rich Schmidt
Neil Kimmelman

MHTD
ST. LOUIS
STREET DEPT

340-4318
647-3111

One Corporate Center, 7401 Metro Boulevard
Minneapolis, Minnesota 55439
Telephone: (612) 835-6411
Fax: (612) 8357376



Engineers
Planners
Consultants

BI-STATE ST. LOUIS AREA IVHS PLANNING STUDY

PUBLIC INFORMATION MEETING SUMMARY

7:30 p.m., February 9, 1994

This public information meeting was held on Wednesday, February 9, 1994 at the Engineer's Club of St. Louis, 4359 Lindell Blvd., St. Louis. A total of eight people were in the audience, though only five signed in (see attached sign-in sheet), and picked up the handout materials (attached to the 2:00 p.m. meeting summary).

PART A - PROJECT OVERVIEW

MHTD Project Manager Dale Ricks began the meeting at 7:35 p.m. by welcoming everyone. He explained the goals and schedule for the project, the Bi-State St. Louis Area Intelligent Vehicle Highway Systems (IVHS) Planning Study. He explained that the project final report may be delayed from April, 1994 to May due to a potential public-private partnership in the communications area that is being explored.

Ricks explained that a consultant team headed by Edwards and Kelcey, Inc. (EK) had been selected to undertake the study and would be conducting today's meetings. He noted that after a short presentation, most of the meeting would be devoted to comments and questions from the audience. Ricks then introduced Jim Giblin, EK Project Manager who chaired the meeting, and Gary Rylander, EK Deputy Project Manager. Giblin explained that a short presentation about the project would be made first, followed by comments/questions from the audience and an opportunity for everyone to state their opinions on priorities.

Giblin gave a brief explanation of "traffic engineering" and "IVHS", and noted that urban areas can no longer build enough roadways to eliminate congestion. A freeway management plan is being developed in order to better manage traffic. He explained how IVHS technologies collect traffic data and that information is used to determine how well traffic is moving and to locate incidents. The traffic data is also made available to the public to help them plan their trips, through the media, cable TV, traffic information kiosks in office buildings and shopping centers, etc. He discussed how incidents and accidents have a major impact on traffic safety and flow, and for this reason having an incident management plan is important.

Because of the small number of attendees and the fact that most were familiar with the project, Giblin altered the format from the afternoon meeting. At this point, he used overhead transparencies of handout material to review the project schedule, public concerns, focus group concerns and explain the Early Implementation Plan (EIP) questionnaire (as he had done at the 2:00 p.m. meeting earlier that day). He asked everyone to take a few minutes to fill out the EIP questionnaire by ranking the top three IVHS user service categories, from their perspective. The questionnaires were collected and tabulated, with the following results:

1. Motorist Aid Call Boxes
2. Motorist Assist Patrol/Emergency Patrol Vehicle service
3. Interstate System Route Diversion Signs/Cable TV Channel (tie)

A complete summary of the rankings, showing the number of votes for first, second and third priority, is attached. He explained that when tonight's results were combined with those from the afternoon meeting, the following overall priority rankings resulted:

1. Traffic Information Center
2. Motorist Aid Call Boxes
3. Motorist Assist Patrol/Emergency Patrol Vehicle service

PART B - COMMENTS AND QUESTIONS FROM THE AUDIENCE

At this point, Giblin opened the floor to comments and questions from the audience. For ease of reference, each has been numbered and presented in sequential order. As these are summary notes and not a verbatim transcript, remarks have been paraphrased. Responses are by Giblin unless noted otherwise.

1. What about air quality? **RESPONSE:** Estimates of emissions will be made, though not in a detailed analysis because that would be very complex and beyond the scope of the study. Ricks commented that it is difficult to get "before" data for the nature and duration of incidents, while "after" data will be easy to obtain.
2. It will be tough to get local fire departments to give up responding to calls on the Interstate system because they get funding for doing so. **RESPONSE:** Ricks noted that fire departments are not a problem; rather, it is the local police agencies.
3. Are rail systems part of this study? **RESPONSE:** No, the Interstate freeway system is the focus of the study. **FOLLOW-UP:** What about where they cross the rivers? A discussion followed about transit usage and how ridership can be improved. The ridership characteristics on the Washington, DC Metro subways and AMTRAK were discussed, along with inexpensive cars and cheap, plentiful gasoline in the St. Louis area. Giblin noted that travel patterns between rail systems and automobile drivers are very different; convenience, reliability and personal security are major issues when people are deciding whether to drive or take transit.
4. How will this be funded? **RESPONSE:** Funding for implementation will need to be approved by the East-West Gateway Coordinating Council, the region's metropolitan planning organization. There are a number of possible funding sources; federal "Congestion Mitigation and Air Quality" (CMAQ) funds may be available.

**Bi-State St. Louis Area IVHS Planning Study
February 9, 1994 Public Information Meeting Summary (7:30 pm)**

Page 3

5. I did not receive a notice of this meeting, but heard about it from others. RESPONSE: Many notification letters were sent out. I don't know why you did not receive one since you attended the October public information meeting: you should have.
6. The Creve Coeur TMA has CMAQ-generated traffic data which we will provide to you. RESPONSE: Thank you. Please send it Bill Bunte at Crawford, Bunte, Brammeier.

There being no further comments or questions from the audience, Ricks thanked everyone for attending and indicated that a summary of this meeting will be prepared so that it could be taken into account in the study.

The meeting concluded at 9:05 p.m.

Prepared by,

A handwritten signature in black ink, appearing to read "Gary F. Rylander", with a long horizontal flourish extending to the right.

Gary F. Rylander
Edwards and Kelcey, Inc.

Attachments

BI-STATE ST. LOUIS AREA
IVHS PLANNING STUDY

EARLY IMPLEMENTATION PLAN QUESTIONNAIRE

<u>RANK</u>	<u>IVHS</u>	<u>USER SERVICES</u>
1	<u>2/1/0</u>	MOTORIST AID CALL BOXES
	<u> </u>	WEIGH-IN-MOTION
	<u>1/0/0</u>	HIGHWAY ADVISORY RADIO (HAR)
3	<u>1/1/1</u>	CABLE TV TRANSPORTATION CHANNEL
2	<u>1/2/0</u>	MOTORIST ASSIST PATROLS/ EMERGENCY PATROL VEHICLES
	<u> </u>	HIGHWAY ADVISORY TELEPHONE
3T	<u>12/0/3</u>	INTERSTATE ROUTE DIVERSION SIGNS
	<u>1/1/0</u>	REGIONAL TRAFFIC INFORMATION CENTER
	<u>0/0/1</u>	RIDE SHARING/TELECOMMUTING/FLEX-TIME
	<u>1/0/2</u>	PUBLIC-PRIVATE PARTNERSHIPS
	<u>0/1/0</u>	INFORMATION KIOSKS
	<u>0/1/1</u>	CONSTRUCTION/MAINTENANCEWORK DATABASE
	<u> </u>	OTHER(write in)_____
	<u> </u>	OTHER(write in)_____

1st /2nd / 3rd ranking - blank means no votes

BI-STATE ST. LOUIS IUTS
PUBLIC INFORMATION MEETING

Feb. 9, 1994 7:30 pm

Name

Representing

Telephone

Robert Prager, P.E.

Intuition and Logic

968-3863

Patti Trout

Cleve Coen TMA

993-6323

Laurie Peterfreund

St. Louis County Economic Council

889-7663

Bill Grogan

East-West Gateway

421-4220

Brent M Vaughn

Student, SIU-E

822-0223

223 McCullough Ave
Kirkwood MO 63122-5813