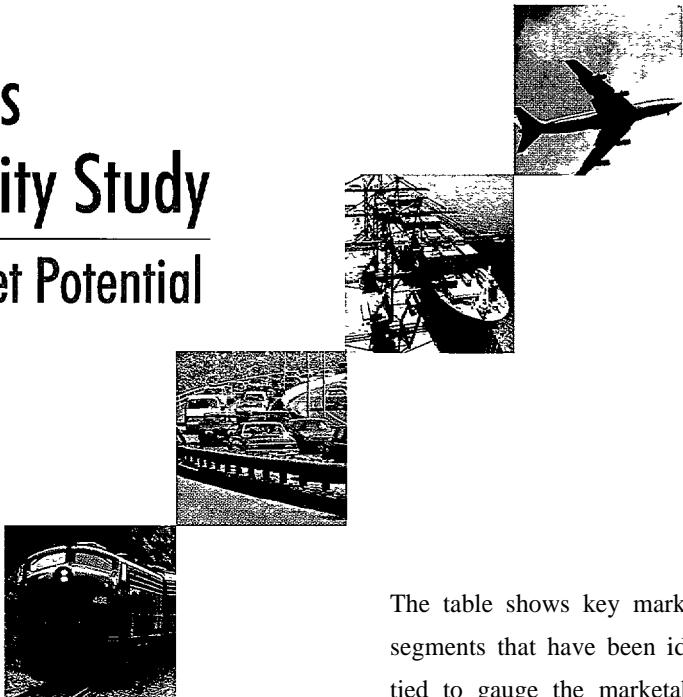


ATIS User Needs And Marketability Study

Assessment of Market Potential



Potential ATIS Market in the
I-95 Northeast Corridor

Category	Percent	Potential Market Size
Adult Population	100	40,400,000
Drivers	73	29,500,000
Drive 20,000 miles/year or less	59	23,800,000
Drive over 20,000 miles/year	14	5,700,000
Households with at least one vehicle	79	15,500,000
Users of Highway I-95	31	12,500,000
Long Distance Travelers*	68	27,500,000
Air Travelers**	55	22,200,000
Users of High Tech Products***	72	29,100,000
Computer Users	50	20,200,000
On-line Service Subscribers	20	8,100,000
Users of Travel Information****	64	25,900,000
listen to Traffic Reports Daily	—	25,000,000
Willing to Pay for Information	63	25,400,000
Thanksgiving Holiday Travelers	10	4,000,000
Thanksgiving Travelers by Car	7	2,800,000
Thanksgiving Travelers by Plane	2	800,000
Thanksgiving Travelers by Train/Bus	1	400,000

The table shows key market segments that have been identified to gauge the marketability of Advanced Traveler Information Systems (ATIS) products tested in this study. Since most of the ATIS products tested are targeted to auto travel, the potential market reflects the corridor residents who travel by car (29.5 million persons). The market segmentation is also based on the total adult population (18 years and older) of the corridor region, which is 40.4 million as reported in the 1990 census figures.

Notes: * Take at least one trip of 100 miles or more in a year by car
 ** Took at least one trip by plane in the past year.
 *** Use at least one of five high-tech products (fax, cellular phone, has PC, uses PC, has PC on-line service).
 **** Uses at least two travel information sources during or before trips

Market Research Program For Selected ATIS Products

The goal of this study was to determine the market potential of selected ATIS products meant to assist travelers in the Northeast Corridor. The products were:

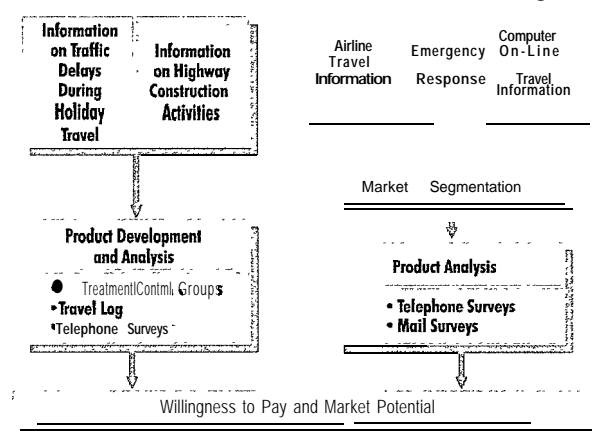
- ◆ information on traffic delays and construction activities for long distance recreational travelers;
- ◆ emergency response systems;
- ◆ air traveler information services; and,
- ◆ computer on-line traveler information services.

Three corridor-wide studies were conducted to obtain information on the potential marketability of these systems among corridor travelers. These studies

employed several survey mechanisms including telephone, mail and travel logs. The surveys identified the following about willingness to pay and market potential:

- ◆ general interest in each product;
- ◆ specific interest in each product based on projected price and fees;
- ◆ preference ranking of product concepts; and,
- ◆ preferred qualities that make up such a product.

Assessment of Market Potential Research Program



Long Distance Recreational Traveler

Importance of Travel Information on Construction & Traffic Delays

Pre-Trip Information and Travel Adjustments

Holiday travelers were asked what information they would have liked before taking the trip. Eighteen percent of travelers noted alternative routes to their

destination, while 15 percent noted traffic congestion. Fourteen percent would have liked more information on construction delays.

Additional Information Needed*

Information	Percent
Alternate route information	18
Where traffic is slow	15
Construction delays	14
Facilities (e.g., rest stops)	8
Regional Information	6
More radio listings	6
More traffic information	5
More detailed map	5
Nothing/Other	23

*Thanksgiving long distance traveler survey

Travel Adjustments Due to Pre-Trip Information*

Pre-Trip Information on:	Changed Route (%)	Changed Time (%)	Changed Plans (%)
Construction	22	32	6
Special Events	33	78	---
Other Traffic Problems	27	30	13
Any Pre-Trip Information	26	35	8

* Thanksgiving long distance traveler survey

Many holiday travelers who had pre-trip traffic information changed their travel plans. About 1/4 of the holiday travelers in the Northeast Corridor, who had pre-trip information, changed the roads they took for their trip based on pre-trip information about

construction, special events, or some other problems. About 1/3 of holiday travelers adjusted the time they traveled. Meanwhile, about one-in-ten travelers mentioned making some other change in their travel plans because of the pre-trip information they acquired.

Long Distance Recreational Traveler (Cont'd)

En Route Information and Travel Adjustments

About 1/4 of holiday travelers experienced traffic delays due to construction, accidents, and “other traffic problems.” Traffic delays due to construction and other traffic problems caused an average of two delays per trip for holiday travelers, while an average of one delay was experienced by those encountering a traffic delay due to an accident or a special event. Regardless of the cause of the traffic delay, fewer than one-in-three holiday travelers who experienced delays actually heard about that delay while they were traveling.

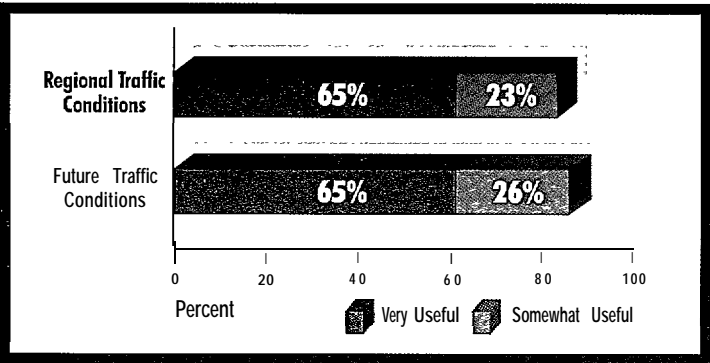
En Route Travel Adjustments Resulting from Hearing Reports on Traffic Delays and Construction

En Route Information on:	Alternate Roads Suggested (%)	Changed Roads (%)
Construction	33	12
Accidents	24	24
Other Traffic Problems	32	18
Overall	27	18

* Thanksgiving long distance traveler survey

Overall, of those who heard en route information about the delays they experienced — whether construction, accidents or other traffic problems — 27 percent heard information offering

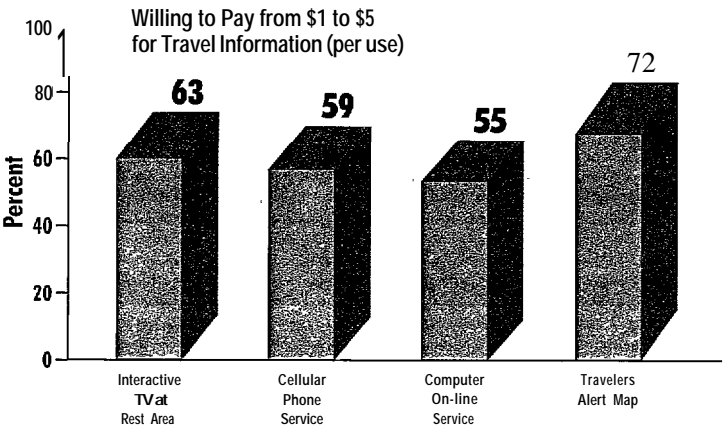
alternate routes to avoid the delay. And of those who heard information on delays, 18 percent actually changed the roads they were on to avoid the delay.



Regional & Future Traffic Conditions

Holiday travelers expressed keen interest in two types of information that they do not normally receive: regional traffic conditions, and future (i.e., return trip or downstream) traffic conditions.

Willingness To Pay For Information Services

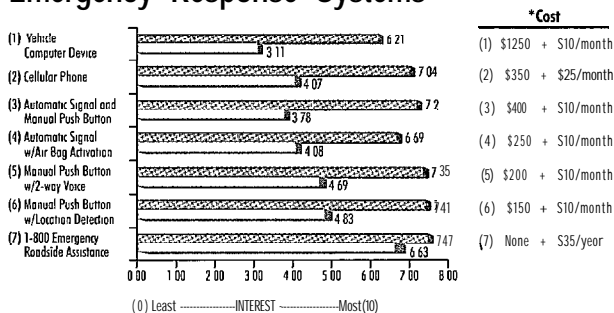


Overall, the stated preference of respondents indicates a general willingness to pay some modest fees for access to various information services. Many holiday travelers would pay from \$1 to \$5 per use for these informational services. Even at higher prices (\$3 to \$5), there was substantial interest in these products:

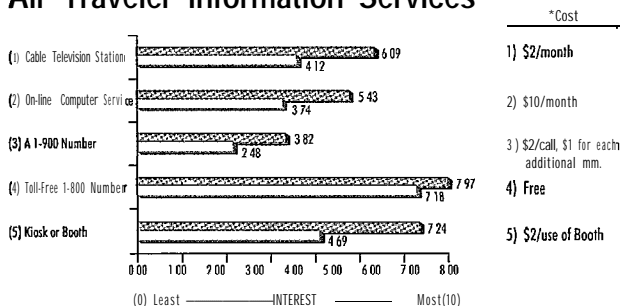
- + 35% would pay \$3 to \$5 for a map identifying construction areas.
- + 40% would pay \$3 to \$5 to use an interactive TV display at a rest area.
- + 33% would pay the same for using a computer on-line service
- + 27% would pay the same for cellular phone service.

General and Purchasing Interest In Selected ATIS Products and Services

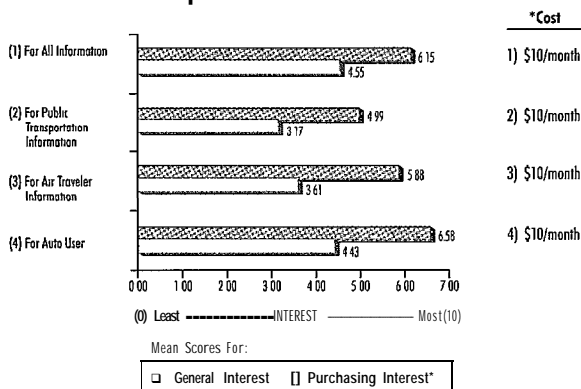
Emergency Response Systems



Air Traveler Information Services



On-line Computer Information Services



In this survey, travelers were asked to rank their interest on a scale from 0 (least) to 10 (most). Overall, there is substantial interest in the the product concepts described above. However, interest in purchasing the products declines from the initial interest indicated for all the products except the "1-800" system for emergency response and for air traveler information. Since these are product concepts, this may be a consequence of people not understanding the technology or possible benefits of a product they have never seen or used. It is possible that different descriptions and examples of products could lead to increased interest. However, as the products were described in this study, corridor residents are sensitive about the prices for the products offered even though they seem to see benefits in the services provided.

Key Findings

◆ People do change their behavior if they have information about travel conditions. Overall, this suggests that the greater the number of travelers with pre-trip and en route information, the greater the number of travelers who would adjust their travel plans.

➔ Holiday travelers use an average of two pre-trip and en route travel information sources for their long distance trips.

◆ Holiday travelers across numerous market segments seem willing to pay for various information services tested.

◆ Corridor residents showed a substantial general interest in the emergency response systems, air traveler information systems, and on-line computer information services. However, their interest declined once the costs and fees of these products and services were provided.