Precursor Systems Analyses of Automated Highway Systems

Index to PSA Reports

The table below provides a "point and click" index to the PSA reports contained on this CD ROM. The studies are cross-referenced by contractor and activity area (referred to as "tasks"), and are represented in the table as shaded boxes. By checking the table you can quickly ascertain which contractor(s) prepared studies covering which tasks.

To view a study, click on a shaded box in the table below. A hypertext link will take you directly to the associated document. For reference purposes, brief descriptions of each study area are listed on the next page. To view a Contractor's web site, click on the contractor. To view a task description click on the associated task letter.

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Contractor	Α	B	<u>C</u>	D	E	E	G	H	Ī	J	K	L	M	N	0	<u>P</u>	Q	<u>R</u>	<u>S</u>
Battelle																			
<u>BDM</u>																			
<u>Calspan</u>																			
<u>Delco</u>																			
<u>Honeywell</u>																			
Lockheed																			
<u>MITRE</u>																			
Northrop																			
<u>PATH</u>																			
Raytheon																			
Rockwell																			
<u>SAIC</u>																			
<u>SRI</u>																			
TASC																			
TRW																			
UC Davis																			

Precursor Systems Analyses Activity Areas

<u>A) Urban and Rural AHS Comparison</u> -- an analysis which defines and contrasts the urban and rural operational environments relative to AHS deployment

B) Automated Check-In -- issues relating to certifying vehicle equipment is functioning properly for AHS operation, in a manner enabling smooth flow onto the system

<u>C) Automated Check-Out</u> -- issues relating to transitioning control to the human driver and certifying vehicle equipment in functioning properly for manual operation

D) Lateral and Longitudinal Control Analysis -- technical analyses relating to automated vehicle control

E) Malfunction Management and Analysis -- analyses relating to design approaches for an AHS which is highly reliable and fault tolerant

<u>F) Commercial Transit AHS Analysis</u> -- issues relating to the unique needs of commercial and transit vehicles operating within the AHS

<u>G) Comparable Systems Analysis</u> -- an effort to derive “lessons learned” from other system development and deployment efforts with similarities to AHS

<u>H) AHS Roadway Deployment Analysis</u> -- issues relating to the deployability of possible AHS configurations within existing freeway networks

<u>I) Impact of AHS on Surrounding Non-AHS Roadways</u> -- analysis of the overall network impact of AHS deployment and development of mitigation strategies

<u>J) AHS Entry/Exit Implementation</u> -- analysis of highway design issues relating to the efficient flow of vehicles on and off of the AHS facility

K) AHS Roadway Operational Analysis -- issues relating to the ongoing operation of an AHS

L) Vehicle Operational Analysis -- issues relating to the operation of an AHS vehicle, including the retrofitting of vehicles for AHS operation

<u>M) Alternative Propulsion Systems Impact</u> -- analysis of possible impacts alternately propelled vehicles may have on AHS deployment and operation

N) AHS Safety Issues -- broad analysis of safety issues pertaining to AHS

O) Institutional and Societal Aspects -- broad analysis of the many non-technical issues which are critical to successful deployment of AHS

P) Preliminary Cost/Benefit Factors Analysis -- an early assessment of the factors which comprise the costs an benefits of AHS.

<u>Q) Preliminary Measures of Performance</u> -- an analysis that projects initial system performance specifications milestones for an AHS program.

<u>**R)** Other Reports</u> -- additional analyses of various AHS areas.

<u>S) Summary Reports</u> -- Summaries and assessments of findings.