

Precursor Systems Analyses Activity Areas

A) Urban and Rural AHS Comparison -- 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

C) Automated Check-Out -- 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

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

G) Comparable Systems Analysis -- an effort to derive ‘lessons learned’ from other system development and deployment efforts with similarities to AHS

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

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

J) AHS Entry/Exit Implementation -- 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

M) Alternative Propulsion Systems Impact -- 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 and benefits of AHS.

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

R) Other Reports -- additional analyses of various AHS areas.

S) Summary Reports -- Summaries and assessments of findings.