Table 1.1. Stakeholders for Data Generated by ITS

Stakeholder Group	Primary Transportation-Related Functions	Example Applications
MPO and state transportation planners	Identifying multimodal passenger transportation improvements (long- and short-range); congestion management; air quality planning; develop and maintain forecasting and simulation models	! congestion monitoring ! link speeds for TDF and air quality models ! AADT, K- and D-factor estimation ! temporal traffic distributions ! truck travel estimation by time of day ! macroscopic traffic simulation ! parking utilization and facility planning ! HOV, paratransit, and multimodal demand estimation ! congestion pricing policy
Traffic management operators	Day-to-day operations of deployed ITS (e.g., Traffic Management Centers, Incident Management Programs)	! pre-planned control strategies (ramp metering and signal timing) ! highway capacity analysis ! saturation flow rate determination ! microscopic traffic simulation -- historical -- short-term prediction of traffic conditions ! dynamic traffic assignment ! incident management ! congestion pricing operations
Transit operators	Day-to-day transit operations: scheduling, route delineation, fare pricing, vehicle maintenance; transit management systems; evaluation and planning	! capital planning and budgeting ! corridor analysis planning ! financial planning ! maintenance planning ! market research ! operations/service planning ! performance analysis planning ! strategic/business planning
Air quality analysts	Regional air quality monitoring; transportation plan conformity with air quality standards and goals	! emission rate modeling ! urban airshed modeling
MPO/state freight and intermodal planners	Planning for intermodal freight transfer and port facilities	! truck flow patterns (demand by origins and destinations) ! HazMat and other commodity flow patterns
Safety planners and administrators	Identifying countermeasures for general safety problems or hotspots	! safety reviews of proposed projects ! high crash location analysis ! generalized safety relationships for vehicle and highway design ! countermeasure effectiveness (specific geometric and vehicle strategies) ! safety policy effectiveness
Maintenance personnel	Planning for the rehabilitation and replacement of pavements, bridges, and roadside appurtenances; scheduling of maintenance activities	! pavement design (loadings based on ESALs) ! bridge design (loadings from the "bridge formula") ! pavement and bridge performance models
Commercial vehicle enforcement personnel	Accident investigations; enforcement of commercial vehicle regulations	! HazMat response and enforcement ! congestion management ! intermodal access ! truck route designation and maintenance ! truck safety mitigation ! economic development
Emergency management services (local police, fire, and emergency medical)	Response to transportation incidents; accident investigations	! labor and patrol planning ! route planning for emergency response ! emergency response time planning ! crash data collection

Stakeholder Group	Primary Transportation-Related Functions	Example Applications
Transportation researchers	Development of forecasting and simulation models and other analytic methods; improvements in data collection practices	! car-following and traffic flow theory development ! urban travel activity analysis
Private sector users	Provision of traffic condition data and route guidance (Information Service Providers); commercial trip planning to avoid congestion (carriers)	