

Component			Source
Service	Function	Sub-Function	Requirement
Regional ITS Management System			
IM			
MIRP			
CRI			
	6.2.3.001	Incidents shall be classified based on incident data.	GGO 20.10.1
	6.2.3.002	Incidents shall be classified according to standard categories. (Rational: Requirements specify a wide range of classifications which are covered by this standard e.g., HAZMAT chemical spills, breakdown/disable vehicle, accidents within injuries, major events).	USR 5.1.2.2.3,5.1.1.1,4
	6.2.3.003	Incident reports for each incident shall be retained in an incident tile.	Derived
DAI			
	6.2.1.001	Incidents shall be detected and incident data collected for planned (predicted) incidents.	USR 1.7.1, 1.7.1.1, 1.7.1
	6.2.1.002	Incidents shall be detected and incident data collected for unplanned incidents.	USR 1.7.1, 1.7.1.2,4.5.1
	6.2.1.004	Incidents shall be detected using incident data collected from media sources.	USR 1.7.1.1.1, 1.7.1.2.1
	6.2.1.005	Incidents shall be detected using incident data collected from weather information sources.	USR 1.7.1.1.1, 1.7.1.2.1
	6.2.1.010	Incidents data shall be detected using incident data collected from traffic control agencies.	USR 1.7.1.1.1, 1.7.1.2.1
	6.2.1.013	Incidents shall be detected using incident data collected via in-vehicle alert/mayday systems and sensors.	MnE 5.3.3
	6.2.1.014	Incidents shall be detected using incident data collected via telephone.	USR 2.4.4.1
	6.2.1.018	Incident data shall include type of incident classification.	USR 1.7.1.1.2, 1.7.1.2.2,
	6.2.1.019	Incident data shall include location.	USR 1.7.1.1.2, 1.7.1.2.2,
	6.2.1.020	Incident data shall include severity.	USR 4.5.1.2
	6.2.1.021	Incident data shall include time of occurrence.	USR 4.5.1.2
	6.2.1.022	Incident data shall include material involved.	USR 5.1.1.3, GGO 20.10

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	6.2.1.023	Upon receipt of incident data, an incident acknowledgement message shall be sent to the reporting source of the incident.	USR 5.1.1.3
	6.2.1.024	An incident acknowledgement message shall contain verification that the incident data has been received.	MnE 5.2,5.2.1,5.2.2
	6.2.1.025	An incident acknowledgement message shall contain estimated time when help will arrive.	MnE 5.3.1, MCTO 4/24/
	6.2.1.026	Incident detection shall be available 24 hours/day, 7 days/week.	Derived
IRPPR			
	6.2.4.001	Response plans and response procedures shall be selected and implemented based on the most current incident data.	USR 1.7.3, 1.7.3.1,4.5.2
	6.2.4.002	Response plans and response procedures shall provide for coordination of all responding agency activities at the incident scene pertaining to patient care.	MnA 3.2.1
	6.2.4.003	Response plans and response procedures shall provide for coordination of all responding agency activities at the incident scene pertaining to traffic flow control.	MnA 3.2.1
	6.2.4.004	Response plans and response procedures shall provide for coordination of all responding agency activities at the incident scene pertaining to incident clearing and removal.	MnA 3.2.1
	6.2.4.005	Resource requests shall be sent to the appropriate agencies based on the response plans and response procedures that have been selected to resolve the incident.	Derived
	6.2.4.006	A resource request shall contain, the most current incident data.	Derived
	6.2.4.009	A travel conditions request shall be generated to request travel conditions information along a primary or alternate response route.	Derived
	6.2.4.010	Response routes shall be selected based on the most current incident data and tailored travel conditions for that response route.	USR 5.2.2.2
	6.2.4.011	Emergency response vehicles and personnel shall be advised of travel conditions along the response route. (Rationale: reduce response time to an incident by helping emergency vehicles avoid delays due to travel conditions).	Derived

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		6.2.4.015	A resource cancellation shall be issued for any incident response resource that is no longer needed to respond to an incident.	Derived
MIL				
		6.2.6.001	Incident log reports shall be generated based on data stored in the incident log.	MnA 3.4.5
		6.2.6.002	Incident log reports shall be generated based on user defined criteria for one or more incidents to support key stakeholder agencies.	Mm4 3.4.1,3.2.2,3.3
		6.2.6.004	Incident information shall be accessible by mobile data terminals.	MnA 3.4.3,3.4.4
		6.2.6.004.a	Incident information shall be accessible by agency computers.	Derived
		6.2.6.005	Incident history information shall be generated from incident reports and incident files contained in the incident log. (Rationale: This information will be used for analysis purposes to determine if changes are needed to existing response plans, procedures and routes, or if a new response plan, procedure or route needs to be developed.).	Mm4 3.4.5, USR 1.7.2
		6.2.6.006	Incident conditions shall be generated based on incident data and incident response status.	USR 1.7.3.3, Derived
		6.2.6.012	Incident conditions shall identify type of incident.	Derived
		6.2.6.013	Incident conditions shall identify location.	USR 4.5.1.2
		6.2.6.014	Incident conditions shall identify severity (e.g. number of lanes blocked or other factors that would require traffic rerouting).	Derived
		6.2.6.015	Incident conditions shall identify time of occurrence.	USR 4.5.1.2
		6.2.6.016	Incident conditions shall identify estimated time until incident cleared.	Derived
		6.2.6.018	Incident information shall be retained for TBD years.	Derived
		6.2.6.019	Incident information and shall be provided on a need-to-know basis.	Derived
TRP				
		6.2.5.001	Incident response status shall include estimated time of arrival of responding resources.	MnE 5.2,5.2.2

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		6.2.5.002	Incident response status shall include current step in the response procedure.	Derived
		6.2.5.003	Incident response status shall include estimated time to removal and clearing of incident.	USR 1.7.1.2.2
		6.2.5.006	Estimated time of arrival shall be sent to mayday service users, people who have reported incidents, and agencies participating in the incident response until the responding resource arrives at the scene.	MnE 5.2.1
		6.2.5.007	Incident response status shall be monitored and updated continuously until an incident is closed.	USR 1-7.1.2.2
		6.2.5.009	Incident response status for each incident shall be stored and maintained in the incident log.	Derived
MIRS				
MIRA				
		6.3.1.001	Resource assignments shall be used to manage assignment of emergency medical resources, from multiple agencies and multiple jurisdictions.	GGO 2 1.5.4, Derived
		6.3.1.002	Resource assignments shall be used to manage assignment of emergency tire resources, from multiple agencies and multiple jurisdictions.	GGO 2 1.5.4, Derived
		6.3.1.003	Resource assignments shall be used to manage assignment of emergency police resources, from multiple agencies and multiple jurisdictions.	GGO 2 1.5.4, Derived
		6.3.1.004	Resource assignments shall be used to manage assignment of highway maintenance resources, from multiple agencies and multiple jurisdictions.	GGO 21.5.4, Derived
		6.3.1.005	Resource assignments shall be used to manage assignment of highway service (e.g. Highway Helper) resources, from multiple agencies and multiple jurisdictions.	GGO 2 1.5.4, Derived
		6.3.1.007	Resource assignments shall include vehicle assignments.	USR 5.2.1
		6.3.1.008	Resource assignments shall include personnel assignments.	Derived
		6.3.1.009	Resource assignments shall include equipment assignments.	Derived
		6.3.1.010	Vehicle assignments shall include jurisdictional assignment of vehicles to facilities and districts (e.g. fire station).	Derived

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	6.3.1.011	Vehicle operational assignments shall include assignment of vehicles to incidents, patrols, maintenance, or training.	USR 1.7.2.2, 1.7.2.3
	6.3.1.012	Vehicle assignment status shall be maintained for each vehicle.	Derived
	6.3.1.013	Personnel assignments shall include capability of assignment of personnel to vehicles.	Derived
	6.3.1.014	Personnel assignments shall include jurisdictional assignment of personnel to facilities and districts (e.g. tire station).	Derived
	6.3.1.015	Personnel assignments shall include operational assignment of personnel to available, incidents, training, or other.	Derived
	6.3.1.016	Personnel assignment status shall be maintained for each individual.	Derived
	6.3.1.017	Equipment assignments shall include assignment of equipment to vehicles.	Derived
	6.3.1.018	Equipment assignments shall include jurisdictional assignment of equipment to facilities and districts (e.g. fire station).	Derived
	6.3.1.019	Equipment assignments shall include assignment of equipment to personnel.	Derived
	6.3.1.020	Equipment assignment status shall be maintained for each piece of equipment.	Derived
	6.3.1.021	Equipment assignments shall include operational assignment of equipment to available, incidents, maintenance, or training.	Derived
	6.3.1.022	Resource assignments for each incident shall be determined based on a resource request, resource status, resource assignment status, and resource location.	MnA 3.4,3.4.2,3.5.1, U
	6.3.1.022.a	When required resources are unavailable to be assigned to incidents, incidents will be queued until appropriate resources become available.	Derived
	6.3.1.023	A resource request shall be sent to Public Transit Fleet Management when transportation for large numbers of people is required during an incident.	USR 2.4.4.3
	6.3.1.029	Upon receipt of a resource cancellation or incident completion notice, resource assignments shall be updated to indicate that responding vehicle(s), personnel and equipment are available to be reassigned to other incidents.	MnA 3.4.2

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	6.3.1.030	When incident response status indicates that an incident per response plans and procedures is closed, resource assignments shall be updated to indicate that responding vehicle(s), personnel and equipment are available to be reassigned to other incidents.	MnA 3.4.2
	6.3.1.031	Upon receipt of a maintenance request for preventative maintenance on a vehicle, vehicle assignments shall allocate the vehicle to a maintenance garage if the vehicle is not currently assigned to an incident or assigned as a backup to another vehicle that is assigned to an incident.	Derived
	6.3.1.032	Upon receipt of a maintenance completion notice, the vehicle shall be reassigned to its facility.	Derived
	6.3.1.033	Upon receipt of a maintenance request for preventative maintenance on a piece of equipment, equipment assignments shall allocate the equipment to maintenance if the equipment is not currently assigned to an incident or assigned as a backup to other equipment that is assigned to an incident.	Derived
	6.3.1.034	When vehicle status indicates that a vehicle is not operable, the failed vehicle will be assigned to a maintenance garage.	Derived
	6.3.1.035	When vehicle status indicates that a vehicle is not operable, the appropriate maintenance equipment and personnel shall be assigned to the failed vehicle's location.	Derived
	6.3.1.036	When vehicle status indicates that a vehicle is not operable, an available replacement vehicle shall be assigned to replace the disabled vehicle, if the disabled vehicle was assigned to an incident.	Derived
	6.3.1.037	When a maintenance completion notice is received for a vehicle the vehicle shall be made available for operational assignment.	Derived
	6.3.1.037.a	When a maintenance completion notice is received, the vehicle status shall indicate the vehicle is operable.	Derived
	6.3.1.038	Vehicle condition shall include accumulated mileage.	Derived
	6.3.1.039	Vehicle condition shall include driver reported problems.	Derived
	6.3.1.040	When equipment status indicates that a piece of equipment is inoperable, the failed equipment will be assigned to maintenance.	Derived

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	6.3.1.04	1	When equipment status indicates that a piece of equipment is inoperable, appropriate maintenance equipment and personnel shall be assigned to the failed equipment's location (if necessary).	Derived
	6.3.1.042		When equipment status indicates that a piece of equipment is inoperable, available replacement equipment shall be assigned to replace the disabled equipment if the original equipment had been assigned to an incident.	Derived
	6.3.1.043		When a maintenance completion notice is received on repaired equipment, the equipment status shall indicate operable.	Derived
	6.3.1.044		Equipment condition shall include accumulated hours of usage.	Derived
	6.3.1.045		Equipment condition shall include operator reported problems.	Derived
	6.3.1.046		When a maintenance completion notice is received, the equipment assignment shall be made available for operational assignment.	Derived
	6.3.1.047		When a training request is received, incident response personnel shall be scheduled for a training/certification course if they are not assigned to an incident or if they are not assigned as back-up to other personnel.	Derived
	6.3.1.048		When a training completion notice is received, personnel will be made available for operational assignment.	Derived
	6.3.1.049		Resource assignments shall be stored and maintained.	USR 5.2.1.1, 5.2.2.1,5.2
TIRS				
	6.3.2.001		Resource location shall be determined.	MnA 3.5,3.5.1, USR 1.7
	6.3.2.003		Resource location shall be determined to an accuracy of +/- (TBD) meters.	Derived
	6.3.2.004		Resource location shall be continuously monitored and reported.	MnE 5.2, GGO 21.5.1
	6.3.2.004.a		Resource location reporting shall be tailorable to the needs of resource managers (e.g. resource owners, dispatch personnel, and on-scene coordinators).	MnE 5.2, GGO 2 1.5.1

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	6.3.2.005	The resource managers (e.g. on scene incident coordinator, the dispatching agency, and the resource owner) shall be alerted when any vehicle condition or equipment condition information indicates a problem.	Derived
	6.3.2.006	Resource status shall include vehicle status.	Derived
	6.3.2.007	Resource status shall include equipment status.	Derived
	6.3.2.008	Resource location shall include vehicle location.	Derived
	6.3.2.009	Resource location shall include personnel location.	Derived
	6.3.2.010	Resource location shall include equipment location.	Derived
PIR			
MRPP			
	6.1.2.001	Response plans and response procedures shall be developed based on the analysis of response requirements and incident history information.	MnA 4.5.3, MCTO 4/24/
	6.1.2.002	Response plans and response procedures shall be developed to handle each incident in a manner that minimizes response time.	USR 1.7.2, MnA 3.4.2,
	6.1.2.003	Response plans and response procedures shall be developed to handle each incident in a manner that assigns the correct personnel, vehicles and equipment.	USR 1.7.2, 1.7.3, 1.7.2.2
	6.1.2.004	Response plans and response procedures shall be developed to handle each incident in a manner that establishes a command structure to coordinate responding agencies.	USR 1.7.2, MnA 3.2.1,
	6.1.2.005	Response plans and response procedures shall be developed to handle each incident in a manner that minimizes time required to clear an incident.	USR 1.7.2, MnA 3.1.3
	6.1.2.006	Response plans shall define the appropriate personnel, vehicles and equipment that are needed to respond to a specific incident based on the type of incident.	USR 1.7.2, 1.7.2.2, 1.7.2
	6.1.2.007	Response plans shall define the appropriate personnel, vehicles and equipment that are needed to respond to a specific incident based on the location of incident.	USR 1.7.2, 1.7.2.2, 1.7.2
	6.1.2.008	Response plans shall define the appropriate personnel, vehicles and equipment that are needed to respond to a specific incident based on the severity of incident.	USR 1.7.2, 1.7.2.2, 1.7.2

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	6.1.2.009	Response procedures shall define the specific actions, including data that shall be recorded in the incident file, that need to be performed to resolve a specific type of incident.	USR 1.7.2
	6.1.2.010	Response plans and response procedures shall be developed for traffic accident incidents.	USR 1.7.2, 1.7.2.1
	6.1.2.011	Response plans and response procedures shall be developed for transit accident incidents.	USR 1.7.2, 1.7.2.1
	6.1.2.012	Response plans and response procedures shall be developed for HAZMAT incidents.	USR 1.7.2, 1.7.2.1
	6.1.2.013	Response plans and response procedures shall be developed for breakdown incidents.	USR 1.7.2, 1.7.2.1
	6.1.2.014	Response plans and response procedures shall be developed for fire incidents.	USR 1.7.2, 1.7.2.1
	6.1.2.015	Response plans and response procedures shall be developed for medical emergency incidents.	USR 1.7.2, 1.7.2.1
	6.1.2.016	Response plans and response procedures shall be developed for planned event (construction, parades, sports or other special events) incidents.	USR 1.7.2, 1.7.2.1
	6.1.2.017	Response plans and response procedures shall be developed for hazardous situation incidents (eg. reported drunk driver, road hazard, etc.).	USR 1.7.2, 1.7.2.1, MnE
	6.1.2.019	Response plans and response procedures shall facilitate a coordinated response to an incident across multiple agencies and jurisdictions involving state/local police.	MnA 3.1.1, 3.4.2, USR 2
	6.1.2.020	Response plans and response procedures shall facilitate a coordinated response to an incident across multiple agencies and jurisdictions involving emergency medical services.	MnA 3.1.1, 3.4.2, USR 2
	6.1.2.021	Response plans and response procedures shall facilitate a coordinated response to an incident across multiple agencies and jurisdictions involving fire departments.	MnA 3.1.1, 3.4.2, USR 2
	6.1.2.022	Response plans and response procedures shall facilitate a coordinated response to an incident across multiple agencies and jurisdictions involving HAZMAT teams.	MnA 3.1.1, 3.4.2, USR 2
	6.1.2.023	Response plans and response procedures shall facilitate a coordinated response to an incident across multiple agencies and jurisdictions involving towing services.	MnA 3.1.1, 3.4.2, USR 2
	6.1.2.024	Response plans and response procedures shall facilitate a coordinated response to an incident across multiple agencies and jurisdictions involving TMC.	MnA 3.1.1, 3.4.2, USR 2

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	6.1.2.025	Response plans and response procedures shall facilitate a coordinated response to an incident across multiple agencies and jurisdictions involving highway maintenance.	MnA 3.1.1,3.4.2, USR2
	6.1.2.026	Response plans and response procedures shall facilitate a coordinated response to an incident across multiple agencies and jurisdictions involving state and/or local transportation officials.	MnA 3.1.1,3.4.2, USR 2
	6.1.2.027	Response plans and response procedures shall facilitate a coordinated response to an incident across multiple agencies and jurisdictions involving environmental protection agencies.	MnA 3.1.1,3.4.2, USR 2
	6.1.2.028	Response plans and response procedures shall be updated based on response requirements changes and improvements identified from incident history analyses.	USR 1.7.2, MCTO 4/24/
	6.1.2.029	Response plans and response procedures shall be stored and maintained.	Derived
MRR			
	6.1.1.001	Response requirements shall be collected, stored and maintained to support incident and emergency response planning activities.	USR 4.4.5.2
	6.1.1.002	Response requirements shall reflect the needs of key stakeholder agencies (e.g. Police(including Transit Police), Fire , Emergency Medical, MnDOT, TMC, road maintenance, Highway Helper, environmental (e.g. HAZMAT teams, etc.)).	Derived
	6.1.1.003	Response requirements shall reflect the needs of counties, cities and state.	Derived
	6.1.1.004	Response requirements shall reflect the needs of travelers/citizens.	Derived
MRRO			
	6.1.3.001	Response routes shall be developed based on the analysis of response requirements and incident history information.	MnA 4.5.3
	6. I 3.002	Response routes shall be developed in a manner that minimizes the travel time required to respond to an incident.	MnA 3.4.2
	6.1.3.003	Response routes shall be updated based on response requirements changes and improvements identified from incident history analyses.	USR 1.7.2
	6.1.3.004	Response routes shall be stored and maintained.	USR 5.2.3.1

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		MTCD	
		CTCD	
	1.1.2.001	Travel conditions source data shall include traffic conditions.	MnE 1.3
	1.1.2.002	Travel conditions source data shall include traffic surveillance data.	Derived
	1.1.2.003	Travel conditions source data shall include weather conditions.	MnE 1.3
	1.1.2.004	Travel conditions source data shall include weather surveillance data.	MnE 1.3
	1.1.2.005	Travel conditions source data shall include road surface conditions.	MnE 1.3
	1.1.2.006	Travel conditions source data shall include road surface surveillance data.	MnE 1.3
	1.1.2.007	Travel conditions source data shall include incident conditions.	MnE 1.3
	1.1.2.008	Travel conditions source data shall include planned event information.	MnE 1.3
	1.1.2.009	Travel conditions source data shall include parking conditions.	MnE 1.3
	1.1.2.010	Travel conditions source data shall include transit conditions.	MnE 1.3
	1.1.2.012	Traffic conditions data shall be collected.	Derived
	1.1.2.013	Weather conditions shall be collected.	Derived
	1.1.2.017	Road surface conditions shall be collected from other systems.	Derived
	1.1.2.020	Planned event information shall be collected from other systems.	Derived
	1.1.2.021	Parking conditions shall be collected.	Derived
	1.1.2.022	Transit conditions shall be collected.	Derived
	1.1.2.029	Travel conditions source data shall be accepted into the system via electronic entry. (ITS standard format).	Derived
	1.1.2.029.a	Travel conditions source data shall be accepted into the system when in NTCIP format.	Derived

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	1.1.2.029.b	Travel conditions source data shall be accepted into the system when in ITIS BAP format.	Derived
	1.1.2.030	Travel conditions source data shall be accepted into the system via electronic entry. (ITS non-standard format)	Derived
	1.1.2.031	Travel conditions source data received in a non-standard format shall be converted to standard format.	Derived
	1.1.2.032	Travel conditions source data shall be stored and maintained as an operator selectable option.	Derived
	1.1.2.033	Travel conditions source data that is no longer active shall be identified.	Derived
	1.1.2.034	Travel conditions source data that is no longer active shall be manually deletable.	Derived
	1.1.2.035	Travel conditions source data shall be logged upon initial receipt, change, and deletion.	Derived
	1.1.2.036	Condition start time shall be assigned when travel conditions source data is generated.	Derived
	1.1.2.037	Condition stop time shall be assigned to travel conditions source data.	MnE 2.2, 2.6.2, 1.5.3, 1.
	1.1.2.038	Expected duration shall be assigned when travel conditions source data is generated.	MnE 2.2, 2.6.2, 1.5.3, 1.
	1.1.2.039	Weather surveillance data shall be collected.	USR 3.1.2.5
	1.1.2.040	Road surface surveillance data shall be collected.	
	1.1.2.042	Traffic surveillance data shall be collected.	Derived
	1.1.2.043	Travel conditions source data shall include parking surveillance data.	Derived
	1.1.2.044	incident conditions shall be collected from other systems.	Derived
	1.1.2.045	Multiple sources of travel conditions source data shall be compared to improve the accuracy of the data.	Derived
	1.1.2.046	Multiple sources of travel conditions source data shall be compared to improve the consistency of the data.	Derived

DBTCTE

Component			Source
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	1-1.3.004	Travel conditions shall be referenced to a physical location.	MnE 1.1.1, 1.2
	1.1.3.005	Travel effects shall be referenced to a physical location.	MnE 1.1.1
	1.1.3.007	Link reference model data shall be stored and maintained.	Derived
	1.1.3.008	Travel conditions shall include current traffic conditions	USR 5.2.2.1
	1.1.3.009	Travel conditions shall include current weather conditions.	USR 5.2.2.1, GGO 10.5.
	1.1.3.010	Travel conditions shall include forecasted weather conditions.	MnE 1.1.2, 1.6.1, GGO
	1.1.3.011	Travel conditions shall include current road surface conditions.	USR 5.2.2.1
	1.1.3.012	Travel conditions shall include forecasted road surface conditions	Derived
	1.1.3.013	Travel conditions shall include current incident conditions.	USR 5.2.2.1
	1.1.3.014	Travel conditions shall include planned event information	MnE 1.6.1
	1.1.3.015	Travel conditions shall include current parking conditions	USR 1.1.2.1.6
	1.1.3.016	Travel conditions shall include current transit conditions	USR 1.1.2, 1.1.2.1
	1.1.3.017	Travel conditions shall include future transit conditions	MnE 2.5,2.6
	1.1.3.018	Travel conditions shall be stored and maintained.	Derived
	1.1.3.019	Traffic conditions shall include congestion	USR 5.2.2.1, MnE 1.4.1,
	1.1.3.020	Traffic conditions shall include freeway data.	USR 5.2.2.1, GGO 1.5.1
	1.1.3.021	Traffic conditions shall include traffic speeds	USR 5.2.2.1, USR 1.1.2.
	1.1.3.022	Traffic conditions shall include traffic levels (volume and occupancy)	USR 5.2.2.1, MnE 1.4.1,
	1.1.3.024	Weather conditions shall include rain.	MnE 1.1, 1.4.1, MnA 1.

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	1.1.3.025	Weather conditions shall include snow.	MnE 1.1, 1.4.1, MnA 1.
	1.1.3.026	Weather conditions shall include fog.	MnE 1.1, 1.4.1, MnA 1.
	1.1.3.027	Weather conditions shall include clear weather.	MnE 1.1, 1.4.1, MnA 1.
	1.1.3.028	Forecast weather conditions shall be maintained.	MnE 1.1.2, 1.6.1,2.5,2.
	1.1.3.029	Road surface conditions shall include dry pavement.	MnE 1.1, 1.4.1, MnA 1.
	1.1.3.030	Road surface conditions shall include wet pavement.	MnE 1.1, 1.4.1, MnA 1.
	1.1.3.031	Road surface conditions shall include flooded pavement	MnE 1.1, 1.4.1, MnA 1.
	1.1.3.032	Road surface conditions shall include snow covered pavement	MnE 1.1, 1.4.1, MnA 1.
	1.1.3.033	Road surface conditions shall include icy pavement.	MnE 1.1, 1.4.1, MnA 1.
	1.1.3.034	Road surface conditions shall include plowed pavement	MnE 1.1, 1.4.1, MnA 1.
	1.1.3.035	Road surface conditions shall include salted pavement.	MnE 1.1, 1.4.1, MnA 1.
	1.1.3.036	Road surface conditions shall include sanded pavement.	MnE 1.1, 1.4.1, MnA 1.
	1.1.3.037	Forecasted road surface conditions shall be maintained.	Derived
	1.1.3.038	Planned event information shall include current construction and maintenance.	USR5.2.2.1, 1.1.2.1.1,
	1.1.3.039	Incident conditions shall include dangerous situations and hazards	USR5.2.2.1, 1.1.2.1.1,
	1.1.3.040	Incident conditions shall include accidents	USR5.2.2.1, 1.1.2.1.1,
	1.1.3.041	Planned event information shall include special events.	USR 5.2.2.1, 1.1.2.1.1,
	1.1.3.042	Future planned event information such as future construction and maintenance shall be maintained.	MnE 1.6.1,2.5,2.5.1,2.

Component			Source
Service	Function	Sub-Function Requirement	
	1.1.3.043	Future planned event information such as upcoming special events/event schedules shall be maintained.	MnE 1.6.1,2.5,2.5.1,2.6,
	1.1.3.044	Parking conditions shall include parking availability.	USR 1.1.2.1.6, MnE 1.5.
	1.1.3.045	Parking conditions shall include parking lot status	USR 1.1.2.1.6, MnE 1.4.
	1.1.3.046	Transit conditions shall include estimated arrival times at each transit stop	GGO 1.5.2, MnE 2.3.1,
	1.1.3.046.a	Transit conditions shall include estimated departure times from each transit stop	Derived
	1.1.3.046.b	Transit conditions shall include transit vehicle schedule status relative to each stop along a route	Derived
	1.1.3.047	Transit conditions shall include schedule changes.	GGO 1.5.2, MnE 2.2.2.
	1.1.3.048	Transit conditions shall include route changes	GGO 1.5.2, MnE 2.2.2.
	1.1.3.049	Transit conditions shall include transfer changes.	GGO 1.5.2, MnE 2.2.2.
	1.1.3.050	Transit conditions for various public transit modes including public transit buses shall be determined	USR 1.1.2, 1.1.2.1
	1.1.3.053	Future transit conditions shall be maintained	Derived
	1.1.1.3.054	Travel conditions that are no longer active shall be identified.	Derived
	1.1.3.055	Travel effects that are no longer active shall be identified.	Derived
	1.1.3.056	Travel conditions shall be manually deletable.	Derived
	1.1.3.057	Travel effects shall be manually deletable.	Derived
	1.1.3.059	Travel effects shall be stored and maintained.	Derived
	1.1.3.060	Travel conditions shall be logged upon initial receipt, change and deletion.	Derived
	1.1.3.061	Travel effects shall be logged upon initial receipt, change and deletion.	Derived

Component			Source
Service	Function	Sub-Function Requirement	
	1.1.3.062	Agencies shall be able to access travel conditions without having to manually replicate the information.	MnA 1.1.2
	1.1.3.069	Travel effects shall include delays.	GGO 2.10.3, MnE 1.5.1
	1.1.3.070	Travel effects shall include road/ramp closings.	GGO 2.10.3, MnE 1.5.2
	1.1.3.071	Travel effects shall include detours.	GGO 2.10.3, MnE 1.5.2
	1.1.3.072	Travel effects shall include reduced speeds.	GGO 2.10.3, MnE 1.5.1
	1.1.3.074	Future travel effects shall be determined and maintained, including expected delays.	MnE 1.7, MnE 1.7.1
	1.1.3.075	Future travel effects shall be determined and maintained, including planned road/ramp closings.	MnE 1.7, MnE 1.7.1
	1.1.3.076	Future travel effects shall be determined and maintained, including planned detours.	MnE 1.7, MnE 1.7.1
	1.1.3.077	Travel effects that are no longer active shall be identified.	Derived
	1-1.3.080	Travel effects rules shall include current condition specific rules.	Derived
	1.1.3.081	Travel effects rules shall include future/forecast condition specific rules.	Derived
	1.1.3.082	Travel effects rules shall be created, stored and updated.	Derived
	1.1.3.091	Traffic conditions shall include arterial data.	Derived
	1.1.3.095	Traffic conditions shall include road segment travel time.	Derived
	1.1.3.096	Traffic conditions shall include signal timing data.	Derived
MTCI			
	DTCI		
	1.2.1.001	Travel conditions requests shall be accepted for travel conditions.	Derived
	1.2.1.003	Each travel conditions request shall be checked for proper service level authorization.	Derived

Component			Source
Service	Function	Sub-Function Requirement	
	1.2.1.004	Authorized travel conditions requests shall be provided the requested travel conditions information	Derived
	1.2.1.005	A list of authorized users shall be created, stored, updated and deleted.	Derived
	1.2.1.006	Authorized users shall be allowed to request travel conditions.	Derived
	1.2.1.012	As a goal, travel conditions will be made available to users 24 hours/day, 7 days/week, 365 days/year.	MnE 1.3.1,2.4.1, GGO
	1.2.1.012.a	Travel conditions shall be made available within the agreed to hours of operation.	Derived
	1.2.1.012.b	Travel conditions shall be made available to humans	Derived
	1.2.1.012.c	Travel conditions shall be made available to other systems	Derived
	1.2.1.021	Travel conditions shall be distributed via electronic transfer to publicly owned computer.	MnE 1.3.3,2.4.3, MnA
I	1.2.1.032	Basic travel conditions shall be made available via on-line services.	Derived
	1.2.1.033	Travel conditions shall be distributed via electronic transfer to privately owned computer.	Derived
DTTC			
	1.2.3.005	Travel conditions shall be received automatically upon occurrence of an event.	Derived
	1.2.3.006	Travel conditions shall be received automatically upon any change in an event.	Derived
	1.2.3.007	Travel conditions shall be received upon the issuing of a travel conditions request.	Derived
	1.2.3.024	Travel conditions shall contain active/or forecasted/future conditions.	Derived
	1.2.3.025	Forecasted travel conditions shall contain effects of active or forecasted/future conditions.	Derived
	1.2.3.027	Travel conditions shall contain conditions descriptions.	Derived
I	1.2.3.039	Travel conditions shall be compiled for the current time frame.	MnE 1.1.2, MnA 1.4.1,
	1.2.3.040	Travel conditions shall be compiled for the future time frame.	MnE 1.1.2, 1.6.1, USR 1.

Component			Source	
Service	Function	Sub-Function	Requirement	
		1.2.3.041	Travel conditions shall be compiled for the forecasted time frame.	MnE 1.1.2, 1.6.1, USR 1
		DTTE		
		1.2.2.002	Travel effects shall be received automatically upon the occurrence of an event.	Derived
		1.2.2.003	Travel effects shall be received automatically upon any change in an event.	Derived
		1.2.2.004	Travel effects shall be received upon the issuing of a request for travel effects	Derived
TPD		MTPD		
		DR		
		2.1.2.023	Link reference model data shall be accepted from multiple sources including public agencies.	Derived
		2.1.2.024	Link reference model data shall be accepted from multiple sources including information service providers.	Derived
		2.1.2.026	Link reference model data shall be accepted into the system via electronic entry (standard form)	Derived
		2.1.2.028	A link reference model shall be stored and maintained.	Derived
		2.1.2.029	Public transit fleet schedules shall be stored, updated and deleted.	USR 2.2.3.1.1
		MTTP		
		DTPD		
		2.2.3.033	Fixed/Flexible Routes planning shall support external customer query of the the fleet schedule. Query access may include telephone and internet access.	MCTO 4/24/96 - 20
TSI		MTSD		
		BTS		
		3.1.2.001	Traveler services information shall geographically reference traveler services source data to specific, multi-modal route segments.	Derived
		3.1.2.008	Link reference model data shall be stored, updated and deleted.	Derived
		CTS		

Component			Source
Service	Function	Sub-Function Requirement	
	3.1.1.042	Traveler services source data shall be created, stored, updated and deleted.	Derived
	3.1.1.044	Traveler services source data shall include parking data.	Derived
	3.1.1.045	Traveler services source data shall include transit mode use information.	Derived
	3.1.1.04s	Parking data shall be accepted from parking facilities.	Derived
	3.1.1.049	Mode use information shall be accepted from transit agencies.	Derived