

Analysis Context

<u>Study Type</u>	<u>Analysis Horizon</u>	<u>Analysis Timeframe</u>
<ul style="list-style-type: none"> ▪ Planning ▪ Design ▪ Transportation Management Plan ▪ Operations ▪ Evaluation 	<ul style="list-style-type: none"> • Short Term (1-4 years) • Medium Term (5-10 years) • Long Term (Up to 25 years) 	<ul style="list-style-type: none"> • Daily • Peak Hour • Peak Period

Analysis Characteristics

<u>Geographic Area</u>	<u>Facility Type</u>	<u>Travel Mode</u>	<u>Improvement Strategies</u>	<u>Traveler Responses</u>	<u>Performance Measures</u>
<ul style="list-style-type: none"> ▪ Urban/ Suburban ▪ Rural 	<ul style="list-style-type: none"> ▪ Isolated Intersection ▪ Roundabout ▪ Arterial ▪ Highway ▪ Freeway ▪ High-Occupancy Vehicle Lane ▪ Ramp ▪ Auxiliary Lane ▪ Reversible Lane ▪ Truck Lane ▪ Toll Plaza ▪ Rail ▪ Bus Lane ▪ Express Lanes ▪ Managed Lanes ▪ Bicycle ▪ Pedestrian 	<ul style="list-style-type: none"> ▪ Single Occupancy Vehicle ▪ High Occupancy Vehicle (2, 3, 3+) ▪ Bus ▪ Rail ▪ Truck ▪ Motorcycle ▪ Bicycle ▪ Pedestrian ▪ Shared Rides ▪ Low/No Emissions Vehicle ▪ Connected/ Autonomous Vehicle 	<ul style="list-style-type: none"> ▪ Roadway Infrastructure ▪ Roadway Mgmt. ▪ Integrated Corridor Mgmt. ▪ Active Traffic Mgmt. ▪ Connected Vehicles ▪ Autonomous Vehicle ▪ Truck Bypass ▪ Incident Mgmt. ▪ Weather Mgmt. ▪ Work Zone ▪ Travel Information ▪ Electronic Payment ▪ Transit Services ▪ Transit Infrastructure ▪ Active Transportation ▪ Complete Streets ▪ Shared Mobility 	<ul style="list-style-type: none"> ▪ Pre-Trip Route Diversion ▪ En-Route Diversion ▪ Mode Shift ▪ Departure Time Choice ▪ Destination Change ▪ Induced Demand ▪ Foregone Demand ▪ Response Timeframe ▪ Real-Time Response ▪ Longer-Term Response 	<ul style="list-style-type: none"> ▪ Delay ▪ Bottleneck Locations & Extents ▪ Travel Time Speed ▪ Travel Time Reliability ▪ Throughput/Volume ▪ LOS ▪ Transit Ridership ▪ Service Frequency ▪ Injury and Fatality crashes ▪ Bicycle and Pedestrian Collisions ▪ Crash Rates ▪ Reduced Safety Conflicts ▪ Access or System Connectivity ▪ Truck Hours of Delay ▪ Truck Travel Time Reliability ▪ Job Access ▪ Disadvantaged Population Served ▪ GHG ▪ Air Pollutants ▪ VMT ▪ Fuel Consumption ▪ Noise ▪ Mode Share ▪ Jobs/Housing Ratio ▪ Benefit/Cost

Resource Considerations

<u>Time</u>	<u>Data</u>	<u>People</u>	<u>Tools</u>
<ul style="list-style-type: none"> ▪ Time Available for Study 	<ul style="list-style-type: none"> ▪ Accuracy/Quality ▪ Availability ▪ Dynamics ▪ Resources Available for Additional Data 	<ul style="list-style-type: none"> ▪ Knowledge ▪ Skills ▪ Ability ▪ Availability 	<ul style="list-style-type: none"> ▪ Availability ▪ Cost ▪ Visualization Capabilities ▪ Processing/Run-Time ▪ Ease of Use ▪ User Support ▪ Precision/Accuracy Requirements ▪ Well - Trusted