Model Calibration

• Driver Behavior Model
  – Aimsun default model, Gipps model
• Data Source for Demand
  – Freeway: PeMS mainline flow measurement.
  – Intersection: field collected vehicle counts.
• Performance for Comparison
  – Freeway congestion:
    ➢ Observed flow & speed from PeMS vs. simulated flow & speed.
    ➢ Bottleneck location.
  – Onramp queue:
    ➢ Observed average queue length from video vs. simulated queue length.
  – Intersection queues:
    ➢ Observed average queue length from video for critical direction vs. simulated queue length.
    ➢ Blockage.
  – Merging/lane changing behavior near the onramp:
    ➢ Reasonable merging behavior from simulation.