STAGE 2 PROJECT: EXIT 20 IMPROVED ACCESS AND QUEUE DETECTION

PROJECT GOAL
The goal of the proposed project is to help address traffic queuing at Exit 20 on I-87, during periods of peak tourist and commercial traffic, which poses a mainline safety problem. These conditions also impede traffic flow to local sites, tourist destinations, special events, and commercial routes to and from Vermont.

EXISTING PROGRAMS
There are presently no programs to address this problem. Recent traffic studies completed for the expansion of the Great Escape park concluded that the expansion did not trigger the need to make any mitigative improvements at Exit 20. However, field investigations indicated a problem to a sufficient degree to warrant the safety remediation.

PROPOSED PROJECT COMPONENTS
The proposed project would involve installation of a permanent queue detection system at the northbound exit ramp of Exit 20. When queuing at the ramp backs up traffic onto the highway, the system would automatically advise motorists of the presence of stopped vehicles ahead, and provide information on expected delays and alternate routings to key destinations (e.g., Great Escape, Route 149). The queue detectors would communicate with flashing beacons south of Exit 20, and with variable message signs (VMSs) south of Exits 17 and 19. The VMSs could also direct motorists during special events. System components include:

- One queue detector placed immediately south of Exit 20.
- One flashing beacon assembly located along the northbound side of I-87, south of Exit 20.
- Two permanent VMSs, deployed as noted above.
- A Central Control to gather traffic information from the detector, analyze it for queuing, activate the flashing beacon and VMSs as appropriate, and communicate with the Information Exchange Network (IEN) for broader dissemination of this information.

RELATION TO SHORT-/LONG-TERM PLAN
This type of traveler assistance is consistent with both the Smart/Safe Traveler and Smart Highway goals of the corridor’s overall Strategic Plan.

REGULATORY REQUIREMENTS, AGENCY COORDINATION
With construction entirely within the I-87 right-of-way, minimal environmental review would be needed. Inter-agency coordination between the stakeholders (i.e., NYSDOT, NY State Police, local transportation officials) would be necessary to ensure the appropriate design and use of the system.

ESTIMATED COST
Capital costs for the full system would be approximately $480,000 (the queue detection and flashing beacon portion alone could be done initially for $65,000 - $75,000). Funding could be sought under various Federal ITS or Trade Corridor programs.