



February 9, 2005

Philip H. Gitlen, Esq.
Whiteman Osterman & Hanna LLP
One Commerce Plaza
Albany, NY 12210

Re: Preliminary Review
Mountain Resort and Casino Regional Traffic Impact Analysis

Dear Mr. Gitlen:

At the request of Whiteman Osterman & Hanna LLP and the Natural Resources Defense Council, Sam Schwartz Engineering PLLC (SSC) performed an independent assessment of the potential regional traffic impacts of five casinos proposed in Sullivan County.

As a first step in this comprehensive examination, SSC reviewed the April 29, 2004 Mountain Resort and Casino Regional Traffic Impact Analysis (RTIA), which analyzes the traffic impacts of three casinos and a racino on major roads in the Catskill region. The RTIA was prepared as a supplement to the St. Regis Mohawk Tribe Mohawk Mountain Casino Resort Final Environmental Impact Statement prepared for the St. Regis Mohawk Tribe and Caesars Entertainment.

SSC is still reviewing the assumptions, analyses and projections made in the RTIA and will be providing further comments. However, based on our initial review of the RTIA, SSC has found that five Catskill casinos would create traffic demand that exceeds the capacity of Route 17 at many locations in Orange and Sullivan counties.

Our key findings are that casino traffic, when added to existing traffic volumes on Route 17, would cause severe delays, backups, and additional queuing of vehicles up to 6.7 miles during peak travel times. Development of five casinos in Sullivan County would mean as much as an 87% increase in hourly traffic on key stretches of Route 17 (as discussed below). That would not only paralyze already heavy traffic on this critical artery, but also cause or increase backups on adjacent roadways such as the New York State Thruway. These conclusions are all based upon an extrapolation of data contained in the RTIA.

Below are several examples of traffic conditions that our review shows could be expected with five Catskill casinos.

Route 17 Capacity

Exit 130

The RTIA reports that, under current conditions, hourly traffic peaks at 3,500 vehicles per hour at Exit 130 (Town of Monroe, Orange County) on a Friday (RTIA, P.18).¹ Analysis of the data presented in the RTIA shows that three casinos would generate an additional 757 vehicles per hour and that five casinos² would generate an additional 1,264 vehicles, leading to peak hour traffic flows of 4,764 vehicles per hour. This exceeds the 4,500 vehicle per hour capacity³ of Route 17 that is reported in the RTIA.

Exit 116

According to the RTIA, Route 17 hourly traffic at Exit 116 (Town of Bloomingburg, Sullivan County), currently peaks at 2,900 vehicles per hour on both Fridays and Sundays (RTIA, p.14). Based on the RTIA traffic data, an additional 1,514 vehicles per hour would use this section of Route 17 in the peak direction on Fridays and Sundays if three casinos were built. (RTIA p.18, Figure 3.1). Five casinos would generate an additional 2,528 vehicles per hour, leading to peak hourly traffic flows of 5,428. This traffic volume represents an 87% increase in hourly traffic and exceeds the capacity of Route 17 by nearly 1,000 vehicles per hour as seen in Table 1.

Table 1: Vehicle volumes on Route 17 (all numbers in vehicles per hour)

	Existing Condition (RTIA)	Three-Casino Condition	Five-Casino Condition
Exit 130 Westbound (FRI)	3,500	4,257	4,764
Exit 130 Eastbound (SUN)	3,000	3,910	4,520
Exit 116 Westbound (FRI)	2,900	4,414	5,428
Exit 116 Eastbound (SUN)	2,900	4,414	5,428

Harriman Toll Plaza Congestion

Based upon RTIA data, we estimate that traffic caused by five casinos in Sullivan County would result in a near standstill condition on Route 17 eastbound at the Harriman New York State Thruway (Route 87) toll plaza. Specifically, during peak conditions on Sunday, an additional 1,180 vehicles per hour would be added to the existing queue of vehicles – a condition that is mentioned in the RTIA (RTIA, p.20). Over three hours

¹ It should be noted that SSC’s review of actual data presented in Table 3 of the RTIA Appendix D indicates that peak traffic volumes as high as 3,662 vehicles per hour have been observed in this area.

² A 5 to 3 ratio (factor of 1.67) was used to project from a three casino scenario to a five casino scenario. Therefore, this does not account for the racino which was not possible to factor out of the calculation due to the general nature of the RTIA. A provision of more detailed analysis would allow for a more specific ratio.

³ The RTIA estimates the capacity of Route 17 as 2,250 passenger cars per hour per lane based on the Highway Capacity Manual. The report then mistakenly converts this capacity to 4,500 vehicles per hour. “Passenger cars” (or passenger car equivalents) are different from “vehicles.” The latter assumes a mix of different types of vehicles and the former assumes only passenger cars utilizing an equivalency factor for trucks, buses and RVs (i.e 1 truck equals 2.5 passenger cars). This is due to the fact that trucks, buses and RVs are larger than cars and perform differently (slower acceleration, etc.). Therefore, the stated capacity is actually lower when accounting for larger vehicles in the traffic stream. However, we have utilized this number for simplicity in this letter.

(several hours of peaking as stated on Page 19 of the RTIA) this equates to an additional 3,540 vehicles added to the back of the existing queue. Assuming an average of 20 feet per car (a generally accepted industry standard), an additional 70,800 feet of cars would be added to Route 17. At 5,280 feet per mile, that equates to 13.4 lane-miles. Since there are two lanes on Route 17, five casinos could add an additional 6.7 miles of bumper-to-bumper cars and buses on Route 17, extending west from the toll plaza.

Additionally, five Catskill casinos could also be expected to result in traffic backing onto the New York State Thruway (northbound) at the Harriman interchange. The capacity of this exit ramp is 3,800 passenger cars per hour (Highway Capacity Manual, p. 25-4). According to the RTIA, the existing peak service flow rate on the Thruway off-ramp is 3,000 vehicles per hour (RTIA, P.16). With five casinos, the ramp traffic volume would increase to 3,983 vehicles per hour. This would increase queuing onto the Thruway.

In summary, based on our initial technical review of the data contained in the RTIA, the traffic generated by five Catskill casinos could be expected to cause sustained congestion on Route 17 in Orange and Sullivan counties, result in miles of backed up cars, trucks and buses on Route 17 at the Harriman interchange, and result in traffic backing up onto the New York State Thruway at the Harriman interchange.

If you have any questions or comments, please feel free to contact me.

Very truly yours,

Erich Arcement, P.E., PTOE
Vice President

cc: Mark Izeman, NRDC