

# **Vehicle Speed Study Summary**

## **Route 9D Corridor Management Plan**

A speed study was performed by New York State Department of Transportation personnel on Wednesday, December 7, 2005 along Route 9D in the Town of Philipstown. Using a laser gun, vehicle speeds were recorded at three locations along Route 9D while traffic was flowing freely and weather conditions were good. Speeds were recorded at each location, in both directions, between the hours of 9:45 AM and 1:15 PM.

An average sample size of 179 vehicles was recorded at each location. The speed study found that the average speed exceeded the posted limit of 40 MPH by 8 MPH. Slightly higher speeds were recorded within the southern portion of Route 9D between Manitou Station Road and Canada Hill Road compared to those speeds collected in the northern portion of Route 9D, near the entrance to Philipstown Park and at Dick's Castle Road.

Speeds in excess of 65 MPH were recorded in the corridor. Sixty five percent of all vehicles studied within the 40 MPH speed limit zone were exceeding the speed limit by at least 5 MPH.

See attached sheet for summary of speed study data.

# Route 9D Speed Study - Philipstown

December 7, 2005  
9:45 AM – 1:15 PM

Location	Direction	15 <sup>th</sup> Percentile Speed	50 <sup>th</sup> Percentile Speed	85 <sup>th</sup> Percentile Speed	95 <sup>th</sup> Percentile Speed	Count	Average	Low	High	Current Posted Speed Limit	Previous Posted Speed Limit	Percent Exceeding Speed Limit	Percent Exceeding 5 MPH over Speed Limit
Rt. 9D at Polhemus Construction Entrance	NB & SB	45	49	54	59	138	49.6	37	78	40	45	97.1	78.3
Rt. 9D at Philipstown Park Entrance	NB & SB	43	47	52	54	200	47.4	35	59	40	40	94.5	64.5
Rt. 9D at Dick's Castle Road	NB & SB	41	46	51	54	200	46.0	30	58	40	45	89.5	52.0
<b>Average</b>	<b>n/a</b>	<b>43</b>	<b>47</b>	<b>52</b>	<b>56</b>	<b>179</b>	<b>47.7</b>	<b>34</b>	<b>65</b>	<b>n/a</b>	<b>n/a</b>	<b>93.7</b>	<b>64.9</b>

The 85<sup>th</sup> percentile speed is the speed at which 85 percent of the vehicles have been observed to pass through a facility during off-peak hours, during free-flow conditions. The 85<sup>th</sup> percentile speed is commonly used to determine the design speed of a highway. It is sometimes referred to as the “operating speed.” In summary, the speeds of all motorists are ranked in the sample size from slowest to fastest; the “85<sup>th</sup> percentile speed” separates the slower 85% from the fastest 15%.