

2. STUDY ESTIMATES AND ASSUMPTIONS

This section presents an enumeration of the estimates and assumptions utilized in the development of the evacuation time estimates.

2.1 Data Estimates

1. Population estimates are based upon Census 2000 data, projected to year 2003. County-specific projections are based upon growth rates estimated by comparing the 1990 and 2000 census data. Where specific areas within the county experiences growth rates that are different than the county-wide average, these areas are considered separately. Estimates of employees who commute into the EPZ to work are based upon the New York State Journey to Work Database, applied to the Year 2000 employment data stratified on an ERPA basis. Specific major employers were also considered.
2. Population estimates at special facilities are based on available data, telephone contacts and mail surveys.
3. Roadway capacity estimates are based on field surveys and the application of Highway Capacity Manual 2000¹. Roads, which are seasonally closed, are identified in the county-specific assumptions section.
4. Population mobilization times are based on statistical analysis of data acquired by a telephone survey. No assumptions are made, all times are supported by local data.
5. The relationship between resident population and evacuating vehicles is developed from the results of the telephone survey detailed in Appendix F. Results are reported on a county by county basis:

Vehicle Occupancy Rates

County	Household Size	Evacuating Vehicles Per Household ²	Persons per Evacuating Vehicle
Orange	2.84	1.26	2.24
Putnam	3.10	1.27	2.44
Rockland	3.36	1.25	2.68
Westchester	2.84	1.24	2.28

¹ Highway Capacity Manual (HCM2000), Transportation Research Board, National Research Council, 2000.

² Compare the telephone survey results with Institute for Environmental Studies, University of Toronto, THE MISSISSAUGA EVACUATION FINAL REPORT, June 1981. The report indicates that 75,500 households evacuated the area using 93,400 vehicles, yielding 1.24 evacuating vehicles per household. (Page 5-10).