APPENDIX J

Evacuation Time Estimates for All Evacuation Regions and Scenarios

And

Evacuation Time Graphs for Region R3, for all Scenarios

APPENDIX J: EVACUATION TIME ESTIMATES FOR ALL EVACUATION REGIONS AND SCENARIOS

AND

EVACUATION TIME GRAPHS FOR REGION R3, FOR ALL SCENARIOS

This appendix presents the ETE Results for all 35 Regions and all 14 Scenarios (Tables J-1A through J-1D). In addition to the four tables presenting the ETE results, a fifth table, Table J-1E, presents "EPZ Clearance Times".

Tables of ETE and of EPZ Clearance Times are also presented for Regions R1, R2, and R3, for all Scenarios in a format that displays these values for the 50th, 90th, 95th, and 100th percentiles of evacuating population. (Tables J-3A and J-3B).

Plots of Evacuating Population vs. Elapsed Time leaving the 2-mile and 5-mile circular areas around IPEC and the entire EPZ for Region R3, for all 14 scenarios. Each plot has points indicating the evacuation times corresponding to the 50th, 90th, and 95th percentiles of evacuated population.

J.1 Guidance on Using ETE Tables

Tables J-1A through J-1D present the ETE values for all 35 Evacuation Regions and all 14 Evacuation Scenarios. They are organized as follows:

Table	Contents
J-1A	ETE represents the elapsed time required for 50 percent of the population within a Region, to evacuate from that Region.
J-1B	ETE represents the elapsed time required for 90 percent of the population within a Region, to evacuate from that Region.
J-1C	ETE represents the elapsed time required for 95 percent of the population within a Region, to evacuate from that Region.
J-1D	ETE represents the elapsed time required for 100 percent of the population within a Region, to evacuate from that Region.

The user first determines the percentile of population for which the ETE is sought. The applicable value of ETE within the chosen Table may then be identified using the following procedure:

1. Identify the applicable **Scenario**:
   - The Season
     1. Summer
     2. Winter (also Autumn and Spring)
   - The Day of Week
     3. Midweek
     4. Weekend
   - The Time of Day
     5. Midday
     6. Evening
   - Weather Condition
     7. Good Weather
     8. Rain
     9. Snow
   - Special Event (if any)
     10. Football game at West Point
     11. Commencement Exercises at West Point

While these Scenarios are designed, in aggregate, to represent conditions throughout the year, some further clarification is warranted:

- The conditions of a summer evening (either midweek or weekend) and rain are not explicitly identified in Tables J-1A through J-1E. For these conditions, Scenario (4) applies.
- The conditions of a winter evening (either midweek or weekend) and rain or snow are not explicitly identified in Tables J-1A through J-1E. For these conditions, Scenarios (10) for rain and (11) for snow, apply.
- The seasons are defined as follows:
  - Summer implies that public schools are *not* in session.
  - Winter, Spring and Autumn imply that public schools *are* in session.
- Time of Day: Midday implies the time over which most commuters are at work.

2. With the Scenario identified, now identify the **Evacuation Region**:
   - Determine the projected azimuth direction of the plume (coincident with the wind direction). This direction is expressed in terms of compass orientation: *towards* N, NNE, NE, …
   - Determine the distance that the Evacuation Region will extend from IPEC. The applicable distances and their associated candidate Regions are given below:
     - 2 Miles (Region R1)
     - 5 Miles (Regions R2 and R4-R19)

- to EPZ Boundary (Regions R3 and R20-R35)

- Enter Table J-2 and identify the applicable group of candidate Regions based on the distance that the selected Region extends from IPEC. Within this group, identify the row corresponding to the Azimuth Direction identified in the 2nd bullet above (see column with the heading, DESCRIPTION OF REGION). Select the Evacuation Region identifier in that row from the first column of the Table.

3. Determine the **ETE for the Scenario** identified in Step 1 and the Region identified in Step 2, as follows:
   - The columns of Table J-1 are labeled with the Scenario numbers. Identify the proper column in the selected Table using the Scenario number determined in Step 1.
   - Identify the row in this table that provides ETE values for the Region identified in Step 2.
   - The unique data cell defined by the column and row so determined contains the desired value of ETE expressed in Hours:Minutes.

<u>Example</u>

It is desired to identify the ETE for the following conditions:

- Sunday, August 10th at 4:00 AM.
- It is raining.
- Wind direction is *to* the northeast.
- Wind speed is such that the distance to be evacuated is judged to be 10 miles (to EPZ boundary).
- The desired ETE is that value needed to evacuate 95 percent of the population from within the impacted Region.

Table J-1C is applicable because the 95-percentile population is desired. Proceed as follows:

1. Identify the Scenario as summer, weekend, evening and raining. Entering Table J-1C, it is seen that there is no match for these descriptors. However, the clarification given above assigns this combination of circumstances to Scenario 4.

2. Enter Table J-2 and locate the group entitled "5 Mile Ring and Sector to EPZ Boundary". Under "DESCRIPTION OF REGION", identify the NE (northeast) azimuth (wind direction) and read REGION R22 in the first column of that row.

3. Enter Table J-1C to locate the data cell containing the value of ETE for Scenario 4 and Region 22. This data cell is in column (4) and in the row for Region R22; it contains the ETE value of **7:00**.

Table J-1A. Time To Clear The Indicated Area of 50 Percent of the Affected Population (Page 1 of 2)																
	Summer		Summer		Summer		Winter			Winter			Winter		Autumn	Spring
	Midweek		Weekend		Midweek Weekend		Midweek			Weekend			Midweek Weekend		Weekend USMA Football	Midweek USMA Graduation
Scenario:	(1)	(2)	(3)	(4)	(5)	Scenario:	(6)	(7)	(8)	(9)	(10)	(11)	(12)	Scenario:	(13)	(14)
Region	Midday		Midday		Evening	Region	Midday			Midday			Evening	Region	Midday	Midday
	Good Weather	Rain	Good Weather	Rain	Good Weather		Good Weather	Rain	Snow	Good Weather	Rain	Snow	Good Weather		Good Weather	Good Weather
Entire 2-Mile Region, 5-Mile Region, and EPZ																
R1	1:45	1:50	1:35	1:40	1:20	R1	1:45	1:55	2:20	1:30	1:35	2:00	1:25	R1	1:30	1:45
R2	2:10	2:25	2:00	2:15	1:40	R2	2:20	2:30	2:55	1:55	2:05	2:30	1:45	R2	1:55	2:20
R3	3:05	3:25	2:30	2:50	2:10	R3	3:10	3:30	3:55	2:30	2:50	3:15	2:10	R3	2:35	3:10
2-Mile Ring and Keyhole to 5 Miles																
R4	1:55	2:00	1:45	1:50	1:35	R4	1:55	2:05	2:30	1:40	1:45	2:15	1:35	R4	1:50	1:55
R5	2:00	2:10	1:55	2:00	1:40	R5	2:05	2:15	2:45	1:50	2:00	2:30	1:45	R5	1:50	2:05
R6	2:00	2:10	1:50	1:55	1:40	R6	2:05	2:15	2:40	1:45	1:55	2:25	1:40	R6	1:45	2:05
R7	2:00	2:05	1:50	1:55	1:35	R7	2:05	2:15	2:40	1:45	1:50	2:20	1:40	R7	1:45	2:05
R8	2:05	2:10	1:50	2:00	1:35	R8	2:05	2:15	2:45	1:45	1:55	2:20	1:40	R8	1:45	2:05
R9	2:10	2:25	2:00	2:15	1:40	R9	2:20	2:30	2:55	1:55	2:00	2:30	1:40	R9	1:55	2:20
R10	2:05	2:20	2:00	2:10	1:30	R10	2:15	2:25	2:50	1:50	1:55	2:20	1:30	R10	1:50	2:15
R11	2:10	2:25	2:00	2:15	1:40	R11	2:20	2:30	2:50	1:55	2:05	2:30	1:40	R11	1:55	2:20
R12	2:10	2:25	2:00	2:15	1:40	R12	2:20	2:30	2:50	1:55	2:05	2:30	1:45	R12	1:55	2:20
R13	1:55	2:10	1:50	2:00	1:40	R13	2:05	2:15	2:35	1:50	2:00	2:25	1:40	R13	1:50	2:05
R14	1:45	1:55	1:35	1:45	1:30	R14	1:50	2:05	2:25	1:40	1:50	2:15	1:35	R14	1:40	1:50
R15	1:45	1:55	1:35	1:45	1:30	R15	1:50	2:05	2:25	1:40	1:50	2:15	1:35	R15	1:40	1:50
R16	1:45	1:50	1:35	1:35	1:20	R16	1:45	1:55	2:20	1:30	1:35	2:00	1:25	R16	1:30	1:45
R17	1:45	1:50	1:35	1:35	1:20	R17	1:45	1:55	2:20	1:30	1:35	2:00	1:20	R17	1:45	1:45
R18	1:45	1:50	1:35	1:35	1:20	R18	1:45	1:55	2:20	1:30	1:35	2:00	1:15	R18	1:40	1:45
R19	1:50	1:55	1:40	1:50	1:30	R19	1:55	2:00	2:30	1:35	1:45	2:10	1:30	R19	1:45	1:55

Table J-1A. Time To Clear The Indicated Area of 50 Percent of the Affected Population (Page 2 of 2)																
	Summer		Summer		Summer		Winter			Winter			Winter		Autumn	Spring
	Midweek		Weekend		Midweek Weekend		Midweek			Weekend			Midweek Weekend		Weekend USMA Football	Midweek USMA Graduation
Scenario:	(1)	(2)	(3)	(4)	(5)	Scenario:	(6)	(7)	(8)	(9)	(10)	(11)	(12)	Scenario:	(13)	(14)
Region	Midday		Midday		Evening	Region	Midday			Midday			Evening	Region	Midday	Midday
	Good Weather	Rain	Good Weather	Rain	Good Weather		Good Weather	Rain	Snow	Good Weather	Rain	Snow	Good Weather		Good Weather	Good Weather
5 Mile Ring and Keyhole to EPZ Boundary																
R20	2:25	2:40	2:05	2:20	1:50	R20	2:25	2:50	3:10	2:05	2:20	2:50	1:50	R20	2:15	2:25
R21	2:35	2:50	2:10	2:25	1:55	R21	2:40	3:00	3:25	2:10	2:25	2:55	1:55	R21	2:20	2:40
R22	2:45	3:05	2:20	2:40	2:00	R22	2:50	3:10	3:35	2:20	2:35	3:05	2:00	R22	2:20	2:50
R23	2:50	3:10	2:20	2:40	1:55	R23	2:50	3:15	3:40	2:20	2:40	3:00	1:55	R23	2:20	2:50
R24	2:55	3:15	2:25	2:45	2:00	R24	2:55	3:20	3:40	2:20	2:35	3:00	2:00	R24	2:20	2:55
R25	3:00	3:20	2:30	2:50	2:10	R25	3:05	3:30	3:50	2:30	2:50	3:10	2:10	R25	2:30	3:05
R26	2:45	3:05	2:25	2:40	2:00	R26	2:50	3:10	3:35	2:20	2:40	3:00	2:00	R26	2:25	2:50
R27	2:55	3:10	2:25	2:45	2:05	R27	3:00	3:15	3:40	2:25	2:45	3:05	2:05	R27	2:25	3:00
R28	2:40	3:00	2:10	2:25	1:55	R28	2:45	3:00	3:25	2:10	2:25	2:45	1:55	R28	2:15	2:45
R29	2:35	2:50	2:10	2:20	1:55	R29	2:40	3:00	3:20	2:10	2:25	2:50	1:55	R29	2:15	2:40
R30	2:35	2:50	2:10	2:20	1:55	R30	2:40	2:55	3:20	2:10	2:25	2:50	1:55	R30	2:15	2:40
R31	2:15	2:25	2:00	2:15	1:40	R31	2:20	2:35	3:05	1:55	2:00	2:30	1:45	R31	1:55	2:20
R32	2:10	2:25	2:00	2:15	1:40	R32	2:20	2:35	2:55	1:55	2:05	2:35	1:45	R32	2:05	2:20
R33	2:10	2:25	2:00	2:15	1:40	R33	2:20	2:40	3:00	1:55	2:10	2:35	1:45	R33	2:05	2:20
R34	2:10	2:25	2:00	2:15	1:40	R34	2:20	2:35	2:55	1:55	2:05	2:35	1:45	R34	2:05	2:20
R35	2:15	2:30	2:00	2:15	1:45	R35	2:20	2:40	3:05	1:55	2:10	2:40	1:45	R35	2:10	2:20

Table J-1B. Time To Clear The Indicated Area of 90 Percent of the Affected Population (Page 1 of 2)

	Summer		Summer		Summer		Winter			Winter			Winter		Autumn	Spring
	Midweek		Weekend		Midweek Weekend		Midweek			Weekend			Midweek Weekend		Weekend USMA Football	Midweek USMA Graduation
Scenario:	(1)	(2)	(3)	(4)	(5)	Scenario:	(6)	(7)	(8)	(9)	(10)	(11)	(12)	Scenario:	(13)	(14)
	Midday		Midday		Evening		Midday			Midday			Evening		Midday	Midday
Region	Good Weather	Rain	Good Weather	Rain	Good Weather	Region	Good Weather	Rain	Snow	Good Weather	Rain	Snow	Good Weather	Region	Good Weather	Good Weather
Entire 2-Mile Region, 5-Mile Region, and EPZ																
R1	3:50	4:10	3:15	3:25	2:55	R1	3:55	4:15	4:50	3:15	3:30	4:05	2:55	R1	3:15	3:55
R2	4:50	5:10	4:20	4:45	3:55	R2	4:55	5:20	6:20	4:15	4:40	5:40	3:55	R2	4:15	4:55
R3	6:30	7:20	5:45	6:25	4:55	R3	6:30	7:10	8:05	5:30	6:05	7:00	5:00	R3	5:30	6:30
2-Mile Ring and Keyhole to 5 Miles																
R4	4:30	4:55	3:55	4:20	3:40	R4	4:35	5:05	5:50	4:05	4:30	5:15	3:35	R4	4:05	4:35
R5	4:45	5:10	4:15	4:35	3:55	R5	4:55	5:20	6:20	4:15	4:40	5:40	3:55	R5	4:15	4:55
R6	4:50	5:10	4:15	4:35	3:55	R6	4:50	5:20	6:20	4:15	4:40	5:35	3:55	R6	4:15	4:50
R7	4:50	5:10	4:10	4:35	3:55	R7	4:55	5:20	6:15	4:15	4:40	5:35	3:55	R7	4:15	4:55
R8	4:50	5:10	4:10	4:30	3:50	R8	4:50	5:20	6:10	4:10	4:40	5:30	3:50	R8	4:10	4:50
R9	4:45	5:10	4:15	4:45	3:30	R9	4:45	5:10	5:55	4:05	4:25	5:00	3:30	R9	4:05	4:45
R10	4:30	4:55	4:05	4:35	3:15	R10	4:30	4:55	5:35	3:50	4:05	4:40	3:10	R10	3:50	4:30
R11	4:35	5:00	4:10	4:40	3:35	R11	4:35	5:00	5:35	4:00	4:20	4:55	3:25	R11	4:00	4:35
R12	4:35	5:05	4:15	4:40	3:35	R12	4:35	5:00	5:35	4:00	4:20	4:55	3:25	R12	4:00	4:35
R13	4:20	4:50	3:50	4:15	3:35	R13	4:20	4:45	5:25	3:55	4:15	4:55	3:30	R13	3:55	4:20
R14	4:15	4:40	3:45	4:10	3:30	R14	4:15	4:45	5:20	3:50	4:10	4:50	3:25	R14	3:50	4:15
R15	4:15	4:40	3:45	4:10	3:30	R15	4:15	4:45	5:20	3:50	4:10	4:50	3:25	R15	3:50	4:15
R16	3:50	4:10	3:15	3:25	3:00	R16	3:55	4:15	4:50	3:20	3:30	4:10	3:00	R16	3:20	3:55
R17	3:50	4:10	3:15	3:30	2:55	R17	3:55	4:15	4:50	3:15	3:30	4:05	2:55	R17	4:15	3:55
R18	3:50	4:10	3:15	3:30	2:55	R18	3:55	4:15	4:55	3:15	3:30	4:05	2:55	R18	4:15	3:55
R19	4:30	4:50	3:50	4:15	3:35	R19	4:30	5:00	5:50	3:55	4:25	5:10	3:30	R19	3:50	4:30

Table J-1B. Time To Clear The Indicated Area of 90 Percent of the Affected Population (Page 2 of 2)																
	Summer		Summer		Summer		Winter			Winter			Winter		Autumn	Spring
	Midweek		Weekend		Midweek Weekend		Midweek			Weekend			Midweek Weekend		Weekend USMA Football	Midweek USMA Graduation
Scenario:	(1)	(2)	(3)	(4)	(5)	Scenario:	(6)	(7)	(8)	(9)	(10)	(11)	(12)	Scenario:	(13)	(14)
Region	Midday		Midday		Evening	Region	Midday			Midday			Evening	Region	Midday	Midday
	Good Weather	Rain	Good Weather	Rain	Good Weather		Good Weather	Rain	Snow	Good Weather	Rain	Snow	Good Weather		Good Weather	Good Weather
5 Mile Ring and Keyhole to EPZ Boundary																
R20	5:25	6:05	4:50	5:25	4:20	R20	5:30	6:05	6:55	4:55	5:15	6:10	4:15	R20	4:55	5:30
R21	5:50	6:30	5:15	5:45	4:40	R21	5:55	6:30	7:30	5:10	5:40	6:40	4:40	R21	5:10	5:55
R22	6:15	6:55	5:35	6:10	4:55	R22	6:25	7:05	8:05	5:30	6:05	7:00	5:00	R22	5:30	6:25
R23	6:15	7:00	5:40	6:15	4:55	R23	6:20	7:00	7:55	5:25	6:00	7:00	4:55	R23	5:25	6:20
R24	6:15	7:00	5:35	6:15	4:50	R24	6:20	7:00	7:50	5:20	5:55	6:50	4:50	R24	5:20	6:20
R25	6:30	7:20	5:45	6:25	4:45	R25	6:30	7:10	8:05	5:30	6:05	6:55	4:40	R25	5:30	6:30
R26	6:10	6:45	5:20	6:00	4:20	R26	6:10	6:45	7:30	5:10	5:40	6:25	4:20	R26	5:10	6:10
R27	6:05	6:40	5:25	5:55	4:30	R27	6:10	6:40	7:30	5:10	5:40	6:25	4:20	R27	5:10	6:10
R28	5:50	6:35	5:10	5:40	4:25	R28	5:55	6:30	7:20	5:00	5:25	6:10	4:15	R28	5:00	5:55
R29	5:35	6:10	4:55	5:25	4:15	R29	5:35	6:10	6:55	4:45	5:10	5:55	4:05	R29	4:45	5:35
R30	5:30	6:10	4:50	5:20	4:15	R30	5:30	6:10	6:55	4:40	5:05	5:55	4:05	R30	4:40	5:30
R31	5:10	5:45	4:25	4:55	3:55	R31	5:15	5:45	6:35	4:20	4:45	5:30	3:55	R31	4:20	5:15
R32	5:05	5:45	4:30	5:05	4:00	R32	5:10	5:40	6:25	4:25	4:50	5:40	3:55	R32	4:40	5:10
R33	5:05	5:45	4:30	5:00	4:00	R33	5:10	5:40	6:25	4:25	4:50	5:40	3:55	R33	4:40	5:10
R34	5:05	5:45	4:30	5:00	4:00	R34	5:10	5:40	6:25	4:25	4:50	5:40	3:55	R34	4:40	5:10
R35	5:10	5:45	4:35	5:05	4:05	R35	5:10	5:45	6:25	4:30	4:50	5:40	3:55	R35	4:40	5:10

Table J-1C. Time To Clear The Indicated Area of 95 Percent of the Affected Population (Page 1 of 2)																
	Summer		Summer		Summer		Winter			Winter			Winter		Autumn	Spring
	Midweek		Weekend		Midweek Weekend		Midweek			Weekend			Midweek Weekend		Weekend USMA Football	Midweek USMA Graduation
Scenario:	(1)	(2)	(3)	(4)	(5)	Scenario:	(6)	(7)	(8)	(9)	(10)	(11)	(12)	Scenario:	(13)	(14)
	Midday		Midday		Evening		Midday			Midday			Evening		Midday	Midday
Region	Good Weather	Rain	Good Weather	Rain	Good Weather	Region	Good Weather	Rain	Snow	Good Weather	Rain	Snow	Good Weather	Region	Good Weather	Good Weather
Entire 2-Mile Region, 5-Mile Region, and EPZ																
R1	4:15	4:40	3:35	3:50	3:15	R1	4:20	4:40	5:20	3:40	3:55	4:30	3:15	R1	3:40	4:20
R2	5:20	5:45	4:45	5:15	4:15	R2	5:20	6:00	6:55	4:40	5:05	6:10	4:15	R2	4:40	5:20
R3	7:20	8:10	6:35	7:15	5:35	R3	7:20	8:00	9:10	6:15	7:00	8:10	5:40	R3	6:15	7:20
2-Mile Ring and Keyhole to 5 Miles																
R4	5:00	5:25	4:20	4:45	4:00	R4	5:00	5:30	6:25	4:25	4:50	5:40	3:55	R4	4:25	5:00
R5	5:20	5:45	4:40	5:00	4:15	R5	5:20	6:00	6:55	4:40	5:05	6:10	4:15	R5	4:40	5:20
R6	5:20	5:45	4:40	5:00	4:15	R6	5:20	6:00	6:55	4:40	5:05	6:10	4:15	R6	4:40	5:20
R7	5:20	5:45	4:45	5:00	4:15	R7	5:20	5:50	6:55	4:40	5:05	6:05	4:15	R7	4:40	5:20
R8	5:15	5:40	4:35	5:00	4:15	R8	5:20	5:50	6:50	4:40	5:05	6:05	4:15	R8	4:40	5:20
R9	5:10	5:30	4:40	5:05	3:50	R9	5:05	5:25	6:25	4:20	4:45	5:25	3:50	R9	4:20	5:05
R10	4:50	5:15	4:25	4:55	3:30	R10	4:50	5:15	5:55	4:05	4:25	5:00	3:25	R10	4:10	4:50
R11	4:55	5:25	4:35	5:10	4:00	R11	4:55	5:25	6:00	4:25	4:45	5:20	3:55	R11	4:35	4:55
R12	4:55	5:25	4:40	5:10	4:00	R12	4:55	5:25	6:05	4:25	4:45	5:25	3:55	R12	4:35	4:55
R13	4:50	5:20	4:20	4:50	4:05	R13	4:50	5:20	6:00	4:25	4:50	5:25	4:05	R13	4:35	4:50
R14	4:45	5:15	4:15	4:40	4:00	R14	4:45	5:15	5:55	4:20	4:45	5:25	4:00	R14	4:25	4:45
R15	4:45	5:15	4:15	4:40	4:00	R15	4:45	5:15	5:55	4:20	4:45	5:25	4:00	R15	4:25	4:45
R16	4:15	4:40	3:35	3:50	3:20	R16	4:20	4:40	5:30	3:40	3:55	4:40	3:20	R16	3:40	4:20
R17	4:15	4:40	3:35	3:55	3:15	R17	4:20	4:40	5:25	3:40	3:55	4:35	3:15	R17	4:55	4:40
R18	4:20	4:40	3:40	3:55	3:15	R18	4:25	4:45	5:35	3:40	3:55	4:45	3:15	R18	4:40	4:25
R19	5:00	5:20	4:15	4:45	4:05	R19	5:00	5:30	6:30	4:20	4:50	5:40	4:00	R19	4:20	5:00

Table J-1C. Time To Clear The Indicated Area of 95 Percent of the Affected Population (Page 2 of 2)																
	Summer		Summer		Summer		Winter			Winter			Winter		Autumn	Spring
	Midweek		Weekend		Midweek Weekend		Midweek			Weekend			Midweek Weekend		Weekend USMA Football	Midweek USMA Graduation
Scenario:	(1)	(2)	(3)	(4)	(5)	Scenario:	(6)	(7)	(8)	(9)	(10)	(11)	(12)	Scenario:	(13)	(14)
	Midday		Midday		Evening		Midday			Midday			Evening		Midday	Midday
Region	Good Weather	Rain	Good Weather	Rain	Good Weather	Region	Good Weather	Rain	Snow	Good Weather	Rain	Snow	Good Weather	Region	Good Weather	Good Weather
5 Mile Ring and Keyhole to EPZ Boundary																
R20	5:55	6:40	5:25	6:00	4:55	R20	6:00	6:45	7:35	5:30	5:50	6:55	4:50	R20	5:30	6:00
R21	6:30	7:10	5:55	6:30	5:15	R21	6:35	7:15	8:20	5:45	6:25	7:30	5:15	R21	5:45	6:35
R22	7:10	8:00	6:25	7:00	5:35	R22	7:20	8:00	9:10	6:15	7:00	8:10	5:40	R22	6:15	7:20
R23	7:10	8:00	6:30	7:10	5:35	R23	7:15	8:00	9:10	6:15	6:55	8:10	5:35	R23	6:15	7:15
R24	7:10	8:00	6:25	7:10	5:30	R24	7:15	7:55	9:05	6:10	6:50	8:00	5:30	R24	6:10	7:15
R25	7:10	7:55	6:25	7:05	5:20	R25	7:10	8:00	8:55	6:05	6:45	7:45	5:15	R25	6:05	7:10
R26	6:55	7:35	6:05	6:50	4:55	R26	6:50	7:30	8:25	5:45	6:20	7:10	4:50	R26	5:45	6:50
R27	6:50	7:30	6:05	6:40	5:00	R27	6:50	7:25	8:20	5:45	6:20	7:10	4:50	R27	5:45	6:50
R28	6:30	7:20	5:50	6:25	4:55	R28	6:35	7:15	8:10	5:35	6:00	6:55	4:45	R28	5:35	6:35
R29	6:00	6:45	5:25	5:55	4:40	R29	6:05	6:45	7:30	5:10	5:40	6:25	4:30	R29	5:10	6:05
R30	6:00	6:40	5:20	5:55	4:40	R30	6:00	6:40	7:30	5:05	5:35	6:25	4:30	R30	5:10	6:00
R31	5:40	6:20	4:55	5:25	4:20	R31	5:45	6:20	7:10	4:50	5:15	6:10	4:15	R31	4:50	5:45
R32	5:35	6:20	5:00	5:35	4:25	R32	5:40	6:15	7:00	4:55	5:20	6:10	4:20	R32	5:05	5:40
R33	5:35	6:15	5:00	5:30	4:25	R33	5:35	6:15	7:00	4:55	5:20	6:10	4:20	R33	5:10	5:35
R34	5:35	6:15	5:00	5:30	4:25	R34	5:40	6:15	7:00	4:55	5:20	6:10	4:20	R34	5:10	5:40
R35	5:40	6:20	5:05	5:35	4:30	R35	5:40	6:20	7:05	5:00	5:25	6:15	4:25	R35	5:15	5:40

Table J-1D. Time To Clear The Indicated Area of 100 Percent of the Affected Population (Page 1 of 2)																
	Summer		Summer		Summer		Winter			Winter			Winter		Autumn	Spring
	Midweek		Weekend		Midweek Weekend		Midweek			Weekend			Midweek Weekend		Weekend USMA Football	Midweek USMA Graduation
Scenario:	(1)	(2)	(3)	(4)	(5)	Scenario:	(6)	(7)	(8)	(9)	(10)	(11)	(12)	Scenario:	(13)	(14)
Region	Midday		Midday		Evening	Region	Midday			Midday			Evening	Region	Midday	Midday
	Good Weather	Rain	Good Weather	Rain	Good Weather		Good Weather	Rain	Snow	Good Weather	Rain	Snow	Good Weather		Good Weather	Good Weather
Entire 2-Mile Region, 5-Mile Region, and EPZ																
R1	4:55	5:30	4:50	5:25	4:45	R1	5:15	5:15	6:50	4:55	5:30	5:55	4:30	R1	5:30	5:15
R2	6:20	7:10	5:55	6:45	5:25	R2	6:20	7:00	8:00	5:55	6:25	7:20	5:25	R2	6:30	6:20
R3	9:25	10:30	8:50	9:50	7:15	R3	9:30	10:55	12:00	7:55	8:50	10:10	7:10	R3	8:45	9:30
2-Mile Ring and Keyhole to 5 Miles																
R4	5:45	6:20	5:10	5:35	4:50	R4	5:45	6:25	7:30	5:15	5:30	6:35	4:45	R4	5:55	5:45
R5	6:00	6:45	5:25	5:50	5:15	R5	6:10	7:00	8:00	5:25	5:45	7:10	5:15	R5	5:55	6:10
R6	6:00	6:45	5:25	5:50	5:15	R6	6:10	7:00	8:00	5:25	5:45	7:10	5:15	R6	5:55	6:10
R7	6:10	6:40	5:20	5:50	5:10	R7	6:10	6:45	8:00	5:20	5:40	7:05	5:15	R7	6:00	6:10
R8	6:10	6:35	5:20	5:50	5:10	R8	6:05	6:45	8:00	5:20	5:45	7:10	5:15	R8	6:00	6:05
R9	5:55	6:25	5:55	6:40	4:35	R9	6:00	6:30	7:35	5:10	5:30	6:45	4:35	R9	6:00	6:00
R10	5:25	5:45	5:55	6:40	4:25	R10	5:20	5:55	6:45	4:40	5:25	5:55	4:25	R10	5:30	5:20
R11	6:20	6:55	5:55	6:40	5:25	R11	6:20	6:55	7:45	5:55	6:20	7:20	5:25	R11	6:30	6:20
R12	6:20	6:55	5:55	6:40	5:25	R12	6:20	6:55	7:45	5:55	6:20	7:20	5:25	R12	6:30	6:20
R13	6:20	7:10	5:55	6:45	5:25	R13	6:20	6:55	7:40	5:55	6:25	7:15	5:25	R13	6:30	6:20
R14	6:20	7:10	5:55	6:45	5:25	R14	6:20	6:55	7:40	5:55	6:25	7:15	5:25	R14	6:30	6:20
R15	6:20	7:10	5:55	6:45	5:25	R15	6:20	6:55	7:40	5:55	6:25	7:15	5:25	R15	6:30	6:20
R16	5:25	5:40	4:50	5:10	4:25	R16	5:10	5:45	6:45	4:45	5:30	5:55	4:25	R16	5:30	5:10
R17	5:25	5:40	4:50	5:10	4:25	R17	5:10	5:45	6:45	4:45	5:30	5:55	4:25	R17	6:50	5:10
R18	5:20	5:40	4:50	5:15	4:25	R18	5:15	5:50	6:45	4:45	5:30	5:50	4:25	R18	6:50	6:00
R19	5:40	6:20	4:55	5:30	4:45	R19	5:40	6:35	7:30	5:15	5:30	6:35	4:45	R19	5:55	5:40

Table J-1D. Time To Clear The Indicated Area of 100 Percent of the Affected Population (Page 2 of 2)																
	Summer		Summer		Summer		Winter			Winter			Winter		Autumn	Spring
	Midweek		Weekend		Midweek Weekend		Midweek			Weekend			Midweek Weekend		Weekend USMA Football	Midweek USMA Graduation
Scenario:	(1)	(2)	(3)	(4)	(5)	Scenario:	(6)	(7)	(8)	(9)	(10)	(11)	(12)	Scenario:	(13)	(14)
Region	Midday		Midday		Evening	Region	Midday			Midday			Evening	Region	Midday	Midday
	Good Weather	Rain	Good Weather	Rain	Good Weather		Good Weather	Rain	Snow	Good Weather	Rain	Snow	Good Weather		Good Weather	Good Weather
5 Mile Ring and Keyhole to EPZ Boundary																
R20	7:25	8:10	6:45	7:30	6:25	R20	7:30	8:15	9:25	6:55	7:25	8:40	6:25	R20	6:50	7:30
R21	8:00	8:55	7:20	8:15	6:45	R21	8:10	8:55	10:20	7:10	8:05	9:20	6:40	R21	7:00	8:10
R22	8:55	9:55	7:50	8:45	7:15	R22	8:55	9:55	11:15	7:55	8:45	10:05	7:10	R22	8:45	9:15
R23	8:55	9:55	8:15	8:50	7:15	R23	9:00	10:00	11:20	7:50	8:50	10:10	7:05	R23	8:45	9:15
R24	8:45	9:40	7:55	9:00	7:05	R24	8:50	9:40	11:00	7:45	8:20	9:50	7:00	R24	8:45	9:20
R25	9:25	10:30	8:50	9:30	6:55	R25	9:25	10:55	12:00	7:30	8:05	9:30	6:50	R25	8:15	9:25
R26	9:25	10:30	8:50	9:30	6:15	R26	9:30	10:55	12:00	7:20	7:55	8:45	6:00	R26	7:50	9:30
R27	9:20	10:30	8:20	9:25	6:15	R27	9:25	10:55	11:55	7:05	7:55	8:45	6:00	R27	7:50	9:25
R28	9:20	10:25	8:20	9:50	6:20	R28	9:30	10:30	12:00	7:15	7:35	8:45	6:25	R28	7:50	9:30
R29	8:10	8:55	7:20	7:40	6:25	R29	8:10	8:55	9:50	6:50	7:20	8:15	6:15	R29	6:45	8:10
R30	8:00	8:55	7:25	7:45	6:50	R30	8:00	8:45	10:00	6:45	7:20	8:20	6:20	R30	7:30	8:00
R31	7:15	8:25	6:45	7:20	6:20	R31	7:20	7:55	8:50	6:45	7:00	8:25	6:15	R31	7:30	7:20
R32	6:40	7:45	6:40	7:10	5:50	R32	6:45	7:40	8:30	6:10	6:40	7:55	5:40	R32	6:50	6:45
R33	6:40	7:45	6:40	7:10	5:50	R33	6:45	7:40	8:30	6:10	6:40	7:55	5:40	R33	6:50	6:45
R34	6:40	7:45	6:40	7:10	5:50	R34	6:45	7:40	8:30	6:10	6:40	7:55	5:40	R34	6:50	6:45
R35	6:55	7:45	6:40	7:10	5:50	R35	6:55	7:40	8:30	6:20	6:55	7:55	5:50	R35	6:50	6:55

Table J-1E. Time To Clear The EPZ Boundary of 100 Percent of the Affected Population (Page 1 of 2)																
	Summer		Summer		Summer		Winter			Winter			Winter		Autumn	Spring
	Midweek		Weekend		Midweek Weekend		Midweek			Weekend			Midweek Weekend		Weekend USMA Football	Midweek USMA Graduation
Scenario:	(1)	(2)	(3)	(4)	(5)	Scenario:	(6)	(7)	(8)	(9)	(10)	(11)	(12)	Scenario:	(13)	(14)
	Midday		Midday		Evening		Midday			Midday			Evening		Midday	Midday
Region	Good Weather	Rain	Good Weather	Rain	Good Weather	Region	Good Weather	Rain	Snow	Good Weather	Rain	Snow	Good Weather	Region	Good Weather	Good Weather
Entire 2-Mile Region, 5-Mile Region, and EPZ																
R1	6:05	6:40	5:45	6:20	4:55	R1	6:05	6:40	7:40	5:50	6:20	7:20	4:40	R1	5:55	6:05
R2	6:45	7:35	6:15	7:05	5:40	R2	6:40	7:35	8:30	6:15	6:40	7:50	5:35	R2	7:00	6:40
R3	9:25	10:30	8:50	9:50	7:15	R3	9:30	10:55	12:00	7:55	8:50	10:10	7:10	R3	8:45	9:30
2-Mile Ring and Keyhole to 5 Miles																
R4	6:30	7:00	5:45	6:40	5:25	R4	6:30	7:15	8:05	5:55	6:40	7:20	5:25	R4	6:35	6:30
R5	6:40	7:20	6:10	6:40	5:40	R5	6:40	7:35	8:30	6:05	6:40	7:50	5:35	R5	6:30	6:40
R6	6:40	7:20	6:10	6:40	5:40	R6	6:40	7:35	8:30	6:05	6:40	7:50	5:35	R6	6:30	6:40
R7	6:35	7:10	6:05	6:40	5:30	R7	6:40	7:25	8:25	6:05	6:40	7:50	5:30	R7	6:45	6:40
R8	6:35	7:10	6:05	6:40	5:35	R8	6:40	7:25	8:25	6:05	6:40	7:50	5:30	R8	6:50	6:40
R9	6:25	7:00	6:15	7:05	4:55	R9	6:30	7:00	8:10	5:50	6:40	7:40	5:00	R9	6:10	6:30
R10	6:10	6:40	6:15	7:05	4:55	R10	6:10	6:45	7:55	5:50	6:25	7:20	4:40	R10	5:55	6:10
R11	6:45	7:25	6:15	7:05	5:40	R11	6:40	7:10	7:55	6:15	6:35	7:35	5:35	R11	6:45	6:40
R12	6:45	7:25	6:15	7:05	5:40	R12	6:40	7:10	7:55	6:15	6:35	7:35	5:35	R12	6:45	6:40
R13	6:45	7:35	6:15	7:05	5:40	R13	6:40	7:10	7:55	6:15	6:35	7:35	5:35	R13	6:45	6:40
R14	6:45	7:35	6:15	7:05	5:40	R14	6:40	7:10	7:55	6:15	6:35	7:35	5:35	R14	6:45	6:40
R15	6:45	7:35	6:15	7:05	5:40	R15	6:40	7:10	7:55	6:15	6:35	7:35	5:35	R15	6:45	6:40
R16	6:05	6:40	5:50	6:20	4:55	R16	6:10	6:40	7:55	5:50	6:25	7:20	4:40	R16	5:55	6:10
R17	6:05	6:40	5:50	6:20	4:55	R17	6:10	6:40	7:55	5:50	6:20	7:20	4:40	R17	7:00	6:10
R18	6:05	6:40	5:50	6:20	4:55	R18	6:10	6:40	7:55	5:50	6:20	7:20	4:40	R18	7:00	6:10
R19	6:30	7:00	5:45	6:40	5:20	R19	6:30	7:00	8:05	5:50	6:40	7:20	5:15	R19	6:50	6:30

Table J-1E. Time To Clear The EPZ Boundary of 100 Percent of the Affected Population (Page 2 of 2)																
	Summer		Summer		Summer		Winter			Winter			Winter		Autumn	Spring
	Midweek		Weekend		Midweek Weekend		Midweek			Weekend			Midweek Weekend		Weekend USMA Football	Midweek USMA Graduation
Scenario:	(1)	(2)	(3)	(4)	(5)	Scenario:	(6)	(7)	(8)	(9)	(10)	(11)	(12)	Scenario:	(13)	(14)
	Midday		Midday		Evening		Midday			Midday			Evening		Midday	Midday
Region	Good Weather	Rain	Good Weather	Rain	Good Weather	Region	Good Weather	Rain	Snow	Good Weather	Rain	Snow	Good Weather	Region	Good Weather	Good Weather
5 Mile Ring and Keyhole to EPZ Boundary																
R20	7:30	8:15	6:50	7:35	6:30	R20	7:35	8:20	9:30	7:00	7:30	8:45	6:30	R20	7:15	8:10
R21	8:05	9:00	7:20	8:20	6:50	R21	8:15	9:00	10:25	7:15	8:10	9:25	6:45	R21	7:45	8:50
R22	9:00	10:00	7:55	8:50	7:15	R22	9:00	10:00	11:20	7:55	8:50	10:10	7:10	R22	8:45	9:20
R23	9:00	10:00	8:20	8:55	7:15	R23	9:05	10:05	11:25	7:55	8:50	10:10	7:10	R23	8:45	9:20
R24	8:50	9:45	8:00	9:05	7:10	R24	8:55	9:45	11:05	7:50	8:25	9:55	7:05	R24	8:45	9:20
R25	9:25	10:30	8:50	9:35	7:00	R25	9:30	10:55	12:00	7:35	8:10	9:35	6:55	R25	8:20	9:30
R26	9:25	10:30	8:50	9:35	6:20	R26	9:30	10:55	12:00	7:25	8:05	8:50	6:05	R26	7:55	9:30
R27	9:25	10:30	8:25	9:30	6:20	R27	9:30	10:55	12:00	7:10	8:00	8:50	6:05	R27	7:55	9:30
R28	9:25	10:30	8:25	9:50	6:25	R28	9:30	10:35	12:00	7:20	7:40	8:50	6:30	R28	7:55	9:30
R29	8:15	9:00	7:25	7:45	6:30	R29	8:15	9:00	9:55	6:55	7:25	8:20	6:20	R29	7:05	8:25
R30	8:05	9:00	7:30	7:50	6:55	R30	8:05	8:50	10:05	6:50	7:25	8:25	6:25	R30	7:35	8:25
R31	7:20	8:30	6:50	7:25	6:25	R31	7:25	8:05	9:10	6:50	7:15	8:30	6:20	R31	7:35	8:10
R32	7:00	7:55	6:50	7:20	5:55	R32	7:10	8:05	9:10	6:35	7:15	8:10	5:50	R32	7:05	8:10
R33	7:00	7:55	6:50	7:20	5:55	R33	7:10	8:05	9:10	6:35	7:15	8:10	5:50	R33	7:05	8:10
R34	7:00	7:55	6:50	7:20	5:55	R34	7:10	8:05	9:10	6:35	7:15	8:10	5:50	R34	7:05	8:10
R35	7:00	7:55	6:50	7:20	5:55	R35	7:10	8:05	9:10	6:35	7:15	8:10	5:50	R35	7:05	8:10

Table J-2. Definition of Evacuation Regions

REGION	ERPAs IN ORANGE COUNTY	ERPAs IN PUTNAM COUNTY	ERPAs IN ROCKLAND COUNTY	ERPAs IN WESTCHESTER COUNTY	DESCRIPTION OF REGION	ERPAs IN REGION
R1	39	NONE	29, 38, 39	1-4, 7, 44	Entire 2 mile ring	1-4, 7, 29, 38, 39, 44
R2	26, 39, 40	16, 18, 45	29-31, 38-40	1-9, 43, 44, 47-49	Entire 5 mile ring	1-9, 16, 18, 24, 26, 29-31, 38-40, 43-45, 47-49
R3	24-28, 39, 40	16-20, 23, 45, 46	29-41	1-15, 21, 22, 42-44, 47-51	Full EPZ	1-51
2 Mile Ring and Sector to 5 Miles						
R4	26, 39, 45	16, 18, 45	29, 38, 39	1-4, 7, 8, 44	N	1-4, 7, 8, 16, 18, 26, 29, 38, 39, 44, 45
R5	39, 45	16, 18, 45	29, 38, 39, 44, 45	1-4, 7-9, 44, 45	NNE	1-4, 7-9, 16, 18, 29, 38, 39, 44, 45
R6	39	16, 18	29, 38, 39, 44	1-4, 7-9, 44, 49	NE	1-4, 7-9, 16, 18, 29, 38, 39, 44, 49
R7	39	NONE	29, 38, 39, 44	1-4, 7-9, 44, 49	ENE	1-4, 7-9, 29, 38, 39, 44, 49
R8	39	NONE	29, 38, 39, 44	1-5, 7-9, 44, 48, 49	E	1-5, 7-9, 29, 38, 39, 44, 48, 49
R9	39	NONE	29, 38, 39, 44	1-7, 9, 44, 47-49	ESE	1-7, 9, 29, 38, 39, 44, 47-49
R10	39	NONE	29, 38, 39, 43, 44	1-7, 43, 44, 47-49	SE	1-7, 29, 38, 39, 43, 44, 47-49
R11	39	NONE	29-31, 38, 39, 43, 44	1-7, 43, 44, 47-49	SSE	1-7, 29-31, 38, 39, 43, 44, 47-49
R12	39	NONE	29-31, 38, 39, 43, 44	1-4, 6, 7, 43, 44, 47, 48	S	1-4, 6, 7, 29-31, 38, 39, 43, 44, 47, 48
R13	39	NONE	29-31, 38, 39, 43, 44	1-4, 7, 43, 44	SSW	1-4, 7, 29-31, 38, 39, 43, 44
R14	39, 40	NONE	29-31, 38-40, 43, 44	1-4, 7, 43, 44	SW	1-4, 7, 29-31, 38-40, 43, 44
R15	39, 40	NONE	29-31, 38-40, 44	1-4, 7, 44	WSW	1-4, 7, 29-31, 38-40, 44
R16	39, 40	NONE	29, 30, 38-40, 44	1-4, 7, 44	W	1-4, 7, 29, 30, 38-40, 44
R17	24, 26, 39, 40, 45	45	29, 30, 38-40, 44, 45	1-4, 7, 44, 45	WNW	1-4, 7, 24, 26, 29, 30, 38-40, 44, 45
R18	24, 26, 39, 40, 45	16, 45	29, 38-40, 44, 45	1-4, 7, 44, 45	NW	1-4, 7, 16, 24, 26, 29, 38-40, 44, 45
R19	24, 26, 39, 40, 45	16, 45	29, 38, 39, 40, 44, 45	1-4, 7, 8, 44, 45	NNW	1-4, 7, 8, 16, 24, 26, 29, 38, 39, 40, 44, 45

Table J-2. Definition of Evacuation Regions

(Concluded)

REGION	ERPAs IN ORANGE COUNTY	ERPAs IN PUTNAM COUNTY	ERPAs IN ROCKLAND COUNTY	ERPAs IN WESTCHESTER COUNTY	DESCRIPTION OF REGION	ERPAs IN REGION
5 Mile Ring and Sector to EPZ Boundary						
R20	24-26, 39, 40	16-19, 23, 45, 46	29-31, 38-40	1-9, 43, 44, 47-49	N	1-9, 16-19, 23-26, 29-31, 38-40, 43-49
R21	24, 26, 39, 40	16-20, 23, 45, 46	29-31, 38-40	1-10, 43, 44, 47-49	NNE	1-10, 16-20, 23, 24, 26, 29-31, 38-40, 43-49
R22	24,26, 39, 40	16-20, 45	29-31, 38-40	1-14, 43, 44, 47-49	NE	1-14, 16-20, 24,26, 29-31, 38-40, 43-45, 47-49
R23	24,26, 39, 40	16, 18, 19, 20, 45	29-31, 38-40	1-15, 43, 44, 47-49	ENE	1-16, 18-20, 24,26, 29-31, 38-40, 43-45, 47-49
R24	24,26, 39, 40	16, 18, 20, 45	29-31, 38-40	1-15, 21, 43, 44, 47-50	E	1-16, 18, 20, 21, 24,26, 29-31, 38-40, 43-45, 47-50
R25	24,26, 39, 40	16, 18, 45	29-31, 38-40	1-9, 11-15, 21, 22, 43, 44, 47-51	ESE	1-9, 11-16, 18, 21, 22, 24,26, 29-31, 38-40, 43-45, 47-51
R26	24,26, 39, 40	16, 18, 45	29-32, 38-40	1-9, 12, 13, 21, 22, 42-44, 47-51	SE	1-9, 12-13, 16, 18, 21-22, 24,26, 29-32, 38-40, 42-45, 47-51
R27	24,26, 39, 40	16, 18, 45	29-35, 38-40	1-9, 12, 21, 22, 42-44, 47-51	SSE	1-9, 12, 16, 18, 21, 22, 24,26, 29-35, 38-40, 42-45, 47-51
R28	24,26, 39, 40	16, 18, 45	29-40	1-9, 22, 42-44, 47-49, 51	S	1-9, 16, 18, 22, 24,26, 29-40, 42-45, 47-49, 51
R29	24,26, 39, 40	16, 18, 45	29-41	1-9, 42-44, 47-49	SSW	1-9, 16, 18, 24,26, 29-45, 47-49
R30	24,26, 39, 40	16, 18, 45	29-31, 34-41	1-9, 43, 44, 47-49	SW	1-9, 16, 18, 24,26, 29-31, 34-41, 43-45, 47-49
R31	24,26, 28, 39, 40	16, 18, 45	29-31, 34, 36-41	1-9, 43, 44, 47-49	WSW	1-9, 16, 18, 24,26, 28-31, 34, 36-41, 43-45, 47-49
R32	24, 26-28, 39, 40	16, 18, 45	29-31, 38-41	1- 9, 43, 44, 47-49	W	1-9, 16, 18, 24, 26-31, 38-41, 43-45, 47-49
R33	24-28, 39, 40	16, 18, 45	29-31, 38-40	1-9, 43, 44, 47-49	WNW	1-9, 16, 18, 24-31, 38-40, 43-45, 47-49
R34	24-28, 39, 40	16, 18, 45	29-31, 38-40	1-9, 43, 44, 47-49	NW	1-9, 16, 18, 24-31, 38-40, 43-45, 47-49
R35	24-27, 39, 40	16-18, 23, 45, 46	29-31, 38-40	1-9, 43, 44, 47-49	NNW	1-9, 16-18, 23-27, 29-31, 38-40, 43-49

Table J-3A. Evacuation Percentiles for the 2-Mile, 5-Mile Rings and the EPZ Boundary - Summer Scenarios

	Summer									
	Midweek									
Scenario:	(1)					(2)				
Region	Midday									
	Good Weather					Rain				
	Percentile					Percentile				
	50	90	95	100	EPZ Bdry	50	90	95	100	EPZ Bdry
R1	1:45	3:50	4:15	4:55	6:05	1:50	4:10	4:40	5:30	6:40
R2	2:10	4:50	5:20	6:20	6:45	2:25	5:10	5:45	7:10	7:35
R3	3:05	6:30	7:20	9:25	9:25	3:25	7:20	8:10	10:30	10:30
	Summer									
	Weekend									
Scenario:	(3)					(4)				
Region	Midday									
	Good Weather					Rain				
	Percentile					Percentile				
	50	90	95	100	EPZ Bdry	50	90	95	100	EPZ Bdry
R1	1:35	3:15	3:35	4:50	5:45	1:40	3:25	3:50	5:25	6:20
R2	2:00	4:20	4:45	5:55	6:15	2:15	4:45	5:15	6:45	7:05
R3	2:30	5:45	6:35	8:50	8:50	2:50	6:25	7:15	9:50	9:50
	Summer									
	Midweek, Weekend									
Scenario:	(5)									
Region	Evening									
	Good Weather									
	Percentile									
	50	90	95	100	EPZ Bdry					
R1	1:20	2:55	3:15	4:45	4:55					
R2	1:40	3:55	4:15	5:25	5:40					
R3	2:10	4:55	5:35	7:15	7:15					

Table J-3B. Evacuation Percentiles for the 2-Mile, 5-Mile Rings and the EPZ Boundary
Winter Scenarios

	Winter														
	Midweek														
Scenario:	(6)					(7)					(8)				
Region	Midday														
	Good Weather					Rain					Snow				
	Percentile					Percentile					Percentile				
	50	90	95	100	EPZ Bdry	50	90	95	100	EPZ Bdry	50	90	95	100	EPZ Bdry
R1	1:45	3:55	4:20	5:15	6:05	1:55	4:15	4:40	5:15	6:40	2:20	4:50	5:20	6:50	7:40
R2	2:20	4:55	5:20	6:20	6:40	2:30	5:20	6:00	7:00	7:35	2:55	6:20	6:55	8:00	8:30
R3	3:10	6:30	7:20	9:30	9:30	3:30	7:10	8:00	10:55	10:55	3:55	8:05	9:10	12:00	12:00

	Winter														
	Weekend														
Scenario:	(9)					(10)					(11)				
Region	Midday														
	Good Weather					Rain					Snow				
	Percentile					Percentile					Percentile				
	50	90	95	100	EPZ Bdry	50	90	95	100	EPZ Bdry	50	90	95	100	EPZ Bdry
R1	1:30	3:15	3:40	4:55	5:50	1:35	3:30	3:55	5:30	6:20	2:00	4:05	4:30	5:55	7:20
R2	1:55	4:15	4:40	5:55	6:15	2:05	4:40	5:05	6:25	6:40	2:30	5:40	6:10	7:20	7:50
R3	2:30	5:30	6:15	7:55	7:55	2:50	6:05	7:00	8:50	8:50	3:15	7:00	8:10	10:10	10:10

	Winter				
	Midweek, Weekend				
Scenario:	(12)				
Region	Evening				
	Good Weather				
	Percentile				
	50	90	95	100	EPZ Bdry
R1	1:25	2:55	3:15	4:30	4:40
R2	1:45	3:55	4:15	5:25	5:35
R3	2:10	5:00	5:40	7:10	7:10

	Autumn					Spring				
	Weekend USMA Football					Midweek USMA Graduation				
Scenario:	(13)					(14)				
Region	Midday					Midday				
	Good Weather					Good Weather				
	Percentile					Percentile				
	50	90	95	100	EPZ Bdry	50	90	95	100	EPZ Bdry
R1	1:30	3:15	3:40	5:30	5:55	1:45	3:55	4:20	5:15	6:05
R2	1:55	4:15	4:40	6:30	7:00	2:20	4:55	5:20	6:20	6:40
R3	2:35	5:30	6:15	8:45	8:45	3:10	6:30	7:20	9:30	9:30

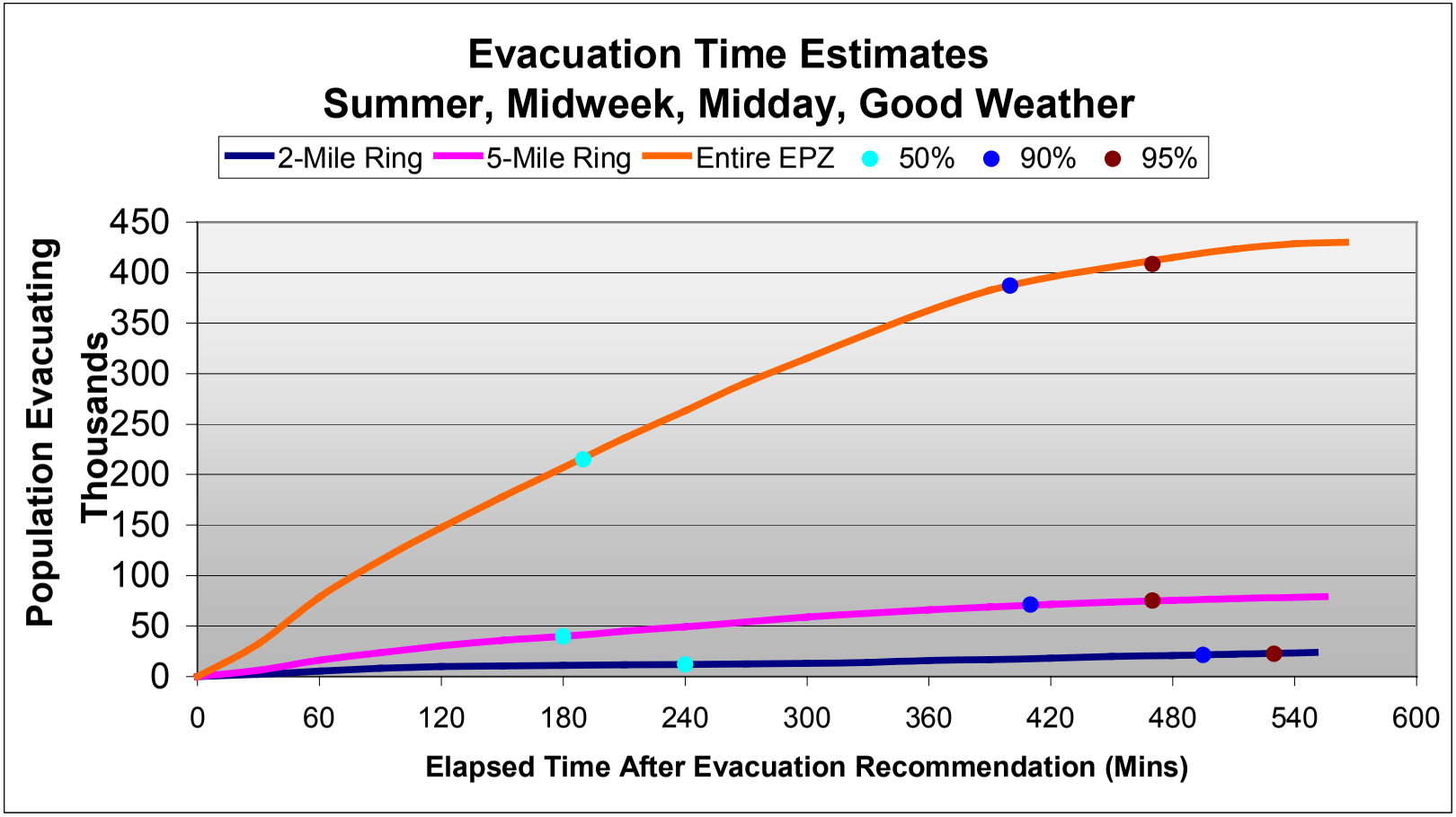

Figure J-1. Evacuation Time Estimates – Scenario 1 for Region R3 (Entire EPZ)

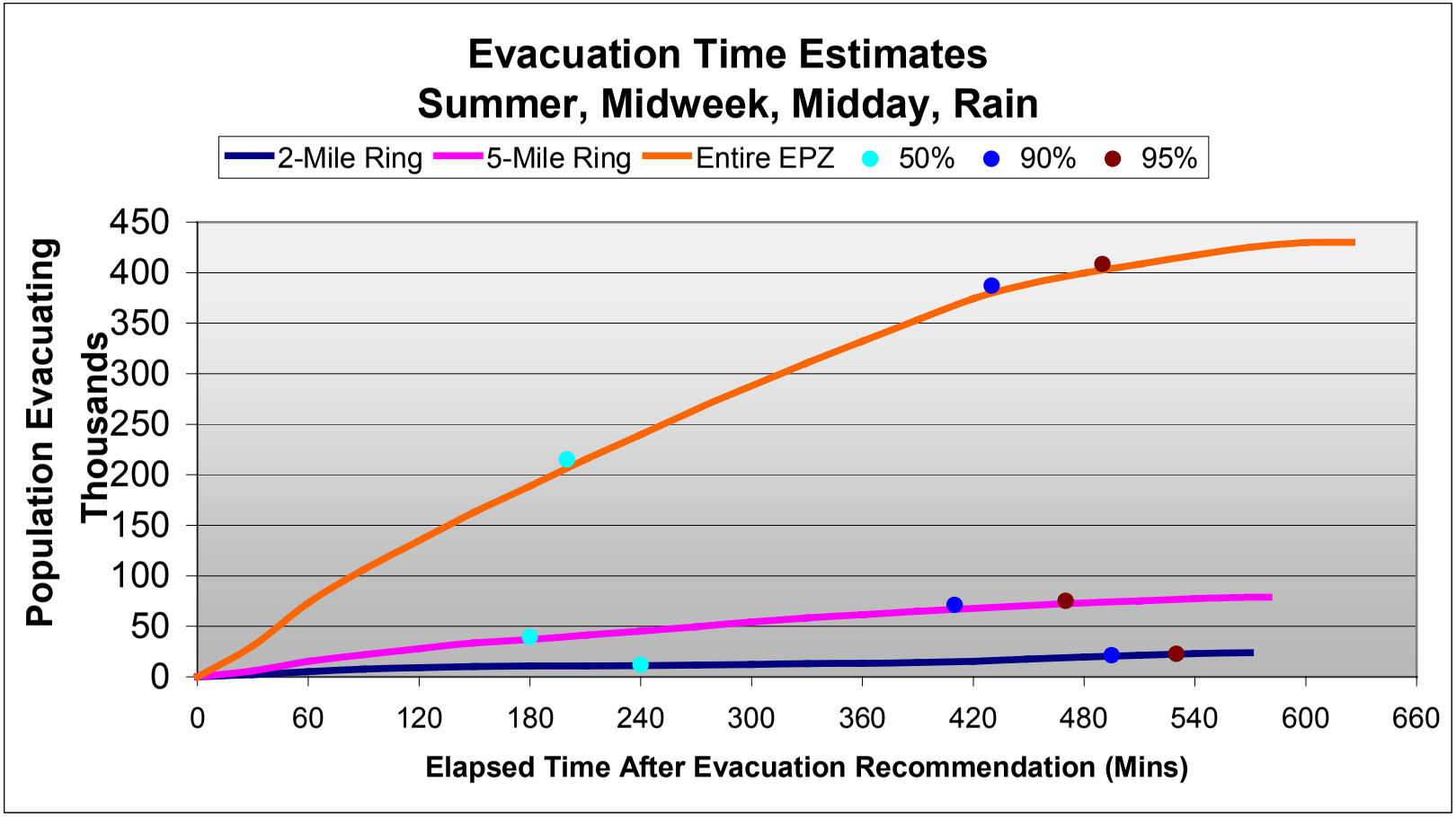

Figure J-2. Evacuation Time Estimates – Scenario 2 for Region R3 (Entire EPZ)

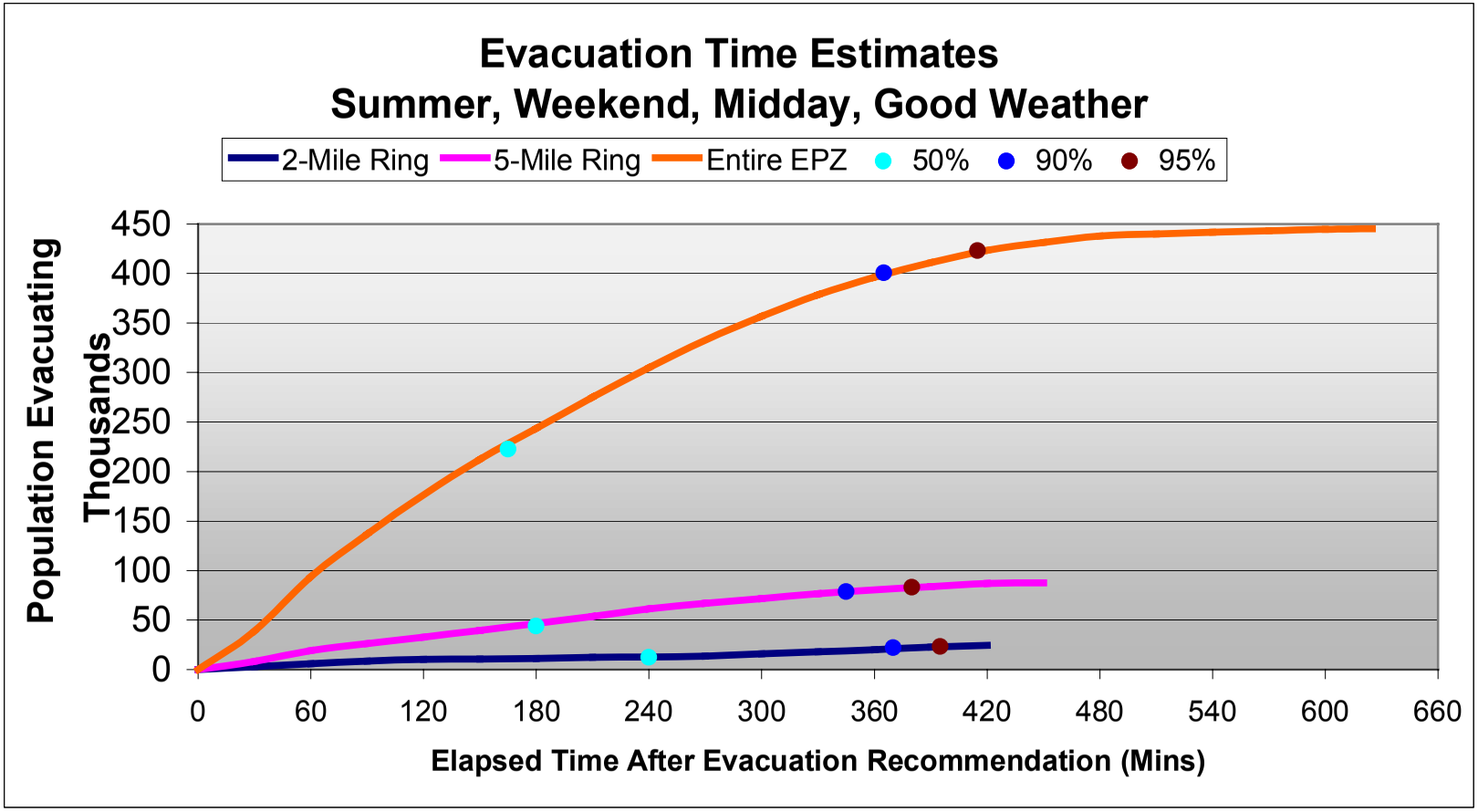

Figure J-3. Evacuation Time Estimates – Scenario 3 for Region R3 (Entire EPZ)

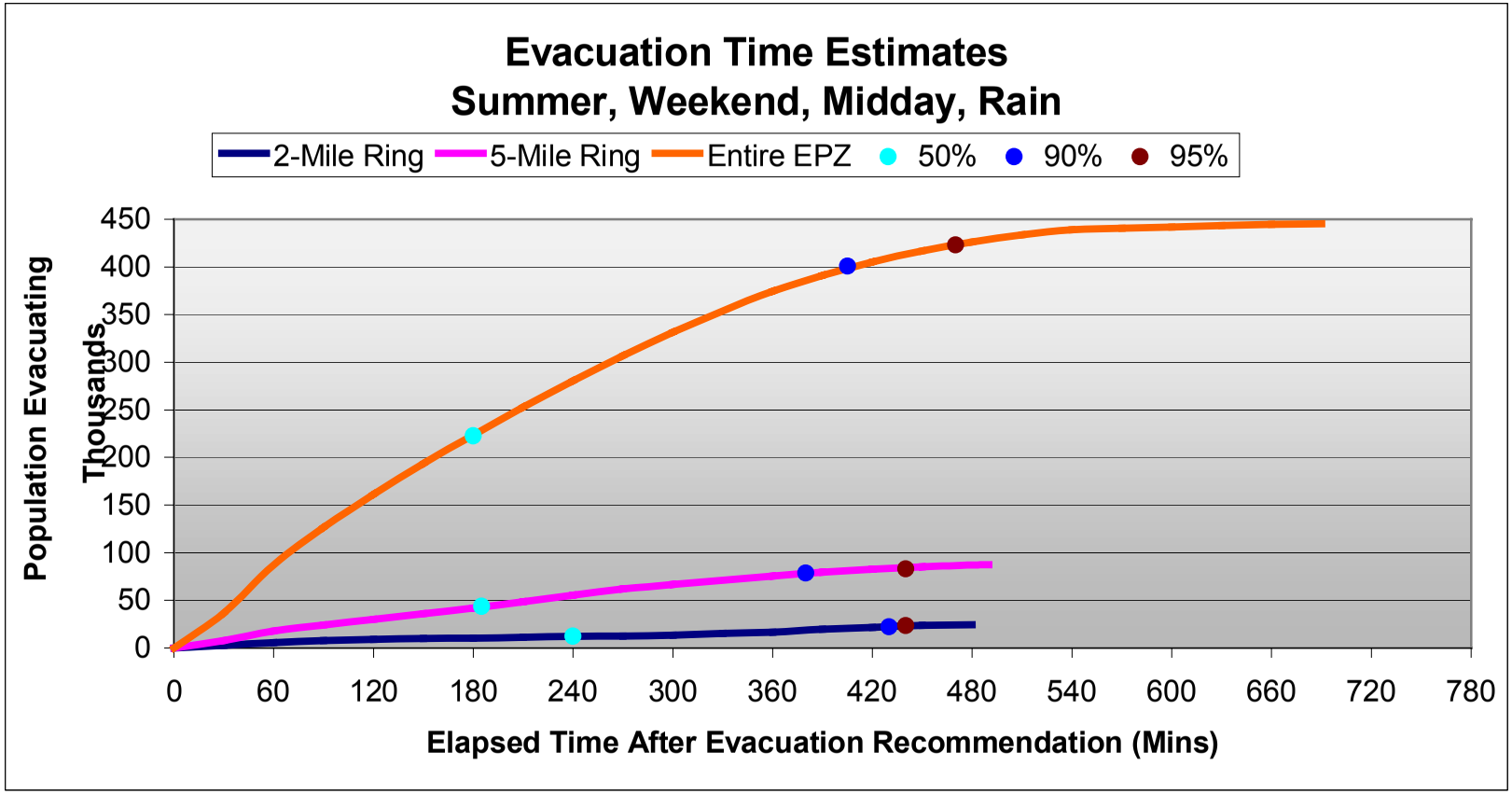

Figure J-4. Evacuation Time Estimates – Scenario 4 for Region R3 (Entire EPZ)

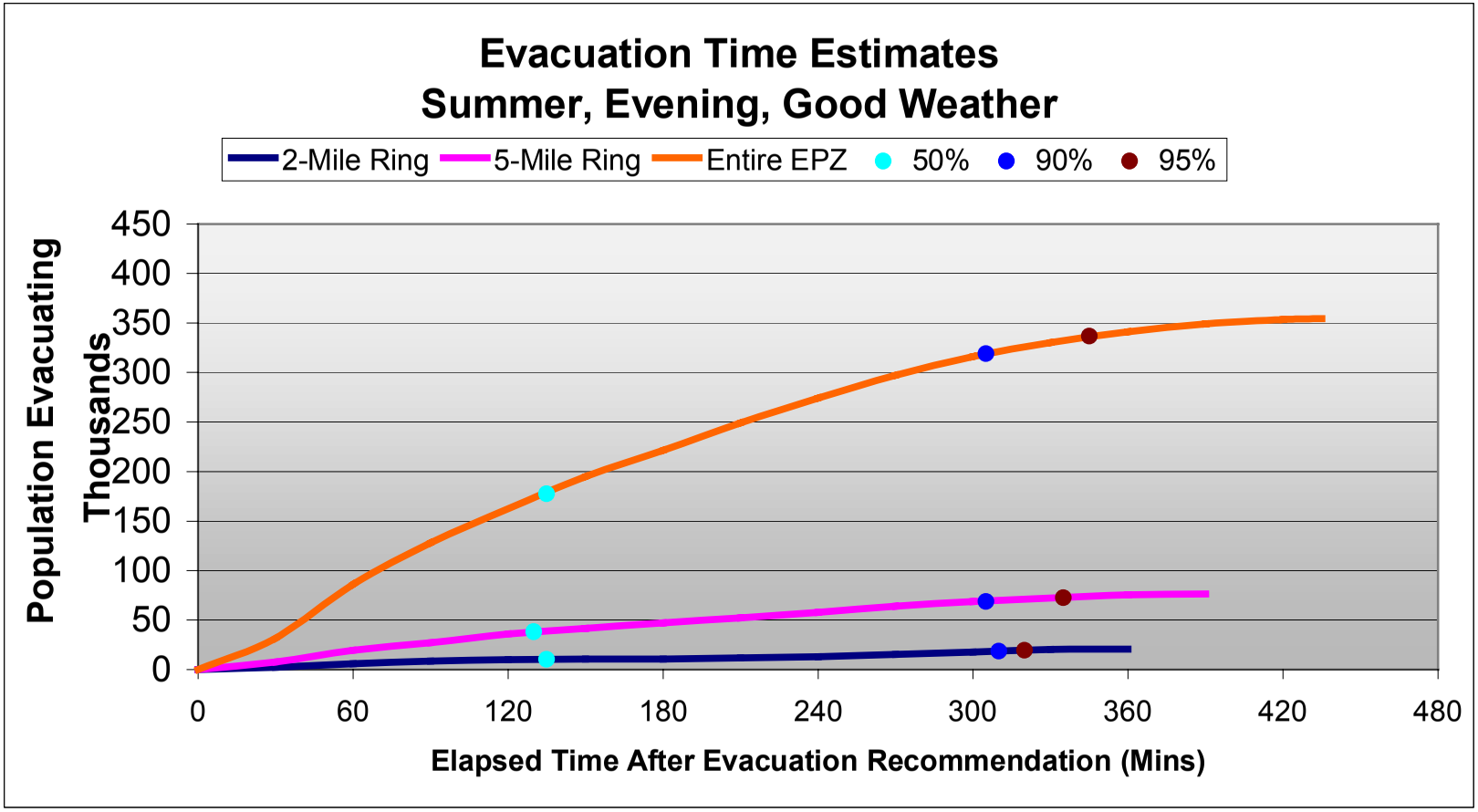

Figure J-5. Evacuation Time Estimates – Scenario 5 for Region R3 (Entire EPZ)

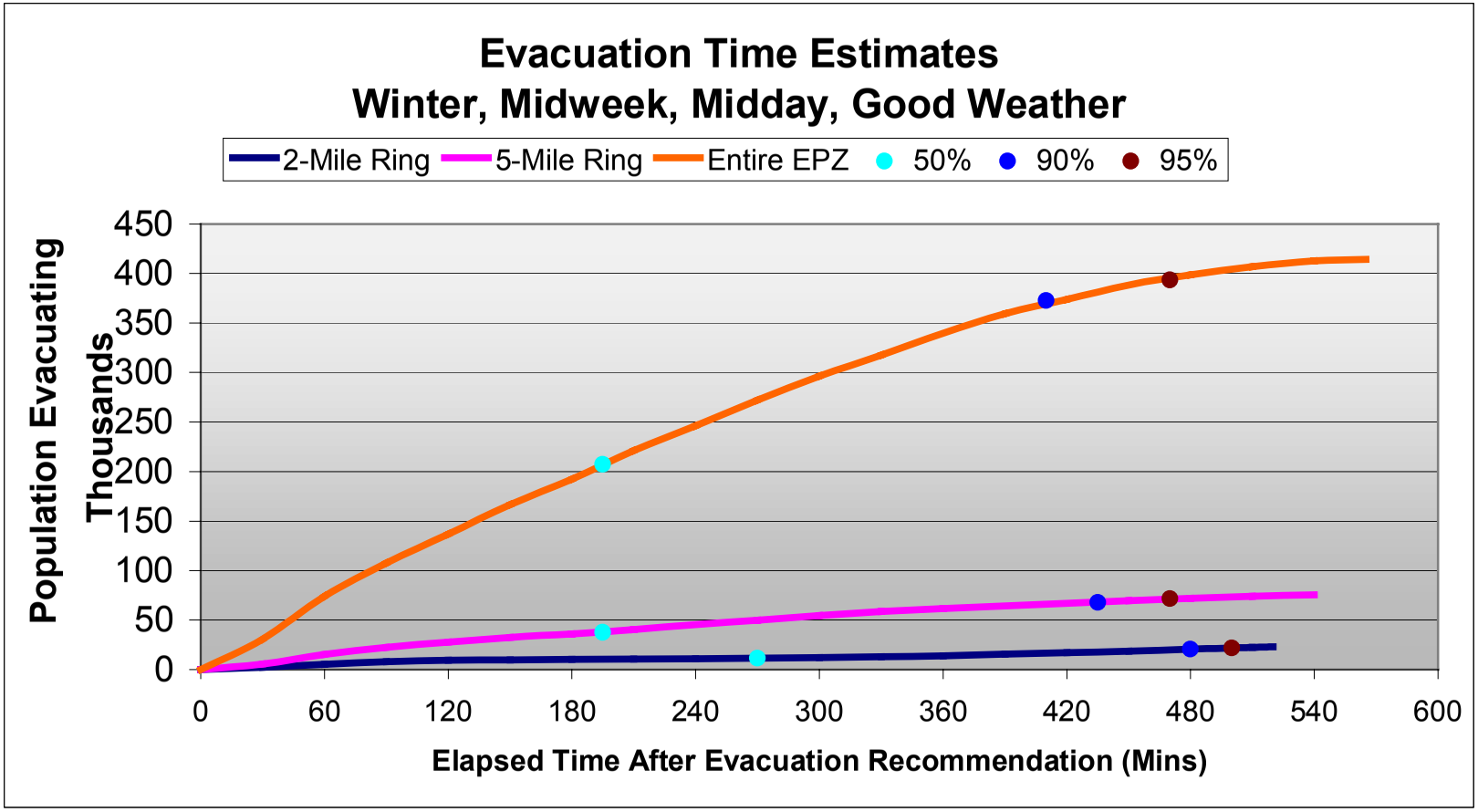

Figure J-6. Evacuation Time Estimates – Scenario 6 for Region R3 (Entire EPZ)

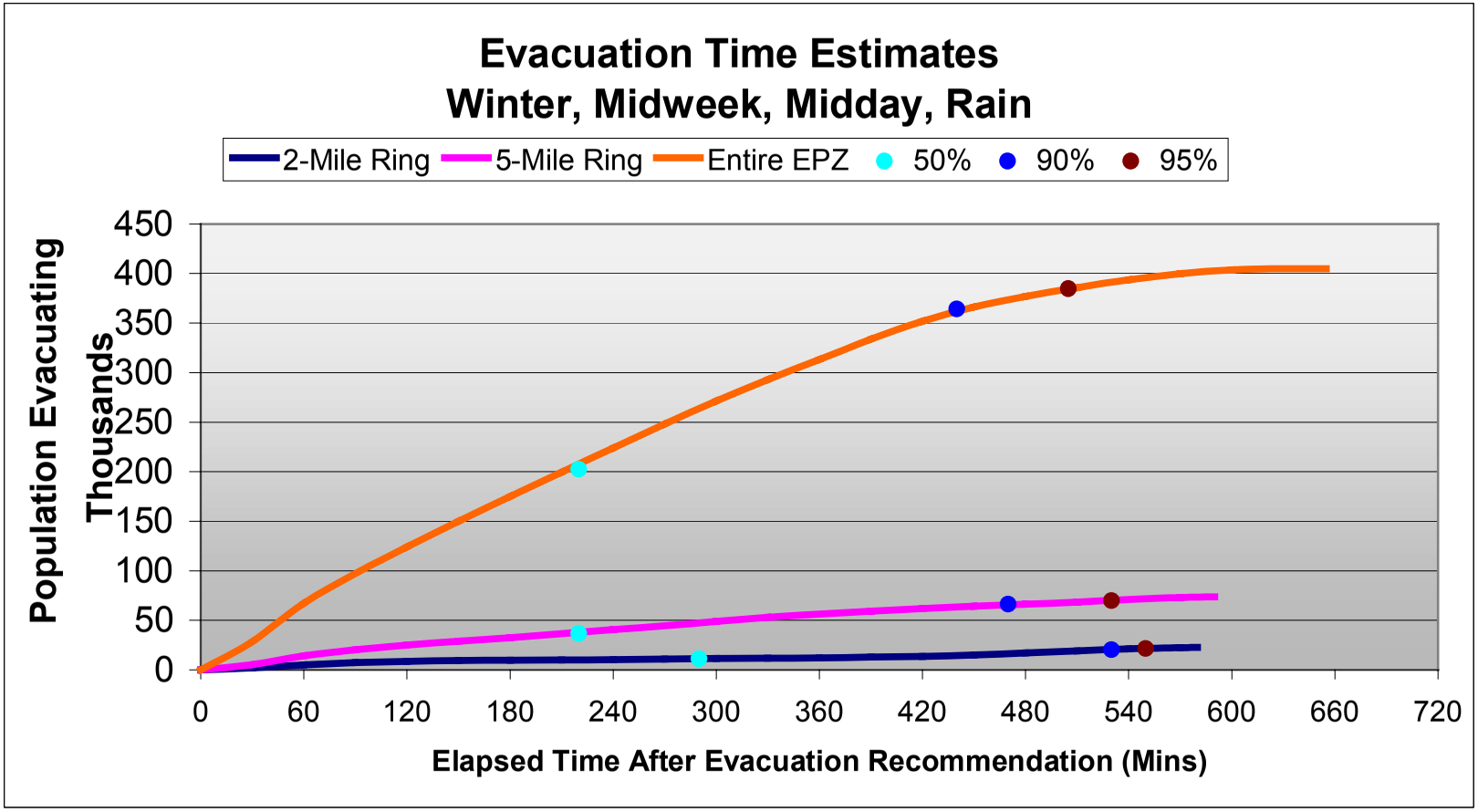

Figure J-7. Evacuation Time Estimates – Scenario 7 for Region R3 (Entire EPZ)

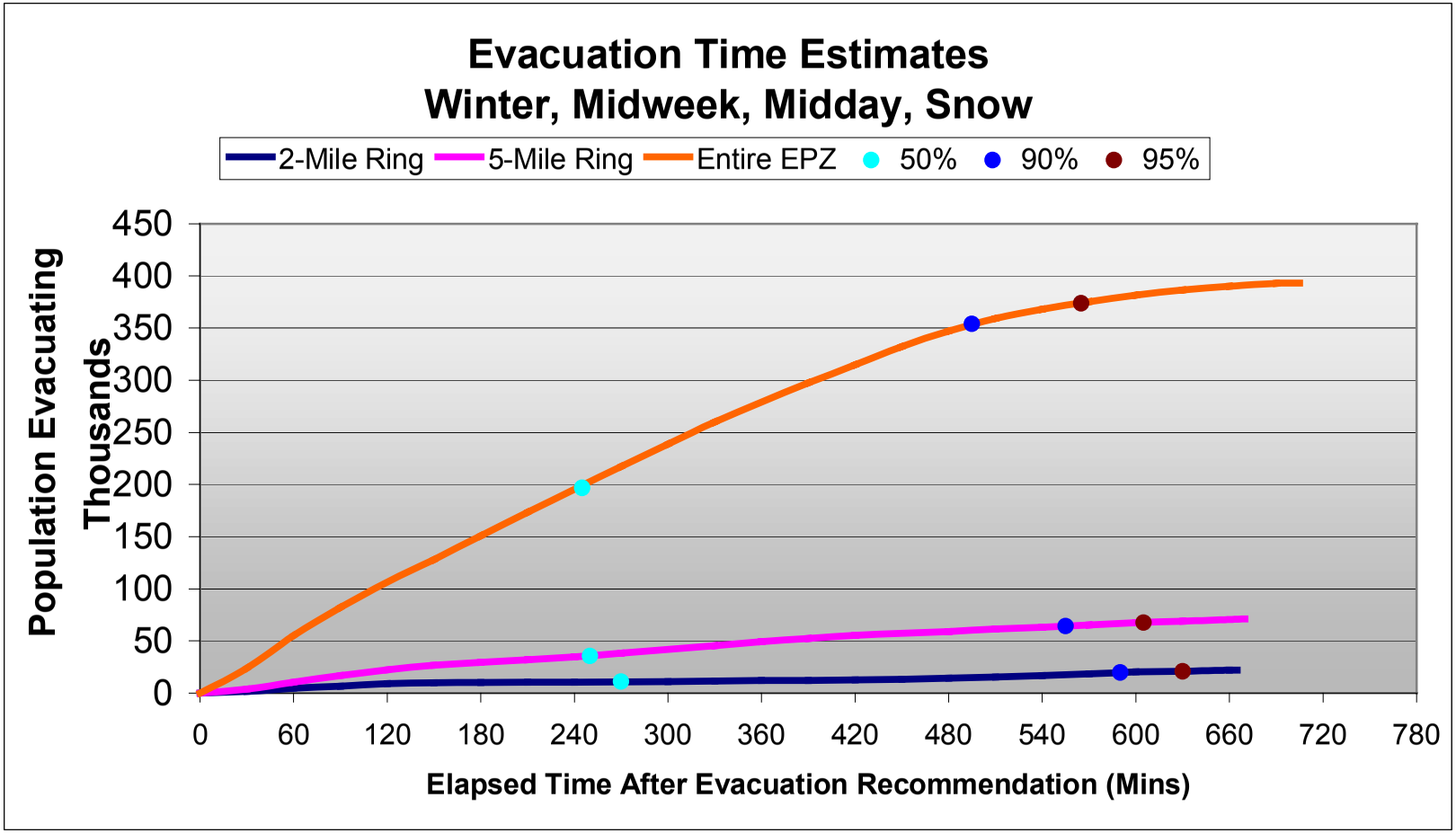

Figure J-8. Evacuation Time Estimates – Scenario 8 for Region R3 (Entire EPZ)

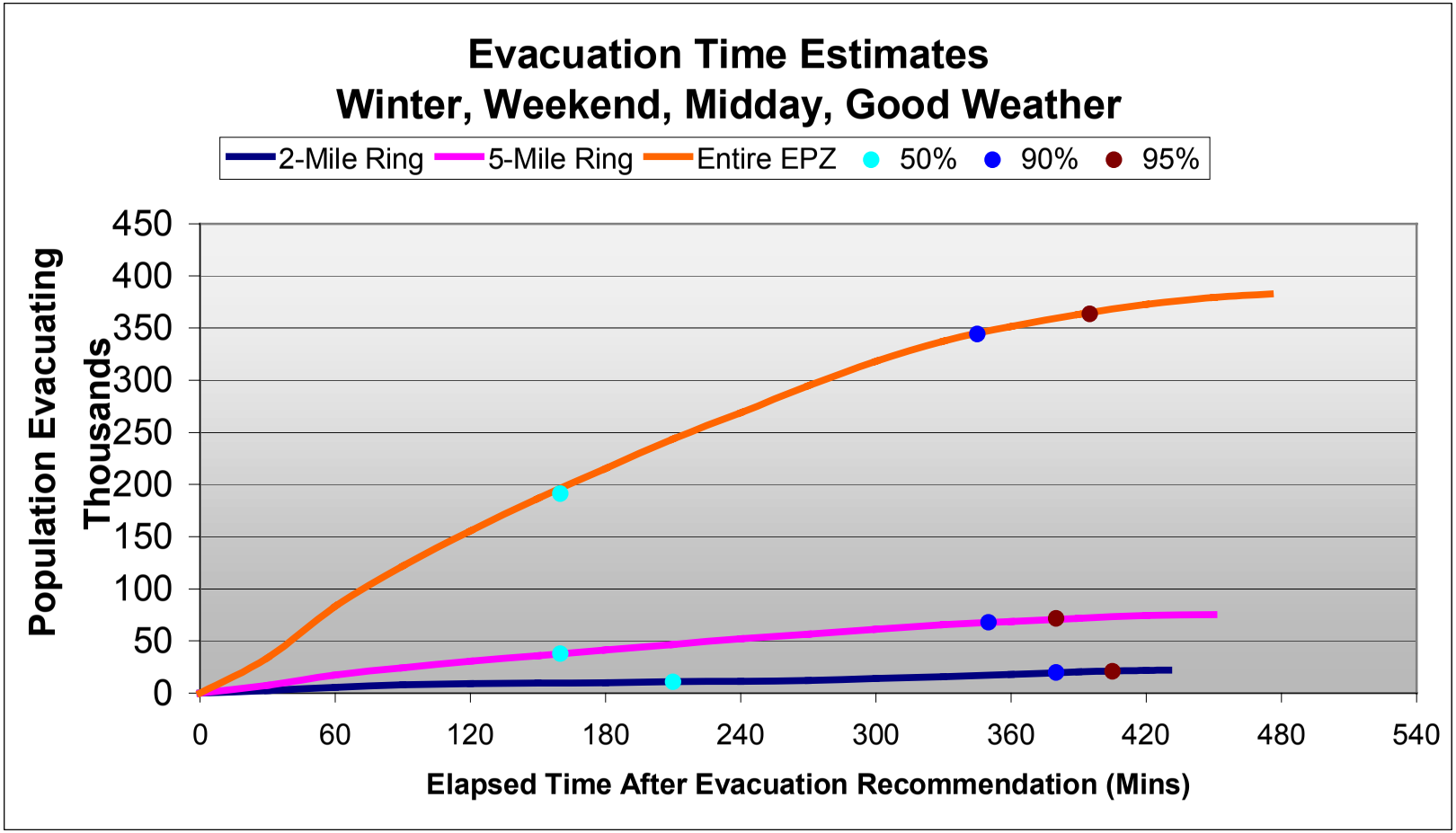

Figure J-9. Evacuation Time Estimates – Scenario 9 for Region R3 (Entire EPZ)

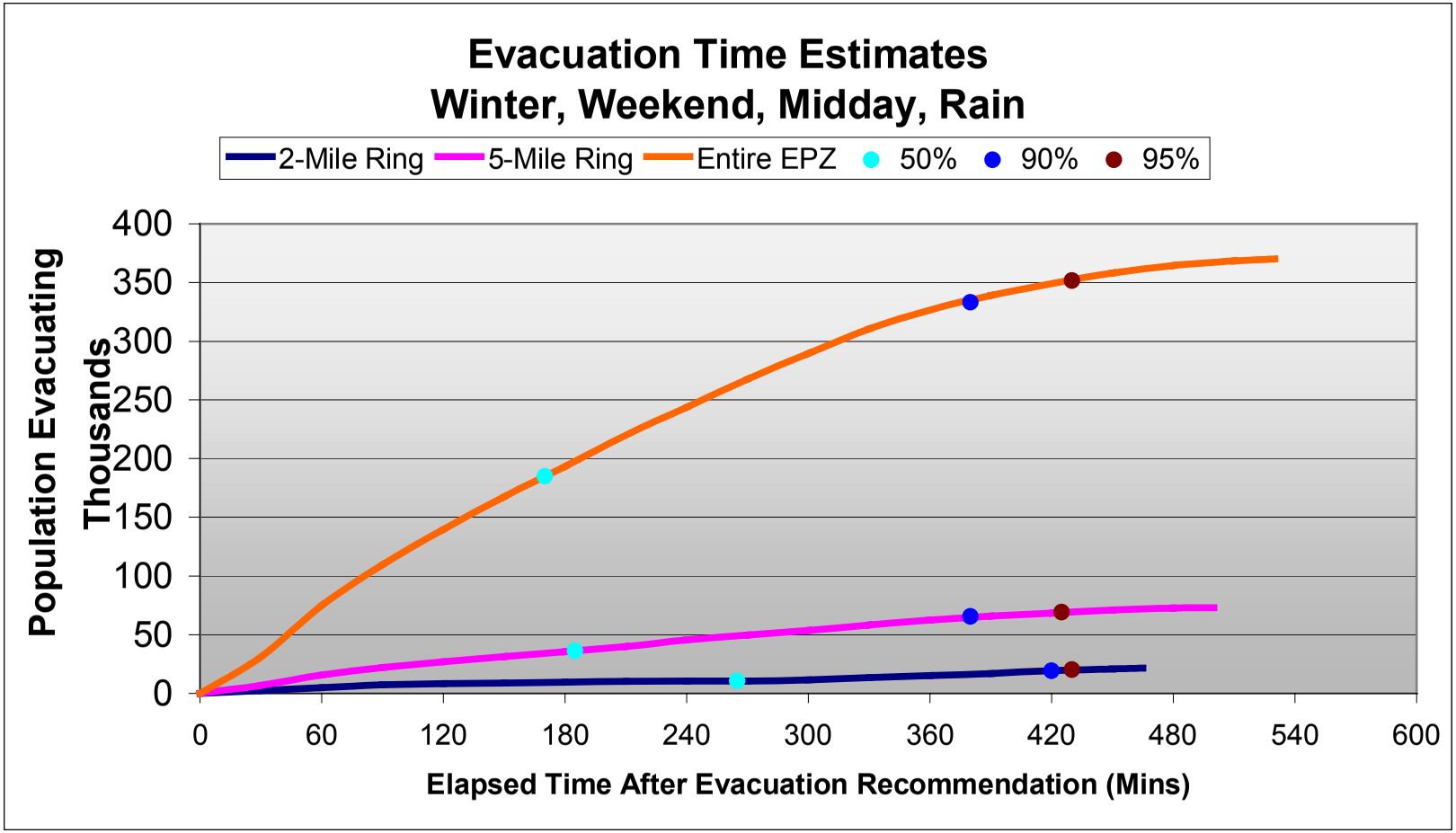

Figure J-10. Evacuation Time Estimates – Scenario 10 for Region R3 (Entire EPZ)

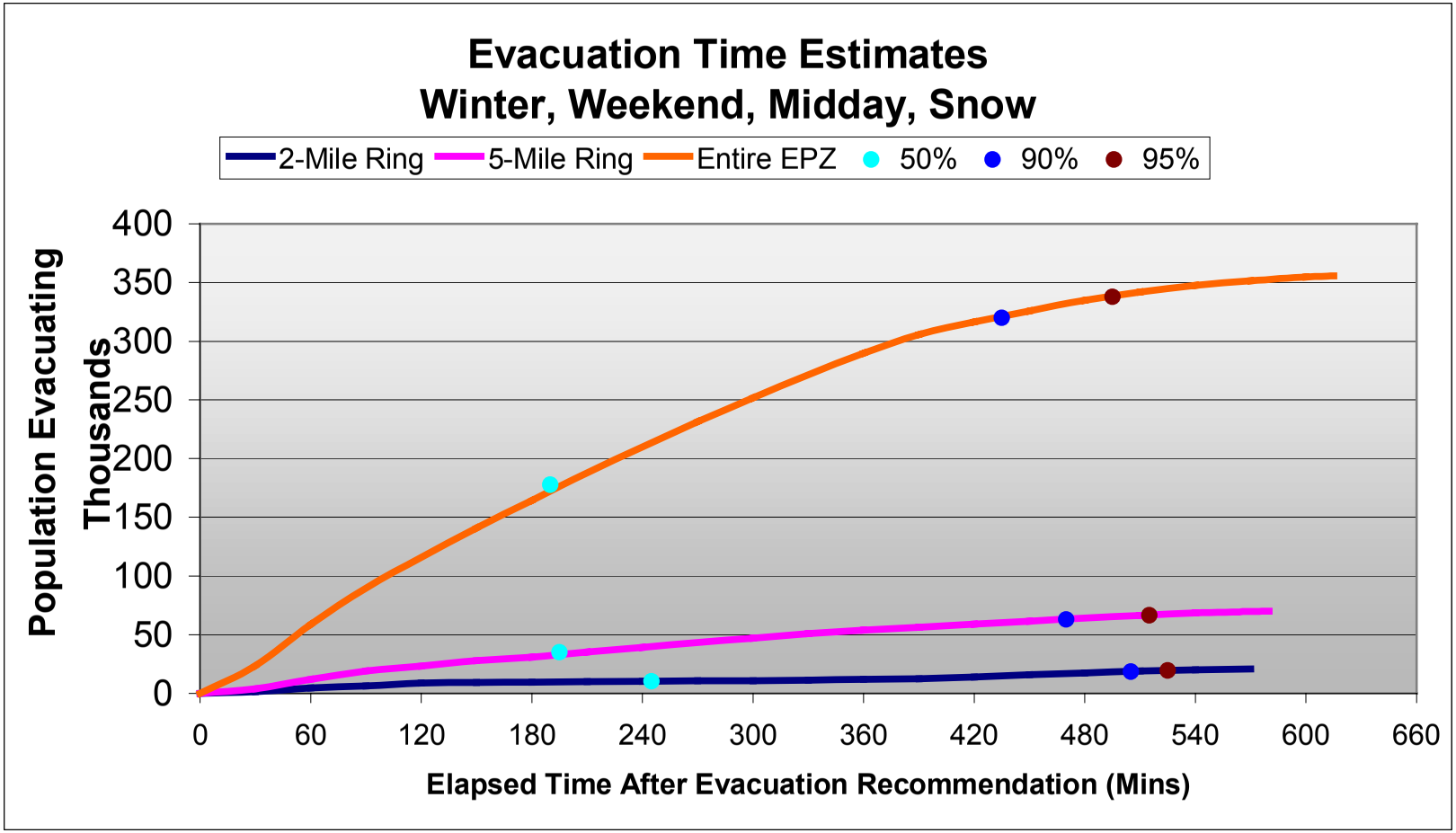

Figure J-11. Evacuation Time Estimates – Scenario 11 for Region R3 (Entire EPZ)

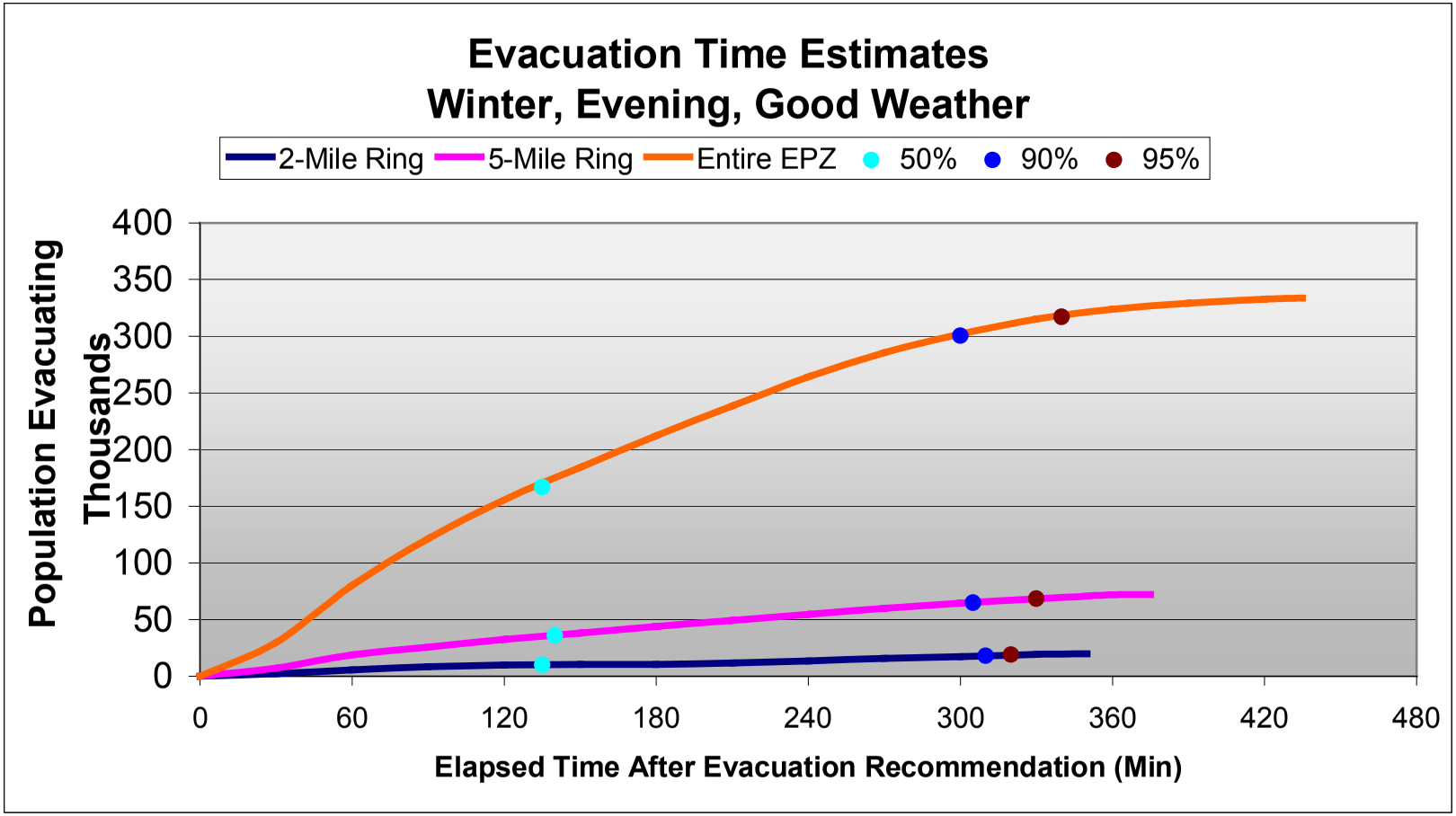

Figure J-12. Evacuation Time Estimates – Scenario 12 for Region R3 (Entire EPZ)

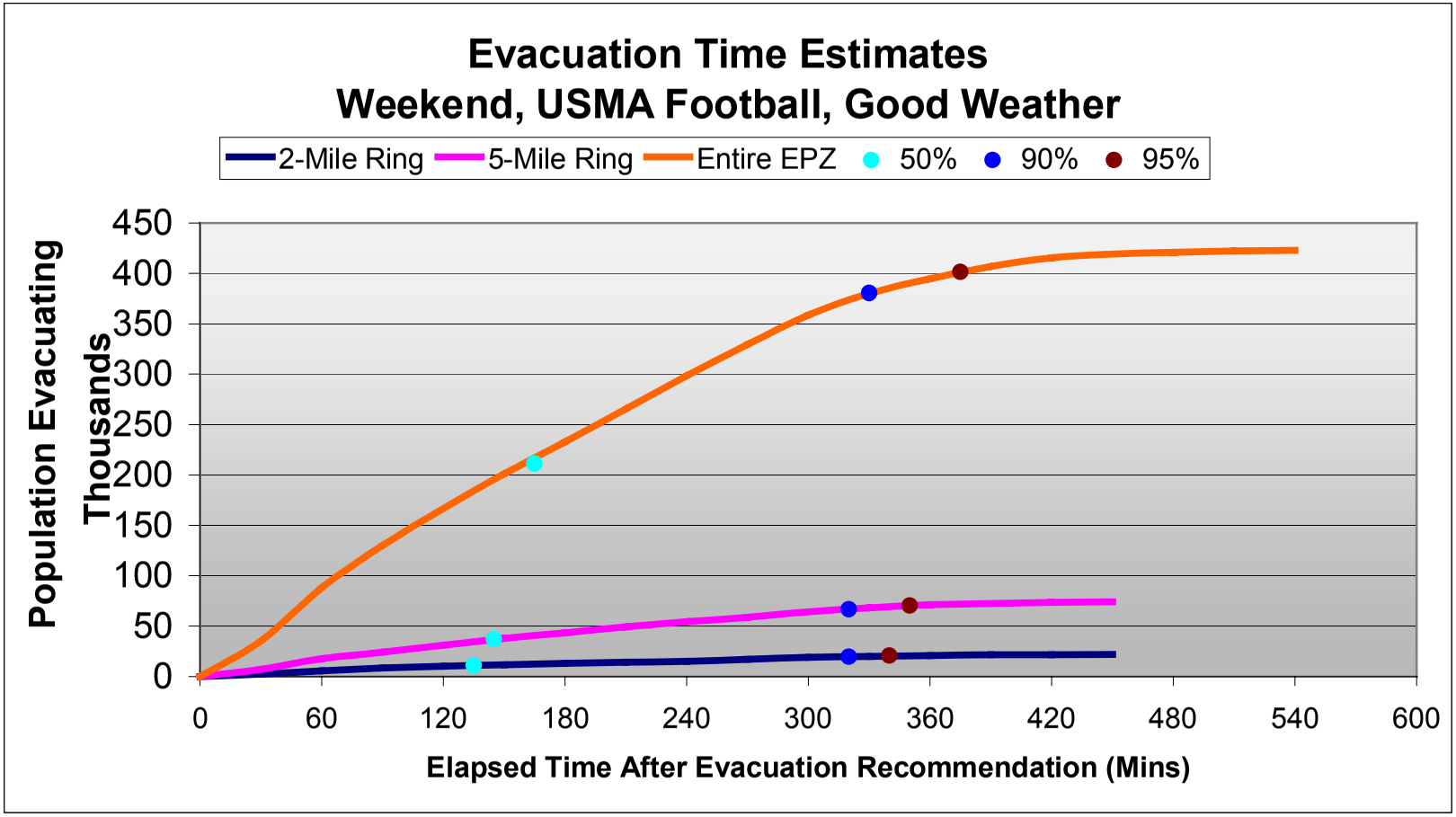

Figure J-13. Evacuation Time Estimates – Scenario 13 for Region R3 (Entire EPZ)

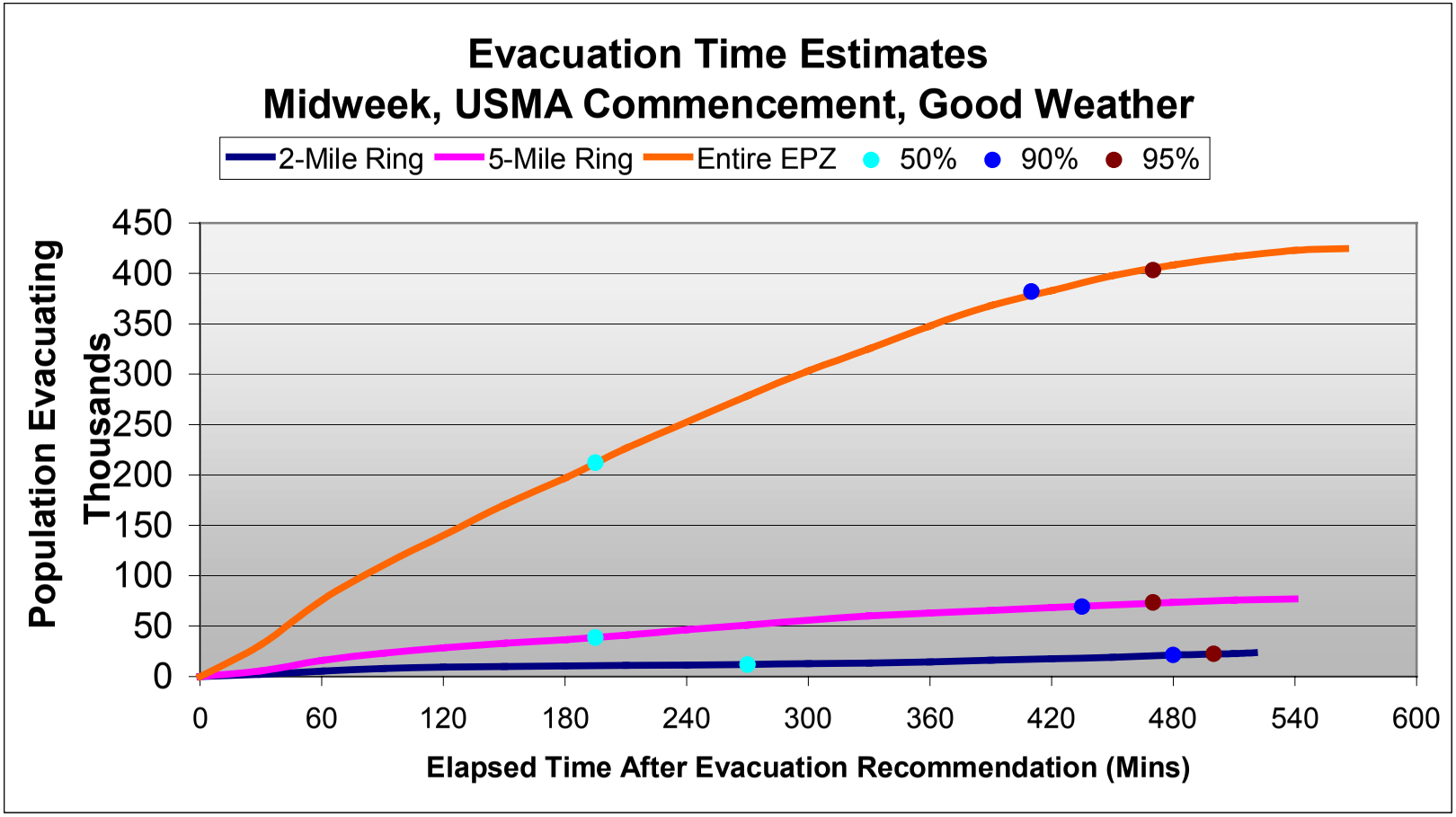

Figure J-14. Evacuation Time Estimates – Scenario 14 for Region R3 (Entire EPZ)