

The I-290 Eisenhower Expressway project study area is located within Cook County in northeast Illinois. Cook County is currently classified as a maintenance area for the 1997 (annual) PM_{2.5} standard. As of December 18, 2014, the entire State of Illinois was listed as unclassified under the 2012 annual standard. This designation will be reanalyzed by USEPA as new monitoring data becomes available.

As shown in Table 1, the I-290 No Build and Preliminary Build Alternative (representing the addition of a high occupancy toll lane in which carpools with 3 or more persons are free [HOT 3+] between Mannheim Road and Austin Boulevard, and conversion of the fourth lane in each direction between Austin Boulevard and Ashland Avenue to a HOT 3+ lane) is forecasted to have between approximately 160,000 and 250,000 Average Annual Daily Traffic (AADT), which includes approximately 10,000 to 17,000 diesel trucks in 2040.

It should be noted that these AADTs have been updated for the Preliminary Build Alternative since the September 20, 2013 Chicago Metropolitan Agency for Planning (CMAP) Tier II Consultation meeting. At this Tier II Consultation meeting, I-290 traffic volumes for a worst case General Purpose Lane Alternative were presented. Since this meeting, further analysis has identified a Preliminary Build Alternative as a HOT 3+ Lane and updates to the traffic forecasts and further alternatives definition have been made.

Section 93.123(b)(1) of the conformity rule defines those projects that require a PM_{2.5} or PM₁₀ hot-spot analysis as “(i) New highway projects that have a significant number of diesel vehicles, and expanded highway projects that have a significant increase in the number of diesel vehicles.” As shown in Table 1, the Preliminary Build Alternative is expected to increase AADTs in the western portion of I-290 (generally between I-88 and Austin, where an additional lane is being added in each direction [including a HOT 3+ lane between Mannheim and Austin]). In the eastern portion of I-290, the Preliminary Build Alternative is expected to decrease AADTs east of Independence due to the conversion of a general purpose lane to a HOT 3+ lane in each direction between Austin and Ashland.

In terms of trucks (diesel vehicles), the Preliminary Build Alternative is expected to result in an increase of up to 3,300 trucks per day west of 1st Avenue. Between 1st Avenue and Cicero Avenue, the Preliminary Build Alternative is between 300 and 1,500 trucks per day greater than the No Build Alternative. East of Cicero Avenue, the Preliminary Build Alternative is expected to have equal or lower truck volumes than the No Build Alternative.

Based on the relatively modest changes in truck volumes on I-290 between the No Build and the Preliminary Build Alternatives, the Illinois Department of Transportation recommends that this project not be designated a project of air quality concern.

Table 1. Preliminary Projected 2040 Bi-Directional AADT Along I-290

Section		No Build Alternative			Preliminary Build Alternative		
From	To	Total	Trucks	% Trucks	Total	Trucks	% Trucks
I-88	Mannheim	159,600	13,800	9%	185,200	17,100	9%
Mannheim	25 th	194,300	13,250	7%	248,100	16,550	7%
25 th	1 st	192,600	13,250	7%	230,200	16,550	7%
1 st	Harlem	191,500	12,300	6%	225,700	12,600	6%
Harlem	Austin	198,600	11,800	6%	228,700	13,300	6%
Austin	Central	210,700	12,200	6%	211,100	11,100	5%
Central	Cicero	215,900	12,200	6%	222,800	11,200	5%
Cicero	Kostner	210,000	11,200	5%	212,800	11,100	5%
Kostner	Independence	228,000	11,200	5%	230,000	11,200	5%
Independence	Sacramento	232,500	11,300	5%	226,600	10,700	5%
Sacramento	Western	232,500	11,200	5%	226,600	10,600	5%
Western	Oakley	204,200	10,900	5%	203,300	10,300	5%
Oakley	Damen	216,400	11,000	5%	215,300	10,400	5%
Damen	Racine	185,700	10,800	6%	187,400	10,300	5%

Source: Parsons Brinckerhoff I-290 Travel Demand Model, 2015