



Citizens for Appropriate Transportation

728 South Euclid Avenue
Oak Park, Illinois 60304

www.CitizensForAppropriateTransportation.org

This letter is intended for inclusion in the Public Record

May 31, 2011

Illinois Dept. of Transportation
c/o Mr. Peter Harmet and Mr. Mark Peterson
201 West Center Court
Schaumburg, IL 60196

SUBJECTS: (1) I-290 (Eisenhower Expressway) Draft Purpose and Need Statement and (2) Summary of Stakeholder Alternatives by Mode

Dear Mr. Harmet and Mr. Peterson:

This letter contains comments on the "I-290 Environmental Impact Statement Purpose & Need Summary", dated April 2011 and the "Summary of Stakeholder Alternatives by Mode – October 2009 – January 2011." IDOT wants to finalize the Purpose and Need Statement, so most comments are on this document. The Alternatives Phase is still in an early stage.

A. Purpose and Need

1. Two of the Project Needs account for just roads and sidewalks, rather than all transportation modes.

a. The "Improve Safety for All Users" Need should account for all transportation modes, not just roads and sidewalks.

Although the third Project Need ("Improve Safety for All Users" on Page 10) talks about all transportation modes, the three identified needs (listed below) only refer to roads and sidewalks.

1. Address Pedestrian-Vehicle Conflicts on Cross Streets (Page 10)
2. Address High Comparative Crash Rates (Page 10)
3. Address High Frequency of Crashes (Page 11)

Near the end of the study (late 2012 or early 2013), IDOT and FHWA must make a formal determination that the Preferred Alternative meets Purpose and Need. Roadway improvements can meet the three needs listed above, but transit improvements cannot, leading to an unfair evaluation.

Travelers are much less likely to be in a crash if they ride the CTA or Metra compared to driving on the Eisenhower Expressway.

The Draft Purpose and Need Statement says, "The overall predominant crash type along I-290 is rear end (64 percent overall on a 24-hour basis) with 94 percent of rear end crashes occurring during the peak congested travel periods between 6 AM and 11 PM. During congested periods, rear end collisions represent 71 percent of all crashes." The high rate of rear end crashes would decrease with more space between roadway vehicles, so diverting auto travelers to transit would reduce the number of vehicles on the road, providing more space between the remaining vehicles.

We are especially concerned by IDOT's statement, "The identification of transit crashes is primarily to identify safety improvements for transit users within the corridor and to a lesser extent about comparisons concerning relative safety of travel modes."¹ The comparison of crash rates on roadways versus transit is part of a rigorous analysis of impacts and a fair evaluation of alternative solutions.

b. The "Improve Facility Deficiencies" Need should account for all transportation modes, not just the expressway and sidewalks.

The opening paragraph for the fifth Project Need (Page 16) refers to roadway pavement and structures, as well as pedestrian, bicycle, and transit facilities. However, the five identified needs (listed below) make it clear IDOT is only referring to roadway and sidewalk users.

1. Address Pavement Age (Page 16)
2. Address Structure Deficiencies (Page 17)
3. Address Geometric Deficiencies (Page 18)
4. Address ADA Ramp and Sidewalk Deficiencies (Page 18)
5. Address Drainage Deficiencies (Page 19)

When it comes time for IDOT and FHWA to make a formal determination the Preferred Alternative meets Purpose and Need, transit improvements will not be treated fairly because they are excluded from the five needs listed above.

The quality of service provided by the three major transit agencies has a major impact on the quality of service IDOT can provide on the Eisenhower Expressway. CTA, Metra, and PACE facilities have needs and deficiencies that should be corrected.

¹ Letter from Illinois Department of Transportation (Diane M. O'Keefe and Peter E. Harmet) to Citizens for Appropriate Transportation (Rick Kuner), November 3, 2010, Page 2.

2. The Purpose and Need Statement should recognize all reasonable solutions.

The Problem Statement for this Study starts with the sentence, “The I-290 study area is a multimodal corridor with a complex network of roadway, public transit, freight railroad, and non-motorized facilities and services that is a critical component of the local and regional transportation system.” This language clearly suggests the need to craft multi-modal solutions that contain multiple projects. The No-Build Alternative IDOT presented to the Corridor Advisory Group / Task Force contains multi-modal projects. Excluding the need for improvements to the CTA Blue Line, Metra’s commuter rail lines, and PACE bus routes does not comply with the Problem Statement and excludes important elements that are part of prudent, feasible, and reasonable alternatives.

The Purpose and Need Statement provides a checklist to help evaluate alternative solutions. When the checklist excludes some modes, it creates a bias.

There are times when it appears IDOT wants a fair consideration of all alternatives and times when IDOT is trying to bias the result toward the expressway. The following quotes illustrate this point.

a. Quotes from IDOT that suggest no bias towards roads

“This study will take a fresh look at the transportation needs and will be based upon the broader transportation system encompassing roadways, rail/bus transit and bike/pedestrian facilities.”²

“Our public outreach program will be extensive and will follow the Department’s Context Sensitive Solutions (CSS) policy. By definition, this policy provides an interdisciplinary approach that seeks effective, multi-modal transportation solutions by working with stakeholders to develop, build, and maintain cost effective transportation facilities that fit into and reflect the project’s surroundings – its ‘context.’”³

“Although the pavement is nearing the end of its service life, there is no predisposition toward a highway widening scenario in conjunction with the pavement reconstruction.”⁴

“Our technical analysis of the CTA Blue Line operation (p.25, ETSP) coupled with discussions with the CTA and RTA indicate that the Blue Line is operating at only 56% capacity. The technical analysis indicated that there was significant excess capacity in transit cars that averaged approximately 25 peak hour riders per car

² Letter from Illinois Department of Transportation (Diane M. O’Keefe) to Village President David Pope, August 27, 2009, Page 1.

³ Ibid, Page 1.

⁴ Letter from Illinois Department of Transportation (Diane M. O’Keefe and Peter E. Harnet) to Citizens for Appropriate Transportation (Rick Kuner), February 23, 2010, Page 2.

under the present (2009) operating conditions. In addition, there is the potential to add CTA trains based on maximum load volumes.”⁵

“The opportunities for improving safety performance will be primarily a function of design improvements, as well as potential mode shifts that can reduce congestion related crashes in the I-290 corridor.”⁶

b. Quotes from IDOT that suggest a road bias

“As indicated previously, our initial study area is based upon the likely limits of reconstruction along I-290.”⁷

“Our current study area captures the physical and operational characteristics to support the reconstruction of I-290.”⁸

“However, the basic responsibilities of each agency for planning and funding their core facility improvements has not changed, and would not change as a result of the I-290 EIS.”⁹

“There may be alternatives that can shift demand to other modes, or off of I-290; however the facility condition needs will require a reconstruction of I-290, even if it is a replacement ‘in-kind.’”¹⁰

“Addressing the age, condition, and obsolescence of I-290 is the responsibility of IDOT’s Division of Highways, which is leading the study. The conditions of facilities owned by and maintained by Pace, CTA and Metra (i.e. tracks, maintenance yards, stations, signals, power supply, bus stops, and other transit facilities) are the responsibility of the respective transit service providers.”¹¹

“As discussed at CAG meeting #7, IDOT cannot bear primary responsibility for the improvement of non-IDOT transit facilities as part of this project’s purpose and need.”¹²

The U.S. Federal Highway Administration is one of the two Joint Lead Agencies along with IDOT, but the U.S. Federal Transit Administration is not a lead agency. This suggests roads are more important to IDOT than transit.

⁵ Letter from Illinois Department of Transportation (Diane M. O’Keefe and Peter E. Harmet) to Citizens for Appropriate Transportation (Rick Kuner), March 18, 2011, Page 1. ETSP is the Existing Transportation Systems Performance Report.

⁶ Ibid, Page 2.

⁷ Letter from Illinois Department of Transportation (Diane M. O’Keefe and Peter E. Harmet) to Citizens for Appropriate Transportation (Rick Kuner), February 23, 2010, Page 1.

⁸ Letter from Illinois Department of Transportation (Diane M. O’Keefe and Peter E. Harmet) to Citizens for Appropriate Transportation (Rick Kuner), April 29, 2010, Page 2.

⁹ Letter from Illinois Department of Transportation (Diane M. O’Keefe and Peter E. Harmet) to Citizens for Appropriate Transportation (Rick Kuner), November 3, 2010, Page 1.

¹⁰ Letter from Illinois Department of Transportation (Diane M. O’Keefe and Peter E. Harmet) to Citizens for Appropriate Transportation (Rick Kuner), March 18, 2011, Page 1.

¹¹ Ibid, Page 2.

¹² Ibid, Page 2.

3. The Purpose and Need Statement excludes important evaluation criteria.

Evaluation criteria should include all modes, as well as economic, environmental, and social problems related to transportation.

FHWA policy requires a broader Purpose and Need Statement, as illustrated in the following quotation.

"(b) Alternative courses of action be evaluated and decisions be made in the best overall public interest based upon a **balanced consideration** of the need for safe and efficient transportation; of the social, economic, and environmental impacts of the proposed transportation improvement; and of national, State, and local environmental protection goals."¹³ (emphasis added)

"SAFETEA-LU Sections 3005, 2006, and 6001 require that:

"The transportation planning process provides for actions and strategies that protect and enhance the environment, promote energy conservation, improve the quality of life, and promote consistency between transportation improvements and State and local planned growth and economic development patterns"¹⁴

4. The Project Purpose should refer to multi-modal facilities, not one facility.

The Project Purpose statement on Page 1 says, "The purpose of this proposed action is to provide **an improved transportation facility** along the I-290 Eisenhower Expressway multi-modal corridor" (emphasis added). The word "an" in the phrase "an improved transportation facility" means one. In a multi-modal corridor with documented deficiencies in all modes, the expressway cannot solve all the transportation problems. The ability of the Eisenhower Expressway to provide an acceptable Level of Service is clearly related to the quality of service provided by the CTA, Metra, and PACE. A better Project Purpose would say, "The Project Purpose is to provide improved facilities in the multi-modal Eisenhower Transportation Corridor."

5. The Purpose and Need should reflect FHWA policy to avoid, minimize, or mitigate negative health and environmental impacts.

The Problem Statement for this Study contains language to avoid, minimize, or mitigate negative health and environmental impacts,¹⁵ but the Draft Purpose and Need Statement does not. It should.

¹³ Code of Federal Regulation 23 CFR Section 771.105(b) emphasis added

¹⁴ FHWA, "1. The Environmental Review Process – Section 6002 – SAFETEA-LU Environmental Review," Answer to Question 4. SAFETEA-LU is the Safe Accountable Flexible Efficient Transportation Equity Act: A Legacy for Users.

¹⁵ The sentence in the Problem Statement says, "Sustainable solutions to transportation problems need to be developed, while avoiding, minimizing, and mitigating impacts to the surrounding environment, including disproportionate social and economic effects on minority and low-income populations."

U.S. Federal Highway Administration Policy (FHWA) policy says,

“There are three fundamental environmental justice principles:

- To avoid, minimize, or mitigate disproportionately high and adverse human health and environmental effects, including social and economic effects, on minority populations and low-income populations.
- To ensure the full and fair participation by all potentially affected communities in the transportation decision-making process
- To prevent the denial of, reduction in, or significant delay in the receipt of benefits by minority and low-income populations”¹⁶

6. The relationship between the 2040 No-Build Employment Forecast of 43 percent and Traffic Projections on the expressway of 3 percent seems implausible unless IDOT restricts the volume of traffic allowed on the expressway.

The population and employment data for 2010 and the 2040 No-Build projections in the table below appear on Page 2 of the Draft Purpose and Need Statement. I added the last column on Percent Change from 2010 to 2040 and the last row on traffic. The three percent increase in traffic appears on Page 3 of the Draft Purpose and Need Statement.

Study Area	2010 CMAP	2040 I-290 No-Build	Percent Change from 2010 to 2040
Population	312,955	329,500	5.3%
Employment*	105,344	151,100	43.4%
Traffic			3%

* IDOT uses the U.S. Bureau of Economic Analysis definition of employment for the 2040 No-Build forecast and CMAP uses the Illinois Department of Employment Security definition, so there is the possibility this is an apples to oranges comparison. A telephone call to CMAP to raise this question was not returned.

A five percent increase in population compared to a 43 percent increase in employment from 2010 to 2040 suggests that a large part of the increase in employment is expected to come from workers who live outside the Study Area. These workers will generate a large increase in home-to-work trips.

The only way a three percent increase in traffic can result from a 43 percent increase in employment is if IDOT deliberately restricts the amount of traffic allowed on the expressway. Because people must go to work, traffic not allowed on the expressway will use the arterial roadways, which are already congested.

¹⁶ U.S. Department of Transportation, “An Overview of Transportation and Environmental Justice,” available at <http://www.fhwa.dot.gov/environment/ej2000.htm>

On Pages 5 and 6, IDOT says, “In 2010, 68 percent of the study area arterials operated at very congested conditions with v/c ratios greater than 0,90, corresponding to a Level of Service E and F.”¹⁷ If the projected 43 percent increase in employment will generate traffic that cannot be accommodated on I-290, and 68 percent of the study area arterials are already operating at LOS E and F, adding more traffic on already congested arterials is not a good solution.

On Page 6, IDOT says, “In 2040, 77 percent of the study area arterials are projected to be operating under very congested conditions” under the 2040 No-Build Scenario for the PM peak period (Figure 1-5). IDOT used the 2000 Highway Capacity Manual (Footnote 2 on Page 3) and Highway Capacity Manual Special Report 209 (Footnote 4 on Page 6). For the roadway capacity analysis, IDOT used Highway Capacity Manual 2000. The 2010 Highway Capacity Manual was shipped in April 2011, so you did not have time to use it for a report issued in the same month. In the coming months, IDOT should update the roadway capacity analysis based on HCM 2010. The definitions and methodology for analyzing expressway weaving segments are different in HCM 2010 compared to HCM 2000, and these differences affect merge and diverge segments as well.

If IDOT believes I-290 cannot handle the projected increase in demand (under the No-Build 2040 Scenario), then IDOT should:

1. Identify which roads and/or transit systems will accommodate the projected increase in demand
2. Estimate the projected Levels of Service on these other roads and/or transit systems
3. Recommend improvements to handle the increase in demand

7. The Purpose and Need Statement should account for the ability of major transportation investments to shape desirable land use patterns.

Transportation facilities can play three roles:

1. Move traffic
2. Provide access to property
3. Shape desirable land use patterns

The following table summarizes the ability of each street type to play each of the three roles.

¹⁷ The v/c ratio is Volume to Capacity.

Street Type	Move Traffic	Provide Access To Property	Shape Desirable Land Use Patterns
Expressway	Primary	None	Highly Significant
Arterial	Primary	Secondary	Significant
Collector-Distributor	Equal	Equal	Important
Local Street	Secondary	Primary	Minor

The Eisenhower Expressway is intended to move a high volume of traffic at high speed. It is not intended to provide direct access to property, because curb cuts (drive-ways) are not permitted. An expressway can have a significant impact on shaping desirable land use patterns.

CMAP's GoTo 2040 Plan recommends increasing density in some areas. Rail transit functions better with density. The CTA Blue Line and Metra's commuter rail lines support denser development much more effectively than the Eisenhower Expressway.

IDOT says it accounts for transportation / land use relationships as illustrated by the two quotations below.

- "The I-290 planning process has been structured to account for land use and transportation relationships."¹⁸
- "In addition, we will continue to work with CMAP and the corridor municipalities to consider existing and planned land uses and their relationships to project alternatives."¹⁹

IDOT accounts for land use in the models. For example, the Trip Generation Model bases the number of trips on the type and density of land use. Land use is an input to the Trip Generation Model. Transportation can shape development patterns – a result IDOT should take into account.

IDOT is using land use as an input, but shaping desirable land use patterns is also an output. CMAP's GoTo 2040 Plan recommends changing land use patterns over time, so it is treating land use as an output.

8. The Study Area should extend east to Wells Street or Michigan Avenue.

¹⁸ Letter from Illinois Department of Transportation (Diane M. O'Keefe and Peter E. Harmet) to Citizens for Appropriate Transportation (Rick Kuner), November 30, 2010, Page 2.

¹⁹ Ibid, Page 2.

The eastern boundary of the Study Area should be Wells Street or Michigan Avenue. Using approximately two miles east of Cicero Avenue as the eastern boundary of the Study Area is not a good choice. We have made this point before, especially in our December 2, 2009 letter. The largest concentration of jobs in the entire region is downtown Chicago. Traffic volumes on the Eisenhower Expressway are greater between Cicero Avenue and Wells Street than they are between Cicero Avenue and Mannheim Road. There are time delays related to parking in Chicago's downtown. The expressway ends at a traffic signal at Wells Street. The expressway intersection near UIC of the Kenney-Ryan and Eisenhower Expressways is frequently congested. CTA boardings are much higher at the downtown stations than they are at the Cicero Avenue Station.

IDOT's response to this concern is the CMAP Travel Demand Models incorporate the traffic network of the region. CMAP Models are intended to be regional in scope but have limited ability to deal with corridor-level impacts. For example, will the CMAP Models identify increased congestion east of Cicero Avenue? Will the CMAP models highlight any increase in congestion at the Wells Street traffic light? A corridor simulation model is more likely to address these concerns than a regional model, because corridor models are designed to deal with a smaller scale.

FHWA Policy says, "In order to ensure meaningful evaluation of alternatives and to avoid commitments to transportation improvements before they are fully evaluated, the action evaluated in each EIS or finding of no significant impact (FONSI) shall:

1. Connect logical termini and be of sufficient length to address environmental matters on a broad scope;
2. Have independent utility or independent significance, i.e., be usable and be a reasonable expenditure even if no additional transportation improvements in the area are made; and
3. Not restrict consideration of alternatives or other reasonably foreseeable transportation improvements." 23 CFR § 771.11(f)

The Study Area as presently defined fails to meet each of the three FHWA requirements listed above. The eastern boundary east of Cicero Avenue is not a logical terminal. The defined Corridor does not have an independent utility. IDOT language in the Draft Purpose and Need Statement restricts consideration of some alternatives and other reasonably foreseeable transportation improvements, in particular, rail transit.

B. Stakeholder Alternatives by Mode

1. Extending the CTA Blue Line provides greater person-capacity than widening the expressway.

Transportation capacity is expressed two ways: (1) vehicles per hour and (2) persons per hour. Both ways are appropriate. When comparing expressway

alternatives with transit alternatives, persons per hour is useful because of the large difference between the average number of people per car compared to the average number of people on a CTA Blue Line train.

The Transit Capacity Manual makes a distinction between Theoretical Capacity and Person Capacity.²⁰

- “The *theoretical capacity* is the number of cars per hour per direction, times the maximum design load of each car.”²¹
- *Person capacity* accounts for variations in passenger arrivals and distribution, and is lower than the theoretical capacity.”²²

The Transit Capacity Manual goes on to say, “The theoretical capacity assumes that all the offered capacity can be used by passengers. In practice, this only occurs when a constant queue of passengers exists to fill all available seats and standing room – a situation that is undesirable in a transit operation, as it leads to crowded platforms and passenger delay. Transit passengers generally do not arrive at an even rate over the course of an hour, and generally do not distribute themselves evenly among the cars of a train.”²³

2. IDOT’s Preferred Alternative should not prevent the CTA from meeting the requirements of the Americans with Disabilities Act (ADA) and National Fire Protection Association 130: Standard for Fixed Guideway Transit and Passenger Rail Systems.

CTA Blue Line Station platforms in the Study Area do not meet either ADA or NFPA 130 requirements.

For transit stations, ADA requires an accessible route on platforms of at least 36 inches. If the accessible route is next to the platform edge, a 24-inch treatment edge is not included in the 36 inches, so the clear width along a platform edge must be at least 60 inches.²⁴

NFPA 130 (National Fire Protection Association) requires egress routes to be at least 5 feet 8 inches wide. If the egress route passes between the edge of a platform and an obstacle (such as a stairway), an additional width of 1 foot 6 inches must be provided at the platform edge and 1 foot must be provided next to the obstruction, so that there is a minimum clear width of 8 feet 2 inches.²⁵

There is nothing in the Purpose and Need Statement that indicates any commitment from IDOT to make sure the CTA can improve Blue Line Stations to

²⁰ Transportation Research Board, “Transit Capacity and Quality of Service Manual,” – TCRP Report 100, 2nd Edition, Page 5-5.

²¹ Ibid., Page 5-5.

²² Ibid., Page 5-5.

²³ Ibid., Page 5-5.

²⁴ Transportation Research Board, TCRP Report 100, “Transit Capacity and Quality of Service Manual, 2nd Edition, 2003, Page 7-26.

²⁵ Ibid, Page 7-26.

meet ADA and NFPA requirements. FHWA Policy says, “the action evaluated in each EIS” should “not restrict consideration of alternatives or other reasonably foreseeable transportation improvements.” 23 CFR § 771.11(f)

IDOT’s report, “Existing Americans with Disabilities Act (ADA) Accessibility,” April 2011 only deals with sidewalks and curbs. It does not deal with ADA compliance on the CTA Blue Line or Metra.

3. Extend the CTA Blue Line to Hillside or beyond.

We support extending the CTA Blue Line to Hillside or beyond for the following reasons:

- The CTA Blue Line has far greater person-capacity than can be achieved with a HOV or HOT lane.
- Extending the Blue Line west from the Forest Park Station can be done in increments.
- Extending the Blue Line to serve the Maybrooke Court House and development around First Avenue is relatively easy and inexpensive.
- Heavy Rail Transit serves Captive Riders, who do not have access to cars. Captive Riders include seniors, children, persons with disabilities, and working adults without access to a car.

I appreciate the opportunity to provide comments. The issues that the study is dealing with are complex and the decisions made will have a long-term and significant impact on the communities in the Corridor. If you need further information or want to meet to discuss these issues further, please feel free to contact me by telephone or e-mail. Thank you .

Sincerely,

Citizens for Appropriate Transportation

Rick Kuner
708/848-0942
rkuner@comcast.net

IDOT Study\CAT Ltr to IDOT May 2011

Sent by e-mail attachment