







# Report on the Potential Impacts of the Proposed Eisenhower Expansion

December 2002



### **Introduction and Summary**

The Village of Oak Park is celebrating its Centennial in 2002, justifiably proud of its reputation as a community with world-renowned architecture and as the home of men and women who have achieved distinction in the arenas of science, the arts, religion, and business. Recognized in 1976 as an All-American Community, Oak Park celebrates its diversity, looked to as a pioneer in the areas of open housing, racial diversity, and as the home of organizations dedicated to the elimination of every form of discrimination and social injustice. Situated just west of Chicago, Oak Parkers have long enjoyed easy access to the city, its employment, its cultural and commercial opportunities, as well as everything else a great metropolis has to offer. At the same time, the Village has benefited from its independence and ability to self-govern, run its own schools, develop its own recreational facilities, and largely determine its own destiny.

The Village of Oak Park is a Home Rule Community under the Constitution of the State of Illinois, giving it a great deal of autonomy. Governed by an elected President and Board of Trustees and administered by a Village Manager and staff, this home rule community provides fire and police protection, sanitation services, street maintenance, and the licensing of businesses. The Village is the primary unit of government in the lives of its citizens. The Township provides social services, the Park District administers the parks and recreation programs, and the Library Board is responsible for the three public libraries in the

<sup>&</sup>lt;sup>1</sup> Much of this Introduction is excerpted from Oak Park Illinois, Continuity and Change (Arcadia 2000) by Dr. David M. Sokol. Dr. Sokol Chairs the Department of Art History at the University of Chicago and has served as a member of the Village Board of Trustees and Chairman of the Oak Park Historical Preservation Commission. Dr. Sokol is a member of the Village Citizens

community. Eight elementary schools, two middle schools, and the large high school shared with River Forest are the province of the two school districts.

Utilities and public transportation are provided by regional servers. The community enjoys strategic advantages of a Lake Michigan water supply, a commuter rail station, and two CTA rail rapid transit lines into Chicago and to the two major airports.

The boundaries of the Village are Austin Boulevard to the east, Harlem Avenue to the west, Roosevelt Road to the south, and North Avenue to the north. North to south, Oak Park is four miles long while ranging one and a half miles wide, with a 52,500 resident population in 2000 and a peak population of more than 66,000 in the 1940's. The community is extremely diversified in age, religion, ethnicity, race, and sexual preference. It has been a town of commuters into the Windy City especially after the Chicago Fire of 1871, yet Oak Park has always been home for people locally employed. There are many whose families have resided there for generations, corporate transferees, and the urbanites for whom the community has become the place of choice when faced with making school choices for their children.

Housing patterns have changed in the 150 years of residential development; farms are gone, some large Victorian mansions have been razed to provide more moderately sized homes or various forms of apartment living have developed. The continued conversion of apartments into condominiums has meant that more units are in personal ownership than at any time in our history.

The construction of town houses on available pieces of land is increasing the density and ending the population decline that was the result of the decrease in family unit size. Housing costs were low during the 1970s as fear of racial change caused some residents to flee the community, but housing values have exceeded the growth rate of many Chicago area communities. Oak Park remains a very desirable place to live.

Conscious efforts toward economic development have become more necessary with the loss of sales tax income that accompanied the departure of the automobile dealerships for more suburban locations and the reality that regional shopping malls have lured department store anchors out of downtown Oak Park. Village officials and the local financial institutions funded the Oak Park Development Corporation, and the Oak Park business associations have worked diligently at filling retail vacancies, bringing new development to the community and brokering partnerships when necessary. New anchors and branches of major retail chains have been attracted to a revitalized downtown Oak Park. At the same time, numerous restaurants, antique shops, art galleries and boutiques provide more of an urban feel than is customary in suburban commercial centers.

The largest and most rapidly growing industry in Oak Park is tourism. The over twenty homes designed by Frank Lloyd Wright and a larger number by his followers in the Prairie School, as well as the birth home of native son Ernest Hemingway, have brought tens of thousands of people into Oak Park each year. Additional attention has recently been paid to other historical sites and people too. The promotion of tourism without undue stress on the citizens, the

infrastructure, or the attractions themselves, is an important challenge for the coming decades.

Nowhere is this challenge presented more clearly than in the proposed expansion of the Eisenhower Expressway (I-290) through Oak Park. The construction of the Expressway through the southern part of the Village in 1959 improved access to the city for Oak Parkers in addition to those west of Oak Park, but also increased noise and pollution, caused the removal of many homes and split the Village apart. The attendant economic, social, and environmental effects remain with the Village to this day. The impact was mitigated somewhat by the decision in 1959 to narrow the roadway from four to three lanes while passing through Oak Park, and the unique central ramps which were designed to minimize the impact of the construction and the traffic at that time. However, the current proposal would remove these mitigation measures and add two new HOV lanes designed to facilitate a 35% increase in the current traffic load. Recent studies of "induced demand" indicate that the eventual increase in traffic is likely to be much larger.

Adding more lanes to the Ike is unlikely to provide any significant benefits for Village residents, with the possible exception of a single HOV lane that could be used for reverse commuting and would not require the taking of additional land. On the other hand, the impacts on the Village of this increased freeway congestion, along with the related construction and the pollution created by both, could be substantial. The Village has convened a Citizens Committee, composed of residents with relevant expertise, to study the potential impacts of

the I-290 HOV proposal (Tab A). Individual citizens also have been encouraged to provide their views.<sup>2</sup> This preliminary effort has identified the following major potential impacts:

- Significant potential to undermine the status of Village as a home rule community and to disrupt the Comprehensive Village Plan, and related zoning ordinance, for housing, transportation and parking, public facilities and services and economic development;
- Inconsistency with regional growth policies developed by the Northeastern Illinois Planning Commission and plans of the Chicago City Government;
- Adverse impacts on energy requirements and conservation of depletable natural resources;
- Adverse public health and safety impacts, including significant increases in exposure to ozone, nitrogen oxides, carbon monoxide, particulate matter, hydrocarbons, noise pollution, diesel emissions and at least 20 other carcinogenic substances contained in particle or other emissions from mobile sources or road dust;
- Increased building and materials damage in a community that contains over 300 historically or architecturally significant buildings;
- Adverse impacts on visibility, wildlife and water quality;
- Significant potential for environmental injustice.

As we begin the 21<sup>st</sup> Century, the Village of Oak Park -- and indeed, the entire Chicago area and much of the rest of the Nation -- finds itself at a major crossroads of transportation policy. Clearly, the congestion on the Eisenhower

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<sup>&</sup>lt;sup>2</sup> This includes Citizens for Appropriate Transportation (CAT), a citizens group that has formed to oppose the HOV proposal and seek reduction of the environmental and social impacts of the present freeway. CAT has made substantial contributions to the community discussion of the proposal and to this report. The existence of CAT is another clear demonstration of the level of concern among Oak Park residents about the potential expansion of the Eisenhower Expressway.

Expressway is a significant regional concern. Current studies suggest that if we expand the highway, the traffic will continue to come. But is that really the most desirable and reasonable approach? If we build new HOV lanes, will they soon be overwhelmed and require conversion into general purpose facilities? Would additional expansion be required after that? What would be the impacts on the Village, its quality of life and the health of its citizens? Is it possible to mitigate them adequately? Should we continue to rely on the automobile, with its inherent tendencies toward pollution and mass consumption of rapidly depleting energy resources? How would that affect the inner city and the rapid decentralization of northeastern Illinois? What are the impacts of continued decentralization? Are there viable mass transit or other alternatives? Can we afford them? If we choose the HOV road now, can we turn back later? If so, how much would that cost?

The Village and its citizens do not claim to have the answers to these questions. But we believe that the decisions that are made now, in this proceeding, will shape the future of our transportation system and its impacts on the Village for many years to come. At the very least, these decisions require the full and complete scrutiny of the legal and analytical tools required by federal law to address them: a Congestion Management System (CMS), a Major Investment Study (MIS), and an Environmental Impact Statement (EIS).

In recent correspondence with the Village Government, the Illinois

Department of Transportation (IDOT) agreed that the requirements for

congestion management systems and major investment studies will be followed

in connection with the I-290 expansion proposal.<sup>3</sup> IDOT also indicated in the letter that an Environmental Assessment (EA) will be performed to determine whether an EIS is required, and "will also serve to facilitate the development of an EIS if it is determined that significant impacts will occur to the natural or human environment." As summarized above and discussed in detail below, the Village believes, at least upon initial analysis, that the potential impacts are clearly sufficient to justify preparation of an EIS for the proposed I-290 project.

### 1.0 LEGAL ISSUES

The primary purpose of this Report is to provide a preliminary analysis of the potential impacts on the Village of Oak Park if the Eisenhower Expressway (I-290) is expanded to include high occupancy vehicle (HOV) lanes as has been proposed. However, as expressed in earlier correspondence with the Federal Highway Administration (FHWA) and the Illinois Department of Transportation (IDOT), the Village believes that an Environmental Impact Statement (EIS) is required for the proposed project as a matter of law. The FHWA regulations implementing the National Environmental Policy Act (NEPA) expressly require an EIS for construction of HOV lanes not located within an existing highway facility (23 CFR 771.115(a)). In adopting this regulation, FHWA explained that the only case in which an EIS is not required is where an existing lane is merely converted to an HOV or bus-only lane, and an EIS must be prepared for any HOV lane requiring new construction. See 52 Fed. Reg. 32660 et seq. (August

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<sup>&</sup>lt;sup>3</sup> Letter from Kirk Brown, Secretary, to Joanne E. Trapani, Village President (October 24, 2002)(Tab B).

28, 1987). This point is discussed in detail in the prior correspondence and Legal Memorandum attached to this Report under Tab C.

### 2.0 ANALYSIS OF ALTERNATIVES

The 1998 feasibility study for the proposed I-290 project deals only with HOV alternatives. Yet the Eisenhower Corridor includes three modes of transportation -- expressway, CTA Blue Line and CSX rail freight tracks.

Crossing the corridor are additional modes, including motor vehicles, PACE and CTA bus lines, pedestrians and bicycle riders. Any major project for the Eisenhower corridor should include evaluation of alternatives designed to improve conditions for all of these transportation modes.

The MIS, CMS and EIS requirements discussed above all require thorough consideration of all reasonable alternatives to the proposed I-290 project.<sup>4</sup> FHWA has advised the Village as follows with respect to consideration of potential alternatives:

FHWA and FTA are encouraging State Departments of Transportation, Metropolitan Planning Organizations and transit operators to discuss the best approach for studying a reasonable range of modal alternatives when a major transportation investment is proposed. Discussions among the key modal and decision-making agencies have begun, and FHWA is encouraging the Illinois Department of Transportation (IDOT) to continue this coordination with these agencies as the study proceeds to satisfy

See, e.g., Simmons v. U.S. Army Corps. Of Engineers, 120 F.3d 664 (7<sup>th</sup> Cir. 1997).

the legislative intent that integrates consideration of all modal alternatives into the NEPA process.<sup>5</sup>

The Village agrees that all modal alternatives, including highway alternatives, must be considered in accordance with the CMS, MIS and EIS requirements.

### 3.0 GENERAL RULES

In evaluating potential impacts, the Village has employed the following general rules specified in the federal NEPA regulations:<sup>6</sup>

Relevant impacts include ecological (such as the effects on natural resources and on the components, structures and functioning of affected ecosystems), aesthetic, historic, cultural, economic, social or health impacts, whether direct, indirect or cumulative.

Direct impacts are those which are caused by the action and occur at the same time and place.

Indirect impacts are those which are caused by the action and are later in time or farther removed in distance, but are still reasonably foreseeable. Indirect impacts may include growth inducing effects and other effects related to induced changes in the pattern of land use, population density or growth rate, and related effects on air, water and ecosystems. Examples of indirect impacts that could be

<sup>&</sup>lt;sup>5</sup> Letter from Norman R. Stoner to Joanne E. Trapani (September 17, 2002)(reproduced in Tab B)

<sup>&</sup>lt;sup>6</sup> See 23 CFR 771 (FHWA); 40 CFR 1500 et seq. (CEQ).

caused by the proposed lke expansion include effects on regional growth policies and related environmental impacts, and effects on inner city neighborhoods and inner ring suburbs including environmental justice considerations.

Cumulative impacts are those which result from the incremental impact of the action when added to other past, present and reasonably foreseeable future actions. Cumulative impacts can result from individually minor but collectively significant actions taking place over a period of time. Examples of cumulative impacts that could be caused by the proposed lke expansion include the cumulative impacts of increased pollution on public health, the environment and the historic buildings in the Village.

### 4.0 SPECIFIC IMPACTS

The following discussions are organized according to the specific types of impacts listed for consideration in the federal NEPA regulations. They are based on the views of Village residents and the deliberations of the Citizens Committee referenced above, with respect to the HOV project as described in the 1998 IDOT feasibility study. We note, however, that the proposed project would require expansion beyond Mannheim Road to Hillside. Although the proposal includes replacement of the bridges in that segment, it does not appear to include replacement of the roadway. In addition, it appears that a "flyover" would

be required at the Hillside intersection, yet that has also been omitted from the project proposal. Thus, it appears that additional construction beyond the stated project limits would be required.

## 4.1 The relationship between short-term uses of the environment and the maintenance and enhancement of long-term productivity.

A primary issue here is whether the HOV proposal is a short-term solution that will soon be inadequate and require replacement with other highway or transit alternatives that could be adopted now and would avoid the interim environmental impacts. The Village is concerned that the proposed HOV lanes will not be effective in reducing congestion on I-290 and will actually lead to increased congestion. The 2020 Regional Transportation Plan for the Chicago area indicates that the proposed HOV lanes would allow an increase in traffic of about 70,000 vehicles per day or approximately 35%. Thus, it appears that the current congestion may continue and may simply be moved to the next bottleneck.

Further, studies discussed below suggest that the HOV lanes would actually increase the current congestion on the freeway, causing additional congestion in Oak Park as well on streets near exit ramps and popular destinations. It is our understanding, as reported in the media, that IDOT has conducted a post-project report concluding that the recently completed "Hillside

<sup>&</sup>lt;sup>7</sup> A table on page 48 of the 2000 Edition of the 2020 Regional Transportation Plan (also known as Destination 2020) lists the Highway and Transit Projects included in the 2020 plan. The proposed lke HOV lanes are included in this table, which provides a current traffic estimate of 200,000 vehicles per day. The estimated increased traffic for 2020 Weekday Users is 71,800 under the Existing Airports Scenario and 70,900 if the proposed South Suburban Airport is built. Thus, the HOV lanes would be intended to allow an increase of approximately 70,000 vehicles per day or 35% of the existing traffic load.

Strangler" project is already causing such effects. Travel times on the Eisenhower Expressway were not reduced as expected by those costly improvements, and have simply relocated the congestion. And the Illinois Tollway Authority has not yet even begun to implement its plans to expand I-88 from three to four lanes from the western suburbs to Hillside, where I-88 feeds into I-290. The Tollway's expansion plans, included in the 2020 RTP, are likely to recreate the conditions that the recent Hillside Strangler project was intended to alleviate at that merge point. These effects are consistent with much of the national literature on the effects of HOV lanes and the resulting "induced demand."

### 4.1.1 Do New Roads Relieve Congestion?

Nationwide, the evidence is mounting that traffic congestion and related air quality problems cannot be alleviated simply by building more road space.

For example, a recent report of the Surface Transportation Policy Project concludes:

Traditionally, transportation agencies have responded to congestion by trying to add more space to the road system. However, our analysis of the TTI [Texas Transportation Institute] data shows this has proven to be an ineffective strategy. TTI's data show that places that have built the most roads haven't had much success in slowing growth in congestion. Even though road building has been outpacing population growth in the metro areas studied by TTI, congestion has grown worse in most places.

In the last decade, one-third of the metro areas surveyed that added the most road space per person experienced a 6.5% increase in rush hour congestion, compared to a 7.2% increase in the metro areas that added the least road capacity. The low road building

areas had higher population growth than the high road building areas, eliminating population growth as an explanation for the differences between the two sets of areas. Travel delay is actually higher on average in the 23 metro areas that built the most roads.

In part, road building is ineffective because adding capacity to highways actually generates additional travel, as people take additional car trips and new development creates even more demand.<sup>8</sup>

The report goes on to conclude that "the implication of our analysis is that the best route to providing commuters with congestion relief is to provide more choices, not more roads. The burden that traffic congestion places on commuters is considerably less when those commuters can choose to ride a bus or train, or walk or bicycle" (p. 9). Applying those type of findings to the Chicago region, a Chicago non-profit organization, Metropolis 2020, has concluded that even if all of the highway and tollway extensions or expansions in the state's long-range plans were built, Chicago area residents would still experience a total time delay equaling approximately 10 more days in traffic annually by the year 2030 than if the more transit oriented and land use sensitive Metropolis Plan were implemented.

### 4.1.2 Are HOV Lanes Effective?

Nationwide studies increasingly show that HOV lanes are more likely to increase traffic congestion and related pollutant emissions than to decrease them, and also may lead to increased congestion on side streets near off ramps and destinations resulting from the increased congestion on the freeway. These

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<sup>&</sup>lt;sup>8</sup>Surface Transportation Policy Project, *Easing the Burden: A Companion Analysis of the Texas Transportation Institute's Congestion Study*, p. 2 (May 2001)(reprinted in Tab D).

issues are discussed in a 1996 paper by Johnston and Ceerla, which reviews the results of several relevant recent studies.<sup>9</sup> Their conclusions may be summarized as follows:

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- New freeway HOV lanes temporarily reduce congestion and emissions on surface streets that compete with the freeway segments for line-haul traffic. New HOV lanes, however, also increase congestion and emissions on surface streets near off ramps and destinations, because of the increased vehicle flows on the freeways due to the new HOV lanes. New HOV lanes relocate emissions and congestion . . . local planners need to model HOV lanes properly . . . including these effects, in order to project emissions accurately (p. 36).
- New HOV lanes always increase single-occupancy vehicle capacity, compared to the do-nothing alternative, because they attract some vehicles previously occupied by 2 or more persons from the mixed-flow lanes. The number of single-occupant vehicles will increase, in spite of some of them converting to HOVs, due to the induced travel in single-occupant vehicles (p. 36).
- A recent study of one facility found that after a new HOV lane was built, the speeds in the mixed flow lanes did not rise, due to demand induced onto the freeway. Another post hoc study also found that mixed flow lane speeds did not rise after construction of HOV lanes . . . Some new HOV lanes will speed up travel by single occupant autos on mixed flow lanes in the short run . . . [W]e argue that the effect is generally temporary and that the higher speeds soon induce longer non-work trips, time-shifting to on-peak, mode shifts from transit to HOV and single occupant auto, and higher auto ownership. The result is higher VMT [vehicle miles traveled] than would have occurred without the HOV lanes (p. 37).
- New roadway capacity and new transit capacity can be quickly offset by induced auto trips . . . The difference, of course, is that new transit capacity induces fewer auto trips in the long run than does a new HOV lane because there are fewer auto lanes (p. 37, emphasis in original).
- [The author's short-term analysis indicated that] the new HOV lane scenario increases oxides of nitrogen (NOx) considerably, compared to

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<sup>&</sup>lt;sup>9</sup> Johnston, Robert A. and Ceerla, Raju. (1996) *The Effects of New High-Occupancy Vehicle Lanes on Travel and Emissions.* Transps. Res.-A. Vol. 30, No.1, pp. 35-50 (reprinted in Tab D).

the no-build (do-nothing) alternative, and reduces total organic gases (hydrocarbons) and carbon monoxide (CO) slightly. Take-a-lane HOV increased all pollutants . . . New HOV lanes appear to have little emissions reduction benefit. LRT [light rail transit] appears to be much better for emissions reductions. These results will vary for different time periods and should be analyzed for 30-yr and 40-yr horizons also (pp. 45-46).

Similar conclusions are drawn in a 1994 paper by Leman, Schecter and Pally.<sup>10</sup> Their recommendations include:

- In congested urban areas, newly constructed roadway lanes should be primarily or exclusively for public transit (p.2).
- Regional transportation plans, spending programs, air quality conformity analyses and other actions must fully analyze the increases in solo driving and air pollution that would result from each HOV lane construction proposal. Governments should adopt standards to discourage projects that would have these results.
- Construction of new HOV lanes that are not transit only should not be listed as a transportation control measure under the federal Clean Air Act unless their long run air quality impacts are shown to be positive in a rigorous analysis.
- Bus only and HOV lanes should be established first by conversion from existing general purpose roadways. New lane construction should be a second choice, if it is chosen at all.

### 4.1.3 Studies of Induced Demand

The effect described above, in which new or expanded roadways induce more traffic, is known as "induced demand." Studies of induced demand indicate that shortly after the new lanes or road are opened traffic increases by 10%-50% of the new capacity as public transit or carpool riders switch to single occupancy driving, or decide to take more or longer trips or change routes. In the longer term (3 years or more) the induced travel rises to 50%-100% of the

new capacity. As discussed above, the added traffic increases congestion and related pollutant emissions not only on the primary roadway but also on local streets at major entrance or exit ramps and popular destinations.

The following table shows the results of recent major studies of induced demand:

Table 1: New Capacity Filled With Induced Traffic

Study	Short-Term	Long-Term
Johnston & Ceerla <sup>11</sup>		60-90%
Fulton et. al <sup>12</sup>	10-40%	50-80%
SACTRA <sup>13</sup>		50-100%
Goodwin <sup>14</sup>	28%	57%
Hansen and Huang <sup>15</sup>		90%
Marshall <sup>16</sup>		76-85%
Noland and Cowart <sup>17</sup>	20-50%	70-100%

The issue of induced demand also is addressed in a slide presentation posted on the FWHA website and attached under Tab D. 18 The presentation makes the following observation:

Highway improvements which add capacity to a specific corridor or a regional transportation network will attract increased levels of vehicular traffic.

<sup>&</sup>lt;sup>10</sup> Leman, Christopher K., Schecter, Preston L., Pally, Kristin (1994). *Re-Thinking HOV: High Occupancy Vehicles and the Public Interest*, Chesapeake Bay Foundation (reprinted in Tab D).

<sup>&</sup>lt;sup>11</sup> Cited above

<sup>&</sup>lt;sup>12</sup> Fulton et. al, A Statistical Analysis of Induced Travel Effects in the U.S. Mid-Atlantic Region, accepted for publication in the Journal of Transportation and Statistics.

<sup>&</sup>lt;sup>13</sup> Standing Advisory Committee on Trunk Road Assessment, Department of Transport (UK). *Trunk Roads and Generation of Traffic*. HMSO, London, 1994.

<sup>&</sup>lt;sup>14</sup> Goodwin, Empirical Evidence on Induced Traffic, Transportation, Vol. 23, No. 1, 35-54 (Feb. 1996).

<sup>&</sup>lt;sup>15</sup> Hansen and Huang, *Road Supply and Traffic in California Urban Areas*, Transportation Research A, 31: 205-218 (1997).

<sup>&</sup>lt;sup>16</sup> Marshall, Evidence of Induced Demand in the Texas Transportation Institute's Urban Roadway Congestion Study Data Set, presented at Transportation Research Board, Washington, D.C. January 2000.

<sup>&</sup>lt;sup>17</sup> Noland and Cowart, *Analysis of Metropolitan Highway Capacity and the Growth in Vehicle Miles of Travel*, Transportation Research Board 2000; Nolan, *Relationships Between Highway Capacity and Induced Vehicle Travel*, accepted for publication in Transportation Research A.

<sup>&</sup>lt;sup>18</sup> Induced Demand: Gaining A Better Understanding

After discussing the various economic theories and evidence supporting this observation, the presentation concludes:

- Transportation improvements will (and should) lead to increased demand for the facility
- Induced demand is neither mysterious nor sinister; it is simply demand that has not been fully accounted for in our forecasts.

The presentation then makes the following recommendations:

- Implement better travel demand forecasting models in transportation planning practice
  - Integrated land use and travel demand models
  - Activity-based models of household tripmaking
- Do research to address current deficiencies in travel demand modeling
  - System-sensitive time-of-day models
  - Policy-sensitive land use models

These studies indicate that new HOV lanes clearly have the potential to increase congestion and related pollution, particularly in the absence of adequate modeling to account for these factors. The U.S. EPA also has acknowledged the problem of induced demand: "A growing body of evidence suggests that additional highway capacity does not simply relieve congestion at fixed levels of usage, but generates additional travel as well." As discussed above, the proposed HOV lanes are intended to allow an increase in traffic of approximately 35%. The studies discussed above suggest that this increase may actually be much higher, in both the short and long term scenarios. Further, it is our understanding that the base travel demand models that have been used to evaluate this project to date were not specifically designed for HOV projects

<sup>&</sup>lt;sup>19</sup> EPA comments on the DEIS for the U.S. 95 Widening Project in the Las Vegas area.

and do not account for induced demand. We also understand that the air quality conformity analysis for the proposed project was performed without the benefit of an HOV model that accounts for induced demand. The NEPA and other analyses for the proposed I-290 project should include a thorough evaluation of these issues addressing the problems discussed above and using the latest available modeling techniques that have been developed for HOV projects and account for induced demand.

# 4.2 Possible conflicts between the proposed action and the objectives of federal, regional, state and local land use plans, policies and controls.

Local land use plans, policies and controls are set forth in the Village of Oak Park Comprehensive Plan and Zoning Ordinance. Regional policies are articulated in the Policy Statement on Regional Growth Strategy developed by the Northeastern Illinois Planning Commission (NIPC) and in the new Downtown Chicago Central Area Plan. A detailed review of these planning documents indicates potential for major conflicts if the proposed I-290 project is pursued.

### 4.2.1 Village of Oak Park Comprehensive Plan

As mentioned above, the Village of Oak Park is a home rule community under the Illinois Constitution. As such, the Village has adopted a comprehensive Village Plan and related zoning ordinance, which are attached under Tab E. These contain detailed goals, objectives and policies for Housing, Transportation and Parking, Public Facilities and Services, Economic Development and Citizen Participation, among other things. To the extent that the proposed HOV project threatens the achievement of these goals, policies and

objectives, and compliance with the related ordinances, it also threatens the authority of Oak Park as a home rule community under the Illinois Constitution. If the concerns of the Village Government are not adequately considered and fully addressed in the transportation planning process, the basic responsibility of the Government to determine issues that impact the people that live in the Village will be seriously undermined. The major provisions of the Comprehensive Village Plan and the potential impacts of the proposed I-290 project on each are discussed in turn below.

### 4.2.1.1 **Housing**

The Village Housing Goal is to preserve and enhance a stable residential environment so persons of all ages, races and incomes can continue to live in sound, affordable housing in the Village. The potential adverse impacts of prolonged construction, increased traffic and increased pollution appear to pose a direct threat to the stability of the current housing environment. One of the Village objectives is to promote racial integration by supporting efforts to revitalize the Austin neighborhood along southeastern Oak Park. Yet this is one the neighborhoods that could be affected most severely by the proposed highway and related construction.

The objective of maintaining quality housing for all would be discouraged if property values are undermined by proximity to an expanded freeway and along the streets leading to the major entrance and exit ramps. There are also potentially negative impacts if existing frontage roads are eliminated, shortened or converted to one-way streets. Potentially affected roads include Harrison and

Flournoy on the north side of the lke and Garfield on the south side. Harrison, but especially Flournoy has many homes facing the expressway that could be impacted negatively. For most of the length of the expressway through the Village, the width of these three frontage streets provide what little barrier there is between the highway corridor and the homes and businesses that border the expressway. They are frequently used by children who are playing in these neighborhoods or going to or from their schools or playgrounds. Diminished accessibility of frontage streets would drive more traffic into residential areas posing an even greater risk of accidents into this area of families and parks. They also provide vital access for public safety vehicles, for which one-way traffic or the elimination of frontage streets would pose a major impedance, undermining safety, increasing traffic, noise and pollution. There are residences that might have their only access to the road system cut off, either by termination of alley access or the elimination of driveways onto the frontage road.

An example of the negative impact is the large apartment building at the northeast corner of Maple and Harrison, which would sit virtually on top of the freeway if some or all of that portion of Harrison is eliminated to accommodate new off-ramps. Residents of that building undoubtedly have the prospect of literally looking out their windows into the eyes of the commuters on a reconfigured ramp brought farther to the north. Additional problems could be caused by relocation of the freight and passenger railways farther to the south and closer to residences. These include permanent increases in noise, vibrations, pollution from freight trains, as well as the likely disruption of access to

passenger service during construction. The Village of Oak Park Department of Public Health receives complaints on a consistent basis with respect to respect to railroad "stationing" trains along the I-290 corridor. The complaints generally include noise, noise vibrations and odors, and often indicate that pollution from the trains exacerbates chronic health conditions such as asthma or emphysema. If the railroad sells its right of way to allow highway expansion, these conditions and the related potential for health problems are likely to increase.

If the pollution and congestion increases as suggested in the studies discussed above, compliance with Housing Code and high-quality management practices by property owners is likely to become more difficult. The same would be true with respect to current efforts to rehabilitate single and multiple-family housing. Home maintenance is likely to become more expensive and could to suffer accordingly. The policies of promoting visually attractive residential areas and protecting the integrity of land uses may become more difficult to achieve. The current atmosphere of public safety may be threatened if neighborhoods near the like or its major "feeder" streets become more congested and polluted. The expense of Village services provided to residential areas may climb as greater efforts are necessary combat the adverse effects of like expansion.

The Village plan provides detailed goals and objectives for historic and architectural preservation, as the Village is home to over 300 buildings of historical and architectural significance. The potential adverse effects on these architectural treasures are discussed below in Section of this Report.

Finally, prolonged freeway construction and any subsequent influx of people and traffic could cause significant disruption of current efforts to promote commercial redevelopment, stabilize the Village population and encourage reasonable development of higher density residential buildings.

### 4.2.1.2 Transportation and Parking

The proposed expansion and related construction could have profound effects on attainment of the Village goals and objectives for transportation and parking. As the Village Plan states, even under the current conditions "moving large volumes of vehicular traffic while protecting residential neighborhoods from encroachment by through traffic is a major challenge facing this community . . . A reduction in the number of automobile trips within the Village is desirable not only to alleviate congestion on its streets but also to help reduce energy demands on the finite supply of fossil fuels -- a national problem -- and to reduce exhaust emissions that erode air quality" (p. 29).

The studies of induced demand discussed above suggest that this problem, already serious, could approach a crisis stage if the lke is expanded as proposed. If congestion increases as the studies predict, it would likely eliminate any reasonable possibility of reducing traffic in the Village. Road maintenance costs, already high, would soar to unprecedented levels. Adequate parking, not only for residents but also for shoppers, employees, commuters, visitors and persons with disabilities, probably could not be provided under any reasonable

scenario. Current plans to encourage alternative routes for local and through traffic would no longer be viable.

In addition, if the access points to the proposed HOV lanes are not carefully located in positions convenient for Oak Park drivers, they could have the effect of creating more local traffic across the community from east to west or vice-versa, depending on their location. It is also possible that removal of the center ramps from the Oak Park portion of the expressway could create a new hazard by forcing traffic quickly to cross several lanes to access the westbound HOV lanes from the Austin or Harlem interchanges.

The Ike proposal also could discourage the Village objective of enhancing public transportation opportunities for all residents, including those with limited mobility, and encouraging more use of public transportation and less dependence on automobiles. This particularly true if the heavily automobile centered HOV proposal is chosen in lieu of viable public transportation alternatives. Such a result would stand the Village transportation policy completely on its head. Accessibility to and expansion of rail and rapid transit, taxi and bus services would likely be impeded, particularly if funding for those alternatives suffers as a result of the HOV project. The Village policy of seeking to establish multi-modal transportation centers at strategic points within the Village would be defeated or significantly delayed.

### 4.2.1.3 Public Facilities and Services

As stated in the Village Plan:

People choose to live in Oak Park because of its quality of life -- a quality that is sustained by a high level of public services and facilities . . . Among the Village services are those relating to public safety, public works, code enforcement, health, recreation, community relations and community development. Over the years, these services and facilities have expanded as conditions warranted.

The cost of providing these services and facilities has been rising steadily . . . [T]he Village has limited financial resources to pay for these services and those which may emerge in the future to enhance the quality of life in Oak Park. Consequently, Oak Park must undertake efforts to provide in the most efficient manner those public services and facilities that maintain Oak Park as a desirable community (p. 41).

In many ways, the potential disruption of this quality of life and the ability of the Village Government to continue to provide high quality facilities and services is at the heart of the Village concern with the proposed lke expansion. The Village goal of providing efficient and cost-effective public services and facilities would be severely challenged if the proposed expansion is allowed. As discussed above, any significant influx of people and traffic would cause related increases in maintenance and security costs. The ability of the Village to manage, plant and maintain its parkways would be increasingly reduced if funding for this purpose becomes less available at precisely the time it is needed to combat the deleterious effects of increased pollution and use.

The continuing ability of the Village to promote an improved and healthy environment within all of Oak Park would be subject to serious question if these

potential impacts become reality. The Village has adopted an environmental platform that calls, among other things, for:

- Protection of parks, gardens and natural sites;
- Actions to promote cleaner air;
- Water conservation and protection;
- Promotion of energy conservation;
- Reduction of solid and toxic wastes.

As explained in the discussions below of potential environmental impacts, attainment of each of these goals appears to be threatened by the proposed freeway expansion.

### 4.2.1.4 Economic Development

In order to continue to provide high quality services and facilities, the Village has adopted a policy of continuously seeking to expand its tax base. This, too, may be threatened by the proposed expansion of the Eisenhower Expressway. Any significant increase in congestion and pollution would render orderly control of land use and reuse much more difficult, and perhaps impossible in some areas. If Oak Park's image as a desirable place to invest and do business becomes tarnished, efforts to facilitate and attract new business would become more costly and less successful. Promotion of Oak Park's cultural, historical and architectural heritage to encourage tourism would suffer severely if the effects of increased congestion and pollution render the tourist experience less pleasant and more time consuming, while at the same time

accelerating the deterioration of historical and architectural treasures and increasing maintenance costs.

### 4.2.1.5 Citizen Participation

The Village places the highest priority on maintaining a high level of citizen involvement in Village affairs. This is a major reason why an EIS should be prepared for the proposed I-290 project, as the opportunities for public involvement would be much greater than those provided in the EA process.

### 4.2.2 Zoning Ordinance

A copy of the most recent Village Zoning Ordinance is provided under Tab E. As explained in Article 1.2 (Intent and Purpose) and implemented in subsequent provisions, the policies underlying the zoning provisions, such as the creation of a transit overlay district with the Oak Park/Eisenhower Business District, are similar to those articulated in the Village Plan and would suffer similarly if the proposed highway expansion is allowed.

### 4.2.3 Regional Land Use And Transportation Polices

The regional planning agency for the area in which the Village is located is the Northeast Illinois Planning Commission (NIPC). The current NIPC *Strategic Plan for Land Resource Management* is attached under Tab F, as is a supplemental *Policy Statement on the Regional Growth Strategy*. While NIPC did approve the 2020 Regional Transportation Plan, which includes the I-290 HOV proposal, NIPC also has endorsed thorough environmental studies of such

projects and detailed consideration of potential transit and other alternatives. Neither has yet been performed for the proposed I-290 HOV project. In the absence of such analyses, the proposed project appears inconsistent with the regional growth policies articulated in the NIPC documents in several major respects.

The NIPC *Policy Statement* provides that "new development must meet high standards of cost-effectiveness and environmental protection" (p. 8). In discussing this goal, the *Statement* concludes:

A substantial amount of the region's population and employment growth will be accommodated by new development through the conversion of agricultural and vacant land in the outer counties. Two paramount considerations must govern that development. The first is that new growth should be oriented to existing communities in order to make use of their established physical, economic and social infrastructure and to minimize uncoordinated or piecemeal extension of services. The second is that new growth should meet, at both the community and site levels, development standards which will (1) minimize adverse impacts on nearby communities and the natural environment and (2) make cost-effective use of infrastructure investments. Development should be avoided in areas where environmental resources cannot otherwise be protected. High standards of environmental protection should, of course, be applied as well in the stabilization or redevelopment of established communities (p.8).

As discussed above, the proposed HOV lanes may not represent a costeffective use of infrastructure investment if, as suggested in the studies discussed above, they will increase traffic congestion in both the short and long terms. The new HOV lanes are intended to allow an increase in traffic of approximately 35%, and the studies of induced demand discussed above suggest that the actual increase is likely to be much higher. As also documented in the studies of induced demand, with this increase in congestion comes a concomitant increase in pollution. Thus, the goal of environmental protection would also be threatened, as would the goal of minimizing adverse impacts on local communities such as the Village of Oak Park.

The proposed HOV lanes also would discourage the regional policy of orienting new growth toward existing communities. The projected 35% increase in vehicles that the lanes are intended to allow is thought to be consistent with NIPC's latest regional population, household, and employment projections which, for the year 2030 are expected to increase by 21%, 25% and 25%, respectively, over the year 2000. The NIPC small area forecasts used to project auto trips in the 2020 Regional Transportation Plan are the product of a model that measures the relative attractiveness for growth in sub-regional analysis zones. One factor used in estimating relative attractiveness is that of "impedances" between one zone and another as measured by highway and transit access. Thus any transportation measure which is likely to increase the relative attractiveness of outlying areas (e.g. zones in outer portions of DuPage County and NW Cook Count) by facilitating auto trip destinations to and from Chicago and inner suburban zones would be expected to accelerate growth in such outlying areas. Since the regional growth forecast is held constant, increased growth in outer areas can only come at the expense of the inner areas – hence more suburban sprawl and more urban disinvestment. The same would not be true of transit alternatives, as they can be sited at desirable locations in existing communities

and offer the flexibility of easy access to any inner area where a transit station is located.

Similar notions are expressed in the NIPC Strategic Plan, which emphasizes "the need to coordinate planning for new development and the public infrastructure required to serve it" (p. 22). The Plan notes that auto emissions will need to be curtailed as much as possible to attain compliance with federal Clean Air Act requirements and avoid the sanctions for noncomplying areas, which include denial of federal highway funding (p.23). The Plan includes a series of recommendations for improving environmental stewardship (pp. 17-20). With respect to transportation projects, the Plan recommends development of transportation plans "as necessary to discourage further metropolitan decentralization, to encourage more balanced patterns of suburban development, and to encourage investment in mature communities" (p. 27). The Plan also recommends that construction of major highway or transit projects be "subject to a full environmental impact statement" (id.). Each of these regional policies should be taken fully into account in the NEPA analyses for the proposed HOV project.

Apart from the NIPC materials, the new Downtown Chicago Central Area Plan predicts substantial growth in downtown Chicago which is not included in the NIPC projections. This growth would also be expected to contribute to traffic on the Ike, as evidenced by the suggestion in the Plan to create parking restrictions to inhibit vehicle use and creation of a multitude of new transit options.

# 4.3 Energy requirements and the conservation potential of various alternatives and mitigation measures.

The NEPA analysis of the proposed HOV project should contain a thorough analysis of the energy requirements associated with the increased vehicle traffic that the proposed project is intended to allow, as well as increases predicted to occur as a result of induced demand. These should then be compared to those of the transit alternatives.

# 4.4 Natural or depletable resource requirements and conservation potential of various alternatives and mitigation measures.

The NEPA analysis of the proposed HOV project should contain a thorough analysis of the depletable resource requirements associated with the increased vehicle traffic that the proposed project is intended to allow, as well as increases predicted to occur as a result of induced demand. These should then be compared to those of the transit alternatives. A recent report of the American Public Transit Association documents that for every passenger mile traveled, public transportation uses about one-half the fuel of private automobiles, sport utility vehicles, and light trucks.

# 4.5 Urban quality, historic and cultural resources, and the design of the built environment, including the reuse and conservation potential of the various alternatives.

As discussed above, preservation of the high quality of life in Oak Park and protection of the historic and architectural treasures in the Village lay at the heart of the Village concern over the impacts of the proposed Eisenhower expansion. Major potential adverse impacts identified by Village residents are summarized below.

### 4.5.1 Neighborhood Impacts

The direct, indirect and cumulative impact on the neighborhoods surrounding the Eisenhower Expressway could be devastating if the proposed HOV expansion project becomes a reality. Some of these are discussed above in connection with the comprehensive Village plan. In addition, according to the 2000 Census, roughly 21,736, or 41% of Oak Park's total population of 52,524 lives within 4-5 blocks of the expressway. Located within this same area are three public elementary schools, two parochial schools, and seven day care centers. There are also at least twelve churches located within this area. In addition, many of the community's cultural attractions are contained in this heavily populated area, such as Maze Library, the historic Oak Park Conservatory and the Gunderson Historic Housing District. Located within this same area are eleven neighborhood parks, many of which actually abut the existing expressway, including Barrie Park, Rehm Park and Pool, the Wenonah Avenue Tot Lot, Columbus Park immediately to the east, Veterans Park and the Forest Park District Pool immediately to the West. This area also includes two business districts, the Oak Park / Eisenhower Business District and the Harrison Avenue District. Both districts contain historically significant buildings and serve as vibrant economic centers serving the surrounding villages. The Harrison District is unique in that it is has become the heart and soul of the artistic community in Oak Park.

If the congestion on the freeway increases as suggested in the studies discussed above, the exit/entrance ramps and the major feeder streets will

increase pollution, noise and noise and vibration to nearby residents. These problems may be exacerbated if, as suggested in the 1998 HOV Feasibility Report, the railroad will only sell part of its right of way in exchange for the capacity to double-stack its rail cars through the village. The economic health of the area business districts and the safety of residents may be directly and adversely impacted. There may be less parking, less foot traffic and less patronage. This, in turn, will impact the vitality of the neighborhoods at large, which, in turn, affects property values.

The potential effects of the expansion proposal (increased traffic, air pollution and noise pollution) also may force the community to bear potentially significant economic costs in the form of decreased property values. Increased air pollution would also increase expenses for area residents as the need to paint buildings, refurbish stucco exterior, and wash/clean windows, cars, decks, outdoor furniture will occur even more frequently. The pollution can cause similar effects inside homes as well. Moreover, the potential health effects of the proposed expansion, discussed further below, could at a minimum increase expenses for medical care and insurance premiums.

### 4.5.2 Construction Impacts

With potential reconstruction of seven bridges, two entrance/exit ramps, retaining walls, and possibly east-west frontage roads and portions of roads providing access between the north and south of sections of the Village, as well as on and off the expressway, it appears that this project could significantly

impair mobility in and around the Village for a long period of time and necessitates serious and detailed examination and planning. Some of the potentially significant construction impacts include:

- Emergency Services a fire station is immediately south of the expressway at East Avenue and the Police Station is located north of the expressway several blocks at Lombard.
   Ambulances are stationed north of the expressway at North Boulevard and Euclid. Access to the West Suburban, Loretto and Oak Park Hospitals would likely be impeded, and the latter two are also sensitive noise receptors due to their proximity to the expressway. Thus, construction would raise significant public health and safety concerns.
- Oak Park / Eisenhower Business District & Harrison Business
  District changes in traffic patterns, loss of on-street parking
  spaces, and lack of access to these business areas due to
  closure/restricted access to bridges could irreparably damage
  businesses in these areas, causing serious adverse economic
  impact.
- Retaining wall construction would impede travel on local access and frontage roads and construction would impact adjacent residential areas.
- Construction is likely to require additional maintenance work and possible expansion on alternative routes such as Madison Street or Roosevelt Road, with similar adverse impacts on residents and businesses in those areas.

### 4.5.3 Unique Characteristics

Columbus Park already has serious air and noise impact issues as an outdoor facility abutting the freeway, as do Barrie and Rehm Parks and the Conservatory and Wenonah tot lot (at the north side of Home Ave. bridge). The Maze Branch of the Village Library is also a sensitive noise receptor, adjacent to the expressway. A detailed study of impacts on public properties is required. In addition, the Home Avenue bridge and other affected bridges are regularly used

by children who have to cross the freeway to get to public and parochial schools on the opposite side from their residence.

### 4.6 Public health and safety impacts

Each day, nearly 1,000 school aged children must cross the expressway to attend school. District 97 has five schools -- three elementary and two middle schools -- that have significant populations split by the Eisenhower and would be affected by disruption to the bridges. In this current school year, Lincoln Elementary has 238 children that are bussed from north to south to avoid the intersections deemed hazardous by the State of Illinois at Home Ave bridge/Garfield and at Oak Park Ave/Eisenhower. Irving Elementary has 62 children that live north of the Eisenhower and must cross south, mostly at the Lombard or Ridgeland bridges. Longfellow Elementary has 39 students that live south that must go north of the expressway. Brooks Middle School has 158 students south that must travel north. Julian Middle School has 200 students south that must travel north. Ascension Catholic Elementary School, located immediately north of the Expressway on East Ave. has 475 students in grades K-8 in this school year, slightly more than 400 of which have the 60304 zip code. This area is roughly split in half by the Eisenhower, so it has an estimated 200 students that would have to move north to the school from the other side where they live.

The safety of these children will be threatened twice daily by the construction and increased traffic as they make their way across the expressway. Safe alternative routes will not be readily available as passage over the

expressway is limited. As discussed above, frontage roads, especially if designated one-way due to the construction, will also severely limit access by emergency vehicles, placing the safety of the community at risk.

Multifamily housing lines both sides of the Eisenhower Expressway in Oak Park. Thirty-three percent (33%) of the Village population already lies within a "Diesel Hot Spot" identified by the American Lung Association. Increased air and noise pollution would pose less visible but equally direct impacts on area residents. If traffic and pollution increase as suggested in the studies discussed above and below, the Chicago area's attempts to meet federal air quality standards would be dealt a serious blow. Incidents of air-quality related health problems would increase with the increase in traffic and related pollution. Children, the elderly, people with lung and heart diseases as well as minority populations are the most vulnerable to this threat, and the area contains large concentrations of these populations. Noise from the expressway and overcrowded secondary roadways, already a demonstrated burden on the community, would also increase. This effect may be regional as expressway noise detracts from the public enjoyment of the parks and other nearby cultural attractions and deters attendance by those both within and outside of the community. The impacts of the increased congestion and related pollution on central Chicago and the loop should also be considered, particularly if the proposed expansion merely moves the "bottleneck" closer to the inner city. Pest control during construction is another issue that should be thoroughly addressed. These issues are discussed in detail below.

#### 4.6.1 Air Quality Impacts

#### 4.6.1.1 Local Air Quality Impacts

Residents of Oak Park and others who live near I-290 are subject to air pollution "hot spots" for particulate matter, diesel soot, air toxics, carbon monoxide and nitrogen oxides that create significant health risks. A growing body of scientific research indicates that air pollution from highways contributes to higher rates of cancer, asthma attacks, heart disease, and low birth-weight babies in neighborhoods near or adjacent to the highways. See Tab G for a summary of published studies on this subject.

Moreover, scientific studies indicate that, by increasing travel volumes, highway expansion can significantly increase human exposure to air pollution along the highway corridors – making a bad air pollution problem worse. (A 33% increase in traffic is expected with the proposed I-290 expansion.) For example, analyses of the proposed expansion of U.S. Interstate 95 in Las Vegas, Nevada, examined three toxic air pollutants and found that the proposed expansion will likely result in a significant number of excess cancers in neighborhoods along the highway.<sup>20</sup>

Highway agencies often assert that increased road capacity reduces emissions by relieving congestion, and that these reductions more than offset any emissions increases associated with additional traffic created by the expansion. However, as noted in Section 4.1, induced travel demand resulting

Resource Systems Group. Review of Exposure to Toxic Air Pollutants from Mobile Sources and the Impact of the Expansion of US 95 in Las Vegas, Nevada (December, 2001);

and the Impact of the Expansion of US 95 in Las Vegas, Nevada (December, 2001); Environmental Health and Engineering, Inc. Preliminary Toxicological Review of Roadway Traffic Pollution: Conclusions Letter (January, 2002).

from the additional highway capacity is expected to wipe out any congestion relief. Over time, we expect more cars stuck in the same levels of congestion that are experienced today. The limited amount of congestion relief experienced by the Hillside strangler expansion is a perfect example.

Even if congestion relief is achieved as a result of the expansion and this leads to very small region-wide reductions of some pollutants, pollution levels near the highway would still be higher after the expansion. This is because cars and trucks that previously traveled different routes will funnel into the I-290 corridor in large numbers, making this air pollution "hot spot" even hotter. Of particular concern are emissions of air toxics that are primarily a function of traffic volume as opposed to traffic speeds. In other words, congestion relief in the I-290 corridor will not reduce motor vehicle air toxic emissions from cars and trucks, but increased travel will. Combined with 33% more traffic, the additional cancer risk associated with motor vehicle air toxins is likely to be considerably higher after the expansion.

This evidence bolsters the need for transportation alternatives that minimize or eliminate these health risks. It is imperative to complete a detailed study that compares current health risks in the I-290 corridor with the risks that result from different transportation alternatives. Clearly, an Environmental Impact Statement addressing these issues in detail must be prepared. The potential damage to children's health also must be evaluated pursuant to Executive Order 13045. See 62 Fed. Reg. 19885 (April 23, 1997) (Protection of Children From Environmental Health Risks and Safety Risks).

#### 4.6.1.2 Ozone

The metropolitan Chicago area fails to meet the federal air quality standard for ozone, and a more stringent ozone standard will become effective in April 2004. As a result, the Chicago area will almost surely be out of compliance with federal health standards for ozone for many years to come. Increased traffic resulting from the proposed lke expansion would lead to substantial increases in truck and auto emissions of ozone precursors (nitrogen oxides and volatile organic compounds) at the very time when further efforts to reduce such emissions are essential. An EIS for this proposal should include a conformity analysis for the "old" and new ozone standards.

Noncompliance with the federal standards means an unacceptable risk that the citizens of Oak Park and the rest of Chicago and the surrounding area will continue to suffer the adverse health effects that the standard is intended to prevent. The federal standards are based on EPA's determination that exposure to ozone causes respiratory effects such as altered lung function, increased prevalence of acute respiratory illness and lung tissue damage. Population groups most sensitive to these effects include children, the elderly, people with asthma and others with chronic respiratory illnesses such as emphysema and bronchitis, people with heart disease, and anyone who exercises outdoors. On high ozone days, anyone may have difficulty breathing, regardless of whether he or she has been diagnosed with asthma or some other respiratory

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<sup>&</sup>lt;sup>21</sup> See 62 Fed. Reg. 38859-74 (July 18, 1997).

condition. See Tab G for a summary of studies on the health effects of ozone.

According to data compiled by the American Lung Association, in metropolitan Chicago alone there are large numbers of at-risk populations, including:

- 1,580,967 children age 14 and under.
- 871,364 seniors age 65 and over.
- 77,174 people with emphysema.
- 252,713 people with chronic bronchitis.
- 433,536 adults with asthma.
- 110,161 children with asthma.

## 4.6.1.3 Nitrogen Oxides

Apart from the ozone issues, EPA has determined that exposure to NOx emissions causes respiratory effects such as altered lung function, increased prevalence of acute respiratory illness and lung tissue damage. Again, population groups most sensitive to these effects include children, the elderly, asthmatics and others with emphysema, bronchitis or other chronic respiratory illness (id.). Given the magnitude of the potential increase in NOx emissions from the proposed facility and related construction, the increased risk of these effects from NOx emissions alone should be evaluated in addition to the ozone analysis.

#### 4.6.1.4 Carbon Monoxide

EPA has established primary CO standards of 9 ppm (8-hour average) and 35 ppm (1-hour average). The standards are based on cardiovascular and central nervous system effects found to result from inhaled CO that disrupts delivery of oxygen to the body's tissues. The sensitive population groups on which the standards are based include the same groups toward which the NOx and ozone standards are aimed, as discussed above, as well as persons with a history of angina or other cardiovascular disease. The risk of these effects from increased CO emissions attributable to the proposed facility and related construction should be examined. An EIS should include worst-case scenario modeling to determine potential hotspots for CO resulting from increased traffic.

#### 4.6.1.5 Particulate Matter

The Chicago area is expected to violate the new federal air quality standards for fine particulate matter (PM) that were adopted in 1997 and are expected to become effective within the next 2 to 4 years. Reducing PM emissions from motor vehicles, in particular diesel engines, will be an important strategy for achieving the new standard. PM emissions from mobile sources generally consist of fine PM.<sup>25</sup> EPA has concluded that fine PM causes the same health effects in the same populations as the NOx, ozone and CO standards described above.<sup>26</sup> Analyses of the effects of fine PM emissions from the mobile sources on the proposed new lanes and related construction should be

<sup>22</sup> See 50 Fed. Reg. 25532 et seq. (June 19, 1985).

<sup>&</sup>lt;sup>23</sup> See 40 CFR §50. 8 (2002).

<sup>&</sup>lt;sup>24</sup> See 50 Fed. Reg. 37484 <u>et seq.</u> (September 13, 1985).

<sup>&</sup>lt;sup>25</sup> See, e.g., 62 Fed. Reg. 54699.

performed. This issue was recently addressed in the 2002 Special Report of the National Academy of Sciences Transportation Board entitled *The Congestion Mitigation and Air Quality Improvement Program:* Assessing 10 Years of Experience. The report draws the following conclusions with respect to PM

At the same time, as discussed earlier in this chapter, other pollutants, such as PM and air toxics, have become of increasing concern as knowledge about their adverse health effects has grown. This has certainly been the case for PM. In 1997 EPA issued new standards to regulate fine particles on the basis of epidemiological studies that found a close correlation between ambient particulate matter concentrations and increased mortality and illness from cardiac and pulmonary respiratory disease. A subsequent intensive research initiative established a more definitive causal relation between exposure levels and adverse health effects (HEI Perspective 2001) . . .

Work is also under way to link atmospheric concentrations of fine particles to their sources, with particular emphasis on the contribution of exhaust from diesel vehicles. Although tailpipe emissions from highway vehicles represent a small share of directly emitted PM on a national basis, they account for a substantially higher proportion of longer-lived atmospheric concentrations of fine particles in urban areas, for example, up to 40 to 50 percent in the Denver and Los Angeles metropolitan areas, as previously noted. Heavy-duty diesel trucks and buses are the major source of PM emissions from highway vehicles.

Studies of the composition of tailpipe emissions are summarized in Tables 2, 3 and 4, which are reprinted from EPA's 1996 *Air Quality Criteria for Particulate Matter* (pp. 3- 93, 5-21-22). They contain significant concentrations of organic and elemental carbon and at least 37 other chemicals or compounds, many of which are known to be toxic or otherwise harmful.

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<sup>&</sup>lt;sup>26</sup> See 62 Fed. Reg. 38655 - 79 (July 18, 1997).

Apart from tailpipe emissions, particle emissions from resuspension of road dust can also be substantial. With respect to dust loadings from paved roads, the *Criteria Document* draws the following conclusions:

Dust loadings on a paved road surface build up by being tracked out from unpaved areas such as construction sites, unpaved roads, parking lots and shoulders; by spills from trucks carrying dirt and other particulate materials, by transport of dirt collected on vehicle undercarriages, by wear of vehicle components such as tires, brakes, clutches and exhaust system components, by wear of the pavement surface, by deposition of suspended particles from many emission sources, and by water, wind and erosion from adjacent areas (p. 5-11).

The chemical composition of paved road dust is depicted in Figure 1, also reproduced from the particle *Criteria Document* (p. 5-12). It contains nearly 35 chemicals or compounds, many of which, again, are known to be toxic or otherwise harmful.

Particle sizes for various types of particle emissions are shown in Table 5, again taken from the particle *Criteria Document* (p. 3-145). Road dust consists primarily of coarse particles, which can travel 10s of km from the source.

Tailpipe emissions consist primarily of fine particles, which can travel 100s of km. Thus, both types of emissions are capable of reaching virtually all areas of the Village from the I-290 corridor.

Clearly, potential increases in fine and coarse PM emissions should be a major focus of the NEPA analysis for the proposed project. PM emissions related to construction activities should also be examined. See Appendix X for a summary of recent studies on the health effects of particulate matter.

#### 4.6.1.6 **Hydrocarbons**

EPA has not adopted a separate standard for hydrocarbons (HC); however, EPA regulates HC emissions as contributors to ozone nonattainment.<sup>27</sup> Thus, HC emissions would present the same health concerns as the ozone standard and should also be examined in detail.

#### 4.6.1.7 **Mobile Source Air Toxics**

Emissions from mobile sources contain the hazardous air pollutants ("HAPs") benzene, formaldehyde and 1,3 butadiene. 28 The International Agency for Research on Cancer (IARC) has classified benzene as a known human carcinogen, and has classified 1,3 butadiene as a probable human carcinogen (id.). More recently, EPA has concluded that a list of 21 Mobile Source Air Toxics (MSATs) pose significant cancer and other public health risks requiring additional regulation of mobile source emissions.<sup>29</sup> The MSATs listed for future regulation are:

Acetaldehyde	Dioxin/furans	Manganese	Styrene
Acrolein	Diesel exhaust	Mercury	Toluene
Arsenic compounds	Ethyl Benzene	MTBE	Xylene
Benzene	Formaldehyde	Napthalene	-
1,3 Butadiene	n-Hexane	Nickel	
Chromium compounds	Lead compounds	POM	

As discussed above, it appears that emissions of these substances are capable of penetrating virtually all parts of the Village, as they are often contained in road dust or tailpipe particle emissions.

 $^{27}$  See, e.g., 63 Fed. Reg. 4002 (January 27, 1998).  $^{28}$  See 63 Fed. Reg. 4002 (January 27, 1998); 57 Fed. Reg. 52950 (November 5, 1992).  $^{29}$  See 61 Fed. Reg. 17230 (March 29, 2001).

Mobile source air toxics also are addressed in the recent report of the National Academy of Sciences Transportation Board, referenced above, which suggests that MSATs should be a future focus of the CMAQ program:

Air toxics are also regulated under the Clean Air Act, but have not been a focus of the CMAQ program. Nearly 200 pollutants have been identified as toxic air contaminants that derive from a broad range of sources. In 1998 California identified particulate emissions from diesel exhaust as a toxic air contaminant and potential carcinogen. The state has launched an aggressive program to develop appropriate control strategies for both new and existing diesel-fueled engines and vehicles. As the underlying science advances, the CMAQ program could also direct more attention to heavy-truck, bus, and freight projects focused on reducing diesel exhaust. In sum, to ensure that the CMAQ program remains effective and relevant in mitigating the future air quality impacts of transportation sources, adaptations to accommodate changing ambient air pollutant trends and the priorities that emerge from new research findings and the next generation of human exposure assessments must be considered.

The proposed HOV lanes appears likely to bring at least a 35% increase in emissions of these cancer-causing agents, and possibly much more. The NEPA analysis for the proposal should include a quantitative assessment of the potential increase in cancer and other health risks in the Village of Oak Park that could result from increases in these emissions.

#### 4.6.1.8 Diesel Emissions

As discussed in the MSAT rule, EPA and the International Agency for Research on Cancer (IARC) have concluded that diesel exhaust is a probable human carcinogen. More recently, EPA has completed a health assessment document (HAD) confirming that chronic exposure to diesel exhaust is likely to pose a lung cancer hazard. In a notice published on September 3, 2002 EPA summarized the conclusions of the HAD as follows:

The health assessment concludes that long-term (i.e., chronic) exposure to diesel exhaust is likely to pose a lung cancer hazard, as well as damage the lung in other ways depending on exposure. The health assessment's conclusions are based on exposure to exhaust from diesel engines built prior to the mid-1990s. Short-term (i.e., acute) exposures can cause transient irritation and inflammatory symptoms, although the nature and extent of these symptoms are highly variable across the population. The assessment also states that evidence is emerging that diesel exhaust exacerbates existing allergies and asthma symptoms. The assessment recognizes that diesel engine exhaust emissions, as a mixture of many constituents, also contribute to ambient concentrations of several criteria air pollutants including nitrogen oxides, sulfur oxides, fine particles, as well as other hazardous air pollutants.<sup>30</sup>

These recent EPA conclusions are not good news for the people of Oak Park. In 1999, the American Lung Association released a report entitled Dirty Diesel Hot Spots (Tab F). In this report, Oak Park was ranked sixth among suburban municipalities with the most people living in Dirty Diesel Hot Spots (17,709 residents, 31.3% of population). A Dirty Diesel Hot Spot is an area within 1/2 mile of highways with the most truck traffic in metropolitan Chicago. This includes areas within 1/2 mile of limited access expressways that carry in excess of 15,000 heavy duty diesel vehicles per day and arterial routes that carry an average of over 2,000 heavy duty diesel vehicles per day. As discussed above, it appears that diesel emissions are capable of penetrating other parts of the Village as well, because they are contained in fine particles that can travel up to 100 km from the I-290 corridor before they settle into the environment.

If the proposed HOV lanes cause an increase in congestion and related emissions they would exacerbate this already serious problem. The NEPA

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<sup>&</sup>lt;sup>30</sup> 67 Fed. Reg. 56290 (September 3, 2002)

analysis for the proposed HOV lanes should include a quantitative assessment of the potential increase in cancer and other health risks in the Village of Oak Park that could result from a substantial increase in diesel emissions.

#### 4.6.2 Noise Pollution

Two studies of noise pollution have been performed along the I-290 corridor; one in 1981and another in 1987. The reports are provided in Tab I, as is an additional a survey to determine the impact of traffic noise on Oak Park residents.

In July 1981, the Environmental and Energy Advisory Commission initiated a study by the Technical Services Division of the Cook County

Department of Environmental Control to determine the level of noise along I-290.

Measurements were taken at three sites: South side of the expressway (East Avenue and Garfield at Fire Station #3), North side of the expressway (Maple Avenue and Harrison Street), and Maple Avenue and Harrison Street at the rim of the expressway. This study found noise levels well in excess of the maximum levels identified by the United States Environmental Protection Agency as prerequisite to protect the public health of individuals engaged in indoor or outdoor activities.

The December 23, 1987 study was conducted to quantify noise levels in areas adjacent to I-290. The monitored noise levels were compared to levels the Illinois Department of Transportation applies to judge the acceptability of the noise environment. This study was also conducted at three locations: Harrison and Wenonah on the north side of the expressway, Harrison and Kenilworth on

the north side of the expressway, and Garfield and Lombard on the south side of the expressway. Monitoring was done in areas to estimate noise effects on apartment buildings with two or more stories that would have a direct line exposure to the noise source. The results showed that one-story buildings and other land uses immediately adjacent to and along the I-290 corridor experience noise levels slightly exceeding noise abatement criteria. Moreover, taller residential buildings are likely to experience noise levels well in excess of noise abatement criteria.

Along with the 1987 noise study, a survey was done to determine the impact of traffic noise on Oak Park residents. Households responding represented a population of 1,014 persons. Fifty eight percent (58%) of the households found the level of expressway noise objectionable and reported some effect upon their health and/or lifestyle. This suggests that a significant number of residents living along the I-290 corridor perceive noise levels as a problem.

These studies indicate that noise is already a problem along the I-290 corridor. The 1981 study showed that noise levels exceed the standards established by the United States Environmental Protection Agency, and the 1987 study showed that noise levels exceeded the standards as determined by the Illinois Department of Transportation. The residential survey shows that the level of noise from the I-290 corridor is objectionable to those that live along it.

The proposed HOV lanes appear likely to make these current problems worse. The impacts of additional noise pollution caused by construction and

operation of the proposed new lanes should be thoroughly studied, including the use of actual noise testing equipment deployed in Oak Park locations, in the NEPA analysis for the proposed project.

#### 4.6.3 Pest Control

Pest control needs to be considered in the analysis of the proposed I-290 expansion project. Typically, rat boroughs exist in areas where food and refuse is abundant, such as along railways and expressways. When construction occurs, the rats' homes are disrupted and they tend to move somewhere else, typically somewhere where they are more likely to be noticed. An integrated pest management system should be in place before any expansion on I -290 occurs. A survey of the area should be conducted, and if rat boroughs are found, the rats should be destroyed. The area should be monitored during construction to ensure that rats or other rodents are not overrunning residential and commercial areas along the I-290 corridor.

4.7 Effects on unique characteristics of the geographic area, such as proximity to historic or cultural resources, parklands, prime farmlands, wetlands, wild and scenic rivers, or ecologically critical areas

#### 4.7.1 Parks and Vegetation

As discussed above, Oak Park is home to numerous parks, gardens and natural sites. Preservation of these priceless ecological resources, and the many fine old trees that line the Village streets, is a major policy objective of the Village. This is particularly true in a time when the greenways of the Chicago area are disappearing at an alarming rate, as noted in the NIPC materials

discussed above. NIPC has made preservation of these resources a regional policy objective as well.

It appears that increased pollution from the proposed lke expansion and related construction could cause a substantial increase in the costs of maintaining the Village ecological resources. It could also damage a significant percentage of the trees and other vegetation in the Village and other nearby areas such as Chicago's Columbus Park, as well as foliage within the existing Eisenhower right of way. EPA has concluded that ozone causes a wide range of vegetation effects such as visible foliar injury, growth reductions and yield loss, growth reductions in tree seedlings and mature trees, and effects that can have significant impacts at the forest stand and ecosystem level.<sup>31</sup>

EPA also has concluded that PM emissions can cause similar effects.

The April 2002 Draft of EPA's *Air Quality Criteria Document for Particulate Matter* concludes:

Overall, then, PM produced by human activities has the potential to cause the loss of ecosystem biodiversity in ways that reduces the ability of ecosystems to provide the services that society requires to sustain life. The major impacts of PM on ecosystems are the indirect effects that occur through the soil and affect plant growth, vigor, and reproduction. Mineral nutrient cycling can be altered by the deposition of heavy metals. The deposition of nitrogen and sulfur and the acidifying effects of the two in association with the H + ion in precipitation also alter biogeochemical cycling, cause soil acidification, alter the Ca/Al ratio, and impact the growth of vegetation and forest trees, in particular. Leaching of nitrates and other minerals through runoff can impact coastal and aquatic wetlands and, thus, influence their ability to produce the products and services necessary for existence of human society (pp. 4-207-08).

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<sup>&</sup>lt;sup>31</sup> See 62 Fed. Reg. 38874 et seq. (July 18, 1997).

As discussed above, it appears that particle emissions are capable of causing these effects in virtually all parts of the Village, because they can travel up to 10 km (coarse particles) or 100s of km (fine particles) from the I-290 corridor before they settle into the environment.

In addition, the affects of salt spray on trees and other vegetation should be considered. The addition of two new HOV lanes undoubtedly will mean greater use of road salt. Studies by Dr. Ware, formerly with the Morton Arboretum, indicated that salt spray from the East-West toll road adversely affected certain tree species within a distance of 1/2 mile from that road.

The NEPA analysis for the proposed HOV project should include a detailed analysis of the impacts of the increased pollution on the parks, trees, gardens, foliage and other vegetation in the Village. In addition, if the proposed project would involve use of Columbus Park or other public parklands, analyses under Section 4(f) and the 1966 Department of Transportation Act and Section 6(f) and of the Land and Water Conservation Fund Act must be included.

#### 4.7.2 Building and Property Damage

As discussed above, emissions of both fine and coarse PM are likely to emanate from the I-290 corridor. Construction activities also emit both fine and coarse PM. EPA has concluded that PM emissions can cause substantial damage to buildings and property. In adopting the current PM standards, EPA stated:

[P]articles affect materials by promoting and accelerating the corrosion of metals, by degrading paints, and by deteriorating

building materials such as concrete and limestone. Soiling is found to reduce the aesthetic quality of buildings and objects of historical or social interest. Past studies have found that residential properties in highly polluted areas typically have lower values than those in less polluted areas. Thus, at high enough concentrations, particles become a nuisance and result in increased cost and decreased enjoyment of the environment.<sup>32</sup>

As also discussed above, it appears that particle emissions are capable of causing these effects in virtually all parts of the Village.

A primary objective of the Oak Park Comprehensive Plan (Tab E) is to promote a visually attractive environment in residential areas (p. 20). In addition, as discussed further below, the Village contains more than 300 buildings of historical or architectural significance. Preservation of the existing residences and historic buildings lies at the core of the high quality of life in the Village and is accorded the highest priority. The resulting tourism is a cornerstone of the Village economic plan. It is absolutely essential for the NEPA analysis for the proposed freeway expansion to provide a thorough review of the potentially deleterious effects of particle emissions on the fine homes and historic buildings in the Village.

### 4.7.3 Visibility

A related concern involves the effects on PM emissions on visibility in the Village. In establishing the current PM standards, EPA drew the following conclusions:

Particulate matter can and does produce adverse effects on visibility in various locations, depending on the PM concentrations involved and other factors discussed below. It has been demonstrated that impairment of visibility is an important effect of

<sup>&</sup>lt;sup>32</sup> 62 Fed. Reg. 38683 (July 18, 1997).

PM on public welfare, and that it is experienced throughout the United States, in multi-state regions, urban areas, and remote mandatory Class I Federal areas alike. Visibility is an important welfare effect because it has direct significance to people's enjoyment of daily activities in all parts of the country. Individuals value good visibility for the well being it provides them directly, both where they live and work, and in places where they enjoy recreational opportunities. Visibility is highly valued in significant natural areas, such as national parks and wilderness areas, because of the special emphasis given to protecting these lands now and for future generations. The Criteria Document cites many studies designed to quantify the benefits associated with improvements in visibility.<sup>33</sup>

As discussed above, it appears that particle emissions are capable of causing these effects in virtually all parts of the Village. Protection of visibility in the Village goes hand in hand with protection of the high quality of life and the aesthetic experience of visiting the Village and its architectural treasures. This is another issue that must be addressed thoroughly in the NEPA analysis for the proposed freeway expansion.

#### 4.7.4 Water Quality

The NEPA analysis should examine potential adverse impacts to the local floodplain including any jurisdictional wetlands, and property upstream and downstream of both crossings. Potential impacts include loss of floodplain or floodway, exacerbation of flooding, channelization, and ecological impairment. Expansion of I-290 will potentially impact Addison Creek and Des Plaines River floodplains in the Villages of Bellwood and Maywood respectively. In particular, the Addison creek floodplain is extensive, stretching approximately from Rice Avenue to 23rd Avenue. The flood insurance rate map for Addison creek within the Village of Bellwood is in the process of being revised based on a recent

study. The flow of Addison creek across I-290 is complex, and most of the Village of Bellwood's buildings are contained in the floodplain and potentially impacted by any of the changes made to I-290.

Water quality impacts also may result from additional highway runoff from the proposed road widening. Drainage of I-290 is directed to the Des Plaines River by pumping stations at several locations. The increased highway stormwater runoff may contribute to additional degradation of the Des Plaines River water quality. Highway stormwater typically contains elevated amounts of road salt, oils and grease, heavy metals and a multitude of other toxic contaminants. The issue of non-point source pollution (pollution from diffuse sources such as urban runoff) is increasingly becoming important because of concerns about the deterioration of water quality in receiving waters. Such concerns are behind EPA's promulgation of The National Pollutant Discharge Elimination System Phase II (NPDES II) regulations.

#### 4.7.5 Wildlife

The Village parks and many fine old trees are home to significant populations of migratory birds and other wildlife that make an appreciable contribution to the aesthetic experience of visiting or living in the Village. The courts have recently held that the potential effects of highway expansion on migratory birds must be considered thoroughly in the NEPA process.<sup>34</sup> This is another issue that must be considered in the NEPA analysis for the proposed lke

<sup>33</sup> 62 Fed. Reg. 38680 (July 18, 1997).

<sup>&</sup>lt;sup>34</sup> See *Utahns for Better Transportation v. DOT*, 10<sup>th</sup> Cir. No. 01-4216 (decided September 16, 2002)(EIS for proposed highway rejected for failure to consider effects on migratory bird populations beyond 1,000 feet from the highway).

expansion. The analysis also should consider the degree to which the proposed action may adversely affect endangered or threatened species.

4.8 The degree to which the action may adversely affect districts, sites, highways, structures or objects listed in or eligible for listing in the National Register of Historic places, or may cause loss or destruction of significant scientific, cultural or historical resources.

Oak Park is well known for its stately old homes and outstanding architecture. The Village is home to more than 300 buildings of historical or architectural significance, designed by many famous and original architects: Frank Lloyd Wright, George W. Maher, William Drummond, John Van Bergen, Patton and Fisher, E.E. Roberts and others. Side-by-side with these masterpieces are smaller scale modest homes, landmark apartment buildings, and commercial structures -- all framed by a network of parks and tree-lined streets that establish the special character of the community. Oak Parkers treasure this priceless heritage and appreciate that the preservation of these structures greatly enhances the quality of life in the Village.

Recognition of Oak Park's valuable architectural and historical resources began in the late 1960's. The 1972 Hasbrouck/Sprague historic structures survey identified hundreds of structures of historical or architectural significance. In that same year, the Village established a landmarks commission and designated by ordinance the Frank Lloyd Wright/Prairie School of Architecture Historic District, which was subsequently placed on the National Register of Historic Places. In 1983, the Village designated the Ridgeland/Oak Park Historic District, which has also been included on the National Register. Earlier this year, a third historic district, the Gunderson Historic District, adjacent to the

Eisenhower Expressway was designated locally by Village of Oak Park and also placed on the National Register. In addition to the three historic districts, many individual landmarks in the Village are also included on the National Register, and many others are eligible for local and federal landmark designation.

As discussed above, the Comprehensive Village Plan includes objectives and policies recognizing the value and desirability of historic preservation. The Village Historic Preservation Commission provides numerous related services and maintains historic and architectural archives at the main library. The Frank Lloyd Wright Home and Studio Foundation operates a research center, and the Oak Park-River Forest Historical Society maintains an archive of old documents and photographs to assist restoration efforts.

The Village actively promotes tourism, both as an economic development tool and as a means of educating citizens and visitors. The Historic Preservation Commission continues to publish a "Guide to Frank Lloyd Wright and Prairie School Architecture in Oak Park" and a guidebook for the Oak Park/Ridgeland Historic District. The Village continues to support the Oak Park Tour Center, a part of the Oak Park Visitors Bureau.

Most recently, the Gunderson Historic District was added to the National Register. This District is bounded on the South by Harrison Street, which borders the Eisenhower Expressway. The Oak Park Conservatory, a building certainly eligible for listing on the National Register, faces Garfield Avenue, abutting the Expressway and railroad tracks to the its south of the expressway. The Maze Branch Library, on the 800 block of S. Gunderson Street, and

adjoining the Gunderson Historic District, is also probably eligible for listing on the National Register. Just across the Oak Park border in the City of Chicago, Columbus Park also has been listed on the National Register, and local and federal landmark designation is pending.

The potential effects of the proposed freeway expansion on these historical and architectural treasures in Oak Park should be examined thoroughly in the NEPA analyses for the proposed project. As discussed above, these include building and materials damage, vibrations that could affect the stability of the foundations, and noise, visibility and pollution effects that destroy the aesthetic experience and deter the tourism on which the Village economy relies. Stucco buildings, which are particularly common in the Gunderson district but also throughout Oak Park generally, are especially sensitive to deleterious effects from air pollution. As also discussed above, it is possible that these adverse impacts could occur in virtually all parts of the Village, because many of them are caused by particles that can travel up to 100 km from the I-290 corridor before they settle into the environment.

In addition, any proposed change in the location of the exit/entrance ramps to and from the Expressway could have the same potential adverse impact as the widening itself. Adverse impacts on the historically and architecturally significant buildings in Oak Park should be a primary focus of the NEPA study for the proposed freeway expansion.

#### 4.9 Whether the action raises environmental justice concerns.

Pursuant to the DOT Order to Address Environmental Justice in Minority

Populations and Low-Income Populations (1997)(Tab J), considerations of
environmental justice must be addressed in all relevant phases of the
transportation planning process. The DOT Order is based on Title VI of the Civil
Rights Act of 1964, as implemented in Executive Order 12298 (1994).

Environmental Justice incorporates three fundamental principles:

- To avoid, minimize or mitigate disproportionately high and adverse human health and environmental effects, including social and economic effects, on minority 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

The proposed I-290 project appears to present a significant potential for violation of these basic principles. Rates of incidence, hospital and doctor visits are all higher for African-Americans and other minority and low income populations with respect to asthma and the other public health problems, discussed above, that are associates with highway pollution. Several such populations are likely to be affected by the I-290 HOV proposals.

Austin, the Chicago neighborhood immediately east of Oak Park, contains a high proportion of minority and low-income residents. This is also true of other neighborhoods along I-290 in the project area defined by IDOT from Mannheim Road to the west of Oak Park and eastward moving into the City of Chicago to Central. Expansion of the Expressway through Oak Park may simply move the

"bottleneck" even more into these neighborhoods, particularly in the City of Chicago, with all the attendant impacts of the increased congestion and related pollution.

There are also potential environmental justice issues for the entire stated project corridor from Central Avenue to Mannheim Road. The entire corridor has predominance of minority and low income individuals who would bear the brunt of any adverse impacts that may result from the proposal. On the other hand, the principle beneficiaries of the proposal reside in communities much farther to the west which are not composed primarily of minority or low income populations. This is demonstrated by the Chicago region's 2000 Census population maps available on the NIPC website.

As recognized in the NIPC *Strategic Plan* (p. 5), "decentralization as a response to urban problems is costly not only to those who participate, but to those who are left behind, often in semi-abandoned neighborhoods." This leads to "a growing problem for workers from lower-income households and their employers. Among the more obvious implications of job-housing imbalance are unemployment, higher costs of travel, increased traffic congestion and greater air pollution" (pp. 35-36). All of this leads to the suggestion that transit based options would better address the mobility needs of the populations in the affected corridor with much less negative impact that a highway expansion. These implications should be studied thoroughly in the NEPA analysis of the proposed I-290 expansion.

## 4.10 Whether the action threatens a violation of federal, state, or local law or requirements imposed for the protection of the environment.

As detailed above, the proposed freeway expansion threatens numerous violations of such requirements.

# 4.11 Whether the action would cause economic or social effects that are related to the environmental impacts.

As detailed above, the proposed freeway expansion would cause many such effects.

#### **4.12 Potential Mitigation Measures**

In the past, the Village has explored the possibility of mitigating the existing adverse impacts of the Eisenhower Expressway by placing a cap over portions of the expressway running through Oak Park. At the Village request, in 1987 IDOT performed an *Oak Park Air Rights Feasibility Study* (Tab K) which examined three proposals:

- A recreation park, including a soccer field, baseball field and 127 parking spaces over the corridor at East Avenue;
- One-story commercial buildings, relocated transit station and parking for 180-200 vehicles over the corridor at Oak Park Avenue; and
- Multistory hotel, office or commercial complex, relocated transit station and parking over the CTA and B&O at Harlem Avenue.

The study concluded that these proposals may be feasible and would provide substantial mitigation benefits, but also would be subject to significant constraints.

The Village has been awarded a grant from the "Illinois Tomorrow" program to update and revise the 1987 feasibility study. The Village intends to submit the resulting study for consideration in this proceeding. However,

regardless of whether the Village is able to participate in a study of a potential cap over the freeway in Oak Park, this and other potential mitigation measures should be thoroughly investigated in the NEPA study for the proposed HOV project.

# 4.13 The degree to which the action may establish a precedent for future actions with significant effects or represents a decision in principle about a future consideration.

As we begin the 21st Century, the Village of Oak Park -- and indeed, the entire Chicago area and much of the rest of the Nation -- finds itself at a major crossroads of transportation policy. Clearly, the congestion on the Eisenhower Expressway is a significant regional concern. Current studies suggest that if we build the highway, the traffic will continue to come. But is that really the most desirable and reasonable approach? If we build new HOV lanes, will they soon be overwhelmed and require conversion into general purpose facilities? Would additional expansion be required after that? What would be the impacts on the Village, its quality of life and the health of its citizens? Is it possible to mitigate them adequately? Should we continue to rely on the automobile, with its inherent tendencies toward pollution and mass consumption of rapidly depleting energy resources? How would that affect the inner city and the rapid decentralization of northeastern Illinois? What are the impacts of continued decentralization? Are there viable mass transit or other alternatives? Can we afford them? If we choose the HOV road now, can we turn back later? If so, how much would that cost?

The Village and its citizens do not claim to have the answers to these questions. But we believe that the decisions that are made now, in this

proceeding, will shape the future of our transportation system and its impacts on the Village for many years to come. At the very least, these decisions require the full and complete scrutiny of the legal and analytical tools required by federal law to address them: a Congestion Management System (CMS), a Major Investment Study (MIS), and an Environmental Impact Statement (EIS).

#### Conclusion

For the foregoing reasons, IDOT should comply with the requirements for Congestion Management Systems, and should prepare a Major Investment Study and an Environmental Impact Statement for the proposed addition of HOV lanes to I-290, the Eisenhower Expressway.