interest." Natural areas include lands registered under the Illinois Natural Areas Preservation Act or identified in the INAI. Many INAI sites are associated with nature preserves, land and water reserves, or natural heritage landmarks and may overlap a forest preserve. Based on information provided by the IDNR and Illinois Natural Heritage Database, there are eight INAI sites within the study area (see Exhibit 2-10), seven of which are associated with forest preserves (see Table 2-21).

2.8 Visual Resources

Visual resources are aspects of the environment that determine the physical character of an area and the manner in which it is viewed. Visual resources include scenery viewed at various distances, as well as cultural manmade modifications, vegetation, and other landforms.

Most landscape within the study area is urban, having been substantially altered for development purposes, resulting in the leveling of large areas of the natural topography. Within the study area, there are few long distance natural vistas, unless one looks skyward or the viewer is within an open area (a park, a forest preserve), on a manmade hill, or looking out the window of a multistory building. Otherwise, views generally are obstructed by roads, buildings, and tree lines. These urban features stand upon nearly flat to gently rolling terrain within the study area, with natural elevations ranging from 620 to 820 feet (North American Datum, 1927). Large hills within the study area are primarily **built** spoil piles, fill piles, or embankments for roadways or other development. No large naturally occurring hills exist within the study area.

Most of the study area (63 percent) is a mix of residential, industrial, institutional, and commercial land uses. Transportation accounts for an additional 11 percent. The transportation system includes an established roadway system, commuter and freight rail, a regional airport, and an international airport; and is complemented by bicycle routes and pedestrian paths. Thus, transportation is an integral part of the visual scene of the area and does not represent an unusual or uncommon visual image.

Residential areas are primarily concentrated along the southern and western parts of the study area, whereas O'Hare Airport and adjacent industrial facilities dominate the northern and eastern parts. Residential areas are representative of typical suburban areas with moderately dense populations and little undeveloped land. Complementing the suburban landscape are community centers that provide a sense of community and architectural style and have composition that creates integrity and intactness in visual quality.

Open space accounts for about 26 percent of the study area and primarily comprises forest preserves, parks, and other undeveloped land. Preliminary field reconnaissance of the land near the proposed improvements shows that most of the open space habitat consists of old field successional areas and degraded woodlands of low to moderate quality. Nestled among the developed landscape is the Ned Brown Preserve, the largest forest preserve in the study area, and several adjacent to the Des Plaines River, both in Cook County. There is also a cluster of forest preserves near the southwestern part of the study area in DuPage County. In general, the largest contiguous open spaces within the study area are located along the Des Plaines River and Salt Creek, or adjacent to existing transportation corridors (such as I-290 and Des Plaines River Road). These facilities are most sensitive to visual

change and not only offer visual amenity; they also serve ecological and recreational purposes, such as habitat and wildlife corridors and trails.

Determining the potential effects of the project's visual resources requires identification of the visual quality of the study area and an understanding of potential viewers, the infrastructure to be installed, and the alteration such infrastructure has on the various levels of view, both near and far.

The degree to which viewers can be affected by changes to the visual environment varies with their financial and emotional investment in the aesthetic quality of the land and their urban surroundings. For example, people who reside or work near the project corridor may be affected to a greater degree by changes in visual character than people who spend very little time in and have little connection to that area. Even though a project may not alter the basic view within an urban environment, a change in distance of view length could change a viewer's perception, from open to enclosed space.

2.9 Air Quality

Chicago is the third largest metropolitan area in the nation, with a large number of both industrial and vehicle air emission sources. The USEPA National Ambient Air Quality Standards (NAAQS) set maximum allowable concentration limits for six criteria air pollutants. Table 2-23 lists the NAAQS. The primary standards are established at levels that are intended to protect the public health. Secondary standards are required to protect the public welfare from any known or anticipated adverse effects of a pollutant. One exceedance of the 24-hour standard for $PM_{2.5}^{31}$ was recorded in the study area, while no exceedances or violations within the study area were recorded for carbon monoxide, lead, and nitrogen dioxide. Ozone, PM_{10} , and sulfur dioxide were not monitored in the study area.³²

TABLE 2-23 National Ambient Air Quality Standards

| Pollutant | Primary Standards | | Secondary Standards | |
|--|--------------------------------|--------------------------|---------------------|-------------------|
| | Level | Averaging Time | Level | Averaging Time |
| Carbon monoxide | 9 ppm (10 mg/m ³) | 8-hour ^a | None | |
| | 35 ppm (40 mg/m ³) | 1-hour ^a | | |
| Lead | 0.15 μg/m ^{3 b} | Rolling 3-month average | Same as primary | |
| | 1.5 μg/m ³ | Quarterly average | Same as primary | |
| Nitrogen dioxide | 0.053 ppm (100 μg/m³) | Annual (arithmetic mean) | Same as primary | |
| Particulate matter (PM ₁₀) | 150 μg/m ³ | 24-hour ^c | Same as primary | |

 $^{^{31}}$ PM $_{2.5}$ is particulate matter 2.5 micrometers or smaller.

³² PM₁₀ is particulate matter 10 micrometers or smaller.