

Glossary

100-year floodplain	The area delineated that has a one percent annual exceedance probability flood since it is a flood that has a one percent chance of being equaled or exceeded in any single year.
7460 review	The Federal Aviation Administration form used to guide reviews of airspace that the proposed project is located in; used to determine if the project is compatible with airspace and obstacle clearance requirements near airport operations.
access-controlled highway	A high-speed roadway facility accessed only by interchanges.
aesthetic design guidelines	The set of recommendations for enhancing visual quality of the structural and landscaped features associated with the project. The aesthetic design guidelines were developed by the project Corridor Aesthetic Advisory Team, an organization of project team members and stakeholders.
Affected Environment	Existing biological, physical, social, and economic conditions of an area subject to change, both directly and indirectly, as a result of a proposed human action.
Airfield Operations Area (AOA)	Any area of an airport used or intended to be used for landing, takeoff, or surface maneuvering of aircraft. An AOA includes such paved areas or unpaved areas that are used or intended to be used for the unobstructed movement of aircraft in addition to associated runway, taxiways, or apron.
Airport Layout Plan	The official, Federal Aviation Administration-approved map of an airport's facilities.
alternate	A potential type of improvement (e.g., facility or interchange type) where multiple possibilities exist.
Approach Lighting With Sequenced Flashers (ALSF)	Radiating light beams guiding pilots to the extended centerline of the runway on final approach and landing.
arterial	A class of roads serving major traffic movements (high speed, high volume) for travel between major points.

at-grade crossing	A location where two roadways or railroads intersect.
avoidance	The ability to modify the proposed design to eliminate the need to impact a resource.
benthic	bottom dwelling
best management practices (BMP)	Water pollution control techniques implemented during the course of a project.
bidirectional	Travel in two, usually opposite, directions.
biota	The animal and plant life of a particular region or habitat.
buffer	A zone placed around a specified area to protect or reduce the potential impact from adjoining land use.
Build Alternative	The set of new improvements being proposed in this Draft Environmental Impact Statement.
common noise environments (CNE)	A group of receptors within the same Activity Category that are exposed to similar noise sources and levels, traffic volumes, traffic mix, traffic speed and topographic features.
compensatory storage	The creation of floodplain in return for filling in a floodplain elsewhere.
complete Build Alternative	The entire set of improvements, which include the initial construction phase and full build-out phase improvements, in the Build Alternative.
congestion management strategy	Method for increasing travel efficiency and reducing the number of single-occupancy vehicles without requiring the need for additional right-of-way. Congestion management strategies include, for example, implementing variable message signage, interconnected traffic signals on arterial streets, high-occupancy vehicle lanes, and toll pricing strategies.
construction sequencing	The act of implementing the proposed improvements in stages rather than constructing the entire project at once. The Elgin O'Hare - West Bypass project could be implemented in two stages.
consumptive recreation	Recreational activities that result in the harvesting of wildlife (e.g., fishing).

context-sensitive solutions (CSS)	A context-sensitive solutions approach to transportation planning adds consideration of the surrounding environment to the traditional components of design, including safety and geometry. Transportation planners apply flexible design techniques to fit roadway improvements into the context of a community or surrounding area. Community members provide planners with an understanding of the visual and other intangible aspects of the area that are meaningful to the community and should be represented or considered in the design of improvements.
continuous flow intersection (CFI)	An at-grade intersection system consisting of a main signalized intersection and a minor signalized intersection on one or more approaches. Left turning traffic is directed across the oncoming lanes at the minor intersection to a turning bay on the far left side of the roadway. This removes the conflict between left turning and oncoming traffic in the main intersection, allowing the left turn and opposing through phase to operate simultaneously.
cooperating agency	An agency with regulatory jurisdiction or expertise in an environmental resource relevant to the project; a cooperating agency is involved early and regularly in the National Environmental Policy Act process. A cooperating agency provides relevant information related to its resource of expertise and provides input on the project's purpose and need, alternatives screening analysis, build alternative(s), and preferred alternative.
cultural resources	Archaeological artifacts or structures with architectural integrity that adequately represent history and culture.
cumulative impact	An effect on a resource that results from not only the current project, but also other projects in the vicinity that have occurred, are occurring, or will occur in the reasonably foreseeable future.
cumulative impacts	Effects that result from an action when added to other past and reasonably foreseeable future actions regardless of what agency (federal or non-federal) or person undertakes such other actions.
decibel A-weighted (dB[A])	The measurement of sound frequencies adjusted to a scale (A) that measures the way an average person hears sound.
detention	Temporary storage of stormwater runoff.

direct impact	An immediate effect on a resource resulting solely from the proposed action.
easement	An amendment to property ownership that allows for temporary or permanent access to the property by another entity.
economic output	The measure of goods and services used and produced, as quantified in dollars.
Elgin O'Hare corridor	The portion of the project that is along the Elgin-O'Hare Expressway and Thorndale Avenue between the western terminus and O'Hare Airport.
emergent	Wetland vegetation that is rooted below water but grows above the water line.
environmental consequences	The potential impacts a project or alternatives could have on the natural and human environment.
environmental justice	The fair treatment and meaningful involvement of all people regardless of race, color, sex, national origin, or income with respect to the development, implementation and enforcement of environmental laws, regulations, and policies.
environmental justice evaluation	The assessment of the project to determine if it has a disproportionate impact on low-income and/or minority populations.
EO-WB Advisory Council	A collection of individuals that made recommendations to the Governor of Illinois on implementation, financing, and operation of the Elgin O'Hare - West Bypass project.
ephemeral	Streams that flow for fleeting periods only, such as following snow melt or rain events.
equivalent sound level (L_{eq})	The equivalent steady-state sound level, which represents the average sound level on an hourly basis.
eutrophication	Excessive richness of nutrients in a lake or other body of water, frequently due to runoff from the land, which causes a dense growth of plant life.
facility types	Options for applying tolls to all, some, or none of the proposed improvements.
floodplain	That land near a body of water with ground surface elevation at and below the 100-year frequency flood elevation.

floodway	The channel and that portion of the floodplain adjacent to a stream or watercourse that is needed to store and convey the anticipated future 100-year frequency flood discharge with no more than a 0.1 foot increase in flood stage, and no more than a 0.1 percent increase in velocities due to the loss of flood conveyance and storage.
fragmentation	The breaking down of larger habitats into smaller pieces either through geological processes or by human activity, such as land conversion, roadways, and fencing.
freeway	A controlled-access highway that is designed and built specifically for high-speed vehicular traffic, with no fees for usage.
frontage road	A road paralleling a higher-type facility used for providing local access that was terminated when the higher-type facility was implemented.
full build-out phase	The second set of improvements included in the Build Alternative to be implemented between 2035 and 2040.
Geographic Information System (GIS)	A computerized system for manipulating and displaying geographic-based information.
glideslope	An electronic beam that provides vertical guidance for aircraft on final approach.
Hazardous wildlife attractant	Wildlife species that are commonly associated with wildlife-aircraft strike problems, are capable of causing structural damage to airport facilities, or act as attractants to other wildlife that pose a wildlife-aircraft strike hazard. Any human-made structure, land use practice, or human-made or natural geographic feature, that can attract or sustain hazardous wildlife within the landing or departure airspace, aircraft movement area, loading ramps, or aircraft parking areas of an airport. These attractants can include but are not limited to architectural features, landscaping, waste disposal sites, wastewater treatment facilities, agricultural or aquacultural activities, surface mining, or wetlands.
heavy metals	Elements such as copper, lead, and zinc, which can be found in water or associated sediment.
herbaceous	A plant that has leaves and stems that dies down at the end of the growing season to the soil level; not a woody plant.

heritage characteristics	Features of wetlands that provide habitat for state- or federal-listed species, have high floristic quality value, or are located in designated lands, such as Illinois Nature Preserves, natural areas, forest preserves, parks, and wildlife refuges.
hot-spot analysis	An estimation of future concentrations of pollutants in a localized portion of a nonattainment area, rather than the entire nonattainment area.
hydric soil	Soil that formed under conditions of saturation, flooding, or ponding long enough during the growing season to develop anaerobic conditions in the upper part.
hydrophytic vegetation	The community of plants that occurs in areas where inundation or soil saturation is either permanent or of sufficient frequency and duration to influence the existence of plants.
impairment	The inability of a segment of water to meet its designated use(s).
impervious surface	Land cover that does not allow water to pass through it (e.g., pavement).
indirect impact	An effect on a resource by the proposed project that occurs later in time or is located farther away, but is still reasonably foreseeable.
infiltration	The movement of water into the underlying substrate.
initial construction phase	The first set of improvements included in the Build Alternative to be implemented between 2013 and 2025.
interchange type study area	A portion of the project corridor within which interchanges were analyzed. In some cases, the interchange type study areas spanned multiple interchange locations because the interchange types influenced operations of other interchanges in the same study area.
intermittent	Streams that flow for only a portion of the year.
interspersed	A mixture of plant community habitat types within one area.
lacustrine	Pertaining to, produced by, or formed in a lake.
lead agencies	The signatories of the environmental impact statement.

level of service (LOS)	The ability of a roadway to provide the capacity for the volume of vehicles using it. Level of service is measured on a scale from A to F.
local-access interchange	An interchange that provides access from an access-controlled facility to a local roadway.
localizer	The portion of an instrument landing system that gives left/right guidance information down the centerline of the instrument runway for final approach.
lotic	Inhabiting or situated in rapidly moving fresh water.
minimization	Activities taken to reduce the adverse impact of an action.
mitigation	Activities taken to compensate for an adverse impact of an action.
Mobile Source Air Toxics (MSAT)	A subset of the 188 air toxics defined by the Clean Air Act that are emitted from highway vehicles and non-road equipment.
MOVES model	This new emission modeling system estimates emissions for mobile sources covering a broad range of pollutants and allows multiple-scale analysis. MOVES currently estimates emissions from cars, trucks, and motorcycles.
National Ambient Air Quality Standards (NAAQS)	The maximum concentration limits for six criteria pollutants – carbon monoxide, lead, nitrogen oxide, particulate matter (10 micrometers and 2.5 micrometers in diameter – ozone, and sulfur dioxide) as allowed by U.S. Environmental Protection Agency.
National Environmental Policy Act (NEPA)	Enacted in 1969, the National Environmental Policy Act requires a major federal action to take into consideration the impacts that action will have on environmental resources. The environmental considerations are disclosed in an environmental impact statement.
navigational aids	Any visual or electronic device, airborne or on the surface, which provides point-to-point guidance information or position data to aircraft in flight.
NEPA/404 merger process	A process by which the National Environmental Policy Act and Clean Water Act Section 404 requirements are considered concurrently at regularly scheduled meetings with the group of federal and state regulatory resource agencies with jurisdiction or expertise over resources pertinent to transportation projects that are subject to National Environmental Policy Act and Section 404.

No-Build Alternative	A consideration of expected future outcomes if the proposed project were not built. For the Elgin O'Hare – West Bypass project, the No-Build Alternative includes projects in the vicinity that are included in the Chicago Metropolitan Agency for Planning <i>GO TO 2040 Comprehensive Regional Plan</i> (excluding this project) and the Illinois Department of Transportation <i>Fiscal Year 2012-2017 Statewide Transportation Improvement Program</i> .
noise abatement criteria (NAC)	Thresholds of sound that the Federal Highway Administration uses to determine noise impacts to various types of noise receptors. NACs define sound levels at or above the thresholds that constitute a noise impact and require the evaluation of noise abatement measures.
noise wall	A structure that is erected along roadway improvements to mitigate noise levels constituting an impact to sensitive noise receptors.
nonattainment area	A geographical area within which an air pollutant exceeds the maximum allowable concentration as regulated by the U.S. Environmental Protection Agency.
non-jurisdictional	Wetlands or waters that are not regulated by the U.S. Army Corps of Engineers.
nonstructural BMP	A technique that consists of operation or guidance in lieu of a physical object or structure performing a pollutant-removal service.
nutrient enrichment	Increased nutrient loading (in bodies of water).
palustrine	Relating to a system of inland, nontidal wetlands characterized by the presence of trees, shrubs, and emergent vegetation (vegetation that is rooted below water but grows above the surface). Palustrine wetlands range from permanently saturated or flooded land (as in marshes, swamps, and lake shores) to land that is wet only seasonally (as in vernal pools).
peak hour	The hour(s) in a day with the highest volume of vehicles.
perennial	Describes streams that flow throughout the year.
pervious surface	A land cover that allows water to pass through it.

planning horizon	The period of time considered for a project. For the Elgin O’Hare – West Bypass project, it is 2010 to 2040, where 2010 is the existing year and 2040 is the year for which improvements have been designed. Conditions in 2010 are used as a baseline for projecting conditions in 2040. Planning for conditions in year 2040 are consistent with the Chicago Metropolitan Agency for Planning <i>GO TO 2040 Comprehensive Regional Plan</i> planning year.
pollutant loading	The total quantity of pollutants in stormwater runoff.
potable water	safe drinking water
project area	For the Elgin O’Hare – West Bypass project, the project area is the area surrounding the project corridor.
project corridor	The area located within the proposed limits of the Elgin O’Hare – West Bypass project.
project footprint	The area within the construction limits.
project-level conformity	The ability to demonstrate that a project will not cause violations of National Ambient Air Quality Standards. This is required when a project is located in a nonattainment or maintenance area.
purpose and need	The goal(s) of the project and the reasons for proposing improvements.
quadrant bypass	Independent roadway alignment along which conflicting traffic movements are rerouted in advance of the main intersection.
regulatory resource agencies	Agencies that regulate involvement with natural resources; these include U.S. Environmental Agency, U.S. Army Corps of Engineers, U.S. Fish and Wildlife Service, Illinois Environmental Agency, and Illinois Department of Natural Resources.
riparian	Describes the area of land habitat adjacent to a creek, stream, or river that is influenced by the adjoining body of water.
riverine	Describes the habitat immediately in or adjacent to a creek, stream, or river.
runway protection zone (RPZ)	A trapezoidal area off the end of a runway on which development is restricted; an RPZ provides enhanced protection for people and property in the event that an aircraft needs the space beyond the runway.

Safe, Accountable, Flexible, Efficient Transportation Equity Act A Legacy for Users (SAFETEA-LU)	SAFETEA-LU was enacted in 2005 to apportion funds for transportation projects, including this project, and update regulations on transportation projects. Amongst the updated regulations were opportunities for expanding public involvement during transportation projects. This includes the addition of “Participating Agency” as a category for participation in the public involvement process and the requirement to involve the public not only in the determination of the project’s purpose and need but also in alternatives to be considered in the Draft Environmental Impact Statement.
Section 4(f)	The section in the U.S. Department of Transportation Act of 1966 that requires significant public recreational properties and resources of historic importance to be considered when federal transportation projects are undertaken. In 2008, the Federal Transit Administration and Federal Highway Administration published a new, comprehensive rule for governing Section 4(f) approvals, which includes changes required by SAFETEA-LU and clarifications of the original regulation. Although the location where the complete guidance is found is in the Code of Federal Regulations (23 CFR 774), the term “Section 4(f)” is still universally used to identify the regulation and the protected resources.
socioeconomic	Relating to, or involving a combination of social or economic factors.
State Implementation Plan	The strategy that the state agency overseeing air quality identifies for bringing a nonattainment area into compliance with National Ambient Air Quality Standards, as required by the U.S. Environmental Protection Agency.
study area	For the Elgin O’Hare – West Bypass project, the study area refers to the area studied in Tier One.
substrate	The bedding material of a creek, stream, river, wetland, or lake.
system interchange	The connection between two fully access-controlled facilities.
threatened and endangered species	Species whose numbers are diminishing enough to cause concern as identified by the U.S. Fish and Wildlife Service, the U.S. Commerce Department, and states. Such species are protected by the Endangered Species Act.

tiering	The process of addressing a project in multiple (typically two) steps wherein the first step identifies the general project area within which the alternatives would be developed to address the purpose and need, and the second step includes the detailed design of alternatives, a more accurate evaluation of environmental impacts, and the identification of specific avoidance, minimization, and mitigation measures. Tier Two is more aligned with what occurs during the development of typical environmental impact statements.
toll road	A controlled-access highway that is designed and built specifically for high-speed vehicular traffic that charges a fee for usage.
transportation management strategies (TMS)	Methods for increasing travel efficiency and reducing the number of single-occupancy vehicles without requiring the need for additional right-of-way. Similar to congestion management strategies, TMS strategies include implementing variable message signage, interconnected traffic signals on arterial streets, high-occupancy vehicle lanes, and toll pricing strategies.
value added	Represents the difference between total revenue and the purchase of materials and services from other entities.
watershed	The mutual area of land from which all of the runoff drains to the same place, or the area circumscribed by a drainage divide.
West Bypass corridor	The portion of the project that bypasses O'Hare Airport along its west side from Interstate 90 to Interstate 294.
West Terminal	A future passenger terminal proposed for the west side of O'Hare Airport, near the terminus of the Elgin-O'Hare Expressway.
wetland enhancement	Completion of management tasks to improve the health, quality, and/or species diversity of an existing wetland area.
wetlands	From a regulatory perspective, wetlands are defined as those areas that are flooded or saturated by surface or groundwater at a frequency and duration sufficient to support, and that under normal circumstances do support, a prevalence of vegetation typically adapted for life in saturated soil conditions. Wetlands generally include swamps, marshes, bogs and similar areas.