

U.S. Route 45 (IL 132 to IL 173 and Millburn Bypass)

Frequently Asked Questions

This document provides responses to the frequently asked questions pertaining to the U.S. Route 45; IL Route 132 to IL Route 173 and Millburn Bypass project.

Below is this list of the frequently asked questions that are included. The Environmental Assessment (EA) and other project related documents are available for public review on the project website at: www.route45project.com.

- 1. Why was the western Millburn Bypass route chosen over the eastern Millburn Bypass route?**
- 2. Was public input taken into consideration for the Millburn Bypass?**
- 3. How was safety & health considered with the selected western Millburn Bypass alternative, which traverses the Forest Trail subdivision and is adjacent to the Heritage Trails subdivision?**
- 4. What role did Old Mill Creek, Lindenhurst, and adjacent property owners have in Millburn Bypass decision?**
- 5. Can a roundabout be used on this project like the roundabouts on Hunt Club Road?**
- 6. How is the Millburn Bypass being funded?**
- 7. What are the future plans for bicyclist accommodations?**
- 8. How was traffic noise evaluated as part of this project?**
- 9. Is vegetated screening being considered adjacent to the Forest Trail and Heritage Trails subdivisions?**
- 10. How will the Millburn Bypass affect property values?**
- 11. What will the State do to restrict truck traffic on U.S. Route 45?**
- 12. Why were the paths of the eastern bypass alternatives apparently shifted?**
- 13. How will the U.S. Route 45 project impact the Lake County Forest Preserves?**
- 14. Can a traffic signal be included at Independence Boulevard, Haven Lane, or at any of the Old U.S. Route 45 intersections?**
- 15. How will traffic be maintained during construction and what are the stages of construction?**
- 16. Why wasn't Wadsworth Road extended to U.S. Route 45?**

1. Why was the western Millburn Bypass route chosen over the eastern Millburn Bypass route?

Through the study process, and with significant input from the public and project stakeholders, 18 initial alternatives including east and west bypass alignments were evaluated and reduced to the three finalist alternatives that were presented at a Public Meeting in September 2011. The three finalist alternatives included two west bypass alternatives (A1 and A4) and one east bypass alternative (C4). The west bypass Alternative A4 was selected by the Illinois Department of Transportation (IDOT), the Lake County Division of Transportation (LCDOT), and Federal Highway Administration (FHWA), based on a number of distinguishing factors including stakeholder feedback, travel performance, environmental resource impacts, and design considerations for U.S. Route 45 based on its functional classification as a Strategic Regional Arterial (SRA) roadway, and compatibility with transportation and land-use plans, as summarized below.

The selected alternative (A4) includes both a west bypass of U.S. Route 45 and the re-alignment of Grass Lake Road to the south to create a four-legged signalized intersection with U.S. Route 45 and Millburn Road.

a) Transportation Performance¹

The Average Daily Traffic (ADT) for U.S. Route 45 at Millburn Road is projected to double to approximately 30,000 vehicles per day (more to the south, less to the north) in the year 2040 as compared to the current 16,000 vehicles per day. The increase in traffic along U.S. Route 45 is anticipated even if no improvements to U.S. Route 45 are made as a result of projected population and employment growth within the area.

Based on the analysis of projected year 2040 travel performance for all vehicles in the study area during the peak evening travel period, the west bypass Alternative A4 would have superior performance with the lowest cumulative travel time (99 hours as compared to 107 and 116 hours for Alternatives A1 and C4 respectively), the lowest cumulative travel delay (32 hours as compared to 38 hours for Alternatives A1 and C4), and the best p.m. peak level of service (LOS) for the main intersection of the U.S. Route 45 bypass and Grass Lake Road and/or Millburn Road (LOS C as compared to LOS D for Alternatives A1 and C4). LOS is based on average delay per vehicle (i.e.; additional travel time experienced as compared to free flow conditions) traveling through the intersection.

This amounts to a considerable travel time savings aggregated over a year, which also results in reduced road user costs due to reduced congestion and delay. A west bypass is also most compatible with the predominant northwest/southeast regional travel

¹ *The future traffic volumes used in the planning for this bypass are based on projections prepared by the Chicago Metropolitan Agency for Planning (CMAP) for the year 2040 and were requested for various design alternatives, including western bypass, on-alignment, and eastern bypass.*

patterns in the study area as discussed in the project Purpose and Need statement within Chapter 1 of the Environmental Assessment. These are considered by the Illinois Department of Transportation, the Lake County Division of Transportation, and the Federal Highway Administration as important transportation performance measures that distinguish Alternative A4.

b) Environmental Resource Impacts

The study area includes the Millburn Historic District, which is on the National Register of Historic Places. Section 106 of the National Historic Preservation Act of 1966 (NHPA) requires that Federal Agencies, and any agency using Federal funds, take into account the effects of their undertakings on historic properties listed on the Register. The goal is to seek ways to avoid, minimize or mitigate any adverse effects on historic properties. Locally, a State Historic Preservation Officer (SHPO) advises the Federal agencies and oversees compliance with Section 106.

For the U.S. Route 45 project, the west bypass is the only finalist alternative that completely avoids any impact and results in no adverse effect to the Millburn Historic District. The Illinois SHPO gave concurrence for a western bypass in the no adverse effect finding on January 14, 2013. The east bypass on the other hand, would require approximately 1.25 acres of property acquisition from the Historic District, and would separate the building of primary importance (the Strang House) from the remainder of the historic district buildings within the National Register boundaries. Another alternative suggested early in the selection process was widening existing U.S. Route 45 through the Historic District. This alternative was dismissed as it would require more land acquisition than all other alternatives and the demolition of several Historic properties. Even if parking was removed, there would be inadequate room to include the needed four lanes to handle the projected future traffic.

Since an alternative to impacting the Historic District is available that completely satisfy Section 106 of the NHPA, the Illinois Department of Transportation, the Lake County Division of Transportation, and the Federal Highway Administration considers the availability of a feasible alternate that avoids the Millburn Historic District a distinguishing factor for the selection of the west bypass.

c) Design Considerations

U.S. Route 45 is designated as a Strategic Regional Arterial (SRA) roadway based on it's continuity and connection to the regional roadway network, which means it inherently serves both regional long distance traffic and local traffic. On this basis, roadway design is an important consideration, particularly in light of some of the existing design deficiencies discussed in Chapter 1 of the Environmental Assessment, such as the existing curve of U.S. Route 45 north of Grass Lake Road. While each of the finalist alternative designs is considered feasible, the location and reverse curve design of Alternative C4 north of Millburn Road was required to avoid wetlands and the identified Historic Millburn Burial Site. While the reverse curve design meets all appropriate design standards, it is a less desirable feature of Alternative C4. This also

resulted in less than desirable intersection spacing between the Alternative C4 main intersection (U.S. Route 45 bypass and Millburn Road) and existing U.S. Route 45 which are not concerns with the west bypass finalist alternatives. These are considered as distinguishing factors for the finalist alternatives, particularly looking out to and beyond the year 2040 planning horizon.

d) Compatibility with Transportation and Land Use Plans

Both east and west bypass alternatives have been discussed since the early 1990s as part of the previous SRA study by the Illinois Department of Transportation (IDOT). As a result of these previous planning efforts, a west bypass alignment and right-of-way was recorded in 1995. As noted above, a west bypass alternative was approved by resolution from the Lake County Forest Preserve District (LCFPD) and by resolution of the Lake County Board in 1994. An intergovernmental agreement was executed in 1995 between Lake County, the LCFPD, the Village of Lindenhurst, the Lindenhurst Sanitary District, and Westfield Homes of Illinois, Inc. that acknowledges the cooperative planning efforts and mutual support for a west bypass of U.S. Route 45. The initial phase of the Heritage Trails subdivision was being planned during this same timeframe. The Heritage Trails subdivision appropriately backs up to the recorded west bypass right-of-way with additional buffer area. The Forest Trails subdivision was recorded in 1997 and incorporated the west bypass right-of-way, which was owned by the State of Illinois at the time. A west bypass is compatible with these previous planning efforts, and as noted above comprises two of the three Finalist Bypass Alternatives that emerged from the initial 18 potential bypass considered with the current study. This is considered a distinguishing factor for the finalist alternatives.

2. Was public input taken into consideration for the Millburn Bypass?

The Millburn Bypass was identified as a priority by the public during a series of public listening sessions held in 2004 and also at the Lake County Transportation Summits for local elected officials held in 2005 and 2006. Public involvement for the current U.S. Route 45 project started with a public information meeting in March 2009 where the public helped to define the project purpose and the full range of options to be considered. A Community Advisory Group (CAG) made up of project stakeholders was then formed and with their input 18 potential alternative concepts were identified for further study. With input from the CAG and other project stakeholders, this initial range of alternatives was narrowed to nine alternatives, and then eventually down to three finalist alternatives which included two west and one east. A second public meeting was held in September 2010 to provide an update of the project and present these finalist alternatives to the public. The Illinois Department of Transportation, the Lake County Division of Transportation, and the Federal Highway Administration based their decision on a technical evaluation and input from all project stakeholders, which includes individuals, organizations, and agencies with an interest in the project or that have a jurisdictional responsibility.

In summary, the development of this project was coordinated with the public through an open and transparent stakeholder involvement process.

3. How was safety & health considered with the selected western Millburn Bypass alternative, which traverses the Forest Trail subdivision and is adjacent to the Heritage Trails subdivision?

Safety is a key design objective for this project, as with any LCDOT and IDOT project. The proposed realignment of U.S. Route 45 will improve motorist safety by reducing traffic congestion/delay/frustration along U.S. Route 45 and with realignment of Grass Lake Road to form a single intersection as opposed to the two offset intersections that exist today. A total of 159 crashes occurred within the existing Millburn Bypass study area with 61 crashes (39%) occurring at the existing Grass Lake Road and Millburn Road intersections between 2007 and 2011. The high incidence of Rear-End and Turning crashes is an indication of the recurring congestion at this location. Improvements such as adding lanes, elimination of the offset intersection and smoother curves, are being made to U.S. Route 45 to reduce congestion and improve safety.

Regarding safety for pedestrians and bicyclists, accommodations for a 10 foot wide bike path are included for the west side of U.S. Route 45 that will provide improved connectivity north and south along this corridor for non-motorized traffic. Accommodations for a 5 foot wide sidewalk are included along the east side of U.S. Route 45. Added sidewalks and bike paths will improve the feeling of separation between the roadway and adjacent land uses and also the safety for non-vehicular traffic.

A traffic barrier warrant analysis was completed as part of the engineering studies and the only locations where roadside barriers are warranted is at the crossings of Millburn Creek and the Tributary to Millburn Creek south of Haven Lane.

The completed environmental studies determined that this project meets the National Ambient Air Quality Standards per the Clean Air Act. Please see section 3.4 of the Environmental Assessment for more details.

4. What role did Old Mill Creek, Lindenhurst, and adjacent property owners have in Millburn Bypass decision?

Representatives from the Villages of Old Mill Creek and Lindenhurst, and adjacent property owners were members on the Community Advisory Group (CAG). The role of the CAG was to provide input to the project team. For the full list of communities, agencies, organizations, and individuals represented on the CAG please see Table 4-2 in the Environmental Assessment (EA) available on the project website.

As mentioned, the project team ultimately based the decision on the consideration of the input received from all project stakeholders and the results of the detailed engineering and environmental studies.

5. Can a roundabout be used on this project like the roundabouts on Hunt Club Road?

Roundabouts have the potential to improve safety and reduce motorist delay as compared to signalized or stop controlled intersections. A roundabout was considered for the U.S Route 45 at Grass Lake Road intersection. However, a signalized intersection is the superior design for the U.S. Route 45 and Grass Lake Road intersection due to several factors including the split between traffic volumes on the major (U.S. Route 45) and minor (Grass Lake Road) roadway, the high amount of turning vehicles, and less than standard level-of-service for various movements.

6. How is the Millburn Bypass being funded?

Funds for the bypass section were secured through the SAFETEA-LU Federal Highway Bill, the RTA Transportation Empowerment Funds for Lake County, and State funding. The Transportation Empowerment Funds are county-wide sales tax revenue designated specifically for transportation and public safety projects. For the IDOT and LCDOT, roadway funds are separate from other funding, such as for schools, and are designated only for transportation purposes. These funds cannot be used for other such purposes. The estimated cost for construction of the bypass is \$16.75 million.

The reconstruction of U.S. Route 45 south of the Millburn Bypass to IL Route 132 and north of the Millburn Bypass to IL Route 173 is not currently included in IDOT's Fiscal Year 2014 to 2019 Proposed Highway Improvement Program, and will be considered for inclusion in future programs.

7. What are the future plans for bicyclist accommodations?

Accommodations for a 10 foot wide bike path are proposed along the west side of U.S. Route 45 that will provide improved connectivity north and south of Grass Lake Road. A bike path along the western Millburn Bypass is also most compatible with the regional LCFPD trail objectives, providing direct connectivity to McDonald Woods trails and the Millennium Trail bike path system, and also allows for future connectivity to other forest preserves to the north and south. The bike path along the western Millburn Bypass is also most compatible with planned Village of Lindenhurst Park District bike facilities to the west. Access to the bike path from the east side of U.S. Route 45 will be provided at the signalized intersection of U.S. Route 45 and Grass Lake Road. A pedestrian/bicyclist bridge or tunnel was considered but is not planned across U.S. Route 45 near Haven Lane as part of this project due to additional property impacts resulting from ramp design requirements.

8. How was traffic noise evaluated as part of this project?

The traffic noise study was performed consistent with both IDOT policy and FHWA regulations, and is discussed in detail in the Environmental Assessment. The first step in assessing traffic noise impacts is to determine if there are noise sensitive land

uses with the potential to be impacted by existing traffic noise and/or traffic noise from the proposed project. Residential receptors are considered to be noise sensitive and therefore a traffic noise analysis was conducted for the U.S. Route 45 project due to the proximity of the residential receptors. As required, a computer model (Traffic Noise Model, otherwise known as TNM) was used to predict traffic noise levels for the Existing Scenario (2011), the No-Build Scenario (2040 traffic with no improvements) and the Build Scenario (2040 traffic with improvements) under peak-traffic hour conditions assuming free-flow conditions since traffic noise is generated by the tires on the pavement, along with engine and exhaust noise. All these occur at the same time when traffic is moving at normal speeds. Traffic idling or even moving at a slow speed is generally limited to exhaust and engine noise. Once each of these scenarios is predicted using TNM, traffic noise impacts are identified in locations where the Build Scenario (2040) traffic noise levels approach or exceed the Noise Abatement Criteria (NAC) of 67 dB(A) for residential receptors. IDOT considers 66 dB(A) as the noise level that approaches the NAC, so every location with a Build Scenario noise level of 66 dB(A) or higher is determined to be impacted. Field noise measurements were obtained in select locations to validate the noise levels predicted using TNM for the Existing Scenario, but were not used to determine if there are traffic noise impacts.

As a result of the relocation of U.S. Route 45 and Grass Lake Road, there are properties that will see a reduction in traffic noise, and properties that will see an increase in traffic noise. In areas where traffic noise will increase and approach or exceed the Noise Abatement Criteria level (NAC) of 67 dB(A), the benefits of noise abatement walls in accordance with IDOT and FHWA requirements were evaluated. There are instances where a noise abatement wall will not work due to openings for access roads such as along Haven Lane to the west. In other locations, such as along Haven Lane to the east and along the Heritage Trails subdivision, there are not enough residences that would benefit (5 dB(A) reduction in traffic noise levels) from a noise abatement wall to allow the walls to meet the IDOT and FHWA allowable cost per benefitted receptor criteria. On this basis, noise abatement walls will not be constructed along the bypass or at any other locations along U.S. Route 45 within the full EA limits.

9. Is vegetated screening being considered adjacent to the Forest Trail and Heritage Trail subdivisions?

Landscaping will be incorporated along the Forest Trail and Heritage Trails subdivisions. Although this landscaping will not provide a traffic noise abatement benefit, it will provide aesthetics and visual screening between U.S. Route 45 and the residences. This will include planting of trees/shrubs focused in these areas in accordance with IDOT's tree replacement policy. Along the Forest Trail subdivision, since there is very limited opportunity to include plantings within the right-of-way previously purchased for this project by the State of Illinois, additional temporary construction easements are proposed in all four quadrants to provide a more robust visual screening.

Along the Heritage Trails subdivision, there is already a considerable amount of vegetation (trees/shrubs) in the area in between the proposed bypass and the subdivision. This area will also be looked at for additional plantings to further increase the visual buffer. Both locations provide opportunities for the Villages to consider specialty landscape features such as Village gateways, etc., which may require Village cost participation and agreement to maintain these special features.

10. How will the Millburn Bypass affect property values?

The effect of a roadway project on property values is difficult to discern since there are a number of factors that could lead to an individual's perception including improved transportation and accessibility, proximity, or other factors. A western Millburn Bypass has been included in land use plans since the mid 1990's, which is anticipated to have been reflected in home values. The Illinois Department of Transportation does not reimburse or collect from property owners for any positive or negative changes to property values which may or may not have been caused by roadway projects.

11. What will the State do to restrict truck traffic on U.S. Route 45?

Truck traffic cannot be prohibited on a state marked route, such as U.S. Route 45. U.S. Route 45 is also designated a Strategic Regional Arterial (SRA) and Class II truck route since it serves a regional/longer distance travel function. Based on 2009 traffic counts, there is approximately 8 to 14.5 percent truck traffic along this section of U.S. Route 45 on average. Because this corridor is absent any site specific truck traffic growth factors (e.g. a new trucking terminal within the project limits or industrial developments), the amount of truck traffic is not anticipated to appreciably change. As always, local law enforcement should be diligent in enforcing all laws such as speed and weight limits, engine braking (as applicable), etc.

12. Why were the paths of the eastern bypass alternatives apparently shifted?

East bypass alternatives C1, C2, and C4 were initially presented at the third CAG meeting in April 2010. Alternatives C1 and C2 were discarded subsequent to this meeting due to impacts to the Millburn Historic District, higher costs, and less favorable transportation performance as compared to the other remaining alternatives. Alternative C4 was carried forward for further consideration and development. In May 2010, the Illinois State Archeological Survey (ISAS), as a part of their cultural surveys for the project, identified the Historic Millburn Burial Site which was impacted by the Alternative C4 design. In accordance with Federal and State laws, modifications to Alternative C4 were considered with the obligation to first avoid, then minimize or mitigate impacts to the burial site. A modification of Alternative C4 that avoids the burial site was determined to be feasible with a series of reverse superelevated curves. The revised Alternative C4 was presented at the fourth CAG meeting in August 2010 and subsequently the second Public Meeting in September 2010.

13. How will the U.S. Route 45 project impact the Lake County Forest Preserves?

The Millburn Bypass will pass through the northeastern part of McDonald Woods. This will require the acquisition of 3.14 acres of McDonalds Woods for the roadway, and an additional 7.13 acre remnant parcel east of the bypass that will be disconnected from the remainder of McDonald Woods. This area will be used for storm water detention and water quality best management practices, as well as to preserve higher quality wetlands within this parcel. The LCFPD has concurred that the west Millburn Bypass and the associated property acquisition will not adversely affect the function and use of McDonald Woods.

A section U.S. Route 45 north of Miller Road requires approximately 0.315 acres of direct property acquisition and 0.174 acres of temporary construction easement from the Raven Glen Forest Preserve for the proposed widening of U.S. Route 45. The LCFPD has concurred that the proposed future improvements to U.S. Route 45 and the associated property acquisition will not adversely affect the function and use of the Raven Glen Forest Preserve.

The LCFPD is in support of the proposed U.S. Route 45 improvements, including the western Millburn Bypass, as being consistent with their trail plans and connections.

14. Can a traffic signal be included at Independence Boulevard, Haven Lane, or at any of the Old U.S. Route 45 intersections?

Intersections with traffic signals shown in the proposed plan are the only locations where they meet traffic signal warrants based on IDOT criteria. The traffic signal at U.S. Route 45 and Grass Lake Road will create periodic gaps in traffic on U.S. Route 45 at old U.S. Route 45, Haven Lane, and Independence Boulevard. Additionally, the current traffic signals at existing U.S. Route 45 and Grass Lake Road and Millburn Road will be removed after completion of the bypass construction. With removal of the existing traffic signals, the Millburn Road intersection will be free flow on the realigned Grass Lake Road/Millburn Road and stop sign controlled on the local legs ("Old U.S. Route 45"). The intersection of existing Grass Lake Road and "Old U.S. Route 45" will be converted to free flow on Old U.S. Route 45 and stop controlled on existing Grass Lake Road. Temporary traffic signals during construction are not expected, however existing traffic signals will not be removed until after the new signal is operational. A signal at Country Place and Sand Lake Road is outside the project limits and is not included as part of this project.

15. How will traffic be maintained during construction and what are the stages of construction?

Traffic flow will be maintained through the project limits during construction of the Millburn Bypass and Grass Lake Road realignment, with access being maintained on existing U.S. Route 45, Grass Lake Road, Country Place, Haven Lane, Heritage Drive and Independence Boulevard as well as residential and commercial driveways. In general, substantial portions of the new bypass can be constructed without

interruption to the existing roadway network. For the portions of improvements that involve the existing roadways, construction will be carried out using temporary widening on existing shoulders and generally staged to shift traffic to one side of the roadway while the other is being reconstructed. Two main stages of construction are anticipated. The first stage involves construction of the U.S. Route 45 Bypass (which will have very minimal impact to existing traffic flows) and the second stage involves shifting traffic onto the new bypass and realigned Grass Lake Road while removing the existing roadways. Additional sub-stages may be required for utility relocations, local street connections, etc.

16. Why wasn't Wadsworth Road extended to U.S. Route 45?

This project focused on improvements to U.S. Route 45 from IL Route 132 to IL Route 173. The Wadsworth Road extension was investigated as a part of the range of 18 alternatives (Alternative C6) and was discarded for not satisfying the purpose and need of this project. Refer to section 2.3.2 of the Environmental Assessment.