



Randall Over 90 Public Information Meeting Script May 15 and May 16, 2023

SLIDE 1: Randall Over 90 Public Information Meeting

Hello and welcome to the Randall Over 90 public information meeting hosted by The Kane County Division of Transportation. Kane County appreciates your interest and involvement in this project.

My name is Mike Zakosek, and I am the KDOT project manager for the Randall Over 90 project. This live presentation will present the same information that will be presented at the in-person meeting scheduled for tomorrow May 16, and you will have the opportunity to provide input on the project and proposed Alternatives Under Consideration.

I would now like to introduce the consultant team Project Manager, Matt Papirnik from Burns & McDonnell, who will walk us through the project information our team has compiled.

SLIDE 2: Project Overview

Thank you, Mike for that welcome and introduction. As he mentioned my name is Matt Papirnik and I serve as the consultant team project manager. We have a very informative and full slate of information about the project to share with you today.

The purpose of the Randall Road at I-90 Corridor Improvement study, known as Randall Over 90, is to evaluate potential improvements to Randall Road between Big Timber Road on the south and IL 72 on the north, with a particular focus on the interchange with I-90 (the Jane Addams Memorial Tollway).

SLIDE 3: Project Development

Let's take a look at where we've been and preview where this project is headed. In August 2021, KDOT completed the Planning & Environmental Linkage or PEL strategy which consisted of early evaluations, analyses and preliminary studies within the corridor. KDOT selected a draft slate of Alternatives to be Carried Forward into Phase I made up of concepts from each of the three-focus areas within the corridor. KDOT started Phase I in August 2022 and began developing and creating end-to-end alternatives that were comprised of the concepts carried from the PEL. Through detailed analysis and robust evaluation criterion, KDOT has selected 5 alternatives which are under consideration. From these 5, KDOT will select one single Preferred Alternative that will be included in the final Project Development Report and submitted for approval by IDOT/FHWA. The Preferred Alternative is the alternative that KDOT believes will best accomplish the



project's Purpose and Need and will be the alternative that will carry over into Phase 2 for development of construction plans.

SLIDE 4: Project Purpose & Need Statement

Why does the Purpose & Need statement matter so much to our work? It provides a constant guide as to what's important, and it keeps us focused. If you look at the information we've compiled on this project over the years, you will constantly see references to Purpose and Need... because that is what matters most.

Any alternative selected by KDOT will demonstrably address the issues from the Purpose and Need Statement, better than the other ideas we've come up with. This provides stakeholders and the public with the assurance that whatever alternative KDOT selects is what all of us, including you the public, determined was most important.

SLIDE 5: Project Purpose & Need Statement

The project's purpose is to develop one or more infrastructure concepts which enhances mobility, improves safety, supports current and future travel demand and addresses economic and quality-of-life impacts throughout the corridor.

The needs for this project are:

- To relieve congestion, improve travel times, and provide for expected traffic growth
- Provide capacity improvements which mitigate very poor levels of service
- Improve safety performance by reducing impediments to smooth traffic flow
- Address deficiencies in existing roadway, bridge, and multimodal infrastructure

It is important to note that all of the Alternatives Under Consideration meet the project's Purpose and Need Statement. You can view the entire Statement on the home page of the project website.

SLIDE 6: Notable Updates Since the PEL Study

KDOT has made a number of updates since the PEL phase based on input from the public and stakeholders.

First, we removed I-90 flyover interchange concepts from consideration based on feedback with the Illinois Tollway. Next, the PEL study inspired the City of Elgin to construct improvements to Alft Lane at Randall Road, which are now underway and should be complete by the end of the summer.



North of Auto Mall Drive, we have relocated the proposed centerline of Randall Road farther to the west. This will allow better use of the available right-of-way secured by KDOT from development. It will also make it easier to avoid right-of-way acquisition from residential properties on the east side of Randall.

Finally, the jughandle concept has been adjusted to provide a southbound left turn lane into the Sanfilippo plant.

SLIDE 7: Traffic & Safety Analysis

As previously highlighted in the purpose and need statement for this project, both traffic and safety are key components of consideration when evaluating any proposed alternative against the existing and projected conditions of the Randall Road corridor.

Before any alternatives were drafted, it was deemed essential to provide an unbiased examination of the existing roadway conditions. In considering a foundation for comparison, the traffic analyses all incorporated projections of future traffic conditions combined with known planned improvements both immediately north and south of the study area. The evaluation at its core determined that the existing Randall Road corridor is fundamentally insufficient to accommodate both existing traffic conditions and the anticipated growth within the area; hence, the need for alternatives.

The analyses were then at liberty to explore distinct roadway improvements all directed towards reducing traffic queuing, improving key travel routes, and limiting the amount of congestion experienced while traveling along Randall Road.

Although effective traffic operations are inherently beneficial to drivers themselves, comprehensive safety is a related factor that is considered top priority for KDOT. Updated safety analyses showed that rear end collisions constituted a significant portion of the crash types along the corridor, particularly in the stretch between the I-90 interchange and the intersection of Auto Mall Drive with Randall Road. COVID-19 conditions even underscored the persistent safety concerns with a relatively consistent crash frequency rate, at a time when traffic volumes were considerably lower.

With driver safety in mind, the planned improvements to the Randall Road corridor all aim to meet the needs of drivers while also alleviating congestion to mitigate potential safety hazards.

SLIDE 8: Project Updates – Traffic Noise Analysis

A traffic noise analysis was performed in accordance with guidelines set forth by the IDOT, which have been approved by FHWA.



In order to justify the construction of a noise barrier, the following criteria shown on the screen must be met in terms of both feasibility and reasonableness. The justification for proposing a noise barrier depends on a variety of factors such as impacted noise receptors, topography and land use, safety, and cost.

In summary, a noisewall is eligible for Federal funding if it is found to provide a specific level of noise reduction at a cost of \$30,000 or less for each benefited receptor.

At this early stage in design, we are unsure if a feasible noisewall on the east side of Randall Road is going to meet the Federal cost/benefit standard for reasonableness. The spacing of benefited receptors in the Saddle Club neighborhood makes this difficult. Additionally, a noisewall on the east side of the road would have to be built on the right-of-way line, meaning that some additional right-of-way would have to be secured from adjacent parcels to allow for access and maintenance.

Moves by the design team to shift Randall Road towards the west, and to consider a wider median, may help with this issue. The shift will also improve opportunities to install beautification and landscape screening.

A noisewall on the west side of Randall north of Technology Way has been found to be feasible. A determination on reasonableness will require viewpoint solicitation of residents and property owners affected by the potential wall.

SLIDE 9: Alternatives Under Consideration

Now we will dig into the five Alternatives Under Consideration for the Randall Road corridor.

SLIDE 10: Alternatives Under Consideration – Signal Phasing

Before we get into the specific alternatives, we want to remind you of how impactful signal phasing can be for a corridor with numerous traffic signals such as Randall Road.

One of the keys to improving traffic flow on Randall Road is making its many traffic signals more efficient. KDOT has worked to optimize the timing of the existing traffic signals and while removing traffic signals would provide a traffic benefit, we also understand the importance of maintaining and ideally improving access to the businesses and residents along Randall Road. With this in mind, many of the Alternatives Under Consideration include interchange and intersection configurations that reduce the number of phases at the key intersections without eliminating entire traffic signals.



Signal phasing is what we call the process of deciding how long, and in what order, each movement at an intersection gets its “turn” to proceed. The top image shows the current signal phasing for Randall Road at eastbound I-90. It has three signal phases. One for the ramp traffic turning both directions onto Randall Road. A second for both southbound through traffic and left turns onto I-90. And the third and final phase provides a green light for both northbound and southbound through traffic. The more phases you have means less “go time” or green lights for drivers. Less green time means an increased likelihood of queueing and backups. The southbound left turn movement from Randall Road onto eastbound I-90 is a perfect example of this issue.

The bottom image shows the same intersection with two phases. One for the ramp traffic to Randall Road and another for through traffic on Randall Road; allowing an increase in green time for Randall Road traffic. We understand that the solution here is not simply removing access to I-90. You can see a blue arrow that shows “ramp” traffic as well in the northeast quadrant of the intersection. This arrow represents the left turning traffic which has been re-routed to bypass the intersection. You can see that the signal phasing without that movement is much simpler. It allows for increased green light time because there is no longer a need to provide green time for that southbound left.

SLIDE 11: Alternatives Under Consideration – Alternative 1

Alternative 1 incorporates a partial clover leaf, commonly coined as ‘Parclo’, at the interchange of I-90 and Randall Road. The loop ramp services southbound Randall Road traffic destined towards eastbound I-90. The arterial to freeway connection provides additional capacity to support the high demand that would traditionally be performing a southbound left at the eastbound ramp terminals. In isolating this movement to a separate structure, not only is the movement in highest demand improved, but the entire interchange is positively influenced from an operations standpoint as a result.

To the north and south of the I-90 interchange, a proposed widening from 4 lanes to 6 total lanes is proposed to enhance capacity and retain lane consistency.

The proposed widening north of the I-90 interchange is included in all of the Alternatives Under Consideration.

SLIDE 12: Advantages and Limitations of Alternative 1

Alternative 1 offers improvements to travel times across the roadway network through means of isolating a single movement with a consistently high volume across peak periods. The alternative also maintains access at the intersection of Alft Lane and Randall Road as no geometric reconfigurations are proposed beyond widening the road.



Now while Alternative 1 provides fundamental improvements to the Randall Road facility, the alternative does encounter a set of limitations. The proposed “Parclo” interchange would require complete reconstruction of the existing interchange and requires Right-of-Way for both the southbound approach to the interchange and the looping ramp structure itself. Furthermore, Alternative 1 provides minimal improvement at the westbound ramp terminals, which are a notable source of congestion.

SLIDE 13: Alternatives Under Consideration – Alternative 2

Alternative 2 comprises both the “Parclo” interchange configuration and the road widening north of the I-90 interchange. The distinct difference with Alternative 2 is the incorporation of a “jughandle” intersection design for Alft Lane.

How does this unusual-looking configuration improve traffic? It works by combining four movements – the northbound left turn onto Alft, and the three movements out of the Sanfilippo plant – into a single two-phase traffic signal slightly to the north. Traffic which wants to travel from northbound Randall to westbound Alft exits Randall on the right, travels around the jughandle to a new intersection, then doubles back on southbound Randall and exits to Alft at an unsignalized right turn.

SLIDE 14: Advantages and Limitations of Alternative 2

Alternative 2 experiences similar benefits and limitations noted with Alternative 1, considering the Parclo configuration at the I-90 interchange and the road widening north of I-90 are consistent between the alternatives.

The significant difference is found at the Alft Lane and Randall Road intersection. This geometric reconfiguration not only reduces delays for Randall Road through traffic and Alft Lane exit movements, but also contributes to intersection safety as the jughandle eliminates the need for drivers to make a traditional left turn at the highly trafficked intersection of Alft Lane and Randall Road. While there **is** some extra travel distance to get to Alft, the wait at the new signal is very likely to be shorter than the wait time now. The remaining Alft signal will now require three phases instead of four, resulting in shorter waits for traffic on Randall and on the west leg of Alft Lane.

Though the split intersection layout enhances traffic operations, it affects access out of the Sanfilippo plant, and requires Right-of-Way acquisition from Sanfilippo and for the Parclo interchange. There is also an additional cost in introducing a new signalized intersection and adding large amounts of new pavement between Alft and I-90.



SLIDE 15: Alternatives Under Consideration – Alternative 3

Alternative 3 proposes a displaced left at the I-90 and Randall Road interchange. The displaced left interchange type refers to a ramp configuration that diverts left turning traffic to a separate structure left of the opposing directions through lanes.

Similar to Alternative 1, a proposed widening from 4 lanes to 6 total lanes is proposed north and south of the I-90 interchange.

Specific to the Randall Road design, northbound Randall Road traffic destined to merge onto westbound I-90, must first cross-over the main eastbound ramp terminal intersection to access the westbound I-90 on-ramp rather than performing a traditional left at the westbound ramp terminal. Eastbound left traffic originating from the I-90 eastbound off-ramp is prompted to turn onto the displaced left bridge structure and similarly “crosses over” the mainlanes at the westbound ramp terminal.

With optimized signal timings, this design provides additional capacity for two highly trafficked travel routes. The layout would require additional pavement markings and adequate signage to assist drivers in navigating the interchange safely.

SLIDE 16: Advantages and Limitations of Alternative 3

A unique benefit of Alternative 3 is that the proposed improvements are the least impactful to existing I-90 interchange and is the least expensive Alternative Under Consideration. Furthermore, constructing the displaced left bridge can precede the replacement of the current bridge, essentially offering improvements sooner rather than later.

While the displaced left provides significant benefits at the eastbound I-90 ramp terminal, the modification does not impact the number of phases present at the signalized intersection of the I-90 westbound ramp terminal.

The unconventional geometric configuration of the displaced left design can also prove to be unfamiliar to many road users; therefore, it will be important to invest in proper striping and signage to suitably accommodate the intended operational behavior of the roadway layout.



SLIDE 17: Alternatives Under Consideration – Alternative 4

Alternative 4 combines the concepts of the Jughandle at Alft Lane with the displaced left interchange configuration and retains the widening of Randall Road north of I-90 seen in all prior alternatives.

SLIDE 18: Advantages and Limitations of Alternative 4

Alternative 4 provides several advantages such as enhanced travel times, independent phasing of capacity improvements, and revamping access to the Elgin business district located within the industrialized zone of the project area.

While the western limit of Randall Road at Alft Lane has increased capacity, the jughandle design affects access out of the Sanfilippo plant. The displaced left at the interchange also retains a similar number of phases at the ramp terminals, and the unorthodox design of the interchange itself can result in driver confusion if not designed properly.

SLIDE 19: Alternatives Under Consideration – Alternative 5

Alternative 5 poses several significant changes to the Randall Road corridor..

The first modification is consistent with the previous alternatives already identified, where Randall Road is widened from 4 to 6 lanes north of the I-90 interchange. The second familiar modification is the introduction of the Jughandle design at the Alft Lane intersection with Randall Road.

The most significant change modifies the existing I-90 interchange into a grade-separated echelon. An echelon at its foundation is an alternative interchange type consisting of two separate levels. For the purposes of the Randall Road design, the upper-level services westbound left, southbound left, and southbound through traffic. The lower-level serves northbound movements and eastbound left traffic from the I-90 eastbound off-ramp. The grade separation and elevation difference between the two levels promotes longer intervals of continuous flow of traffic as the traditionally three phased intersections now only require two phases for safe intersection control.

An additional element introduced as part of this alternative is a roundabout at the intersection of Point Boulevard and the PACE bus station. The implementation of a roundabout at this location is intended to support the continuous flow of traffic generated by the Echelon interchange.



SLIDE 20: Alternatives Under Consideration – Alternative 5 Typical Sections

To further demonstrate the geometric components of the Echelon design, the proposed I-90 Echelon typical section is displayed on the slide in front of you.

The typical section shown here is not to scale but contributes to the overall understanding of the grade separation between the upper and lower bridge decks of the echelon, with both decks still intended to overpass the I-90 freeway. Focusing in on the left turning lanes of each bridge deck, the echelon configuration offers the opportunity for drivers to freely turn without being impacted by the opposing through movement since they are on isolated levels of elevation.

SLIDE 21: Alternatives Under Consideration – Alternative 5 Typical Sections

The Point Boulevard and Randall Road intersection is located less than 450 feet from the I-90 and Randall Road westbound ramp terminal. The continued grade separation at Point Boulevard is intentionally carried through for the purpose of allowing the elevated bridge deck to return to existing conditions.

Additional and sufficient spacing allows for a safe transition that ties back into the Randall Road corridor as it exists today. The extended grade separation directly influences the configuration of Point Boulevard as it intersects with the Randall Road facility.

Even with this change, the elevation difference at Point Boulevard maintains the geometric criteria for only two required signal phases. Southbound Randall Road traffic provides a single phase for both the through and left turning movements since the opposing traffic volume is located on the lower deck. Similarly, the left turn exit movements from Point Boulevard are given a separate dedicated phase to continue their route along southbound Randall Road.

Not pictured in this typical section, but displayed in the Alternative 5 exhibit, eastbound right traffic exiting from Point Boulevard will be located upstream of the elevated Point Boulevard roadway section and tie into the at-grade section of Randall Road seen on the left with the lower profile.

SLIDE 22: Advantages and Limitations of Alternative 5

Alternative 5 offers several key advantages such as improving travel times for drivers traveling both northbound and southbound along the Randall Road corridor, reducing the amount of phasing and number of stops at the interchange with I-90, and enhances safety by limiting the amount of potential queuing. With these improvements, Alternative 5 offers the highest performing capacity and traffic operations among the alternatives considered.



While there are many advantages related to the traffic operations under Alternative 5 conditions, the alternative necessitates several intricate structures and retaining walls and calls for the entire interchange to be reconstructed. The interchange reconstruction and reconfiguration at the Alft Lane and Randall Road intersection would require complex construction staging, impact access south of the I-90 interchange, and demand a substantial amount of Right-of-Way. All of these factors ultimately make Alternative 5 the most expensive Alternative Under Consideration.

SLIDE 23: Project Timeline and Next Steps

This phase of the project began in August of 2022. Since then, data has been collected and analyses have been updated by the project team, whose evaluations have ultimately resulted in the 5 alternatives presented tonight.

Looking forward, the project team will continue to evaluate each of the 5 Alternatives Under Consideration with the goal of selecting a single Preferred Alternative in Summer 2024 for final approval by IDOT/FHWA.

SLIDE 24: KDOT Wants to Hear from You

This is the point where we want to encourage you to tell us what you think about what you've learned today. Public input is an important factor as we continue to evaluate alternatives. There are multiple ways for you to complete the project survey. You can access the electronic survey by scanning the QR code on the screen or by visiting www.randallover90.com.

You can send your completed survey responses and comments by email to the project team at Randallover90@gmail.com or send it by mail to The Kane County Division of Transportation, care of Mike Zakosek, P.E. The street address is 41W011 Burlington Road, St. Charles, IL 60175.

All comments must be received on or before Friday, June 16, 2023, to be included in the formal meeting documentation, which will be compiled and posted by late Summer 2023. I will now hand it back over to Mike Zakosek to wrap up this live presentation.

SLIDE 25: Thank You

Thank you, Matt.



I just want to thank you all for taking the time out to join us for this live virtual public information meeting. Your input will help shape the future of this community and Randall Road at I-90. For more information regarding the project or to sign up for project updates visit www.randallover90.com.