



SR 37 Mobility Study (Study) 126th Street to SR 32 / SR 38 and along 146th Street from Allisonville Road to Cumberland Road

Summary of Process

I. HISTORY OF THE STUDY

The genesis of this project began with an idea presented by the Hamilton County Commissioners in December, 2008. At that time, the City of Carmel had recently completed the first portions of their Keystone Parkway project. The scope of that project has been a key part of developing the framework for this State Road 37 Project Study.

State Road 37 is a key north – south corridor serving the citizens of Hamilton County, the Town of Fishers and the City of Noblesville. It is owned and operated by the Indiana Department of Transportation. It is a four-lane divided highway that, at the last counting (November 2010 through January 2011), is used by approximately 45,000 vehicles per day. Traffic is regulated at each of the cross streets with actuated traffic signals which are becoming more and more overloaded as time passes.

Contained in this study is a detailed traffic analysis and growth projections showing that roundabout interchanges, similar to those constructed along the Carmel Keystone Project, will significantly improve the safety and efficiency of moving the high volumes of traffic across this corridor. There are numerous socio-economic benefits that are in addition to the efficiency of the improved facility. Some of those include community connectivity, significant safety improvements, reduced noise pollution, and reduced user costs.

Once the idea of this project was matured by the Hamilton County Commissioners, through the Indianapolis Metropolitan Planning Organization, they selected the engineering team of United Consulting and American Structurepoint to embark on a detailed study of the corridor.

Meanwhile, strategic meetings were held with members of the Indiana State Legislature, the INDOT Commissioner, members of the Fishers Town Council, and leaders of the City of Noblesville. The intent of these meetings was to present the significant improvements and benefits to the lives of the users of this corridor and thereby build a coalition of these government agencies.

Then, after a unified coalition was formed, the engineering team was authorized to begin the study. Throughout the Study process, periodic meetings were then conducted with a project Stakeholder group. This group was comprised of technical transportation representatives of the Indianapolis MPO, INDOT, Hamilton County, the Town of Fishers, and City of Noblesville.



The following paragraphs briefly describe the intent and general results reached at each of the Stakeholder meetings:

A project kick-off stakeholder meeting was conducted on November 23, 2010 at 2:00 p.m. at the offices of the Hamilton County Highway Department. The purpose of the meeting was to initiate the Study.

A second project stakeholder meeting was conducted on June 10, 2011 at 9:30 a.m. at the offices of the Hamilton County Highway Department. The objective of the meeting was to provide an update on the development of the Study and to reach consensus from the Stakeholder group regarding the concept of utilization of collector-distributor (C-D)/Frontage Roads at interchanges. After discussion, the Stakeholder group concurred with the recommendation to analyze the use of C-D/Frontage Roads at the Study intersections/interchanges.

A third project stakeholder meeting was held on Wednesday, December 14, 2011 at 3:00 p.m. at the offices of the Hamilton County Highway Department. The objective of the meeting was to provide an update on the development of the Study and to reach consensus from the group regarding the preferred design solution to carry forward for additional evaluation. A PowerPoint presentation was shown that highlighted results from the draft Traffic Operation Analysis. The primary result from the meeting was the conclusion to continue further investigation of the tear drop build alternative.

A fourth project stakeholder meeting was held on Wednesday, October 10, 2012 at 9:30 a.m. at the offices of the Hamilton County Highway Department. The objective of the meeting was to conclude the stakeholder participation process for the SR 37 Mobility Study. The primary result was a discussion relative to the final design solution. This included an overview of the decisions made relative to over/under SR 37 and intersecting streets and the coordination involved with local Stakeholders.

In addition to the project Stakeholder meetings, numerous meetings were conducted during the Study process with local elected officials from each jurisdiction to keep them abreast of project developments.

Now that the study has been completed, we have a reliable total project development budget from which the coalition can begin the task of pursuing project funding opportunities.

II. PLANNING PROCESS

The following discussion summarizes the planning process used to complete SR 37 Mobility Study.

Gather Information: Secondary source information was gathered for the Study area including previous studies along S.R. 37, aerial photographs, existing contours, and GIS maps.

Stakeholder Communication: The Study involved a comprehensive local stakeholder participation process to ensure that localized and regional issues were investigated and



resolved. Groups participating in the local stakeholder participation process included transportation professionals representing INDOT, the Indianapolis Metropolitan Planning Organization, Hamilton County, Fishers, and Noblesville.

In addition to local transportation professionals, local executive officials from Hamilton County, Fishers, and Noblesville were continuously updated as to the progress of the Study from members of the project team.

Traffic Operations Analysis (TOA): A TOA was completed for the project corridors encompassing SR 37 between 126th Street to SR 32 / SR 38 and along 146th Street from Allisonville Road to Cumberland Road. The TOA evaluated the traffic operations of various alternatives proposed Study.

The focus of the TOA was to verify the feasibility of replacing existing at-grade signalized intersections with grade-separated interchanges along the Study corridors.

A capacity analysis and a traffic simulation were performed at the Study interchanges and the Study intersections for the following alternatives:

- (Capacity Analysis Only) No Build – Opening Year and Design Year AM & PM Peak Hours
- (Capacity Analysis and Traffic Simulation) Signalized Interchange Alternative - Opening Year and Design Year AM & PM Peak Hours
- (Capacity Analysis and Traffic Simulation) Roundabout Interchange Alternative - Opening Year and Design Year AM & PM Peak Hours

Establish Project Alternatives: Two build alternatives were investigated as part of the Study. The first alternative involved converting existing and planned intersections into teardrop roundabout interchanges. The second alternative involved converting existing and planned intersections into tight diamond interchanges with the use of traffic signals (if needed).

Evaluate Project Alternatives: The two proposed build alternatives were evaluated based on results from the TOA. Results from the TOA were shared with the local stakeholder group during a Stakeholders meeting and afterwards shared with elected officials. During this meeting, the group collectively decided to pursue the alternative which involved reconstructing each of the Study intersections into teardrop roundabout interchanges.

Environmental Screening: A preliminary screening of environmental impacts associated with the proposed teardrop roundabout alternative was completed for the Study area.

Field Inspection: Several field inspections were conducted during the course of the Study to determine if any additional impacts or unique conditions exist which might not have been apparent from the secondary source information previously gathered.

Preliminary Design: The teardrop roundabout alternative was further developed and refined to produce construction limits and a right-of-way footprint. An existing surface will be built from 2ft contours. The existing profile for the teardrop roundabout alternative was then sampled from the surface. A finish grade profile was produced, which closely follows existing ground, and is graded in such a way to ensure proper drainage and clearance over existing and proposed structures. A cross-section template including a standard ditch was applied to the profile grade.



From these cross-sections the construction limits were imported to determine any areas where extra right-of-way width may be required.

Preliminary Right-of-Way Design: A preliminary right-of-way footprint was established for the Study area. From this preliminary right-of-way footprint, right-of-way project costs were estimated. This included land, cost to cure, and damages costs; as well as land acquisition services costs.

Cost Estimate: Detailed quantities were prepared and a project budget was developed for the teardrop roundabout alternative. The project budget assumed construction commencing in 2018 and concluding in 2027.

Final Study Report: A Final Report was written to document the planning process and the results generated in the 13-volume binder set provided herein.