

BOARD OF PUBLIC WORKS AND SAFETY (Form B-01-2012)
Agenda Request Form

Organizations and individuals are asked to submit a request form and supporting documents to be placed on the agenda. You will be contacted by the City confirming the date of the meeting in which your request will be heard. Please make sure that your contact information is accurate in case we need to get in touch with you. The Board of Works meets on the 1st and 3rd Monday of each month at 5:00 p.m. in City Hall located at 70 E. Monroe Street.

Date Submitted:	2/16/16	Meeting Date:	3/7/16
Contact Information:			
Requested by:	Travis Underhill		
On Behalf of Organization or Individual:	Planning and Engineering Department		
Telephone:	736-3631		
Email address:	tunderhill@franklin.in.gov		
Mailing Address:	70 E Monroe Street, Franklin, IN 46131		
Describe Request:			
Speed Limit Reports (Comprehensive and Jefferson Street) for the board's review and discussion			
List Supporting Documentation Provided:			
Comprehensive Speed Limit Report			
Jefferson Street Speed Limit Report			
Who will present the request?			
Name:	Travis Underhill	Telephone:	736-3631C

In order for an individual and/or agency to be considered for new business on the Board of Works agenda, this reservation form and supporting documents must be received in the Mayor's office no later than 4:00 p.m. on the Wednesday before the meeting.

Jefferson Street Speed Limit Report



City of Franklin, IN
February 2016

Prepared by: Mark St. John
Department of Engineering

Reviewed and Approved:

Travis Underhill, P.E.
City Engineer

Introduction

The purpose of this report is to investigate the current and establish the posted maximum travel speeds along Jefferson Street from the Forsythe Street intersection west to the intersection of US31. It is the intention of the City Department of Planning and Engineering to establish a single prevailing speed along this entire corridor.

Existing Conditions

As can be seen in *Figure 1* below there are currently two different speeds along this stretch of Jefferson Street. Traveling west from Forsythe Street to Home Avenue the speed limit is 30 miles per hour (MPH). This stretch of Jefferson Street is mainly residential with 2 lanes varying in width from 12 feet to 15 feet. At the intersection of Jefferson Street Home Avenue is the start of Franklin's historic downtown and courtyard square and a reduction in speed to 20MPH. The lanes along this stretch of Jefferson Street narrow to 10 feet with on street parking on both sides of the road to provide for the many businesses found in this area. Continuing west along Jefferson Street you reach the intersection of Walnut Street and return to a more residential area, two 12 foot lanes, and a speed limit of 30MPH.



Figure 1

Proposed Conditions

This report proposes to revise the speed limits along this stretch of Jefferson Street to a maximum speed limit of 25MPH for several reasons.

First, this entire corridor can be classified as an urban district. This is due to the high density of residential homes and businesses, the high amount of cross streets, and close proximity to the road of sidewalk and pedestrian facilities. Indiana State Code §9-21-5-6(a)(1) establishes a maximum speed limit in urban districts at 30MPH. This maximum speed limit of 30MPH is also referenced in the Indiana Department of Transportation Design Manual Legal Speeds Section 3-3.03(03). However, due to the high amount of pedestrians, heavy bicycle use, on street parking, proximity of traffic lights, and residential and business drives on this corridor (all of which create limited site distance and stopping space) the 25MPH maximum speed limit is proposed.

This 25MPH maximum speed limit is in fact an increase in speed for parts of Jefferson Street. However, by creating a single maximum speed limit you allow for a more steady flow of traffic. This creates a better, more even traffic flow through the downtown corridor and associated traffic lights thus increasing the level of service.

It is the belief of this Department that a more in-depth, data intensive, traffic study is not required for these proposed conditions. Indiana State Code §9-21-5-6(b) states “an engineering and traffic

study is not required to be performed for the local streets in an urban district under this subsection if the local authority determines that the proper maximum speed in the urban district is not less than twenty-five (25) miles per hour.” Further, this section of Indiana State Code reiterates the necessity to raise the maximum speed limit from 20MPH on the fitting sections of this road.

Required Changes

If the 25MPH maximum speed limit is accepted there will be a few steps necessary to establish it. First, the City’s speed limit ordinance will have to be revised to match a 25MPH maximum speed limit for the sections of road covered under this report. Second, the City will have to remove existing speed limit signs and replace with 25MPH ones. These signs should meet all City standards, and all standards set out in the Manual on Traffic Control Devices (MUTCD)

Conclusion

The Department of Planning and Engineering recommends that the City of Franklin establish the maximum speed limit on Jefferson Street at 25MPH in accordance with this report. This is due to the fact that this stretch of road runs through an urban district with a high number of traffic lights in close proximity, pedestrians, bike traffic, on street parking, and private drives.

Comprehensive Speed Limit Report



City of Franklin, IN
February 2016

Prepared by: Mark St. John
Department of Engineering

Reviewed and Approved:

Travis Underhill, P.E.
City Engineer

Introduction

The principal purpose of this report is to investigate the rationale on how speed limits are set for different streets within the City of Franklin. This report should serve as a guide for future changes in travel speed on established streets, and will help to create a consistent, cohesive, and motorist friendly infrastructure within the City.

To begin, United States Code §23-101-33 describes an urban area as being “designated by the Bureau of the Census as having a population of 5,000 or more and not within any urbanized area, with boundaries to be fixed by responsible State and local officials in cooperation with each other.” Therefore, by definition the entire area within the corporate limits of the City of Franklin is considered an urban area and the following speed limits as outlined in Indiana State Code §9-21-5-6(a) shall apply;

Minimum	Maximum (Day)	Maximum (Night)
20 MPH	55 MPH	50 MPH

Secondly, it is the position of the Department of Engineering that this report satisfies the requirements of Indiana State Code §9-21-5-6(b) which requires an engineering and traffic investigation to determine the proper maximum speed for all local streets. A more in-depth, data intensive report is not required as we will not be deviating from the range of speeds described above.

This report will also reference the hierarchy of street types. As such it may be useful to define what this hierarchy means;

Arterial Street = a street that provides the highest level of service to densely developed areas, at high speeds, for long interrupted distances through the use of access control (*i.e. U.S.31*)

Primary Collector Street = a street that connects local streets and arterial streets while providing a lesser level of service over lower speeds when compared to arterial streets (*i.e. North Main Street*)

Secondary Collector Street = a street that connects local streets and arterial streets, but has less through movement than a primary collector (*i.e. Cumberland Drive*)

Local Street = a street that’s primary function is to provide access with little or no through movement at low speeds (*i.e. Monroe Street*)

Finally, this report also emphasizes that Indiana State Code §9-21-5-1 requires a driver to not travel “at a speed greater than is reasonable and prudent under the conditions.” The speed limits listed in this report, and any associated ordinances, are for maximum allowed speed under ideal travel conditions. There are times when slower travel speeds are necessary.

Maximum Posted Speed Limits

25 Miles per Hour: This speed limit shall be used as the maximum speed limit in areas where there is a high density of residential homes, schools, businesses, and bicycle and pedestrian traffic. Due to these characteristics, these areas typically have a higher number of cross streets, sidewalks and trails, parks, private and business driveway access, and on-street parking. All of which combined result in shorter sight and stopping distances. Streets in these areas are considered local streets and have narrower pavement widths often with minimal pavement markings. The lower maximum speed of 25MPH in these areas will help to keep the large amount of pedestrians and bicyclists safe, as well as keep motorists to a speed where they will be able to adequately see roadway obstructions/hazards and stop in time.

Occasionally this speed limit will be seen along streets that are classified as primary collectors. The best example of this is Jefferson Street through historic downtown Franklin. This collector street is highly traveled, and acts as a thoroughfare connecting two major arterials (King Street and U.S. 31), but has the characteristics of a local street. For this reason a lower speed limit of 25MPH is used.

30 Miles per Hour: This speed limit shall be used in areas similar to those described in the 25MPH section. However, this increase in speed shall only be designated to streets that are considered secondary collectors. These streets will typically have an increase in pavement width to local streets, fewer number of driveways, and fewer stops than found on local streets. These streets often serve to move traffic from one section of a neighborhood to another, and will still allow for on-street parking. Traffic may be controlled at specific intersections by both stop and yield signs. The increase in pavement width with fewer conflict points results in the reasoning to safely increase the speed to 30MPH.

35 Miles per Hour: This speed limit shall be used in areas that are heavily developed with industrial or professional business uses, and have pedestrian facilities set farther back from the edge of pavement with fewer allowed pedestrian crossings. Streets with this speed limit could be classified as either a secondary or primary collector street and will see a higher amount of truck traffic, delivery vehicles, and through traffic use. However, bike traffic may still be seen on streets with this speed limit and there will still be pedestrian facilities and crossings on these streets. This all leads to wider pavement width than local streets, and no on-street parking will be provided.

40-45 Miles per Hour: These speed limits shall be used along streets that are classified as an arterial street. Areas serviced by these streets are typically highly developed with lots of through vehicle traffic. Pavement width in these areas is generally very wide, and bicycle pedestrian facilities should be set as far back from the street as possible. Traffic signals should be used to control traffic as required at intersections.

50-55 Miles per Hour: This section reaches the maximum speed limit allowed in an urban area under Indiana Code §9-21-5-6. This speed limit shall be limited to the heaviest traveled arterial streets whose purpose is to move traffic over long distances in the most efficient way possible. This means streets typically have multiple travel lanes in each direction, and surrounding areas with this speed limit will have no private drive access and a limited amount of cross streets. Pavement width in these areas will be extremely wide to safely allow for vehicles moving at a high

rate of speed, and pedestrians and bicyclists will only be allowed to cross at designated signalized intersections. Further, there may be traffic control devices in place such as raised medians, traffic signals, and separated travel directions.

Conclusion

All designated speed limits within the City of Franklin meet the requirements outlined in Indiana State Code §9-21-5-6, and are given their designated speeds based on the surrounding land use, desired traffic patterns/movements, and engineered design. This report should be used by the City in the future when considering requested or desired changes to speed limits along City streets to help create a consistent, cohesive, and motorist friendly infrastructure within the City.