First-Mile, Last-Mile Connections to Transit Workshop Report

City of Terre Haute

In partnership with
The Terre Haute Transit Utility

Hosted by The WILL Center
October 21, 2015

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Workshop Summary

Since 2013, Health by Design has partnered with the Governor's Council for People with Disabilities (GCPD) to conduct workshops that promote an understanding of how transportation options relate to livable communities and the need to ensure access to a network of pedestrian, bicycle and public transit options that meets the needs of people with disabilities and other community members. These workshops are facilitated through Health by Design's transit initiative, the Indiana Citizens' Alliance for Transit (ICAT).

In 2015, the workshops began to focus on First-Mile, Last-Mile Connections to Transit. The goal of the workshops is to educate local community partners, including people with disabilities, transit agencies, city officials, advocates and the general public on the need to ensure critical links to fixed-route bus stops. These links that make up the distance between the rider's trip origin and the bus stop are referred to as the "first mile" connection; the distance between the bus stop and final destination are referred to as the "last mile" connection. These workshops are intended to establish a process and system for assessing, documenting, and improving safety and accessibility for transit riders during all phases of their trips.

On October 21, 2015, a workshop was held in partnership with the City of Terre Haute and hosted by The WILL Center. Twenty-seven community partners and volunteers were trained to assess the safety, accessibility, and functional features of existing fixed-route bus stops and connecting pedestrian infrastructure. While the bus stop data collected is intended to inform the need for specific infrastructure upgrades, please note that the findings represent only a small sample of the entire transit network. Given that it is likely the accessibility, safety, and functional deficiencies found through these assessments would also be found at other bus stops, funding and policy solutions should be applied system-wide.

Because Terre Haute Transit Utility's bus stop facilities and associated infrastructure are city facilities, any existing physical obstacles need to be identified in the city' Americans with Disabilities Act (ADA) transition plan. Additionally, the plan should provide a schedule for upgrading access and indicate the public official responsible for implementing the plan (i.e., local ADA coordinator). Therefore, all bus stop accessibility deficiencies should be inventoried and incorporated into the respective city's ADA transition plan for ongoing upgrades. Furthermore, it is important to note that any public facilities or programs which receive federal funding are required to be accessible according to ADA standards defined by the United States Department of Justice and Department of Transportation.

Prior to volunteers conducting bus stop assessments, ICAT Coordinator, Addison Pollock led participants through a presentation which put bus stops and pedestrian infrastructure into a greater community context, underscoring their impacts on quality of life. As part of the presentation, participants broke into small groups to discuss the concepts of community "livability" and "mobility" and how the two ideas relate. Participants then reported to the

entire group detailing their interpretation of the two concepts and which features constitute each. Responses included:

- **Livability**
    - Places to work, live, play, worship
        - Group homes
        - Groceries
        - Schools
        - Church
        - Medical facilities
    - Supportive living
    - Access to jobs
    - Transit (extended) – access to where you want and need to go
    - Safe/peaceful community

- **Mobility**
    - City bus, taxi, Greyhound, airport, car, etc.
    - Drivers to get people where they need to go
    - Curb-to-curb bus service
    - Volunteer transportation
    - Flexibility
    - Biking and walking
    - Good infrastructure

Bus Stop Assessments

The 27 community partners and volunteers formed five teams and assessed 25 Terre Haute Transit Utility bus stops. The teams used the "Bus Stop Accessibility Assessment" in Appendix A to assess each stop's features and nearby pedestrian infrastructure, including, but not limited to, connecting sidewalks, boarding pads, pedestrian signals, curb cuts, signage, and seating.

Brad Miller, the General Manager of the Terre Haute Transit Utility, selected the 25 bus stops which were assessed. The stops were selected because the Transit Utility had recently completed its Google Transit online application and the list of stops, including their geographic locations were conveniently on hand. The 25 stops are on five different routes in Terre Haute and represent 15 percent of the total bus stops.

The assessment tool is divided into five different sections: location, pedestrian access, intersection access, signage, and features. The location section provides an indication of adjacent land uses and community context, including popular nearby destinations. Such locations – like shopping centers, medical facilities or schools – are known as trip generators, and illustrate the extent to which a bus stop is likely to be used.

The signage, pedestrian access, and intersection access criteria were derived from the Department of Transportation's ADA guidelines (ADAG) and the U.S. Access Board's Public Right-of-Way Accessibility Guidelines (PROWAG). The intent of referencing both standards in the assessment tool was to combine federal baseline standards (ADAG) with proposed standards (PROWAG) that better embody the "Spirit of ADA," going above and beyond the current minimum accessibility standards. For instance, according to ADAG, bus stop boarding and alighting areas shall have a firm, stable surface and shall be connected to streets, sidewalks, or pedestrian paths by an accessible route. Taking it further, the proposed PROWAG standards recommend the provision of braille signage detailing street crossing information at pedestrian signals to provide better access. Please reference the ADAG and PROWAG web links in the Resources section of this report for more information.

Features, often referred to as amenities, are made up of other pedestrian and bicycle facilities that may be provided at bus stops. Examples include bike racks, seating, and shelters. These items provide additional comfort and convenience to people who walk/roll, cycle, or use transit. Often these features are viewed as supplemental; however, they are purposeful in encouraging the use of the transit system and other active transportation options. It is not expected that these features are present at every bus stop, but it is ideal to provide them as often as possible, especially at high ridership stops.

Methodology

The "Bus Stop Accessibility Assessment" in Appendix A was used to gauge the existence and quality of safety, accessibility, and functional features at each bus stop, specifically examining pedestrian and intersection access, signage, and features. Each component was then assigned two designations: critical or non-critical and complex or simple. The critical or non-critical label relates to the extent to which the component impacts safety and accessibility; complex or simple refers to the relative cost, timing and decision-making authority needed to fix the issue. These designations were then used to categorize and prioritize the four different types of bus stop deficiencies:

- **(A) Critical and simple**
- **(B) Critical and complex**
- **(C) Non-critical and simple**
- **(D) Non-critical and complex**

Please reference the table in Appendix B to view each safety, accessibility, and functional component listed according to the aforementioned designations. It is important to note that the levels of complexity assigned to each stop are relative and based on the judgment and experience of ICAT staff. Transit agency staff and other partners should consider each deficiency individually when prioritizing improvements. Additionally, please note that each bus stop is unique and does not warrant all components; depending on the geographic location and available right-of-way, transit agency staff and other professionals should consider improvements on a case-by-case basis according to accessibility guidelines and agency policies.

Summary of Findings

Please view the excel files referenced in Appendix C for the 25 bus stop assessments and summary findings. Each sheet represents a different stop and divides each assessment component into three categories: Pedestrian Access, Intersection Access, and User Friendliness (i.e., signage and features).

The bus stops yielded these findings:

- **95 (A) critical and simple deficiencies**, including:
  - Physical barriers reducing sidewalk width; bus stop sign, trash can, and bench
  - No visible crosswalk
  - No detectable warning strips (on curb cut)
  - No braille signage (on pedestrian signal)
  - Sign deficiencies, which included:
    - No route # in plain view
    - No non-glare finish
    - No characters/symbols contrast from background
    - No information readable for person who uses a wheelchair

- **85 (B) critical and complex deficiencies**, including:
  - No stable boarding pad, or insufficient boarding pad size
  - No connecting sidewalk
  - Hazardous sidewalk condition
  - Physical barriers reducing the sidewalk width (bus shelter, light pole, etc.)
  - No curb cuts
  - No visible pedestrian signal
  - No pedestrian pushbuttons
  - No vibrating surfaces
  - No audible tones OR speech
  - A person using a wheelchair could not maneuver into and within the existing shelter

- **49 (C) non-critical and simple** deficiencies, including:
  - No seating
  - No trashcan
  - No bike parking connected to sidewalk

- **16 (D) non-critical and complex** deficiencies, which all related to lack of a shelter at the stop

<u>Recommendations</u>

Based on these findings, there are significant opportunities to improve safety, accessibility, and comfort for people who ride transit in Terre Haute. Though this report offers only a snapshot of conditions in certain areas, the results can likely be extended to many others throughout the transit system. For that reason, this report is not intended to serve merely as a checklist of improvements for these 25 stops, but rather, a basis and impetus to pursue funding, policy and operational solutions that can be implemented system-wide.

First, it is recommended that leadership and staff from the transit agencies and various city departments, including, but not limited to planning and public works, come together to review the entire bus stop network and create an inventory database and systems for tracking, monitoring and prioritization. Needed accessibility improvements must be incorporated into each city's ADA transition plan and overall project development and management systems. Another key recommendation for facilitating better safety, accessibility, and function at city bus stops is to align investments from the transit agency, other public entities, and private interests. The transit agency and city should communicate and coordinate regarding capital projects, as significant cost sharing can occur during design, engineering, construction and maintenance phases. Similarly, private development can spur capital bus stop improvements, if required and/or incentivized through zoning and development standards. Furthermore, financial, volunteer or in-kind contributions from local businesses, nonprofit partners and other community stakeholders can be used to toward the costs of shelters, benches, or bike parking.

Given that a large number of ADA upgrades result from citizen complaints, it is imperative to provide riders a clear path for action if they observe any impediments to the safety, accessibility, or function of a city bus stop. A reporting process should be created to allow riders to provide input; it could be similar to a Title VI complaint process, but instead aimed specifically at addressing these types of bus stop upgrades. The Fort Wayne Public Transportation Corporation (Citilink) bus stop report form in Appendix D can be used as a model.

It is also recommended that a community advisory group be appointed to ensure that bus stop safety, accessibility, and function continue to be inventoried and improved. This group could support the efforts the transit agency and city to conduct ongoing assessments, document deficiencies and schedule upgrades. It could be newly formed or designated from an existing body, such as a transportation advisory committee or mobility advisory committee. Either way, representatives should include a diverse cross-section of key stakeholders, including transit riders, persons with disabilities, representatives of local advocacy organizations and other interested citizens.

Finally, the transit agency and city must commit to identifying financial resources, adopting policies and improving internal systems and practices in order to address first-mile and last-mile

connections to transit. The mobility, independence and well-being of transit riders requires infrastructure that is safe and accessible.

Resources

- Standards and Guides
    - [ADA Standards for Transportation Facilities (Department of Transportation 2006)](#)
    - [Public Right-of-Way Accessibility Guidelines (United States Access Board 2011)](#)
    - [Accessible Pedestrian Signals: A Guide to Best Practices (National Cooperative Highway Research Program 2007)](#)

- City and Public Transportation Corporation Resources
    - [City of Fort Wayne ADA Transition Plan and Citilink bus stop resources](#)
    - [Indianapolis Public Transportation Corporation (IndyGo) Transit Amenities](#)

- Easter Seals Project Action Assessments
    - [Checklist for Assessing the Accessibility of Transportation and Mobility](#)
    - [Accessible Pathways to Bus Stops and Transit Facilities Process Guide (Findings in Brief)](#)

- Contacts
    - Administrators
        - [United States Department of Transportation](#)
        - [Federal Transit Administration](#)
        - [Indiana Department of Transportation (INDOT)](#)
        - [Terre Haute Transit Utility](#)
        - [Department of Redevelopment](#)
        - [West Central Indiana Economic Development District, Inc.](#)
    - Elected officials
        - [United States Senate](#)
        - [United States House of Representatives](#)
        - [Indiana General Assembly](#)
        - [City Council](#)

- Funding
    - [Fixing America's Surface Transportation (FAST) Act 2015](#)
    - [Bicycle and Pedestrian Funding Opportunities: US Department of Transportation, Federal Transit, and Federal Highway Funds](#)
    - [INDOT Public Mass Transportation Fund (PMTF)](#)

- [INDOT Public Transit Annual Reports](#)

Appendix A. Bus Stop Accessibility Assessment.

Bus Stop Accessibility Assessment

Name(s): _____

Location

- Bus stop: _____

- Street name and nearest cross street/intersection: _____

- Adjacent to which lane of travel? (circle one)

  Northbound   Southbound   Eastbound   Westbound

- Adjacent property address and/or name of business: _____

- List any important destinations near the bus stop (e.g., hospital, grocery store, etc.)

Pedestrian Access

- Is the bus stop located along a connecting sidewalk? (circle one)   **Yes   No   N/A**

- How wide is the sidewalk? (check one)   ___**N/A** ___ **< 3'** ___ **3-5'** ___ **> 5'**

    - Are there physical barriers that reduce the sidewalk width? (circle & describe)   **Yes   No   N/A**
      (e.g., utility poles, signs, fire hydrants, etc.)

    - Are there any objects sticking out into or blocking the sidewalk? (circle & describe) **Yes   No   N/A**
      (e.g., overgrown vegetation/shrubs, newspaper boxes, etc.)

    - Rank the condition of the sidewalk near the bus stop (check one):

        __ 1 = Hazardous – someone could get hurt or using a wheelchair would be difficult
        __ 2 = Poor – poor shape but not hazardous, e.g., tree root uplifting, cracks, or breaks
        __ 3 = Fair – minor tree root uplifting, minor cracks or breaks
        __ 4 = Good – not perfect but no need for immediate repair
        __ 5 = Very Good – cosmetically excellent; new; no repair necessary

- List any recommendations for better pedestrian connectivity or safety, and/or any potential traffic hazards in/ and around the bus stop (e.g., high speed traffic, no crosswalk, etc.).

- Is there a stable boarding pad that connects the sidewalk and curb? (circle one)   **Yes**   **No**   **N/A**

- Is the boarding pad at least 5 ft. wide and 8 ft. deep next to the curb/street? (circle one)   **Yes**   **No**   **N/A**

- Are cars parked between the boarding pad and the bus stopping area? (circle one)   **Yes**   **No**   **N/A**

- List any problems with the boarding pad surface.

Signage

- Check all features that are on each bus stop sign (circle one):

    o   Route number in plain view   **Yes**   **No**

    o   Non-glare finish   **Yes**   **No**

    o   Characters/symbols on stop signs are in contrast from their background   **Yes**   **No**

    o   Information at eye level of a person who uses a wheelchair   **Yes**   **No**

- List any problems with the signage (e.g. graffiti, tree branches blocking signage, etc.)

Features

- Check all that are at each stop (circle one):
    Seating   **Yes**   **No**
    Shelter with clear floor space for mobility aids, connected to sidewalk   **Yes**   **No**
    Trash can   **Yes**   **No**
    Bike parking, connected to sidewalk   **Yes**   **No**

- Could a person using a wheelchair maneuver into and within the shelter?   **Yes**   **No**   **N/A**

Intersection Access Reference Map

NW
Sidewalk

2

1

STREET

3

NE
Sidewalk

4

STREET

STREET

8

SW
Sidewalk

7

STREET

5

SE
Sidewalk

6
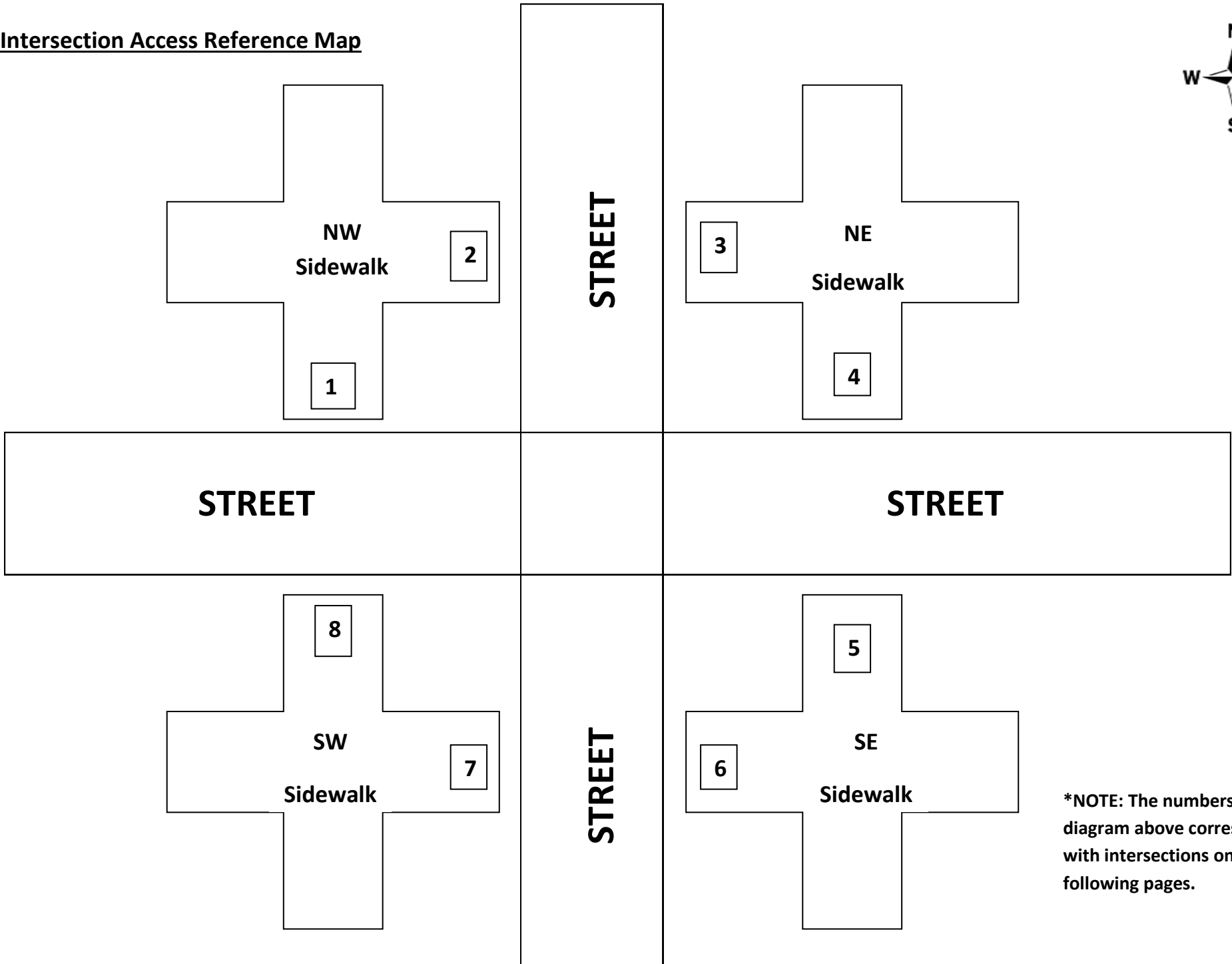
*NOTE: The numbers in the diagram above correspond with intersections on the following pages.

Intersection Access

Circle or check which features are present (and working) at the corners of each intersection **(if applicable)**:

NORTHWEST CORNER | 1 |

- Curb-cuts   **Yes   No**
- Curb-cuts with detectable warning strips   **Yes   No**
- Visible crosswalk   **Yes   No**
- Pedestrian signal: **Yes   No   N/A**

	Existing/Working	Existing/Not working	Does Not Exist
• Pedestrians pushbuttons	___	___	___
• Audible tones OR speech	___	___	___
• Vibrating surfaces	___	___	___
• Braille	___	___	___
• Visible countdown signals	___	___	___

- **Time: _____seconds (traveling south)**
- Is the WALK/FLASHING HAND symbol visible during the entire duration of the crossing period?   **Yes   No   N/A**

NORTHWEST CORNER | 2 |

- Curb-cuts   **Yes   No**
- Curb-cuts with detectable warning strips   **Yes   No**
- Visible crosswalk   **Yes   No**
- Pedestrian signal: **Yes   No   N/A**

	Existing/Working	Existing/Not working	Does Not Exist
• Pedestrians pushbuttons	___	___	___
• Audible tones OR speech	___	___	___
• Vibrating surfaces	___	___	___
• Braille	___	___	___
• Visible countdown signals	___	___	___

- **Time: _____seconds (traveling east)**
- Is the WALK/FLASHING HAND symbol visible during the entire duration of the crossing period?   **Yes   No   N/A**

NORTHEAST CORNER | 3 |

- Curb-cuts   **Yes   No**
- Curb-cuts with detectable warning strips   **Yes   No**
- Visible crosswalk   **Yes   No**
- Pedestrian signal: **Yes   No   N/A**

	Existing/Working	Existing/Not working	Does Not Exist
• Pedestrians pushbuttons	___	___	___
• Audible tones OR speech	___	___	___
• Vibrating surfaces	___	___	___
• Braille	___	___	___
• Visible countdown signals	___	___	___

- **Time: _____seconds (traveling west)**
- Is the WALK/FLASHING HAND symbol visible during the entire duration of the crossing period?   **Yes   No   N/A**

NORTHEAST CORNER | 4 |

- Curb-cuts   **Yes   No**
- Curb-cuts with detectable warning strips   **Yes   No**
- Visible crosswalk   **Yes   No**
- Pedestrian signal: **Yes   No   N/A**

	Existing/Working	Existing/Not working	Does Not Exist
• Pedestrians pushbuttons	___	___	___
• Audible tones OR speech	___	___	___
• Vibrating surfaces	___	___	___
• Braille	___	___	___
• Visible countdown signals	___	___	___

- **Time: _____seconds (traveling south)**
- Is the WALK/FLASHING HAND symbol visible during the entire duration of the crossing period?   **Yes   No   N/A**

SOUTHEAST CORNER | 5 |

- Curb-cuts   **Yes**   **No**
- Curb-cuts with detectable warning strips   **Yes**   **No**
- Visible crosswalk   **Yes**   **No**
- Pedestrian signal: **Yes**   **No**   **N/A**

	Existing/Working	Existing/Not working	Does Not Exist
• Pedestrians pushbuttons	___	___	___
• Audible tones OR speech	___	___	___
• Vibrating surfaces	___	___	___
• Braille	___	___	___
• Visible countdown signals	___	___	___

- **Time: _____seconds (traveling north)**
- Is the WALK/FLASHING HAND symbol visible during the entire duration of the crossing period? **Yes**   **No**   **N/A**

SOUTHEAST CORNER | 6 |

- Curb-cuts   **Yes**   **No**
- Curb-cuts with detectable warning strips   **Yes**   **No**
- Visible crosswalk   **Yes**   **No**
- Pedestrian signal: **Yes**   **No**   **N/A**

	Existing/Working	Existing/Not working	Does Not Exist
• Pedestrians pushbuttons	___	___	___
• Audible tones OR speech	___	___	___
• Vibrating surfaces	___	___	___
• Braille	___	___	___
• Visible countdown signals	___	___	___

- **Time: _____seconds (traveling west)**
- Is the WALK/FLASHING HAND symbol visible during the entire duration of the crossing period? **Yes**   **No**   **N/A**

SOUTHWEST CORNER | **7** |

- Curb-cuts   **Yes**   **No**
- Curb-cuts with detectable warning strips   **Yes**   **No**
- Visible crosswalk   **Yes**   **No**
- Pedestrian signal: **Yes**   **No**   **N/A**

	Existing/Working	Existing/Not working	Does Not Exist
• Pedestrians pushbuttons	___	___	___
• Audible tones OR speech	___	___	___
• Vibrating surfaces	___	___	___
• Braille	___	___	___
• Visible countdown signals	___	___	___

- **Time: _____seconds (traveling east)**
- Is the WALK/FLASHING HAND symbol visible during the entire duration of the crossing period?   **Yes**   **No**   **N/A**

SOUTHWEST CORNER | **8** |

- Curb-cuts   **Yes**   **No**
- Curb-cuts with detectable warning strips   **Yes**   **No**
- Visible crosswalk   **Yes**   **No**
- Pedestrian signal: **Yes**   **No**   **N/A**

	Existing/Working	Existing/Not working	Does Not Exist
• Pedestrians pushbuttons	___	___	___
• Audible tones OR speech	___	___	___
• Vibrating surfaces	___	___	___
• Braille	___	___	___
• Visible countdown signals	___	___	___

- **Time: _____seconds (traveling north)**
- Is the WALK/FLASHING HAND symbol visible during the entire duration of the crossing period?   **Yes**   **No**   **N/A**

General Comments
Please list any general comments about the street, intersection, or bus stop.

Appendix B. **The safety, accessibility, and functional components of each bus stop, designated as critical/non-critical and complex/simple, with examples.**

Pedestrian Access	Ranking Category	Example(s)/Clarification
Bus stop is not along connecting sidewalk	• (B) Critical and complex	
Physical barriers that reduce sidewalk width	• (A) Critical and simple; or • (B) Critical and complex	• (A) a street sign • (B) fire hydrant
Objects encroaching on sidewalk	• (A) Critical and simple or • (B) Critical and complex	• (A) Shrubs, branches, overgrown grass, etc. • (B) Pipes, drains, etc.
Poor sidewalk condition	(B) Critical and complex	Tree root uplifting, cracks, breaks, etc.
Hazardous sidewalk condition	(B) Critical and complex	Someone could get hurt or using a wheelchair would be difficult.
No stable boarding pad	(B) Critical and complex	There is no stable boarding pad linking the sidewalk across the buffer area (i.e., grass area) to the curb.
Parked cars as barriers	(A) Critical and simple	Cars are parked between the curb and the bus making it difficult to board.
Intersection Access	**Ranking Category**	**Example(s)/Clarification**
No curb cut(s)	(B) Critical and complex	One or multiple curb cuts are absent at the nearest intersection.
No detectable warning pad (truncated domes)	(A) Critical and simple	Detectable warning pads (truncated domes) are absent at multiple curb cuts at the nearest intersection.
No Visible Crosswalk(s)	(A) Critical and simple	Visible crosswalk(s) is absent at the nearest intersection.
No Pedestrian Pushbutton	(B) Critical and complex	Pedestrian pushbutton(s) is absent at the nearest intersection.
No audible tones or speech	(B) Critical and complex	Audible tone(s) or speech is absent at the nearest intersection.
No vibrating surface button	(B) Critical and complex	Vibrating pushbuttons are absent at the nearest intersection.

No visible pedestrian/countdown signal	(B) Critical and complex	Visible pedestrian/countdown signal(s) is absent at the nearest intersection.
WALK/FLASHING HAND symbol NOT visible during the entire duration of the crossing period	(B) Critical and complex	
Bus stop user friendly?	**Ranking Category**	**Example(s)/Clarification**
Signage		
Route number in plain view	(A) Critical and simple	No fading or objects blocking the view of the route number or name.
Non-glare finish	(A) Critical and simple	
Characters/symbols contrast from background	(A) Critical and simple	
Information readable for person who uses a wheelchair	(A) Critical and simple	Sign is not out of sight (i.e., positioned too high) for a person who is using a wheelchair to read.
Features		
Seating	(C) Non-critical and simple	Bench, chairs, or Simme-seat available.
Shelter w/ clear floor space for mobility aids, connected to sidewalk	(B) Critical and complex; or (D) Non-critical and complex	
Trash can	(C) Non-critical and simple	
Bike parking, connected to sidewalk	(C) Non-critical and simple	
Shelter enables a person using a wheelchair maneuver into and within the shelter	(B) Critical and complex	Only applicable if shelter is present and does not meet this criterion.

Appendix C. Please see the attached Excel document titled "Terre Haute_Bus stop data" to view the individual bus stop accessibility assessment findings.

Bus Stop Report Form

Route Number: _____

Describe Location: _____

_____

Safety/Accessibility

Concern:_____

_____

_____

_____

Suggested Action: _____

_____

Your Name: _____

Phone Number: _____

(If not a Citilink employee)

Please submit this form to Betsy Kachmar at Citilink. Provide as much detail as you can. Your name & phone are important, as additional information may be necessary to address your concerns. The Mayor's office has pledged to assist with priority issues beyond Citilink's control. Thank you for your input and assistance.

Citilink, 801 Leesburg Road, Fort Wayne, IN 46808
432-4546 ● www.fwcitilink.com