



Shelby County ADA Transition Plan in the Public Rights-of-Way

January 2020



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Abbreviations

A

ADA – Americans with Disabilities Act

C

CEI – Construction Engineering Inspection

CIP – Capital Improvement Plan

F

FHWA – Federal Highway Administration

FTA – Federal Transit Administration

G

GHSA – Governors Highway Safety Association

GIS – Global Information System

L

LF – Linear Feet

M

MOT – Maintenance of Traffic

MPO – Metropolitan Planning Organization

S

SF – Square Feet

T

TDOT – Tennessee Department of Transportation

U

US DOT – United States Department of Transportation

1.0 Mandate and Background

The Americans with Disabilities Act (ADA) enacted on July 26, 1990 is a civil rights statute created to provide persons with disabilities protections against discrimination in all areas of public life. This includes jobs, schools, transportation, and all places that are open to the general public.

There are five titles, which divide the ADA into sections to address each of these different areas of public life.

- Title I. Employment
- Title II. State and local government services
- Title III. Public accommodations
- Title IV. Telecommunications
- Title V. Miscellaneous provisions

Title II – State and Local Government, prohibits state and local governments from discriminating against persons with disabilities in any programs, services, and activities operated by the agency. The ADA applies to all facilities, regardless of if they were built before or after 1990.

1.1 ADA and its Relationship to Other Laws

Title II of ADA is companion legislation to two previous federal statutes and regulations: the Architectural Barriers Acts of 1968 and Section 504 of the Rehabilitation Act of 1973.

The Architectural Barriers Act of 1968 is a Federal law that requires facilities designed, built, altered or leased with Federal funds to be accessible. The Architectural Barriers Act marks one of the first efforts to ensure access to the built environment.

Section 504 of the Rehabilitation Act of 1973 is a Federal law that protects qualified individuals from discrimination based on their disability. The nondiscrimination requirements of the law apply to employers and organizations that receive financial assistance from any Federal department or agency. Title II of ADA extended this coverage to all state and local government entities, regardless of whether they receive federal funding or not.

2.0 Transition Plan Requirements

This Transition Plan has been developed in accordance with ADA Title II, which requires public agencies to develop a transition plan that provides for the mitigation of barriers to accessibility in County programs, services, and activities. This initial Shelby County ADA Transition Plan in the Public Rights-of-Way is limited to infrastructures services provided in the public rights-of-way and access-points to County owned facilities (exterior). Future updates of this ADA Transition Plan will expand the self-assessment locations to incorporate programs, services, and activities that are located outside of the public rights-of-way.

This document will discuss County program and facility accessibility, designate the officials responsible for the implementation of the Transition Plan, implement a self-assessment and prioritization of mitigating identified ADA barriers, as well as provide an implementation schedule and funding for ADA barrier mitigation within the public rights-of-way. Next steps and monitoring, and public involvement will be detailed at the end of the document.

Future updates and expansions to the Shelby County ADA Transition Plan will be published as separate addenda.

Discussion of Program & Facility Accessibility

The Shelby County ADA Transition Plan in the Public Rights-of-Way (ADA Transition Plan) documents Shelby County's goals and objectives to ensure existing and future pedestrian facilities within the public rights-of-way are accessible for all users in unincorporated Shelby County. This Transition Plan will not include any of the seven incorporated cities or towns in Shelby County.

This Transition Plan is intended to identify physical obstacles that limit the accessibility of facilities to individuals with disabilities, describe the methods to be used to make the facilities accessible, provide a schedule for making the access modifications, and identify the public officials responsible for implementation of the Transition Plan within the public rights-of-way.¹ Any future updates to the Shelby County ADA Transition Plan will be published as separate addenda at the end of this document.

4.0 Designation of Officials Responsible

The Federal government, in compliance with Title II of the ADA, requires a public entity or government with 50 or more employees to designate, at minimum, one employee to ensure ADA compliance. This employee is often referred to as the ADA Coordinator.

An ADA Coordinator is beneficial to both the agency and the community, as their responsibility is to serve as the specific contact for other agency staff and the general public regarding accessibility for programs or services offered by the governing agency. The ADA Coordinator also works to implement compliance measures within the agency, and uphold compliance moving forward from the implementation of the Transition Plan. Additionally, having an ADA Coordinator allows the members of the public to easily identify someone to help them with their questions and concerns about the agency's programs or services.

ADA Coordinators should have familiarity with the agency's structure, their activities, and other departments and employees. The Coordinator should have knowledge of the ADA, as well as any state or local laws that work in congruence with ADA or the rights of people with disabilities. An effective ADA Coordinator should have skills and training in negotiation, mediation, organization, and analytics.²

The ADA Coordinator will be chair of the ADA Core Team, established in order to implement, coordinate, and monitor the Shelby County ADA Transition Plan for the Public Rights-of-Way. The role of the ADA Core Team will be explained further in Section 7.1.

¹ ADA Transition Plans: A Guide to Best Management Practices, pg. 1

² ADA Coordinator, Notice & Grievance Procedure: Administrative Requirements Under Title II of the ADA

Information regarding the current ADA Coordinator for Shelby County may be located by visiting the ADA Coordinator webpage, or contacting the following office:

ADA Coordinator & Public Outreach

<https://www.shelbycountyttn.gov/3585/ADA-Coordinator>

Shelby County Roads, Bridges, and Engineering Department

6449 Haley Road

Memphis, TN 38134

ada@shelbycountyttn.gov

(901)-222-7705

Changes to the Shelby County ADA Coordinator position will be published in addenda at the end of this document.

5.0 Self-Evaluation & Prioritization

The Self-Evaluation and Prioritization section documents the evaluation of existing ADA features (curb ramps, sidewalks, etc.) in regards to current ADA standards, and provides a process to prioritize potential ADA retrofit projects.

The study area was selected by sampling approximately half of the sidewalks located throughout Shelby County. The locations are dispersed throughout the County and represent generalized County conditions. The sample is further used to extrapolate potential ADA compliance needs throughout the County.

A process to prioritize locations for ADA improvements based on their likelihood of uses is also developed as a part of the prioritization methodology. Prioritizations and cost estimates provided in Section 5.0 Self-Evaluation & Prioritization should be updated in the future as projects are completed, additional data becomes available, and as cost information related to ADA-specific projects changes over time.

5.1 Approach to Self-Evaluation

This section documents the process of evaluating the first phase of existing ADA features (curb ramps, sidewalks, etc.) in regards to current ADA standards.

5.1.1 Identification of Facilities for Evaluation

The initial list of corridors considered for data collection includes half of the identified sidewalks within Shelby County (Appendix A: Corridors Chosen for Evaluation), and are considered representative of the ADA features located throughout the County. The result is the evaluation of 105 roadway miles and fifty (50) facilities dispersed throughout the County. A map series of the selected locations is located in the Appendix.

5.1.2 Data Collection and Inventory

To provide an encompassing inventory of ADA features throughout Shelby County maintained roadways, information was collected through data imagery using a Mobile Mapping Vehicle (MMV) that incorporates high speed digital imaging with a global positioning system (GPS). The MMV data

collection provides low altitude, street level imagery using six cameras that are mounted on the vehicle. The high quality panoramic imagery allows for the observation and assessment of ADA features within the public rights-of-way.

ADA features along the evaluated corridors were documented within the ADA Transportation Network Inventory. The ADA Transportation Network Inventory is a GIS-based database that includes ADA features in the public rights-of-way within Shelby County. ADA features are identified with characteristics including their location, condition, and defining attributes. A summary of the elements identified in the inventory is included below in Table 1. Descriptions of the data included in the GIS field assessments are included in Table 20 through Table 25 in Appendix B: GIS Field Data Samples.

Table 1 | Explanation of ADA Inventory Features

Item	Feature Definition	Role in ADA Mobility
Sidewalks	Sidewalks are corridors or pedestrian access routes (PAR) that constitute the portion of the pedestrian system typically located within the right-of-way between the edge of the roadway and the edge of the right-of-way (i.e., property line), and generally along the sides of streets, between street corners.	Sidewalk feature requirements exist to provide individuals with mobility devices or handicaps can safely access and travel the sidewalk. Sidewalk infrastructure is very common and run alongside roads and street corridors.
Curb Ramps	Sloped part of the sidewalk that transitions from curb height (typically 6 inches) to the elevation of the roadway.	Curb ramps are critical to providing access between the sidewalk and the street for people with limited mobility. Curb ramps are most commonly found at intersections, but they may also be used at other locations such as on-street parking, loading zones, transit stops, and midblock crossings. According to the Title II implementing regulations, priorities for the installation of curb ramps in existing facilities should include access to government facilities, transportation, public accommodations, and for employees to their place of employment (U.S. Department of Justice, 1991a).
Handrails	A handrail is a narrow railing located on sidewalks, in pedestrian walkways, bridges, and along ADA access ramps.	Handrails are commonly used to help people maintain stability, facilitate mobility, and mitigate risk where sidewalks or other paths are adjacent to drop-off edges.

Item	Feature Definition	Role in ADA Mobility
Obstacles	Protruding objects or significant ponding that may impede mobility access.	Removal of obstacles in the pedestrian way commonly has the goal of ensuring access and turnaround space for a wheelchair.
Hazards	Excessive cross slope or running slopes on sidewalks or drop-off areas that may impede mobility.	Addressing other potential hazards has the goal of providing access, space for all forms of pedestrian mobility, and provision to safely interact with other pedestrian movement and infrastructure in an area or corridor.
Damages	Examples include: shattered sidewalks, raised/uneven edges, loose bricks, etc.	Repairing damaged accessible features restores mobility, stability and access for ADA users.

A summary of the ADA features included within the first phase of the self-evaluation is provided in Table 2. The evaluation of compliant and noncompliant features is based upon current ADA standards, and does not include adjustments due to the Safe Harbor Provision (28 C.F.R. 35.150(b)(2)(i)). The Safe Harbor Provision allows for facilities that do not meet current standards to remain, provided that they were compliant with the ADA standards in effect when they were installed.

Table 2 | Summary of Data Collection Outcomes

ADA Feature	Inventoried Features	Compliant Features	Incompliant Features
Sidewalks	503,592 LF	468,243 LF	35,349 LF
Passing Distance*	32,777 LF	N/A	N/A
Curb Ramps	1,511	275	1,236
Handrails**	5	5	0
Damages*	887	N/A	N/A
Obstacles*	541	N/A	N/A
Hazards*	2,732	N/A	N/A

*Passing distance, damages, obstacles, and hazards were only identified if a mobility barrier was present at the time of data collection.

**Existing handrails were evaluated for compliance. Any drop off mobility barriers (identified as hazards) would require the installation of a new handrail.

As indicated in Section 7.0 Next Steps and Monitoring, Shelby County will update and expand the ADA Transportation Network Inventory annually until all roadways maintained by the County are incorporated.

5.1.3 Barrier Classification and Mitigation

Upon completion of a self-evaluation, features that are determined to be compliant with ADA standards upon review will be scheduled for future monitoring to maintain compliance. ADA features identified as noncompliant will be classified as ADA barriers, which are then candidates for retrofit or replacement projects. Many of the common barriers are identified in Table 3. For each ADA barrier type, potential strategies to mitigate the barrier are also identified. Table 3 is not a comprehensive list of mitigation strategies, but it does represent the typical strategies that may be utilized by the County to address identified barriers. The strategies shown in Table 3 do not include adjustments due to the Safe Harbor Provision (28 C.F.R. 35.150(b)(2)(i)).

Table 3 | Common ADA Barriers and Suggested Mitigation Strategies

ADA Barrier	Suggested Mitigation Strategy
Gap in sidewalk	Install new sidewalk
Insufficient passing distance	Remove sidewalk panel(s) and add compliant panel(s) for passing/turn around
Missing curb ramp	Install new curb ramp
Structurally deficient curb ramp	Remove and replace curb ramp
Curb ramp missing detectable warning	Add detectable warning
Tree, bush, and/or shrub branches blocking path	Trim obstacle
Vegetation blocking path	Trim obstacle
Utility pole blocking path	Relocate utility pole (assumes sidewalk cannot be realigned)
Excessive water collecting on pathway during rain events (ponding)	Regrade soil and remove/replace sidewalk panels as needed
Excessive cross slope on sidewalk	Remove, regrade and replace sidewalk panels as needed
Excessive running slope on sidewalk	Remove, regrade and replace sidewalk panels as needed
Drop off	Install handrail
Heaving or settlement of sidewalk	Remove and replace sidewalk panels as needed
Shattering of sidewalk	Remove and replace sidewalk panels as needed
Raised/Uneven Edge	Grind pavement at each occurrence

5.1.3.1 Candidate Project Assessments and Countywide Estimates

Field review of the study corridors identified a variety of ADA deficiencies. The most predominant identified barrier were excessive cross slopes on existing sidewalks. When the study corridors were selected for the first phase of the self-evaluation, approximately half of the existing sidewalk network

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was evaluated. This creates an extrapolation factor of 2.0, which was used to estimate the number and types of barriers that may be found countywide, as shown in Table 4.

The results in Table 4 do not incorporate adjustments for the Safe Harbor Provision (28 C.F.R. 35.150(b)(2)(i)). The County’s goal is to upgrade all facilities to current ADA standards in time, and thus all in-compliant areas were considered for potential upgrades. However, the Safe Harbor Provision would potentially allow some barriers to be mitigated at a later time.

Table 4 | Barriers Identified During Self-Evaluation and Countywide Extrapolation

ADA Barrier Type	Number of ADA Barriers Identified on Candidate Projects	Estimated Number of ADA Barriers Countywide
Sidewalks		
Small Gap in Sidewalk (under 50 LF)	1,647 Square Feet (SF)	3,293 Square Feet (SF)
Large Gap in Sidewalk (equal to or over 50 LF)	175,097 Square Feet (SF)	350,194 Square Feet (SF)
Insufficient Passing Distance	219	438
Curb Ramps		
Missing Curb Ramps	68	136
Structurally Deficient Curb Ramps	653	1,306
Curb Ramp Missing Detectable Warning (not structurally deficient)	752	1,504
Obstacles		
Tree, Bush, or Shrub Branches Blocking Path	46	92
Vegetation Blocking Path	315	630
Debris Blocking Path	30	60
Utility Pole Blocking Path	15	30
Excessive Water Collecting on Pathway During Rain Events (ponding)	79	158
Utility Causing Raised/Uneven Edge	49	98
Small Gap in Sidewalk (10 LF)	10	20
Fire Hydrant Blocking Path	2	4
Large Utility Blocking Path	13	26
Sign or Mailbox in Walkway	17	34
Hazards		
Excessive Cross Slope on Sidewalk	2,484	4,968
Excessive Running Slope on Sidewalk	5	10
Unstable Surface	24	48

ADA Barrier Type	Number of ADA Barriers Identified on Candidate Projects	Estimated Number of ADA Barriers Countywide
Drop Off	29	58
Utility Lid Missing	1	2
Damages		
Heaving or Settlement of Sidewalk	703	1,406
Shattering of Sidewalk	196	392
Raised/Uneven Edge	149	298

5.2 ADA Barrier Mitigation Cost Estimates

A unit cost estimate for each mitigation strategy shown in Table 5 was developed in order to address the identified ADA barriers from the self-evaluation. The unit costs for each mitigation strategy are shown in Table 5. The estimated costs are based upon Tennessee Department of Transportation (TDOT) standard costs, assuming a mid-range level of project complexity using 2019 dollars and loaded cost rates. Loaded costs from TDOT include maintenance of traffic (MOT), mobilization, contingency, design, and construction engineering inspection (CEI). The loaded costs do not include additions for right-of-way acquisition, nor adjustments for the Safe Harbor Provision (28 C.F.R. 35.150(b)(2)(i)).

The estimated costs to mitigate the ADA barrier candidate projects, which were identified as part of the self-evaluation, are reported in Table 6.

Shelby County requires that property and homeowners build, maintain, repair, and clean public sidewalks within unincorporated areas of the County that are adjacent to, or abutting, on any public roadway of the County, per Code 1992, § 26.5-53; Ord. No. 128, § 3, 10-4-1993. This ordinance does not apply to land owned by Shelby County or for those who live on any lot used solely for residential use on a road officially designated as a major road by the metropolitan planning organization (MPO).

This ADA Transition Plan for the Public Rights-of-Way will report the cost estimates to mitigate ADA barriers throughout the County. In compliance with the aforementioned ordinance (Code 1992, § 26.5-53; Ord. No. 128, § 3, 10-4-1993), mobility barriers related to sidewalks will be reported separately in Table 7.

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Table 5 | Unit Cost Estimates

Occurrence	Mitigation Strategy	Units	Quantity	Item Cost	Unit Cost Estimate	Mitigation Cost Estimate	Notes
Sidewalks							
Small Gap in Sidewalk (under 50 LF)	New 5' Sidewalk	SF	1		\$20.33	\$30	Based on 4" thick, 5' W x 10' L
	Concrete	SF	50	\$9.00	\$450.00		
	Erosion Control	LF	10	\$20.00	\$200.00		
	Earthwork	CY	17	\$20.00	\$333.33		
	Sod	SY	6	\$6.00	\$33.33		
Large Gap in Sidewalk (equal to or over 50 LF)	New 5' Sidewalk	SF	1		\$14.00	\$20	Based on 4" thick, 5' W x 50' L
	Concrete	SF	250	\$2.67	\$666.67		
	Erosion Control	LF	50	\$20.00	\$1,000.00		
	Earthwork	CY	83	\$20.00	\$1,666.67		
	Sod	SY	28	\$6.00	\$166.67		
Insufficient Passing Distance	Remove sidewalk panel & Add 5' Wide Panel for passing/turn around	EA	1		\$968.33	\$1,000	Based on adding a 4" thick, 5' W x 5' L passing/turn around location every 200'
	Concrete	SF	25	\$9.00	\$225.00		
	Erosion Control	LF	5	\$20.00	\$100.00		
	Earthwork	CY	8	\$20.00	\$166.67		
	Sod	SY	3	\$6.00	\$16.67		
	Saw Cut	LF	5	\$12.00	\$60.00		
	Demolition	LS	1	\$400.00	\$400.00		

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Occurrence	Mitigation Strategy	Units	Quantity	Item Cost	Unit Cost Estimate	Mitigation Cost Estimate	Notes
Curb Ramps							
Add Curb Ramp (no concrete or curb removal)	New Perpendicular Curb Ramp	EA	1		\$3,507.28	\$3,600	Assuming no demolition of existing sidewalk or curb
	<i>Concrete Curb Ramp</i>	SF	105	\$32.03	\$3,363.15		
	<i>Curb & Gutter</i>	CY	0.33	\$432.38	\$144.13		
	New Parallel Curb Ramp	EA	1		\$2,866.68	\$2,900	
	<i>Concrete Curb Ramp</i>	SF	85	\$32.03	\$2,722.55		
	<i>Curb & Gutter</i>	CY	0.33	\$432.38	\$144.13		
Add Curb Ramp (concrete removal)	Remove and Replace Perpendicular Curb Ramp	EA	1		\$3,896.51	\$3,900	Assuming demolition of existing sidewalk, curb, and gutter. Based on a 5' W x 5' L curb ramp
	<i>Concrete Curb Ramp</i>	SF	105	\$30.06	\$3,156.30		
	<i>Curb & Gutter</i>	CY	0.56	\$432.38	\$240.21		
	<i>Saw Cut</i>	LF	10	\$10.00	\$100.00		
	<i>Demolition</i>	LS	1	\$400.00	\$400.00		
	Remove and Replace Parallel Curb Ramp	EA	1		\$3,363.35	\$3,400	
	<i>Concrete Curb Ramp</i>	SF	85	\$30.06	\$2,555.10		
	<i>Curb & Gutter</i>	CY	0.67	\$432.38	\$288.25		
	<i>Saw Cut</i>	LF	10	\$12.00	\$120.00		
	<i>Demolition</i>	LS	1	\$400.00	\$400.00		

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Occurrence	Mitigation Strategy	Units	Quantity	Item Cost	Unit Cost Estimate	Mitigation Cost Estimate	Notes
Fix Curb Ramp (structurally deficient)	Remove and Replace Perpendicular Curb Ramp	EA	1		\$3,165.01	\$3,200	Assuming removal of existing curb ramp and replacement with new curb ramp Based on a 5' W x 5' L curb ramp
	<i>Concrete Curb Ramp</i>	<i>SF</i>	<i>80</i>	<i>\$30.06</i>	<i>\$2,404.80</i>		
	<i>Curb & Gutter</i>	<i>CY</i>	<i>0.56</i>	<i>\$432.38</i>	<i>\$240.21</i>		
	<i>Saw Cut</i>	<i>LF</i>	<i>10</i>	<i>\$12.00</i>	<i>\$120.00</i>		
	<i>Demolition</i>	<i>LS</i>	<i>1</i>	<i>\$400.00</i>	<i>\$400.00</i>		
	Remove and Replace Parallel Curb Ramp	EA	1		\$1,559.75	\$1,600	
	<i>Concrete Curb Ramp</i>	<i>SF</i>	<i>25</i>	<i>\$30.06</i>	<i>\$751.50</i>		
	<i>Curb & Gutter</i>	<i>CY</i>	<i>0.67</i>	<i>\$432.38</i>	<i>\$288.25</i>		
	<i>Saw Cut</i>	<i>LF</i>	<i>10</i>	<i>\$12.00</i>	<i>\$120.00</i>		
	<i>Demolition</i>	<i>LS</i>	<i>1</i>	<i>\$400.00</i>	<i>\$400.00</i>		
Curb Ramp Missing Detectable Warning (not structurally deficient)	Missing Detectable Warning = Add Detectable Warning	EA	1		\$500.00	\$500	Based on a 5' W x 5' L curb ramp
	<i>Detectable Warning</i>	<i>SF</i>	<i>10</i>	<i>\$50.00</i>	<i>\$500.00</i>		
Obstacles							
Tree, Bush, or Shrub Branches Blocking Path	Trim Obstacle	EA	1	\$300.00	\$300.00	\$300	Based on each limb or bush to be trimmed

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Occurrence	Mitigation Strategy	Units	Quantity	Item Cost	Unit Cost Estimate	Mitigation Cost Estimate	Notes
Vegetation Blocking Path	Trim Obstacle	EA	1	\$300.00	\$300.00	\$300	Based on each limb or bush to be trimmed
Debris Blocking Path	Remove Debris	EA	1	\$300.00	\$300.00	\$300	
Utility Pole Blocking Path	Relocate Pole	EA	1		\$10,550.00	\$10,600	
	Remove Pole	EA	1	\$550.00	\$550.00		
	Add Pole	EA	1	\$10,000.00	\$10,000.00		
Excessive Water Collecting on Pathway During Rain Events (ponding)	Regrade & Remove/Replace 20 LF	EA	1		\$2,673.33	\$2,700	Based on 4" thick, 5' W x 20' L
	Concrete	SF	100	\$9.00	\$900.00		
	Erosion Control	LF	20	\$20.00	\$400.00		
	Earthwork	CY	33	\$20.00	\$666.67		
	Sod	SY	11	\$6.00	\$66.67		
	Saw Cut	LF	20	\$12.00	\$240.00		
	Demolition	LS	1	\$400.00	\$400.00		
Utility Causing Raised/Uneven Edge	New 5' Sidewalk	EA	1		\$968.33	\$1,000	Based on 4" thick, 5' W x 5' L
	Concrete	SF	25	\$9.00	\$225.00		
	Erosion Control	LF	5	\$20.00	\$100.00		
	Earthwork	CY	8	\$20.00	\$166.67		
	Sod	SY	3	\$6.00	\$16.67		
	Saw Cut	LF	5	\$12.00	\$60.00		
	Demolition	LS	1	\$400.00	\$400.00		

SHELBY COUNTY ADA TRANSITION PLAN IN THE PUBLIC RIGHTS-OF-WAY

Occurrence	Mitigation Strategy	Units	Quantity	Item Cost	Unit Cost Estimate	Mitigation Cost Estimate	Notes
Small Gap in Sidewalk (10 LF)	New 5' Sidewalk	EA	1		\$1,016.67	\$1,100	Based on 4" thick, 5' W x 10' L
	<i>Concrete</i>	SF	50	\$9.00	\$450.00		
	<i>Erosion Control</i>	LF	10	\$20.00	\$200.00		
	<i>Earthwork</i>	CY	17	\$20.00	\$333.33		
	<i>Sod</i>	SY	6	\$6.00	\$33.33		
Fire Hydrant Blocking Path	New 5' Sidewalk	EA	1		\$1,536.67	\$1,600	Based on 4" thick, 5' W x 10' L
	<i>Concrete</i>	SF	50	\$9.00	\$450.00		
	<i>Erosion Control</i>	LF	10	\$20.00	\$200.00		
	<i>Earthwork</i>	CY	17	\$20.00	\$333.33		
	<i>Sod</i>	SY	6	\$6.00	\$33.33		
	<i>Saw Cut</i>	LF	10	\$12.00	\$120.00		
	<i>Demolition</i>	LS	1	\$400.00	\$400.00		
Large Utility Blocking Path	Remove & Replace 20 LF of Sidewalk for Each	EA	1		\$2,673.33	\$2,700	Based on 4" thick, 5' W x 20' L
	<i>Concrete</i>	SF	100	\$9.00	\$900.00		
	<i>Erosion Control</i>	LF	20	\$20.00	\$400.00		
	<i>Earthwork</i>	CY	33	\$20.00	\$666.67		
	<i>Sod</i>	SY	11	\$6.00	\$66.67		
	<i>Saw Cut</i>	LF	20	\$12.00	\$240.00		
	<i>Demolition</i>	LS	1	\$400.00	\$400.00		
Sign or Mailbox in Walkway	Relocate/Replace Sign/Mailbox	EA	1		\$100.00	\$100	

SHELBY COUNTY ADA TRANSITION PLAN IN THE PUBLIC RIGHTS-OF-WAY

Occurrence	Mitigation Strategy	Units	Quantity	Item Cost	Unit Cost Estimate	Mitigation Cost Estimate	Notes
Hazards							
Excessive Cross Slope on Sidewalk	Remove & Replace 10 LF of Sidewalk for Each	EA	1		\$1,536.67	\$1,600	Based on 4" thick, 5' W x 10' L
	<i>Concrete</i>	<i>SF</i>	50	\$9.00	\$450.00		
	<i>Erosion Control</i>	<i>LF</i>	10	\$20.00	\$200.00		
	<i>Earthwork</i>	<i>CY</i>	17	\$20.00	\$333.33		
	<i>Sod</i>	<i>SY</i>	6	\$6.00	\$33.33		
	<i>Saw Cut</i>	<i>LF</i>	10	\$12.00	\$120.00		
	<i>Demolition</i>	<i>LS</i>	1	\$400.00	\$400.00		
Excessive Running Slope on Sidewalk	Remove & Replace 20 LF of Sidewalk for Each	EA	1		\$2,673.33	\$2,700	Based on 4" thick, 5' W x 20' L
	<i>Concrete</i>	<i>SF</i>	100	\$9.00	\$900.00		
	<i>Erosion Control</i>	<i>LF</i>	20	\$20.00	\$400.00		
	<i>Earthwork</i>	<i>CY</i>	33	\$20.00	\$666.67		
	<i>Sod</i>	<i>SY</i>	11	\$6.00	\$66.67		
	<i>Saw Cut</i>	<i>LF</i>	20	\$12.00	\$240.00		
	<i>Demolition</i>	<i>LS</i>	1	\$400.00	\$400.00		
Unstable Surface	Remove & Replace 20 LF of Sidewalk for Each	EA	1		\$2,673.33	\$2,700	Based on 4" thick, 5' W x 20' L
	<i>Concrete</i>	<i>SF</i>	100	\$9.00	\$900.00		
	<i>Erosion Control</i>	<i>LF</i>	20	\$20.00	\$400.00		
	<i>Earthwork</i>	<i>CY</i>	33	\$20.00	\$666.67		
	<i>Sod</i>	<i>SY</i>	11	\$6.00	\$66.67		
	<i>Saw Cut</i>	<i>LF</i>	20	\$12.00	\$240.00		
	<i>Demolition</i>	<i>LS</i>	1	\$400.00	\$400.00		

SHELBY COUNTY ADA TRANSITION PLAN IN THE PUBLIC RIGHTS-OF-WAY

Occurrence	Mitigation Strategy	Units	Quantity	Item Cost	Unit Cost Estimate	Mitigation Cost Estimate	Notes
Drop Off	Install handrail	EA	1		\$1,100.00	\$1,100	Based on steel pipe handrail 1-1/2" per TDOT specification
	<i>Handrail</i>	<i>LF</i>	10	\$110.00	\$1,100.00		
Utility Lid Missing	Replace Utility Lid	EA	1		\$100.00	\$100	
	<i>Utility Lid</i>	<i>EA</i>	1	\$100.00	\$100.00		
Damages							
Heaving or Settlement of Sidewalk	Remove & Replace 10 LF of Sidewalk for Each	EA	1		\$1,536.67	\$1,600	Based on 4" thick, 5' W x 10' L
	<i>Concrete</i>	<i>SF</i>	50	\$9.00	\$450.00		
	<i>Erosion Control</i>	<i>LF</i>	10	\$20.00	\$200.00		
	<i>Earthwork</i>	<i>CY</i>	17	\$20.00	\$333.33		
	<i>Sod</i>	<i>SY</i>	6	\$6.00	\$33.33		
	<i>Saw Cut</i>	<i>LF</i>	10	\$12.00	\$120.00		
	<i>Demolition</i>	<i>LS</i>	1	\$400.00	\$400.00		
Shattering of Sidewalk	Remove & Replace 10 LF of Sidewalk for Each	EA	1		\$1,536.67	\$1,600	Based on 4" thick, 5' W x 10' L
	<i>Concrete</i>	<i>SF</i>	50	\$9.00	\$450.00		
	<i>Erosion Control</i>	<i>LF</i>	10	\$20.00	\$200.00		
	<i>Earthwork</i>	<i>CY</i>	17	\$20.00	\$333.33		
	<i>Sod</i>	<i>SY</i>	6	\$6.00	\$33.33		
	<i>Saw Cut</i>	<i>LF</i>	10	\$12.00	\$120.00		
	<i>Demolition</i>	<i>LS</i>	1	\$400.00	\$400.00		
Raised/Uneven Edge	Grind Each Occurrence	EA	1	\$60.00	\$60.00	\$100.00	Estimated price per repair

Table 6 | Cost Estimate: Mobility Barriers

Occurrence	Mitigation Strategy	Units	Quantity	Unit Cost Estimate	Candidate Projects Cost Estimate	Notes
Curb Ramps						
Add Curb Ramp (no concrete or curb removal)	New Perpendicular Curb Ramp	EA	68	\$3,507	\$239,000	Assuming no demolition of existing sidewalk or curb
	New Parallel Curb Ramp	EA	0	\$2,867	\$0	
Add Curb Ramp (concrete removal)	Remove and Replace Perpendicular Curb Ramp	EA	628	\$3,897	\$2,450,000	Assuming demolition of existing sidewalk, curb, and gutter Based on a 5' W x 5' L curb ramp
	Remove and Replace Parallel Curb Ramp	EA	0	\$3,363	\$0	
Fix Curb Ramp (structurally deficient)	Remove and Replace Perpendicular Curb Ramp	EA	24	\$3,165	\$76,000	Assuming removal of existing curb ramp and replacement with new curb ramp
	Remove and Replace Parallel Curb Ramp	EA	1	\$1,560	\$1,600	Based on a 5' W x 5' L curb ramp
Curb Ramp Missing Detectable Warning (not structurally deficient)	Add Detectable Warning	EA	752	\$500	\$376,000	Based on a 5' W x 5' L curb ramp

SHELBY COUNTY ADA TRANSITION PLAN IN THE PUBLIC RIGHTS-OF-WAY

Occurrence	Mitigation Strategy	Units	Quantity	Unit Cost Estimate	Candidate Projects Cost Estimate	Notes
Obstacles						
Tree, Bush, or Shrub Branches Blocking Path	Trim Obstacle	EA	46	\$300	\$14,000	Based on each limb or bush to be trimmed
Vegetation Blocking Path	Trim Obstacle	EA	315	\$300	\$100,000	Based on each limb or bush to be trimmed
Debris Blocking Path	Remove Debris	EA	30	\$300	\$9,000	
Utility Pole Blocking Path	Relocate Pole	EA	15	\$10,550	\$159,000	
Utility Causing Raised/Uneven Edge	New 5' Sidewalk	EA	49	\$968	\$48,000	Based on 4" thick, 5' W x 5' L
Fire Hydrant Blocking Path	New 5' Sidewalk	EA	2	\$1,537	\$3,100	Based on 4" thick, 5' W x 5' L
Large Utility Blocking Path	Remove & Replace 20 LF of Sidewalk	EA	13	\$2,673	\$34,800	Based on 4" thick, 5' W x 20' L
Sign or Mailbox in Walkway	Relocate/Replace Sign/Mailbox	EA	17	\$100	\$1,700	
Hazards						
Drop Off	Install handrail	EA	29	\$1,100	\$32,000	Based on steel pipe handrail 1-1/2" per TDOT specification
Utility Lid Missing	Replace Utility Lid	EA	1	\$100	\$100	
Total Mobility Barrier Cost Estimate					\$3,500,000	

SHELBY COUNTY ADA TRANSITION PLAN IN THE PUBLIC RIGHTS-OF-WAY

Table 7 | Cost Estimate: Sidewalk Mobility Barriers

Occurrence	Mitigation Strategy	Units	Quantity	Unit Cost Estimate	Candidate Projects Cost Estimate	Notes
Sidewalks						
Small Gap in Sidewalk (under 50 LF)	New 5' Sidewalk	SF	1,647	\$20	\$34,000	Based on 4" thick, 5' W
Large Gap in Sidewalk (equal to or over 50 LF)	New 5' Sidewalk	SF	175,097	\$14	\$2,460,000	Based on 4" thick, 5' W
Insufficient Passing Distance	Remove sidewalk panel & Add 5' Wide Panel for passing/turn around	EA	219	\$968	\$213,000	Based on adding a 4" thick, 5' W x 5' L passing/turn around location every 200'
Obstacles						
Excessive Water Collecting on Pathway During Rain Events (ponding)	Regrade & Remove/Replace 20 LF	EA	79	\$2,673	\$212,000	Based on 4" thick, 5' W x 20' L
Utility Causing Raised/Uneven Edge	New 5' Sidewalk	EA	49	\$968	\$48,000	Based on 4" thick, 5' W x 5' L
Small Gap in Sidewalk (10 LF)	New 5' Sidewalk	EA	10	\$1,017	\$10,200	
Hazards						
Excessive Cross Slope on Sidewalk	Remove & Replace 10 LF of Sidewalk for Each	EA	2,484	\$1,537	\$3,820,000	Based on 4" thick, 5' W x 10' L
Excessive Running Slope on Sidewalk	Remove & Replace 20 LF of Sidewalk for Each	EA	5	\$2,673	\$14,000	Based on 4" thick, 5' W x 20' L

SHELBY COUNTY ADA TRANSITION PLAN IN THE PUBLIC RIGHTS-OF-WAY

Occurrence	Mitigation Strategy	Units	Quantity	Unit Cost Estimate	Candidate Projects Cost Estimate	Notes
Unstable Surface	Remove & Replace 20 LF of Sidewalk for Each	EA	24	\$2,673	\$64,200	
Damages						
Heaving or Settlement of Sidewalk	Remove & Replace 10 LF of Sidewalk for Each	EA	703	\$1,537	\$1,090,000	Based on 4" thick, 5' W x 10' L
Shattering of Sidewalk	Remove & Replace 10 LF of Sidewalk for Each	EA	196	\$1,537	\$302,000	Based on 4" thick, 5' W x 10' L
Raised/Uneven Edge	Grind Each Occurrence	EA	149	\$60	\$10,000	Estimated price per repair
Sidewalk Mobility Barrier Cost Estimate					\$8,300,000	

SHELBY COUNTY ADA TRANSITION PLAN IN THE PUBLIC RIGHTS-OF-WAY

The costs from the candidate projects identified from the self-evaluation, shown in Table 6 and Table 7, were also extrapolated to estimate the potential countywide costs for ADA barrier mitigation, as shown in Table 8.

Table 8 | Estimated Loaded Costs of Barriers Identified and Countywide Estimate

Occurrence	Candidate Projects Cost Estimate	Countywide Projects Cost Estimate
Sidewalks		
Small Gap in Sidewalk (under 50 LF)	\$34,000	\$68,000
Large Gap in Sidewalk (equal to or over 50 LF)	\$2,460,000	\$4,920,000
Insufficient Passing Distance	\$213,000	\$426,000
Curb Ramps		
Add Curb Ramp (no concrete or curb removal)	\$239,000	\$478,000
	\$0	\$0
Add Curb Ramp (concrete removal)	\$2,450,000	\$4,900,000
	\$0	\$0
Fix Curb Ramp (structurally deficient)	\$76,000	\$152,000
	\$1,600	\$3,200
Curb Ramp Missing Detectable Warning (not structurally deficient)	\$376,000	\$752,000
Obstacles		
Tree, Bush, or Shrub Branches Blocking Path	\$14,000	\$28,000
Vegetation Blocking Path	\$100,000	\$200,000
Debris Blocking Path	\$9,000	\$18,000
Utility Pole Blocking Path	\$159,000	\$318,000
Excessive Water Collecting on Pathway During Rain Events (ponding)	\$212,000	\$424,000
Utility Causing Raised/Uneven Edge	\$48,000	\$96,000
Small Gap in Sidewalk (10 LF)	\$10,200	\$20,400
Fire Hydrant Blocking Path	\$3,100	\$6,200
Large Utility Blocking Path	\$34,800	\$69,600

Occurrence	Candidate Projects Cost Estimate	Countywide Projects Cost Estimate
Sign or Mailbox in Walkway	\$1,700	\$3,400
Hazards		
Excessive Cross Slope on Sidewalk	\$3,820,000	\$7,640,000
Excessive Running Slope on Sidewalk	\$14,000	\$28,000
Unstable Surface	\$64,200	\$128,400
Drop Off	\$32,000	\$64,000
Utility Lid Missing	\$100	\$200
Damages		
Heaving or Settlement of Sidewalk	\$1,090,000	\$2,180,000
Shattering of Sidewalk	\$302,000	\$604,000
Raised/Uneven Edge	\$10,000	\$20,000
Total ADA Barrier Mitigation Cost Estimate:	\$11,800,000	\$23,500,000

5.3 Approach to Candidate Projects Prioritization

The ADA prioritization methodology, as detailed in Table 9, facilitates the determination of priority areas within Shelby County for ADA barrier mitigation. The methodology accounts for equity, types of land use and services, and census factors, as shown in Table 9, and calculates a score ranging from 1 to 100. Each of the factors included in the analysis are associated with either generating or supporting greater levels of pedestrian activity.

The highest priority scores generated by this analysis are identified as having the greatest positive impact generated for the community by implementing ADA mitigation projects (i.e. ADA retrofit projects). The priority areas within Shelby County are shown in Figure 1. Areas with a higher prioritization are shown in yellow.

5.3.1 Equity Analysis

The equity analysis considers areas which have a high density of historically underserved populations. The equity component incorporates five socio-economic indicators which as a composite identify the underserved population areas. These include:

- **Poverty:** Percentage of population below poverty level
- **Minority:** Percentage of minority population
- **Limited English Proficiency:** Percentage of population with limited English proficiency
- **Over 65:** Percentage of population age 65 or above

- **18 or Below:** Percentage of population 18 or below

The analysis used a threshold for each of the above indicators, so that those census block groups that had a greater value than the mean value for any given indicator was given a score of one (1). The scores for the individual categories were then summed across the five socio-economic indicators to generate a composite equity score. For example, if a census block group had an above average number of people below poverty level and an above average number of people 65 years of age or older, the census block group was given a score of two (2). The Equity Score range has a maximum possible high score of five (5), indicating above average values for each of the seven socio-economic indicators, and a minimum possible low equity score of zero (0), which would indicate no above average values.

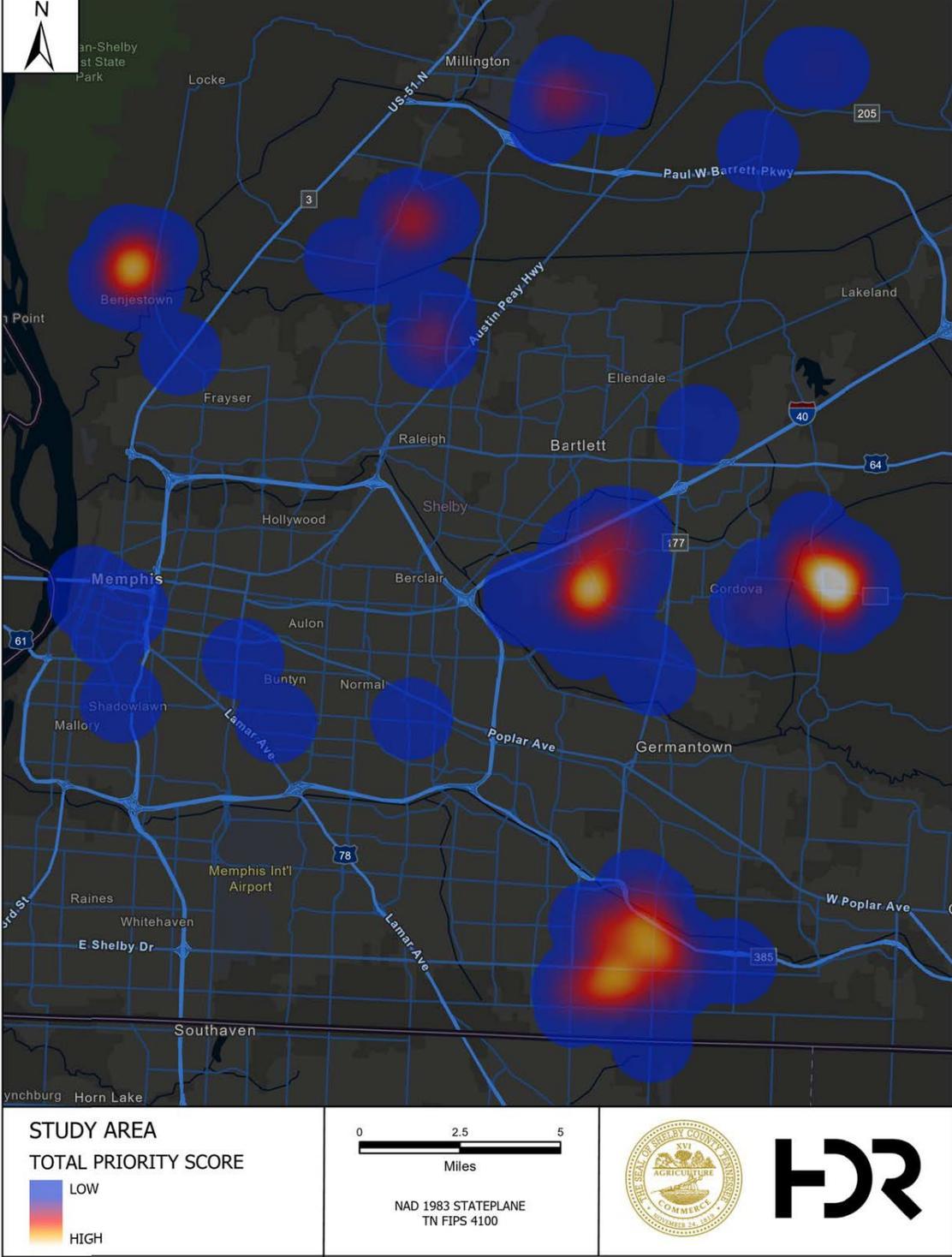
Table 9 | ADA Barrier Mitigation Prioritization Methodology Based on Location

Category	Weighted % of Category
Equity Analysis	25%
7 = 100 points	
6 = 80 points	
5 = 60 points	
3-4 = 40 points	
1-2 = points	
Educational Facilities	20%
1/8 mi of a school = 100 points	
1/4 mi of a school = 80 points	
1/2 mi of a school = 60 points	
3/4 mi of a school = 40 points	
1 mi of a school = 20 points	
Parks & Museums	15%
1/8 mi of a park/cultural center = 100 points	
1/4 mi of a park/cultural center = 80 points	
1/2 mi of a park/cultural center = 60 points	
3/4 mi of a park/cultural center = 40 points	
1 mi of a park/cultural center = 20 points	
Hospitals & Assisted Living Facilities	15%
1/8 mi of Hospital/Retirement Home= 100 points	
1/4 mi of Hospital/Retirement Home = 70 points	
1/2 mi of Hospital/Retirement Home = 50 points	
3/4 mi of Hospital/Retirement Home = 20 points	

SHELBY COUNTY ADA TRANSITION PLAN IN THE PUBLIC RIGHTS-OF-WAY

Category	Weighted % of Category
Transit	
1/4 mi of a Bus Stop with ridership > 100 = 100 points	
1/4 mi of a Bus Stop with ridership 50 -100 = 80 points	10%
1/4 mi of a Bus Stop with ridership 10-50 = 60 points	
1/4 mi of a Bus Stop with ridership 5-10 = 40 points	
1/4 mi of a Bus Stop with ridership < 5 = 20 points	
Functionally Classified Streets	
Arterial = 100 points	5%
Collector = 80 points	
Residential Collector = 60 points	
Residential Population Density (Pop. per Acre)	
Density > 30 = 100 points	
Density > 15-30 = 80 points	10%
Density > 5-15 = 60 points	
Density 1-5 = 40 points	
Density < 1 = 20 points	
TOTAL	100%

Figure 1 | Prioritization Heat Map



5.3.2 Mitigation Project Prioritization

Shelby County should consider ADA improvements in locations that will provide the greatest benefit to the public. The ADA barrier mitigation prioritization methodology described in the previous section facilitates this process by considering types of land use, pedestrian activity, population densities, and equity. Other factors to consider when prioritizing projects include:

- Citizen requests/complaints,
- Available right-of-way,
- Proximity to other planned/programmed projects, and
- Financial / administrative resources.

6.0 Implementation Framework & Funding Assessment

The prioritized mitigation projects identified in the ADA Transportation Network Inventory, if present, should be incorporated into the Capital Improvement Plan (CIP) for programming and implementation.

6.1 Shelby County Capital Improvement Plan

Each year, the County approves a five-year CIP to provide a systematic and transparent process of planning, budgeting, and programming projects. The CIP creates an outline for the County to meet its current and future infrastructure needs. As the County develops candidate projects for the CIP, such as resurfacing, traffic signal maintenance, and corridor improvements, the ADA infrastructure needs of individual projects will need to be assessed using the recommended ADA procedures described in the following sections.

6.1.1 Shelby County Public Development Capital Projects

Public development capital projects are executed by the County, and must meet Title II Public Services requirements. These projects include, but are not limited to: Buildings & Property, Community Projects, Roads & Bridges Projects, and Information Technology Projects.

Project descriptions in the CIP contain short descriptions of each project, and applicable projects should include a statement regarding a focus on providing ADA compliance. Sample ADA commitment statements are included in Table 10.

Table 10 | Recommended CIP ADA Supportive Statements Examples

CIP Category	Recommended ADA Supportive Statements
Park Renovations	“The playground equipment will be designed and installed by a professional company to include age specific units, creative and challenging heights, slides, colors, and will provide ADA accessibility including the installation of safety surfacing below components in accordance with Consumer Product Safety Guidelines.” “Sidewalks are necessary for ADA access.” “...ADA access for this type of equipment is desirable.”
Trail Improvements	“Introduction of new ADA sidewalks for accessibility.”

CIP Category	Recommended ADA Supportive Statements
Curb Ramp Retrofit(s)	“...bring current ADA curb ramps up to federal and TDOT standards in accordance with Shelby County’s ADA Transition Plan.”
Facilities Renovations, Upgrades, and Replacements	“This program provides for the systematic repair, renovation, and replacement of key operating systems, equipment, and components of County operated facilities. Individual projects will include items such as...ADA upgrades and remodels...”
Mobility Infrastructure Rehabilitation and Renovations	“...renovate or upgrade infrastructure to meet ADA standards and provide guard rail upgrades/renovations to meet new DOT code standards.” “...enhance ADA access to the facility.”
Minor Bus Stop Program	“...evaluate which bus stops require improvement based on the following criteria...degree of noncompliance with ADA standards...”

6.1.2 Shelby County Private Development Capital Projects

Private development projects may include improvements in existing public rights-of-way, such as sidewalks around the building or may include the main entrance to the facility. These areas are typically either dedicated rights-of-way or private areas that the public will access. Developers also often develop new roadway corridors accepted by the County into the public rights-of-way system and they must meet Title II Public Services requirements, while privately owned/operated/maintained areas must meet Title III Public Accommodations requirements. Developers must go through a development review process with the Roads, Bridges & Engineering Department, which includes an ADA feature review.

6.1.3 Relationship to Resurfacing Projects

Once the County totals the cost estimates for identified ADA barriers on a countywide basis, the relationship of this to amounts spent on annual roadway resurfacing projects should be reviewed. This should include a review of how many centerline miles of roadway are resurfaced per year compared to how many centerline miles are maintained by Shelby County. This analysis should identify the average roadway resurfacing schedule or year cycle, for example a 15 year cycle. This will result in an estimate of how long it should take the County to mitigate all of the ADA barriers identified, if present, by aligning the retrofit projects with the resurfacing schedule. As discussed previously, the plan should continue to be refined as additional inventories are completed, along with an assessment of the Safe Harbor Provision in addition to updated cost information.

6.1.4 Programming of ADA Projects

The County should address programming of ADA projects into existing programs that, either directly or indirectly, include ADA components. The six programs and brief descriptions of how they will include ADA improvements to rights-of-way infrastructure are as follows:

- Resurfacing Program – Corridors that are candidates for resurfacing projects in the CIP should be reviewed with an ADA assessment completed for the existing pedestrian

infrastructure in the rights-of-way of each individual project. The result of the assessment should be a documented list of ADA deficiencies along the candidate resurfacing corridors. The deficiencies should then be addressed as either a part of the resurfacing project or through a companion project or program that will complete or implement the identified improvements.

- Traffic Signal Maintenance Program – The County should standardize the timeframe of inspecting County-maintained traffic signals. The inspections should identify signal components that do not meet current ADA standards.
- New Capital/Roadway Reconstruction Projects – A primary purpose of the CIP process is to assist in the coordination of roadway reconstruction or widening projects with maintenance improvement projects to avoid rework and maintain an efficient use of resources. This is also true for ADA improvements as specific ADA improvements would not be planned or implemented on a corridor that is scheduled for reconstruction. Staff should identify ADA deficiencies in these locations and improvements to address the ADA deficiencies should be included as a part of the new capital projects. As the County identifies locations of damaged sidewalks and develops projects to address them, County staff should also identify ADA deficiencies within the limits of the areas of sidewalk maintenance projects and incorporate improvements to address the deficiencies as well.
- Development Projects - As new pedestrian infrastructure are developed throughout the County, existing sidewalks and ramps immediately adjacent to the new sidewalk locations should be assessed by the staff managing the completion of the new sidewalks.
- ADA Retrofit Projects – standalone ADA projects for mitigation

Distributing the ADA improvements amongst several programs allows for individual ADA barriers to be mitigated in a timely and fiscally responsible manner, while still providing flexibility to Shelby County to address high priority areas and specific retrofit projects as needed.

Once each ADA retrofit project has been distributed amongst the programs/projects, each program/project is then responsible for identifying the project timeframe to completion and developing a self-assessment process/schedule to ensure that the retrofit project will comply with current ADA standards. Each program/project will then document the funding source(s) for the retrofit improvements. Upon completion of these items, the project can be formally adopted into the Shelby County CIP.

6.2 Implementation and Mitigation Schedule

The implementation and mitigation schedule of this ADA Transition Plan throughout Shelby County will extend over multiple fiscal years. The schedule shall account for the installation, repair, and replacement of the identified ADA barriers for each annual update. A graphical summary of the infrastructure assessment and implementation process for this plan is provided in Figure 2. Table 11 outlines a preliminary annual implementation and funding schedule for ADA barrier mitigation throughout the County, based on the countywide estimate of ADA mobility barriers.

The exact locations and detailed schedule of work will be determined based on the precise mitigation projects being implemented, and are subject to review and recommendations by the County and the public. The implementation schedule may also be adjusted in the future after a more detailed review by project and program managers, which will include additional analyses with the Safe Harbor Provision (28 C.F.R. 35.150(b)(2)(i)).

Table 11 | Thirty Year Implementation and Funding Schedule

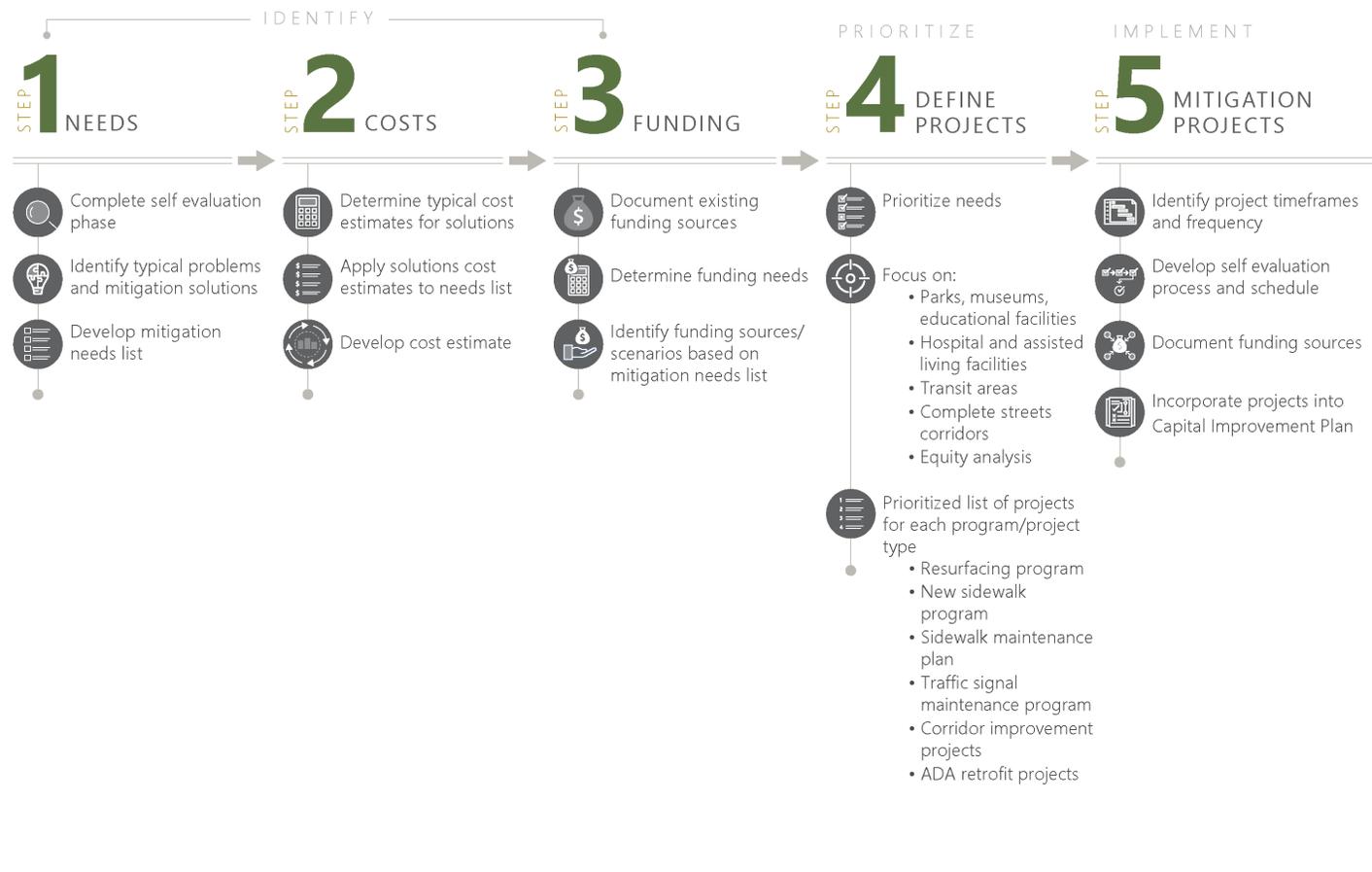
Mobility Barrier	Annual Funding Schedule (30 years)
Shelby County Mobility Barrier Mitigation	\$230,000

Per Shelby County’s sidewalk ordinance (Code 1992, § 26.5-53; Ord. No. 128, § 3, 10-4-1993), property and homeowners are required to build, maintain, repair, and clean public sidewalks within unincorporated areas of the County that are adjacent to, or abutting, any public roadway of the County. This ordinance does not apply to land owned by Shelby County or for those who live on any lot used solely for residential use on a road officially designated as a major road by the metropolitan planning organization (MPO).

Figure 2 | ADA Facility Self-Evaluation and Implementation Framework

ADA for the Public Rights-of-Way

Facility Self Evaluation and Implementation Framework



6.3 Funding Scenarios

Based upon the countywide cost estimates for ADA barriers presented in Table 8, approximately \$23.6 million (2019 dollars) will be needed to mitigate ADA barriers throughout Shelby County roadways and facilities. New roadways and facilities built after the completion of this Transition Plan are assumed to be ADA compliant and will not need mitigation projects, otherwise the cost estimate will increase.

The annual review and update of this plan shall refine the cost estimates and implementation schedule based upon new infrastructure assessments and needs, updated cost estimates, and revisions to adopted ADA standards. This section outlines different funding scenarios for ADA mitigation projects to bring Shelby County infrastructure into ADA compliance.

6.3.1 Current Funding Sources

Shelby County has multiple sources of funding for CIP projects. A few of the funding sources are listed below:

- Budget funding
 - Property taxes
 - Intergovernmental-State
 - Other local taxes
 - Fines, fees, and permits
 - Intergovernmental-Federal
 - Charges for services
 - Investment Income
 - Other
 - Planned Use of Fund Balance
 - Operating Transfers In
 - Other Financial Sources
- CIP funding
 - Short term borrowing program
 - Bond resolution to provide funding for current fiscal year's capital plan
 - Long term general obligation debt
 - Pay-as-you-go funds
 - Generally for smaller projects, projects that do not constitute assets of the county, projects with a shorter useful life, and other non-school projects
 - Debt financing
 - Federal funding
 - State funding
 - Other funding
 - Other government reimbursements
 - Property tax allocations
 - County funding/debt

- Funding outside of CIP
 - General fund
 - Special revenue fund
 - Grant funds
 - Enterprise funds
 - Internal service funds
 - Debt service funds

6.3.2 Potential Funding Sources

Funding for ADA mitigation projects can be made available through existing grant programs, as well as planned maintenance and remediation projects. For instance, a road resurfacing project planned for the near future can incorporate ADA requirements and help mitigate any ADA barriers found along the roadway.

Other sources of additional funding may be found through grant and funding programs overseen by the United States Department of Transportation (US DOT), the Federal Transit Administration (FTA), the Federal Highway Administration (FHWA), and the Governors Highway Safety Association (GHSA). These funding sources and their specific programs, which may be applicable to funding future transportation initiatives, are outlined below in Table 12.

Table 12 | Potential Funding Source Descriptions

Funding Source	Description	Funding Agency	Current Application Requirements Webpage
Better Utilizing Investments to Leverage Development (BUILD) Transportation Discretionary Grants program	Funds surface transportation infrastructure for projects with a significant impact in their local or regional communities, including roads, bridges, transit, rail, ports, and intermodal transportation.	US DOT	BUILD Grants - How to Apply
Federal Transit Administration Capital Investments Grants Program	Funds transit capital investments, including heavy rail, commuter rail, light rail, streetcars, and bus rapid transit.	FTA	FTA New Grant Applicants
Access and Mobility Partnership Grants	Funds innovative projects for the transportation disadvantaged that will improve the coordination of transportation services and non-emergency medical transportation services.	FTA	FTA New Grant Applicants
Congestion Mitigation and Air Quality Program	Provides funding to areas in nonattainment or maintenance for ozone, carbon monoxide, and/or particulate matter; funds may be used for any transit capital expenditure otherwise eligible for FTA funding as long as they have an air quality benefit.	FTA	FTA New Grant Applicants

SHELBY COUNTY ADA TRANSITION PLAN IN THE PUBLIC RIGHTS-OF-WAY

Funding Source	Description	Funding Agency	Current Application Requirements Webpage
National Highway Performance Program	Provides support funding for the condition and performance of the National Highway System (NHS), the construction of new facilities on the NHS, and to support progress toward performance targets established in a State's asset management plan.	FTA	FTA New Grant Applicants
Surface Transportation Block Grant Program	Provides funding to states and localities for projects that preserve and improve conditions and performance of surface transportation, including highway, transit, intercity bus, bicycle, and pedestrian projects.	FTA	FTA New Grant Applicants
Metropolitan & Statewide Planning and Non-Metropolitan Transportation Planning	Provides funding for multimodal transportation planning, including increasing the accessibility and mobility of people.	FTA	FTA New Grant Applicants
Pilot Program for Transit-Oriented Development Planning	Provides funding to local communities to integrate land use and transportation investment.	FTA	FTA New Grant Applicants
Highway Safety Improvement Program (HSIP)	Provides funding for projects that achieve a significant reduction in traffic fatalities and serious injuries on all public roads.	FHWA	HSIP Project Eligibility
Transportation Alternatives Program	Provides funding support for programs and projects defined as transportation alternatives.	Memphis MPO / TDOT (Funded by FHWA)	FHWA - Transportation Alternatives TDOT - Transportation Alternatives Program
Recreational Trails Program (RTP)	Provides funding to States to develop and maintain recreational trails and trail-related facilities for both non-motorized and motorized recreational trail users.	FHWA	Recreational Trails Programs
State and Community Highway Safety Grant Program	Provides funding to states to improve driver behavior and reduce deaths and injuries from motor vehicle-related crashes	GHSA	Section 402 State and Community Highway Safety Grant Program

7.0 Next Steps and Monitoring

After the implementation of the Transition Plan, the next steps and monitoring include establishing:

- An ADA Core Team
- A formal review procedure
- Organizational strategies
- An ADA Compliant Monitoring Procedure

Each of these processes will aid Shelby County with continued ADA compliance as design standards and best practices evolve over time. The purpose and/or responsibilities for each of these items is detailed in the remainder of this section.

7.1 Establish ADA Core Team

The goal of the development of an ADA Core Team, referred to hereafter as the Team, is to implement, coordinate, and monitor the Shelby County ADA Transition Plan for the Public Rights-of-Way. Responsibilities for the team include:

- Scheduling and monitoring ADA improvement projects
- Addressing public involvement
- Addressing community requests
- Developing annual Project Status Memos
- Securing funding for stand-alone ADA retrofit projects
- Reviewing, revising, and approving suggested language updated in the County Code, contract documents, and checklists
- Reviewing, revising, and approving suggested updated to the Standard Operating Procedure for ADA improvements
- Auditing accessibility compliance of projects during planning, construction, and closeout

7.1.1 ADA Core Team Composition

The ADA Core Team should be comprised of different infrastructure planning divisions within Shelby County government, comprised of Shelby County representatives responsible for ADA Compliance. The ADA Coordinator will be the Chair of the Team.

7.1.2 Project Status Meetings

The ADA Core Team shall meet on an annual basis to discuss the primary responsibility items listed in the introduction of Section 7.1. Each team member shall be responsible for presenting suggested revisions to the Shelby County Code of Ordinances, checklists, other relevant documents, and/or procedures necessary for that member's respective division. The team member presenting will also develop the final and approved changes for submission to the ADA Coordinator for adoption into the appropriate document/procedure.

The following items shall be completed one (1) week from each meeting date:

- A project status memorandum (memo) that summarizes the projects discussed at the ADA Core Team meeting
- A technical memo detailing the approved revisions to the Shelby County Code of Ordinances, checklists, other relevant documents, and/or procedures
- Team meeting minutes to be published on the Shelby County website

The Chair will organize and coordinate the team meetings, and serve as the primary developer for the ADA project status memos and meeting minutes.

Table 13 | Example ADA Core Team Meeting Agenda

Proposed Meeting Agenda and Action Items
<ul style="list-style-type: none"> • Discuss upcoming, current/ongoing, and completed ADA projects • Discuss public involvement events • Review ADA Transportation Network Inventory and Data Collection Procedures • Review suggested code, checklist, or procedure updates • Reviews results of Development Engineering ADA audits • Reports from the Divisions and Departments

7.1.3 Project Status Memos

The ADA project status memoranda (memos) shall summarize the status of the ADA Transition Plan implementation at the time of the memo’s development. The memos will be used by the Shelby County ADA Coordinator to document the progress made within the past year to implement the Shelby County ADA Transition Plan.

Additionally, the ADA project status memos will be used to update the Shelby County ADA Transportation Network Inventory in Geographic Information Systems (GIS). Lists of prioritized projects should be presented and every project should be described in the ADA project status memo with the following information at minimum:

- Project title
- Description and location of ADA features constructed/retrofit
- Status (current, upcoming, or completed project)
- Special notes or remarks about the development of the project
 - Project funding status (either anticipated or secured) and funding source
 - Anticipated dates of project start and end
 - Project initiated by (future development, ADA Transition Plan retrofit, grievance procedure request, etc.)

7.2 Formal Review Procedure

The formal review procedure is used for existing County documents, including the Shelby County Code of Ordinances, contract documents, and checklists. Each ADA Core Team representative shall coordinate with their division to review the Shelby County Code, specifications, and detailed that relate to their division on an annual basis. Proposed changes will be presented by the team member representative at the specific Team meeting for the final review and/or revisions.

When the final recommendations are approved by the Team, if applicable, the ADA Coordinator will compile all of the changes presented by the divisions. The ADA Coordinator will bring the recommended changes to the Director of Public Works to present the compilation to the Shelby County Board of County Commissioners for adoption. Upon the approval of the final documents by the County Commissioners, the changes will be incorporated into the division's respective documents and an announcement about the changes will be posted on Shelby County's website.

7.3 Organizational Strategies

With the implementation of the ADA Transition Plan, the ADA Coordinator will be responsible for documenting Shelby County's continuing efforts towards ADA Compliance. The ADA Coordinator will establish responsibilities for Shelby County staff in order to coordinate the efforts of the divisions to implement and maintain the ADA Transition Plan.

Organizational strategies recommended for consideration include:

- **Capital Improvement Plan:** The ADA Coordinator shall work with the Director of Public Works to incorporate ADA improvements into the Shelby County Capital Improvement Plan (CIP). The improvements should be incorporated into planned maintenance, remediation projects, and future projects for efficiency and to reduce the need for additional retrofit funding. The ADA Coordinator shall also arrange for the CIP to implement the recommended ADA project prioritization offered within the Shelby County ADA Project Prioritization and complete specific ADA retrofit projects.
- **Project Monitoring:** Monitoring an ADA project throughout the conceptual planning and construction document review phases shall be coordinated with the Department of Construction Code Enforcement staff in charge of conducting the project scope review, project plan review, construction engineering inspection (CEI), and final construction compliance review. The results of the reviews and inspections should be communicated in writing to the Team for incorporation into the ADA Transportation Network Inventory.
- **Division Coordination:** The ADA Coordinator and Team should maintain open communication with the other Shelby County Divisions and Departments to maintain ADA features in the public rights-of-way, and to assist in efforts to update and monitor the ADA Transition Plan.
- **Release Public Information:** The ADA Coordinator shall monitor and update the ADA Transition Plan on an annual basis. The ADA Transition Plan shall be published on the Shelby County website. Additionally, the Team project status memos, which serve as annual monitoring reports, will be published to the Shelby County website as addenda to the ADA Transition Plan.
- **Grievance Procedure:** The ADA Coordinator shall monitor the Shelby County grievance procedure to resolve requests and grievances from the public, in addition to monitoring the procedure to address large-scale projects. If a requested project has a considerable scope and cost, and planning is necessary, the request could be incorporated into future capital improvement projects.

7.4 ADA Compliance Monitoring Procedure

Compliance monitoring is listed as one of the responsibilities for the ADA Core Team, which includes scheduling/monitoring ADA projects and continuing to implement the Shelby County ADA Transition Plan. The following should be reviewed on an annual basis:

- Shelby County ADA Transition Plan in Public Rights-of-Way
- Shelby County ADA Transportation Network Inventory
- Accessibility Compliance Planning Review
- Certified Engineering Inspections (CEI)

Additionally, Shelby County is committed to maintaining the Transition Plan three years after all identified mitigation efforts have been completed.

7.4.1 ADA Transition Plan Monitoring

The Shelby County ADA Transition Plan in Public Rights-of-Way shall be reviewed annually and updated by publishing the Project Status Memos, written by the ADA Core Team, as addenda to the ADA Transition Plan. The purpose of the annual update is to:

- Identify ADA projects for budgeting and alignment with identified capital improvement projects (CIP)
- Document the progress towards mitigating ADA barriers for ongoing projects
- Document the completion of ADA barrier mitigation as projects are finished

ADA project status memos developed by the Team and the annual data collection efforts to expand the ADA Transportation Network Inventory should aid with the updates needed to maintain the ADA Transition Plan. Once the Transition Plan has been updated by the Team, it shall be published online on the Shelby County website. Additional formats, such as hard-copies, copies with large font, or copies in different languages, will be made available upon request. Electronic versions of the ADA Transition Plan should comply with ADA standards in Section 508.

7.4.2 ADA Transportation Network Inventory

The Shelby County ADA Transportation Network shall be updated annually by the Team. Updates should include:

- Completed mitigation of ADA barriers
- Ongoing efforts to mitigate identified ADA barriers
- ADA projects identified in the ADA project status memos within the year prior
- New ADA features contrasted as part of public and private development within the year prior

7.4.2.1 Data Collection Procedures

The ADA Transportation Network Inventory shall be expanded on an annual basis until all roadways within Unincorporated Shelby County are included in the inventory network. Future inventory expansions should maintain a consistent method of data collection as described in Section 5.0 Self-Evaluation & Prioritization.

7.4.3 Accessibility Compliance Planning Review

Documents used for public and private design and construction improvements to the public rights-of-way shall undergo reviews and inspections with a focus on addressing ADA facilities. Two main types of improvements regarding the public rights-of-way shall be completed:

- Public Infrastructure Plans and Construction Improvements: *Plans designed and constructed by Shelby County or other government agencies such as Tennessee Department of Transportation (TDOT). The design can be completed by engineering consultants, while the construction can be completed by a private contractor. The client is the public agency.*
- Private Development Plans and Construction Improvements: *Plans designed by engineers working a private development community. Construction is typically completed by a private contractor who works for a developer. Improvements address either existing or future public rights-of-way.*

For both types of plans and construction improvements, a design exception process should be utilized if accessibility is technically or structurally infeasible within the scope of each project. Both private and public developments must coordinate with Shelby County's ADA Coordinator to determine the appropriate methods and strategies for development if infeasible scenarios arise.

7.4.3.1 Content of ADA Compliance Design Reviews and Inspections

All accessibility compliance reviews and inspections should follow the ADA Compliance Checklists, and include the following elements in the review:

- Primary functions alteration project requirement
- Scope of work review
- Sidewalks
- Curb ramps
- Crosswalks
- Accessible pedestrian signals (such as push button signals)
- Signage
- Public transportation stops
- Streetscape features (such as benches, vending machines, third party vendors, etc.)
- Railroad crossings
- Other elements as necessary

The plan reviewers and inspectors completing ADA Compliance Checklists and Inspections should include an Accessibility Inspector/Plans Examiner Certified by the International Code Council.

7.4.3.2 Private Development Plan Reviews and Construction Inspections

The Roads, Bridges, and Engineering Department should take the lead on the design review and construction inspection for projects completed by private development. The ADA Coordinator shall provide technical assistance to the reviewers and inspectors, and complete audits of reviews and inspections to verify that reviewers and inspectors are using ADA checklists and properly commenting on ADA features.

Each reviewer/inspector involved in Development Engineering should have three projects audited on an annual basis by the ADA Coordinator or a member of the ADA Core Team. The results of the audits should be shared with the employee and their supervisor. The results of the audit should be used as

a basis for improving and learning. Records of these audits shall be maintained by the ADA Coordinator, with the results of the audits being shared annually at the Team meetings.

7.4.3.3 Public Infrastructure Plan Reviews and Construction Engineering Inspections

The Roads, Bridges & Engineering Department shall be responsible for the programming and tracking of public infrastructure projects completed by the County and other agencies within the County's jurisdiction. The responsibilities of the Roads, Bridges & Engineering Department include ensuring that road and bridge construction follows local zoning regulations and safety standards. Additionally, the Roads, Bridges & Engineering Department reviews plans, issues permits, and conducts inspections of any new road and bridge project, including additions, alterations, and associated components for horizontal construction.

7.4.3.4 Plan Reviews of Infrastructure Projects Completed by Public Works

The Roads, Bridges & Engineering Department is responsible for verifying that building construction and plans follow local zoning regulations and safety standards. The Roads, Bridges & Engineering Department receives plans for every phase review of these projects. The Roads, Bridges & Engineering Department will complete a review of the ADA features following the applicable design standards, the compliance checklists, and the sample curb ramp survey form and procedures³. The Roads, Bridges & Engineering Department will work with individual project managers to address comments and incorporate their respective revisions into the project. An overview of the projects that were reviewed and the outcomes of the review shall be discussed at the annual Team meeting.

7.4.3.5 Plan Reviews of Infrastructure Projects Completed by Other Agencies

Shelby County Roads, Bridges & Engineering Department shall designate one staff member to serve as the lead coordinator with other agencies completing infrastructure projects. The assigned staff member shall distribute the infrastructure project plans to the appropriate member(s) of the Team. The member reviewing the plans should complete reviews for their technical areas including a review of ADA features. Written comments and marked-up plans shall be provided to the lead coordinator of reviews who should provide the comments and mark-ups to the responsible agency. The lead review coordinator for other agency reviews should also provide a copy to the ADA Coordinator and the summary of results from the reviews shall be discussed at the Team meetings. The comment/resolution process shall be followed for the review of these plans and projects with issues being escalated to the Director of Public Works as necessary.

Shelby County's role in these projects is related to coordination and not implementation. Shelby County only has a formal inspection role of these projects if the items are already maintained by Shelby County.

³ ADA Best Practices Tool Kit for State and Local Governments: Appendix 2, Survey Forms: Curb Ramps

8.0 Public Involvement & Outreach

Public entities are required to make available to applicants, participants, residents, and other interested parties and stakeholders information regarding the ADA Transition Plan. This information includes the ADA's application to services, programs, and activities of the public entity, and to inform the public of the protections against discrimination given to them by the ADA. Public involvement will be utilized during the entirety of the ADA Transition Plan enactment, including the development process and after adoption of the Plan.

8.1 Public Involvement

Public engagement during the development of the Shelby County ADA Transition Plan was vital to meeting the needs of the community served by Shelby County government. Recommended methods of communication with the public included a public meeting, advisory board meetings, the Shelby County website, newsletters, press releases, and partnering with local advocacy groups.

8.1.1 Public Meeting

The Shelby County Roads, Bridges, and Engineering Department held a public meeting for the Shelby County Transition Plan on September 12, 2019. This meeting was held at the Shelby County Code Enforcement Office, 6465 Mullins Station Road, Memphis, TN 38134, between 6:00-7:00pm. The purpose of the meeting was to engage the public in the involvement and support of the Shelby County ADA Transition Plan. Topics included the current county facilities and public rights-of-way in seven (7) study areas that were being evaluated for potential upgrades and improvements to comply with ADA accessibility standards. The meeting also included information about the project's goals, scope, schedule, and input received from the public. One person attended the public meeting.

The public meeting notice for this public meeting is located in Appendix C: Public Meeting Notification.

8.1.2 Public Review

Prior to approval and adoption, the Shelby County ADA Transition Plan was made available for two (2) weeks, fourteen (14) calendar days, on the Shelby County government website for public review and comment.

8.2 Ongoing Public Engagement

After the approval and adoption of the Shelby County ADA Transition Plan, it will be made available on the Shelby County government website through the duration of its enactment. Public engagement for the Shelby County ADA Transition Plan continues after the implementation process, and includes maintaining and updating the Shelby County website and publishing a grievance procedure.

8.2.1 Publishing the ADA Transition Plan

The approved and adopted ADA Transition Plan will be made available to the public on the Shelby County website throughout the duration of its enactment. Federal regulations require it be available for a period of at least three (3) years, with additional formats of the Transition Plan available upon request (such as hard-copies of the Transition Plan, copies with large fonts, additional languages, etc.).

8.2.2 Shelby County Website Development

The Shelby County ADA Transition Plan will be published on the Shelby County website, as stated in Section 8.2.1. In addition, Shelby County shall provide information to the public about County resources available to citizens with disabilities. The development of the website must include:

- The ADA Transition Plan
- Grievance Procedure
 - Grievance Form
- Title II Requirements

Additionally, the website is recommended to include additional information as outlined in ADA Section 508. This includes:

- Accessibility Policy for Public Rights-of-Way
- ADA Coordinator Information
- ADA Core Team Information
 - Contact Information
 - Revisions to documents
 - ADA Project Status Memos
- Accommodation Request Form
- ADA Grievance Appeals Representative Contact Information
- Resources for Residents from Shelby County
 - Shelby County Court System ADA Notices
- Resources for Developers
 - ADA Feature Design Standard Documents and Details
 - Checklists for Compliance
 - TDOT and Federal Highway Administration (FHWA) ADA memos and information

If the recommended website information is to be published on another portion of the Shelby County website, outside of the ADA homepage, a hyperlink will be provided on the ADA homepage to facilitate ease of access to this information.

8.2.3 Shelby County Notice under the Americans with Disabilities Act

In accordance with the requirements of Title II of the Americans with Disabilities Act of 1990 (ADA), Shelby County Government will not discriminate against qualified individuals on the basis of disability in its services, programs, or activities [28 C.F.R. Sec.35, 106].

Employment: Shelby County Government does not discriminate on the basis of disability in its hiring or employment practices and complies with all regulations promulgated by the US Equal Employment Opportunity Commission under Title I of the ADA [28 C.F.R. Sec.35, 140].

Effective Communication: Shelby County Government will generally, upon request, provide appropriate aids and services leading to effective communication for qualified person with disabilities so they can participate equally in Shelby County programs, services, and activities, including qualified sign language interpreters, documents in Braille, and other ways of making information and communications accessible to people who have speech, hearing, or vision impairments [28 C.F.R. Sec.35, 160(a)].

Modifications to Policies and Procedures: Shelby County Government will make all reasonable modifications to policies, practices, or procedures to ensure that people with disabilities have an equal opportunity to participate and enjoy Shelby County Government, services, programs and activities [28 C.F.R. Sec.35, 130(b) (7)]. For example, individuals with service animals are welcomed in Shelby County programs and services, even where pets are general prohibited.

Anyone who requires an auxiliary aid or service for effective communication, or a modification of policies or procedures to participate in a Shelby County program, service, or activity, should contact the Shelby County ADA Coordinator at ada@shelbycountyttn.gov, or (901)-222-7705, as soon as possible, but no later than 48 hours before the scheduled event.

The ADA does not require the Shelby County Government to take any action that would fundamentally alter the nature of its programs, services, or activities or impose an undue financial or administrative burden. Complaints that Shelby County's program, service, or activity is not accessible to persons with disabilities should be directed to the ADA Coordinator at ada@shelbycountyttn.gov, or (901)-222-7705.

The Shelby County Government will not place a surcharge on a particular individual with a disability or any group of individuals with disabilities to cover the cost of providing auxiliary aids/services or reasonable modifications of policy, such as retrieving items from locations that are open to the public, but are not accessible to persons who use wheelchairs.

8.2.3.1 Grievance Procedure

Title II of the ADA requires procedures to be adopted and published for resolving grievances. This Grievance Procedure is a formal channel of communication for the community to utilize to file requests or complaints in regards to the ADA and its compliance in Shelby County. The County's grievance procedure process provides guidelines for expectations regarding the grievance process schedule and resolution timeline, as well as directions on how to contact the ADA Coordinator.

8.2.3.1.1 Federal Guidance

The ADA Best Practices Tool Kit for State and Local Governments (2007) provides guidance for establishing the grievance procedure. These recommendations include:

- A description of how and where a complaint under Title II may be filed with the government entity
- If a written complaint is required, a statement notifying potential complainants that alternative ways of filing a grievance will be made available to people with disabilities who require one
- A description of the process and time frames to be followed by the complainant and the government entity
- Information of how to appeal an adverse decision
- A statement of how long grievances filed will be retained

It is also recommended that the grievance procedure be distributed to Shelby County leadership, be included in the spaces of public buildings, on the governments website and available in more than one form to accommodate all persons with disabilities. This ensures consistency and accountability in the entirety of Shelby County.

8.2.3.1.2 Grievance Form

Employee-related grievances of disability discrimination will be handled under Shelby County's Personnel Policy.

A grievance regarding infrastructure should be submitted by the grievant and/or their designee as soon as possible, but no later than thirty (30) calendar days after the alleged violation. Within fifteen (15) calendar days after receiving the complaint, the ADA Coordinator will meet with the grievant and/or their designee to discuss the complaint and the possible resolutions. The ADA Coordinator will respond in writing, or in a format accessible to the grievant when appropriate. The response will explain the position of the Shelby County Government and offer options for substantive resolution of the complaint. The current ADA Coordinator's contact information is available online or by contacting the following office:

ADA Coordinator & Public Outreach

<https://www.shelbycountyttn.gov/3585/ADA-Coordinator>

Shelby County Roads, Bridges, and Engineering Department

6449 Haley Road

Memphis, TN 38134

ada@shelbycountyttn.gov

(901)-222-7705

If the response from the ADA Coordinator does not satisfy and resolve the issue initially filed, the grievant and/or their designee may appeal the decision to the ADA Grievance Appeals Representative, currently the Director of Public Works, or their designee. This appeal must be filed within fifteen (15) calendar days of receiving the response. The Director of Public Works may be contacted:

Director of Public Works

Email: ada@shelbycountyttn.gov

Phone: (901)-222-7705

1079 Mullins Station Road

Memphis, TN 38134

Within fifteen (15) calendar days after receiving the appeal, the Director of Public Works or their designee will meet with the grievant and/or their designee to discuss the grievance and possible resolutions. Within fifteen (15) calendars after this appeals meeting, the Director of Public Works and/or their designee will respond in writing or another format that is accessible to the grievant. This response will be a final resolution to the grievant.

All grievances received by the ADA Coordinator, and the appeals sent to the ADA Grievance Appeals Representative, as well as responses from these offices will be retained by Shelby County Government for at least three years.

Changes to the Shelby County ADA Coordinator and the ADA Grievance Appeals Representative will be published in addenda at the end of this document.

Shelby County will utilize a written grievance form to be used by the community to communicate requests or complaints with compliance of the ADA. Grievance forms should be completed in writing and contain information about the alleged discrimination such as name, address, phone number of complainant and location, date, and description of the problem and mailed to Shelby County

Government. Grievance form accommodations will be made available by Shelby County Government upon request. The grievance form shall be available electronically on the County website and available in hard copy at the County Public Works departments. Alternative means of filing complaints, such as personal interviews or a tape recording of the complaint, will be made available upon request for persons with disabilities.

Figure 3 | Shelby County ADA Grievance Form



Shelby County ADA Grievance Form

Today's Date:

Contact Information – Complainant

Name:

Street Address:

City:

State:

Zip Code:

Phone:

Email:

Designated Contact Information (if different from Complainant)

Name:

Street Address:

City:

State:

Zip Code:

Phone:

Email:

Description of Grievance

Date Grievance Occurred:

Location of Grievance:

Description of Grievance:

Description of Grievance

Requested Solution of Grievance:

Requested Solution Description:

Has this grievance been addressed with other organizations? If yes, please list the organization(s) and their contact information:

Please Send Completed Form By Mail, Online on our Website, or Contact Us for Alternative Submissions:

Shelby County Roads, Bridges, and
Engineering Department
6449 Haley Road,
Memphis, TN 38134

For questions and concerns prior to mailing:
Telephone: (901)-222-7705
TTY: (901)-324-5678

<https://www.shelbycountyttn.gov/3585/ADA-Coordinator>

Appendix A: Corridors Chosen for Evaluation

Figure 4 | Map of North Central Shelby County Corridors Evaluated

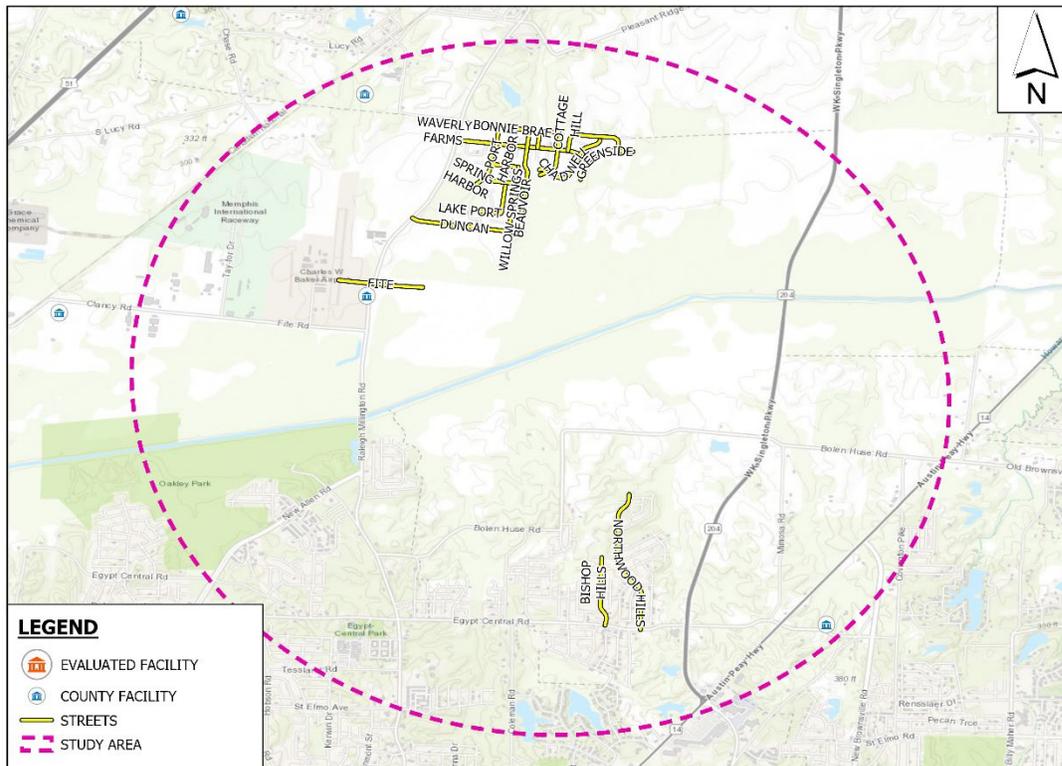


Table 14 | List of North Central Shelby County Corridors Evaluated

Roadway	From	To	Sidewalk on One Side	Sidewalk on Two Sides	Approx. Length (miles)
Port Harbor Dr.	Waverly Farms Rd.	DEAD END		X	0.44
Bonnie Brae Dr.	Port Harbor Dr.	Beauvoir Dr.		X	0.17
Beauvoir Dr. - Garnden Ridge Dr.	Bonnie Brae Dr.	DEAD END		X	0.62
Annie Mae Dr.	Port Harbor Dr.	Willow Springs Dr.		X	0.28
Willow Springs Dr.	Duncan Rd.	Annie Mae Dr.		X	0.44
Lake Port Dr.	Spring Harbor Dr.	Northland Dr.		X	0.33
Port Haven Dr.	Port Harbor Dr.	N Bay Dr.		X	0.22

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Roadway	From	To	Sidewalk on One Side	Sidewalk on Two Sides	Approx. Length (miles)
Spring Harbor Dr.	Port Harbor Dr.	Willow Springs Dr.		X	0.18
Cottage Hill Dr.	Waverly Farms Rd.	DEAD END		X	0.37
Chandeleur Cove	Waverly Farms Rd.	DEAD END		X	0.20
Chadwell Rd.	Cottage Hill Dr.	Crestfield Rd.		X	0.47
Crestfield Rd.	Waverly Farms Rd.	Greenside Rd.		X	0.46
Greenside Rd. - Braeswood Dr.	Waverly Farms Rd.	DEAD END		X	0.41
Norwood Hills Dr.	Egypt Central Rd.	DEAD END		X	0.97
Bishop Hills Dr.	Egypt Central Rd.	DEAD END		X	0.47

Figure 5 | Map of East Central Shelby County Corridors Evaluated

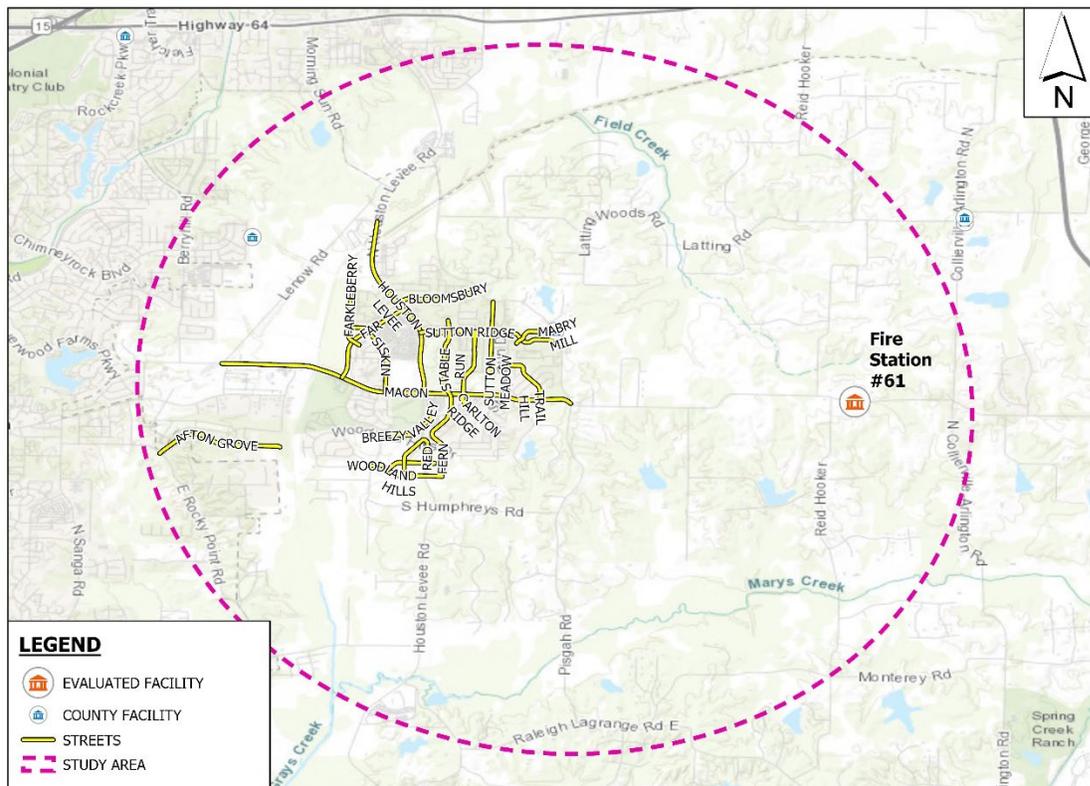


Table 15 | List of East Central Shelby County Corridors Evaluated

Roadway	From	To	Sidewalk on One Side	Sidewalk on Two Sides	Approx. Length (miles)
Siskin Dr.	Macon Rd.	Farkleberry Dr.		X	0.68
Far Dr.	Macon Rd.	N Houston Levee Rd.		X	0.76
Farkleberry Dr.	Winburg Cove	Oldham Dr.		X	0.48
Oldham Dr.	Far Dr.	DEAD END		X	0.40
Bloomsbury Ave.	N Houston Levee Rd.	Pisgah Rd.		X	0.56
Sutton Ridge Ln.	N Houston Levee Rd.	Pisgah Rd.		X	0.96
Sutton Meadow Ln.	Pisgah Rd.	Hamilton View Rd.		X	0.58
Stable Run Dr.	Pisgah Rd.	Woodland Hills Dr.		X	1.38
Breezy Valley Dr.	Macon Rd.	N Houston Levee Rd.		X	0.52

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Roadway	From	To	Sidewalk on One Side	Sidewalk on Two Sides	Approx. Length (miles)
Woodland Hills Dr.	N Houston Levee Rd.	Stable Run Dr.		X	0.54
Green Moss Dr. N	Woodland Hills Dr.	Mossy Knoll Dr.		X	0.34
Red Fern Cir.	Green Moss Dr. S	Green Moss Dr. N		X	0.51
Carlton Ridge Dr.	Sterling Ridge Dr.	Sutton Ridge Dr.		X	0.65
Trail Run Ln.-Trail Hill Ln.	Macon Rd.	Stable Run Dr.		X	0.47
Mabry Mill Rd. - Mabry Mill Cove	Pisgah Rd.	DEAD END		X	0.28
Afton Grove Rd.	Rocky Point Rd.	DEAD END		X	0.90

Figure 6 | Map of North East Shelby County Corridors Evaluated

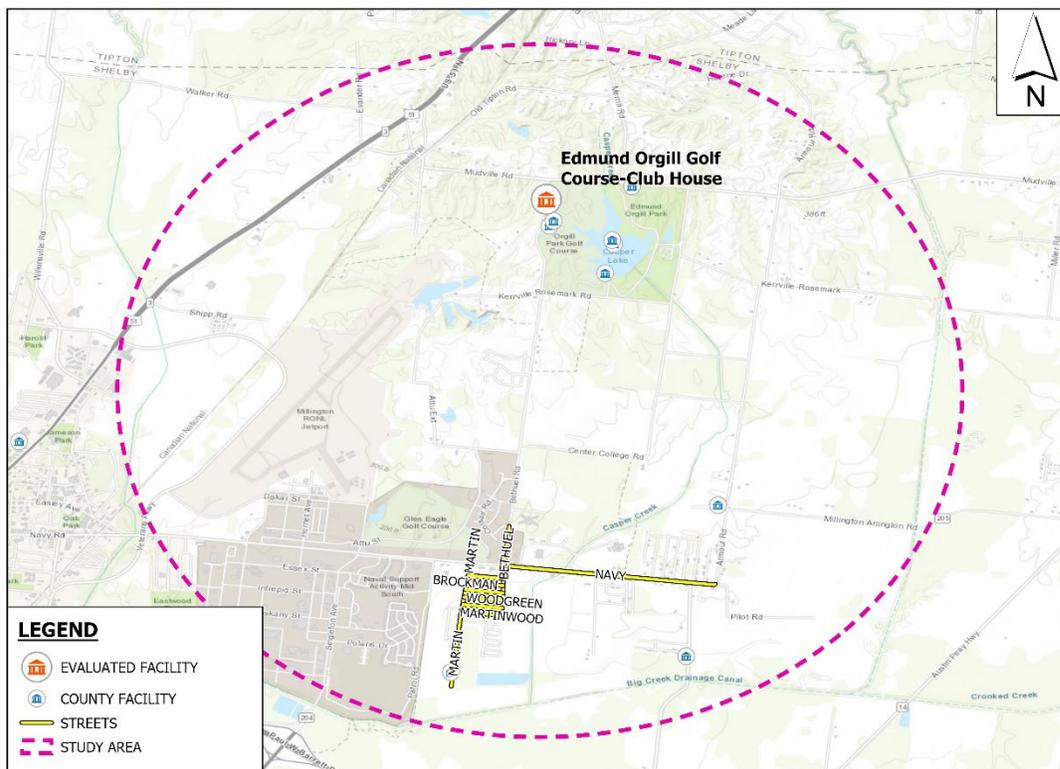


Table 16 | List of North East Shelby County Corridors Evaluated

Roadway	From	To	Sidewalk on One Side	Sidewalk on Two Sides	Approx. Length (miles)
Bethuel Rd.	Navy Rd.	DEAD END	X		0.39
Martin Rd.	Navy Rd.	DEAD END	X		0.91
Raible Dr.	Martin Rd.	Bethuel Rd.		X	0.21
Brockman Dr.	Martin Rd.	Bethuel Rd.		X	0.22
Leamont Dr.	Martin Rd.	Bethuel Rd.		X	0.23
Woodgreen Dr.	Martin Rd.	Bethuel Rd.		X	0.23
Martinwest Dr.	Martin Rd.	Bethuel Rd.		X	0.24
Martinwood Dr.	Martin Rd.	Bethuel Rd.		X	0.25

Figure 7 | Map of North West Shelby County Corridors Evaluated

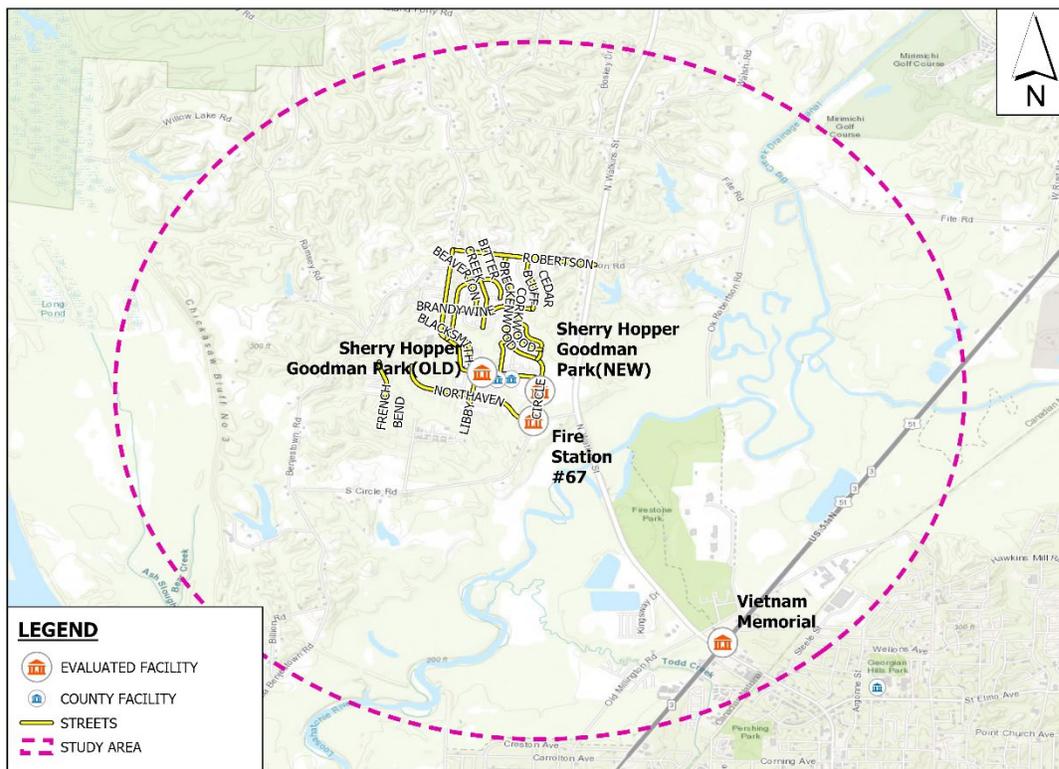


Table 17 | List of North West Shelby County Corridors Evaluated

Roadway	From	To	Sidewalk on One Side	Sidewalk on Two Sides	Approx. Length (miles)
Robertson Rd.	Benjestown Rd.	N Watkins St.		X	0.78
Brandywine Blvd.	Braden Dr.	Cedar Bluff Dr.		X	0.48
Cedar Bluff Dr.	Robertson Rd.	Brandywine Blvd.		X	0.35
Blacksmith Dr.	N Circle Rd.	Braden Dr.		X	0.30
Belfast Dr.	N Circle Rd.	Breckenwood Dr.		X	0.24
N Circle Rd.	Robertson Rd.	Breckenwood Dr.		X	1.28
French Bend Ln.	N Circle Rd.	DEAD END		X	0.22
Braden Dr. - Plover Dr.	N Circle Rd.	Pitney Ln.		X	0.68
Beaverton Dr. - Beaverton Cove	Brandywine Blvd.	DEAD END		X	0.31
Bitter Creek Dr.	Broken Oak Dr.	DEAD END		X	0.36

SHELBY COUNTY ADA TRANSITION PLAN IN THE PUBLIC RIGHTS-OF-WAY

Roadway	From	To	Sidewalk on One Side	Sidewalk on Two Sides	Approx. Length (miles)
Libby Ln	Northaven Dr.	DEAD END		X	0.23
Chantilly Dr.	Breckenwood Dr.	Corkwood Dr.		X	0.32
Corkwood Dr.	Brandywine Blvd.	Chantilly Dr.		X	0.36

Figure 8 | Map of South Shelby County Corridors Evaluated

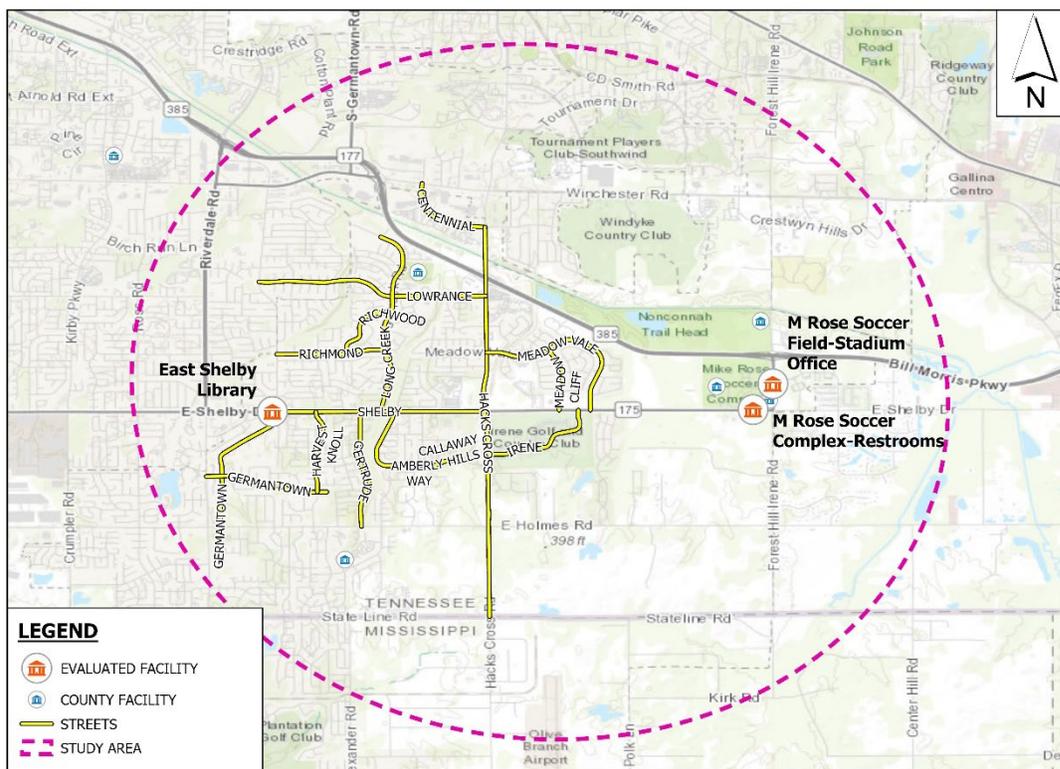


Table 18 | List of South Shelby County Corridors Evaluated

Roadway	From	To	Sidewalk on One Side	Sidewalk on Two Sides	Approx. Length (miles)
Lowrance Rd.	S Germantown Rd.	Hacks Cross Rd.		X	1.66
Long Creek Rd.	E Shelby Dr.	DEAD END		X	1.62
Gertrude Dr.	E Holmes Rd.	E Shelby Dr.		X	1.04
Germantown Trail	Riverdale Rd.	DEAD END		X	0.82
Haverst Knoll Ln.	E Shelby Dr.	Germantown Trail		X	0.72
Meadow Vale Dr.	Hacks Cross Rd.	E Shelby Dr.		X	1.40
Meadow Cliff Dr.	Hacks Cross Rd.	E Shelby Dr.		X	0.55
Richmond Rd.	S Germantown Rd.	Long Creek Rd.		X	0.79
Richwood Pl.	Richmond Rd.	Long Creek Rd.		X	0.56
Callaway Hills Dr.	E Shelby Dr.	DEAD END		X	1.01

Figure 9 | Map of West Central Shelby County Corridors Evaluated

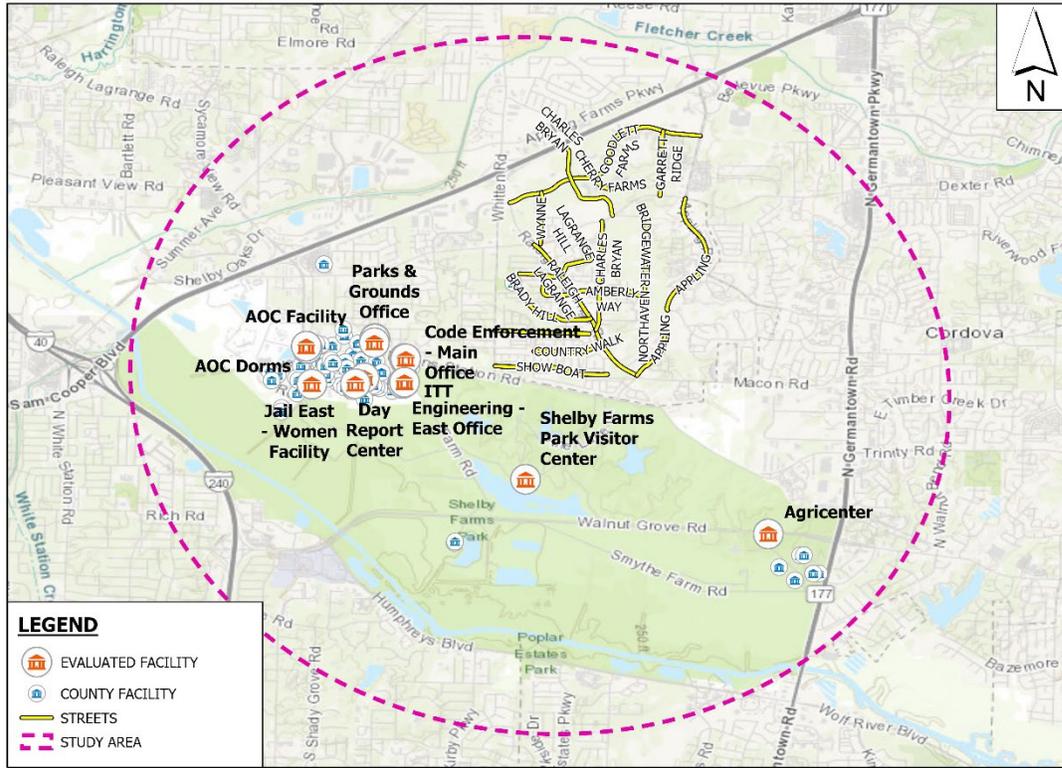


Table 19 | List of West Central Shelby County Corridors Evaluated

Roadway	From	To	Sidewalk on One Side	Sidewalk on Two Sides	Approx. Length (miles)
Amberly Way Dr.	Bridgewater Rd.	Amberly Village Dr.		X	0.74
Wynne Rd.	Dexter Rd.	Goodlett Farms Pkwy.		X	0.41
Cherry Farms Rd.	Goodlet Farms Pkwy.	DEAD END		X	0.31
Garrett Ridge Rd.	Goodlet Farms Pkwy.	Dexter Rd.		X	0.52
Manslick Rd.	Witten Rd.	DEAD END		X	0.63
Jessica Lauren Dr.	Brady Hill Dr.	DEAD END		X	0.44
Witten Rd.	Dexter Rd.	Mullins Station Rd.		X	1.04
Showboat Ln.	Witten Rd.	DEAD END		X	0.75

SHELBY COUNTY ADA TRANSITION PLAN IN THE PUBLIC RIGHTS-OF-WAY

Roadway	From	To	Sidewalk on One Side	Sidewalk on Two Sides	Approx. Length (miles)
Country Walk Dr.	Raleigh Lagrange Rd.	Scotfield Dr.		X	0.46
Brady Hill Dr.	Raleigh Lagrange Rd.	Gallop Dr.		X	0.48
Charles Bryan Rd.	Dexter Rd.	DEAD END		X	1.01
Lagrange Hill Rd.	Dexter Rd.	Lagrange Crest Rd.		X	0.79

Appendix B: GIS Field Data Samples

Table 20 | ADA Transportation Network Inventory – GIS Field Data Sample Table for Sidewalks

Attribute	Attribute Definition	Example Values
Feature ID	Incrementing unique feature ID's aid in classifying and organizing sidewalk assets.	
Photo ID	A unique ID number of the sidewalk image that corresponds with the image frame number from the field imaging camera.	
Functional Classification	Identifies the category of the road's functional classification. The functional classification of a road is the class or group of roads to which the road belongs.	Arterial, Collector, or Local.
Construction / Renovation Date	Date of most recent construction or major renovation.	
Inspection Date	Image date of the assessed feature.	
Source	Identifies the source or the primary reference that the GIS data was obtained from.	Orthorectified Aerial Photo, Street Level Imagery, or Field Location.
Inventory Area	A unique ID number that identifies the assets that are associated with a specific inventory area.	Residential Neighborhoods, Commercial Areas, or Individual Roadways.
Street Name	Name of road that runs parallel along the sidewalk segment.	
Latitude	The angular distance of a location North or South of the earth's equator, measured in degrees, minutes, and seconds.	
Longitude	The angular distance of a location East or West of the meridian at Greenwich, England measured in degrees, minutes, and seconds.	
Status	The current standing position or condition of the sidewalk feature that has been field identified.	Present, Missing, Under Construction, Obscured, or Unknown.

Attribute	Attribute Definition	Example Values
Material	Material is the physical element that the sidewalk is constructed.	Concrete, Asphalt, Brick/Pavers, Stone, Tile, Other: See Notes, None, Unknown, N/A.
Cross Slope Compliance	The cross slope is the slope perpendicular to [across] the direction of pedestrian travel.	Percent Cross Slope.
Running Slope Compliance	Running-slope (longitudinal) is defined as the average cross-slope of a contiguous section of sidewalk following the direction of pedestrian travel.	Percent Running Slope.
Width	Total width of walkway corridor in inches.	24, 30, 36, 42, 48, ..., 144, or Unknown.
Shape Length	Numeric values within specific range representing the total length of sidewalk.	
Passing Distance	Presence of space in which two wheelchairs can travel adjacent to each other. Passing space should occur every 200 feet.	Y/N
Segment Rating	Overall completion rating of all ADA compliant infrastructures that pertains to an individual segment of sidewalk.	Complete, Complete w/Barriers, Partial Infrastructure, or No Infrastructure.
Photo Folder	The directory folder where images of the ADA feature are being stored.	
Photo Hotlink	Defines the path and file name of the photo file linked to the sidewalk.	
Additional Notes	Any additional information pertaining to the sidewalk feature.	

Table 21 | ADA Transportation Network Inventory – GIS Field Data Sample Table for Curb Ramps

Attribute	Attribute Definition	Example Values
Feature ID	Incrementing unique feature ID's aid in classifying and organizing assets.	
Photo ID	A unique ID number of the feature image that corresponds with the image frame number from the field imaging camera.	
Functional Classification	Identifies the category of the road's functional classification. The functional classification of a road is the class or group of roads to which the road belongs.	Arterial, Collector, or Local.
Construction / Renovation Date	Date of most recent construction or major renovation.	
Inspection Date	Image date of the assessed feature.	
Source	Identifies the source or the primary reference that the GIS data was obtained from.	Orthorectified Aerial Photo, Street Level Imagery, or Field Location.
Inventory Area	A unique ID number that identifies the assets that are associated with a specific inventory area.	Residential Neighborhoods, Commercial Areas, or Individual Roadways.
Street Name	Name of street that runs perpendicular to the curb ramp.	
Crossroad Name	Name of road that runs perpendicular to the main road.	
Latitude	The angular distance of a location North or South of the earth's equator, measured in degrees, minutes, and seconds.	
Longitude	The angular distance of a location East or West of the meridian at Greenwich, England measured in degrees, minutes, and seconds.	
Status	The current standing position or condition of the feature that has been field identified and assessed.	Present, Missing, Under Construction, Obscured, or Unknown.

Attribute	Attribute Definition	Example Values
Cross Slope Compliance	The cross slope is the slope perpendicular to [across] the direction of pedestrian travel on the ramp run.	Percent Cross Slope.
Running Slope Compliance	Running-slope (longitudinal) is defined as the average cross-slope of the pedestrian path of travel.	Percent Running Slope.
Type	The ramp type is determined by the location and design.	Perpendicular, One Way Directional, Diagonal, Parallel, Combined, Blended Transition, Built-Up, Other: See Notes, None, or Unknown.
Detectable Warning Surface Type	Warning surfaces that are detectable under foot that indicate the boundary between a pedestrian route and a vehicular route.	None, Synthetic Tactile Mats, Cast In Place Tactile Pavers, Precast Brick/Pavers, Precast Tile, Other: See Notes, or Unknown.
Sides	Identified side type associated with pedestrian ramp.	Flared, Returned Curb, Other: See Notes, None, Unknown, or N/A.
Landing	A 4 ft. x 4 ft. minimum level area of walkway at the top or bottom of a ramp that allows wheeled users a space to orient their direction before and after using a ramp.	Y/N
Marked Crossing	Clearly marked zones found at intersections where pedestrians are crossing.	Y/N
Curb Extensions	An extension of the curb line in a bulb-like rounding radius that incorporates curb ramps. Its purpose is to shorten the crossing distance for pedestrians.	Y/N
Midblock Crossing	Midblock crossings are pedestrian crossings that do not occur at intersections. Often installed in areas with high pedestrian traffic to provide additional crossing opportunities.	Y/N
Island	Raised concrete refuge usually found between right turns and through-fare travel lanes.	Y/N

Attribute	Attribute Definition	Example Values
Pedestrian Signal	Devices that communicate information about the WALK and DON'T WALK intervals at signalized intersections in visual or non-visual formats.	Y/N
Cross Slope Compliant	The cross slope is the slope perpendicular to [across] the direction of pedestrian travel on the ramp run.	Y/N
Running Slope Compliant	Running-slope (longitudinal) is the average cross-slope of a contiguous section of curb ramp.	Y/N
Gutter Transition Compliance	Gutter transition is the transition from curb ramp to the gutters and street.	Y/N
Intersection Quadrant	One of the eight principal directions associated with the location of the curb ramp: N, NE, E, SE, S, SW, W, NW.	
Direction	Approach direction of the pedestrians: N, NE, E, SE, S, SW, W, NW.	
Photo Folder	The directory folder where images of the ADA feature are being stored.	
Photo Hotlink	Defines the path and file name of the photo file linked to the curb ramp.	
Photo Hotlink	Defines the path and file name of the photo file linked to the curb ramp.	
Additional Notes	Any additional information pertaining to the curb ramp feature.	

Table 22 | ADA Transportation Network Inventory – GIS Field Data Sample Table for Handrails

Attribute	Attribute Definition	Example Values
Feature ID	Incrementing unique feature ID's aid in classifying and organizing assets.	
Photo ID	A unique ID number of the feature image that corresponds with the image frame number from the field imaging camera.	
Functional Classification	Identifies the category of the road's functional classification. The functional classification of a road is the class or group of roads to which the road belongs.	Arterial, Collector, or Local.
Construction / Renovation Date	Date of most recent construction or major renovation.	
Inspection Date	Image date of the assessed feature.	
Source	Identifies the source or the primary reference that the GIS data was obtained from.	Orthorectified Aerial Photo, Street Level Imagery, or Field Location.
Inventory Area	A unique ID number that identifies the assets that are associated with a specific inventory area.	Residential Neighborhoods, Commercial Areas, or Individual Roadways.
Street Name	Name of parallel road along handrail.	
Location	The handrail's geographic location description.	Ramp, Bridge, Stairs, Walkway, Other: See Notes, Unknown, or N/A.
Latitude	The angular distance of a location North or South of the earth's equator, measured in degrees, minutes, and seconds.	
Longitude	The angular distance of a location East or West of the meridian at Greenwich, England measured in degrees, minutes, and seconds.	
Status	The current standing position or condition of the feature that has been field identified and assessed.	Present, Missing, Under Construction, Obscured, or Unknown.

Attribute	Attribute Definition	Example Values
Hazard	Anything that can potentially cause a level of threat to life or health within an environment.	Slope, Drop Off, Curb, Traffic, Rough Surface, Other: See Notes, or Unknown.
Shape Length	Numeric values within specific range representing the total length of handrail.	
Photo Folder	The directory folder where images of the ADA feature are being stored.	
Photo Hotlink	Defines the path and file name of the photo file linked to the handrail.	
Additional Notes	Any additional information pertaining to the handrail feature.	

Table 23 | ADA Transportation Network Inventory – GIS Field Data Sample Table for Obstacles

Attribute	Attribute Definition	Example Values
Feature ID	Incrementing unique feature ID's aid in classifying and organizing assets.	
Photo ID	A unique ID number of the feature image that corresponds with the image frame number from the field imaging camera.	
Functional Classification	Identifies the category of the road's functional classification. The functional classification of a road is the class or group of roads to which the road belongs.	Arterial, Collector, or Local.
Construction / Renovation Date	Date of most recent construction or major renovation.	
Inspection Date	Image date of the assessed feature.	
Inventory Area	A unique ID number that identifies the assets that are associated with a specific inventory area.	Residential Neighborhoods, Commercial Areas, or Individual Roadways.
Type	Any obstacle that can restrict an individual's ability to physically move along or within an environment. They may limit the individual's movement from one place to another, or cause a barrier or hindrance.	No Curb Ramp, Uneven Transition, Drainage Grate, Grate (Other), Manhole, Fire Hydrant, Sign Pole, Utility Box, Street Light Pole, Utility Pole, Traffic Sign Pole, Signal Control Box, Landscaping, Planter, Mailbox, Tree, Bush, Shrub Branches, Vegetation, Railroad Tracks, Tree Grates, Grooves, Vault, Guy Wire, Roots, Small Steps, Transit Shelter, Trash Can, Parking Meter, Business Sign, Awnings, Bench, Bike Rack, Bollard, Tables And Chairs, Drinking Fountain, Narrow Path, Gutters, Ponding, Vending Machine, Street Sculpture, Public Telephone, Other: See Notes, or Unknown.
Source	Identifies the source or the primary reference that the GIS data was obtained from.	Orthorectified Aerial Photo, Street Level Imagery, or Field Location.

Attribute	Attribute Definition	Example Values
Street Name	Name of parallel road along obstacle.	
Location	The obstacle's geographic location description.	Ramp, Bridge, Stairs, Walkway, Driveway, Other: See Notes, Unknown, or N/A.
Latitude	The angular distance of a location North or South of the earth's equator, measured in degrees, minutes, and seconds.	
Longitude	The angular distance of a location East or West of the meridian at Greenwich, England measured in degrees, minutes, and seconds.	
Photo Folder	The directory folder where images of the ADA feature are being stored.	
Photo Hotlink	Defines the path and file name of the photo file linked to the obstacle.	
Additional Notes	Any additional information pertaining to the obstacle feature.	

Table 24 | ADA Transportation Network Inventory – GIS Field Data Sample Table for Hazards

Attribute	Attribute Definition	Example Values
Feature ID	Incrementing unique feature ID's aid in classifying and organizing assets.	
Photo ID	A unique ID number of the feature image that corresponds with the image frame number from the field imaging camera.	
Functional Classification	Identifies the category of the road's functional classification. The functional classification of a road is the class or group of roads to which the road belongs.	Arterial, Collector, or Local.
Construction / Renovation Date	Date of most recent construction or major renovation.	
Inspection Date	Image date of the assessed feature.	
Inventory Area	A unique ID number that identifies the assets that are associated with a specific inventory area.	Residential Neighborhoods, Commercial Areas, or Individual Roadways.
Type	Hazard types are potential areas in a pedestrians access route (PAR) that can cause a level of threat, to health or life, within that environment.	Unstable Surface, Protruding Rail, Ramp Transition Grade, Excessive Cross Slope, Excessive Running Slope, Construction, Drop Off, Other: See Notes, Unknown, or N/A.
Source	Identifies the source or the primary reference that the GIS data was obtained from.	Orthorectified Aerial Photo, Street Level Imagery, or Field Location.
Street Name	Name of parallel road along hazard.	
Location	The hazard's geographic location description.	Ramp, Bridge, Stairs, Walkway, Driveway, Other: See Notes, Unknown, or N/A.
Latitude	The angular distance of a location North or South of the earth's equator, measured in degrees, minutes, and seconds.	
Longitude	The angular distance of a location East or West of the meridian at Greenwich, England measured in degrees, minutes, and seconds.	

Attribute	Attribute Definition	Example Values
Photo Folder	The directory folder where images of the ADA feature are being stored.	
Photo Hotlink	Defines the path and file name of the photo file linked to the hazard.	
Additional Notes	Any additional information pertaining to the obstacle feature.	

Table 25 | ADA Transportation Network Inventory – GIS Field Data Sample Tables for Damages

Attribute	Attribute Definition	Example Values
Feature ID	Incrementing unique feature ID's aid in classifying and organizing assets.	
Photo ID	A unique ID number of the feature image that corresponds with the image frame number from the field imaging camera.	
Functional Classification	Identifies the category of the road's functional classification. The functional classification of a road is the class or group of roads to which the road belongs.	Arterial, Collector, or Local.
Construction / Renovation Date	Date of most recent construction or major renovation.	
Inspection Date	Image date of the assessed feature.	
Inventory Area	A unique ID number that identifies the assets that are associated with a specific inventory area.	Residential Neighborhoods, Commercial Areas, or Individual Roadways.
Type	Type of damage caused by the environmental conditions.	Raised/Uneven Edge, Heaving And Settlement, Shattering, Other: See Notes, Unknown, and N/A.
Source	Identifies the source or the primary reference that the GIS data was obtained from.	Orthorectified Aerial Photo, Street Level Imagery, or Field Location.
Street Name	Name of road parallel to the damage.	
Location	The damages geographic location description.	Ramp, Bridge, Stairs, Walkway, Driveway, Other: See Notes, Unknown, or N/A.
Latitude	The angular distance of a location North or South of the earth's equator, measured in degrees, minutes, and seconds.	
Longitude	The angular distance of a location East or West of the meridian at Greenwich, England measured in degrees, minutes, and seconds.	

Attribute	Attribute Definition	Example Values
Photo Folder	The directory folder where images of the ADA feature are being stored.	
Photo Hotlink	Defines the path and file name of the photo file linked to the damage.	
Additional Notes	Any additional information pertaining to the obstacle feature.	

Appendix C: Public Meeting Notification

Shelby County Americans with Disabilities Act Transition Plan Public Meeting



Please join the Shelby County Roads, Bridges, and Engineering Department for a public meeting regarding a study in support of the Shelby County Americans with Disabilities Act (ADA) Transition Plan. The study will evaluate current county facilities and public rights-of-way in seven (7) study areas to identify locations for proposed upgrades to comply with ADA accessibility standards and design improvements for access to facilities and public transit. Information will be provided about the project's goals, scope, and schedule and input received from the public.

Shelby County Americans with Disabilities
Act Transition Plan Public Meeting
Thursday, September 12, 2019
6:00 p.m. – 7:00 p.m.
Shelby County Code Enforcement
Office 6465 Mullins Station Road
Memphis, TN 38134

County Contact: Jim Crook
Shelby County Engineering
901-222-7705