

CITY OF EMPORIA SIDEWALK INVENTORY AND IMPROVEMENT PLAN



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ACKNOWLEDGMENTS

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ABOUT GAP-TA

Visit vtrans.org/about/GAP-TA for information about the Growth and Accessibility Planning Technical Assistance program. OIPI will provide a blurb describing the GAP-TA program

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GLOSSARY OR LIST OF ACRONYMS

ADA	Americans with Disabilities Act
GAP	Growth and Accessibility Planning
OIPI	Office of Intermodal Planning and Investment
VDOT	Virginia Department of Transportation

1-INTRODUCTION

This study was conducted under a Growth and Accessibility Planning (GAP) technical assistance grant. Administered by Virginia's Office of Intermodal Planning and Investment (OIPI), GAP technical assistance projects seek to align infrastructure development with designated and emerging growth areas to improve efficiency and effectiveness. The City of Emporia applied for planning assistance to inventory and prioritize improvements to the city's pedestrian network.

Importance of Pedestrian Infrastructure

At some point, all residents are pedestrians—as they walk or use a mobility-assisting device to complete their daily errands, get between their front door and personal vehicle, or make the last connection between bicycle parking and their destination. A safe, accessible, and well-connected pedestrian environment is crucial in supporting the ability of residents and visitors to choose mobility options beyond driving, and provides long-term benefits to the area.

Creating a well connected pedestrian network will decrease the need to rely on a personal vehicle for short trips. In a broader context, better pedestrian facilities can promote better physical health, alleviate motor vehicle congestion, reduce emissions from motor vehicles, and improve air quality.

Study Area and Background

The study area included minor arterials, major and minor collectors, and select local routes, totaling to 17.6 miles. The City plans to use information developed in this study to apply for funding under the Transportation Alternatives Program to support construction of sidewalks and the elimination of pedestrian network gaps within the study area.

Project Process and Activities

A virtual kick-off was held on September 29, 2023 and virtual progress meetings were held on an ongoing monthly basis with City staff and the consultant project team. Work progressed in two sequential phases. The first involved data collection from publicly available sources, followed by a three-day on the ground assessment to confirm and supplement available data. Data collected included presence of sidewalks, curb ramps, marked crosswalks and related signage along 17.6 miles of study area roadway.

A second phase of work involved identifying and prioritizing opportunities for pedestrian network improvements including

both the addition of new sidewalks, curb ramps, and high-visibility marked crosswalks. Priority was determined based on eligibility for the Transportation Alternatives Program.



Figure 1: Locations of Roads Studied (Source: Toole Design)

2-EXISTING CONDITIONS

The first phase of project work involved creation of an inventory of the Emporia pedestrian network—that is the sidewalks, curb ramps, and crosswalks that make up the pedestrian environment of the city—using publicly available data. In November 2023, the consultant project team, city staff, and a representative from Virginia Department of Transportation (VDOT) observed and collected data on the ground in Emporia during an on-site review. The site review involved walking the entire project area and capturing the availability and condition of pedestrian facilities, opportunities for improvement, and other relevant details.

Maps, tables, and images included in this section are organized by segment and intended to equip the City of Emporia with a comprehensive inventory of the city's pedestrian network, gaps in the network and necessary upgrades.

Generally speaking, there are major gaps in the sidewalk network throughout the city, as well as several areas of concern related to the accessibility of the sidewalk existing facilities (i.e., design and current condition). Sidewalks categorized as “sufficient” are ADA-compliant and meet or exceed 5ft of width, per VDOT standards. Sidewalks that do not meet these requirements or present other accessibility issues (i.e., pavement cracks or poor condition, root heave, etc.) are categorized as “needs upgrade” and details on specific segment issues are noted in the memo. Larger scale maps showing more detail on specific segments are included in the Appendix at the end of this report.

Key Destinations

The project team identified key destinations in Emporia for consideration in prioritizing recommendations. Key destinations were identified using OpenStreetMap data and on the ground observation. Destinations identified included schools and libraries, supermarkets, medical facilities, and parks and playgrounds.

Existing Sidewalks

There are 18.1 miles of cumulative existing sidewalk along the 17.6 miles of roadways in the project study area. However, of the 18.1 miles of existing sidewalks, only about 11 miles are deemed sufficient as per the criteria outlined above. The remaining 7.1 miles of sidewalk require upgrades. Upgrades and proposed improvement projects range from widening or repaving the sidewalk to removing or relocating obstacles, such as utility poles.

Opportunities and Constraints

As identified through the existing conditions data collection and presented in this memo, the city has gaps in approximately 50 percent of its potential sidewalk network. This presents a significant opportunity for the City to close these gaps and promote further safe pedestrian connectivity. The main constraining factor is property ownership and right-of-way. There is also a possibility of opposition towards the construction of new sidewalks, particularly in residential areas with limited available right-of-way.

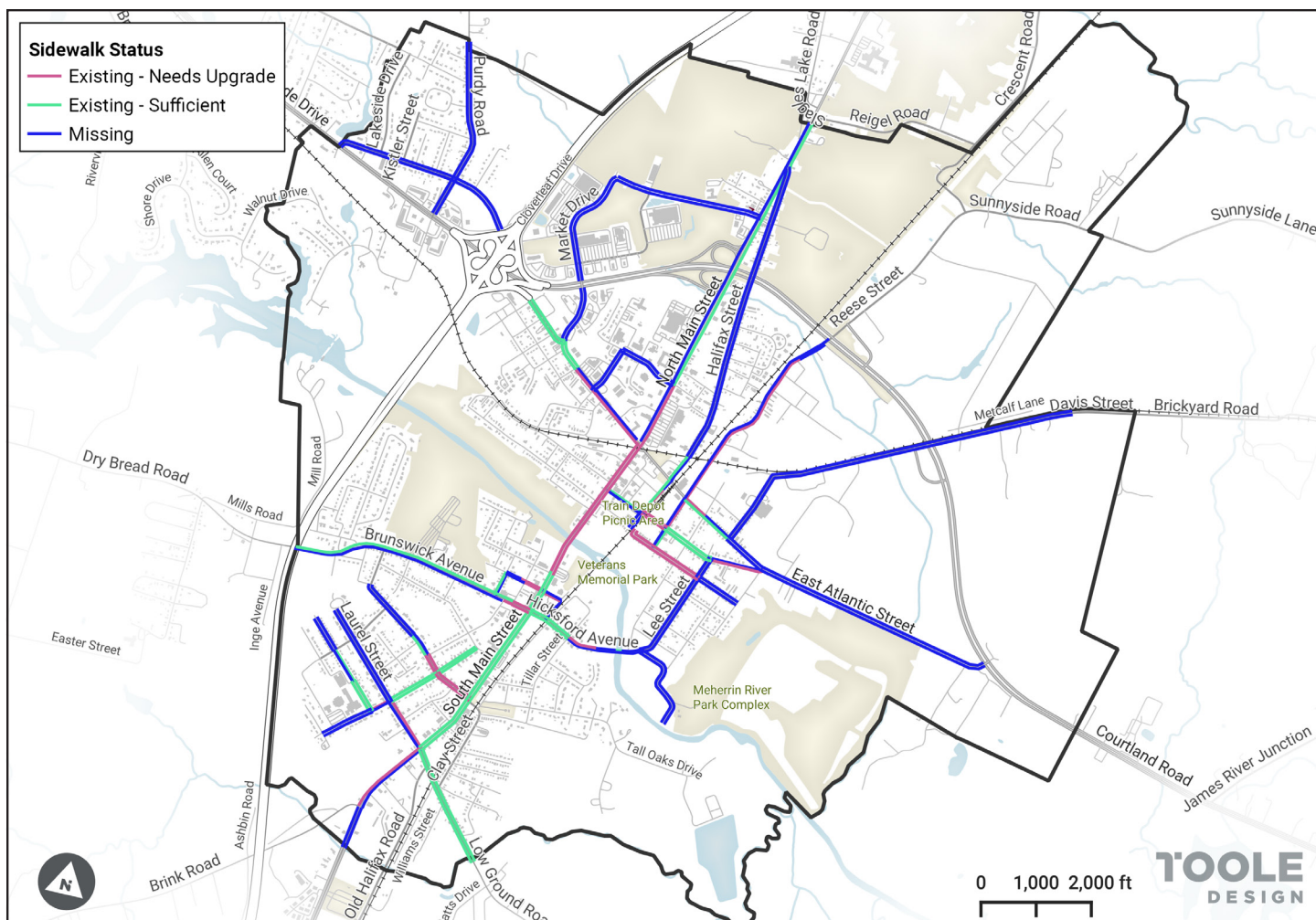


Figure 2: Sidewalk Status . (Source: Toole Design)

Missing Sidewalks

When accounting for both sides of roadways in the study area, there are approximately 37.5 miles of sidewalk missing throughout the City. See Table 3 for the full list, location, and segment length of all missing sidewalk segments. Note that this assessment simply focuses on noting the absence of sidewalks and does not take into account any local requirements on sidewalk construction.

The above map shows the sidewalk network in the City of Emporia. The map includes the existing sidewalks and gaps in the network, and distinguishes which facilities need upgrades to meet accessibility standards and/or ensure a safe and comfortable pedestrian experience.

Crashes in Emporia

Crashes involving pedestrians in Emporia are relatively infrequent, but when they do occur often result in injury. Of 17 pedestrian involved crashes between 2015 and 2023, 15 resulted in visible injury, and in 5 cases severe injury (Source: VDOT).



Figure 3: Missing sidewalk along Halifax Street. (Source: Toole Design)

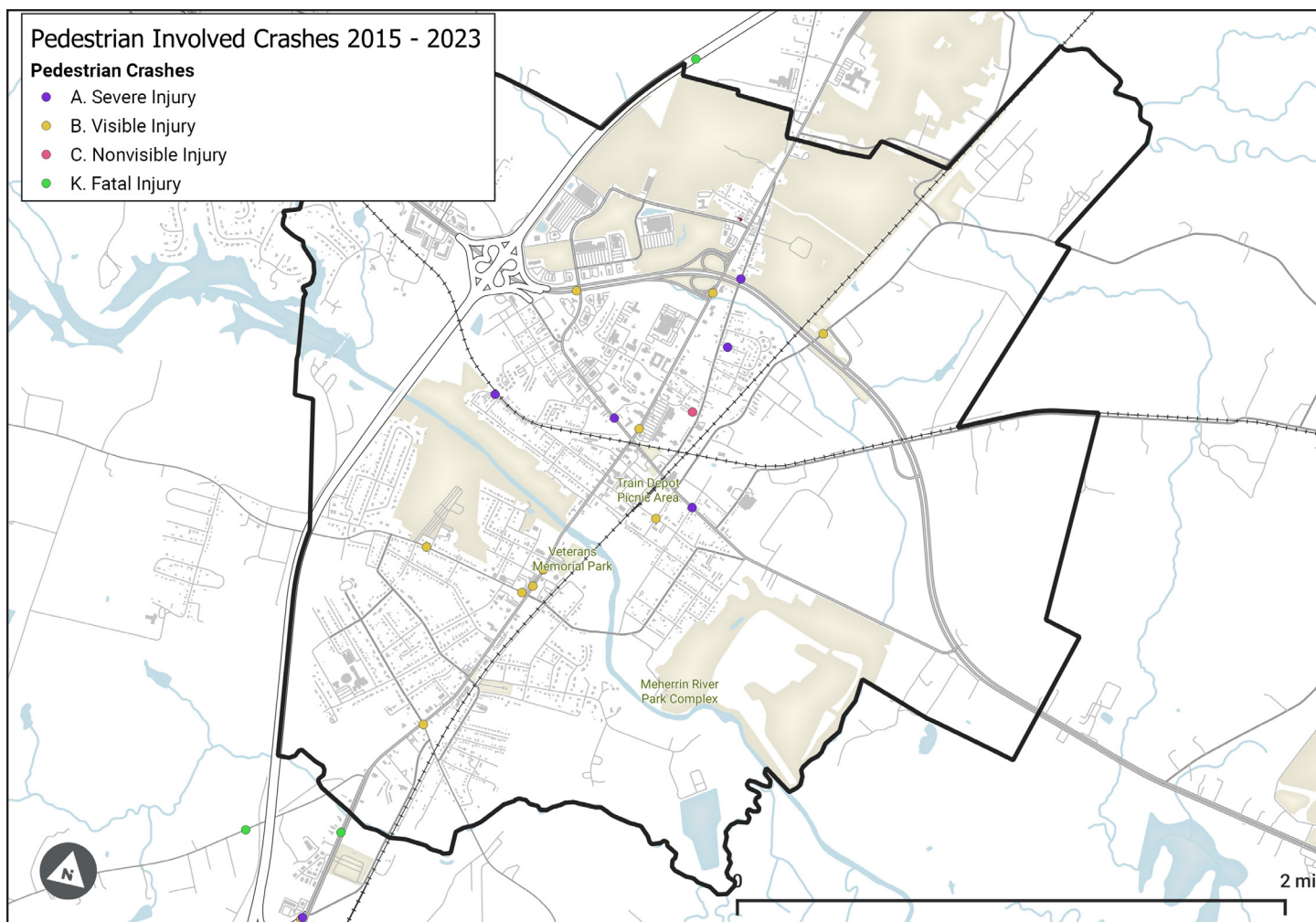


Figure 4: Pedestrian Involved Crashes (2015-2023). (Data Source: VDOT, Map Source: Toole Design)

3 - RECOMMENDATIONS

The project team developed sets of both sidewalk and intersection recommendations based on observed conditions during the Fall 2023 site visit which are discussed below along with suggested prioritization for implementation.

Sidewalk Recommendations

A visual inspection of sidewalks in Emporia was conducted as part of on-site work in Fall 2023 to develop an understanding of the existing condition of the sidewalk network. The table below includes recommendations for both construction of new sidewalk to fill gaps in the network and upgrades or repair to existing sidewalks to increase the safety, comfort, and accessibility of walking.

Missing Sidewalks

Construction of missing sidewalks is the highest priority. This work is eligible for funding through Transportation Alternatives grants, and completing priority segments of the pedestrian network will increase the ability of Emporia residents to walk to complete daily activities.

When accounting for both sides of roadways in the study area, there are approximately 37.5 miles of sidewalk missing

throughout the City.

Each missing sidewalk segment was evaluated based on its proximity to amenities such as schools and libraries, supermarkets, hospitals and clinics, and playgrounds and parks, proximity to identified pedestrian involved crashes, and whether the segment was included in VDOT's 2023 VTans Mid-Term Needs and Priorities list.

The result for each missing sidewalk segment is a priority designation of High, Medium, Low, or Very Low. Of the 67 identified gaps, 5 received a High priority rating, 38 Medium, 18 Low, and the remaining 6 a rating of Very Low.

The tables on the following pages identifies the street name, location, and segment length of all missing sidewalk segments recommended for construction along with its priority designation. Note that this assessment focuses only on the absence of sidewalks and does not take into account any local requirements on sidewalk construction.

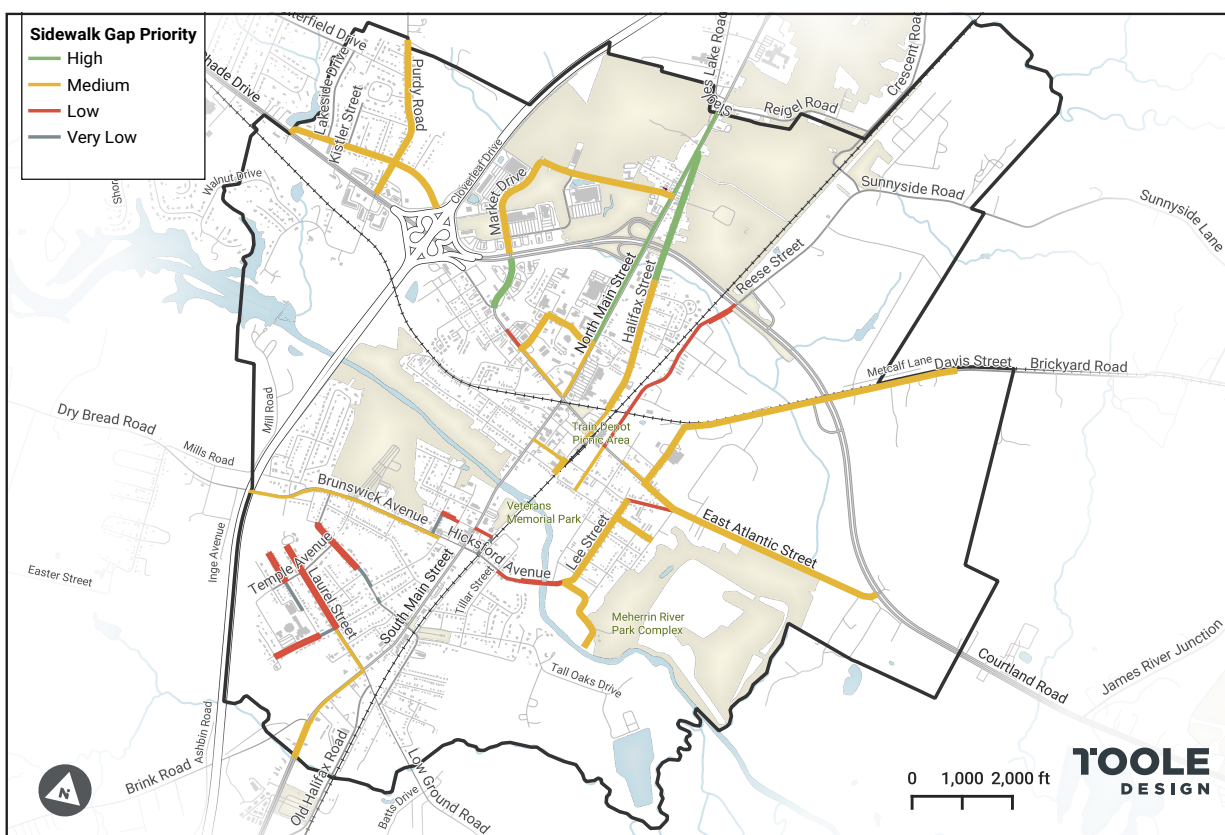


Figure 5: Sidewalk Gap Priority. (Source: Toole Design)

Table 1: High Priority Sidewalks Recommended for Construction

Segment	Side of Roadway	Segment Length (feet)
Halifax St (N Main St to Knox St)	Both	5395
Market Dr (US-58 to W Atlantic St)	Both	2077
N Main St (Harris Ave to City Limits)	West	1149

Table 2: Medium Priority Sidewalks Recommended for Construction

Segment	Side of Roadway	Segment Length (feet)
Belfield Dr (US-58 to Weaver Ave)	Both	1766
Brunswick Ave South (Ingleside Ave to Everett St)	South	3955
Commonwealth Blvd (Market Dr to N Main St)	Both	5321
Davis St (E Atlantic St to City Limits)	Both	13757
E Atlantic St (Davis St to US-58)	Both	10446
E Atlantic St North (Davis St to Center St)	North	569
Halifax St (Knox St to Railroad)	Both	5660
Halifax St (Valley St to Virginia Ave)	Both	657
Halifax St East (E Atlantic St to Midblock)	East	200
Halifax St East (Railroad to E Atlantic St)	East	516
Laurel St West (S Main St to Peachtree St)	West	964
Lee St (Southampton St to Meherrin Park Rd)	Both	4236
Market Dr (US-58 to Commonwealth Blvd)	Both	4366

Meherrin Park Rd (Lee St to End)	Both	3315
N Main St West (W Atlantic St to Harris St)	West	1149
Park Ave (Lee St to Broad St)	Both	1622
Purdy Road (W Atlantic St to end)	Both	6509
Reese St West (E Atlantic St to Park Ave)	West	1015
S Main St (Brink Rd to City Limits)	Both	1470
S Main St East (Laurel St to Brink Rd)	East	1471
Valley St South (N Main St to Halifax St)	South	720
W Atlantic St North (N Main St to Belfield Dr)	North	1157
Weaver Ave (Belfield Dr to US-301)	Both	2185.6
Westend Dr (W Atlantic St to end)	Both	6901

Table 3: Low Priority Sidewalks Recommended for Construction

Segment	Side of Roadway	Segment Length (feet)
Harding St (Temple Ave to end)	Both	1267
Hicksford Ave (Meherrin Park Rd to Center St)	North	656
Hicksford Ave South (Tillar St to Meherrin Park Rd)	South	1339
Jefferson St (mid-block to West Ave)	Both	2356
Laurel St (Peachtree St to end)	Both	3810
Peachtree St (Harding St to Miles Cir)	Both	1897

Reese St East (Service Rd to Midblock)	East	476
Reese St West (E Atlantic St to Service Rd)	West	3959
Southampton St North (Lee St to E Atlantic St)	North	952
Spring St (Midblock to Farmer St)	North	240
Spring St (School St to Farmer St)	South	330
Spring St North (S Main St to Spring St)	North	328
W Atlantic St North (Wolf St to Belfield Dr)	North	450

Table 4: Very Low Priority Sidewalks Recommended for Construction

Segment	Side of Roadway	Segment Length (feet)
Farmer St East (Brunswick Ave to Spring St)	East	416
Harding St West (School driveway to Temple Ave)	West	634
Jefferson St East (Ingleside Ave to midblock)	North	476
Jefferson St East (Mid-block to Peachtree St)	East	57
Peachtree St South (Laurel St to Harding St)	South	374
Spring St East (Spring St to Hicksford Ave)	East	452

Sidewalks Repairs and Upgrades

A variety of issues were observed during the data collection for the 7.1 miles of existing sidewalks needing upgrades. The majority of sidewalks requiring upgrades were either obstructed by objects such as utility poles or intersected with driveway ramps that were not level with the sidewalk and lacked a sufficient ramp. Both raise an issue with accessibility, as wheelchair and stroller users are not

provided with adequate space to navigate across or around these obstacles. Other issues noted included, sidewalk cracking, uplifting, or insufficient width.

The table on the next page identifies recommended sidewalks repairs and upgrades in the project area.

Table 5: Recommended Sidewalk Repairs and Upgrades

Segment	Side of Roadway	Segment Length (feet)
Brunswick Ave (Ingleside Ave to Midblock)	South	143
Brunswick Ave (School St to S Main St)	Both	595
Brunswick Ave (School St to S Main St)	Both	595
E Atlantic St North (Center St to Reese St)	North	441
Halifax St East (midblock)	East	233
Hicksford Ave North (Midblock to Tillar St)	North	500
Jefferson St (Ingleside Ave to Peachtree St)	Both	571
Jefferson St (Ingleside Ave to Peachtree St)	Both	571
Jefferson St (Peachtree St to S Main St)	Both	1424
Jefferson St (Peachtree St to S Main St)	Both	1464
Jefferson St West (Peachtree St to midblock)	West	55
Laurel St East (S Main St to Peachtree St)	East	979
N Main St East (W Atlantic St to Harris St)	East	1215
Park Ave (Lee St to end)	Both	2844
Park Ave (Lee St to end)	Both	3081
Peachtree St North (Harding St to Laurel St)	North	358
Reese St East (E Atlantic St to midblock)	East	3339
Reese St East (E Atlantic St to Southampton St)	East	590

S Main St (Battery Ave to Atlantic St)	Both	5645
S Main St (Battery Ave to Atlantic St)	Both	5622
S Main St West (Laurel St to Brink Rd)	West	1504
Southampton St (Reese St to Halifax St)	Both	1002
Southampton St (Reese St to Halifax St)	Both	1002
Southampton St South (Lee St to E Atlantic St)	South	972
Spring St (School St to Midblock)	North	92
Spring St North (School St to S Main St)	North	324
Spring St South (School St to Spring St)	South	690
W Atlantic St South (N Main St to Belfield Dr)	South	1258
W Atlantic St South (Wolf St to Belfield Dr)	South	469

Intersection Recommendations

A visual inspection of intersections in Emporia was conducted as part of on-site work in Fall 2023 as part of the broader inventory of the pedestrian network. Intersections lacking

appropriate crosswalks or curb ramps were identified and recommended for improvements as outlined in the table below. High-visibility crosswalks, stop bars, and accessible curb ramps are essential components of a safe, comfortable,

Table 6: Recommended Intersections for Crosswalk and Curb Ramp Improvements

Intersection	Leg of Intersection	Proposed Improvement
Atlantic St W & Pennsylvania Ave	South	<ul style="list-style-type: none"> • Install a new standard crosswalk • Install new ramp
Brunswick Ave & Brunswick Ave Ext	North	<ul style="list-style-type: none"> • Mark new stop bar • Reconstruct or repair existing ramp
Brunswick Ave & Church St	North, South	<ul style="list-style-type: none"> • Install new standard crosswalk • Mark new stop bar • Reconstruct or repair existing ramp

Brunswick Ave & Farmer St	North	<ul style="list-style-type: none"> • Install new standard crosswalk • Mark new stop bar • Install new ramp
Brunswick Ave & Ingleside Ave	South	<ul style="list-style-type: none"> • Mark new stop bar • Install new ramp
Brunswick Ave & School St	North	<ul style="list-style-type: none"> • Install new standard crosswalk • Mark new stop bar • Install new ramp
Brunswick Ave & Wright St	South	<ul style="list-style-type: none"> • Mark new stop bar • Reconstruct or repair existing ramp
Halifax St & Atlantic St E	East, Northwest	<ul style="list-style-type: none"> • Install new high-visibility crosswalk • Remark existing stop bar • Remark stop bar at least 4 feet from crosswalk • Install new ramp • Install/upgrade pedestrian signal
Halifax St & Baker St	Northeast, Northwest, Southeast, Southwest, West	<ul style="list-style-type: none"> • Install new ramp • Reconstruct or repair existing ramp
Halifax St & Driveway	North	<ul style="list-style-type: none"> • Install new high-visibility crosswalk
Halifax St & Harris Ave	West	<ul style="list-style-type: none"> • Install new ramp
Halifax St & Park Entrance	North	<ul style="list-style-type: none"> • Install new high-visibility crosswalk • Install advance pedestrian warning sign • Install pedestrian crossing signs with downward pointing arrows
Halifax St & Ruffin St	West	<ul style="list-style-type: none"> • Install new ramp
Hicksford Ave & Driveway	South	<ul style="list-style-type: none"> • Install new ramp
Hicksford Ave & Tillar St	Northeast, Northwest	<ul style="list-style-type: none"> • Mark new stop bar • Install new ramp
Jefferson St & Madison St	South	<ul style="list-style-type: none"> • Mark new stop bar • Reconstruct or repair existing ramp

Jefferson St & Peachtree St	East, North, South, West	<ul style="list-style-type: none"> • Mark new stop bar • Install new ramp
Jefferson St & Tillar Ave	Southwest	<ul style="list-style-type: none"> • Mark new stop bar • Install new ramp
Laurel St & Madison St	Northeast	<ul style="list-style-type: none"> • Install new standard crosswalk • Mark new stop bar • Install new ramp
Laurel St & Peachtree St	East, North, South, West	<ul style="list-style-type: none"> • Install new standard crosswalk • Mark new stop bar • Install new ramp
Low Ground Rd & Faison St	Northeast	<ul style="list-style-type: none"> • Install new standard crosswalk • Remark existing stop bar • Install new ramp
Low Ground Rd & Lundy St/Clay St	North, South	<ul style="list-style-type: none"> • Install new ramp • Reconstruct or repair existing ramp • Mark new stop bar
Low Ground Rd & Old Halifax Rd	South	<ul style="list-style-type: none"> • Install new standard crosswalk • Mark new stop bar • Reconstruct or repair existing ramp
N Main St & Atlantic St	East, North, South, West	<ul style="list-style-type: none"> • Convert blended transition/depressed curb to two, 90 degree curb ramps • Remark stop bar at least 4 feet from crosswalk • Install new high-visibility crosswalk • Install/upgrade pedestrian signal • Install curb extensions • Install median crossing island
N Main St & Baker St	East	<ul style="list-style-type: none"> • Install new standard crosswalk • Mark new stop bar
N Main St & Ruffin St	East	<ul style="list-style-type: none"> • Install new standard crosswalk • Mark new stop bar
N Main St & Valley St	East	<ul style="list-style-type: none"> • Install new standard crosswalk

N Main St & Virginia Ave	East, North, South, West	<ul style="list-style-type: none"> • Install new high-visibility crosswalk • Install/upgrade pedestrian signal
Park Ave & Center St	North, Southwest	<ul style="list-style-type: none"> • Install new standard crosswalk • Install new ramp
Park Ave & Reese St	North	<ul style="list-style-type: none"> • Install new standard crosswalk • Mark new stop bar • Install new ramp
Reese St & Deal St	East	<ul style="list-style-type: none"> • Install new standard crosswalk • Mark new stop bar • Install new ramp
Reese St & Southampton St	East	<ul style="list-style-type: none"> • Install new high-visibility crosswalk • Install new ramp
S Main St & Battery Ave	East, North, South, West	<ul style="list-style-type: none"> • Install new high-visibility crosswalk • Reconstruct or repair existing ramp
S Main St & Briggs St	East	<ul style="list-style-type: none"> • Install new standard crosswalk • Mark new stop bar • Reconstruct or repair existing ramp
S Main St & Brunswick Ave	Southwest	<ul style="list-style-type: none"> • Reconstruct ramp to appropriate slopes • Repair or replace missing or inaudible APS
S Main St & Driveway	East	<ul style="list-style-type: none"> • Reconstruct or repair existing ramp
S Main St & Greenville Ave	East	<ul style="list-style-type: none"> • Install new standard crosswalk • Reconstruct or repair existing ramp
S Main St & Lowground Rd	East, North, South, West	<ul style="list-style-type: none"> • Install new high-visibility crosswalk • Install new ramp • Reconstruct or repair existing ramp • Install curb extensions • Install/upgrade pedestrian signal
S Main St & Spring St	North	<ul style="list-style-type: none"> • Install appropriate crossing signage

Southampton St & Center St	North, South	<ul style="list-style-type: none"> • Install new standard crosswalk • Mark new stop bar
Spring St & Driveway	South	<ul style="list-style-type: none"> • Ramp too steep
Spring St & Driveway	East, West	<ul style="list-style-type: none"> • Reconstruct ramp to appropriate slopes
Spring St & School St	East, North, South, West	<ul style="list-style-type: none"> • Install new high-visibility crosswalk • Install new ramp
Valley St & Budd St	North	<ul style="list-style-type: none"> • Install new ramp • Reconstruct or repair existing ramp
Valley St & Green St	North	<ul style="list-style-type: none"> • Install new standard crosswalk • Mark new stop bar • Install new ramp

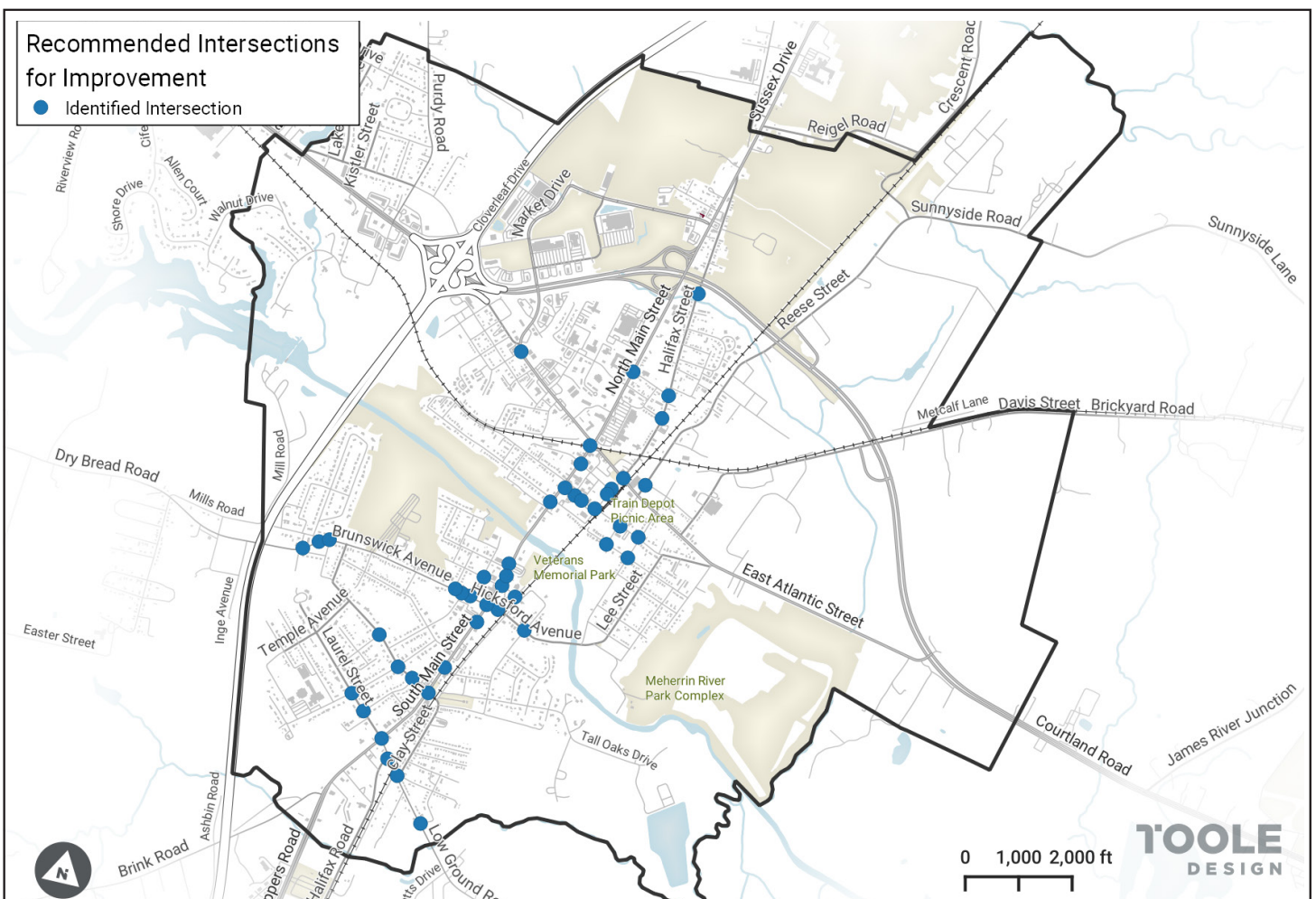


Figure 6: Recommended Intersections for Improvement. (Source: Toole Design)

Crosswalk and Curb Ramp Recommendations

The maps below specifically designate which intersections are recommended for crosswalk and/or curb ramp improvement, respectively.

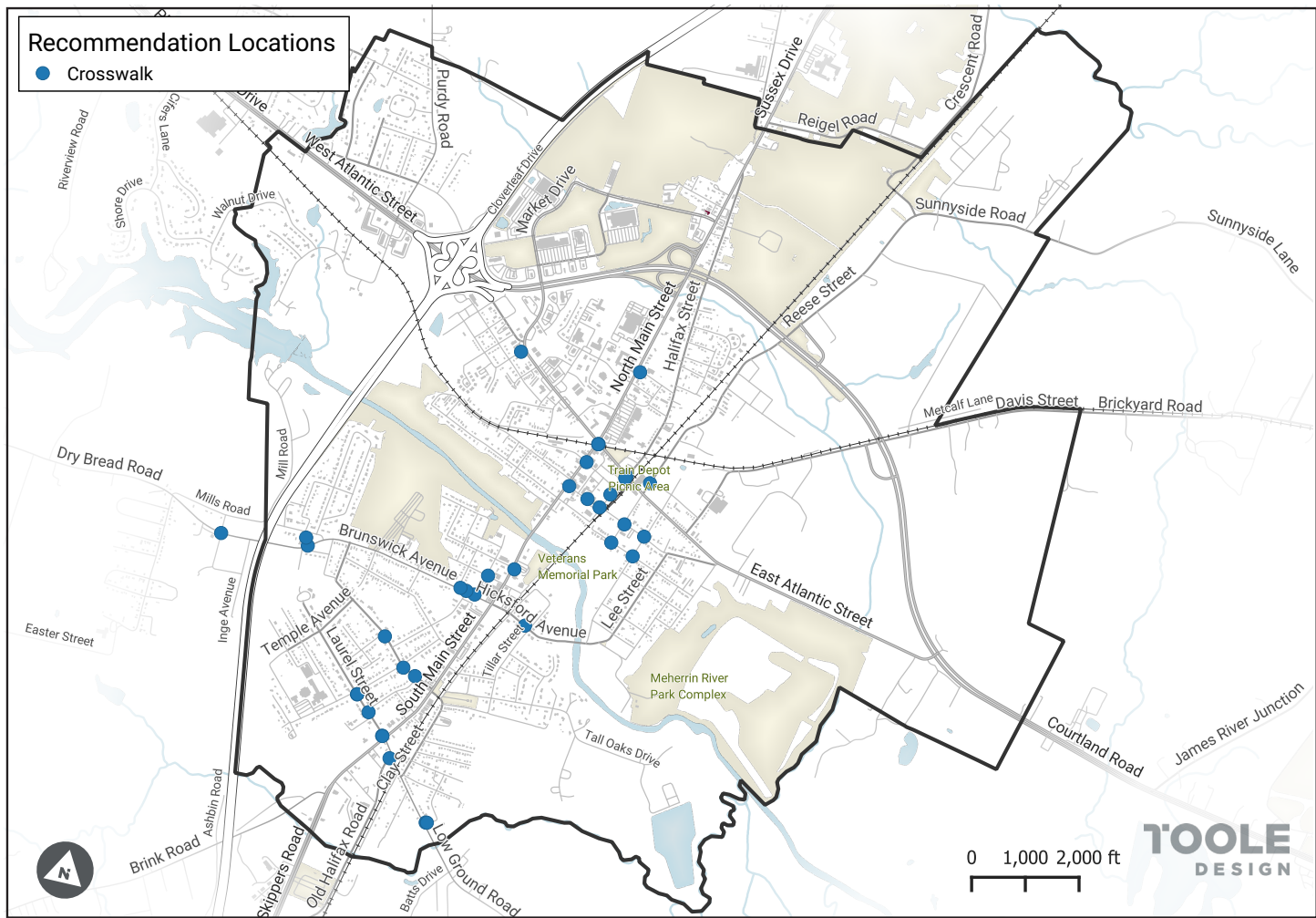


Figure 7: Recommended Crosswalk Improvements. (Source: Toole Design)

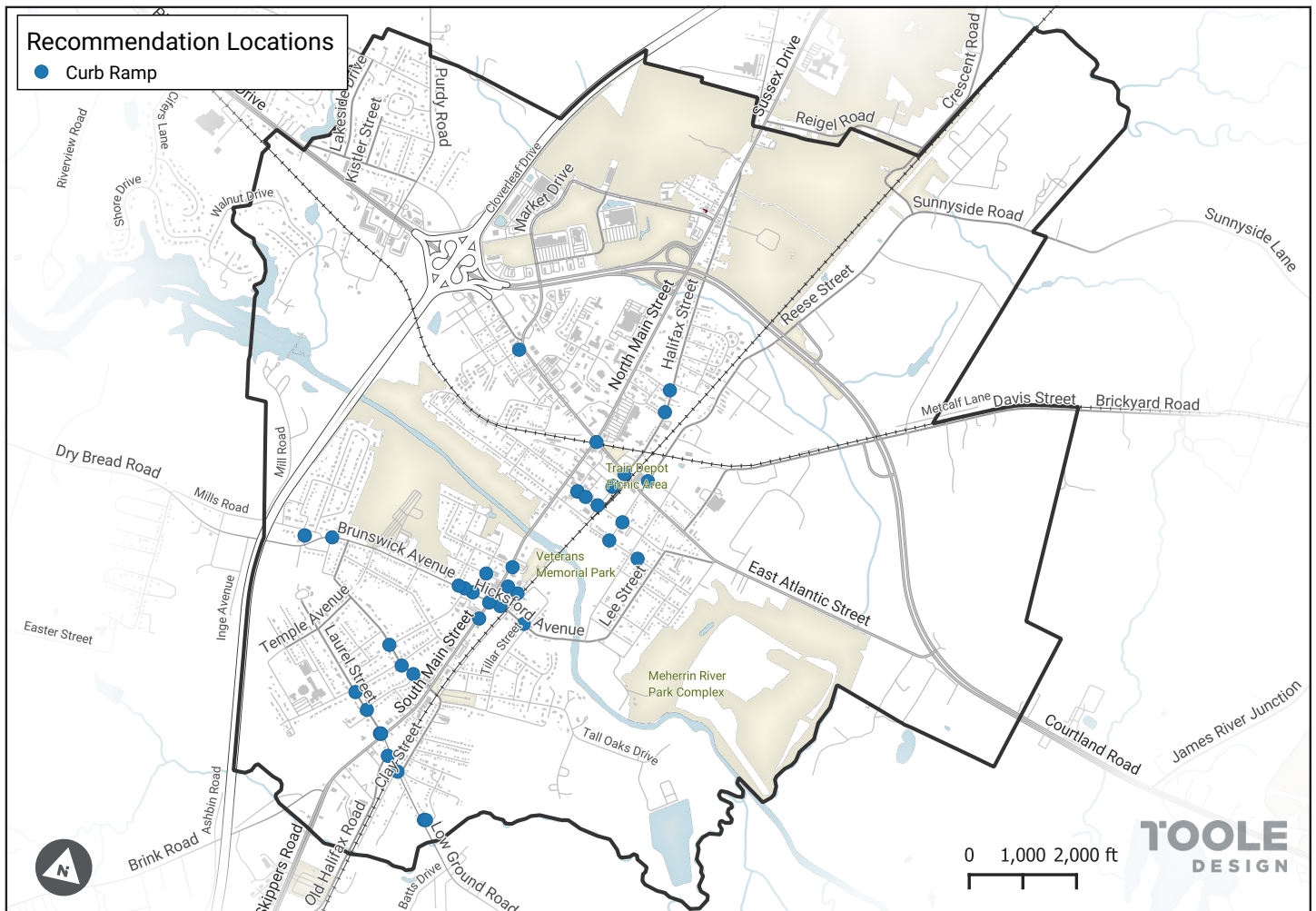


Figure 8: Recommended Curb Ramp Improvements. (Source: Toole Design)

4 - CONCLUSION

The Emporia Sidewalk Inventory will leave the City with a database containing the presence and condition of its sidewalks, as well as intersections needing improvement. The City will be able to utilize this information going forward to apply for funding and implement the recommended improvements, improving the pedestrian network in the City.

