

Sidewalk Inventory and Improvement

FINAL REPORT

POLK COUNTY TRANSPORTATION PLANNING ORGANIZATION

May, 2026

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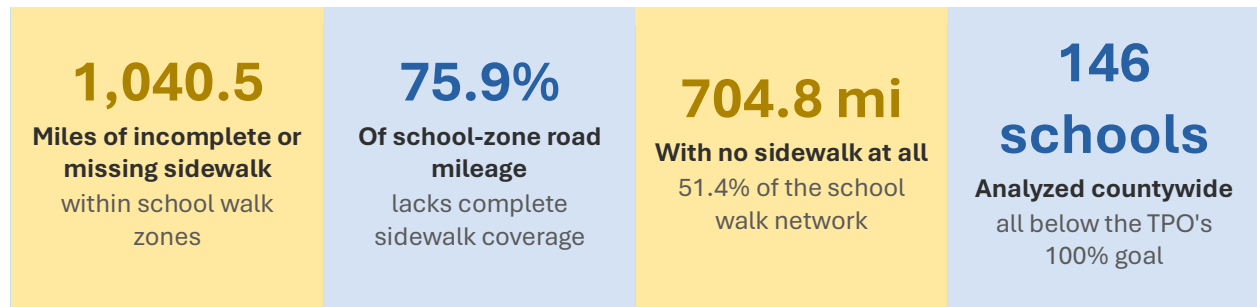
Executive Summary

This study is the latest in a series of sidewalk studies and provides the first countywide picture of where sidewalks are missing. It also establishes a clear, data-driven roadmap for prioritizing where action is needed most.

Polk County has a considerable sidewalk gap. More than **1,040 miles** of roads within one mile of a public school have incomplete or missing sidewalks. That is nearly 76 percent of all school-zone road mileage. This is a scale of deficiency that demands a systematic, funded response.

This study provides the evidence base for that response. Working from 2023 high-resolution aerial imagery, the study mapped sidewalk conditions along every road within walking distance of every public school in Polk County, including 146 schools in total. It then ranked schools by the severity of their gaps, the number of students affected, and the safety risk along their walking routes.

The Findings – At a Glance



Sidewalk Coverage Across Polk County School Walk Zones

The chart below shows the proportion of roadway mileage within one-mile school walk sheds by sidewalk condition.

Table 1. School Walk Network Mileage by Sidewalk Coverage Category

Coverage	Share of School Walk Network	Miles
Both Sides	24.1%	329.7 mi
One Side Only	24.50%	335.7 mi
No Sidewalk	51.40%	704.8 mi

What This Means

For a child trying to walk to school, these numbers translate into a daily reality: half the roads near Polk County schools offer no sidewalk at all. On roads with no protected path, students much walk

in the road, along drainage ditches, or find a longer route if one exists. This is a public safety issue, and it is solvable.

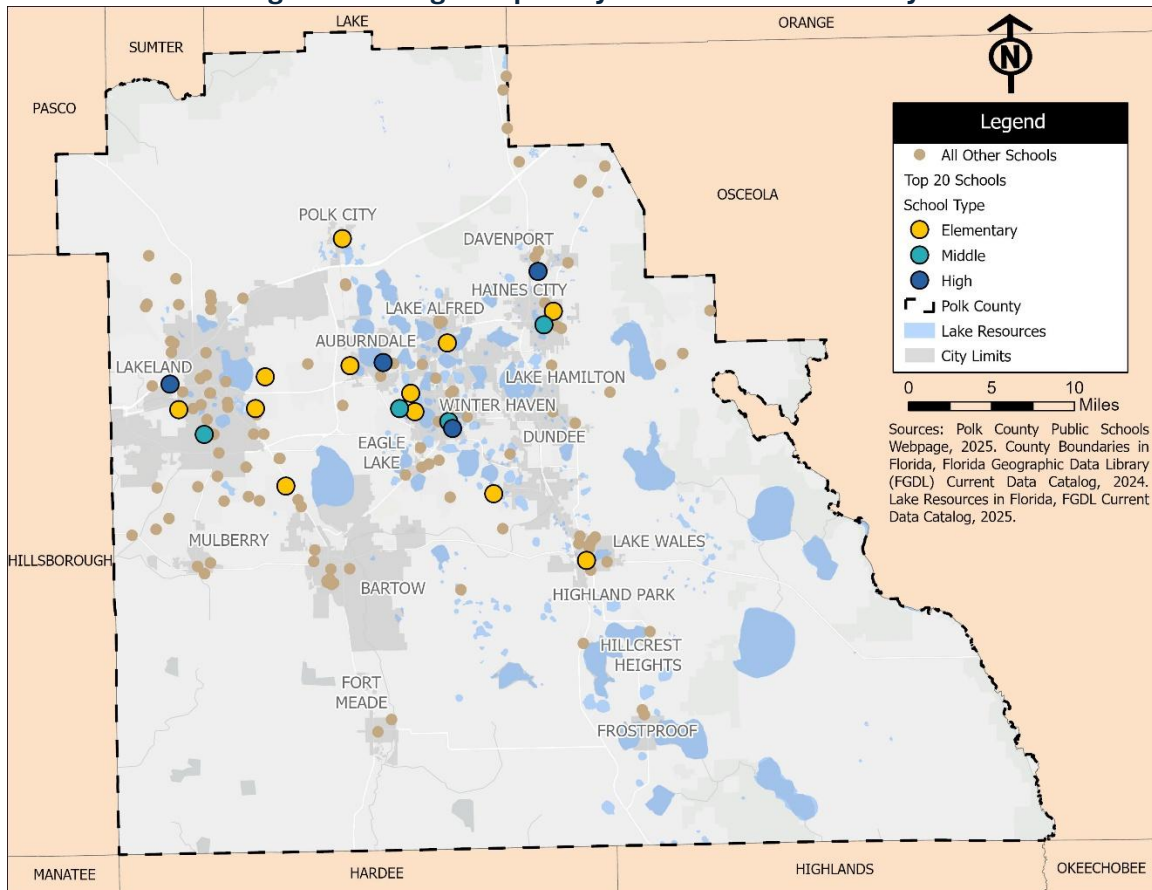
Recommendation

The Polk County TPO should establish a multi-year sidewalk construction program anchored by the priority rankings in this report. All 20 priority schools are Title I designated, serving Polk County’s most economically vulnerable students, who are most likely to walk and least likely to have a safe alternative.

Safe Routes to School, the Highway Safety Improvement Program, and the Transportation Alternatives Program provide competitive funding pathways. The data-driven rankings in this study position Polk County to make compelling and defensible applications.

The 20 highest-priority schools have been field-verified to have actionable sidewalk gaps on County-maintained roads. Conceptual improvement maps for each school are provided in Appendix C.

Figure 1. 20 Highest-priority Schools in Polk County



1. Introduction

Walking to school should be safe. In Polk County, that basic expectation is not yet a reality for many students. Across the county's neighborhoods – from the urbanized corridors of Lakeland and Winter Haven to rural communities across 2,010 square miles – children walk along roadsides where there are no sidewalks, no buffer from traffic, and no protected path to the school door.

The Polk TPO commissioned this study to answer two questions: where are the gaps, and which ones matter most? The answers will support funding requests, capital investment decisions, and a countywide commitment to making school neighborhoods safer for the students who walk through them.

Study Objectives

The study was designed to address three primary objectives:

- Inventory existing sidewalk infrastructure countywide using 2023 high-resolution aerial imagery and machine learning detection techniques.
- Identify sidewalk gaps within one-mile pedestrian network walk sheds surrounding 146 public K-12 schools
- Prioritize schools for sidewalk improvements using a multi-criteria framework that considers student exposure, infrastructure deficiency, pedestrian safety risk, and community need.

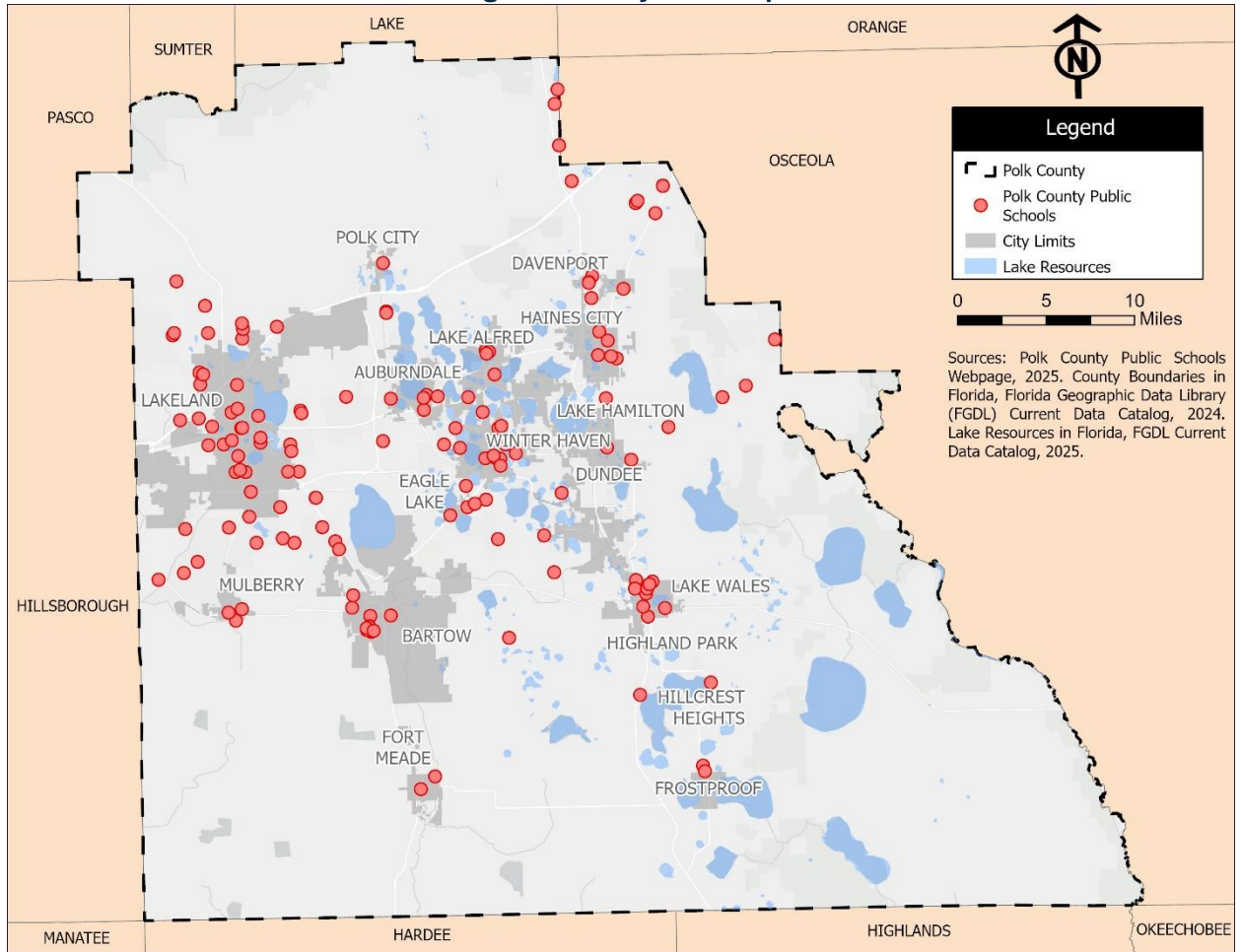
The study supports the goals of the FHWA Safe Routes to School program and aligns with Florida Department of Transportation (FDOT) Pedestrian and Bicycle Safety Plan. Its results provide a data-driven foundation for future project development, grant applications, and coordination within Polk County, Municipal partners, and FDOT District 1.

Study Area and School Inventory

The study area (shows in **Figure 2**) encompasses all of Polk County, Florida, approximately 2,010 square miles, spanning urbanized areas such as Lakeland, Winter Haven, and Bartow, as well as extensive rural communities. The school inventory was refined to focus on conventional K-12 campuses where walk shed analysis is meaningful.

Schools operating exclusively as Pre-K programs, adult education centers, or virtual education providers were excluded because their students do not travel independently to a campus in the same way as traditional K-12 students. Alternative programs were evaluated individually, and those with defined neighborhood campuses accessible by foot were retained. This screening produced a final study set of 146 public schools.

Figure 2. Study Area Map



2. Countywide Sidewalk Inventory

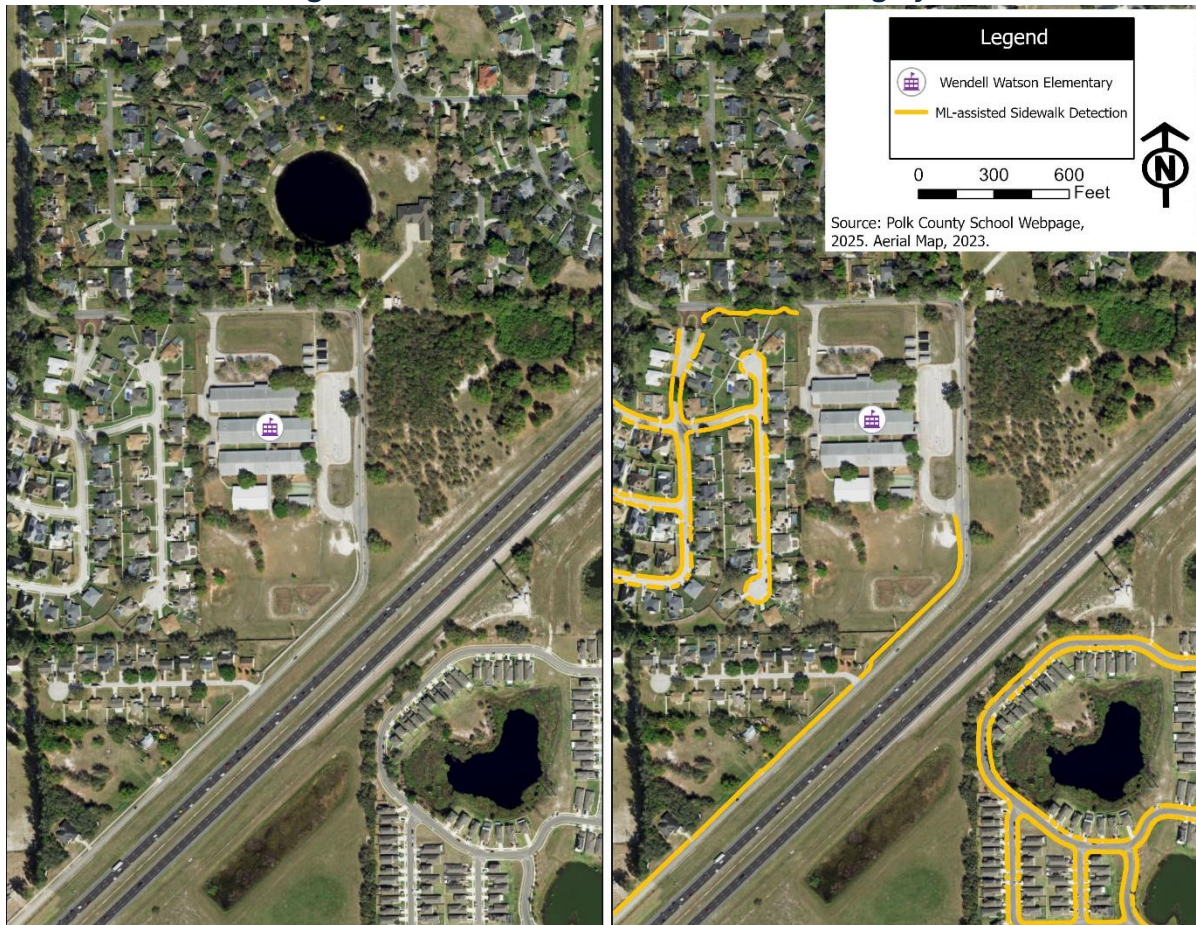
Before gaps can be measured, sidewalks need to be mapped. Because consistent, countywide sidewalk data was not previously available in Polk County, this study developed a new baseline inventory, using aerial imagery and machine learning (ML) to detect sidewalk infrastructure at a scale that would be impractical to achieve through manual field review alone.

How Sidewalks Were Detected

Polk County's 2023 color infrared (CIR) and Red-Green-Blue (RGB) aerial imagery, acquired by FDOT at 0.5-foot spatial resolution, served as the primary data source. Imagery was processed on a remote server to support the computational demands of classification at county scale.

For the purposes of this inventory, as sidewalk is defined as a paved linear feature between 3 and 15 feet in width, located within the public right-of-way or within 50 feet of it. Crosswalks, paved shoulders, and surfaces narrower than three feet of visible pavement were excluded. **Figure 3** below shows an example of line features that were detected by ML model and verified by GIS analyst based on aerial imagery.

Figure 3. Sidewalk Detection from Aerial Imagery



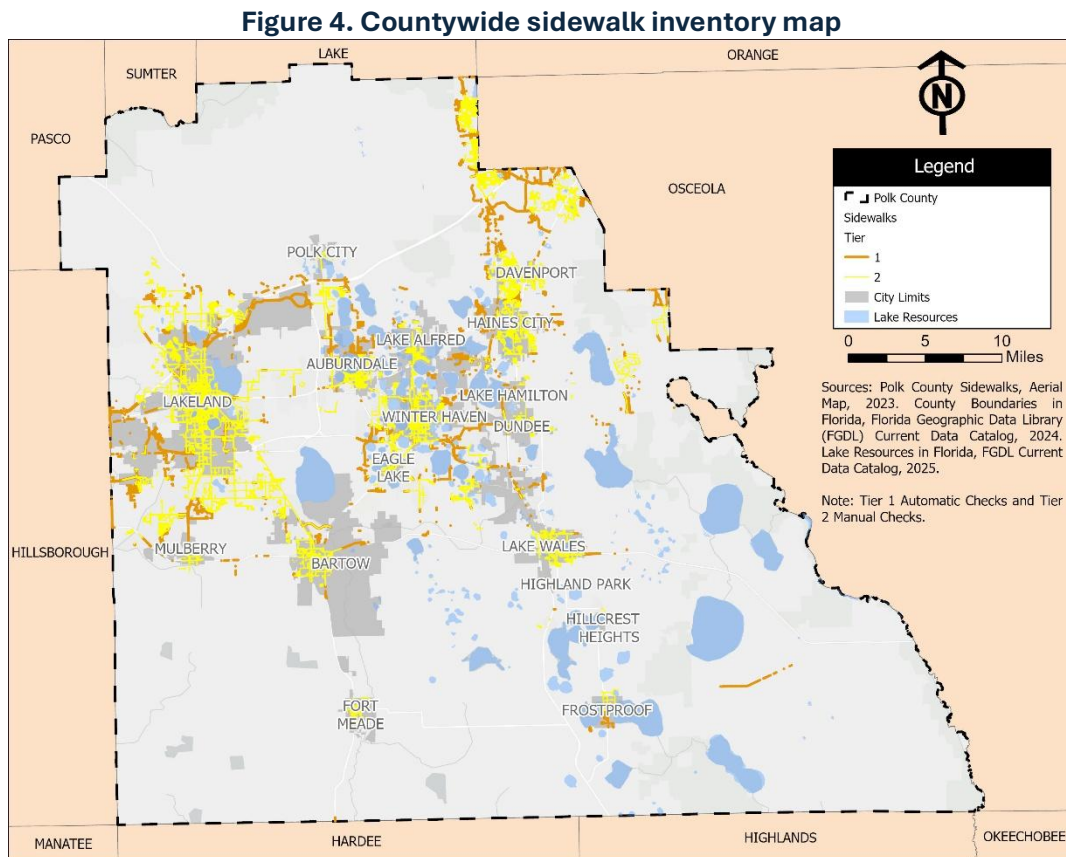
A Machine Learning (ML) model was trained to recognize sidewalk features from the aerial imagery by learning from thousands of manually reviewed examples. Once trained, the model was applied across the full county extent, systematically scanning each image and flagging where sidewalks were present. The results were then converted into GIS line features for gap analysis. Technical details of the model development and validation process are documented in **Appendix E**.

Quality Control

The inventory was validated through a two-tier review process:

- **Tier 1 - Countywide automated refinement:** Sidewalk detections located within parcel boundaries were removed, systematically eliminating false positives from private driveways and parking areas without requiring manual county-wide review.
- **Tier 2 - Manual review within school walk sheds:** All detected sidewalk features within the one-mile network walk sheds of all 146 schools were reviewed manually by GIS analysts. Reviewers verified and corrected ML classifications and manually digitized sidewalks missed due to tree canopy, shadow, or building occlusion.

Figure 4 shows the Tier 1 and Tier 2 sidewalks across the county. The Tier 2 walk shed areas represent the highest-confidence portion of the inventory and form the analytical foundation for the gap analysis and prioritization in Sections 3 through 5.



3. Sidewalk Gap Analysis

Knowing where sidewalks exist is only useful if we know where students actually walk. This section describes how the study defined school walk zones, how sidewalk coverage was measured within them, and what the data shows.

Why Walk Sheds Matter: Measuring Where Students Actually Walk

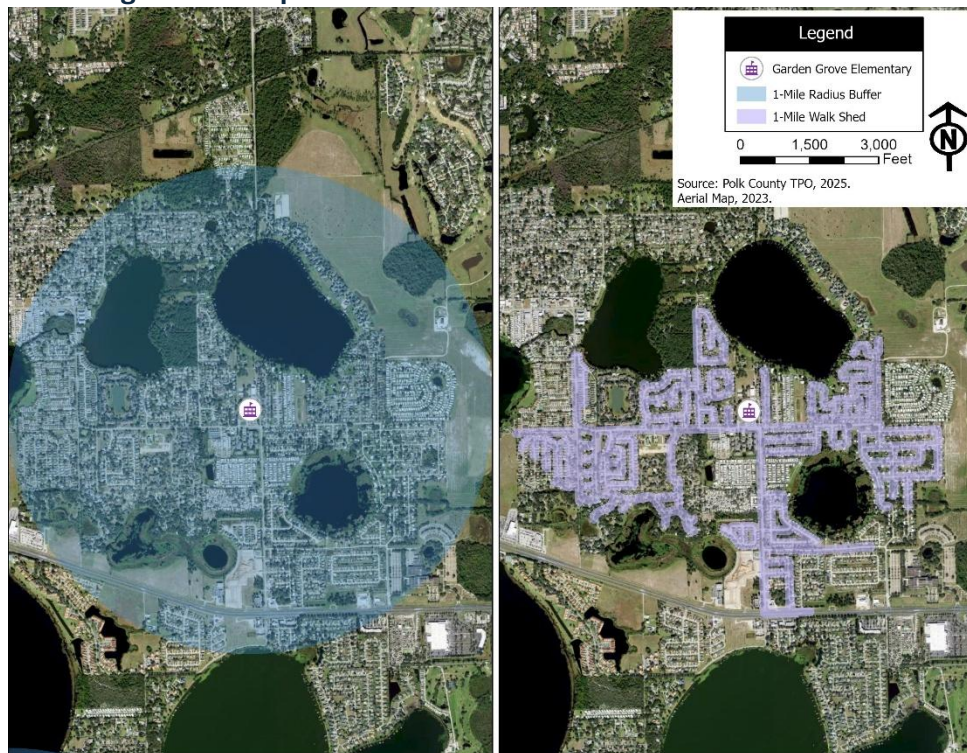
A Simple Circle Overestimates the Problem

A one-mile buffer drawn around a school captures roads that children would never actually walk, roads blocked by highways, with no intersection access, or physically disconnected from the campus. This inflates the gap count and obscures where the real needs are.

A Network Walk Shed Is More Accurate

This study built walk sheds by measuring actual travel distance along the street network, that the routes a child would realistically use. The result: a more accurate picture of where sidewalk investments will make a real difference.

Figure 5. Comparison between Radius Buffer and Walk Shed



Walk sheds were generated using the Network Analyst extension in ArcGIS pro. Where official school attendance geozones were available (87 of 146 schools), the walk shed was clipped to the geozone boundary to reflect only roads that students assigned to that school would realistically travel. Walk paths terminating in commercial, industrial, agricultural, or conservation parcels were removed, since student residences were unlikely to originate in those areas.

How Coverage Was Measured

Sidewalk coverage was evaluated independently for the left and right sides of each road segment using a Python/ArcPy automated classification. Each segment was assigned one of three conditions, in **Table 2**.

Table 2. Sidewalk Coverage Definitions

Both Sides Covered	Sidewalk coverage of 50% or more on both sides of the road. Students have a protected path in both directions.
One Side Only	Sidewalk on one side only. Students traveling in one direction have a protected path; those coming the other way do not.
No Sidewalk (Gap)	Coverage below 50% on both sides. Students must walk in the roadway or on an unpaved surface.

The 50% threshold prevents short sidewalk fragments from being miscounted as full coverage, ensuring each classification reflects the majority condition along that segment.

What the Data Shows

In total, 1,040.5 miles of the 1,320.2-mile school walk network have incomplete or missing sidewalk coverage, as summarized in the Executive Summary. The breakdown by coverage category is provided in **Table 2**.

The results reveal a substantial pedestrian infrastructure deficit. Only 24.1 percent of the school walk network provides sidewalks on both sides. More than half the network (51.4 percent) has no sidewalk on either side. Combined, segments with incomplete or absent coverage account for 1,040.5 miles (75.9 percent) of all roads within school walk zones.

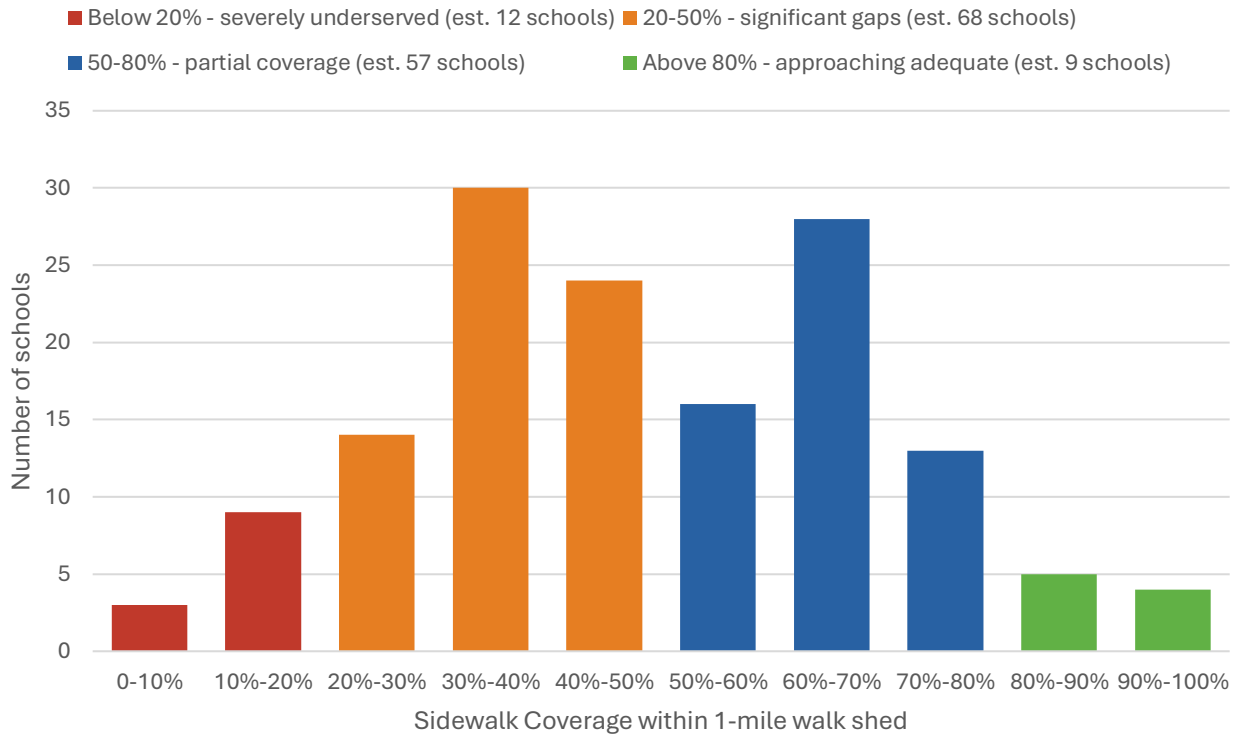
*Sidewalk coverage across the 146 schools ranged from a low of 1.6% (Alturas Elementary) to a high of 96.3% (Bridge Prep Academy of Polk), with a countywide average of 48.4% and a median of 45.5%. Every single school falls below the TPO's long-term goal of 100% sidewalk coverage within one mile. The full list of school gap analysis was documented in **Appendix A**.*

Figure 6 shows how 146 schools are distributed across coverage levels. The pattern reveals two clusters: a large group of schools in 20-50 percent range where significant gaps remain the norm, and a second group in the 50-80 percent range where coverage is partial but incomplete. Together, these two groups account for 125 of the 146 schools. Only 9 schools exceed 80 percent coverage, while 12 schools fall below 20 percent, meaning the majority of surrounding roads near those campuses have no sidewalk at all.

No school in the study reaches 100 percent – the TPO’s long term goal. Sidewalk deficiencies are not isolated to a handful of underserved locations. They are norm across Polk County.

Coverage percentage alone does not determine prioritization. Some schools with lower coverage are in rapidly developing areas where sidewalks may arrive through new construction. Others with moderate coverage may still contain critical gaps along high-volume roads where student risk is greatest. The prioritization framework in Section 4 accounts for these distinctions.

Figure 6. Number of Schools by Sidewalk Coverage within 1-mile Walk Shed



4. Prioritization Framework

Not all sidewalk gaps are equal. A missing sidewalk on a quiet residential street used by a handful of students is a very different problem from a missing sidewalk on a four-lane arterial where hundreds of children cross daily. The prioritization framework directs limited resources where they will do the most good.

Five Factors, One Score

Each school received a composite priority score based on five factors. **Table 3** shows what each one measures and why it matters.

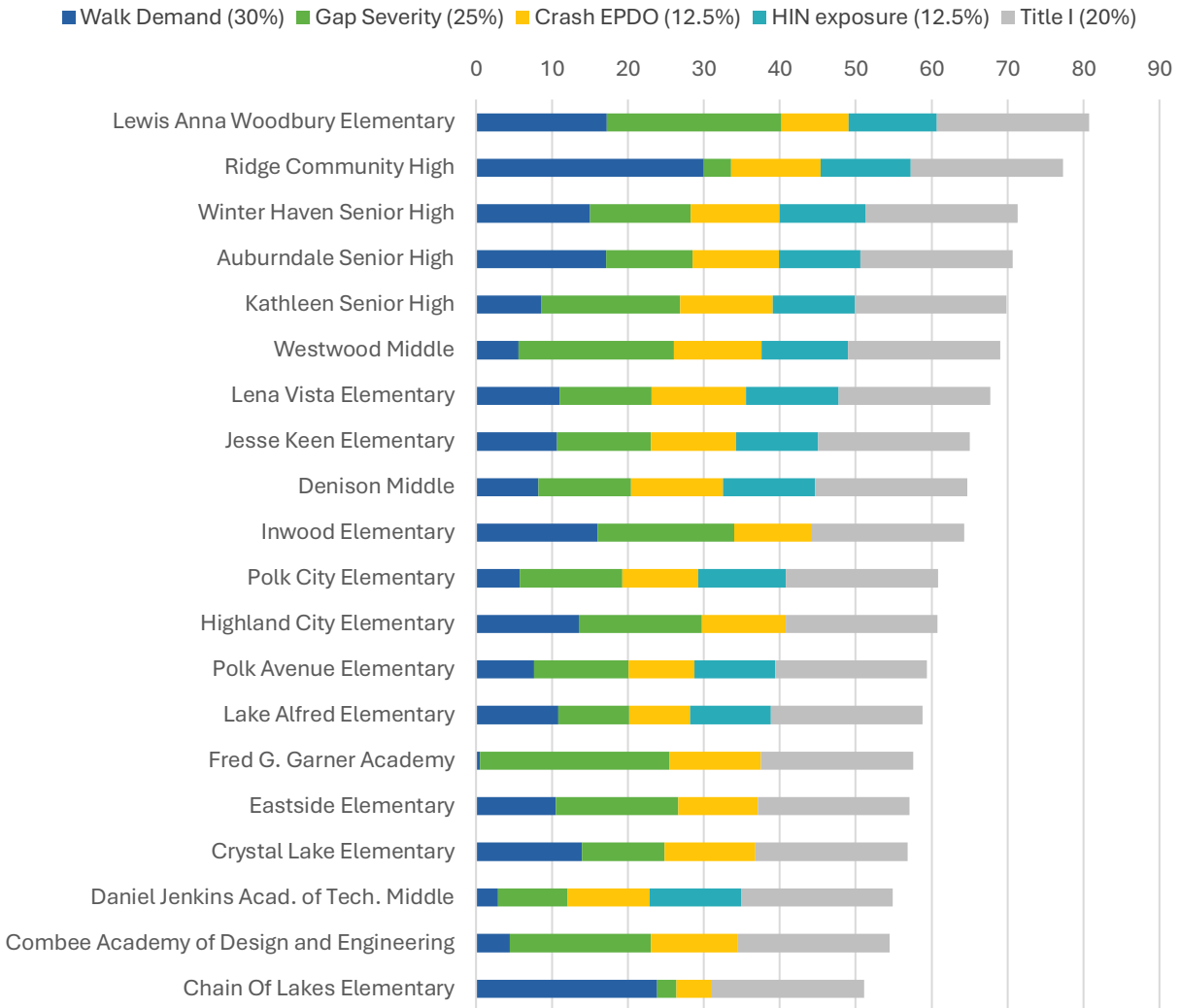
Table 3. Prioritization Framework Five Factors

Factor	Weight	Why It Matters
Walk Demand	30%	Tells how many students are likely to benefit from new sidewalks. A school where hundreds of students live within walking distance delivers far greater safety benefit than one with few walkers.
Sidewalk Gap Severity	25%	Identifies where the infrastructure is most incomplete by measuring both the total walk shed gap and gaps specifically along County-maintained roads where Polk County can act directly. High severity means students face few or no safe alternatives today.
Pedestrian & Bicycle Crash History (EPDO)	12.5%	Highlights where students already face documented danger. Crash severity weighting (EPDO) gives more weight to serious injuries and fatalities, not just crash counts, so the most dangerous locations rise to the top.
High Injury Network (HIN) Exposure	12.5%	Captures systemic risk along entire corridors, not just at crash points. Roads on the High Injury Network (HIN) are statistically the most dangerous for pedestrians in the county. Students walking along HIN segments face elevated risk even without a recent crash.
Title I Status	20%	Ensures community impact is built into the prioritization. Title I schools serve higher concentrations of low-income students who are more likely to walk to school and less likely to have alternative transportation.

*All five factors were scored on a 0-100 normalized scale and combined using the weights above. The resulting composite score ranks each school relative to all others in this study. Prioritization scoring for 146 schools are presented in **Appendix B**.*

Figure 7 below gives the first glance of how each factor impacts the composite score and lists the verified top 20 schools. Section 5 documents the sequential process to verify the final top 20 schools.

Figure 7. Priority Scores for the verified top 20 schools – composite score by factor



Note: all 20 schools are Title I designated with confirmed sidewalk gaps on County-maintained roads. schools are ranked by composite score and verified to have confirmed sidewalk gaps along Polk TPO Road Network Database (RND). Schools without actionable RND gaps were removed and replaced by the next eligible school.

5. School Prioritization

The scores tell a clear story: a cluster of schools faces an urgent combination of severe infrastructure gaps, high student exposure, dangerous road conditions, and elevated community concerns. There are the schools where investment is needed most.

How the Final 20 Were Selected

All 146 schools were initially ranked by composite score. But a high score alone is not enough to qualify for the final list as the goal of this study is to identify locations where Polk County can actually build sidewalks.

Following the initial ranking, desktop field verification was conducted to confirm that each candidate school had actionable sidewalk gaps along County Roadway Network Database (RND) corridors that the roads Polk County has direct authority to construct improvements. Schools where all RND segments within the walk shed already had at least one-sided coverage were removed from consideration, and the next highest-ranked eligible school was evaluated in their place.

This sequential process continued until a final set of 20 schools with confirmed, County-actionable sidewalk gaps was identified. All 20 schools in the final priority list are Title I designated, meaning every recommended investment targets communities where children are most likely to walk and most likely to lack a safe alternative.

Figure 8 summarizes how all 146 schools distribute across the four priority tiers. Of the 146 schools evaluated, 10 score in the Critical tier (65-81), 12 in the High tier (55-64), and 51 in the Moderate tier (40-54). The remaining 73 schools fall in the Standard tier (below 40), where pedestrian infrastructure needs exist but are less acute relative to the rest of the county. The 20 verified priority schools span the Critical, High, and upper Moderate tiers that all confirmed to have actionable sidewalk gaps on County-maintained roads and ready to advance to project development.

Figure 8. Distribution of all 146 study schools by priority tier based on Composite Score

CRITICAL	HIGH	MODERATE	STANDARD
10	12	51	73
Schools	Schools	Schools	Schools
Score 65-81	Score 55-64	Score 40-54	Score below 40
Advance to project development now	Program in 3-5 year capital plan	Include in long-range transportation plan	Monitor through ongoing planning

Top 20 Priority Schools

Table 4 presents the final 20 priority schools following scoring and field verification. Detailed sidewalk improvement opportunities for each school are presented in Section 6 and **Appendix C**.

Table 4 Top 20 Priority Schools by Five Factors and Composite Scores

Rank	School Name	Demand Score	Gap Score	Crash Score	HIN Score	Title I Score	COMPOSITE SCORE	Priority Tier
1	Lewis Anna Woodbury Elementary	57.5	91.8	71.0	93.1	100.0	80.7	Critical
2	Ridge Community High	100.0	14.3	94.5	95.2	100.0	77.3	Critical
3	Winter Haven Senior High	50.2	52.9	93.8	90.3	100.0	71.3	Critical
4	Auburndale Senior High	57.2	45.4	91.0	86.2	100.0	70.7	Critical
5	Kathleen Senior High	28.8	73.0	97.9	86.2	100.0	69.9	Critical
6	Westwood Middle	18.5	82.1	92.4	91.0	100.0	69.0	Critical
7	Lena Vista Elementary	36.6	48.5	99.3	97.9	100.0	67.8	Critical
8	Jesse Keen Elementary	35.6	49.5	89.7	86.2	100.0	65.1	Critical
9	Denison Middle	27.3	48.7	97.2	97.2	100.0	64.7	High
10	Inwood Elementary	53.4	72.0	82.1	-	100.0	64.3	High
11	Polk City Elementary	19.2	54.1	80.0	92.4	100.0	60.8	High
12	Highland City Elementary	45.1	64.9	88.3	-	100.0	60.8	High
13	Polk Avenue Elementary	25.6	49.6	69.7	84.8	100.0	59.4	High
14	Lake Alfred Elementary	36.1	37.4	64.1	84.8	100.0	58.8	High
15	Fred G. Garner Academy	1.6	100.0	96.6	-	100.0	57.5	High
16	Eastside Elementary	35.0	64.6	83.5	-	100.0	57.1	High
17	Crystal Lake Elementary	46.5	43.5	95.9	-	100.0	56.8	High
18	Daniel Jenkins Acad. of Tech. Middle	9.7	36.6	86.2	96.6	100.0	54.9	High
19	Combee Academy of Design and Engineering	14.7	74.4	91.7	-	100.0	54.5	High
20	Chain Of Lakes Elementary	79.6	10.2	37.2	-	100.0	51.1	Moderate

6. Improvement Recommendations

The analysis is complete. The priority list is clear. Now comes the most important question: what happens next? The recommendations in this section translate the data into specific, actionable sidewalk projects, one school at a time, on roads where Polk County has the authority to act.

Each recommendation below is a specific improvement opportunity, identified through GIS analysis, verified against the sidewalk inventory, and mapped for project development. Together, the 20 priority schools represent the most urgent and highest-return targets for sidewalk investment in Polk County.

How Important Segments Were Identified

Proposed sidewalk segments were identified through a GIS-based screening process in ArcGIS Pro, overlaying the County Roadway Network Database (RND), the countywide sidewalk inventory, and school walk shed boundaries. Priority was given to locations where new sidewalks would:

- Extend existing sidewalk segments, or
- Close gaps between two existing sidewalks, improving overall pedestrian connectivity

These recommendations represent planning-level guidance. Detailed engineering design, feasibility review, right-of-way assessment, drainage considerations, and cost estimation will occur during subsequent project development phases.

School-Level Maps

A detailed improvement map was developed for each of the 20 priority schools, showing:

- Existing sidewalk infrastructure
- Identified sidewalk gaps along County RND corridors
- Proposed sidewalk improvement segments
- One-mile network walk shed boundary
- County RND roadway network

These maps are provided in **Appendix C** of this report. A digital ArcGIS map package with the full map series and supporting GIS layers is included as a project deliverable.

One school-level map for each of the 20 priority schools, showing the walk shed, the gaps, and the proposed improvement segments. This is one of the most powerful tools in this report for communicating the scale and septicity of the need to decision-makers and the public.

Preliminary Cost Estimate Summary

Planning-level cost estimates are based on the total length of proposed sidewalk segments along County RND corridors, applied against typical unit costs for sidewalk construction. These estimates are for planning purposes only, they do not reflect detailed design, right-of-way acquisition, drainage, or other project development factors.

Table 5 summarizes the estimated sidewalk construction costs for the recommended improvements. The detailed segment-level estimates per school and the unit cost assumption are provided in **Appendix D**.

Table 5. Preliminary Cost Estimate Summary for Recommended Sidewalk Improvements

Ranking	School Name	Proposed Sidewalk Length (Mile)	Estimated Cost
1	Lewis Anna Woodbury Elementary	0.48	\$261,179
2	Ridge Community High	1.51	\$821,958
3	Winter Haven Senior High	0.88	\$478,488
4	Auburndale Senior High	0.64	\$347,891
5	Kathleen Senior High	3.65	\$1,980,497
6	Westwood Middle	0.83	\$453,190
7	Lena Vista Elementary	0.64	\$345,590
8	Jesse Keen Elementary	0.49	\$267,504
9	Denison Middle	0.45	\$242,916
10	Inwood Elementary	0.76	\$412,456
11	Polk City Elementary	1.65	\$896,278
12	Highland City Elementary	0.63	\$341,577
13	Polk Avenue Elementary	0.38	\$207,686
14	Lake Alfred Elementary	0.95	\$516,667
15	Fred G. Garner Academy	0.68	\$371,055
16	Eastside Elementary	1.67	\$904,176
17	Crystal Lake Elementary	0.71	\$385,992
18	Daniel Jenkins Acad. of Tech. Middle	0.35	\$189,212
19	Combee Academy of Design and Engineering	1.42	\$769,499
20	Chain Of Lakes Elementary	0.49	\$265,357
	Grand Total	19.26	\$10,459,168

7. Conclusion and Next Steps

Polk County has a clearly documented, countywide sidewalk deficit around its schools. This study puts numbers on that deficit for the first time and identifies where the need is greatest.

More than 1,040 miles of roads within one mile of public schools lack complete sidewalk coverage. Twenty schools have been identified, field-verified, and ranked as the highest-priority targets for investment along County-maintained roads. All 20 serve Title I communities. All 20 have actionable improvement opportunities ready to advance.

This is a solvable problem. The data exists. The priorities are clear. The funding pathways are available. What is needed now is the decision to invest.

Recommended Next Steps

Conduct field reviews and feasibility assessments

Desktop GIS verification has confirmed gaps along County RND corridors. On-the-ground review of the top priority sites will validate right-of-way availability, drainage conditions, and constructability before project development begins.

Develop engineering-level cost estimates and project scopes

The planning-level estimates in this study provide order-of-magnitude guidance. Engineering scope, particularly for the Critical-tier schools, will sharpen cost projections and support funding applications.

Coordinate with Polk County, municipalities, and FDOT

The countywide gap analysis documents needs on all road jurisdictions. Gaps on state highways and municipal streets should be shared with FDOT District 1 and local government partners to coordinate parallel investments.

Advance projects through competitive grant programs

Safe Routes to School, Transportation Alternatives, and HSIP all provide pathways for funding sidewalk construction near schools. The ranked priority list and school-level maps in this study are designed to support competitive grant applications directly.

Establish a repeatable monitoring framework

The ML-based sidewalk inventory methodology developed here can be updated as new aerial imagery becomes available, providing Polk County with a scalable approach to tracking progress over time.

This study gives Polk County TPO a data-driven foundation that other communities spend years trying to build. The sidewalk gaps are documented. The priorities are ranked. The first step is funding the first project.

– End of Main Report –

School-level coverage data, improvement maps, cost estimates and technical methodology are provided in Appendices A through E

Appendix A – School Gap Analysis Results

This appendix presents sidewalk coverage statistics for all 146 public schools included in the study. Results are organized by school and include total walk shed mileage, gap mileage by coverage category, and overall sidewalk coverage percentage within the one-mile network walk shed.

Rank	School Name	ID	Coverage	Walk Net (mi)	Full Gap (mi)
1	Alturas Elementary	1041	1.56%	6.53	6.43
2	Hartridge Academy	8121	1.97%	5	4.91
3	Bok Academy	1601	2.62%	11.86	11.54
4	Alta Vista Elementary	0331	12.18%	5.1	4.48
5	Clarence Boswell Elementary	1811	13.80%	6.91	5.96
6	Sandhill Elementary	0341	15.84%	3.14	2.64
7	Garden Grove Elementary	1711	16.67%	16.44	13.7
8	Fort Meade Middle/Senior High	0791	17.60%	12.08	9.95
9	John Snively Elementary	0631	19.06%	3.36	2.72
10	Dale R. Fair Babson Park Elementary	1421	19.18%	10.69	8.64
11	R. Bruce Wagner Elementary	0191	19.41%	10.75	8.66
12	RCMA Mulberry Community Academy	8012	19.44%	8.72	7.02
13	Willow Oak School	1441	20.15%	8.41	6.71
14	Westwood Middle	0571	20.27%	22.61	18.03
15	New Beginnings High	8004	22.95%	6.69	5.15
16	Socrum Elementary	1901	23.72%	6.4	4.88
17	Inwood Elementary	0611	24.43%	19.77	14.94
18	Lena Vista Elementary	0841	25.00%	15.55	11.66
19	Combee Academy of Design and Engineering	0091	25.12%	15.52	11.62
20	Frostproof Ben Hill Griffin Jr. Elementary	1921	25.12%	10.16	7.61
21	Doris A. Sanders Learning Center	0092	25.78%	13.21	9.81
22	Kathleen Middle	1191	26.42%	9.26	6.81
23	Jesse Keen Elementary	1241	26.87%	14.36	10.5
24	Eagle Lake Elementary	1701	27.23%	8.3	6.04
25	Mi Escuela Montessori	8201	27.93%	20.02	14.43
26	Polk City Elementary	0881	28.44%	15.37	11
27	Fred G. Garner Academy	0601	30.08%	28.63	20.02
28	Wahneta Elementary	0681	30.85%	11.09	7.67
29	Laurel Elementary	1611	30.92%	11.39	7.87
30	Karen M. Siegel Academy	0661	31.07%	4.22	2.91
31	Discovery High School	8181	31.14%	4.05	2.79
32	PS Lakeland Gateway to College CHS	8003	31.15%	4.67	3.22
33	Polk State College Collegiate High	8131	31.16%	4.67	3.21
34	South Pointe Elementary	0141	32.73%	3.04	2.04
35	Tenoroc High	1051	32.87%	8.49	5.7
36	Bethune Academy	0391	33.28%	16.84	11.23
37	Eastside Elementary	0361	33.34%	17.57	11.72
38	Lewis Anna Woodbury Elementary	0802	33.41%	37.26	24.81
39	Palmetto Elementary	1702	33.62%	18.01	11.95
40	Compass Middle Charter	0932	34.08%	24.95	16.44
41	Bartow Middle	0931	34.22%	26.03	17.12
42	Kathleen Elementary	1221	34.48%	8.44	5.53
43	Kathleen Senior High	1181	34.87%	18.04	11.75
44	Winston Academy of Engineering	1251	35.17%	7.85	5.09
45	Lake Marion Creek Middle	1831	35.31%	13.43	8.69

Rank	School Name	ID	Coverage	Walk Net (mi)	Full Gap (mi)
46	Chain Of Lakes Collegiate High	8133	35.65%	12.86	8.28
47	Crystal Lake Elementary	0101	35.99%	15.63	10.01
48	Frostproof Middle/Senior High	1801	35.99%	10.24	6.56
49	Edgar L. Padgett Elementary	1451	36.36%	18.95	12.06
50	Highlands Grove Elementary	1281	38.10%	13.03	8.06
51	Discovery Academy of Lake Alfred	1961	38.33%	4.84	2.98
52	Oscar J. Pope Elementary	1521	38.43%	9.81	6.04
53	Highland City Elementary	1061	38.46%	24.36	14.99
54	Cleveland Court Elementary	0081	38.53%	11.69	7.18
55	Walter Caldwell Elementary	0861	39.17%	8.75	5.32
56	Bella Citta Elementary	2003	39.33%	11.33	6.87
57	Floral Avenue Elementary	0961	40.52%	30.08	17.89
58	Wendell Watson Elementary	1881	40.57%	6.39	3.8
59	James E. Stephens Academy	1751	41.59%	12.06	7.04
60	Lake Gibson Middle	1761	41.68%	16.54	9.64
61	Scott Lake Elementary	1681	41.77%	14.51	8.45
62	Bartow Senior High	0901	42.09%	29.5	17.09
63	Valleyview Elementary	1891	42.97%	12.49	7.12
64	Medulla Elementary	0181	43.17%	10.98	6.24
65	Purcell Elementary	1141	43.29%	18.08	10.25
66	Mulberry Senior High	1131	43.40%	8.3	4.7
67	Jean O'Dell Learning Center	0962	43.65%	25.92	14.61
68	Carlton Palmore Elementary	0061	43.79%	15.65	8.8
69	Summerlin Academy	0905	44.22%	29.66	16.55
70	McKeel Academy of Technology	1671	44.73%	16.6	9.17
71	George W. Jenkins Senior High	1931	44.77%	20.2	11.16
72	Davenport School of the Arts	0401	44.92%	4.56	2.51
73	Crystal Lake Middle	1501	45.26%	18.39	10.06
74	Bartow International Baccalaureate	0903	45.72%	28.91	15.69
75	Loughman Oaks Elementary	1941	46.06%	6.25	3.37
76	R. Clem Churchwell Elementary	1841	46.38%	12.04	6.45
77	Lake Gibson Senior High	1762	47.60%	8.32	4.36
78	Lake Alfred Polytech Academy	1662	47.73%	4.42	2.31
79	Mulberry Middle	1161	49.88%	9.35	4.69
80	Jewett School of the Arts	0712	49.91%	16.22	8.12
81	Lake Region High	1991	50.01%	16.28	8.14
82	Davenport High School	2002	50.30%	3.87	1.93
83	Lakeland Highlands Middle	1771	50.38%	13.54	6.72
84	Jewett Middle Academy Magnet	0711	51.22%	16.44	8.02
85	Dundee Elementary Academy	1781	51.28%	11.92	5.81
86	Elbert Elementary	0591	53.83%	16.27	7.51
87	Bartow Elementary Academy	0941	54.40%	30.25	13.8
88	Gause Academy of Leadership	1491	54.68%	13.38	6.07
89	Southwest Middle	0051	55.13%	27.17	12.19
90	Shelley S. Boone Middle	0321	56.62%	15.38	6.67

Rank	School Name	ID	Coverage	Walk Net (mi)	Full Gap (mi)
91	North Lakeland Elem. School of Choice	0201	57.31%	11.94	5.1
92	Lake Shipp Elementary	0621	57.57%	13.13	5.57
93	Dr. NE Roberts Elementary	1851	57.93%	6.92	2.91
94	Lake Alfred Elementary	0651	58.90%	22.04	9.06
95	Frank E. Brigham Academy	0531	59.62%	20.94	8.46
96	Winter Haven Senior High	0481	59.93%	26.23	10.51
97	Hillcrest Elementary	1361	60.48%	18.52	7.32
98	Haines City Senior High	1791	60.50%	13.39	5.29
99	Victory Ridge Academy	8143	60.52%	13.03	5.14
100	Daniel Jenkins Acad. of Tech. Middle	0311	60.58%	19.61	7.73
101	Griffin Elementary	1231	60.91%	3.77	1.47
102	Spessard L Holland Elementary	1908	60.98%	8.96	3.49
103	Mater Academy Davenport Middle School	8020	61.22%	8.4	3.26
104	Mater Academy Davenport	8010	61.24%	8.41	3.26
105	Dundee Ridge Middle Academy	1981	61.32%	8.41	3.25
106	South McKeel Academy	1692	61.33%	11.37	4.4
107	Roosevelt Academy	1381	61.77%	13.6	5.2
108	Southwest Elementary	0231	61.98%	9.66	3.67
109	Ridge Community High	0937	62.81%	9.43	3.51
110	Rochelle School Of The Arts	0261	63.31%	36.91	13.54
111	Lincoln Avenue Academy	0251	63.98%	40.65	14.64
112	Polk Avenue Elementary	1351	65.37%	31.11	10.77
113	James W. Sikes Elementary	1821	65.45%	9.7	3.35
114	McLaughlin Academy of Excellence	1341	65.83%	18.45	6.3
115	Chain Of Lakes Elementary	0933	66.95%	7.01	2.32
116	Magnolia Montessori Academy	8005	67.55%	19.48	6.32
117	Lake Wales Senior High	1721	67.99%	9.64	3.09
118	Berkley Elementary	1951	68.26%	8.36	2.65
119	Bok Academy North	1621	68.33%	26.28	8.32
120	Spook Hill Elementary	1371	68.54%	19.15	6.03
121	Auburndale Senior High	0811	68.56%	27.36	8.6
122	Pinewood Elementary	1731	68.66%	5.59	1.75
123	Union Academy	0971	68.86%	20.32	6.33
124	Dixieland Elementary	0131	69.64%	19.11	5.8
125	Navigator Academy of Leadership Davenport	8007	70.80%	10	2.92
126	Navigator Academy of Leadership High School	8017	71.08%	9.99	2.89
127	Berkley Accelerated Middle School	8142	71.14%	7.64	2.2
128	Horizons Elementary	1362	71.92%	6.63	1.86
129	Citrus Ridge: A Civics Academy	1032	72.86%	10.04	2.72
130	Sleepy Hill Elementary	1271	73.23%	4.27	1.14
131	Lakeland Montessori School House	8141	73.92%	11.35	2.96
132	Janie Howard Wilson	1401	74.43%	9.47	2.42
133	Denison Middle	0491	74.64%	36.48	9.25
134	Language and Literacy Academy for Learning	8008	75.91%	37.62	9.06
135	Rosabelle W. Blake Academy	1861	77.41%	26.92	6.08

Rank	School Name	ID	Coverage	Walk Net (mi)	Full Gap (mi)
136	Lawton Chiles Middle Academy	0043	78.42%	41.32	8.92
137	McKeel Academy Central	1682	78.42%	40.61	8.77
138	Lakeland Senior High	0031	82.14%	26.58	4.75
139	Cypress Junction Montessori	8171	85.38%	24.37	3.56
140	Davenport Elementary	0925	86.31%	21.48	2.94
141	Philip O'Brien Elementary	0151	87.51%	24.69	3.08
142	Jere L. Stambaugh Middle	0821	87.79%	14.61	1.78
143	Auburndale Central Elementary	0851	90.21%	17.01	1.67
144	Sleepy Hill Middle	1971	92.70%	11.08	0.81
145	Ridgeview Global Studies Academy	0441	95.13%	4.37	0.21
146	Bridgeprep Academy of Polk	8009	96.34%	6.15	0.22

Note: Rank here only represents the sorted ascending by coverage - most underserved first

Appendix B – Prioritization Scoring Results

This appendix presents the full composite scoring results for all 146 study schools. Schools are ranked by composite score from highest to lowest. The top 20 schools with confirmed sidewalk gaps on County Roadway Network Database (RND) corridors are identified and presented in the main report (Section 5, Table 5).

Rank	Top 20	School_ID	School Name	Grade Band	Title I Status	Demand Score	Gap Score	Crash Score	HIN Score	Demographic Score	COMPOSITE SCORE
1	YES	0802	Lewis Anna Woodbury Elementary	Elementary	Title I	57.51	91.80	71.03	93.10	100	80.72
2	YES	0937	Ridge Community High	High School	Title I	100.00	14.29	94.48	95.17	100	77.28
3	YES	0481	Winter Haven Senior High	High School	Title I	50.16	52.89	93.79	90.34	100	71.29
4	YES	0811	Auburndale Senior High	High School	Title I	57.19	45.36	91.03	86.21	100	70.65
5	YES	1181	Kathleen Senior High	High School	Title I	28.75	72.95	97.93	86.21	100	69.88
6	YES	0571	Westwood Middle	Middle School	Title I	18.53	82.12	92.41	91.03	100	69.02
7	YES	0841	Lena Vista Elementary	Elementary	Title I	36.58	48.52	99.31	97.93	100	67.76
8	NO	1451	Edgar L. Padgett Elementary	Elementary	Title I	43.45	65.93	49.66	94.48	100	67.53
9	NO	0681	Wahneta Elementary	Elementary	Title I	32.43	51.39	98.62	99.31	100	67.32
10	YES	1241	Jesse Keen Elementary	Elementary	Title I	35.62	49.53	89.66	86.21	100	65.05
11	YES	0491	Denison Middle	Middle School	Title I	27.32	48.70	97.24	97.24	100	64.68
12	YES	0611	Inwood Elementary	Elementary	Title I	53.35	71.96	82.07	-	100	64.26
13	NO	0051	Southwest Middle	Middle School	Title I	27.80	50.79	86.90	95.86	100	63.88
14	NO	0901	Bartow Senior High	High School	Title I	69.01	52.48	72.41	-	100	62.87
15	YES	0881	Polk City Elementary	Elementary	Title I	19.17	54.08	80.00	92.41	100	60.82
16	YES	1061	Highland City Elementary	Elementary	Title I	45.05	64.87	88.28	-	100	60.77
17	YES	1351	Polk Avenue Elementary	Elementary	Title I	25.56	49.58	69.66	84.83	100	59.37
18	YES	0651	Lake Alfred Elementary	Elementary	Title I	36.10	37.42	64.14	84.83	100	58.81
19	YES	0601	Fred G. Garner Academy	Elementary	Title I	1.60	100.00	96.55	-	100	57.55
20	YES	0361	Eastside Elementary	Elementary	Title I	34.98	64.61	83.45	-	100	57.08
21	YES	0101	Crystal Lake Elementary	Elementary	Title I	46.49	43.53	95.86	-	100	56.81
22	NO	1702	Palmetto Elementary	Elementary	Title I	54.63	33.25	84.83	-	100	55.31
23	YES	0311	Daniel Jenkins Acad. of Tech. Middle	Middle School	Title I	9.74	36.57	86.21	96.55	100	54.91
24	YES	0091	Combee Academy of Design and Engineering	Elementary	Title I	14.70	74.40	91.72	-	100	54.47
25	NO	1761	Lake Gibson Middle	Middle School	Title I	37.38	55.00	61.38	-	100	52.64
26	NO	1711	Garden Grove Elementary	Elementary	Title I	41.53	46.27	66.90	-	100	52.39
27	NO	0925	Davenport Elementary	Elementary	Title I	63.90	13.15	71.03	-	100	51.34
28	YES	0933	Chain Of Lakes Elementary	Elementary	Title I	79.55	10.22	37.24	-	100	51.08
29	NO	1811	Clarence Boswell Elementary	Elementary	Title I	14.22	25.31	77.24	86.21	100	51.02
30	NO	1801	Frostproof Middle/Senior High	Other	Title I	23.64	37.23	32.41	82.76	100	50.80
31	NO	0941	Bartow Elementary Academy	Elementary	Title I	27.32	44.23	88.97	-	100	50.37
32	NO	0401	Davenport School of the Arts	Combination	Title I	22.04	10.37	75.86	91.03	100	50.07
33	NO	1701	Eagle Lake Elementary	Elementary	Title I	15.34	39.02	41.38	84.14	100	50.05
34	NO	2003	Bella Citta Elementary	Elementary	Title I	57.83	18.83	60.00	-	100	49.56
35	NO	0031	Lakeland Senior High	High School	Title I	37.06	28.60	90.34	-	100	49.56
36	NO	0961	Floral Avenue Elementary	Elementary	Title I	38.98	57.28	22.76	-	100	48.86
37	NO	1501	Crystal Lake Middle	Middle School	Title I	36.74	44.47	49.66	-	100	48.35
38	NO	1281	Highlands Grove Elementary	Elementary	Title I	39.30	31.88	66.90	-	100	48.12
39	NO	1611	Laurel Elementary	Elementary	Title I	59.11	21.07	40.69	-	100	48.08
40	NO	1361	Hillcrest Elementary	Elementary	Title I	34.03	41.88	55.86	-	100	47.66
41	NO	1131	Mulberry Senior High	High School	Title I	15.34	15.68	58.62	93.10	100	47.49
42	NO	0061	Carlton Palmore Elementary	Elementary	Title I	28.75	37.51	70.34	-	100	46.80
43	NO	1521	Oscar J. Pope Elementary	Elementary	Title I	28.27	30.37	85.52	-	100	46.77
44	NO	1681	Scott Lake Elementary	Elementary	Title I	41.85	37.01	39.31	-	100	46.72
45	NO	1692	South McKeel Academy	Elementary	Non-Title I	57.51	26.30	95.17	86.21	0	46.50
46	NO	1941	Loughman Oaks Elementary	Elementary	Title I	60.54	22.82	20.69	-	100	46.45
47	NO	1141	Purcell Elementary	Elementary	Title I	20.45	39.26	80.00	-	100	45.95
48	NO	0261	Rochelle School Of The Arts	Combination	Title I	7.99	57.40	73.10	-	100	45.88
49	NO	0931	Bartow Middle	Middle School	Title I	31.31	53.25	22.76	-	100	45.55
50	NO	0081	Cleveland Court Elementary	Elementary	Title I	22.20	39.37	68.97	-	100	45.12
51	NO	1908	Spessard L Holland Elementary	Elementary	Title I	35.78	16.04	82.76	-	100	45.09
52	NO	0621	Lake Shipp Elementary	Elementary	Title I	17.25	40.19	77.93	-	100	44.96
53	NO	0201	North Lakeland Elem. School of Choice	Elementary	Title I	42.65	24.47	43.45	-	100	44.34
54	NO	1231	Griffin Elementary	Elementary	Title I	8.31	7.86	55.17	97.93	100	43.59
55	NO	1991	Lake Region High	High School	Title I	27.48	42.43	37.24	-	100	43.50
56	NO	0791	Fort Meade Middle/Senior High	Other	Title I	45.85	28.44	20.69	-	100	43.45
57	NO	1731	Pinewood Elementary	Elementary	Title I	10.38	7.04	63.45	82.76	100	43.15
58	NO	1421	Dale R. Fair Babson Park Elementary	Elementary	Title I	23.16	37.43	53.79	-	100	43.03
59	NO	0181	Medulla Elementary	Elementary	Title I	39.94	32.37	22.76	-	100	42.92
60	NO	1831	Lake Marion Creek Middle	Middle School	Title I	27.96	25.66	64.83	-	100	42.91
61	NO	0131	Dixieland Elementary	Elementary	Title I	31.95	30.75	44.83	-	100	42.88
62	NO	1791	Haines City Senior High	High School	Title I	53.51	25.94	-	-	100	42.54
63	NO	1762	Lake Gibson Senior High	High School	Title I	53.51	25.74	-	-	100	42.49
64	NO	0341	Sandhill Elementary	Elementary	Title I	54.15	23.72	-	-	100	42.18
65	NO	0331	Alta Vista Elementary	Elementary	Title I	21.57	33.38	53.10	-	100	41.45
66	NO	0151	Philip O'Brien Elementary	Elementary	Title I	33.87	16.40	56.55	-	100	41.33
67	NO	0391	Bethune Academy	Elementary	Title I	16.13	42.34	46.90	-	100	41.29
68	NO	0251	Lincoln Avenue Academy	Elementary	Non-Title I	7.35	63.12	93.10	89.66	0	40.83
69	NO	1861	Rosabelle W. Blake Academy	Combination	Title I	8.31	35.34	73.79	-	100	40.55

Rank	Top 20	School_ID	School Name	Grade Band	Title I Status	Demand Score	Gap Score	Crash Score	HIN Score	Demographic Score	COMPOSITE SCORE
70	NO	0711	Jewett Middle Academy Magnet	Middle School	Title I	7.35	35.07	75.17	-	100	40.37
71	NO	0591	Elbert Elementary	Elementary	Title I	13.10	27.27	75.86	-	100	40.23
72	NO	1371	Spook Hill Elementary	Elementary	Title I	15.18	22.16	80.00	-	100	40.09
73	NO	1781	Dundee Elementary Academy	Elementary	Title I	31.47	26.74	31.03	-	100	40.00
74	NO	1821	James W. Sikes Elementary	Elementary	Title I	36.42	11.83	47.59	-	100	39.83
75	NO	0043	Lawton Chiles Middle Academy	Middle School	Non-Title I	7.83	49.20	100.00	100.00	0	39.65
76	NO	1032	Citrus Ridge: A Civics Academy	Combination	Title I	25.88	9.99	74.48	-	100	39.57
77	NO	0851	Auburndale Central Elementary	Elementary	Title I	29.39	9.51	66.21	-	100	39.47
78	NO	2002	Davenport High School	High School	Title I	56.07	10.08	-	-	100	39.34
79	NO	1051	Tenoroc High	High School	Title I	12.62	22.43	77.93	-	100	39.14
80	NO	1341	McLaughlin Academy of Excellence	Combination	Title I	11.50	30.39	61.38	-	100	38.72
81	NO	0321	Shelley S. Boone Middle	Middle School	Title I	17.73	28.80	46.21	-	100	38.30
82	NO	1841	R. Clem Churchwell Elementary	Elementary	Title I	9.90	36.56	48.97	-	100	38.23
83	NO	1191	Kathleen Middle	Middle School	Title I	17.25	20.67	61.38	-	100	38.02
84	NO	1601	Bok Academy	Middle School	Title I	16.13	35.62	31.03	-	100	37.62
85	NO	1771	Lakeland Highlands Middle	Middle School	Title I	21.41	25.26	36.55	-	100	37.30
86	NO	1901	Socrum Elementary	Elementary	Title I	20.45	39.04	-	-	100	35.89
87	NO	1251	Winston Academy of Engineering	Elementary	Title I	3.04	32.71	49.66	-	100	35.30
88	NO	0861	Walter Caldwell Elementary	Elementary	Title I	23.48	20.40	22.76	-	100	34.99
89	NO	0141	South Pointe Elementary	Elementary	Title I	34.50	18.07	-	-	100	34.87
90	NO	1921	Frostproof Ben Hill Griffin Jr. Elementary	Elementary	Title I	12.94	43.06	-	-	100	34.65
91	NO	0191	R. Bruce Wagner Elementary	Elementary	Title I	13.10	32.19	20.69	-	100	34.56
92	NO	8121	Hartridge Academy	Elementary	Title I	9.58	28.09	35.86	-	100	34.38
93	NO	0712	Jewett School of the Arts	Combination	Title I	17.09	36.69	-	-	100	34.30
94	NO	0531	Frank E. Brigham Academy	Elementary	Title I	10.22	42.92	-	-	100	33.80
95	NO	8010	Mater Academy Davenport	Combination	Title I	14.38	15.08	44.14	-	100	33.60
96	NO	1621	Bok Academy North	Middle School	Title I	18.53	32.09	-	-	100	33.58
97	NO	1441	Willow Oak School	Elementary	Title I	0.16	33.32	41.38	-	100	33.55
98	NO	1721	Lake Wales Senior High	High School	Title I	34.03	12.01	-	-	100	33.21
99	NO	1971	Sleepy Hill Middle	Middle School	Title I	18.37	3.76	53.79	-	100	33.18
100	NO	1851	Dr. NE Roberts Elementary	Elementary	Title I	12.94	16.33	41.38	-	100	33.14
101	NO	1961	Discovery Academy of Lake Alfred	Middle School	Title I	25.88	21.25	-	-	100	33.08
102	NO	0631	John Snively Elementary	Elementary	Title I	9.11	20.86	39.31	-	100	32.86
103	NO	0441	Ridgeview Global Studies Academy	Combination	Title I	27.16	-	28.28	-	100	31.68
104	NO	1362	Horizons Elementary	Elementary	Title I	30.03	8.38	-	-	100	31.11
105	NO	8181	Discovery High School	High School	Title I	19.01	20.89	-	-	100	30.93
106	NO	1881	Wendell Watson Elementary	Elementary	Title I	4.47	23.66	28.28	-	100	30.79
107	NO	1931	George W. Jenkins Senior High	High School	Non-Title I	50.16	46.12	32.41	-	0	30.63
108	NO	0821	Jere L. Stambaugh Middle	Middle School	Title I	28.27	8.40	-	-	100	30.58
109	NO	1751	James E. Stephens Academy	Elementary	Title I	0.96	21.78	37.24	-	100	30.39
110	NO	1271	Sleepy Hill Elementary	Elementary	Title I	14.38	5.34	35.17	-	100	30.05
111	NO	1221	Kathleen Elementary	Elementary	Title I	3.51	17.62	32.41	-	100	29.51
112	NO	1891	Valleyview Elementary	Elementary	Non-Title I	60.38	28.22	32.41	-	0	29.22
113	NO	1981	Dundee Ridge Middle Academy	Middle School	Title I	11.82	22.14	-	-	100	29.08
114	NO	1401	Janie Howard Wilson	Elementary	Title I	24.60	6.10	-	-	100	28.91
115	NO	1161	Mulberry Middle	Middle School	Title I	15.02	16.76	-	-	100	28.69
116	NO	1671	McKeel Academy of Technology	High School	Non-Title I	36.74	43.70	52.41	-	0	28.50
117	NO	1041	Alturas Elementary	Elementary	Title I	3.99	17.00	22.76	-	100	28.29
118	NO	8020	Mater Academy Davenport Middle School	Middle School	Title I	14.38	15.08	-	-	100	28.08
119	NO	0231	Southwest Elementary	Elementary	Title I	13.26	13.45	-	-	100	27.34
120	NO	8009	Bridgeprep Academy of Polk	Combination	Title I	10.38	0.45	22.76	-	100	26.07
121	NO	1662	Lake Alfred Polytech Academy	Middle School	Title I	1.76	15.21	-	-	100	24.33
122	NO	1682	McKeel Academy Central	Elementary	Non-Title I	28.75	48.55	22.76	-	0	23.61
123	NO	0092	Doris A. Sanders Learning Center	Combination	Non-Title I	1.44	58.87	60.69	-	0	22.74
124	NO	8012	RCMA Mulberry Community Academy	Elementary	Non-Title I	7.51	37.98	87.59	-	0	22.70
125	NO	8008	Language and Literacy Academy for Learning	Combination	Non-Title I	5.43	49.29	68.28	-	0	22.49
126	NO	8201	Mi Escuela Montessori	Combination	Non-Title I	5.59	54.30	48.28	-	0	21.29
127	NO	8004	New Beginnings High	High School	Non-Title I	22.36	26.63	59.31	-	0	20.78
128	NO	0905	Summerlin Academy	High School	Non-Title I	4.47	52.47	45.52	-	0	20.15
129	NO	1951	Berkley Elementary	Elementary	Non-Title I	35.14	15.66	22.76	-	0	17.30
130	NO	0903	Bartow International Baccalaureate	High School	Non-Title I	-	48.14	28.28	-	0	15.57
131	NO	0971	Union Academy	Middle School	Non-Title I	11.66	21.11	51.72	-	0	15.24
132	NO	8141	Lakeland Montessori School House	Elementary	Non-Title I	6.23	11.30	84.14	-	0	15.21
133	NO	8003	PS Lakeland Gateway to College CHS	High School	Non-Title I	6.39	12.52	79.31	-	0	14.96
134	NO	8005	Magnolia Montessori Academy	Combination	Non-Title I	3.35	26.36	57.24	-	0	14.75
135	NO	0932	Compass Middle Charter	Middle School	Non-Title I	4.47	50.92	-	-	0	14.07
136	NO	8171	Cypress Junction Montessori	Combination	Non-Title I	6.55	17.39	57.24	-	0	13.47
137	NO	1491	Gause Academy of Leadership	Combination	Non-Title I	1.92	18.31	65.52	-	0	13.34
138	NO	0962	Jean O'Dell Learning Center	Combination	Non-Title I	1.44	47.84	-	-	0	12.39

Rank	Top 20	School_ID	School Name	Grade Band	Title I Status	Demand Score	Gap Score	Crash Score	HIN Score	Demographic Score	COMPOSITE SCORE
139	NO	8133	Chain Of Lakes Collegiate High	High School	Non-Title I	7.35	36.32	-	-	0	11.28
140	NO	1381	Roosevelt Academy	High School	Non-Title I	6.07	15.47	28.28	-	0	9.22
141	NO	8007	Navigator Academy of Leadership Davenport	Combination	Non-Title I	17.25	13.12	-	-	0	8.45
142	NO	8142	Berkley Accelerated Middle School	Middle School	Non-Title I	15.81	12.65	-	-	0	7.91
143	NO	8143	Victory Ridge Academy	Combination	Non-Title I	6.55	18.39	-	-	0	6.56
144	NO	0661	Karen M. Siegel Academy	Combination	Non-Title I	3.04	21.95	-	-	0	6.40
145	NO	8131	Polk State College Collegiate High	High School	Non-Title I	7.03	12.53	-	-	0	5.24
146	NO	8017	Navigator Academy of Leadership High School	High School	Non-Title I	2.88	13.46	-	-	0	4.23

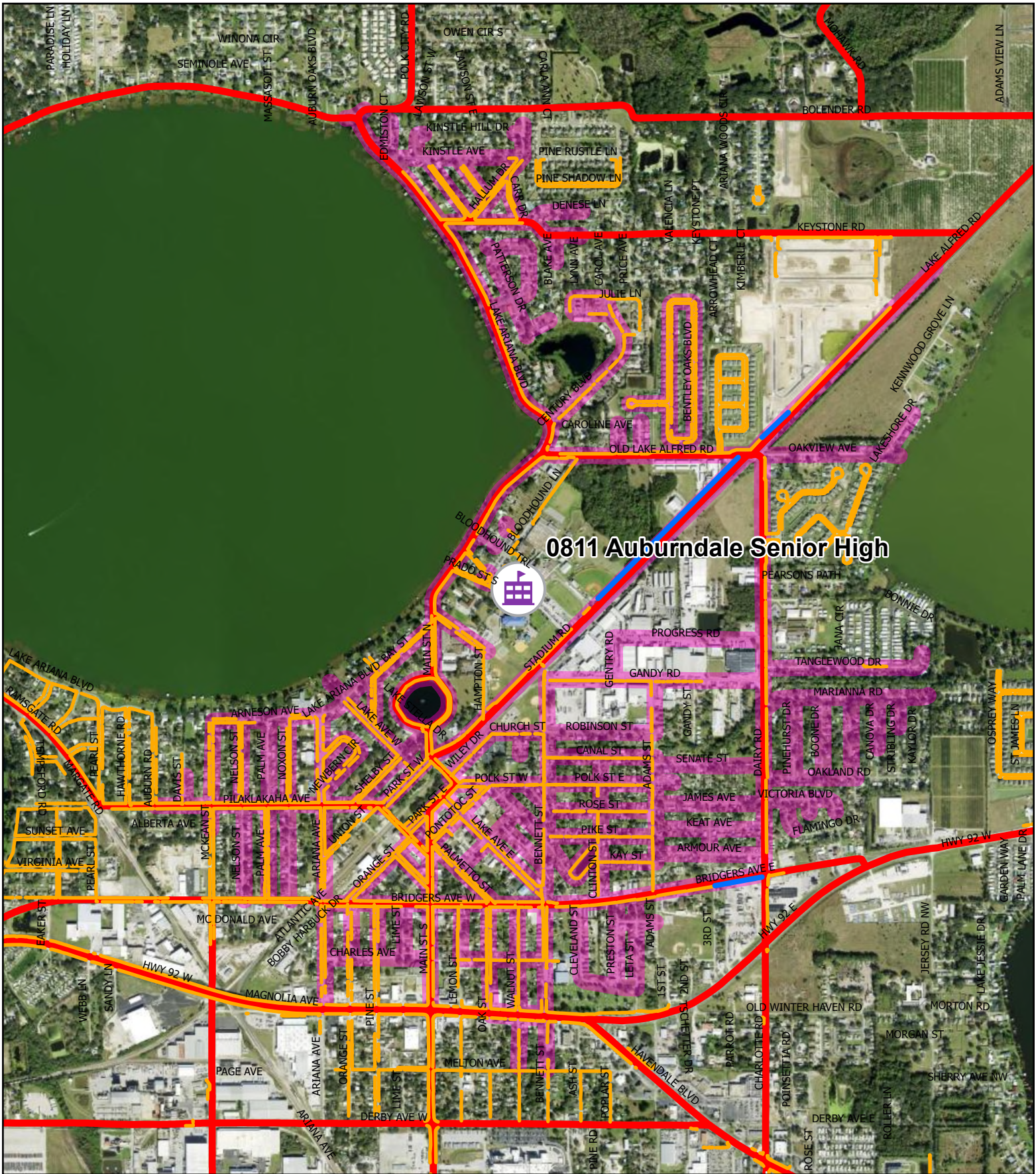
Appendix C – School-Level Sidewalk Improvement Maps

This appendix contains one improvement map for each of the 20 priority schools identified in Section 5. Each map shows existing sidewalk coverage, identified gaps along County RND corridors, proposed sidewalk improvement segments, and the one-mile network walk shed boundary.

Maps were generated using an ArcGIS pro map series, allowing consistent visualization across all priority schools. A digital ArcGIS map package containing the full map series and supporting GIS layers is provided as a separate project deliverable.

Each map includes the following layers:

- Existing sidewalk infrastructure (from the countywide ML-assisted inventory)
- Sidewalk gaps along County Roadway Network Database (RND) corridors
- Proposed sidewalk improvement segments (planning-level)
- One-mile network walk shed boundary
- County RND roadway network
- School location



0811 Auburndale Senior High

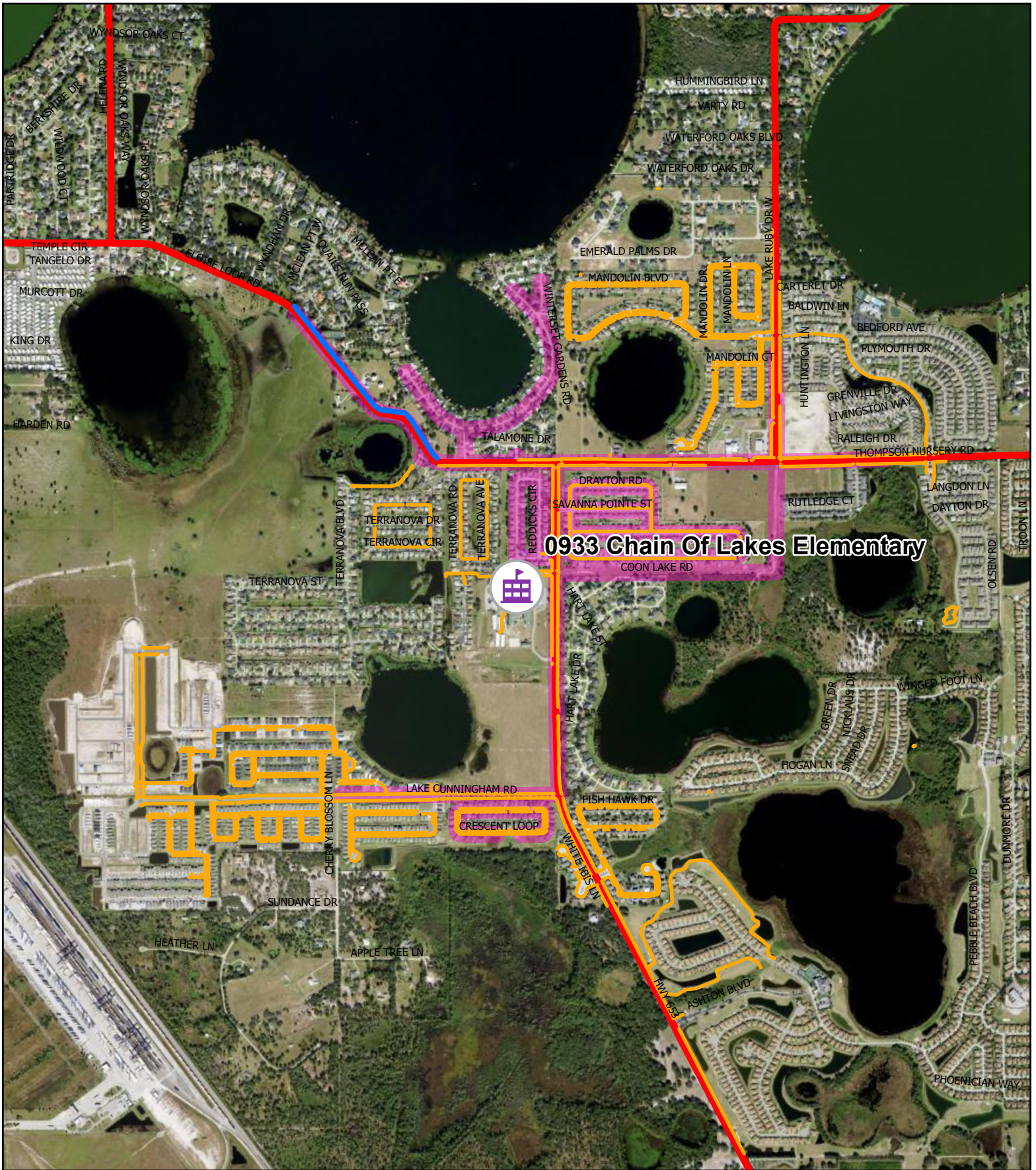


0811 Auburndale Senior High

- Legend
- Existing Sidewalk
 - Polk TPO RND Update 2025
 - Walk Shed Boundary
 - Proposed Improvement
 - Top 20 Schools

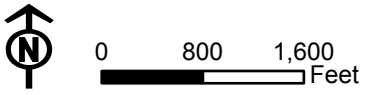


Sources:
 Residential- Polk County Schools
 Crash- FDOT 2010-2014
 Roadway- Polk TPO

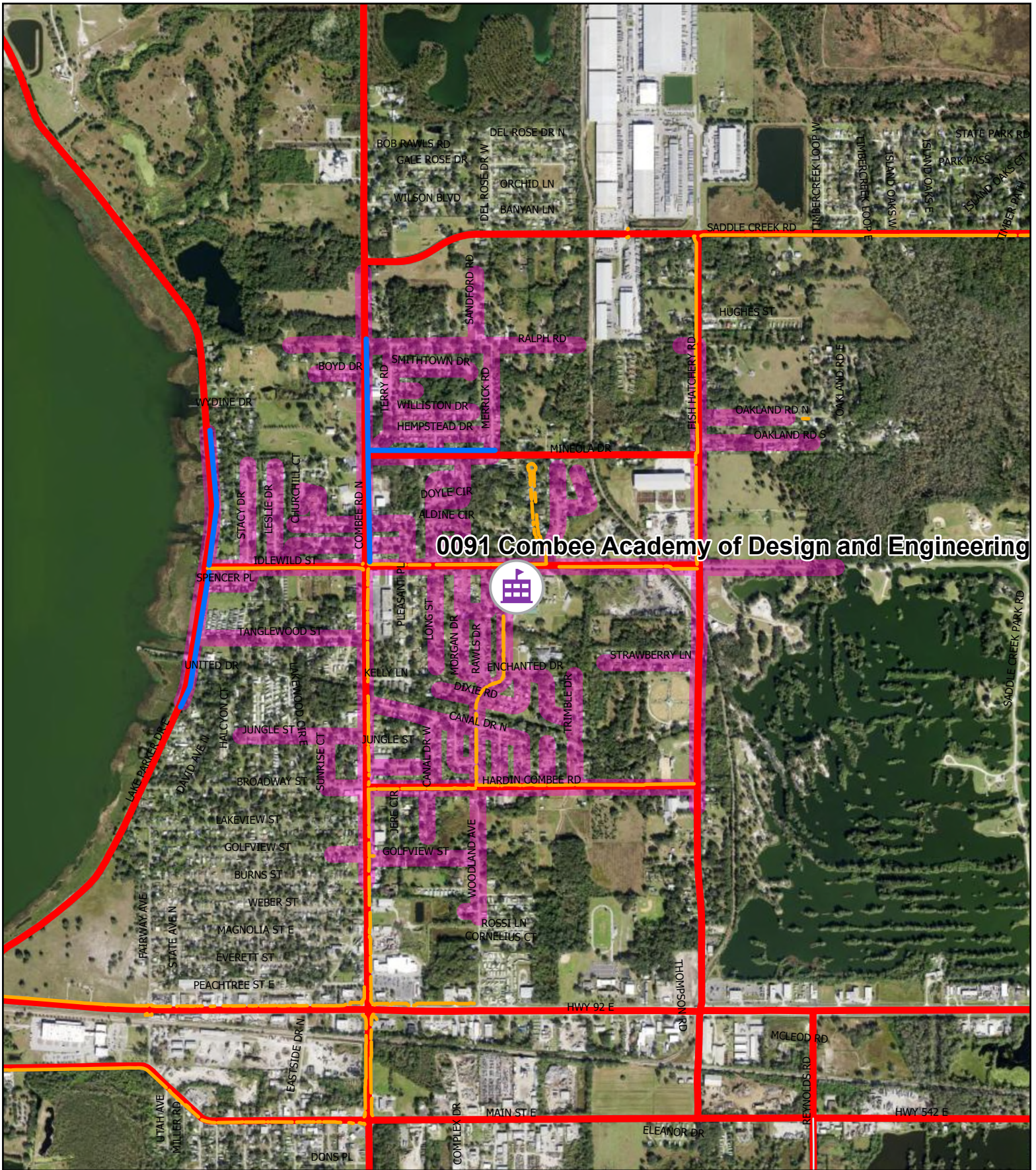


0933 Chain Of Lakes Elementary

- Legend
- Existing Sidewalk
 - Polk TPO RND Update 2025
 - Walk Shed Boundary
 - Top 20 Schools
 - Proposed Improvement



Sources:
 Residential- Polk County Schools
 Crash- FDOT 2010-2014
 Roadway- Polk TPO

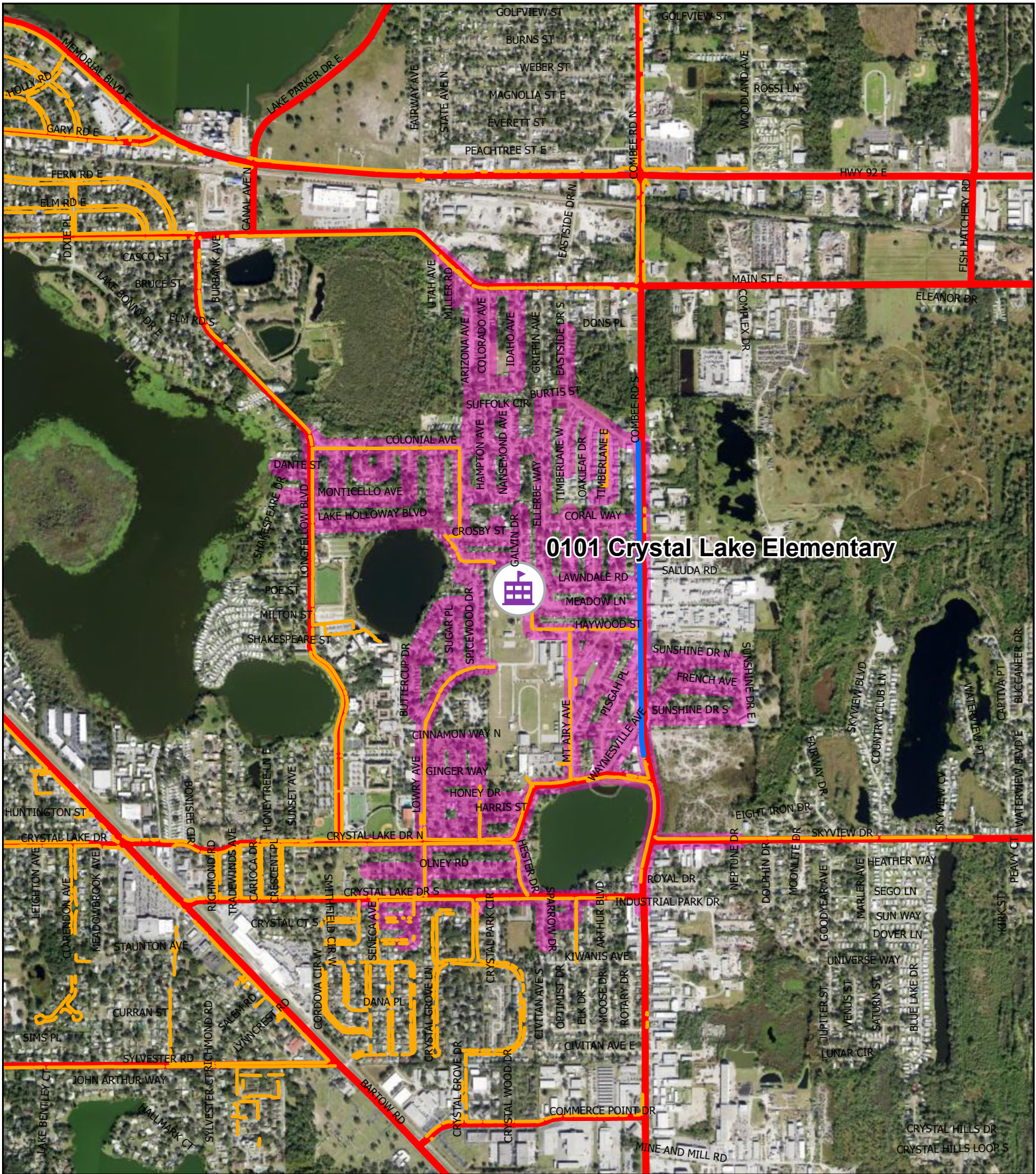


0091 Combee Academy of Design and Engineering

- Legend
- Existing Sidewalk
 - Polk TPO RND Update 2025
 - Walk Shed Boundary
 - Proposed Improvement
 - Top 20 Schools



Sources:
 Residential- Polk County Schools
 Crash- FDOT 2010-2014
 Roadway- Polk TPO

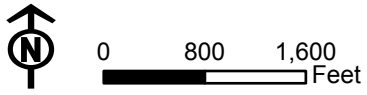


0101 Crystal Lake Elementary

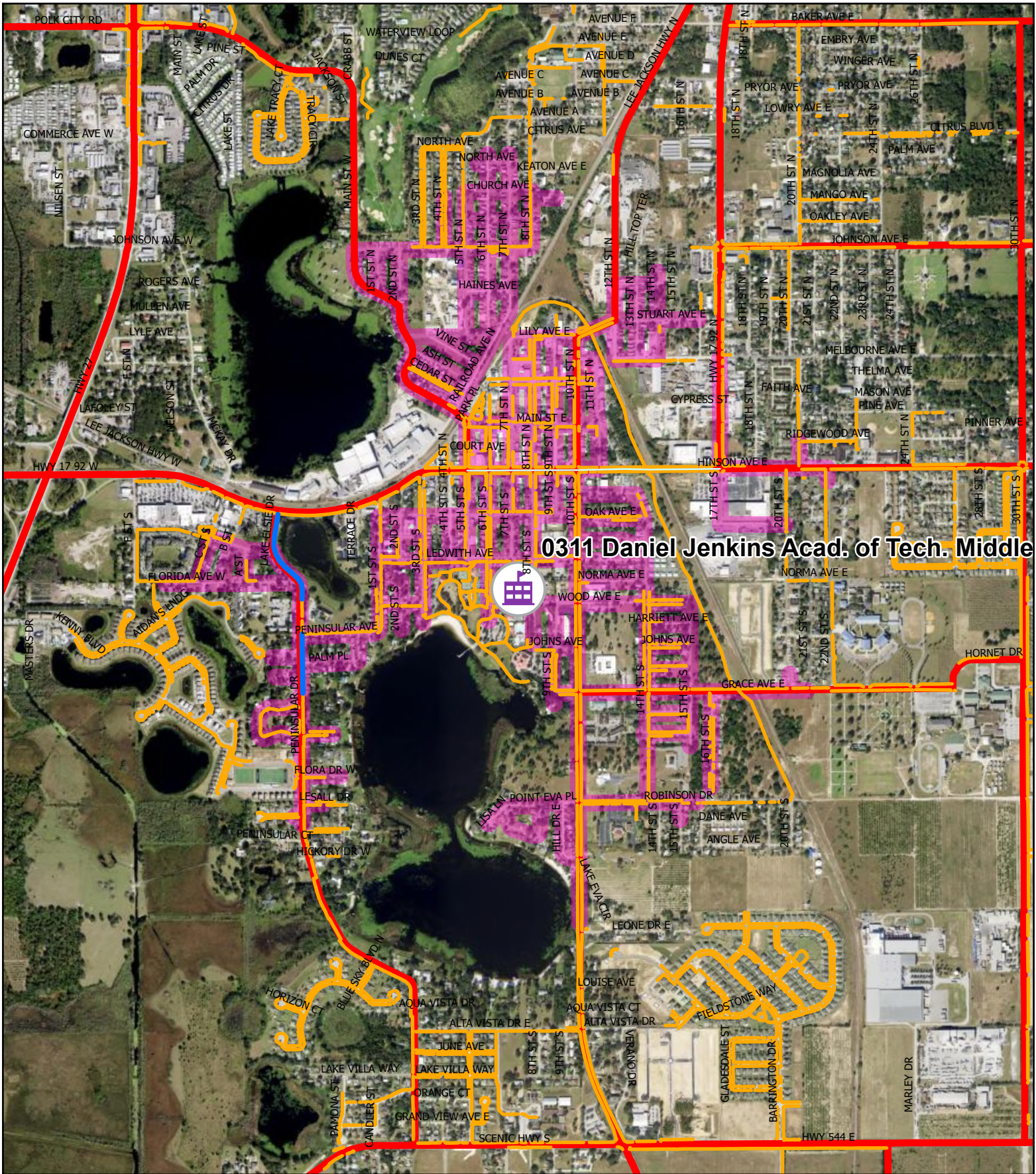


0101 Crystal Lake Elementary

- Legend
- Existing Sidewalk
 - Polk TPO RND Update 2025
 - Walk Shed Boundary
 - Proposed Improvement
- Top 20 Schools



Sources:
 Residential- Polk County Schools
 Crash- FDOT 2010-2014
 Roadway- Polk TPO

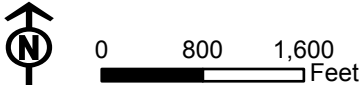


0311 Daniel Jenkins Acad. of Tech. Middle

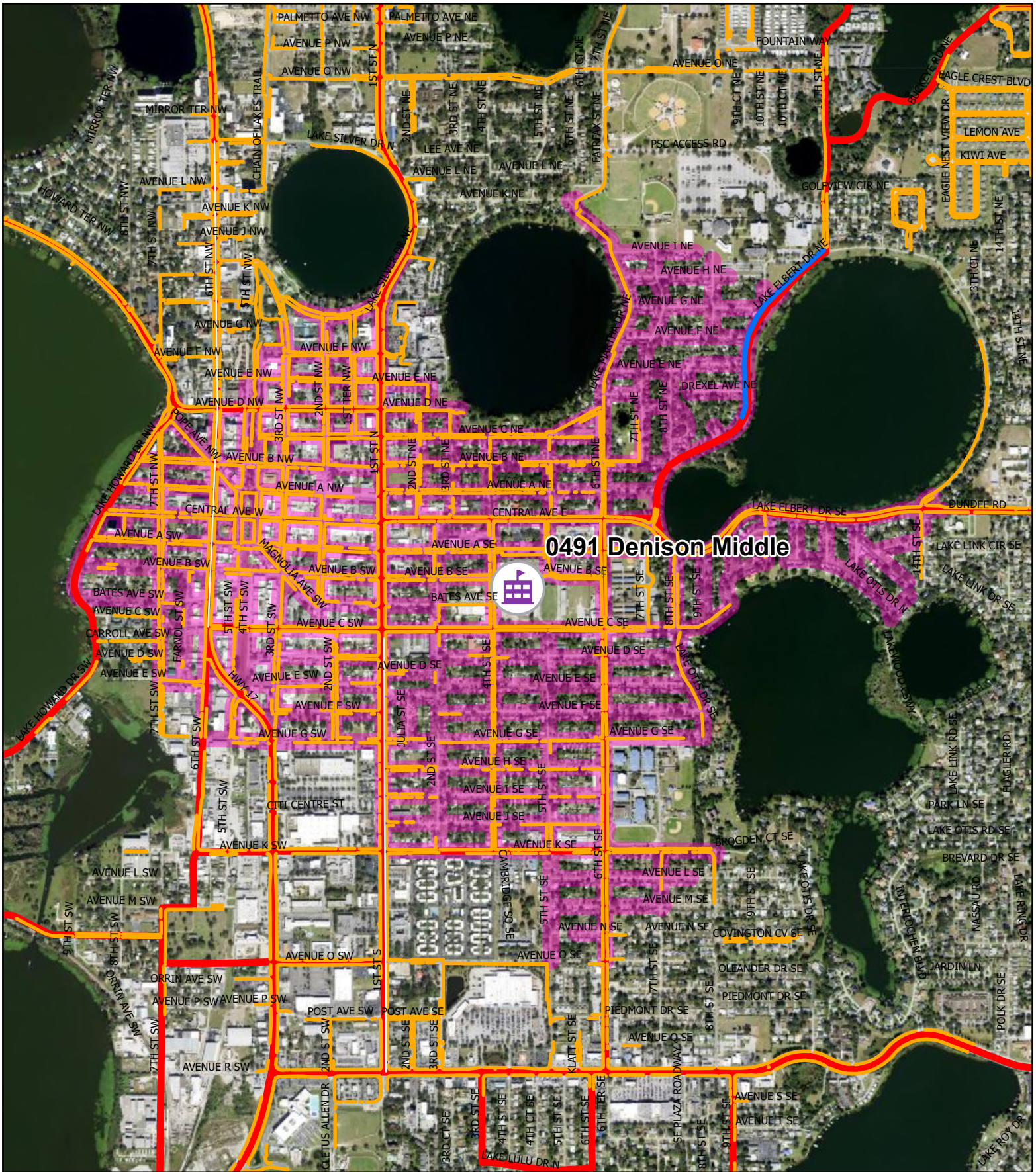


0311 Daniel Jenkins Acad. of Tech. Middle

- Legend
- Existing Sidewalk
 - Polk TPO RND Update 2025
 - Walk Shed Boundary
 - Proposed Improvement
 - Top 20 Schools



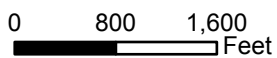
Sources:
 Residential- Polk County Schools
 Crash- FDOT 2010-2014
 Roadway- Polk TPO



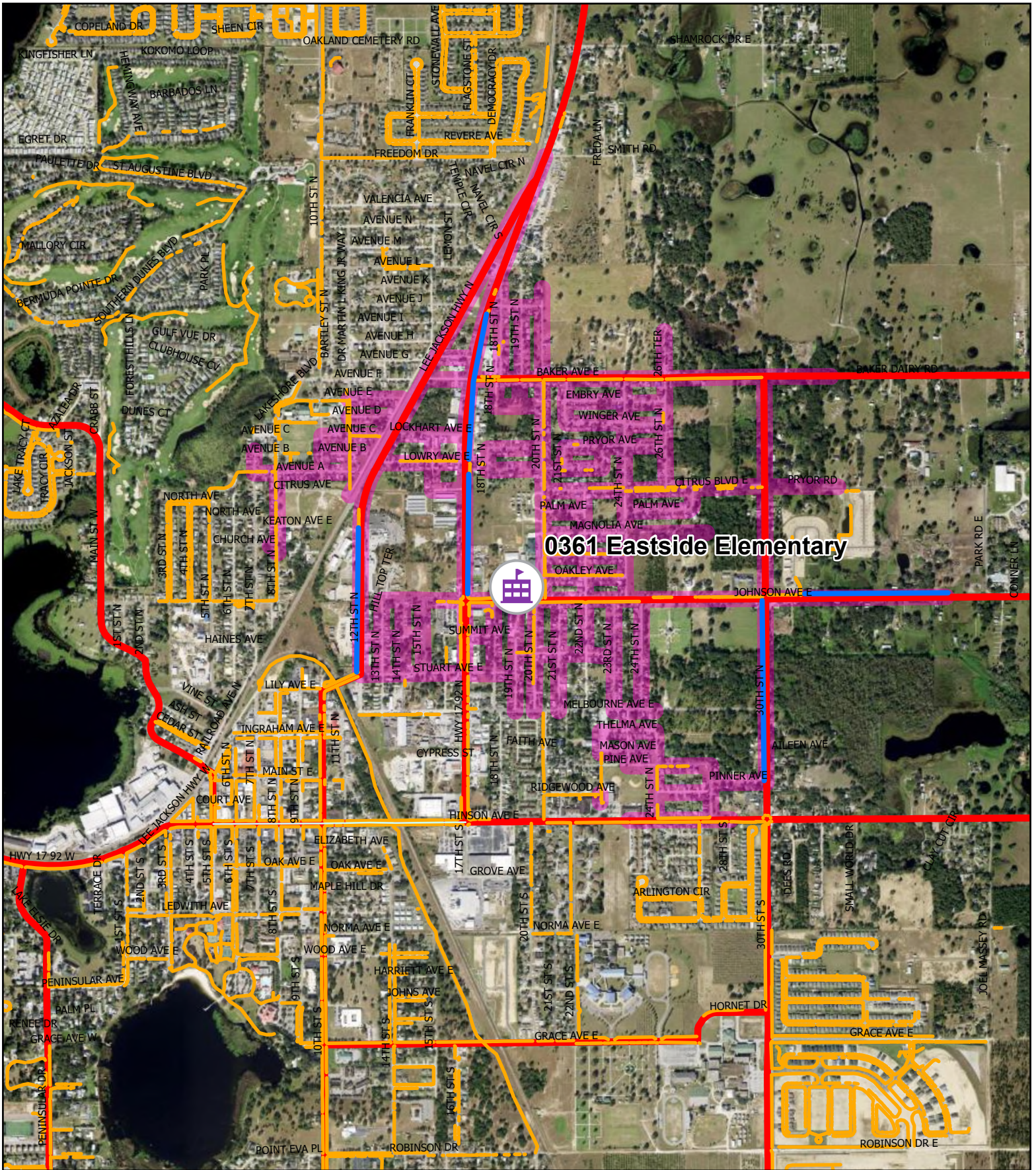
0491 Denison Middle

Legend

- Existing Sidewalk
- Polk TPO RND Update 2025
- Walk Shed Boundary
- Proposed Improvement
-  Top 20 Schools

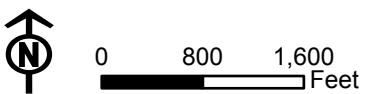


Sources:
 Residential- Polk County Schools
 Crash- FDOT 2010-2014
 Roadway- Polk TPO

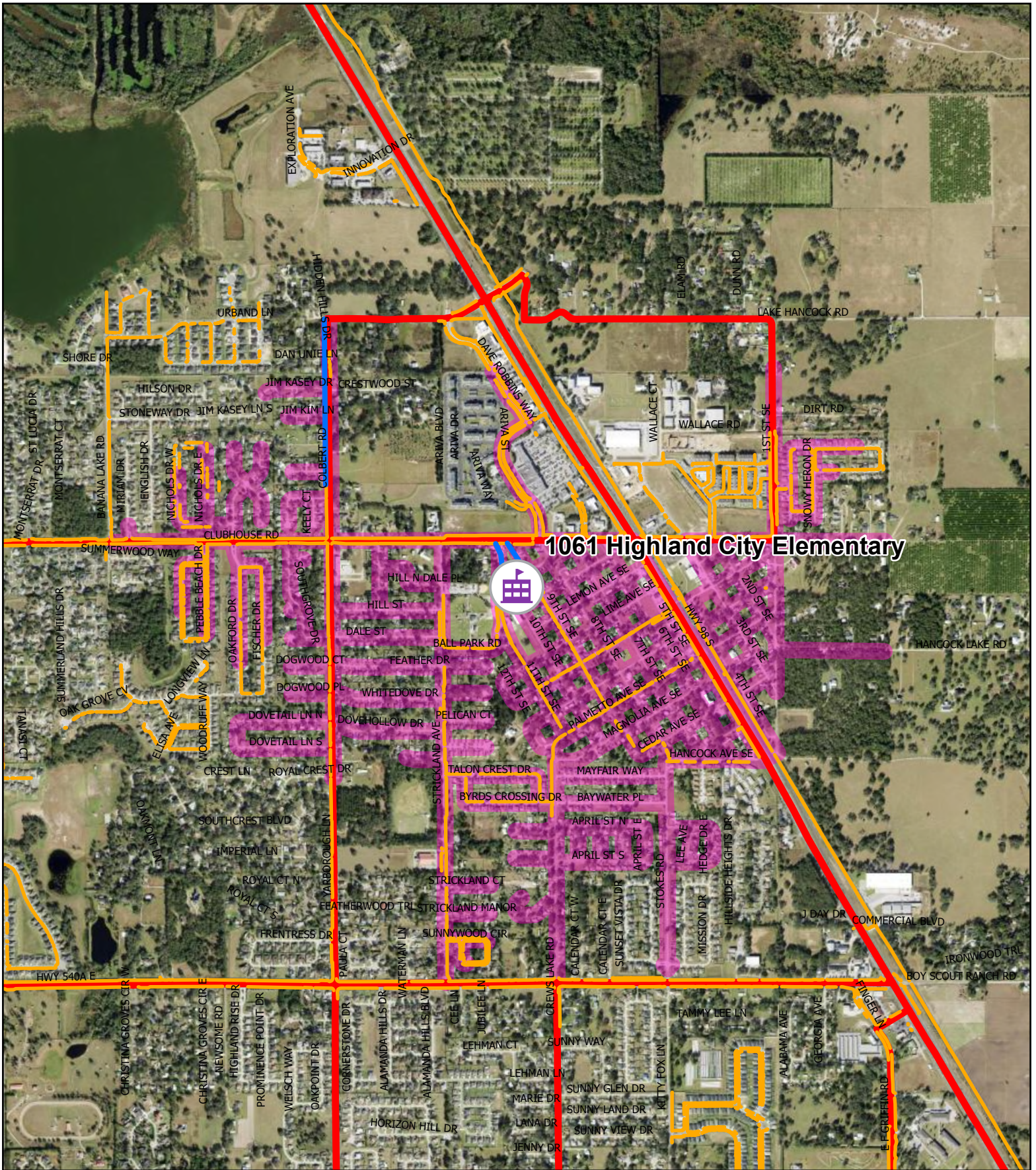


0361 Eastside Elementary

- Legend
- Existing Sidewalk
 - Polk TPO RND Update 2025
 - Walk Shed Boundary
 - Proposed Improvement
 -  Top 20 Schools

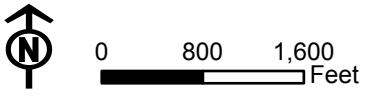


Sources:
 Residential- Polk County Schools
 Crash- FDOT 2010-2014
 Roadway- Polk TPO

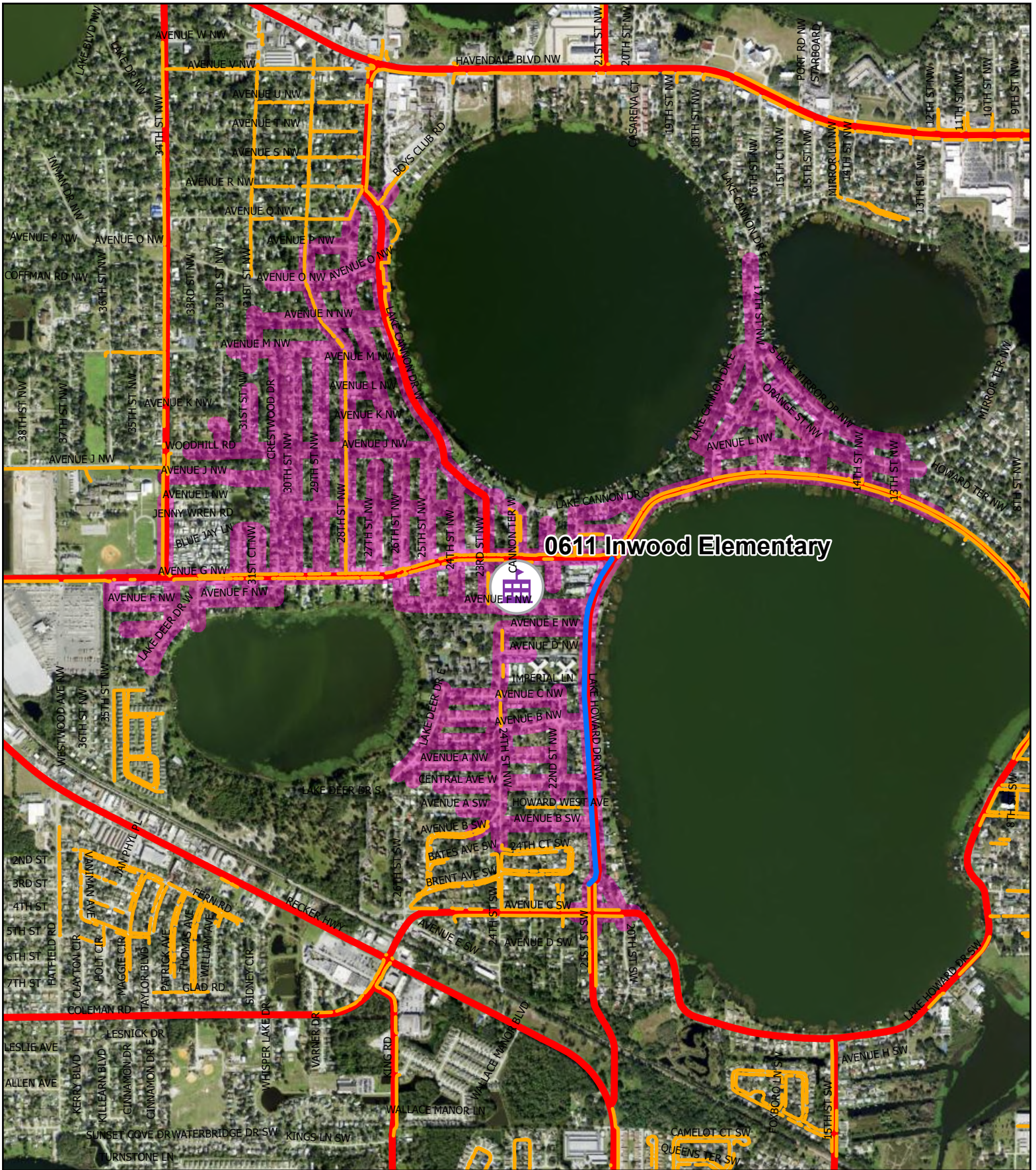


1061 Highland City Elementary

- Legend**
- Existing Sidewalk
 - Polk TPO RND Update 2025
 - Walk Shed Boundary
 -  Top 20 Schools
 - Proposed Improvement



Sources:
 Residential- Polk County Schools
 Crash- FDOT 2010-2014
 Roadway- Polk TPO

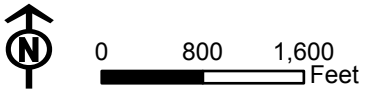


0611 Inwood Elementary

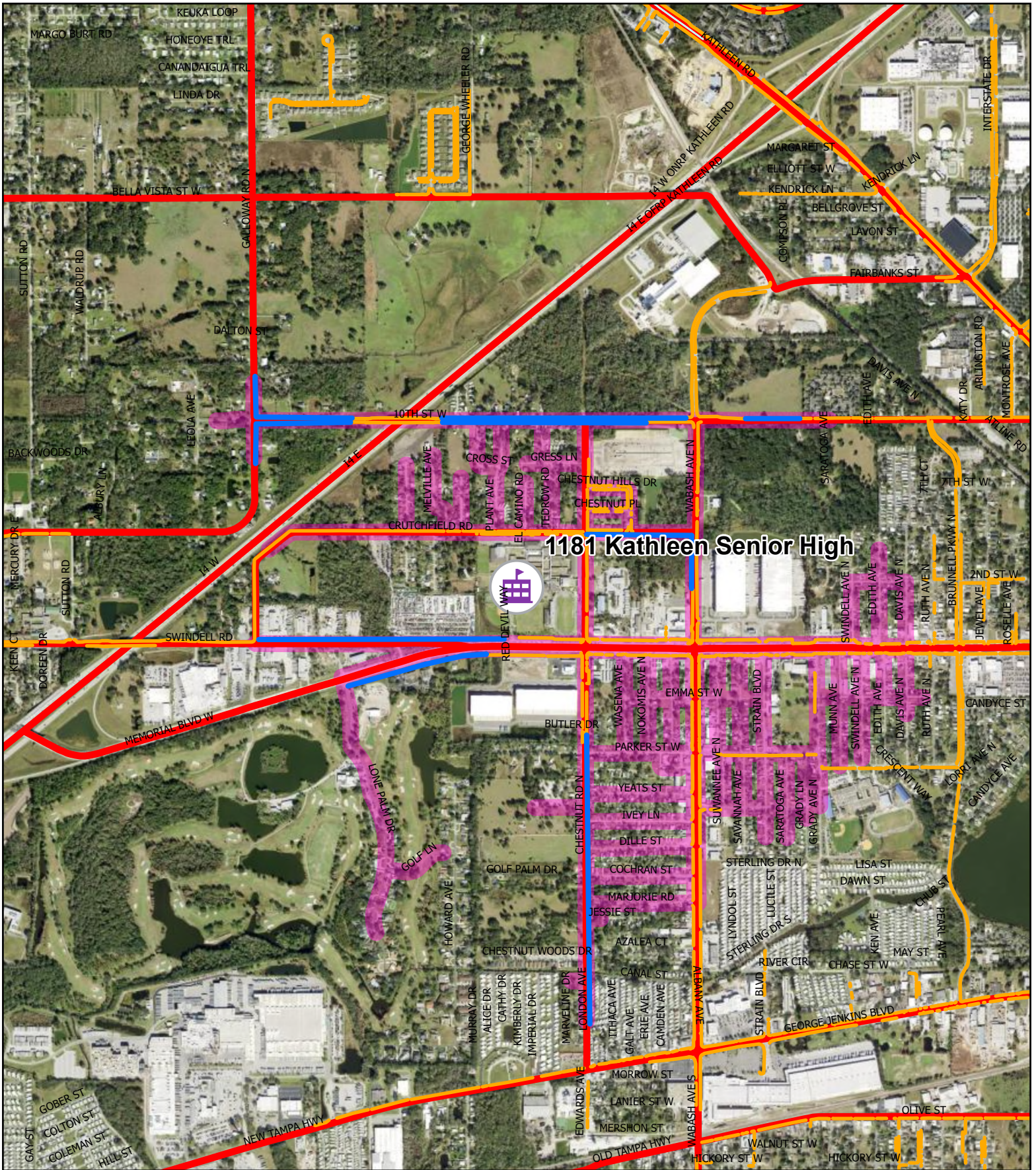


0611 Inwood Elementary

- Legend
- Existing Sidewalk
 - Polk TPO RND Update 2025
 - Walk Shed Boundary
 - Proposed Improvement
- Top 20 Schools



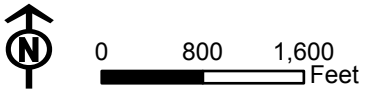
Sources:
 Residential- Polk County Schools
 Crash- FDOT 2010-2014
 Roadway- Polk TPO



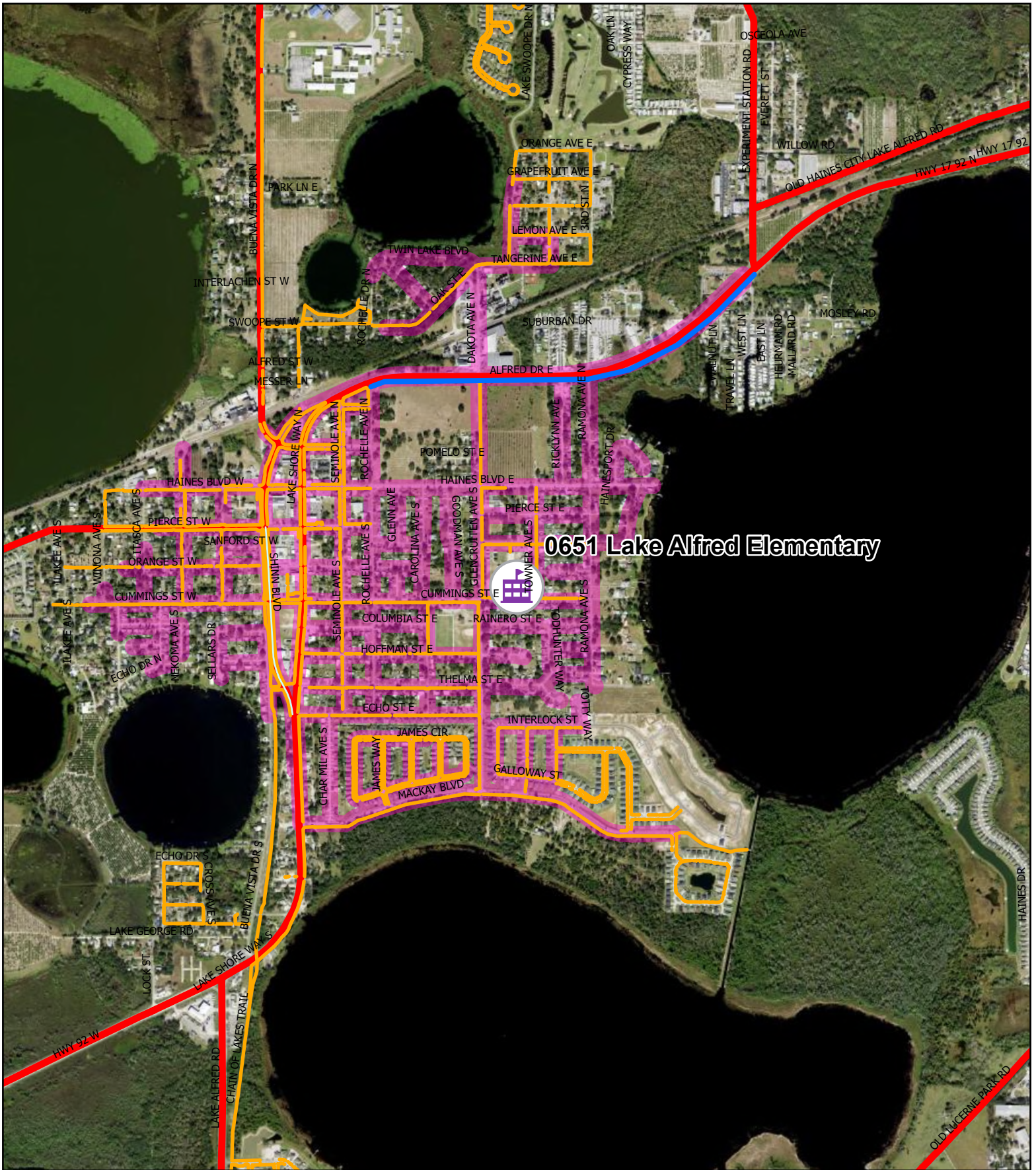
1181 Kathleen Senior High

Legend

- Existing Sidewalk
- Polk TPO RND Update 2025
- Walk Shed Boundary
- Proposed Improvement
- Top 20 Schools



Sources:
 Residential- Polk County Schools
 Crash- FDOT 2010-2014
 Roadway- Polk TPO

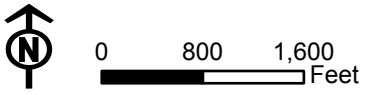


0651 Lake Alfred Elementary

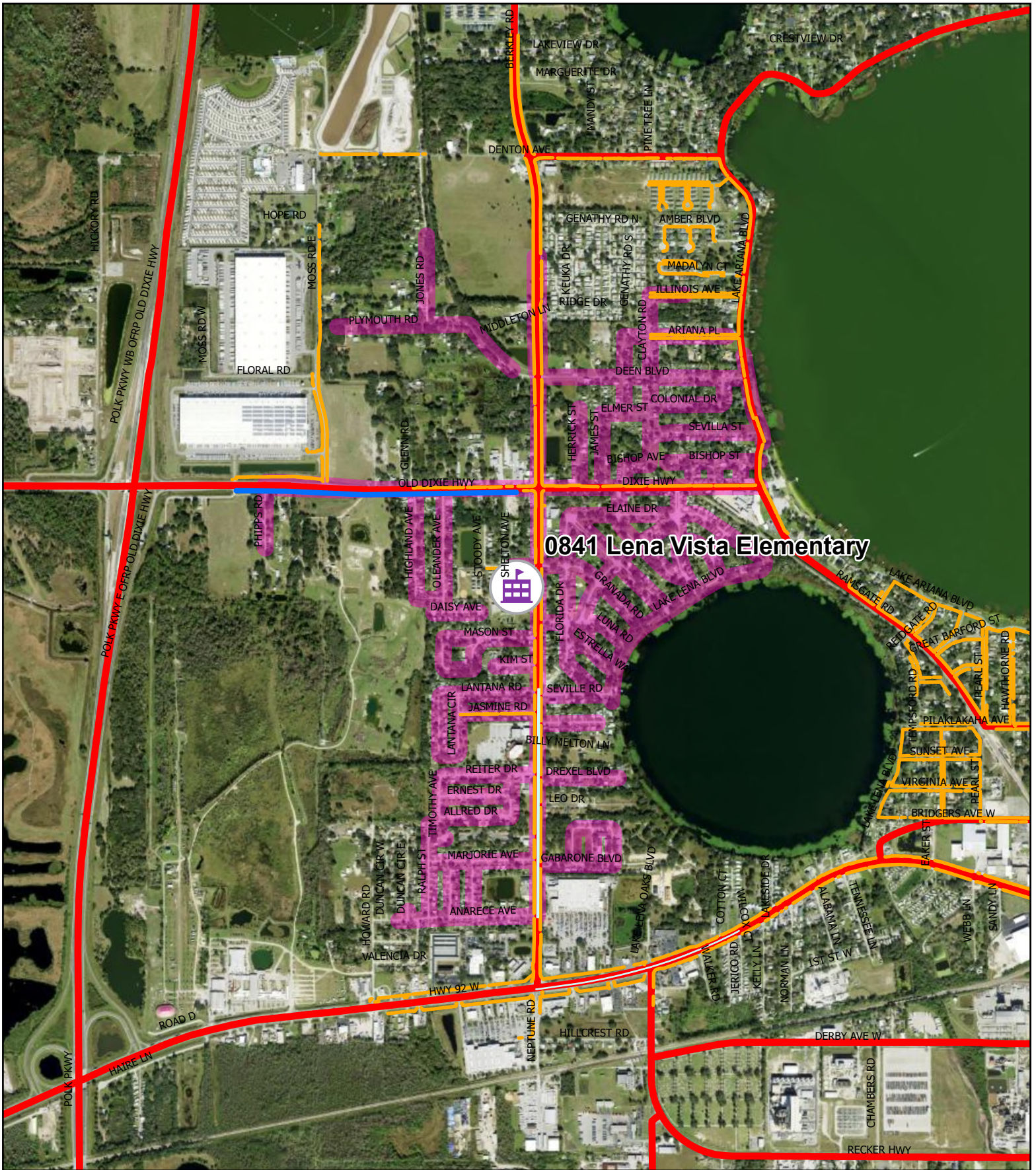


0651 Lake Alfred Elementary

- Legend
- Existing Sidewalk
 - Polk TPO RND Update 2025
 - Walk Shed Boundary
 - Proposed Improvement
 - Top 20 Schools



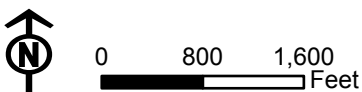
Sources:
 Residential- Polk County Schools
 Crash- FDOT 2010-2014
 Roadway- Polk TPO



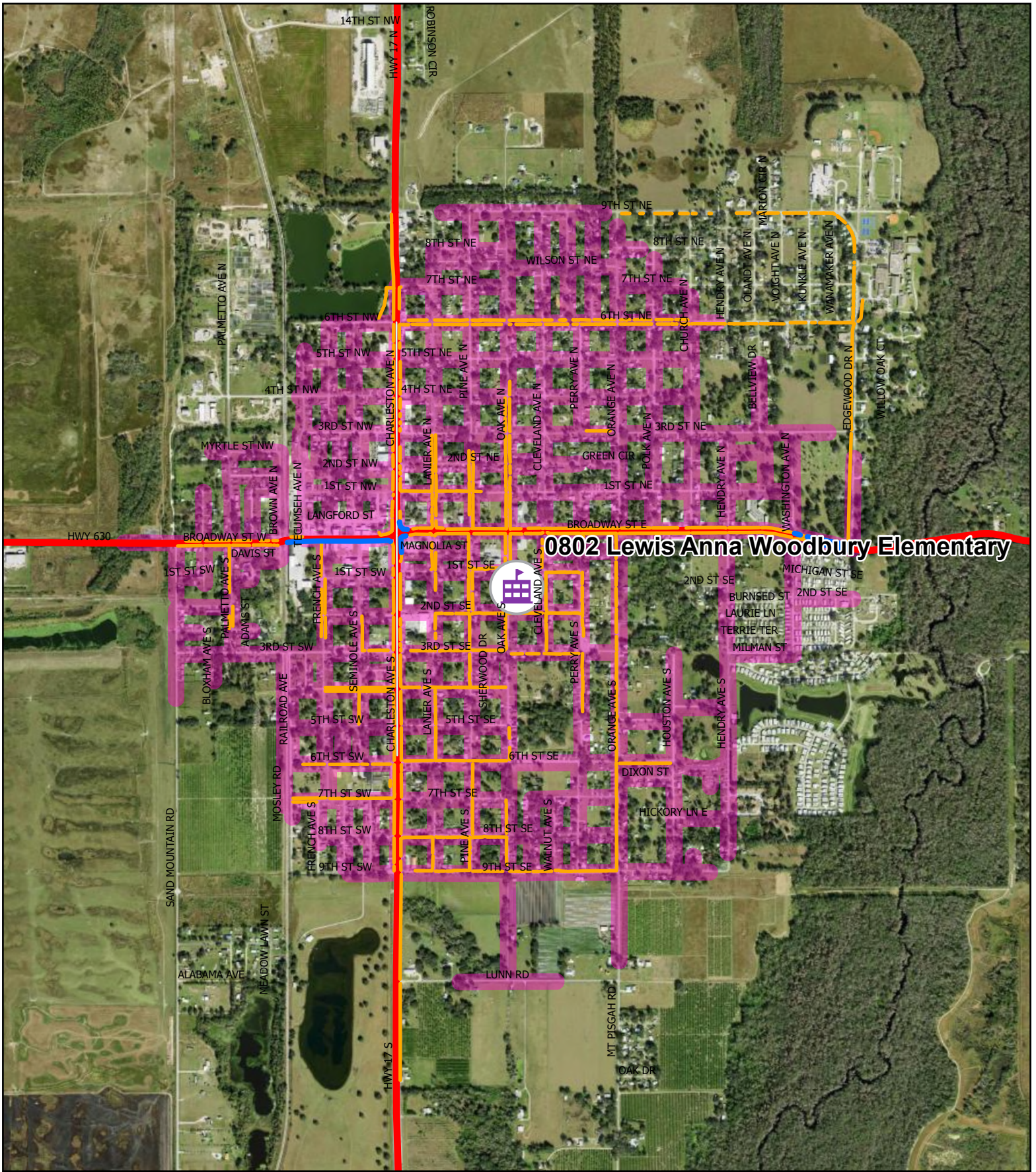
0841 Lena Vista Elementary

0841 Lena Vista Elementary

- Legend
- Existing Sidewalk
 - Polk TPO RND Update 2025
 - Walk Shed Boundary
 - Proposed Improvement
 -  Top 20 Schools



Sources:
 Residential- Polk County Schools
 Crash- FDOT 2010-2014
 Roadway- Polk TPO

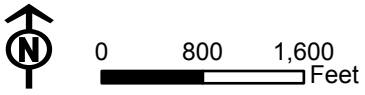


0802 Lewis Anna Woodbury Elementary

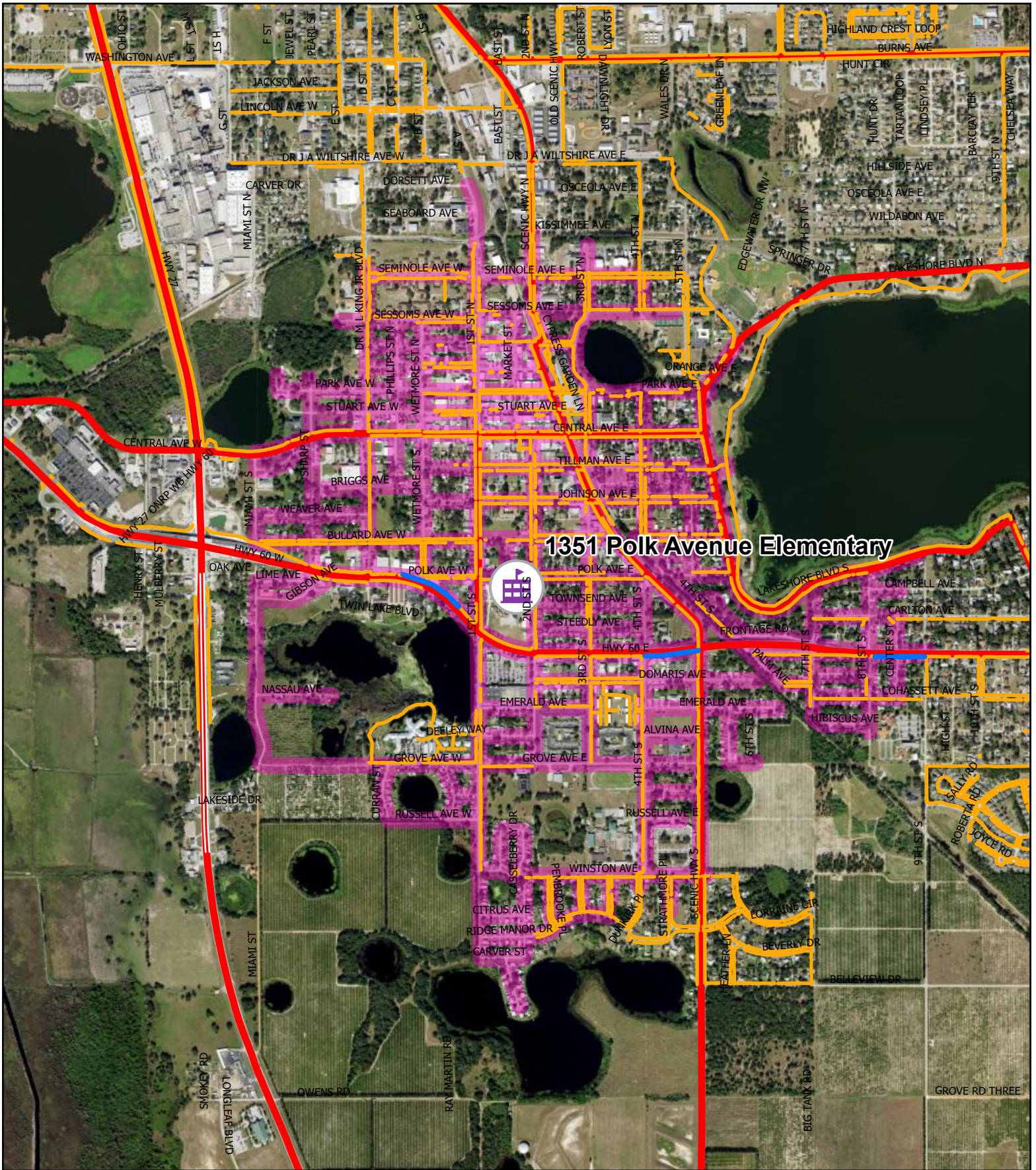


0802 Lewis Anna Woodbury Elementary

- Legend
- Existing Sidewalk
 - Polk TPO RND Update 2025
 - Walk Shed Boundary
 - Proposed Improvement
 - Top 20 Schools



Sources:
 Residential- Polk County Schools
 Crash- FDOT 2010-2014
 Roadway- Polk TPO



1351 Polk Avenue Elementary

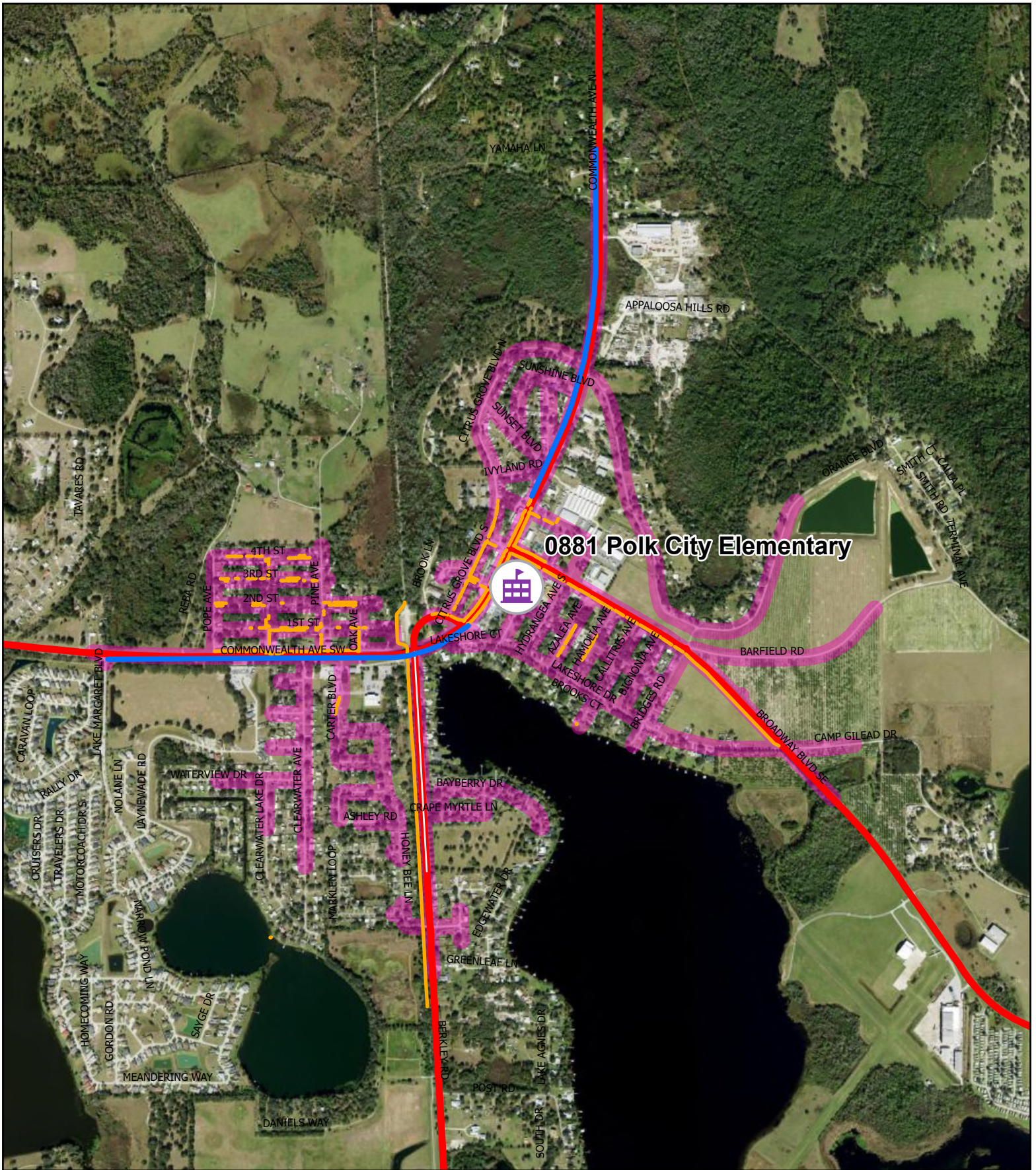


1351 Polk Avenue Elementary

- Legend
- Existing Sidewalk
 - Polk TPO RND Update 2025
 - Walk Shed Boundary
 - Proposed Improvement
 - Top 20 Schools

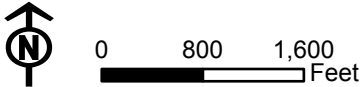


Sources:
 Residential- Polk County Schools
 Crash- FDOT 2010-2014
 Roadway- Polk TPO

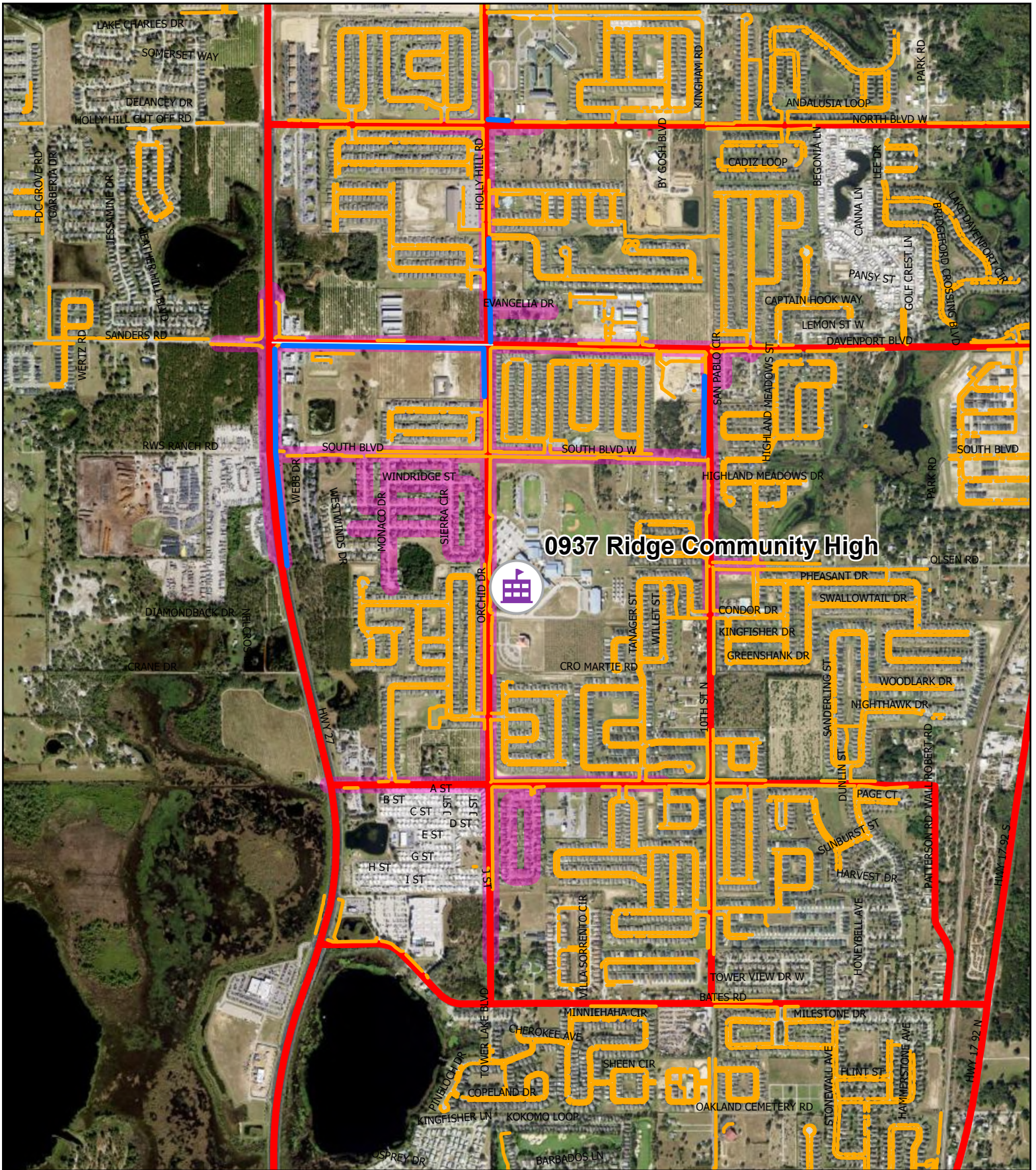


0881 Polk City Elementary

- Legend
- Existing Sidewalk
 - Polk TPO RND Update 2025
 - Walk Shed Boundary
 - Top 20 Schools
 - Proposed Improvement

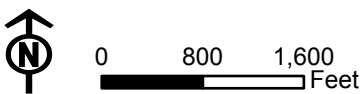


Sources:
 Residential- Polk County Schools
 Crash- FDOT 2010-2014
 Roadway- Polk TPO

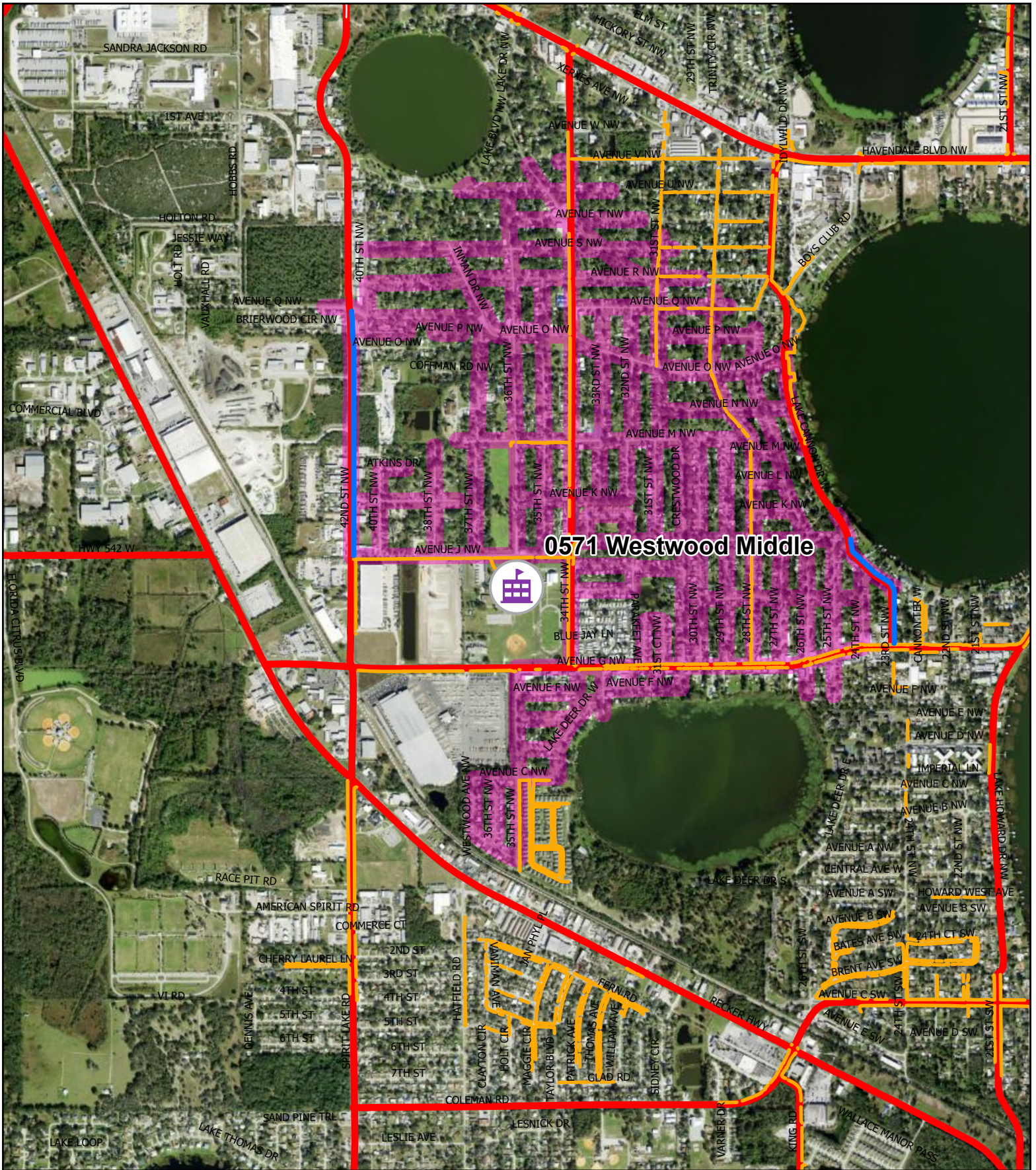


0937 Ridge Community High

- Legend
- Existing Sidewalk
 - Polk TPO RND Update 2025
 - Walk Shed Boundary
 - Top 20 Schools
 - Proposed Improvement



Sources:
 Residential- Polk County Schools
 Crash- FDOT 2010-2014
 Roadway- Polk TPO

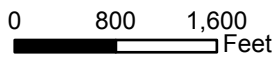


0571 Westwood Middle

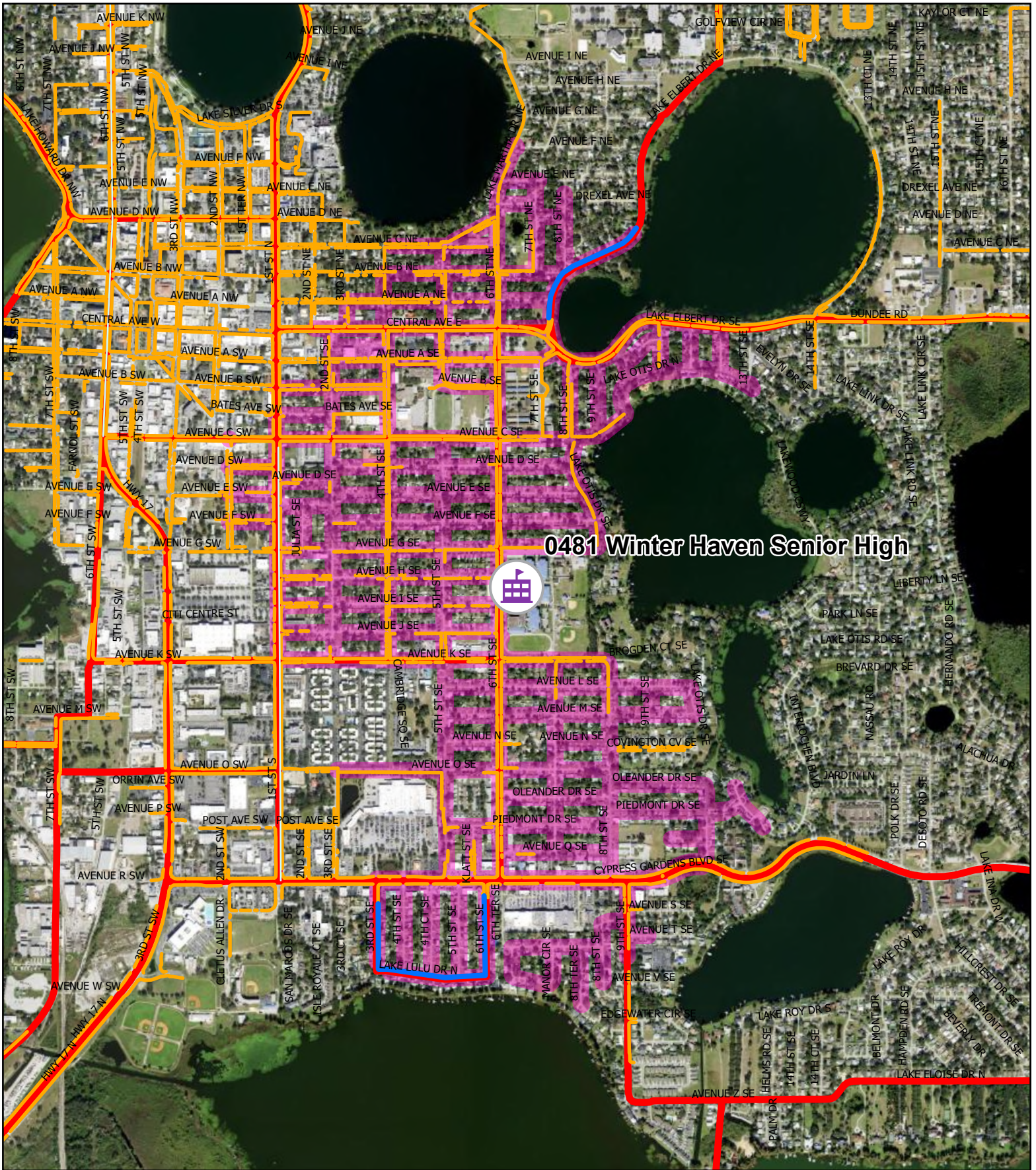


Legend

- Existing Sidewalk
- Polk TPO RND Update 2025
- Walk Shed Boundary
- Proposed Improvement
- Top 20 Schools



Sources:
 Residential- Polk County Schools
 Crash- FDOT 2010-2014
 Roadway- Polk TPO

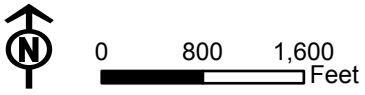


0481 Winter Haven Senior High



0481 Winter Haven Senior High

- Legend
- Existing Sidewalk
 - Polk TPO RND Update 2025
 - Walk Shed Boundary
 - Proposed Improvement
- Top 20 Schools



Sources:
 Residential- Polk County Schools
 Crash- FDOT 2010-2014
 Roadway- Polk TPO

Appendix D – Cost Estimates

This appendix presents planning-level sidewalk construction cost estimates for the recommended improvement segments identified for each of the 20 priority schools. Estimates are based on total proposed sidewalk footage along County RND corridors and typical unit construction costs. These figures are intended for planning and programming purposes only.

Cost estimates do not reflect detailed engineering design, right-of-way acquisition, drainage improvements, utility relocations, or other project-specific factors that would be determined during subsequent project development phases. Actual construction costs may vary significantly based site conditions, materials, and contractor pricing at the time of procurement.

School ID	School Name	Roadway	Length in Miles	Estimated Cost
0091	Combee Academy of Design and Eng	Lake Parker Dr E	0.315	\$ 170,780.89
0091	Combee Academy of Design and Eng	Lake Parker Dr E	0.308	\$ 167,211.01
0091	Combee Academy of Design and Eng	Combee Rd	0.506	\$ 274,897.79
0091	Combee Academy of Design and Eng	Mineola Dr	0.288	\$ 156,608.98
0101	Crystal Lake Elementary	Combee Rd S	0.711	\$ 385,991.69
0311	Daniel Jenkins Acad. of Tech Middle	Peninsular Dr	0.134	\$ 72,496.40
0311	Daniel Jenkins Acad. of Tech Middle	Peninsular Dr	0.215	\$ 116,715.84
0361	Eastside Elementary	Hwy 17/92 N	0.272	\$ 147,443.35
0361	Eastside Elementary	Hwy 17/92 N	0.332	\$ 180,526.35
0361	Eastside Elementary	12th St N	0.327	\$ 177,638.28
0361	Eastside Elementary	30th St N	0.409	\$ 222,044.23
0361	Eastside Elementary	Johnson Ave E	0.325	\$ 176,524.09
0481	Winter Haven Senior High	3rd St SE / Lake Lulu Dr / 6th St SE	0.573	\$ 311,080.37
0481	Winter Haven Senior High	Lake Elbert Dr NE	0.308	\$ 167,407.29
0491	Denison Middle	Lake Elbert Dr NE	0.447	\$ 242,916.45
0571	Westwood Middle	23rde St NW / Lake Cannon Dr W	0.280	\$ 151,867.90
0571	Westwood Middle	42nd St NW	0.555	\$ 301,321.94
0601	Fred G. Garner Academy	34th St NW	0.177	\$ 96,009.82
0601	Fred G. Garner Academy	Havendale Blvd	0.187	\$ 101,624.86
0601	Fred G. Garner Academy	Lake Cannon Dr W	0.235	\$ 127,668.42
0601	Fred G. Garner Academy	21st St NW	0.084	\$ 45,752.22
0611	Inwood Elementary	Lake Howard Dr	0.760	\$ 412,455.91
0651	Lake Alfred Elementary	Alfred Dr E	0.952	\$ 516,667.17
0802	Lewis Anna Woodbury Elementary	Broadway St W	0.235	\$ 127,470.47
0802	Lewis Anna Woodbury Elementary	Charleston Ave S	0.046	\$ 24,913.34
0802	Lewis Anna Woodbury Elementary	Charleston Ave N	0.028	\$ 15,270.20
0802	Lewis Anna Woodbury Elementary	Broadway St E	0.065	\$ 35,291.77
0802	Lewis Anna Woodbury Elementary	Broadway St E	0.094	\$ 50,848.27
0802	Lewis Anna Woodbury Elementary	Broadway St E	0.014	\$ 7,384.45
0811	Auburndale Senior High	Stadium Rd	0.450	\$ 244,310.11
0811	Auburndale Senior High	Bridgers Ave	0.109	\$ 58,961.79
0811	Auburndale Senior High	Lake Alfred Rd	0.082	\$ 44,618.73
0841	Lena Vista Elementary	Old Dixie Hwy	0.636	\$ 345,590.42
0881	Polk City Elementary	Commonwealth Ave SW	0.836	\$ 454,195.39
0881	Polk City Elementary	Commonwealth Ave N	0.814	\$ 442,082.31
0933	Chain of Lakes Elementary	Eloise Loop Rd	0.489	\$ 265,357.42
0937	Ridge Community High	Holly Hill Rd	0.234	\$ 127,160.02
0937	Ridge Community High	Davenport Blvd	0.456	\$ 247,640.88
0937	Ridge Community High	Holly Hill Rd	0.109	\$ 59,257.45
0937	Ridge Community High	US Hwy 27	0.493	\$ 267,474.57
0937	Ridge Community High	10 St N	0.176	\$ 95,610.47
0937	Ridge Community High	North Blvd W	0.046	\$ 24,814.11
1061	Highland City Elementary	11th St SE	0.124	\$ 67,170.83
1061	Highland City Elementary	9th St E	0.129	\$ 70,239.76
1061	Highland City Elementary	Colbert Rd	0.376	\$ 204,166.84

School ID	School Name	Roadway	Length in Miles	Estimated Cost
1181	Kathleen Senior High	Wabash Ave N	0.121	\$ 65,529.13
1181	Kathleen Senior High	Crutchfield Rd	0.238	\$ 129,415.65
1181	Kathleen Senior High	Swindell Rd	0.557	\$ 302,660.84
1181	Kathleen Senior High	Memorial Blvd W	0.323	\$ 175,591.23
1181	Kathleen Senior High	Chestnut Rd N	0.656	\$ 356,129.64
1181	Kathleen Senior High	10th St W	0.217	\$ 117,851.32
1181	Kathleen Senior High	10th St W	0.213	\$ 115,928.50
1181	Kathleen Senior High	10th St W	0.554	\$ 300,728.28
1181	Kathleen Senior High	10th St W	0.463	\$ 251,144.40
1181	Kathleen Senior High	10th St W	0.123	\$ 66,971.63
1181	Kathleen Senior High	Galloway Rd	0.090	\$ 48,945.04
1181	Kathleen Senior High	Galloway Rd	0.091	\$ 49,601.46
1241	Jesse Keen Elementary	Highland St W	0.378	\$ 205,090.84
1241	Jesse Keen Elementary	Wabash Ave S	0.115	\$ 62,413.15
1351	Polk Avenue Elementary	Hwy 60 E	0.112	\$ 60,871.51
1351	Polk Avenue Elementary	Hwy 60 E	0.122	\$ 66,197.51
1351	Polk Avenue Elementary	Hwy 60 E	0.148	\$ 80,617.40
Total			19.26	\$ 10,459,168

Polk County Sidewalk Gap Improvemnts Cost Estimate Per Mile						
0110 1 1	CLEARING & GRUBBING	0.2	AC	\$ 120,000.00	\$ 24,000.00	
0120 1	REGULAR EXCAVATION	891	CY	\$ 25.00	\$ 22,275.00	
0120 6	EMBANKMENT	81	CY	\$ 5.00	\$ 405.00	
0515 1 1	PIPE HANDRAIL - GUIDERAIL, STEEL	6.4	LF	\$ 80.00	\$ 512.00	
0520 1 10	CONCRETE CURB & GUTTER, TYPE F	44.9	LF	\$ 55.00	\$ 2,469.50	
0522 2	CONCRETE SIDEWALK AND DRIVEWAYS, 6"	733.3	SY	\$ 79.00	\$ 57,930.70	
0527 2	DETECTABLE WARNINGS	25	SF	\$ 25.00	\$ 625.00	
0570 1 2	PERFORMANCE TURF, SOD	748.5	SY	\$ 6.50	\$ 4,865.25	
					\$ 113,082.45	\$ 452,329.80
	Unknown Costs - 20%					\$ 90,465.96
	Total Estimated Cost Per Mile					\$ 542,795.76

Appendix E – Technical Methodology

This appendix documents the technical methods underlying the sidewalk inventory, gap analysis, and prioritization framework. It is intended for analysts, GIS practitioners, and reviewers who wish to understand or replicate the analytical approach. The main report (Sections 2-5) presents findings and recommendations in plain language.

E.1. Machine Learning Sidewalk Detection

Model Architecture

The semantic segmentation model used ResNet-50, a 50-layer convolutional neural network commonly applied in image classification tasks. The model was trained to classify aerial imagery pixels as sidewalk or non-sidewalk.

Training Data

- Training data generated by manually classifying 2023 high-resolution aerial scenes, using the existing county sidewalk inventory as a guide.
- Entire orthoimages classified into two categories (sidewalk / non-sidewalk) and divided into chips for training.
- Images rotated and flipped horizontally and vertically during training to increase robustness given limited training data volume.
- Model trained over 25 epochs (833 iterations); final model applied across all Polk County imagery.

Output Format

Model output: binary raster masks of classified sidewalks, converted to polyline features for GIS analysis. Coverage definition: paved linear features 3-15 feet wide, within the public right-of-way or within 50 feet of it as determined by areas outside Polk County parcel boundaries. Crosswalks, paved shoulders, and features narrower than three feet excluded.

E.2. Network Walk Shed Routing Specifications

- Tool: Network Analyst extension, ArcGIS Pro.
- Distance threshold: 1-mile network service area from each school's main pedestrian entry point.
- Geozone constraint: Where official school attendance geozones were available (87 of 146 schools), walk shed clipped to geozone boundary.
- Land use filtering: Walk paths terminating in commercial, industrial, agricultural, conservation, or other non-residential parcels removed from the walk shed.
- Walk shed boundary polygon: Walk path centerlines buffered 100 feet and dissolved by school for mapping purposes.

E.3. Coverage Classification Algorithm

Coverage evaluated independently for left and right sides of each road segment using a Python/ArcPy automated process in ArcGIS Pro. Classification thresholds:

- BOTH_SIDES (Covered): Sidewalk coverage $\geq 50\%$ on both sides.
- ONE_SIDE (Partial): Sidewalk coverage $\geq 50\%$ on one side only.
- GAP (Full Gap): Sidewalk coverage $< 50\%$ on both sides.

Spot checks were conducted on approximately 10% of road segments, stratified across urban, suburban, and rural walk sheds. All segments within the Top 20 priority school walk sheds were subject to detailed manual verification during the prioritization process.

E.4. Prioritization Scoring Details

Walk Demand (30%)

Walk demand reflects the number of students who are ineligible for district bus service and are therefore expected to walk to school. This count is drawn directly from Polk County School Board records, making it a policy-derived measure rather than a modeled estimate. Values are adjusted for the proportion of the school's attendance zone that falls within the one-mile network walk shed. For the 45 schools without observed data, counts were estimated using the grade-band average ratio of bus-ineligible students to total enrollment derived from the 101 schools with observed data. Imputed values are documented in the technical appendix.

Sidewalk Gap Severity (25%)

Gap severity combines two metrics: County RND gap footage (70% of sub-score) and total walk shed gap footage across all road types (30% of sub-score). The County RND gap metric is weighted more heavily to prioritize improvements on county-controlled corridors where Polk County can act directly. The all-roads component preserves exposure context for schools with limited RND presence in their walk sheds.

Safety Risk - Crash EPDO (12.5%)

Pedestrian and bicycle crashes within the walk shed from January 2020 through March 2025 were weighted using Equivalent Property Damage Only (EPDO) severity weighting. EPDO assigns higher values to crashes involving serious injuries or fatalities, ensuring that locations with more severe crash histories receive appropriately higher scores.

Safety Risk - HIN Exposure (12.5%)

The sum of annualized EPDO values from High Injury Network segments and intersections intersecting each walk shed. HIN data reflects systemic risk along entire corridors, complementing point-based crash history.

Title I Status (20%)

Schools designated as Title I for the 2024–2025 school year (per FDOE) received a score of 100. Non-Title I schools received a score of 0. This binary criterion reflects the elevated reliance on walking as a school travel mode in lower-income households and ensures that equity is structurally incorporated into the prioritization.

– End of Report –