

JACKSON PUBLIC SCHOOLS TRANSPORTATION STUDY



Prepared for:



Jackson Public School Department of Transportation

Prepared By:



THE GREENWAY COLLABORATIVE, INC.
Greenways, Complete Streets and Sustainable Design since 1993

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TABLE OF CONTENTS

Summary	1
Overview of the Jackson Public School District	4
Bennett Elementary School	6
Cascades Elementary School	8
Dibble Elementary School.	10
Frost Elementary School	12
Hunt Elementary School.	14
MuCulloch Elementary School.....	16
Northeast Elementary School	18
Sharp Park Academy.....	20
Ann Firth Middle School.....	22
Middle School at Parkside	24
Jackson High School	26
T.A. Wilson Academy.....	28
Appendix	30

SUMMARY

Over 4,100 students in the Jackson Public Schools rely on school buses to get to school. Of these students a significant number of them are within a reasonable walking distance of school and could potentially walk to school on a daily basis. This study identifies which of those students could reasonably be required to walk to school based on existing and potential conditions. It also looks at the cost of the infrastructure changes and the potential transportation savings for the school district.

This study is part of a greater Project U-Turn effort including the Safe Routes to School and Environmental Improvements program. This project addresses the overall goal to increase physical fitness and promote sustainable transportation in the City of Jackson.

STUDY APPROACH

1. Identified for each school the number of students who are currently being bused to school and who live within reasonable walking distances. Reasonable walking distances were defined as within 1 mile of Elementary Schools and 1 ½ miles of Middle and High Schools based on actual walking distance. This translates to about a half-hour walk for the respective age groups. Actual, walking distances were calculated based on the presence of sidewalks, trails and crosswalks. Only marked crosswalks on primary roads were considered in calculating actual walking distance. Crosswalks on local streets need not to be marked to be considered part of the system.
2. Determined the number students currently being bused who could reasonably be required to walk to school based on the existing sidewalk and crosswalk system.
3. Determined the number of students who are currently being bused who could reasonably be required to walk to school if the walkway and crosswalk system was completed within the City of Jackson. This would be comprised of completing sidewalks and both sides of the streets and adding marked crosswalks at strategic locations across primary roads.
4. Determined the number of students who are currently being bused who could reasonably be required to walk to school if the walkway and crosswalk system was completed in the city and the townships.
5. Evaluated the transportation savings of the different scenarios and the infrastructure costs of the various scenarios.
6. Identified two schools where the greatest impact could be made with the fewest infrastructure costs.
7. Identified a few programming needs that will help overcome some of the barriers to getting more students to walk to school.

KEY FINDINGS

1. There is little relationship between school draw boundaries and actual attendance. In most neighborhoods within the district it is common to see attendance at nearly all elementary schools. This is due to the school of choice and magnet schools.
2. That the actual walking distance varies dramatically from the radius distance in many of the schools. This is due to street patterns, physical barriers such as railroads and rivers and of course streets without any pedestrian facilities.
3. There are about 630 students who are currently being bused who are within reasonable walking distance to school using existing sidewalks and crosswalks. If all of these students walked then approximately 8 bus routes could be eliminated saving the district over \$300,000 in transportation costs per year.
4. The cutting of 8 bus routes would then eliminate the need for the school district to replace six buses that according to state guidelines should be retired from service. The school district would realize a one time savings of \$480,000 by not having to replace those six buses.
5. If the sidewalk network was completed within the City of Jackson and selected crosswalks were added to the major roadways only an additional 81 students would be within reasonable walking distance. The cost for these improvements would be 12 to 13 million dollars.
6. Two elementary schools, Hunt and Northeast, have the potential to add 50 walkers if the sidewalk and crosswalk system within a mile of those schools was completed. This constitutes about 62% of all additional walkers if the entire city system was completed. The improvements for those two schools could be done for less than two million dollars.
7. If the sidewalk network was completed for all of the City of Jackson and portions of the surrounding township within the school district, 218 additional students would be within walking distance. The infrastructure needs to accommodate those 218 students would be enormous.

KEY RECOMMENDATIONS

1. That the school board clearly defines the walking distance to all schools. It is recommended that this be 1 mile actual walking distance for Elementary Schools and 1 ½ mile actual walking distance for middle and high schools.
2. To address both real and perceived safety issues adult supervised “Walking School Buses” should be provided to escort elementary age students to school. This program could be undertaken by the school district itself or potentially as a collaborative effort with the Fitness Council of Jackson. Past experience has shown that well organized adult supervised walks are necessary for the program’s success. These supervisors could be either paid or volunteers.
3. That the school district should evaluate returning to neighborhood based school draw boundaries. Many of the boundaries were drawn in response to desegregation efforts many years ago and the demographics of the neighborhoods have changed dramatically since that time. This change would likely have the greatest impact on the number of students within walking distance.
4. Infrastructure improvements should be focused first on upgrading the existing walk and crosswalk system then on the potential walk areas of Hunt and Northeast Elementary Schools. Even a short pathway extension through Optimist Park will make a significant difference to the number of kids who can walk to Hunt Elementary School.
5. Create a collaborative arrangement with the Jackson Public School District, Jackson Fitness Foundation and the City of Jackson to identify, fund and construct infrastructure improvements that improve walking routes to school. The Fitness Council could act as the funding applicant and fiduciary agent for the projects. The City of Jackson’s Engineering Department has the ability to provide the technical expertise in preparing the construction documents, bidding the project and administration of the construction project.
6. Bundle smaller improvement projects into a few larger construction projects. This will help offset the federally mandated administrative requirements inherent in Safe Routes to School funded projects.
7. Integrate the Fitness Council of Jackson’s Safe Routes Program that provides warm clothing to children in need with
8. Provide adequate winter clothing and rain gear suitable for walking to school to students in need. This may be accomplished by integrating the recently established initiative of the Fitness Council of Jackson’s Safe Routes to School programs that does the same. The adult supervisors of walking school buses could act as point persons in this effort helping to identify children who need appropriate clothing.
9. Continue the crossing guard program administered by the police department. Reevaluate guard placement based on potential new walking areas. Coordinate crossing guard program with the walking school bus programs.

OVERVIEW OF THE JACKSON PUBLIC SCHOOL DISTRICT

The Jackson Public School district serves over 6,000 students in preschool through 12th grade. The district is about 39 square miles of which 11 square miles (28%) is the City of Jackson. Even though the City is only 28% of the district by size, the majority of students reside in the City of Jackson. The City of Jackson is also home to all but one of the 12 schools. Also, 94% of all of the existing sidewalks in the Jackson Public School district are in the City of Jackson.

There are 12 schools in the district:

Elementary Schools

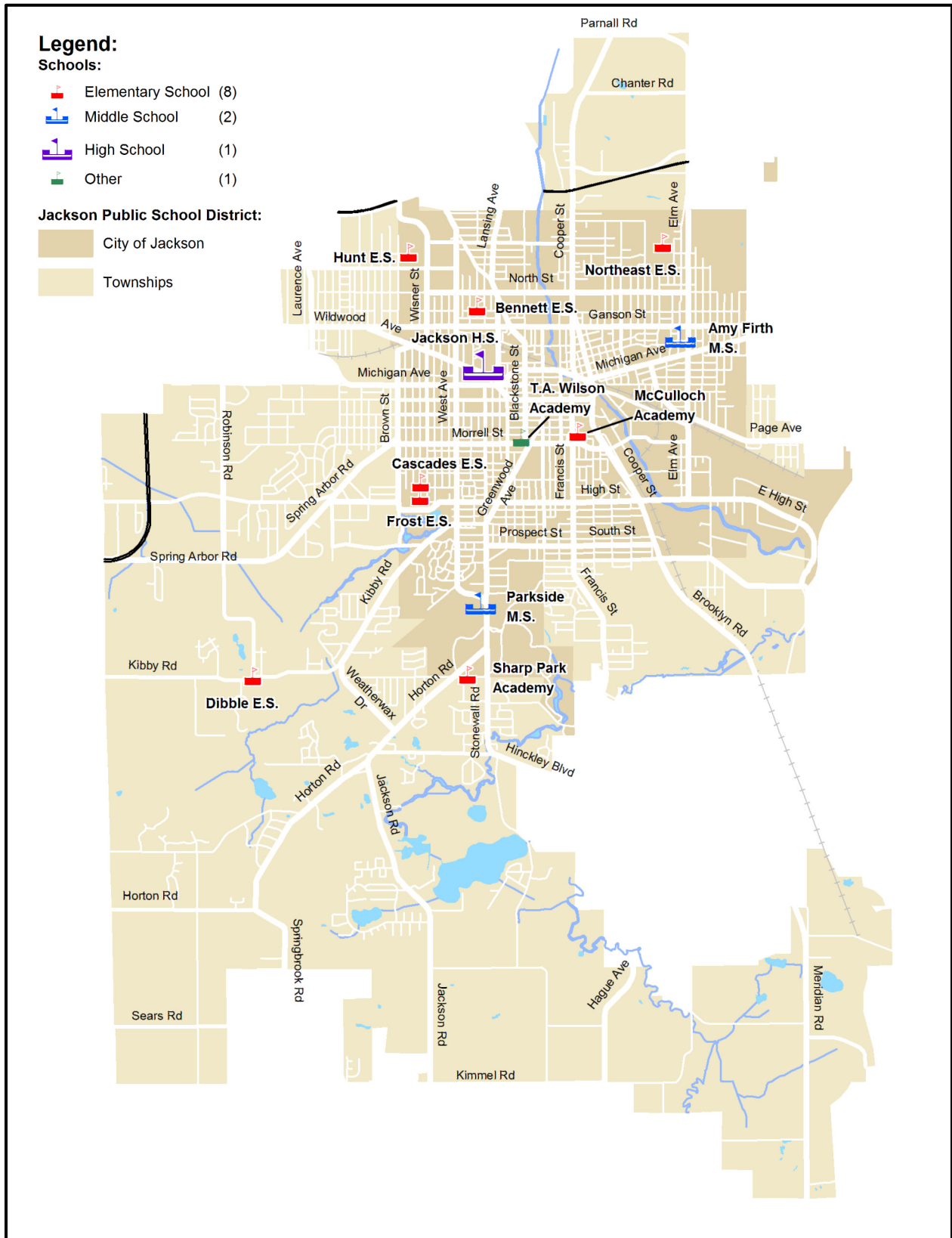
Bennett	(K-6)
Cascades	(K-2) paired with Frost
Dibble	(K-6)
Frost	(3-6) paired with Cascades
Hunt	(PS – 6)
MuCulloch	(PS – 5)
Northeast	(PS – 6)
Sharp Park Academy	(PS – 4)

Middle Schools

Amy Firth	(6 -9) alternative study program
Parkside	(7 – 9)

High Schools

Jackson	(10 – 12)
T.A. Wilson Academy	(9 – 12) alternative study program

FIGURE 1. JACKSON PUBLIC SCHOOL DISTRICT

BENNETT ELEMENTARY SCHOOL

Grades	Kindergarten – Sixth Grade			
Total Students:	442			
Students on Regular Bus:	369	83%		
Number of Regular Buses:	10	(most routes shared with Hunt Elementary School)		
Number of Students/ Bus Route:	51/020HNT	39/021HNT	35/022HNT	20/023HNT
	59/024HNT	12/025HNT	21/026HNT	48/027HNT
	45/028HNT	38/029HNT		
Students on Special Education Buses:	11	3%		
Number of Special Education Buses:	3			
Number of Students/ Bus Route:	3/SPE407	6/SPE408	2/SPE409	
Students that walk, bike or are driven to school:	62	14%		

EXISTING BUS RIDERS WITHIN A 1 MILE WALKING DISTANCE

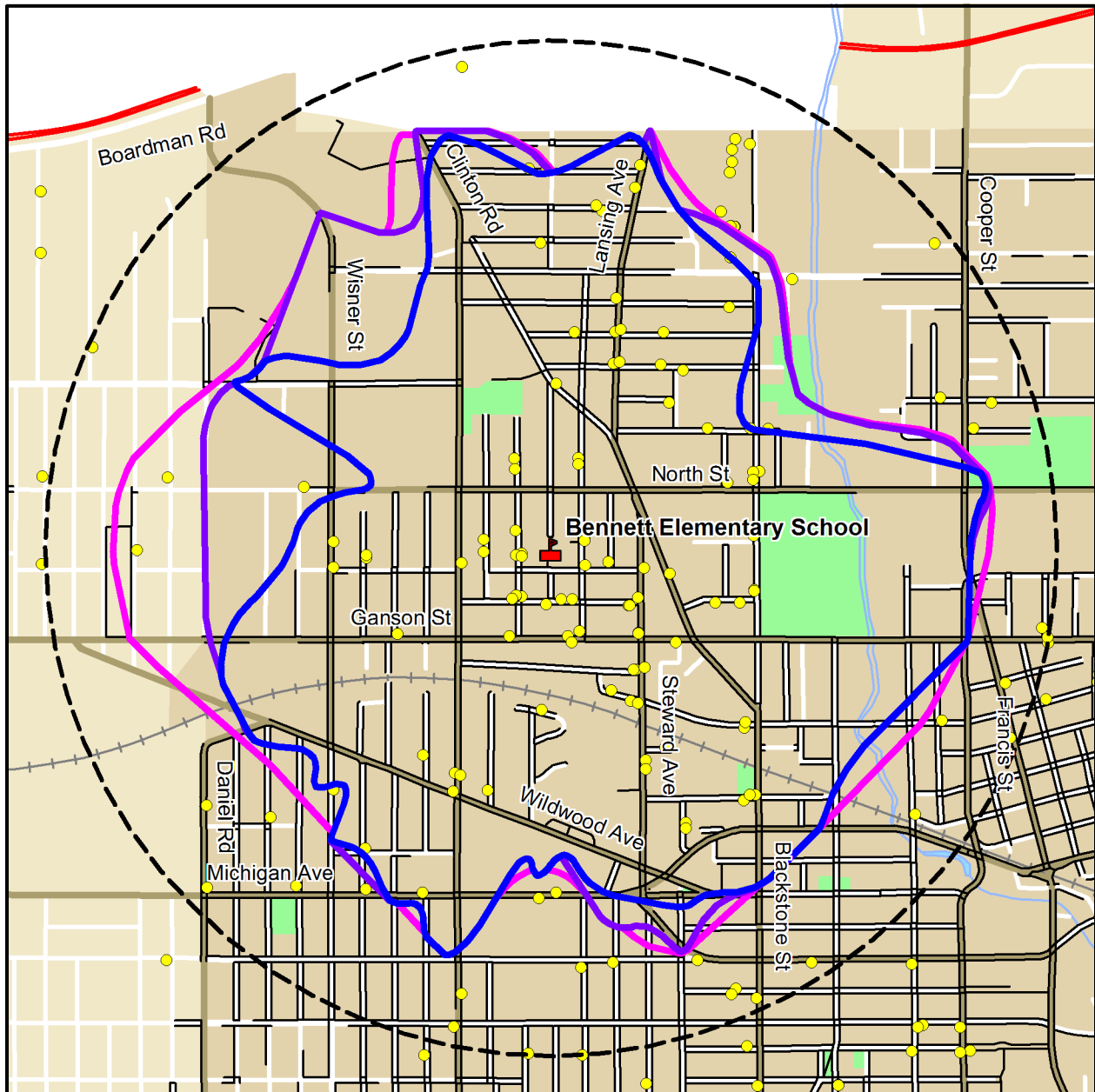
For each of the following three scenarios the number of students who live within a 1 mile actual walking distances from school and the corresponding number of buses this represents where determined.

Existing Walk and Crosswalk Network	136	1.8 Buses
Expanded City Network	140	1.8 Buses
Completed City and Township Network	143	1.9 Buses

NOTES

Many students who are eligible for and assigned bus routes live within a few blocks of the school. This is likely due to the fact that all but one of the routes are shared with Hunt Elementary School as a bus is in the vicinity anyway. In all likelihood, many of these students already walk.

The existing walk and crosswalk network is relatively complete and most of the potential walking area is within the city. Thus, expanding the city's system and adding sidewalks in the township neighborhoods yield only a handful of more walkers.

FIGURE 2. BENNETT ELEMENTARY SCHOOL**Legend:****One Mile Walking Distance Boundaries:**

- Existing Walk and Crosswalk System
- Expanded City Network
- Completed City and Township Network
- 1 Mile Radius From School

Existing Network Elements:

- School Location
- School Bus Riders
- Existing Sidewalks, Paths and Crosswalks

Other Features:

- Freeway
- Arterial Roadway
- +—+—+— Railroad
- River
- Water Body
- Parks

Jackson Public School District:

- City of Jackson
- Townships

CASCADES ELEMENTARY SCHOOL

Grades	Kindergarten – Second Grade (paired with Frost Elementary School next door which covers Third – Sixth grades)			
Total Students:	298			
Students on Regular Bus:	260	87%		
Number of Regular Buses:	11			
Number of Students/ Bus Route:	23/050CFS	10/051CFS	4/052CFS	6/053CFS
	28/054FOR	13/057FRO	30/061CFS	9/062CRS
Students on Special Education Buses:	7	3%		
Number of Special Education Buses:	3			
Number of Students/ Bus Route:	1/SPE411	2/SPE412	1/SPE413	
Students that walk, bike or are driven to school:	31	10%		

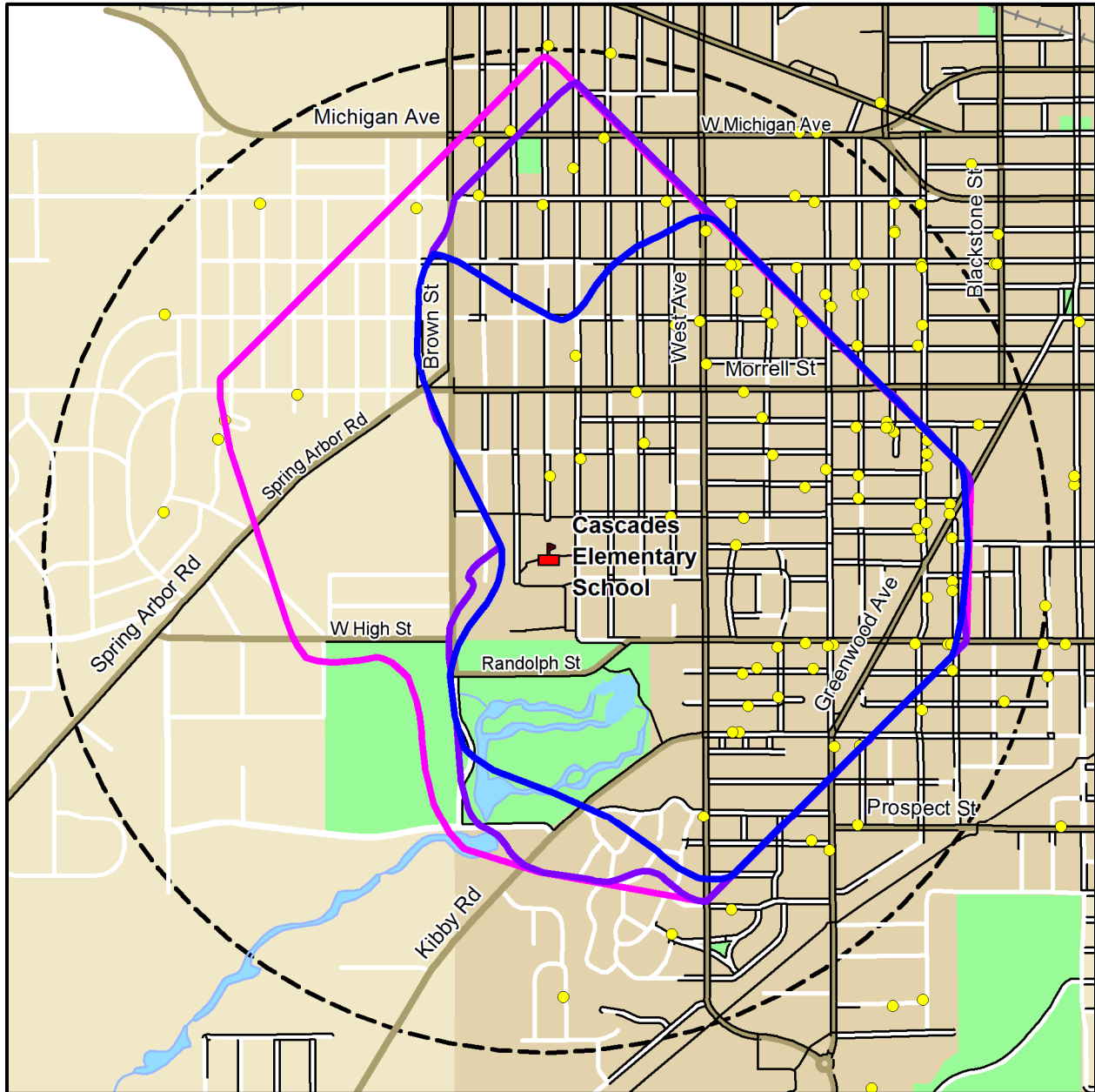
EXISTING BUS RIDERS WITHIN A 1 MILE WALKING DISTANCE

For each of the following three scenarios the number of students who live within a 1 mile actual walking distances from school and the corresponding number of buses this represents where determined.

Existing Walk and Crosswalk Network	79	1.0 Buses
Expanded City Network	85	1.1 Buses
Completed City and Township Network	90	1.2 Buses

NOTES

Cascades Elementary School is located adjacent to Frost Elementary School and together they provide kindergarten through six grade education. While Cascades Elementary School is located near the city / township border, the majority of the students come from the city. 30% of the students currently being bused are within a mile walking distance of the school using the existing walk and crosswalk system. With the addition of some sidewalks along residential streets north of Morrell Street, an additional six students would be able to walk to school. Even completing the sidewalks along just Thompson Street would accommodate most if not all of these students.

FIGURE 3. CASCADE ELEMENTARY SCHOOL EXISTING CONDITIONS**Legend:****One Mile Walking Distance Boundaries:**

- Existing Walk and Crosswalk System
- Expanded City Network
- Completed City and Township Network
- 1 Mile Radius From School

Existing Network Elements:

- School Location
- School Bus Riders
- Existing Sidewalks, Paths and Crosswalks

Other Features:

- Freeway
- Arterial Roadway
- Railroad
- River
- Water Body
- Parks

Jackson Public School District:

- City of Jackson
- Townships

DIBBLE ELEMENTARY SCHOOL

Grades	Kindergarten – Sixth Grade			
Total Students:	381			
Students on Regular Bus:	274	72%		
Number of Regular Buses:	5			
Number of Students/ Bus Route:	45/070DIB	68/071DIB	61/072DIB	42/073DIB
	58/074DIB			
Students on Special Education Buses:	4	1%		
Number of Special Education Buses:	-			
Number of Students/ Bus Route:	-			
Students that walk, bike or are driven to school:	103	27%		

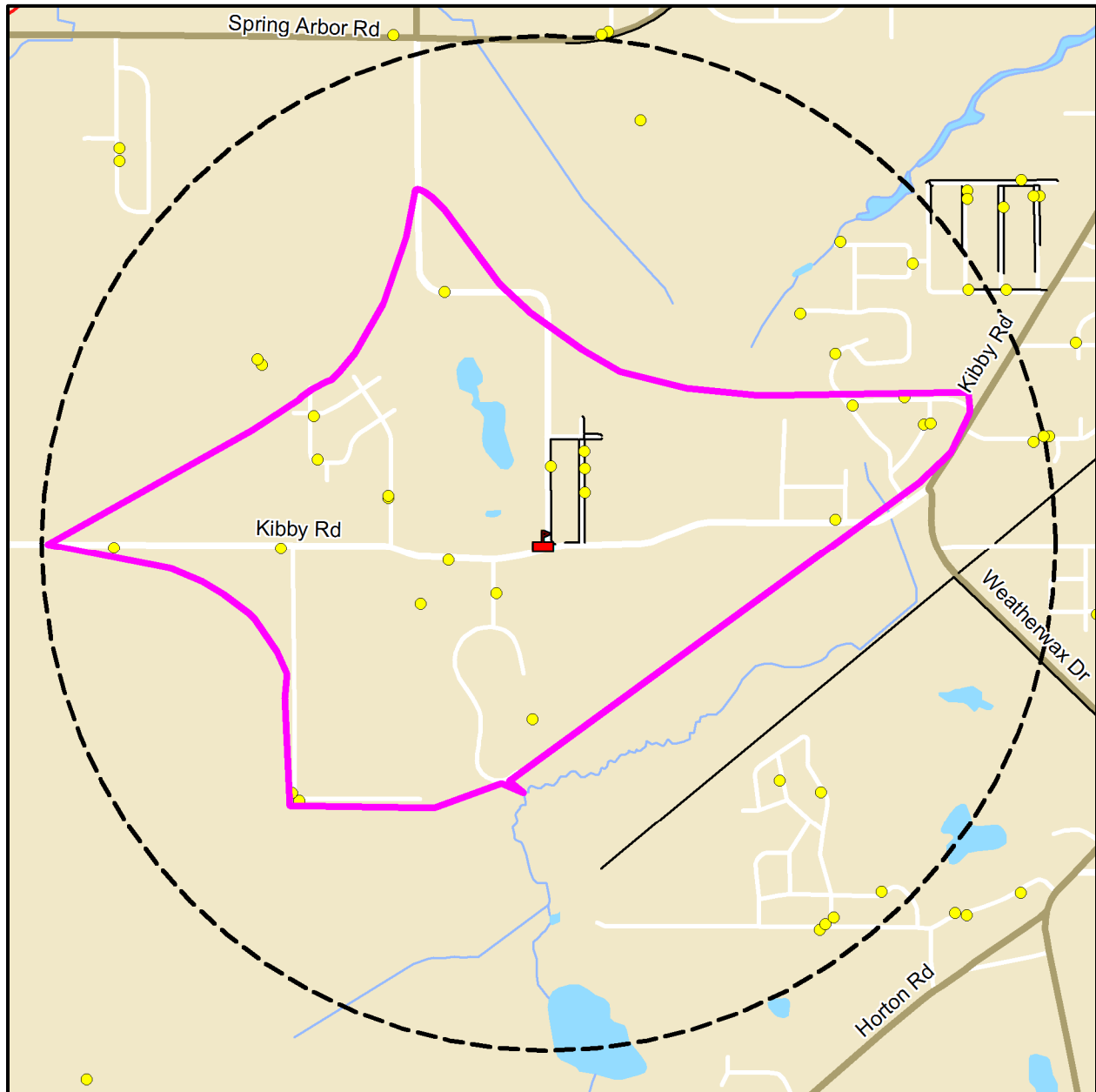
EXISTING BUS RIDERS WITHIN A 1 MILE WALKING DISTANCE

For each of the following three scenarios the number of students who live within a 1 mile actual walking distances from school and the corresponding number of buses this represents where determined.

Existing Walk and Crosswalk Network	0	0 Buses
Expanded City Network	0	0 Buses
Completed City and Township Network	26	0.3 Buses

NOTES

Dibble Elementary School has the most rural location of any of the schools. While there is a small neighborhood with sidewalks immediately across Robinson Road from the school there is not a crosswalk and sidewalk that links the two. A short stretch of sidewalk along Kibby Road and a crosswalk at Robinson Road would allow about five students to walk from the adjacent neighborhood the short distance to the school.

FIGURE 4. DIBBLE ELEMENTARY SCHOOL**Legend:****One Mile Walking Distance Boundaries:**

- Existing Walk and Crosswalk System
- Expanded City Network
- Completed City and Township Network
- 1 Mile Radius From School

Existing Network Elements:

- School Location
- School Bus Riders
- Existing Sidewalks, Paths and Crosswalks

Other Features:

- Freeway
- Arterial Roadway
- + + + + Railroad
- River
- Water Body
- Parks

Jackson Public School District:

- City of Jackson
- Townships

FROST ELEMENTARY SCHOOL

Grades	Third – Sixth Grade (paired with Cascades Elementary School next door which covers Kindergarten – Second grades)			
Total Students:	684			
Students on Regular Bus:	606	89%		
Number of Regular Buses:	11			
# of Students/ Bus Route:	67/050CFS	32/051FRO	15/052CFS	21/053CFS
	62/054FRO	52/057FRO	48/058FRO	57/059FRO
	78/060CFS	33/061CFS	19/062CFS	
Students on Special Education Buses:	10	1%		
Number of Special Education Buses:	3			
Number of Students/ Bus Route:	5/SPE411	4/SPE412	1/SPE413	
Students that walk, bike or are driven to school:	68	10%		

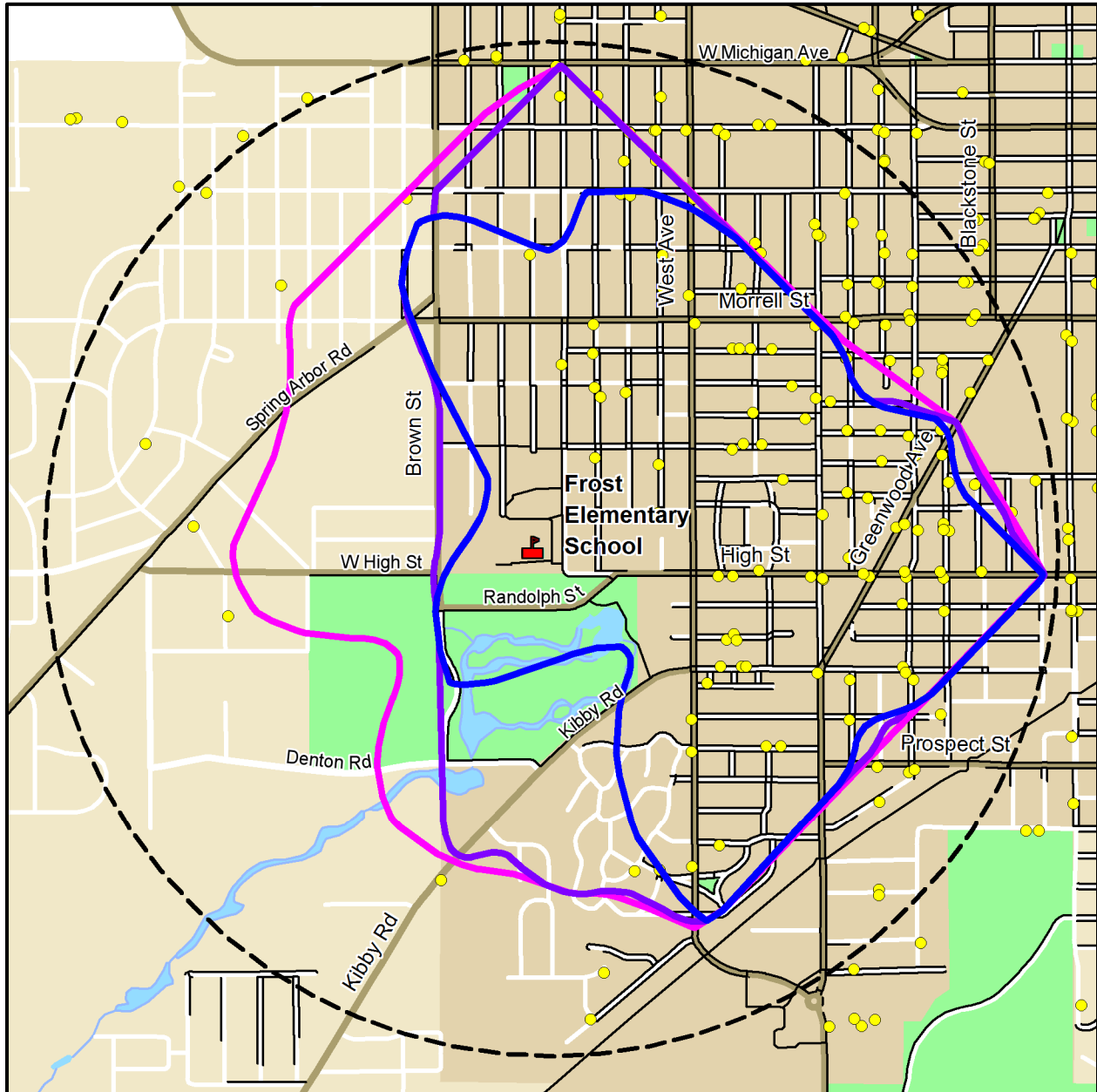
EXISTING BUS RIDERS WITHIN A 1 MILE WALKING DISTANCE

For each of the following three scenarios the number of students who live within a 1 mile actual walking distances from school and the corresponding number of buses this represents where determined.

Existing Walk and Crosswalk Network	108	1.4 Buses
Expanded City Network	117	1.5 Buses
Completed City and Township Network	127	1.6 Buses

NOTES

Frost Elementary School is located adjacent to Cascades Elementary School and together they provide kindergarten through six grade education. While Frost Elementary School is located near the city / township border, the majority of the students come from the city. 18% of the students currently being bused are within a mile walking distance of the school using the existing walk and crosswalk system. With the addition of some sidewalks along residential streets north of Morrell Street, an additional nine students would be able to walk to school.

FIGURE 5. FROST ELEMENTARY SCHOOL**Legend:****One Mile Walking Distance Boundaries:**

- Existing Walk and Crosswalk System
- Expanded City Network
- Completed City and Township Network
- 1 Mile Radius From School

Existing Network Elements:

- School Location
- School Bus Riders
- Existing Sidewalks, Paths and Crosswalks

Other Features:

- Freeway
- Arterial Roadway
- + + + + Railroad
- River
- Water Body
- Parks

Jackson Public School District:

- City of Jackson
- Townships

HUNT ELEMENTARY SCHOOL

Grades	Pre-school – Sixth Grade				
Total Students:	484				
Students on Regular Bus:	406	84%			
Number of Regular Buses:	9				
Number of Students/ Bus Route:	41/020HNT	43/021HNT	35/022HNT	38/023HNT	
	50/024HNT	44/025HNT	44/026HNT	42/028HNT	
	25/029HNT				
Students on Special Education Buses:	32	7%			
Number of Special Education Buses:	3				
Number of Students/ Bus Route:	12/SPE407	9/SPE408	11/SPE409		
Students that walk, bike or are driven to school:	46	9%			

EXISTING BUS RIDERS WITHIN A 1 MILE WALKING DISTANCE

For each of the following three scenarios the number of students who live within a 1 mile actual walking distances from school and the corresponding number of buses this represents where determined.

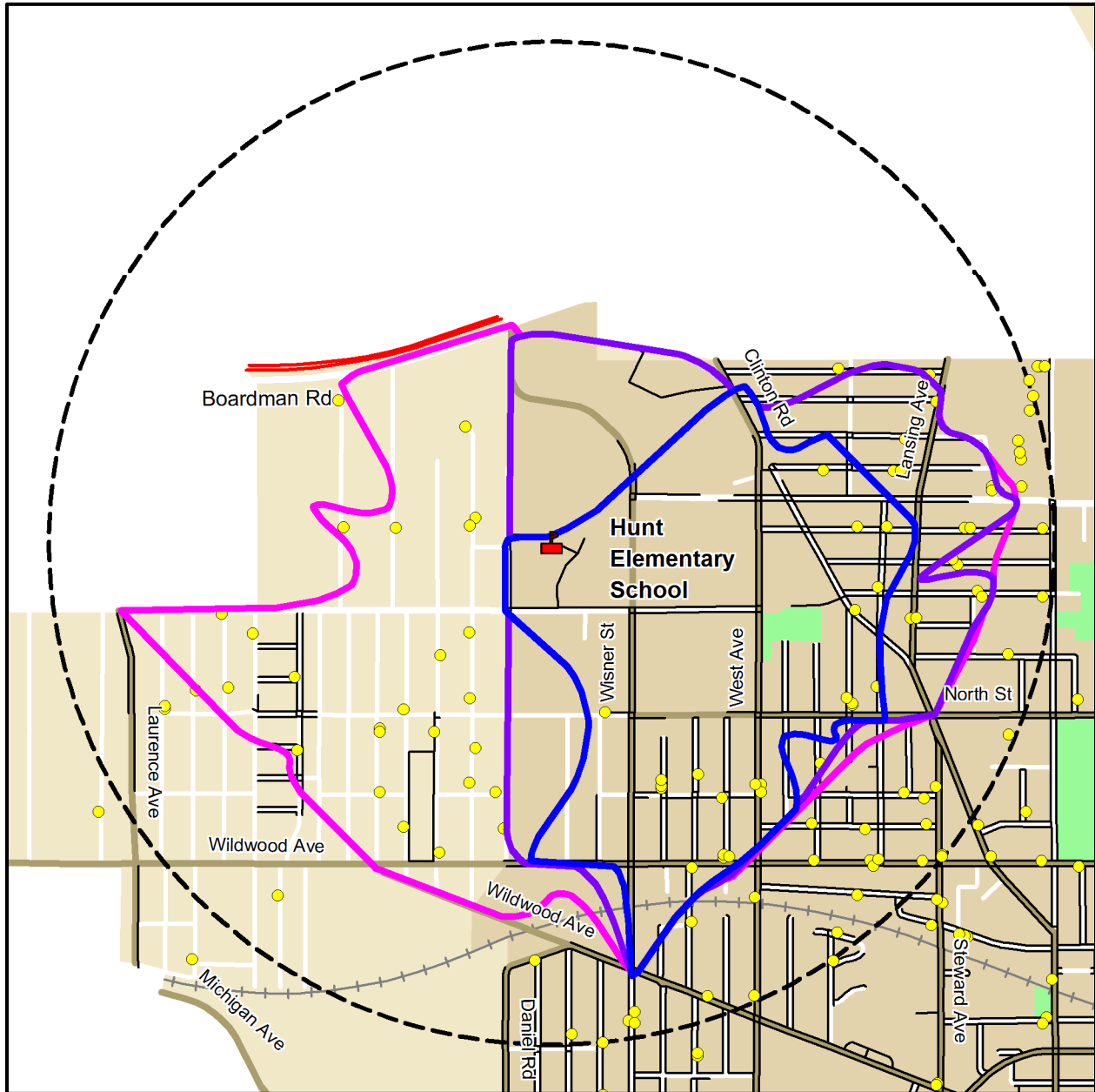
Existing Walk and Crosswalk Network	37	0.5 Buses
Expanded City Network	58	0.8 Buses
Completed City and Township Network	90	1.2 Buses

NOTES

Hunt Elementary School is located near the city / township border, with a significant number of students coming from both the township and the city. 9% of the students currently being bused are within a mile walking distance of the school using the existing walk and crosswalk system. With the extension of a few pathways on the school property and through Optimist Park and number of students to the east would be able to walk to school.

Also, the neighborhoods in the township to the west of the school are fairly dense and good candidates for sidewalks. Completing the sidewalk system in these township neighborhoods would also permit 30 existing bus riders to walk to school.

Hunt School is one of two schools where the addition of sidewalks and crosswalks in the city would permit a significant number of students to walk to school that currently cannot use the existing walk and crosswalk system.

FIGURE 6. HUNT ELEMENTARY SCHOOL**Legend:****One Mile Walking Distance Boundaries:**

- Existing Walk and Crosswalk System
- Expanded City Network
- Completed City and Township Network
- 1 Mile Radius From School

Existing Network Elements:

- School Location
- School Bus Riders
- Existing Sidewalks, Paths and Crosswalks

Other Features:

- Freeway
- Arterial Roadway
- + + + Railroad
- River
- Water Body
- Parks

Jackson Public School District:

- City of Jackson
- Townships

McCULLOCH ELEMENTARY SCHOOL

Grades	Pre-school – Sixth Grade			
Total Students:	232			
Students on Regular Bus:	202	87%		
Number of Regular Buses:	3			
Number of Students/ Bus Route:	116/081MCC	57/082MCC	29/083MC	
Students on Special Education Buses:	5	1%		
Number of Special Education Buses:	-			
Number of Students/ Bus Route:	-			
Students that walk, bike or are driven to school:	27	12%		

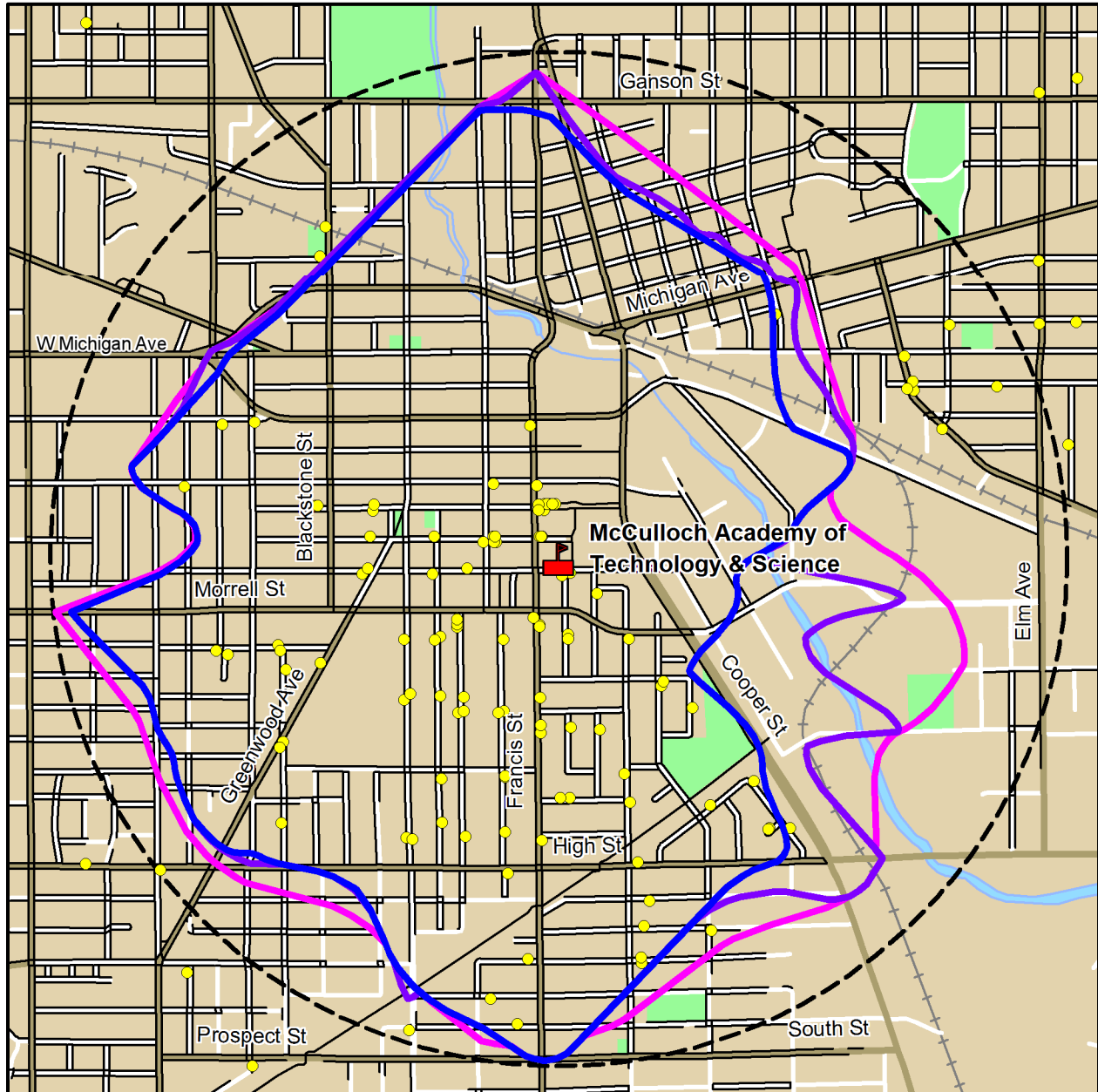
EXISTING BUS RIDERS WITHIN A 1 MILE WALKING DISTANCE

For each of the following three scenarios the number of students who live within a 1 mile actual walking distances from school and the corresponding number of buses this represents where determined.

Existing Walk and Crosswalk Network	154	2.0 Buses
Expanded City Network	156	2.0 Buses
Completed City and Township Network	158	2.1 Buses

NOTES

McCulloch Elementary School is located immediately south of downtown and surrounded on three sides by densely populated neighborhoods with a nearly complete sidewalk system. 76% of the students currently being bused are within a mile walking distance of the school using the existing walk and crosswalk system.

FIGURE 7. MCCULLOCH ELEMENTARY SCHOOL**Legend:****One Mile Walking Distance Boundaries:**

- Existing Walk and Crosswalk System
- Expanded City Network
- Completed City and Township Network
- 1 Mile Radius From School

Existing Network Elements:

- School Location
- School Bus Riders
- Existing Sidewalks, Paths and Crosswalks

Other Features:

- Freeway
- Arterial Roadway
- + + + — Railroad
- River
- Water Body
- Parks

Jackson Public School District:

- City of Jackson
- Townships

NORTHEAST ELEMENTARY SCHOOL

Grades	Kindergarten – Sixth Grade			
Total Students:	626			
Students on Regular Bus:	354	56%		
Number of Regular Buses:	7			
Number of Students/ Bus Route:	56/007NE	42/008NOR	61/009NOR	53/010NOR
	47/011NOR	64/012NOR	31/013NOR	
Students on Special Education Buses:	26	4%		
Number of Special Education Buses:	2			
Number of Students/ Bus Route:	15/SPE403	11/SPE404		
Students that walk, bike or are driven to school:	246	40%		

EXISTING BUS RIDERS WITHIN A 1 MILE WALKING DISTANCE

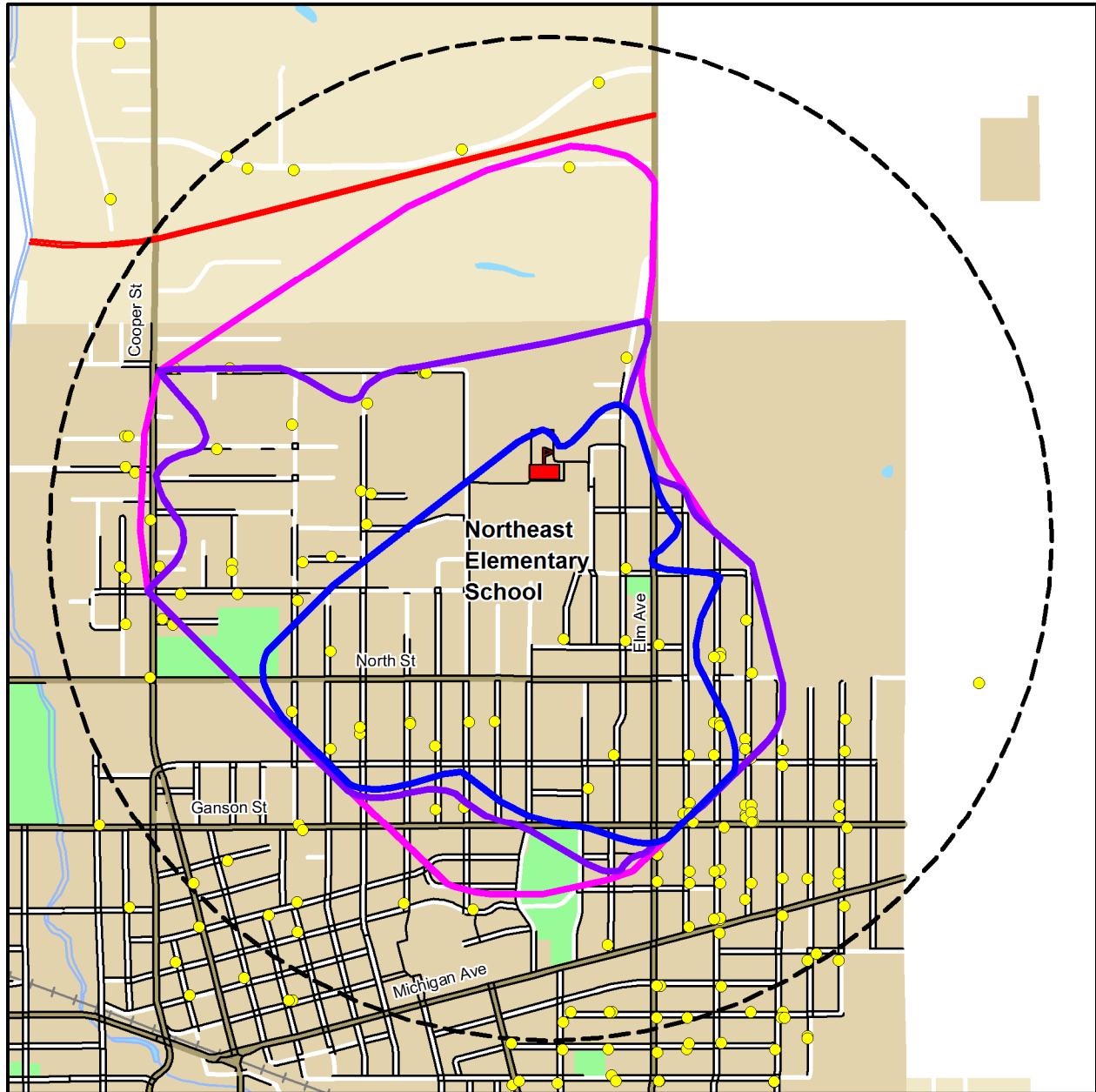
For each of the following three scenarios the number of students who live within a 1 mile actual walking distances from school and the corresponding number of buses this represents where determined.

Existing Walk and Crosswalk Network	27	0.4 Buses
Expanded City Network	56	0.7 Buses
Completed City and Township Network	65	0.8 Buses

NOTES

The majority of Northeast Elementary School's students come from the neighborhood to the south and west of the school. Only 8% of the students currently being bused are within a mile walking distance of the school using the existing walk and crosswalk system. This is due to the sparse sidewalk system near the school.

Northeast Elementary School is one of two schools where the addition of sidewalks and crosswalks in the city would permit a significant number of students to walk to school that currently cannot use the existing walk and crosswalk system.

FIGURE 8. NORTHEAST ELEMENTARY SCHOOL**Legend:****One Mile Walking Distance Boundaries:**

- Existing Walk and Crosswalk System
- Expanded City Network
- Completed City and Township Network
- 1 Mile Radius From School

Existing Network Elements:

- School Location
- School Bus Riders
- Existing Sidewalks, Paths and Crosswalks

Other Features:

- Freeway
- Arterial Roadway
- - - - Railroad
- River
- Water Body
- Parks

Jackson Public School District:

- City of Jackson
- Townships

SHARP PARK ACADEMY

Grades	Preschool – Forth Grade				
Total Students:	284				
Students on Regular Bus:	189	67%			
Number of Regular Buses:	6				
Number of Students/ Bus Route:	37/050CFS	20/052CFS	25/059CFS	50/060CFS	
	31/061CFS	26/062CFS			
Students on Special Education Buses:	2	1%			
Number of Special Education Buses:	-				
Number of Students/ Bus Route:	-				
Students that walk, bike or are driven to school:	90	32%			

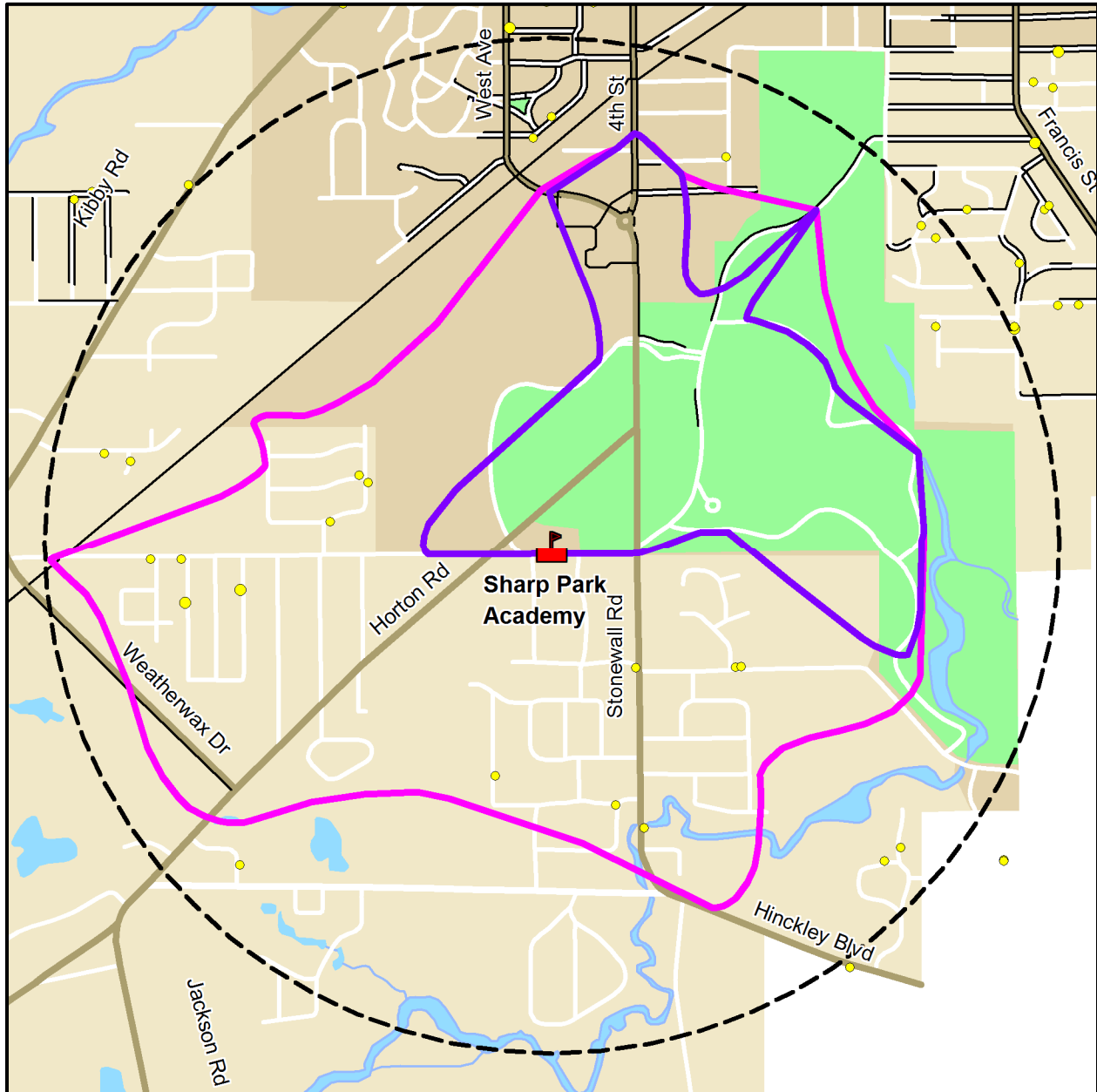
EXISTING BUS RIDERS WITHIN A 1 MILE WALKING DISTANCE

For each of the following three scenarios the number of students who live within a 1 mile actual walking distances from school and the corresponding number of buses this represents where determined.

Existing Walk and Crosswalk Network	0	0.0 Buses
Expanded City Network	0	0.0 Buses
Completed City and Township Network	13	0.2 Buses

NOTES

Sharp Park Academy is located near the city / township border and adjacent to a large park. The combination of which places the school a considerable distance from most students even if a sidewalk network was to be added.

FIGURE 9. SHARP PARK ACADEMY**Legend:****One Mile Walking Distance Boundaries:**

- Existing Walk and Crosswalk System
- Expanded City Network
- Completed City and Township Network
- 1 Mile Radius From School

Existing Network Elements:

- School Location
- School Bus Riders
- Existing Sidewalks, Paths and Crosswalks

Other Features:

- Freeway
- Arterial Roadway
- + + + + Railroad
- River
- Water Body
- Parks

Jackson Public School District:

- City of Jackson
- Townships

ANN FIRTH MIDDLE SCHOOL

Grades	Kindergarten – Sixth Grade			
Total Students:	108			
Students on Regular Bus:	82	76%		
Number of Regular Buses:	3			
Number of Students/ Bus Route:	34/100FRH	28/200FRH	20/250FRH	
Students on Special Education Buses:	-			
Number of Special Education Buses:	-			
Number of Students/ Bus Route:	-			
Students that walk, bike or are driven to school:	26	24%		

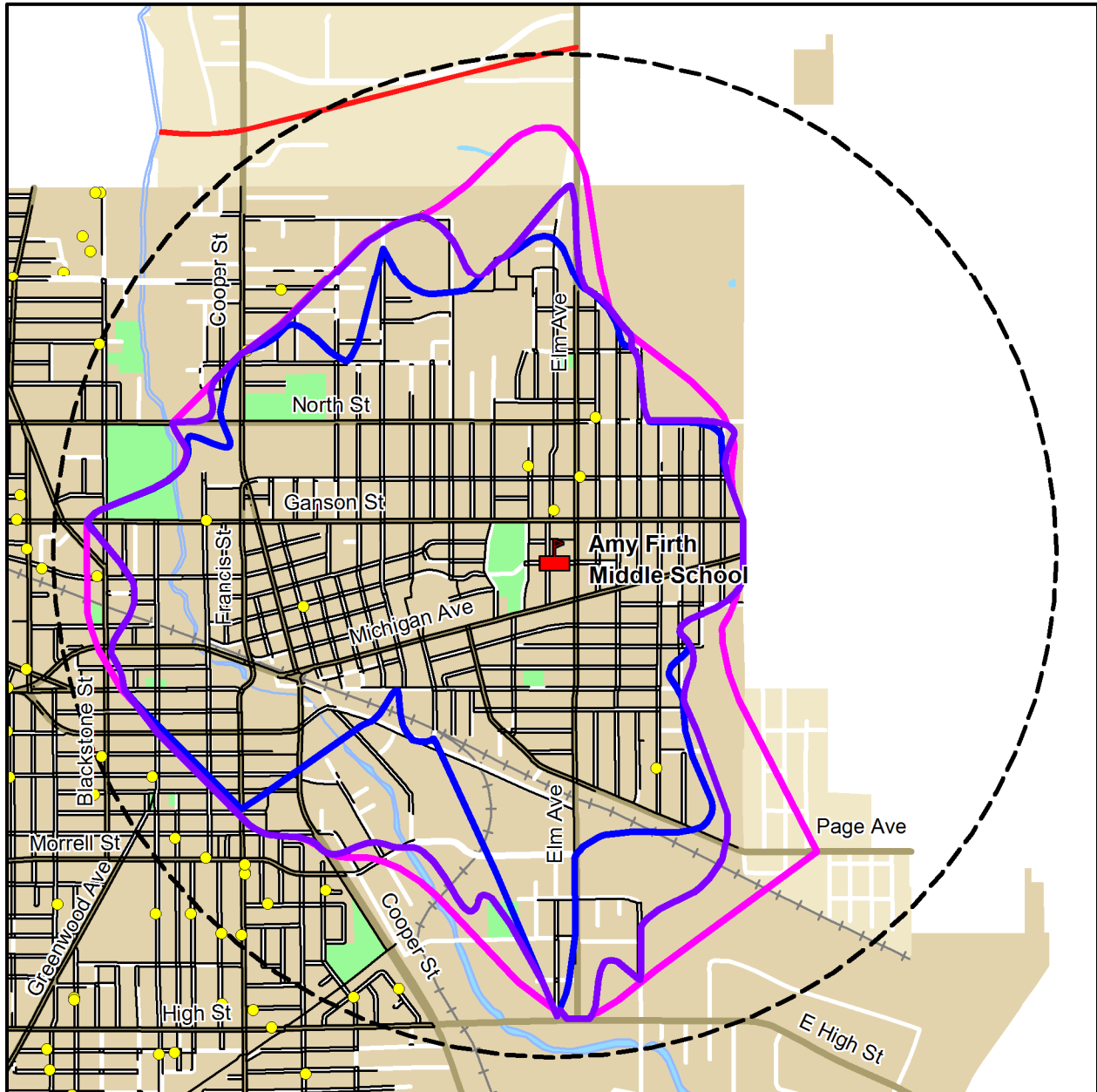
EXISTING BUS RIDERS WITHIN A 1 ½ MILE WALKING DISTANCE

For each of the following three scenarios the number of students who live within a 1 ½ mile actual walking distances from school and the corresponding number of buses this represents where determined.

Existing Walk and Crosswalk Network	7	0.1 Buses
Expanded City Network	8	0.1 Buses
Completed City and Township Network	10	0.1 Buses

NOTES

Amy Firth Middle School is a small alternative study program that draws from all over the school district. Thus there are a limited number of students within walking distance.

FIGURE 11. ANN FIRTH MIDDLE SCHOOL**Legend:****1 1/2 Mile Walking Distance Boundaries:**

- Existing Walk and Crosswalk System
- Expanded City Network
- Completed City and Township Network
- 1 1/2 Mile Radius From School

Existing Network Elements:

- School Location
- School Bus Riders
- Existing Sidewalks, Paths and Crosswalks

Other Features:

- Freeway
- Arterial Roadway
- + + + + Railroad
- River
- Water Body
- Parks

Jackson Public School District:

- City of Jackson
- Townships

MIDDLE SCHOOL AT PARKSIDE

Grades	Kindergarten – Sixth Grade				
Total Students:	868				
Students on Regular Bus:	599	69%			
Number of Regular Buses:	12				
Number of Students/ Bus Route:	28/101PJH	56/102PJH	39/103PJH	57/104PJH	
	72/105PJH	82/106PJH	48/107PJH	37/108PJH	
	26/109PJH	56/110PJH	45/111PJH	53/112PJH	
Students on Special Education Buses:	19	2%			
Number of Special Education Buses:	2				
Number of Students/ Bus Route:	9/SPE405	10/SPE406			
Students that walk, bike or are driven to school:	250	29%			

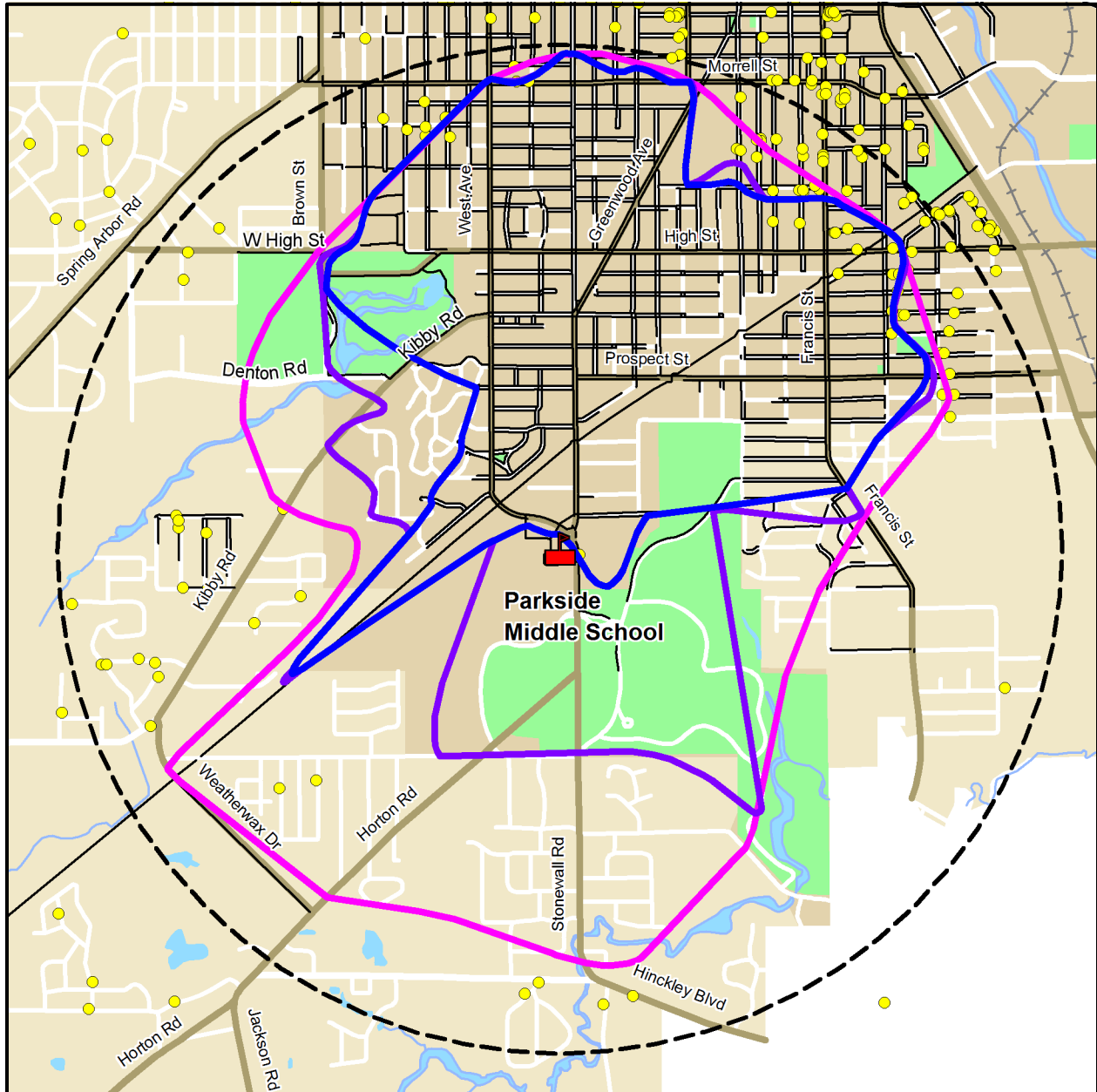
EXISTING BUS RIDERS WITHIN A 1 ½ WALKING DISTANCE

For each of the following three scenarios the number of students who live within a 1 ½ mile actual walking distances from school and the corresponding number of buses this represents where determined.

Existing Walk and Crosswalk Network	17	0.2 Buses
Expanded City Network	19	0.2 Buses
Completed City and Township Network	36	0.5 Buses

NOTES

Middle School at Parkside is located in the south side of town, adjacent to a large park. Thus its draw from more densely populated neighborhoods is limited. It is though close to the Falling Waters Trail that goes into the townships.

FIGURE 10. PARKSIDE MIDDLE SCHOOL**Legend:****1 1/2 Mile Walking Distance Boundaries:**

- Existing Walk and Crosswalk System
- Expanded City Network
- Completed City and Township Network
- 1 1/2 Mile Radius From School

Existing Network Elements:

- School Location
- School Bus Riders
- Existing Sidewalks, Paths and Crosswalks

Other Features:

- Freeway
- Arterial Roadway
- + + + + Railroad
- River
- Water Body
- Parks

Jackson Public School District:

- City of Jackson
- Townships

JACKSON HIGH SCHOOL

Grades	Tenth – Sixth Grade				
Total Students:	1641				
Students on Regular Bus:	798	48%			
Number of Regular Buses:	11				
Number of Students/ Bus Route:	120/140JHS	47/150JHS	68/149JHS	91/148JHS	
	61/147JHS	53/146JHS	49/145JHS	51/144JHS	
	57/143JHS	135/142JHS			
Students on Special Education Buses:	29	2%			
Number of Special Education Buses:	2				
Number of Students/ Bus Route:	12/SPE440	17/SPE441			
Students that walk, bike or are driven to school:	814	50%			

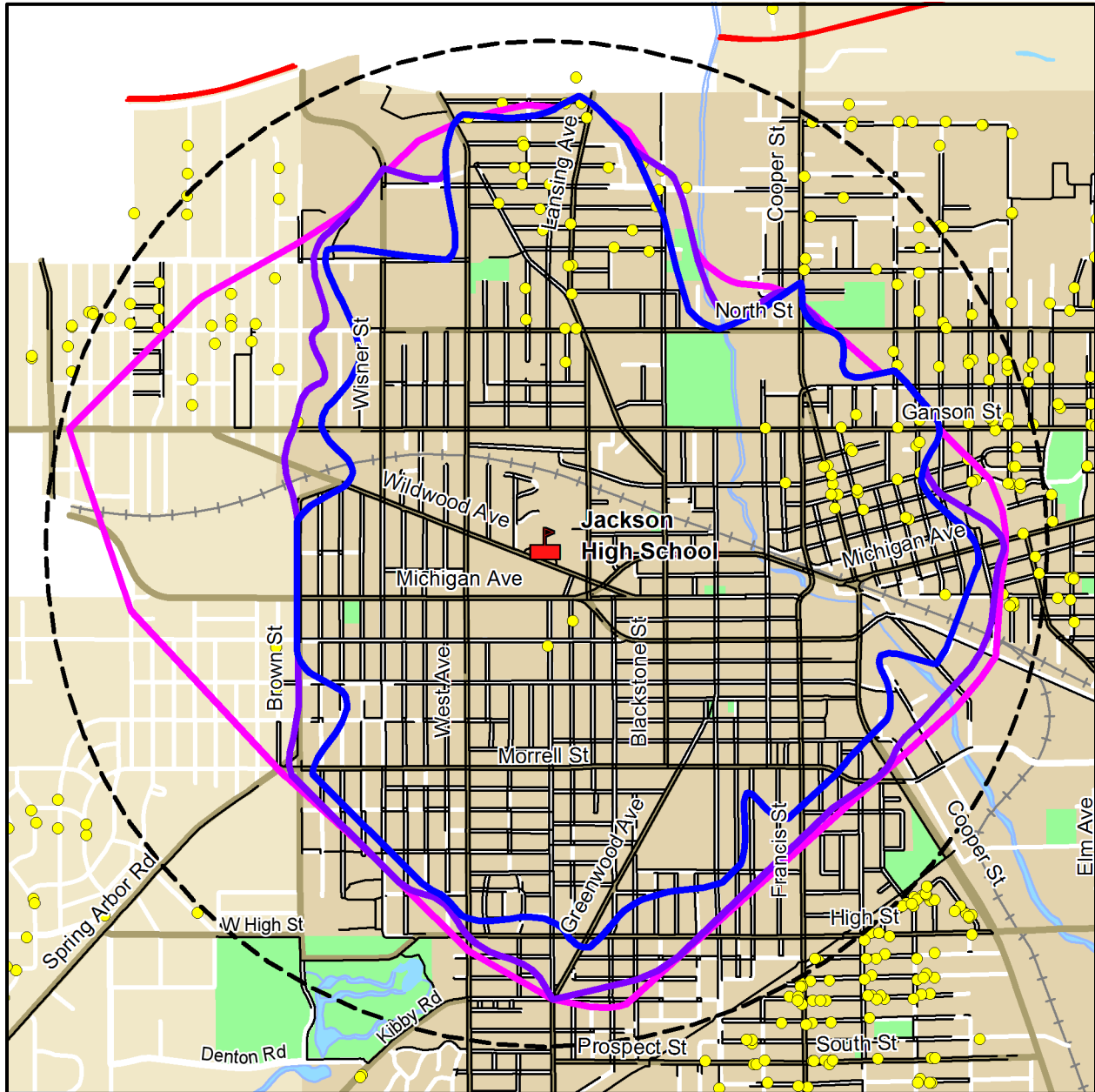
EXISTING BUS RIDERS WITHIN A 1 ½ WALKING DISTANCE

For each of the following three scenarios the number of students who live within a 1 ½ mile actual walking distances from school and the corresponding number of buses this represents where determined.

Existing Walk and Crosswalk Network	65	0.8 Buses
Expanded City Network	72	0.9 Buses
Completed City and Township Network	90	1.2 Buses

NOTES

Jackson High School is located in the heart of the densely populated neighborhoods and busing is only provided for students within the 1 ½ mile walking distances in the neighborhoods to the north and northeast. Those students who are bused from those neighborhoods do constitute about one bus though.

FIGURE 12. JACKSON HIGH SCHOOL**Legend:****1 1/2 Mile Walking Distance Boundaries:**

- Existing Walk and Crosswalk System
- Expanded City Network
- Completed City and Township Network
- 1 1/2 Mile Radius From School

Existing Network Elements:

- School Location
- School Bus Riders
- Existing Sidewalks, Paths and Crosswalks

Other Features:

- Freeway
- Arterial Roadway
- Railroad
- River
- Water Body
- Parks

Jackson Public School District:

- City of Jackson
- Townships

T.A. WILSON ACADEMY

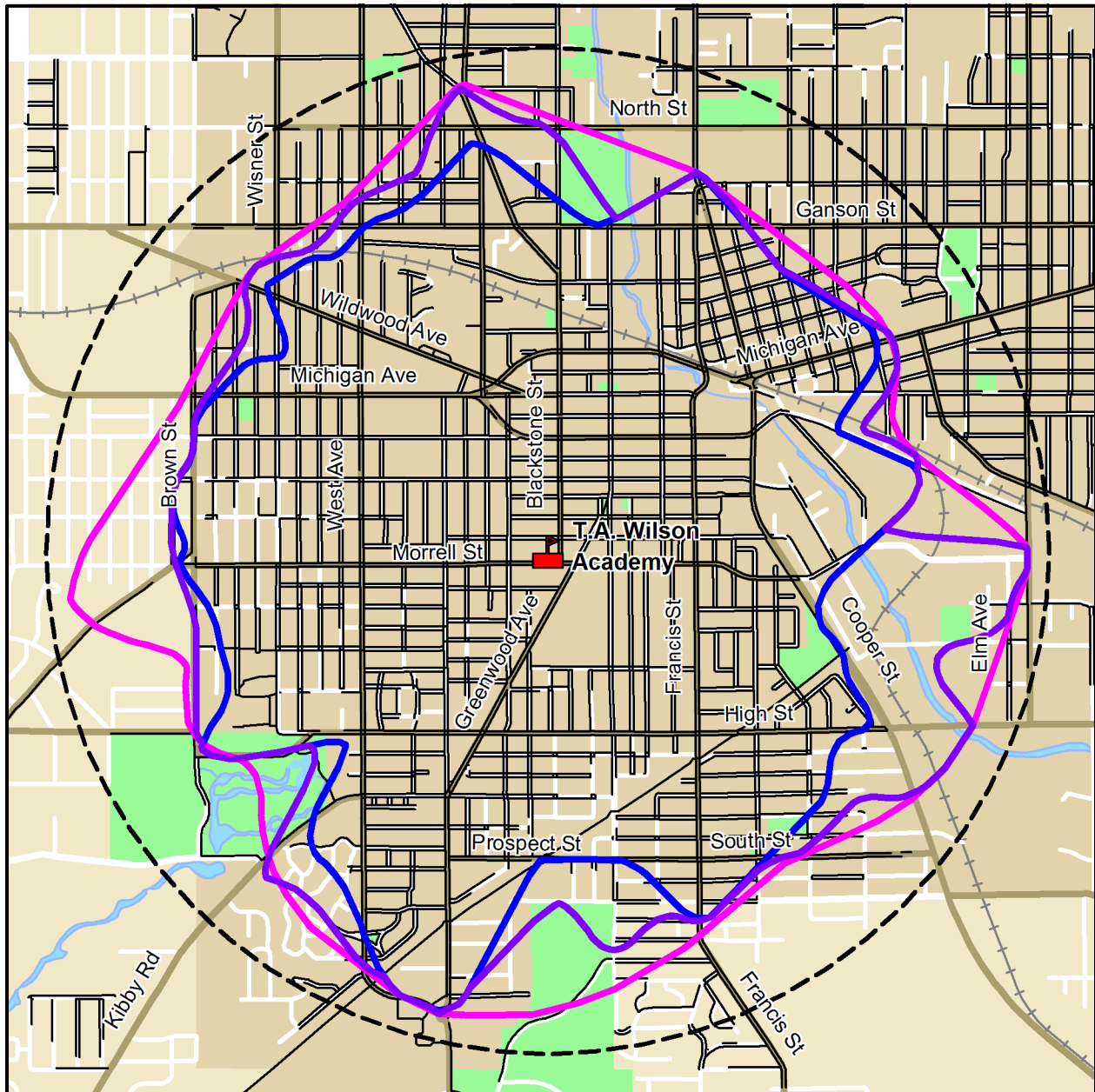
Grades

Ninth – Twelfth Grade

Total Students:

Approximately 275

No Bus Rider Data Provided

FIGURE13. T.A. WILSON ACADEMY**Legend:****1 1/2 Mile Walking Distance Boundaries:**

- Existing Walk and Crosswalk System
- Expanded City Network
- Completed City and Township Network
- 1 1/2 Mile Radius From School

Existing Network Elements:

- School Location
- School Bus Riders
- Existing Sidewalks, Paths and Crosswalks

Other Features:

- Freeway
- Arterial Roadway
- + + + + Railroad
- River
- Water Body
- Parks

Jackson Public School District:

- City of Jackson
- Townships

APPENDIX

SUMMARY OF POTENTIAL NEW WALKERS AND COST SAVINGS

School	Distance	Existing System			Completed City System			Comp. Twp. & City System		
		New	Equiv.	Transp.	New	Equiv.	Transp.	New	Equiv.	Transp.
		Walkers	Buses	Savings	Walkers	Buses	Savings	Walkers	Buses	Savings
Bennett E.S.	1 Mile	136	1.8	\$ 66,234	140	1.8	\$ 68,182	143	1.9	\$ 69,643
Cascades E.S.	1 Mile	79	1.0	\$ 38,474	85	1.1	\$ 41,396	90	1.2	\$ 43,831
Dibble E.S.	1 Mile	0	0.0	\$ -	0	0.0	\$ -	26	0.3	\$ 12,662
Frost E.S.	1 Mile	108	1.4	\$ 52,597	117	1.5	\$ 56,981	127	1.6	\$ 61,851
Hunt E.S.	1 Mile	37	0.5	\$ 18,019	58	0.8	\$ 28,247	90	1.2	\$ 43,831
MuCulloch E.S.	1 Mile	154	2.0	\$ 75,000	156	2.0	\$ 75,974	158	2.1	\$ 76,948
Northeast E.S.	1 Mile	27	0.4	\$ 13,149	56	0.7	\$ 27,273	65	0.8	\$ 31,656
Sharp Park Academy	1 Mile		0.0	\$ -	0	0.0	\$ -	13	0.2	\$ 6,331
Elementary School Totals		541	7.0	\$ 263,474	612	7.9	\$ 298,052	712	9.2	\$ 346,753
Amy Firth M.S.	1.5 Miles	7	0.1		8	0.1		10	0.1	
Middle School at Parkside	1.5 Miles	17	0.2		19	0.2		36	0.5	
Jackson H.S.	1.5 Miles	65	0.8		72	0.9		90	1.2	
T.A. Wilson Academy	1.5 Miles		0.0	\$ -		0.0	\$ -		-	\$ -
Middle & High School Totals		89	1.2		99	1.3		136	1.8	
		Avg. Bus Capacity		77						
		Avg. Yeraly Cost Per Bus								
		Staff		\$ 20,000						
		Depreciation		\$ 7,500						
		Fuel		\$ 8,000						
		Maintenance		\$ 2,000						
				\$ 37,500						

COST OF EXPANDED CITY SYSTEM

Expanded City System:							
Item		Quan.	Unit	Cost	City		
Crosswalks							
Local		188	Each	\$ 50	\$ 9,400		
Collector		11	Each	\$ 500	\$ 5,500	\$ 5,500	
Arterial		38	Each	\$ 15,000	\$ 570,000	\$ 570,000	
Total		237			\$ 584,900	\$ 575,500	
Sidewalks							
Local	333,893	63.2	Miles	\$ 135,000	\$ 8,537,037		
Collector	25,434	4.8	Miles	\$ 165,000	\$ 794,813	\$ 794,813	
Arterial	83,638	15.8	Miles	\$ 165,000	\$ 2,613,688	\$ 2,613,688	
	442,965	83.9			\$ 11,945,537	\$ 3,408,500	
Trails							
	786	0.15	Miles	\$ 200,000	\$ 29,773	\$ 29,773	
					\$ 12,560,210	\$ 4,013,773	

COST OF IMPROVEMENTS TO HUNT AND NORTHEAST ELEM. SCHOOLS

Hunt Elementary School Phase I					
Item	Feet	Quan.	Unit	Cost	Total
Crosswalks					
Local		8	Each	\$ 50	\$ 400
Collector		-	Each	\$ 500	\$ -
Arterial		5	Each	\$ 15,000	\$ 75,000
Total		13			\$ 75,400
Sidewalks					
Local	17,936	3.4	Miles	\$ 135,000	\$ 458,591
Collector	3,527	0.7	Miles	\$ 165,000	\$ 110,219
Arterial	8,308	1.6	Miles	\$ 165,000	\$ 259,625
					\$ 828,435
Trails	788	0.15	Miles	\$ 200,000	\$ 29,848
					\$ 933,683
Northeast Elementary School Phase I					
Item	Feet	Quan.	Unit	Cost	Total
Crosswalks					
Local		3	Each	\$ 50	\$ 150
Collector		-	Each	\$ 500	\$ -
Arterial		3	Each	\$ 15,000	\$ 45,000
Total		6			\$ 45,150
Sidewalks					
Local	35,986	6.8	Miles	\$ 135,000	\$ 920,097
Collector	-	-	Miles	\$ 165,000	\$ -
Arterial	828	0.2	Miles	\$ 165,000	\$ 25,875
					\$ 945,972
Trails	-	-	Miles	\$ 200,000	\$ -
					\$ 991,122
					\$ 1,924,805

METHODOLOGY

- This Study is based on students who currently ride the bus to school, but could have the potential to walk to school if they live within a specific distance. Students who are not eligible to ride the bus, or who are eligible but do not have a bus route number associated with their name were not included. This includes School of Choice Students who would not be given a bus since they are choosing to attend that school. Also, it is assumed that students who currently walk to school will continue to do so, removing them from the group being studied.
- Students classified as attending a school with the abbreviation “SPE” at the end of its name were not included in the study group. These students are in special education and require specific bus routes to transport them.
- Students who live with-in the district but do not attend public school, were not included in the study, since they do not affect the bus route.
- Data was geocoded based on the students ‘pick-up’ address.
- When geocoding, the addresses at the following streets could not be found, so they were not geocoded; Ashton Ridge Road, Blair Park Drive, Woods Circle Drive, Heritage Blvd., Wandering Creek, Maule, Lexington Blvd., and Gallery Place Drive. This could be a result of new roads in the area that have not been updated, or spelling errors that could have occurred within the original data.
- Out of 4,139 total Standard Bus Riders, 4,066 Standard Bus Riders were successfully geocoded. 73 students were unsuccessfully geocoded resulting in over 98% accuracy in this data.