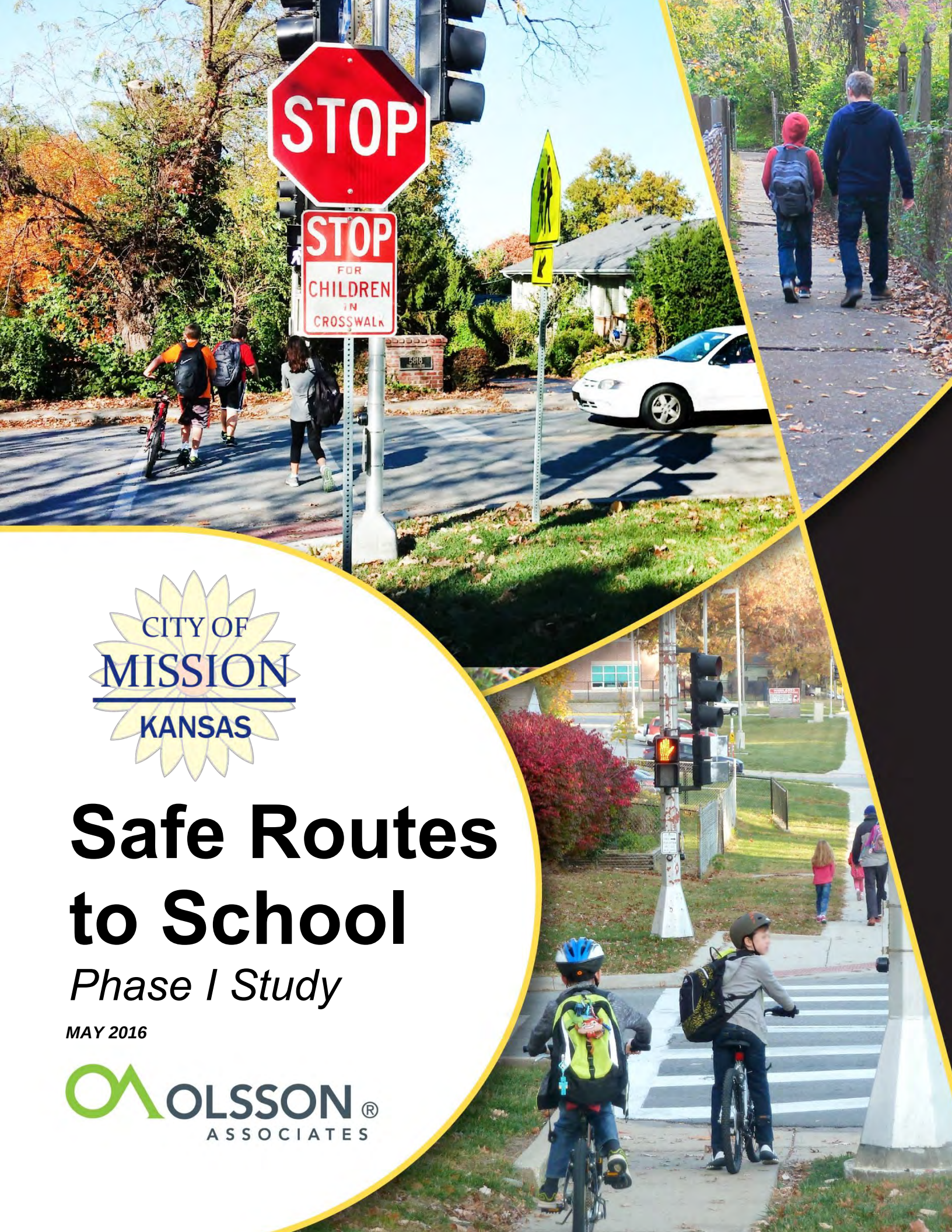

CITY OF MISSION KANSAS

Safe Routes to School

Phase I Study

MAY 2016

OLSSON ASSOCIATES

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Acknowledgments

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Principal Paul Colwell	Horizons High School
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Executive Summary

Walking and biking to school has dramatically declined over the past generation for kids in the United States. In 1969, 48 percent of children, age five to fourteen, usually walked or biked to school. By 2009, this percentage dropped to 13 percent[1]. Childhood obesity rates over the same period have risen significantly, from seven percent to seventeen percent[2]. The cause of this drop in walking or biking to school is linked to land use and development patterns that serve as obstacles to walking; roadway design that prioritize vehicular speed and mobility over considerations for pedestrian; and an increased cultural expectation that children should be bussed or driven to school.

In response to these trends, Congress established a national Safe Routes to School program in 2006 to improve the number of children walking and biking between home and school. Safe Routes to School projects and programs are intended to be comprehensive and combine five different components, which are commonly referred to as the **five E's:**

- **Evaluation:** Monitoring data, trends, and outcomes before and after intervention.
- **Engineering:** Improving physical infrastructure surrounding schools that reduce vehicular speed and potential vehicular-pedestrian/bicycle conflicts, and improve the safer and more accessible sidewalks, crossings, bike facilities, or trails.
- **Education:** Teaching children, parents, and staff about the broad range of transportation choices, and important walking and bicycling safety skills; as well as educating drivers on safety in school zones.
- **Encouragement:** Organized events or activities to promote walking and biking.
- **Enforcement:** Partnering with law enforcement to improve compliance of speeds, yielding to pedestrians, and community enforcements such as crossing guard programs.

By studying and implementing programs that span these multiple disciplines, cities can best increase the safety and attractiveness of walking and biking for students. Improving the ability for students to walk and bike to school will increase students' physical activity, improve their health, and provide them a greater sense of independence.

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[1] *How Children get to School; School Travel Patterns from 1960 to 2009.* Prepared by the National Center for Safe Routes to School, November 2011.
[2] Flegal, K.M., Carroll, M.D., Ogden, C.L., & Curtin, L.R. (2010). Prevalence and trends in obesity among U.S. adults, 1999-2008. *Journal of the American Medical Association, 303,* 235-241

In 2014, the City applied for and received federal financial assistance to conduct a Safe Routes to School study that would evaluate opportunities for increasing walking and biking among the four schools that serve students in Mission:

- Highlands Elementary School – 6200 Roe Avenue, Mission, KS
- Rushton Elementary School, 6001 West 52nd Street, Mission, KS
- Horizons High School, 5900 Lamar Avenue, Mission, KS
- Shawnee Mission North, 7401 Johnson Drive, Overland Park, KS

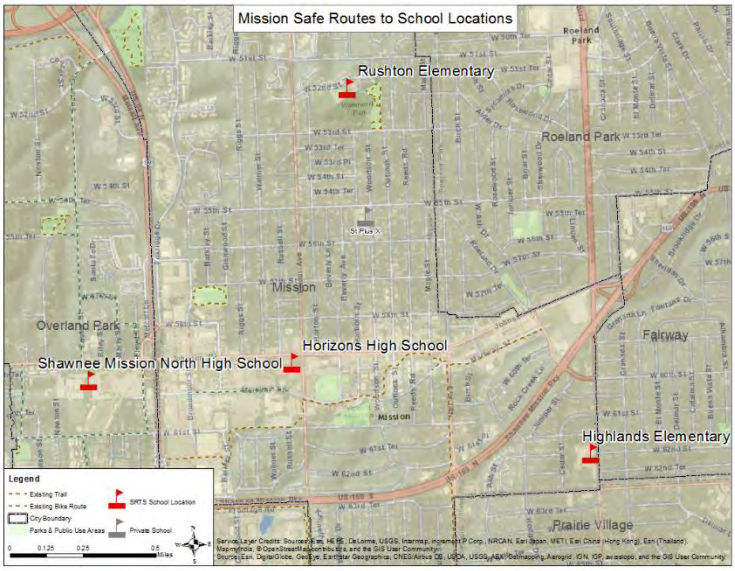

Figure 1 Mission Safe Routes to School study sites

The City selected Olsson Associates in 2015 to serve as the project consultant. In cooperation with City staff, Olsson performed bicycle and pedestrian counts and organized public outreach efforts over the 2015 – 2016 school year. Together, the study team and the school community helped identify and evaluate those programmatic changes or infrastructure improvements that would make walking or biking safer and more enjoyable. This report presents the results of the study, including a summary of the team's activities and their recommendations.

While the study is directed to decision-makers at the City of Mission and the Shawnee Mission School District, the participation of other actors will be necessary to implement the study's recommendations. These may include neighboring cities, including the City of Overland Park and the City of Prairie Village; other government agencies, such as Johnson County and the Kansas City Area Transportation Authority; and the continued participation of community stakeholders, parents, staff, and students.

School Reports

Pedestrian and bicycle counts were conducted at each school, as well as a workshop where parents, students, and staff were invited to provide information about the walking and bicycling needs to city staff and the consultant team. As part of this workshop, participants conducted a walking audit in the streets and neighborhoods immediately around each school. Team members also conducted stakeholder interviews and outreach with PTAs, school administrators, and the Johnson County health department.

Each school's section presents:

- A description of the school, its surroundings, and any unique conditions;
- A map showing surrounding sidewalk coverage (based on City of Mission data);
- Bicycle and pedestrian counts that show where students travel to and from;
- The outcomes of public engagement held for the subject school, and;
- A list of proposed improvements, with narrative and exhibits.

Recommendations

This study recommends **12** programming improvements and **22** infrastructure improvements at a total estimated cost of **$593,000.** An itemized list of recommendations is presented in each school's section as well as narrative and justification.

Table 1 Summary of Recommendations by School

Summary of Recommendations by School			
School	**Programming**	**Infrastructure**	**Est. Costs**
Highlands Elementary	5	7	$233,000
Rushton Elementary	5	4	$136,000
Horizons High School	1	5	$86,000
Shawnee Mission North High School	1	6	$138,000
Total	**12**	**22**	**$593,000**

Programmatic recommendations represent new or additional activities that can be performed by the City, the School District, or other community partners. They include programs that educate students about bicycling and walking and encourage them to do so through incentives or group programs. They may also include ongoing changes to policy or day-to-day behavior by an actor in the plan, such as opening / closing procedures or police speed enforcement. While these recommendations are often the lowest cost to implement, they require sustained effort to make a meaningful difference. In addition to the recommendations provided for each school, Appendix A provides some national program examples also suitable for local implementation.

Infrastructure recommendations involve changes to the physical environment pedestrians and bicyclists use to get to school. They are often the City's responsibility to implement, but other actors are occasionally responsible. Examples range from basic maintenance tasks –

such as repainting faded crosswalks – to significant capital expenditures, such as new sidewalks or re-configured intersections. Appendix B includes diagrams and preliminary estimates of costs for each infrastructure recommendation.

Summary of Elementary School Recommendations

Table 2 Highlands Elementary Recommendations

Highlands Elementary Recommendations	
Ensure snow and debris removal from schools and sidewalks	Programmatic
Consistently unlock gates to allow pedestrian entry through rear access	Programmatic
Identify champions and develop encouragement programs	Programmatic
Implement “walking school buses” and/or “bike trains”	Programmatic
Sponsor a bike rodeo for students	Programmatic
New sidewalk on the west side of Cedar St. from 63rd St. to 61st Terr.	$115,000
Replace sidewalk at back south entrance, including connection to asphalt	$26,000
Replace sidewalk at back north entrance between fences	$29,000
New pedestrian crossing at south back entrance	$8,000
New pedestrian crossing at north back entrance	$12,000
New rectangular rapid flashing beacon at Nall and 63rd Terr.**	$24,000
Reconfigure traffic island crossing at 63rd Terr. and Roe**	$19,000
Subtotal	**$233,000**
*** Improvements are or may be in Prairie Village*	

Table 3 Rushton Elementary Recommendations

Rushton Elementary Recommendations	
Ensure snow and debris removal from schools and sidewalks	Programmatic
Evaluate opening the fire gate between The Falls and Riggs	Programmatic
Identify champions and develop encouragement programs	Programmatic
Implement “walking school buses” and/or “bike trains”	Programmatic
Sponsor a bike rodeo for students	Programmatic
Crosswalk upgrades on 52nd St. (two crossings)	$17,000
Upgrade crosswalk at 53rd and Outlook	$33,000
Stripe bike lane on Lamar from Shawnee Mission Pkwy. to Foxridge	$75,000
Upgrade crosswalk at 51st St. and Woodson	$8,000
Subtotal	**$136,000**

Summary of High School Recommendations

Table 4 Horizons High School Recommendations

Horizons High School Recommendations	
Explore transit and bikesharing opportunities	Programmatic
Add pedestrian lighting on Lamar from Johnson Dr. to 51st St. (one side)	$19,000
Optimize pedestrian signal timing at Johnson Dr. and Lamar Avenue	$1,000
Optimize pedestrian signal at Shawnee Mission Pkwy. and Lamar	$1,000
Add pedestrian refuge island on east leg of Shawnee Mission Pkwy. and Lamar Avenue	$30,000
Complete crosswalks on west and north legs of Shawnee Mission Pkwy. and Lamar Avenue	$35,000
Subtotal	**$86,000**

Table 5 Shawnee Mission North High School Recommendations

Shawnee Mission North High School Recommendations	
Explore transit and bikesharing opportunities	Programmatic
Upgrade bicycle racks**	$4,000
Optimize pedestrian signal timing at 61st & Metcalf Ave.	$1,000
Realign cross walk at south traffic island at Metcalf Lane & Johnson Dr.**	$10,000
Realign cross walk at north traffic island at Metcalf Lane & Johnson Dr.**	$10,000
Sidewalks on south side of Johnson Drive west of Broadmoor	$44,000
Sidewalks on the west side of Broadmoor from Johnson Drive to Martway	$69,000
Subtotal	**$138,000**
** *Improvements are or may be in Overland Park*	

Next Steps

The City Council should direct staff to pursue the implementation of this study's recommendations, and begin to plan for capital improvements in the City's Community Investment Program (CIP). While many proposals may exist to improve student mobility and safety, these represent the highest priorities identified by the study team over the last year.

The City will continue to rely on its partners at the School District and in the community to successfully achieve the goals of Safe Routes to School, and it should continue to engage them periodically. This study should be the *next* step in creating a positive relationship among these diverse stakeholders for the benefit of students, and not the only step.

Funding assistance is available from a number of sources, primarily in the form of Federal transportation funding awarded by the Mid-America Regional Council on behalf of the Kansas Department of Transportation. Johnson County Health also informed the study team that small-scale funding is available that would be appropriate for some of the study recommendations.

This report necessarily focuses on the areas immediately surrounding each school and on proposing the highest impact changes that can promote student mobility and safety. However, the success of student walking and bicycling is in many ways dependent on the health of bicycle and pedestrian access citywide. For example, gaps in the sidewalk network between students and schools will remain an important topic even after all recommended improvements are constructed. Cities can perform an additional Safe Routes study focused on these links later, but often choose to approach this problem in a community-wide, systematic way:

- By adopting a **Complete Streets** policy. The policy's goal is to ensure that the City balances the needs of all street users as it develops the street network. In practice, this means that the City consistently plans for constructing pedestrian and bicycle improvements in tandem with street improvements, and often require projects to meet specific criteria if they do not include those improvements (e.g., the facilities would be unsafe or cost-prohibitive). These policies can help bridge missing links between students and schools over time.

- By pursuing a **bicycle and pedestrian connectivity plan.** Connectivity plans help to identify needs and establish priorities for investment and improvement throughout the community. They typically define key corridors and future key connection opportunities, and the City's desired level of service for users across various areas of the community. They may also begin to set policy as to what facilities (e.g., preferred sidewalk widths, shared-use trails, and bicycle lanes) will be built where (e.g. what facilities are appropriate for neighborhood streets?). The same improvements that benefit the community at-large will benefit students as well.

The balance of this report provides more detailed information on the study and analysis completed at each school, including the programmatic and infrastructure recommendations developed for each.

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Highlands Elementary

Highlands Elementary is located at 6200 Roe Avenue, and had a 2015-2016 enrollment of 311 students. Roe Avenue fronts the school, and had a 2013 daily traffic count of 11,460 vehicles.

The majority of Highland's enrollment area currently is outside of Mission, generally to the east of both the city limit and the school. Mission represents 423 dwelling units, or 21.5%, of the 1964 dwelling units within the Highlands boundary. However, Highlands informally reports that a substantial number of Mission students transfer into the school each enrollment year. It is unclear if future changes to the District's transfer policy will reduce this volume in the future.

Bicycle and pedestrian counts were conducted on October 20th, 2015. More students walked or biked in the afternoon, than in the morning. 33 percent of students walked or biked home in the afternoon, compared to 27 percent of students walking or biking in the morning.

Most pedestrians or bicyclists accessed the school along 62nd Street from the east. 62nd Street feeds into a large residential neighborhood, and the presence of a pedestrian crossing signal and crossing guard at 62nd Street may entice walkers and bikers to feed into 62nd Street. Pedestrians and some bicyclists also accessed the school from the north and south along Roe Avenue. Finally, a smaller amount of users accessed the two back entrances of the school from Cedar Street.

Two separate sidewalk access corridors directly connect Highlands Elementary to the neighborhood west of the school. These access corridors travel between houses, and without them, students would have to walk completely around the school on adjacent streets to access the school from the front. The presence of these corridors greatly increases the appeal of walking to students west of the school.

The location of sidewalks within the City of Mission and around Highlands Elementary is shown on Figure 2. Pedestrian and bicycle counts are shown in Figure 3.

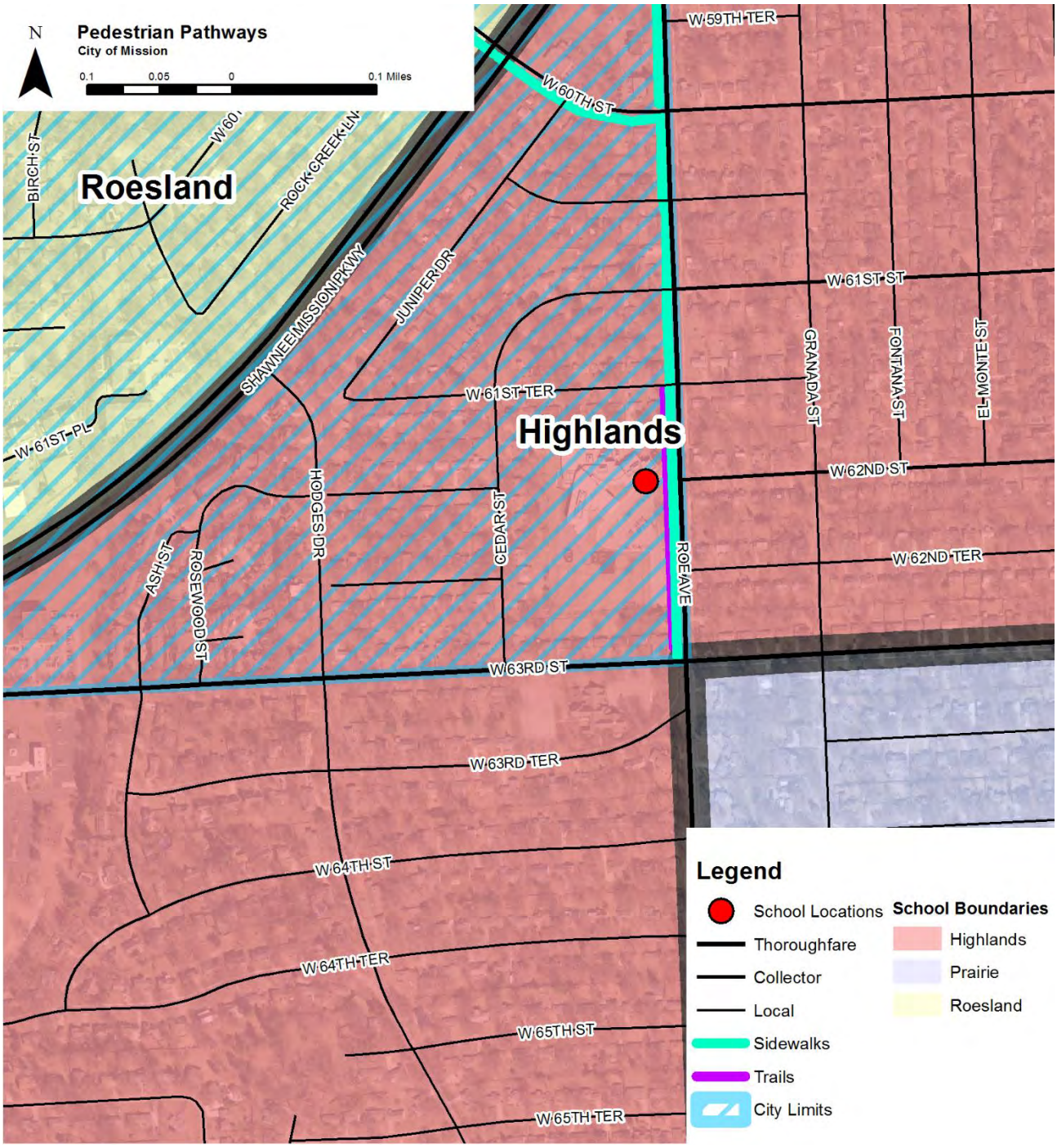

Figure 2 *Sidewalk inventory near Highlands Elementary.*
Note: Data only available within Mission city limits.

Map Source: City of Mission

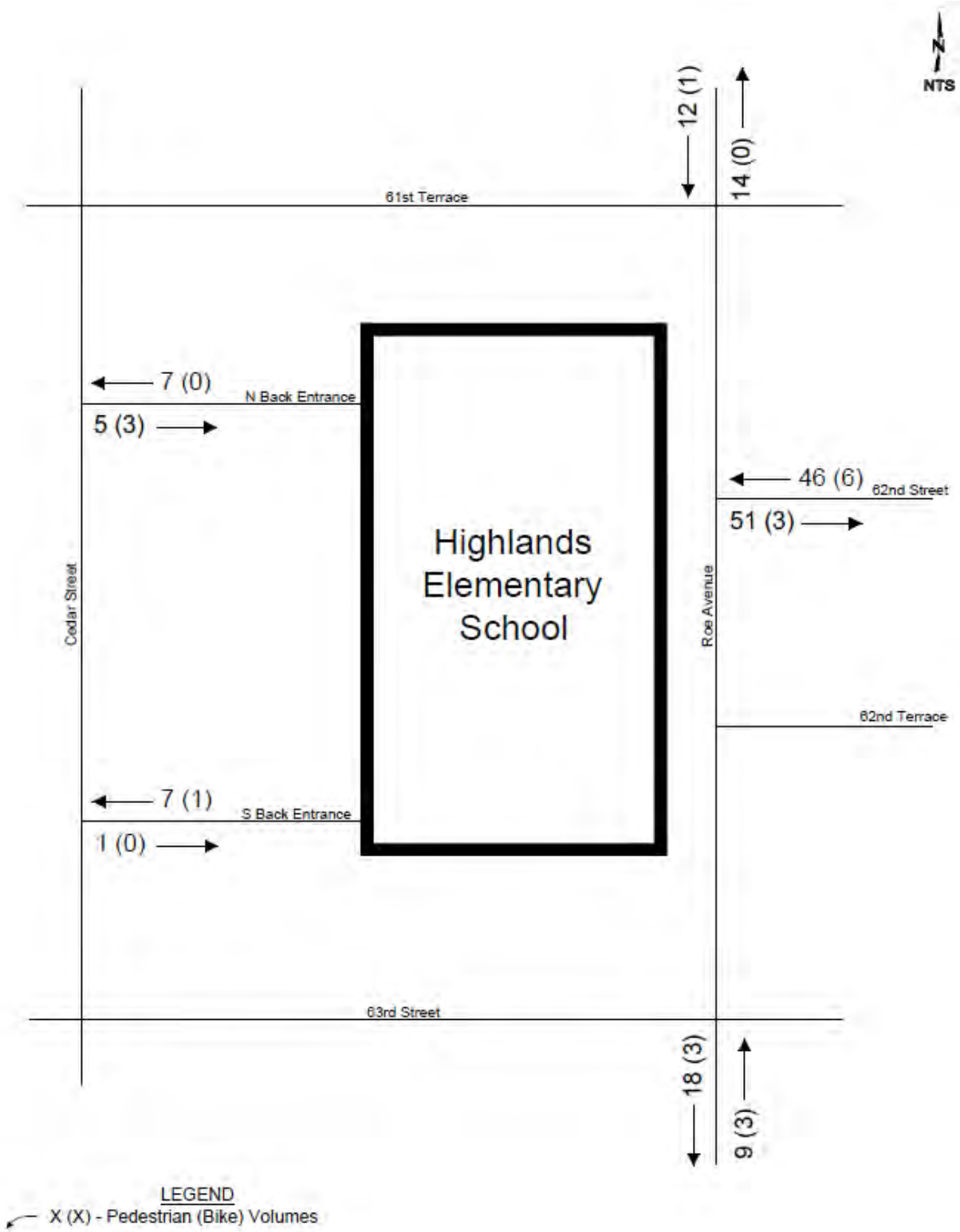

Figure 3 Highlands Elementary walking and bicycling counts

Public Engagement

The study team engaged members of the Highlands Elementary community throughout their work. City and consultant team staff met with the PTA on November 2nd, 2015 to answer questions and collect preliminary input about the biking and walking needs of the school community. The PTA informed the study staff that the school has previously participated in the national Walk to School and Bike to School days.

A workshop was held on November 12th, 2015. Flyers were posted throughout the school and sent home inviting students, parents, and staff to attend. During the workshop, participants discussed active transportation needs and, using an aerial map, identified locations that parents, staff, and other stakeholders considered safe or unsafe, as well as routes that were safe, commonly used, or felt unsafe.

Workshop participants participated in a walking audit conducted immediately after the workshop. Members of the study team and the school's Principal reviewed walking conditions around the school.

Figure 4 Highlands Safe Routes to School workshop

Figure 5 Highlands Elem. community members discussing locations

Figure 6 Highlands walking audit at Roe Avenue crosswalk

Figure 7 Highlands walking audit at rear of school, northern back entrance

Notable comments from the Highlands public engagement sessions are summarized in Figure 8, and include:

- Lots of traffic on 63rd Street south of the school, and Roe Avenue.
- Lack of snow removal on some sidewalks / walking routes inside the school perimeter.
- Potential for pedestrian / vehicle conflicts at entry point of school.
- The two back entrances of the school from Cedar Street offer direct access to the school, but the sidewalk is in poor condition at various locations.
- There is no designated crossing across Cedar Street, or sidewalk along Cedar Street.
- Several streets surrounding the school lack sidewalks on either side and force students to walk along the street.

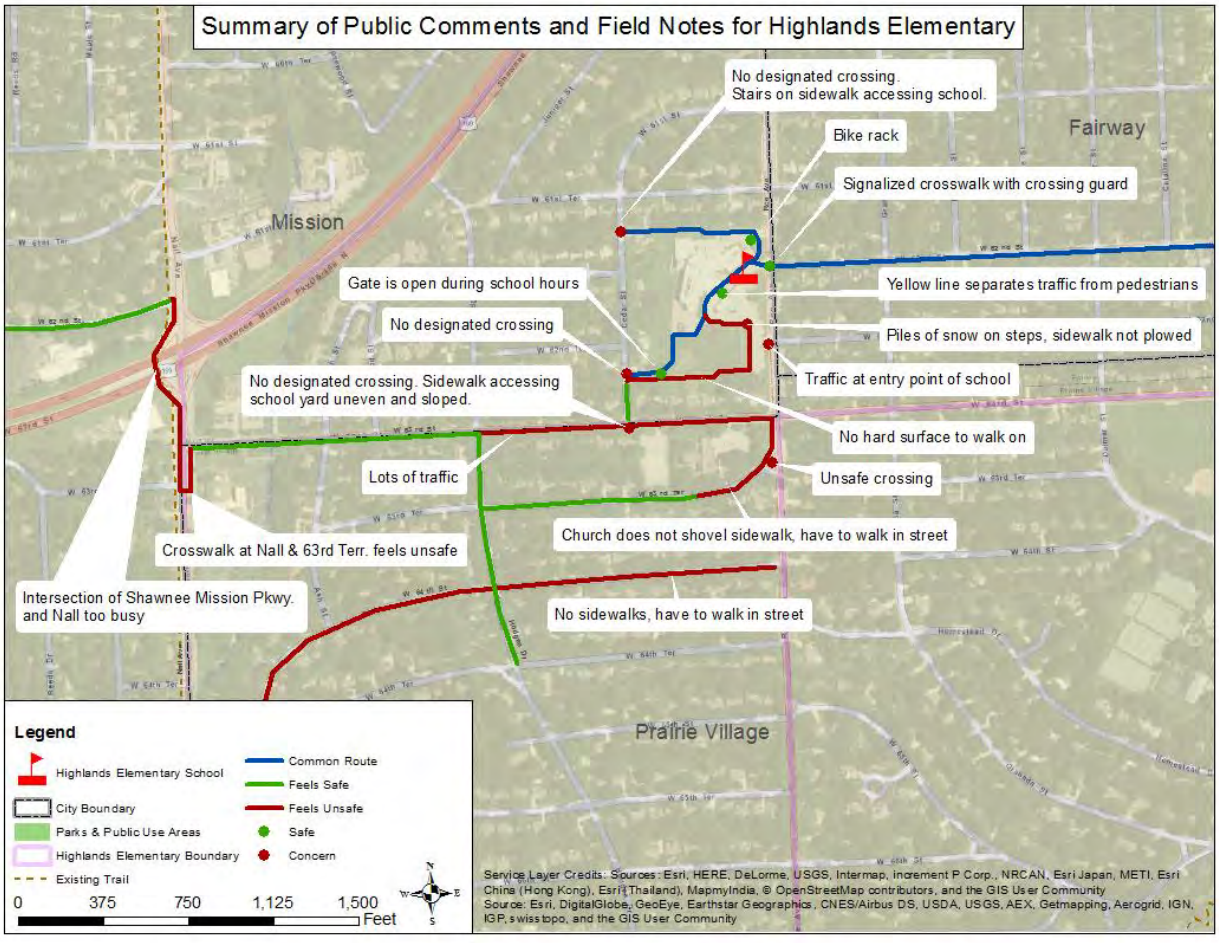

Figure 8 Highlands Elementary public comments and walking audit notes

Recommendations Summary

Table 6 Highlands Elementary Recommendations

Highlands Elementary Recommendations	
Ensure snow and debris removal from schools and sidewalks	Programmatic
Consistently unlock gates to allow pedestrian entry through rear access	Programmatic
Identify champions and develop encouragement programs	Programmatic
Implement “walking school buses” and/or “bike trains”	Programmatic
Sponsor a bike rodeo for students	Programmatic
New sidewalk on the west side of Cedar St. from 63rd St. to 61st Terr.	$115,000
Replace sidewalk at back south entrance, including connection to asphalt	$26,000
Replace sidewalk at back north entrance between fences	$29,000
New pedestrian crossing at south back entrance	$8,000
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New rectangular rapid flashing beacon at Nall and 63rd Terr.**	$24,000
Reconfigure traffic island crossing at 63rd Terr. and Roe**	$19,000
Subtotal	**$233,000**
*** Improvements are or may be in Prairie Village*	

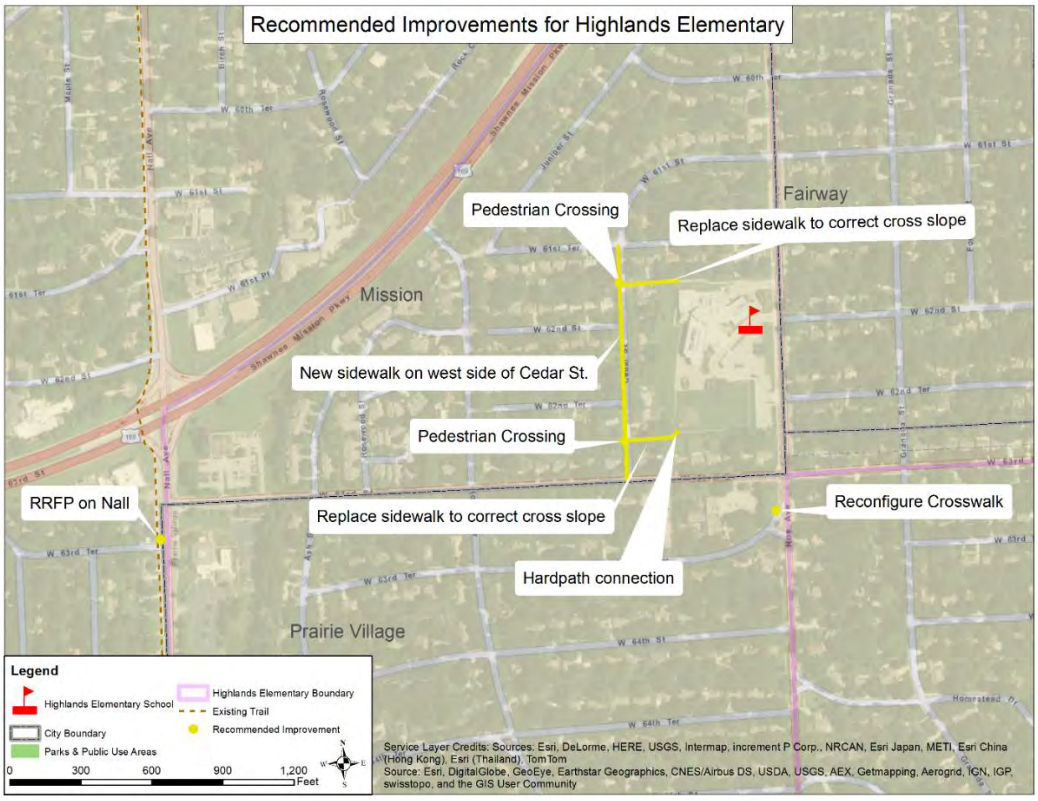

Figure 9 Highlands Elementary recommended improvements

Programmatic Recommendations

Ensure snow and debris removal from schools and sidewalks

Students and parents mentioned piled snow or un-shoveled walks impeded paths during winter months. While not a significant issue at Highlands, some sidewalks were covered in dirt or leaves. Schools should ensure that sidewalks on their property are kept clear when school is in session that day. The City can target code enforcement activities near Highlands to ensure that sidewalks are being cleared in accordance with the City's ordinances. This is particularly important if sidewalk clearance is required a certain amount of time after a snowfall.

Consistently unlock gates to allow pedestrian entry through rear access corridors

Two sidewalks connect Highlands Elementary to Cedar Street. A fence with gates at these connection points surrounds Highlands. Students reported that the south gate is frequently unlocked, but not consistently so. The School District should ensure that these gates are open before and after school to allow students to access Highlands Elementary from Cedar Street.

Identify champions and develop encouragement programs

Highlands Elementary and community partners should identify or recruit local champions to promote walking and biking to school. This champion can be in the form of a parent volunteer, sub-committee of the PTA, or a citywide committee composed of staff/volunteers from multiple schools, the school district and city staff. The champion(s) or committee(s) would focus on developing policies for the schools and raising awareness about the benefits of active transportation among elementary students and their parents. The champion(s) or committee(s) would be responsible for organizing biking or walking to school events and programs that encourage active transportation. Appendix A is provided as a resource for schools and champions to identify common national programs that can be implemented locally.

Figure 10 *Banner outside a middle school encouraging walking and biking (Lawrence, KS)*

Implement "walking school buses" and/or "bike trains"

A "walking school bus" or "bike train" is an organized group of children and parents who meet in a specific location in order to walk or bike in a group to school.

Sponsor a bike rodeo for students

Highlands Elementary has an active student biking population, but also is bordered by streets with relatively heavy traffic that may make parents and children hesitant to bike to school. A school- or city-sponsored bike rodeo can teach children safe riding techniques, and is a way to promote biking to school to both children and parents.

Figure 11 Bicycling to Highlands Elementary along Roe Avenue

Figure 12 Wave bike racks at Highlands Elementary

Note: Grid-style or wave-style bike racks are not recommended by the Association of Bicycling and Pedestrian Professionals (APBP), as these only provide one point of support on a bike which can lead to bike damage; and improper use results in lower bicycle capacity. "Inverted U" racks and other styles support multiple parts of a bicycle. Also see Figure 35.

Infrastructure Recommendations

Replace sidewalks at back north and south access corridors

The sidewalk condition on both access corridors at the rear of the school has deteriorated, including uneven sloping and rough concrete surfaces. The sidewalk of the south access corridor empties into the south athletic field, but leaves a gap of approximately 20 feet between the sidewalk and an asphalt path in the field. The ownership and responsibility for these paths is unclear, and further investigation will be required to determine if the City will need to acquire property or easements to properly implement this recommendation.

Figure 13 Existing sidewalk through south access corridor

New pedestrian crossings at north and south access corridors across Cedar Street

The sidewalk access corridors described above connect directly to Cedar Street. Fencing and vegetation obscure the access corridors themselves as well as the pedestrians exiting onto the street. No signs or street markings warn drivers of the presence of pedestrians. Signs should be installed that warn drivers of crossings. Additionally, wayfinding signs should be installed for pedestrians that communicate the intended use of these access corridors.

Figure 14 Location of entrances to access corridors from Cedar Street

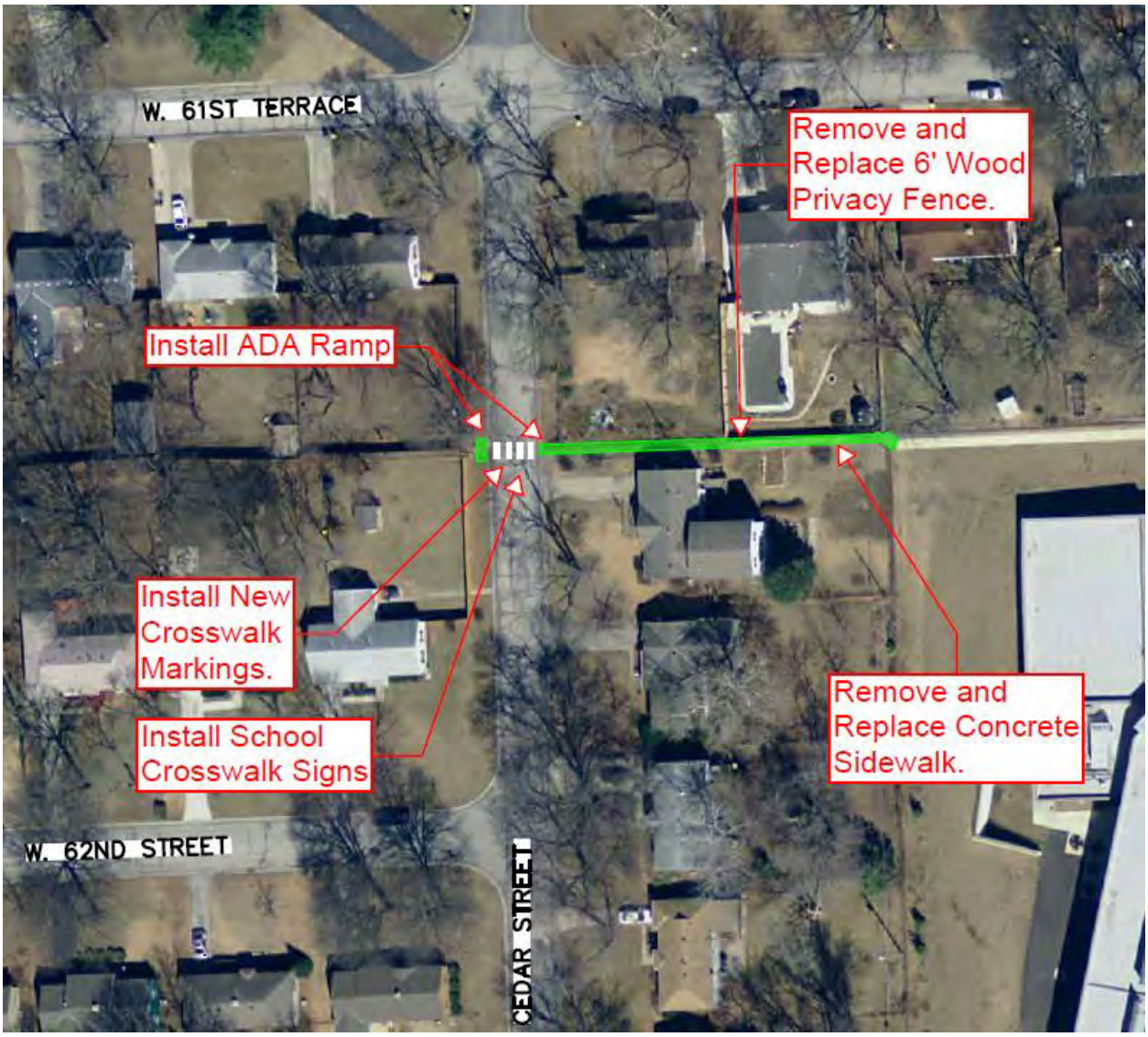

Figure 15 North entrance - new crosswalk and replace sidewalk

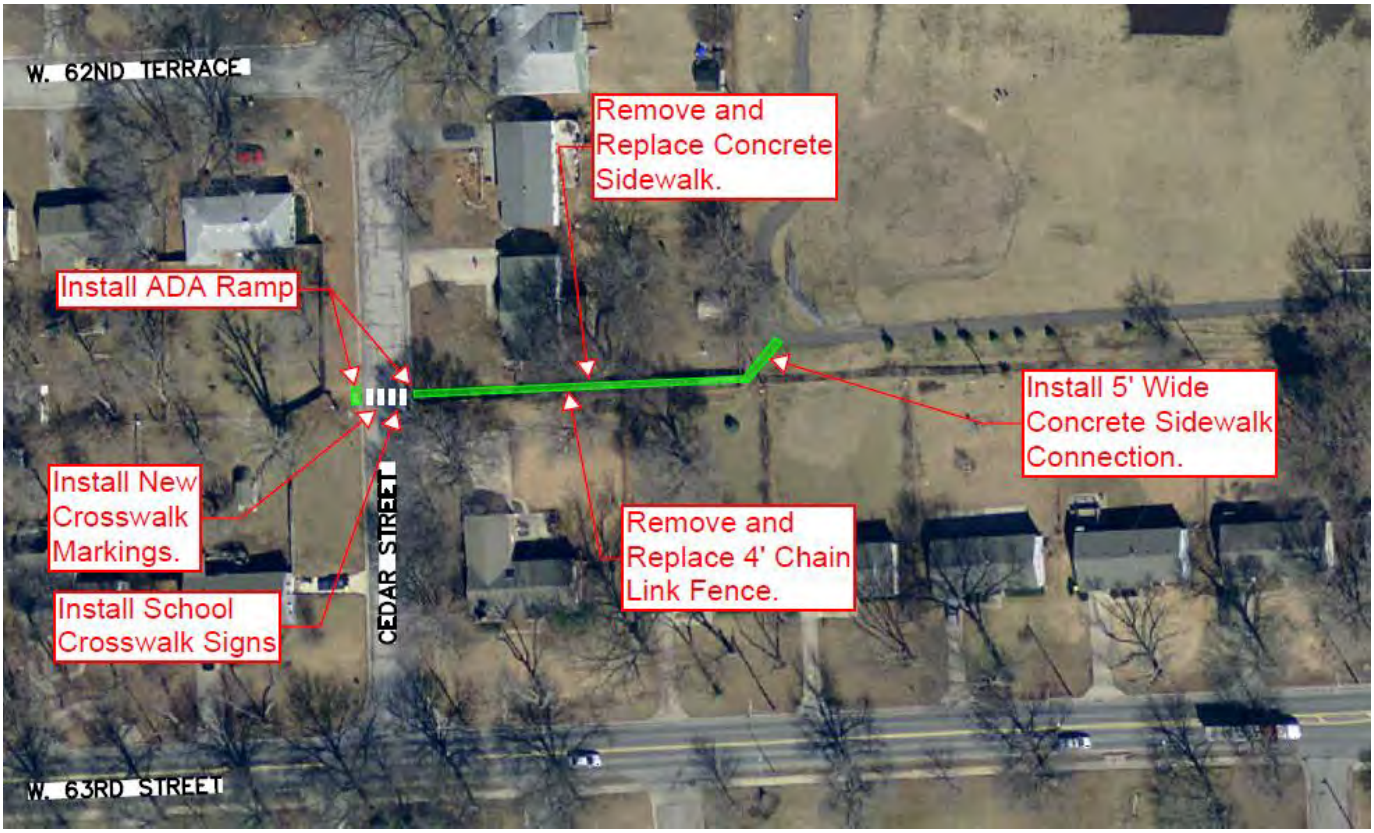

Figure 16 South entrance - new crosswalk and replace sidewalk

New sidewalk on the west side of Cedar Street from 63rd Street to 61st Terrace.

The two access corridors load directly onto Cedar Street. Even with the addition of designated crossings at the access corridors, pedestrians need a safe location to travel once they cross Cedar Street. A new sidewalk on the west side of Cedar Street from 63rd street to 61st Terrace would allow pedestrians from the area to travel safely to the access corridors. A crosswalk across 63rd Street with Rectangular Rapid Flashing Beacons (RRFB) would allow pedestrians on the south sidewalk on 63rd Street to safely access the new sidewalk on Cedar Street.

Figure 17 New sidewalk along Cedar Street

New rectangular rapid flashing beacon at Nall Avenue and 63rd Terrance

Nall Avenue at 63rd Terrace is a four-lane road with a designated crossing. The designated pedestrian crossing consists of northbound and southbound pedestrian crossing signs and paint. A median is present north of the crossing, but is not a pedestrian refuge where curb provides separation from vehicles on both sides of the crosswalk. Cars on Nall Avenue approaching this crossing, particularly from the south, can travel at high speeds and parents are apprehensive about making this crossing. A Rectangular Rapid Flashing Beacon, similar to those on Johnson Drive, would alert drivers when a pedestrian is actively using the crosswalk.

Figure 18 Existing crosswalk at Nall Avenue and 63rd Terrace

Figure 19 Recommended RRFB location

Reconfigure traffic island crossing at 63rd Terrace and Roe Avenue

At the intersection of 63rd Terrace and Roe Avenue, a traffic island directs vehicular traffic and provides a refuge for crossing pedestrians. Sidewalks and pedestrian ramps are present; however, the ramps are not aligned and cause pedestrians to take longer than necessary to cross. The ramp configuration may also decrease pedestrian's visibility to southbound traffic along Roe Avenue turning west onto 63rd Terrace. Re-positioning north south ramps on 63rd Terrace to align with the island ramp will increase pedestrian safety by reducing the crossing distance and by placing crossing pedestrians closer to Roe and clearly in a passing motorist's direct line of sight.

Figure 20 Current pedestrian ramps at 63rd Terrace and Roe Avenue

The wide, sweeping angle of this intersection may allow motorists exiting Roe to drive at a much higher speed than appropriate. In the future, the City should evaluate adding a raced crosswalk or narrowing the turning radius (i.e. closer to a 90-degree right turn) to slow traffic.

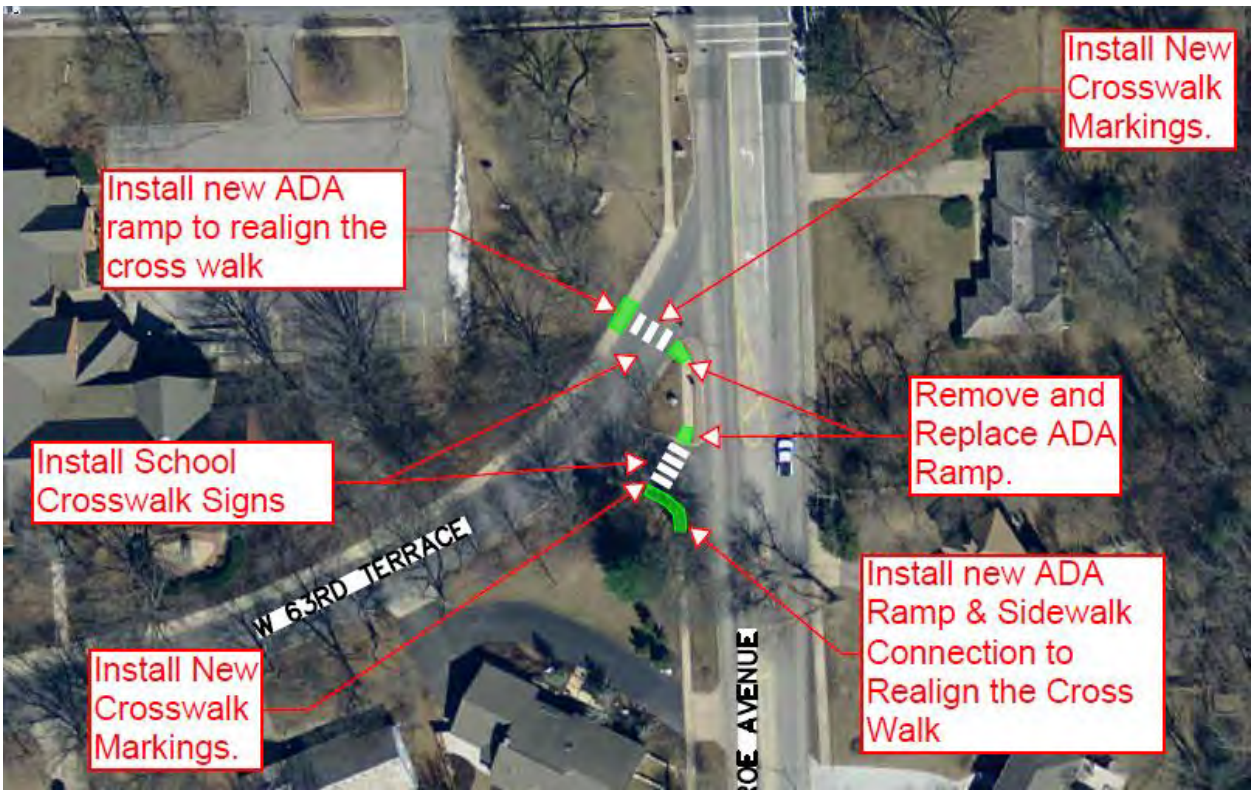

Figure 21 Traffic island reconfiguration at 63rd Terrace and Roe Avenue

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Rushton Elementary

Rushton Elementary is located at 6001 West 52nd Street, and had a 2015-2016 enrollment of 359 students. The school faces 52nd Street. The nearest major streets are Lamar Avenue to the west, and 51st Street to the north. 51st Street had 2013 daily traffic counts of 2,950 vehicles.

The school is an older, established neighborhood school; its enrollment boundary is all areas within the city limits of Mission north of Shawnee Mission Parkway, an area measuring about two miles north-south and one mile east-west. It is directly north of the City's Waterworks Park, and the park's walking trails provide an access corridor to the rear of the school from 53rd Street.

Bicycle and pedestrian counts were conducted on October 28th, 2015. More students walked or biked in the afternoon, than in the morning. Nineteen percent of students walked or biked home in the afternoon, compared to eight percent of students walking or biking in the morning.

Most pedestrians or bicyclists accessed the school from Lamar Avenue north of 52nd Street. Several apartment complexes are located north of and just off Lamar Avenue. Lamar is a high traffic street, with 2010 daily traffic counts of 7,980 vehicles. For most of its length, one sidewalk is provided on the east side of the road, directly adjacent to it. Relatively large blocks increase the walking distance between pedestrian crossings. Difficult terrain and sudden drop offs often prevent pedestrians from shifting away from traffic.

This area of Lamar Avenue is a speed enforcement problem for police. Mission Police officers issued citations for a total of 556 violations in the 5000-5300 blocks of Lamar Avenue from April 2014 to May 2015. Traffic officers patrol this area at least one hour during the morning opening of school, and one hour as school dismisses. The 51st and Lamar intersection has a dated history of vehicle-student accidents, with two separate incidents of walking children involved in a vehicular accident in 2002. Pedestrian safety in this area increased significantly when the City of Mission began providing crosswalk guards around Rushton in response to these incidents.

A smaller number of pedestrians or bicyclists used either Woodson Street or the back entrance south of the school (through Waterworks Park). Study group participants reported that parents occasionally meet their students at the southern end of Waterworks Park to avoid pick-up and drop-off traffic on 52nd Street.

Informally, members of the Rushton community reported that a high number of students participate in before- and after- school programs. These programs may result in students travelling to and from school outside of the typical times at the open and close of the school day.

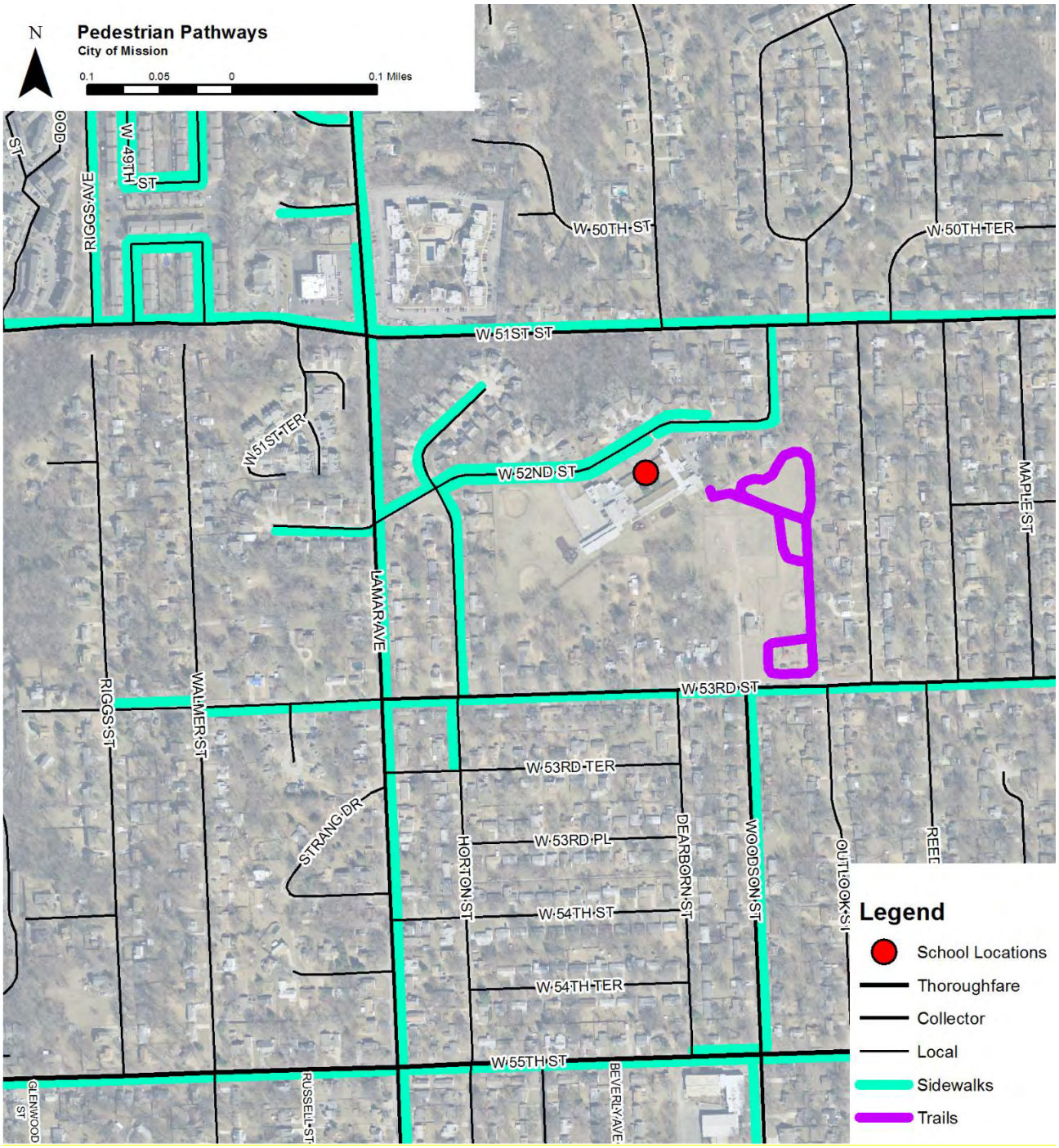

Figure 22 Sidewalk inventory near Rushton Elementary.

Map Source: City of Mission

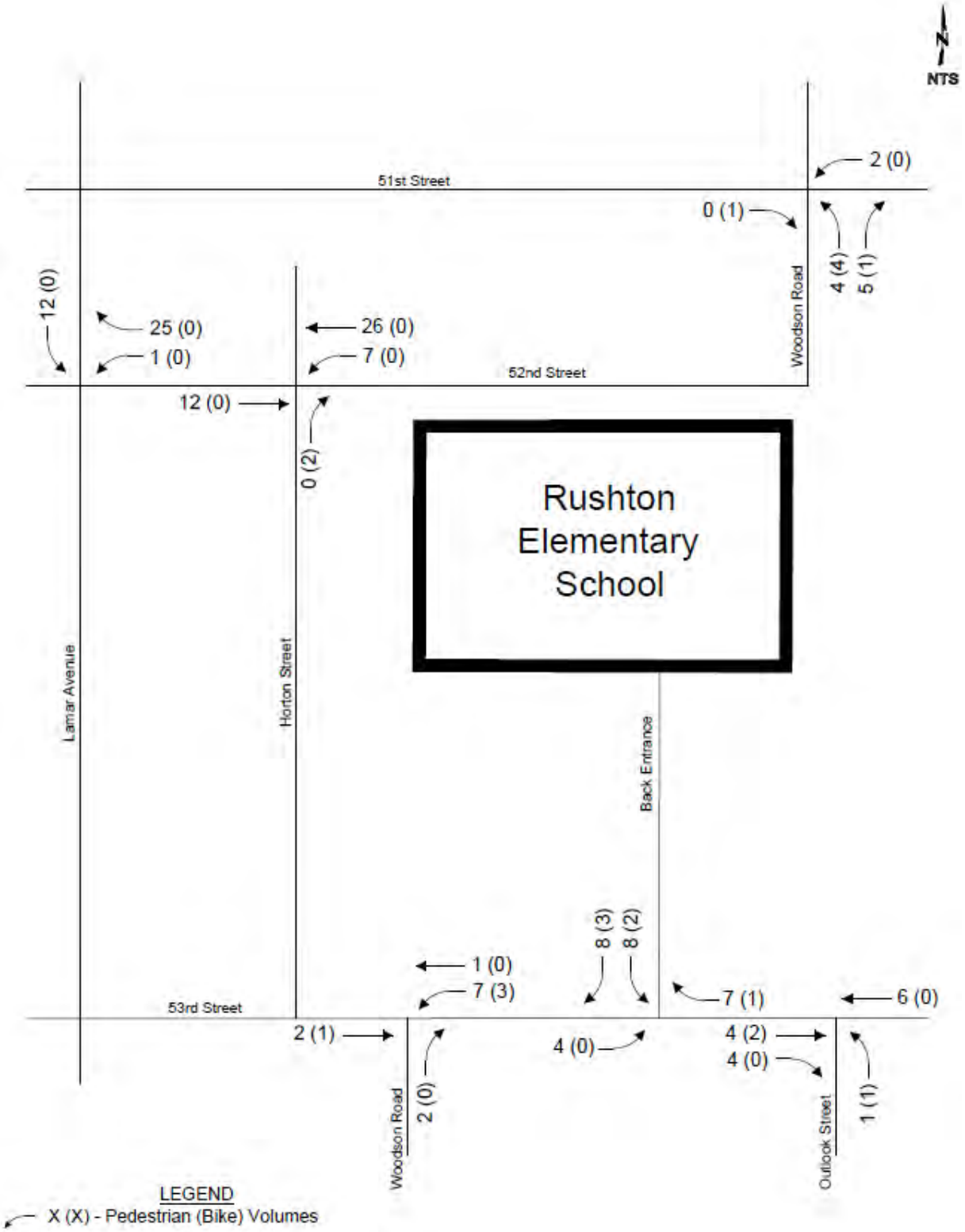

Figure 23 Rushton Elementary walking and bicycling counts

Public Engagement

The study team engaged members of the Rushton Elementary community throughout their work. City and consultant team staff met with the PTA on November 12th, 2015 at the outset of the study to answer questions and collect preliminary input about the biking and walking needs of the school community.

A workshop was held on November 16th, 2015. Flyers were sent home with students in the days preceding the workshop and parents, students and staff were invited. Tables and maps were set up outside the main school entrance to collect direct input from students and parents about their walking and biking experiences. During the workshop participants discussed active transportation needs and, using a map, identified locations that parents, staff, and other stakeholders considered safe or unsafe, as well as routes that were safe, commonly used, or felt unsafe.

Workshop participants were invited on a walking audit conducted immediately after the workshop. Members of the study team and the school Principal reviewed walking conditions around the school.

Figure 24 Collecting input from Rushton students and parents

Figure 25 Kids drawing on maps leads to good things

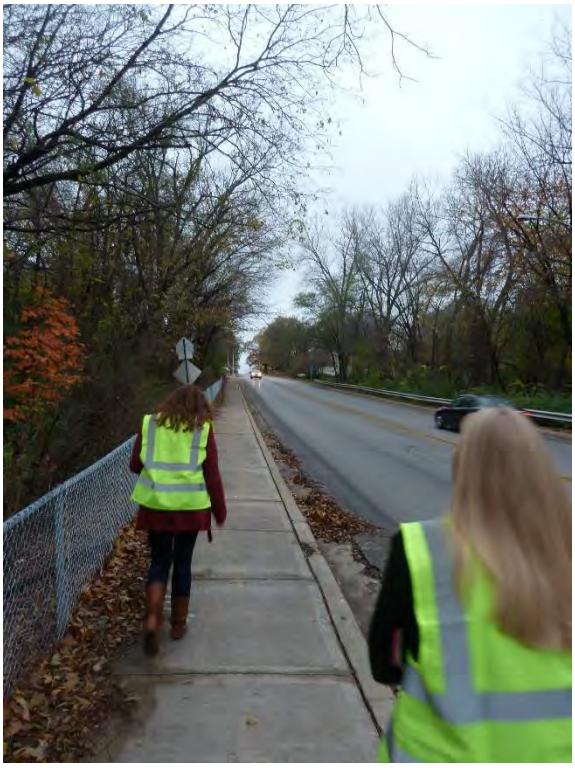

Figure 26 Walking south on Lamar Avenue towards 52nd Street

The wide vehicle lanes and lack of buffer from traffic on Lamar Avenue make pedestrians feel vulnerable.

Figure 27 Workshop discussion with study staff and principal

Figure 28 Student walking north on Lamar Avenue towards 51st Street

Leaf litter, shrubbery, trash cans, and snow can force people to walk in the street

Figure 30 Angled crosswalk at 53rd Street and Outlook Street

Figure 29 Leaf litter and vegetation at 51st Street and Woodson Street

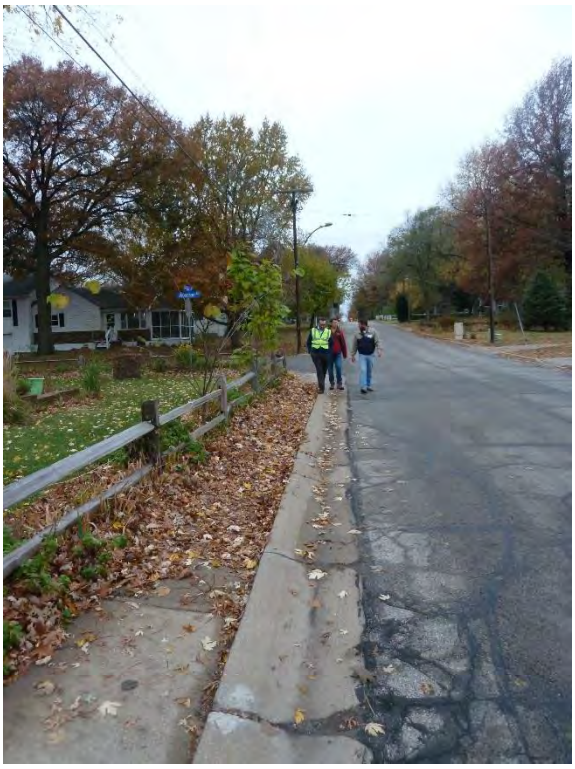

Figure 31 Along 53rd Street

Notable comments from the Rushton public engagement sessions include:

- Lamar Avenue, between 52nd Street and 51st Street has a narrow sidewalk, speeding cars, and many students walking.
- Locked gate between The Falls apartment complex and Riggs Avenue.
- Heavy amount of cars waiting for school pick-up along 52nd Street.
- Cars not always yielding to pedestrians along 52nd Street.
- Misaligned crosswalk at 53rd Street and Waterworks Park.
- Leaf litter or unshoveled snow along 51st Street, 52nd Street, and 53rd Street can constrain sidewalk width.
- 51st Street has a hill towards Woodson Street, and lots of leaf litter on sidewalks, which makes it less attractive for walkers or bicyclists.

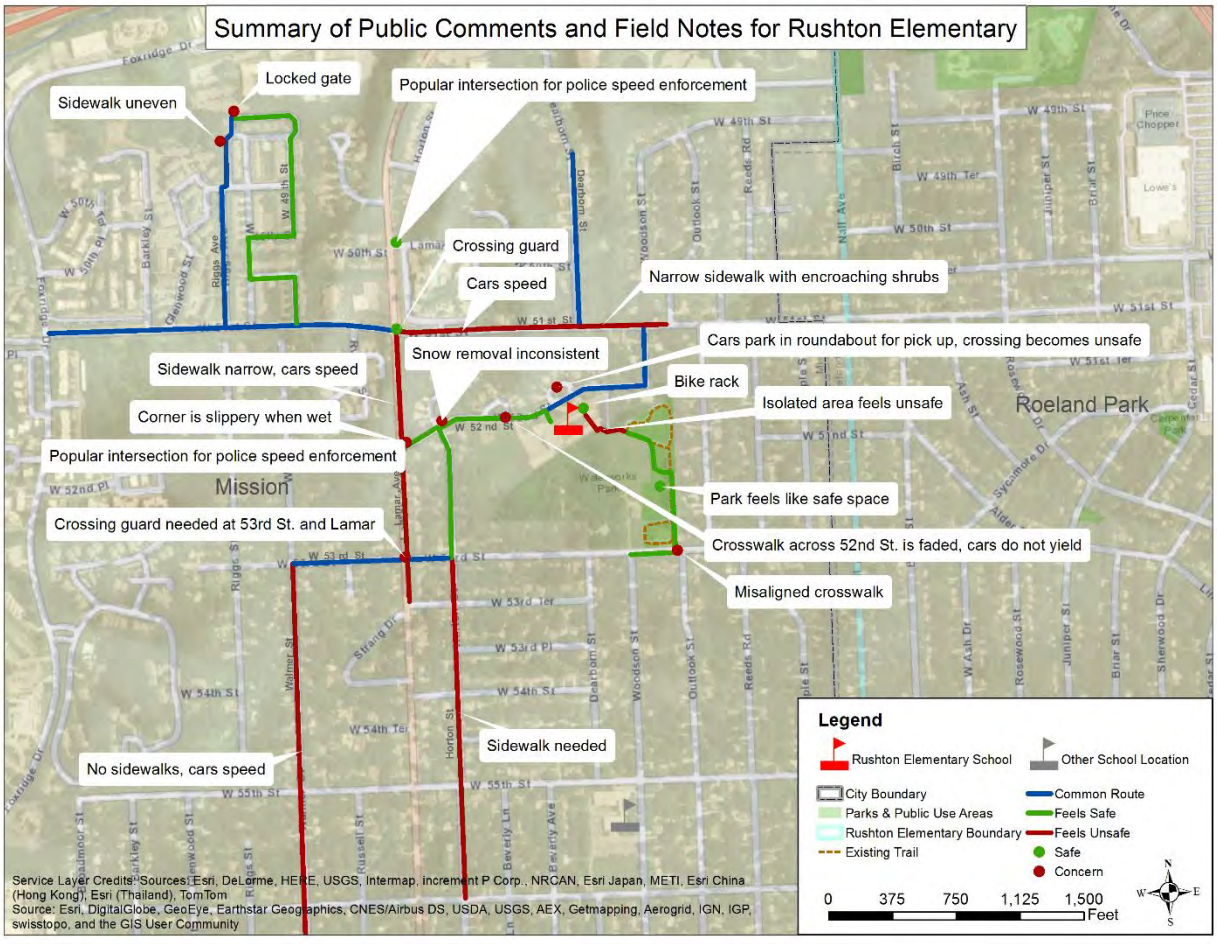

Figure 32 Rushton Elementary public comments and walking audit notes

Table 7 Rushton Elementary Recommendations

Rushton Elementary Recommendations	
Ensure snow and debris removal from schools and sidewalks	Programmatic
Evaluate opening the fire gate between The Falls and Riggs	Programmatic
Identify champions and develop encouragement programs	Programmatic
Implement “walking school buses” and/or “bike trains”	Programmatic
Sponsor a bike rodeo for students	Programmatic
Crosswalk upgrades on 52nd St. (two crossings)	$17,000
Upgrade crosswalk at 53rd and Outlook	$33,000
Stripe bike lane on Lamar from Shawnee Mission Pkwy. to Foxridge	$75,000
Upgrade crosswalk at 51st St. and Woodson	$8,000
Subtotal	**$136,000**

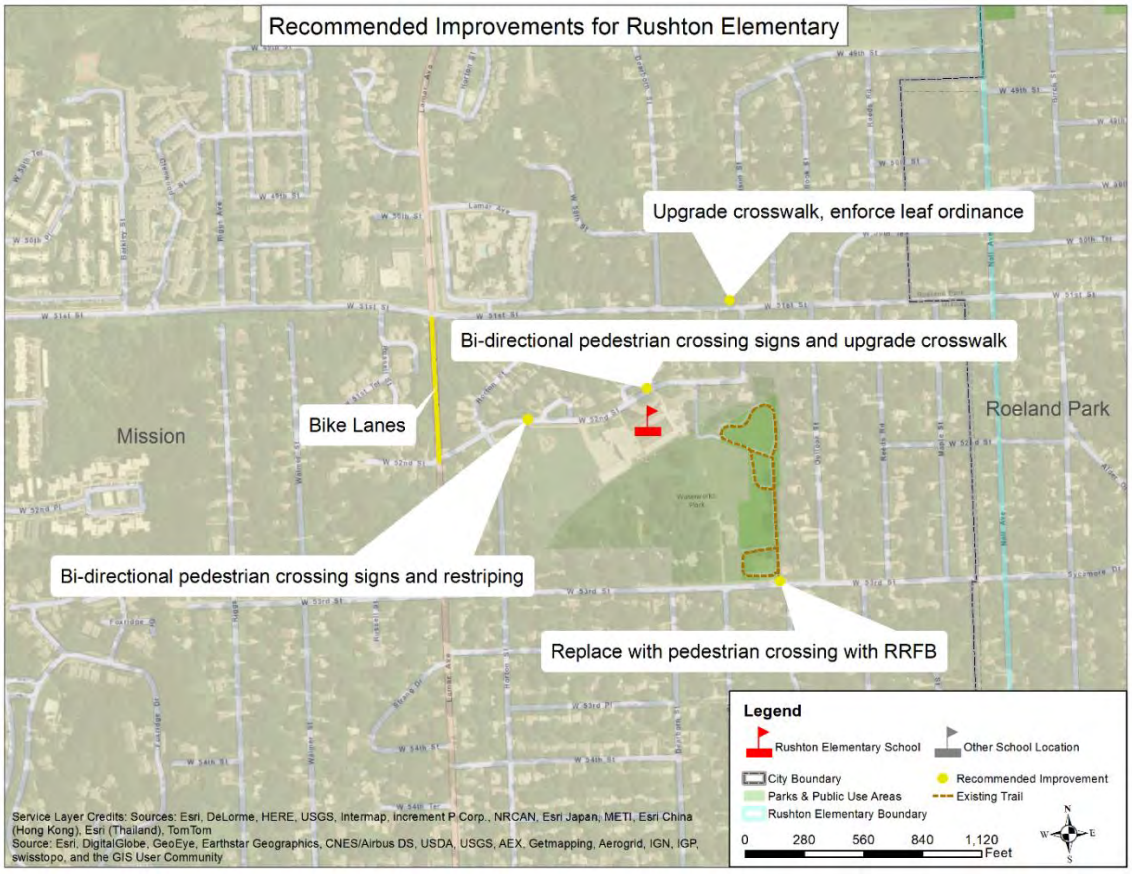

Figure 33 Rushton Elementary recommended improvements

Programmatic Recommendations

Ensure snow and debris removal from schools and sidewalks

Students and parents mentioned piled snow or un-shoveled walks impeded paths during winter months. Students mentioned how leaf litter and overgrown vegetation on some sidewalks encourage students to walk in the street or choose other paths. Schools should ensure that sidewalks on their property are kept clear when school is in session that day. The City can target code enforcement activities near Rushton to ensure that sidewalks are being cleared in accordance with the City's ordinances. This is particularly important if sidewalk clearance is required a certain amount of time after a snowfall.

Evaluate opening the fire gate between The Falls and Riggs Avenue

Participants noted that a fire access driveway between The Falls apartments and Riggs Avenue has a gate that blocks vehicle traffic as well as pedestrians. A significant number of students walk or bike to Rushton from the north and west of Lamar Avenue. The City should evaluate requiring separate pedestrian access even when vehicle access is blocked. A pair of collapsible vehicle barriers or bollards could replace the gate. Alternatively, the gate could simply remain open. This would provide a connection between 51st Street and Foxridge Drive.

Figure 34 A locked gate forces vehicles and pedestrians to exit to Foxridge in order to reach Lamar.

Identify champions and develop encouragement programs

Rushton Elementary and community partners should identify or recruit local champions to promote walking and biking to school. This champion can be in the form of a parent volunteer, sub-committee of the PTA, or a citywide committee composed of staff/volunteers from multiple schools, the school district and city staff. The champion(s) or committee(s) would focus on developing policies for the schools and raising awareness about the benefits of active transportation among elementary students and their parents. The champion(s) or committee(s) would be responsible for organizing biking or walking to school events and programs that encourage active transportation. Appendix A is provided as a resource for schools and champions to identify common national programs that can be implemented locally.

Implement "walking school buses" and/or "bike trains"

A "walking school bus" or "bike train" is an organized group of children and parents who meet in a specific location in order to walk or bike in a group to school.

Sponsor a bike rodeo for students

Rushton Elementary has an active bicycling student population. A school- or city-sponsored bike rodeo can teach children safe riding techniques, and is a way to promote biking to school to both children and parents.

Figure 35 Grid bike racks at Rushton Elementary

Figure 36 Example of "Inverted U" rack that supports bicycles at multiple points. Source: Copyright American Planning Association

Note: Grid-style or wave-style bike racks are not encouraged by Association of Bicycling and Pedestrian Professionals (APBP), as these only provide one point of support on a bike which can lead to bike damage; and improper use results in lower bicycle capacity. "Inverted U" racks and other styles support multiple parts of a bicycle. Also see Figure 12.

Infrastructure Recommendations

Crosswalk Upgrades on 52nd Street

Students and parents have reported that cars sometimes fail to yield to students walking across 52nd street. The current crosswalks (one directly in front of the school entrance and one north of Horton Street) have faded crossing stripes and only one “Pedestrian Crossing” sign. The presence of only one sign may cause drivers to focus on the location of the sign, even though a pedestrian may be crossing the street from the other side. Replacing the stripes, and adding an additional pedestrian crossing sign to each crosswalk so drivers are able to see a sign on both sides of the road, may increase the visibility of pedestrians in the crosswalk. Upgrading the crosswalk directly in front of the school entrance would make this path ADA compliant.

Figure 37 Crosswalk upgrades on 52nd Street

Upgrade crosswalk at 53rd Street and Outlook.

The current crosswalk at 53rd Street and Outlook serves as the primary entrance point for students entering the school grounds from the south. The current crosswalk is a non-standard design, including an angled crossing across the roadway. Upgrading the crossing to Rectangular Rapid Flashing Beacons (RRFB) and correcting the crosswalk angle will increase the visibility of pedestrians in the crosswalk.

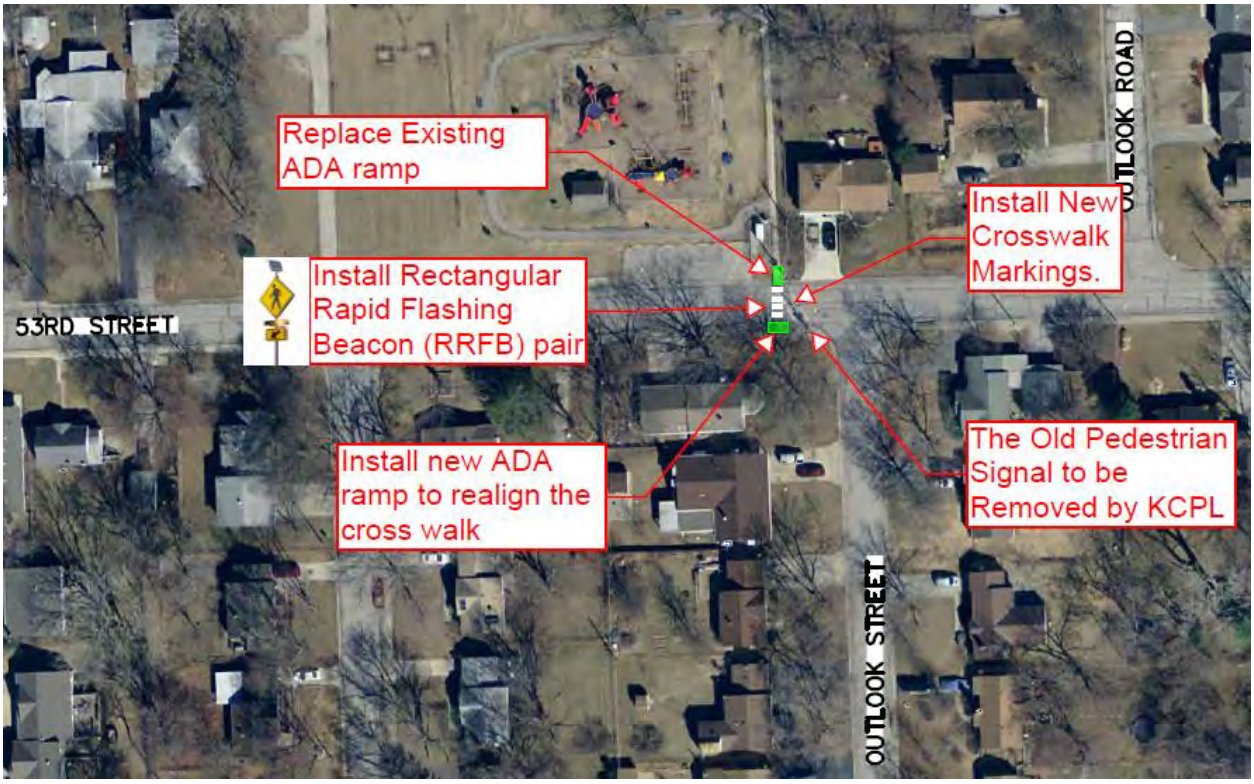

Figure 38 Upgrade crosswalk at 53rd Street and Outlook

Stripe bike lane on Lamar from Shawnee Mission Parkway to Foxridge

The sidewalk on the east side of Lamar Avenue, particularly between 51st Street and 52nd Street, serves as a primary pedestrian path for students and parents walking to Rushton Elementary. Currently, no separation is provided between the vehicles driving along Lamar Avenue and pedestrians on the sidewalk. Since Lamar Avenue is a high volume roadway in which vehicles consistently drive over the 20 mph school zone speed limit, pedestrians have a decreased sense of security along this route. The lack of outside lane striping next to the sidewalk increases the width of the travel lanes and gives drivers the perception that it is safe to drive at high speeds.

Striping a bike lane along Lamar Avenue would both provide a buffer space between pedestrians and drivers, and create a visual narrowing of the travel lane that may cause drivers to slow down. Extending this bike lane along Lamar Avenue between Shawnee Mission Parkway to the south and Foxridge Drive to the north would provide a north-south bicycle linkage through Mission and support bicycle travel to Horizons High School at Lamar Avenue and Johnson Drive.

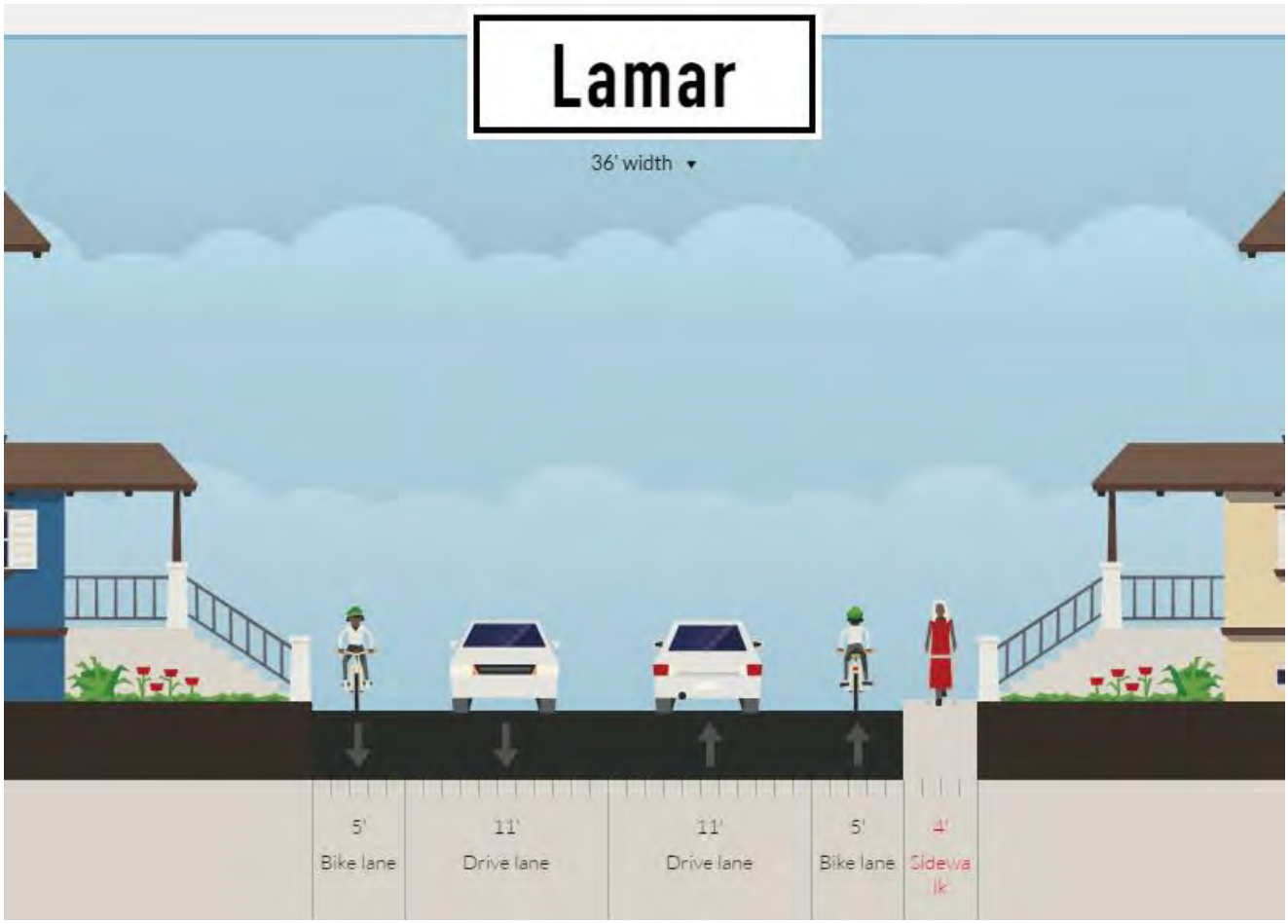

Figure 39 Typical section of Lamar Avenue after striping - for illustration only. (Source: City of Mission)

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Horizons High School

Horizons High School is located at 5900 Lamar Avenue, and has a 2015-2016 enrollment of 109 students. The school provides alternative education and has an enrollment shed of the entire Shawnee Mission School District. The school is at the corner of Lamar Avenue and Johnson Drive, which serves as the primary retail corridor in Mission.

Bicycle and pedestrian counts were conducted on October 29th, 2015, and are displayed in Figure 41. More students walked or biked in the afternoon, than in the morning. 21 percent of students walked or biked home in the afternoon, compared to 6 percent of students walking or biking in the morning.

As Horizons enrollment boundary encompasses the entire Shawnee Mission School District, fewer students may live within walking or biking distance than other schools in the City and the School District. Of those that walked or biked, Johnson Drive and Lamar Avenue north of Johnson Drive were the primary corridors, with fewer students traveling south. Walking or biking activity may be generated by the school's proximity to Johnson Drive. Students may travel nearby for food, services, and employment.

Students at Horizons expressed mobility difficulties. Students travelled excessive distances by walking or biking to reach schools, and relied on shared rides and, to a lesser extent, transit to reach various destinations.

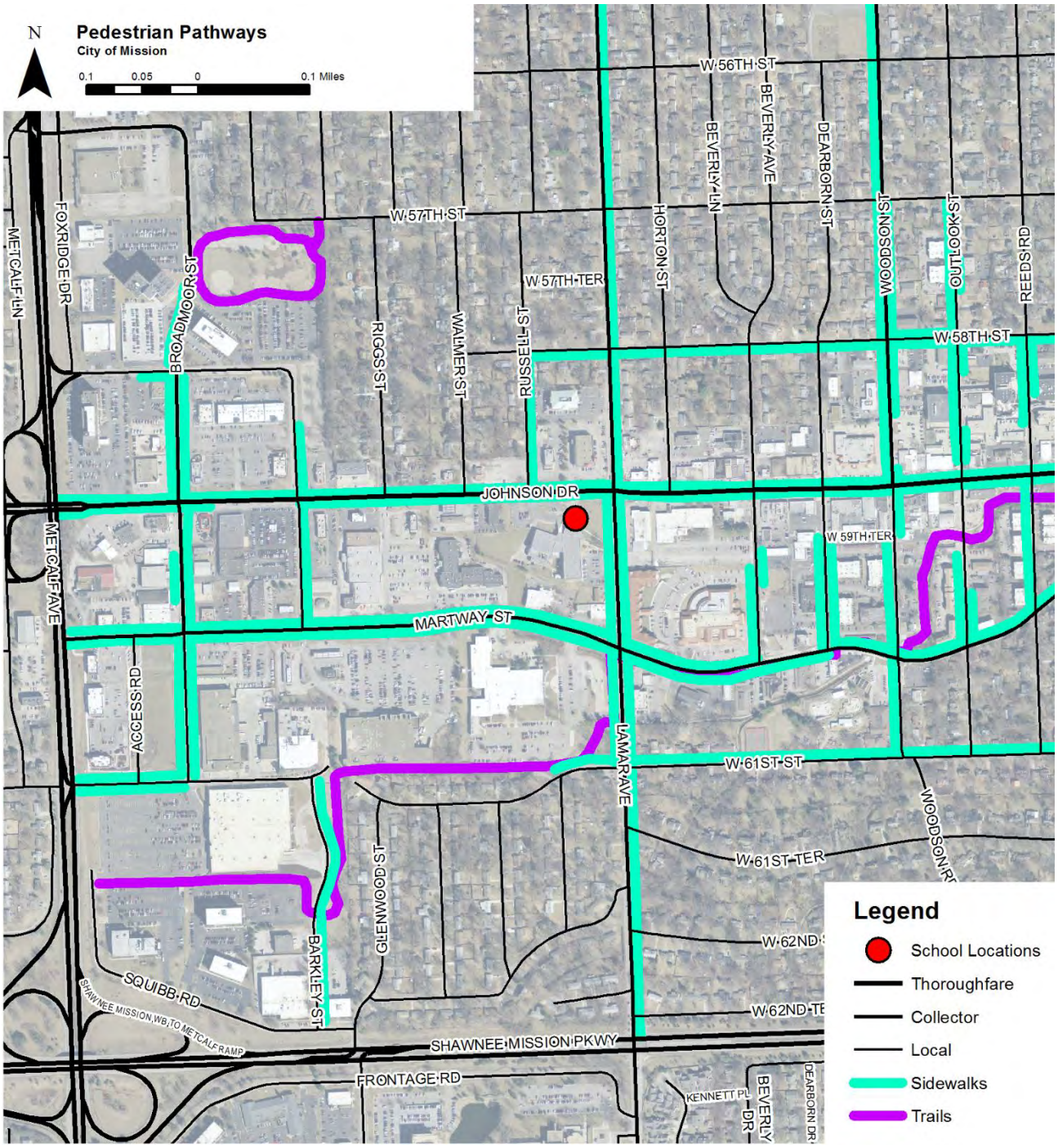

Figure 40 Sidewalk inventory near Horizons High School.

Map Source: City of Mission

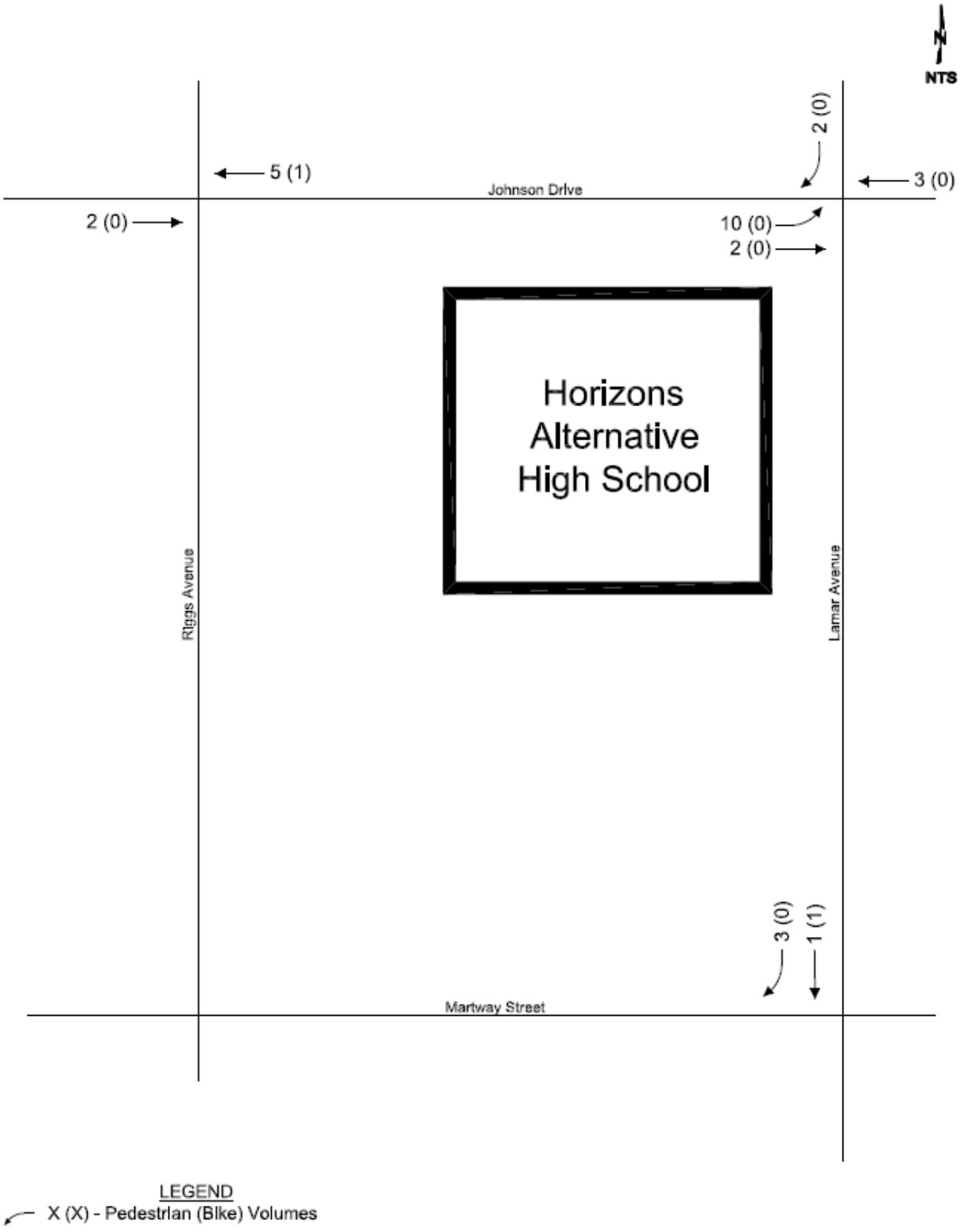

Figure 41 Horizons High School walking and bicycling counts

Public Engagement

The study team engaged members of the Horizons High community throughout their work. Consultant staff met with the Principal and staff at the outset of the study to collect preliminary input about the walking and biking needs of the Horizons community.

A workshop with students and staff was held on January 27th, 2016. The principal and counselor identified and invited students they knew who walked or biked and would provide constructive feedback. Five students, along with staff members discussed active transportation needs and, using a map, identified locations that parents, staff, and other stakeholders considered safe or unsafe, as well as routes that were safe, commonly used, or felt unsafe. In addition, members of the study team reviewed walking conditions around the school.

Figure 42 Horizons Safe Routes to School workshop

Notable comments from the Horizons public engagement sessions include:

- Many students cross Johnson Drive mid-block
- Crosswalk signal at Johnson Drive and Lamar Avenue takes too long to change.
- Many students walk to Shawnee Mission North for carpooling / friends.
- Lamar Avenue (north of Johnson Drive) has poor lighting and sidewalk on only one side.
- Lamar Avenue south of 61st Street too busy / feels unsafe to bicyclists.
- Shawnee Mission Parkway is difficult for pedestrians or bicyclists to cross – cars turn in front of pedestrians and bicyclists.
- Johnson Drive generally feels safe.

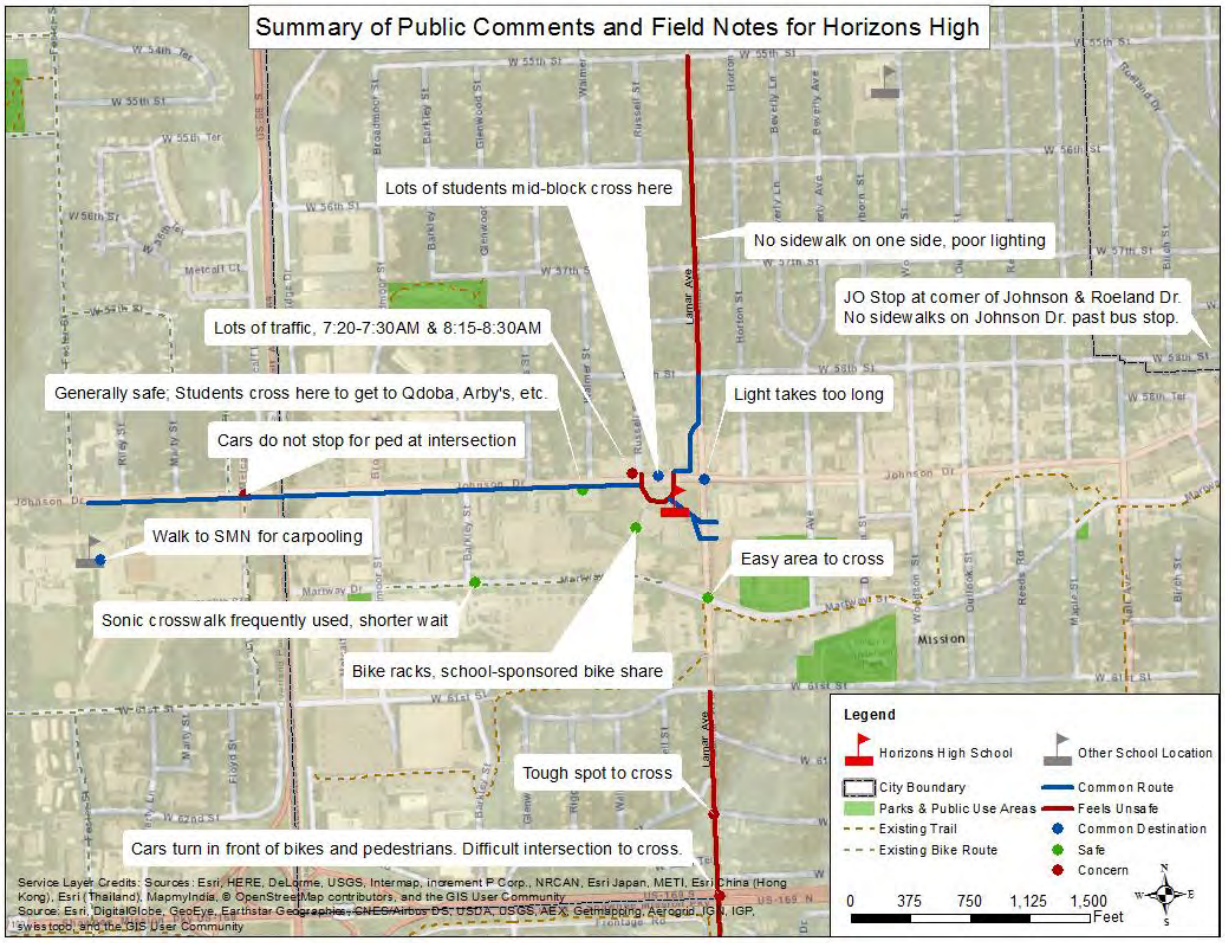

Figure 43 Horizons High School public comments and walking audit notes

Table 8 Horizons High School Recommendations

Horizons High School Recommendations	
Explore transit and bikesharing opportunities	Programmatic
Add pedestrian lighting on Lamar from Johnson Dr. to 51st St. (one side)	$19,000
Optimize pedestrian signal timing at Johnson Dr. and Lamar Avenue	$1,000
Optimize pedestrian signal at Shawnee Mission Pkwy. and Lamar	$1,000
Add pedestrian refuge island on east leg of Shawnee Mission Pkwy. and Lamar Avenue	$30,000
Complete crosswalks on west and north legs of Shawnee Mission Pkwy. and Lamar Avenue	$35,000
Subtotal	**$86,000**

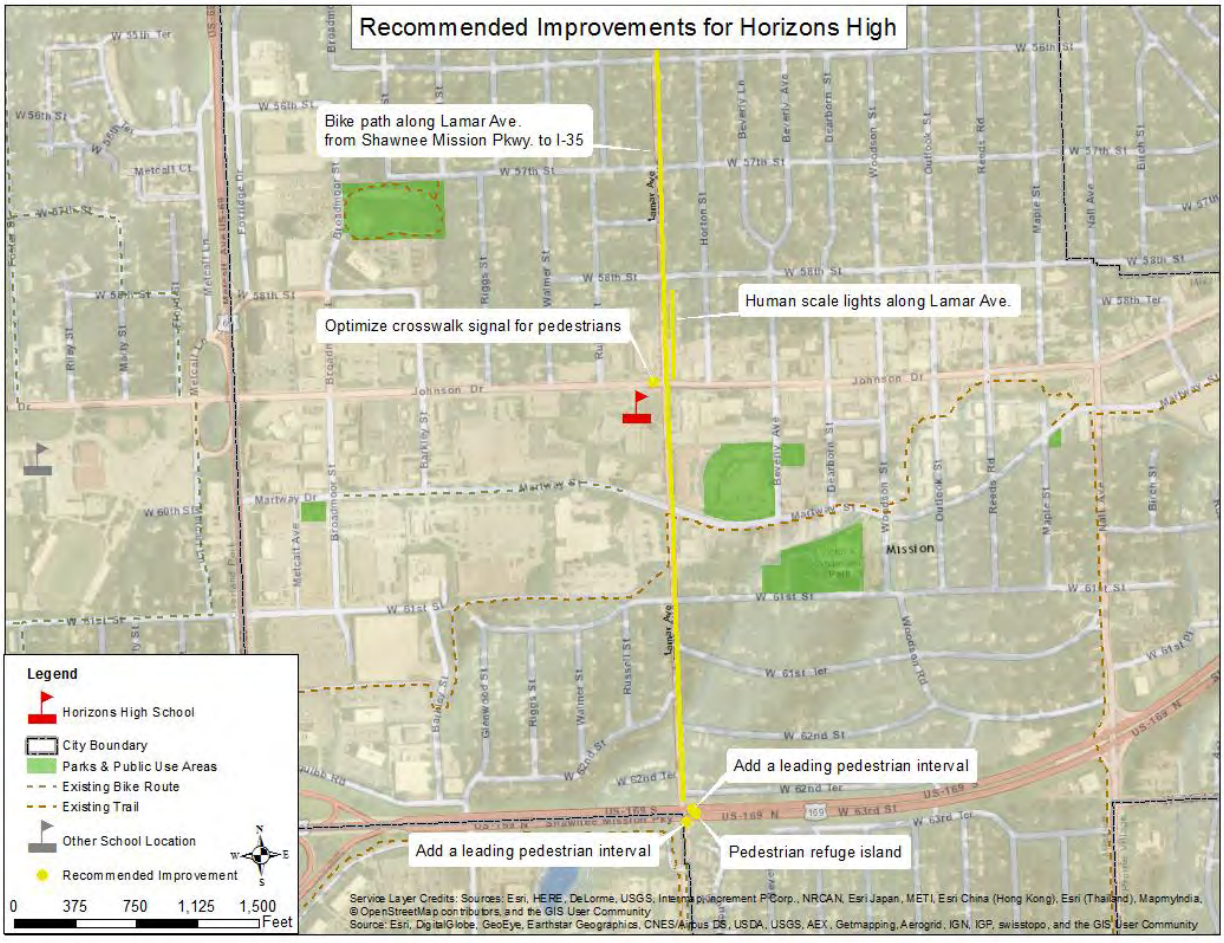

Figure 44 Horizons High School recommended improvements

Programmatic Recommendations

Explore transit and bikesharing opportunities that connect students to destinations

The Kansas City Area Transportation Authority (KCATA) and the Mid-America Regional Council are currently studying transit in northeast Johnson County as both entities develop strategic plans. Upcoming fare structure changes will provide a subsidy for students purchasing transit passes through participating schools. BikeWalkKC has proposed expanding the Kansas City regional bikeshare program into northeast Johnson County in 2019 - 2020. Together, these developments offer the opportunity to provide significantly more transportation options to students within the next five years. In addition to increasing mobility generally, these changes generate more bicyclist and pedestrian activity in the form of “last mile” travel to their destination. The City and School District should actively engage in these opportunities and advocate for locating new facilities that serve the high school.

Infrastructure Recommendations

Add pedestrian lighting on Lamar Avenue from Johnson Drive to 51st Street (one side)

Several students mentioned how lack of street or pedestrian lighting on Lamar Avenue north of Johnson Drive felt unsafe, particularly in the winter. Adding pedestrian-level lighting would increase the visibility of pedestrians to drivers and increase the safety of walking in the winter.

Optimize pedestrian signal timing at Johnson Drive and Lamar Avenue as well as Shawnee Mission Parkway and Lamar Avenue

Several students were observed crossing Johnson Drive mid-block, rather than waiting at the intersection of Johnson Drive and Lamar Avenue for the pedestrian signal phase. Students in the workshop mentioned how the pedestrian signal at this intersection took an excessive amount of time to change after the activating the button. Modifying the timings at Johnson Drive and Lamar Avenue to account for pedestrian traffic during certain weekday time periods may make Lamar Avenue a more attractive route for pedestrians headed to Horizons High School. Adding “Right Turn Yield to Pedestrians” signs placed on the northbound and westbound signal poles would provide additional awareness to motorists.

Students also mentioned that, at the intersection of Shawnee Mission Parkway and Lamar Avenue, it was difficult to cross Shawnee Mission Parkway primarily due to vehicles failing to yield to pedestrians. The intersection of Shawnee Mission Parkway and Lamar Avenue has properly installed crosswalks with directional ramps located close to the curb return to minimize the pedestrian’s time crossing the east leg of the intersection. “Right Turn Yield to Pedestrians” signs and altered timings may also improve pedestrian travel at this signal.

An additional option to consider at Shawnee Mission Parkway would be to program the controller to allow the Walk phase to release a few seconds before the adjacent vehicular through phase. This Leading Pedestrian Interval (LPI) allows pedestrians a head start crossing the intersection as well as possibly placing the pedestrian in the motorist’s cone of vision. However, this will increase vehicular delay when activated.

These signals are important to regional traffic. The City will need to consult with the Kansas Department of Transportation and MARC Operation Greenlight partners prior to changes.

Add pedestrian refuge island on east leg of Shawnee Mission Parkway & Lamar Avenue

Currently, crosswalks are provided along the south and east legs of the Shawnee Mission Parkway and Lamar Avenue intersection. Pedestrians crossing Shawnee Mission Parkway along the east leg of the intersection have six-lanes of traffic to cross, plus a median. Reconfiguring the intersection to provide a pedestrian refuge island on the east leg would heighten pedestrian sense of security and allow for the main street, Shawnee Mission Parkway, to service vehicular traffic more efficiently. If a pedestrian refuge island were provided, pedestrian signal heads and push buttons would need to be installed at the refuge island allowing pedestrians to continue crossing the intersection once stopped at the refuge island.

Complete crosswalks on west and north legs of Shawnee Mission Parkway & Lamar Avenue

Crosswalks are present on the south and east legs of this Shawnee Mission Parkway and Lamar Avenue intersection, but lacking on the west and north legs. This imbalance creates a barrier for pedestrians seeking to travel northbound or southbound on Lamar. Currently, a northbound pedestrian standing at the southeast corner of Lamar and Shawnee Mission Parkway is forced to first cross Lamar Avenue before they can cross Shawnee Mission Parkway, due to the lack of a designated crosswalk at this western leg. Similarly, a southbound pedestrian on Lamar Avenue does not have the option to cross Lamar Avenue before crossing Shawnee Mission Parkway; this would be the equivalent of not allowing right turns on red for drivers.

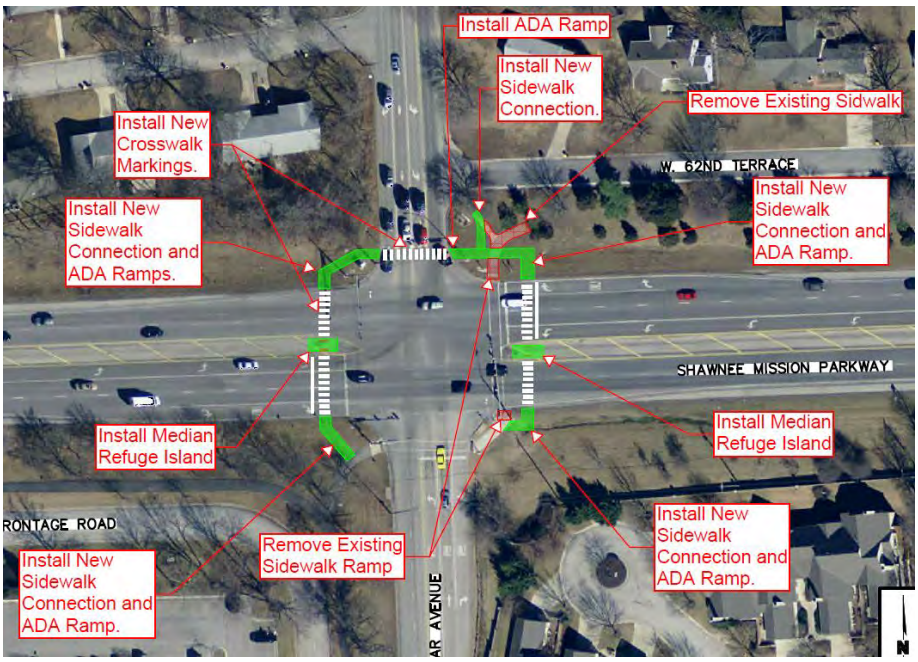

Figure 45 Shawnee Mission Parkway and Lamar Avenue crosswalk upgrades

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Shawnee Mission North High School

Shawnee Mission North High School is located at 7401 Johnson Drive, in Overland Park, with an enrollment area that includes the City of Mission. The school had a 2015-2016 enrollment of 1,564 students. Johnson Drive fronts the school and had a 2013 daily traffic count of 15,845.

Bicycle and pedestrian counts were conducted on November 4th, 2015. More students walked or biked in the afternoon, than in the morning. Six percent of students walked or biked home in the afternoon, compared to three percent of students walking or biking in the morning.

Most pedestrians or bicyclists access the school along Johnson Drive, with 21 pedestrians coming from the direction of the City of Mission. Some pedestrians also access the school through the rear fence along 61st Street.

Metcalf Avenue, elevated above Johnson Drive, represents an urban highway with controlled on and off ramps in this area, which presents an obstacle to pedestrians attempting to cross into Mission on foot or by bicycle.

Shawnee Mission North grants open campus privileges to seniors, who can leave campus for lunch during school hours. Students also travel into Mission for employment, retail, and service opportunities. Students stay late at the school for sports and extracurricular activities, which spreads out their travel times away from the traditional open and close of the school day. Often, their destination in the afternoon is different than home (their morning departure point).

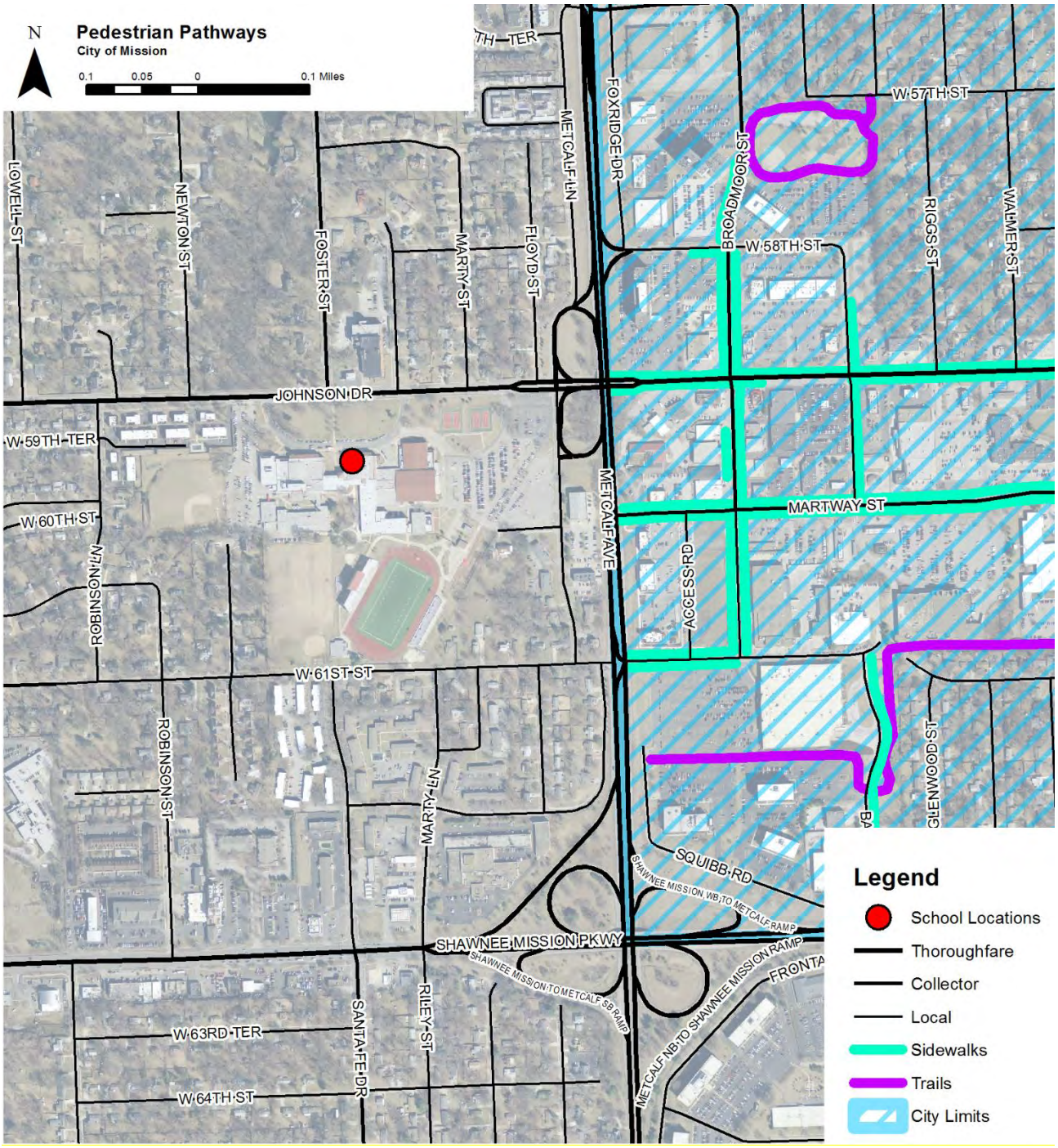

Figure 46 *Sidewalk inventory near Shawnee Mission North High School.*
Note: Data only available within Mission city limits.

Map Source: City of Mission

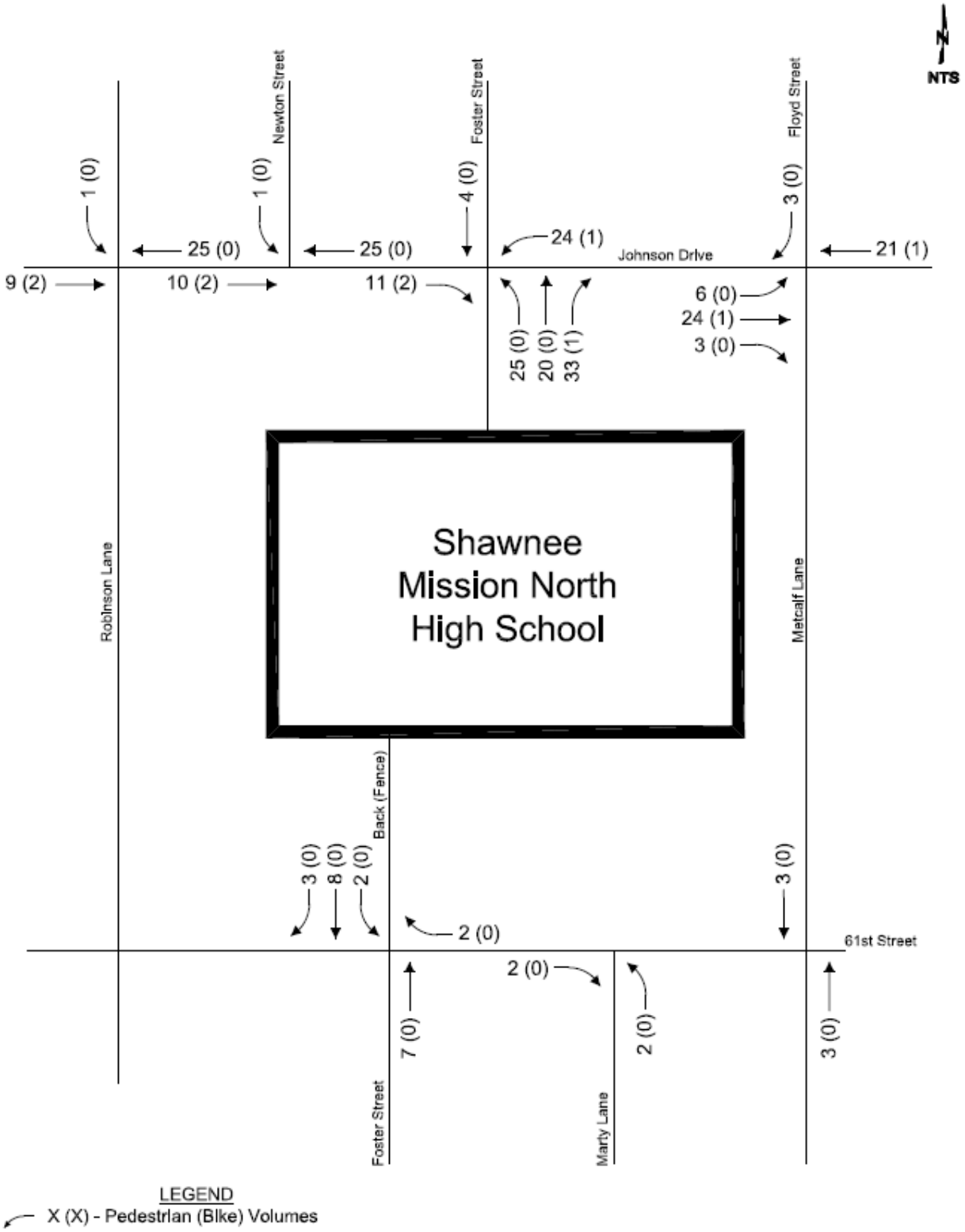

Figure 47 Shawnee Mission North High School walking and bicycling counts

Public Engagement

The study team engaged members of the Shawnee Mission North community throughout their work. Consultant staff met with the Associate Principal at the outset of the study to collect preliminary input about the walking and biking needs of the school.

A workshop with students and staff were held on February 3rd, 2016. The Associate Principal identified and invited students she knew who walked or biked and would provide constructive feedback. During the workshop, participants discussed active transportation needs and, using a map, identified locations that parents, staff, and other stakeholders considered safe or unsafe, as well as routes that were safe, commonly used, or felt unsafe. Prior to the workshop, members of the study team reviewed walking conditions around the school.

Figure 48 Students describing walking and biking around Shawnee Mission North High School

Figure 49 Shawnee Mission North Safe Routes to School workshop

Figure 50 Mapping walking and biking conditions at Shawnee Mission North High School

Notable comments from the Shawnee Mission North public engagement sessions include:

- Cars do not yield to pedestrians at pedestrian island crosswalks at Johnson Drive and Metcalf Lane or W. Frontage
- Fast food and retail development across Metcalf Avenue is a significant draw for students during lunch and after school
- Significant sidewalk gaps on Johnson Drive east of Metcalf Avenue
- Limited bike racks at school
- Back school gate is sometimes locked
- Significant after-school traffic on Metcalf Lane
- Lengthy wait times to use pedestrian signal at 61st Street and Metcalf Avenue

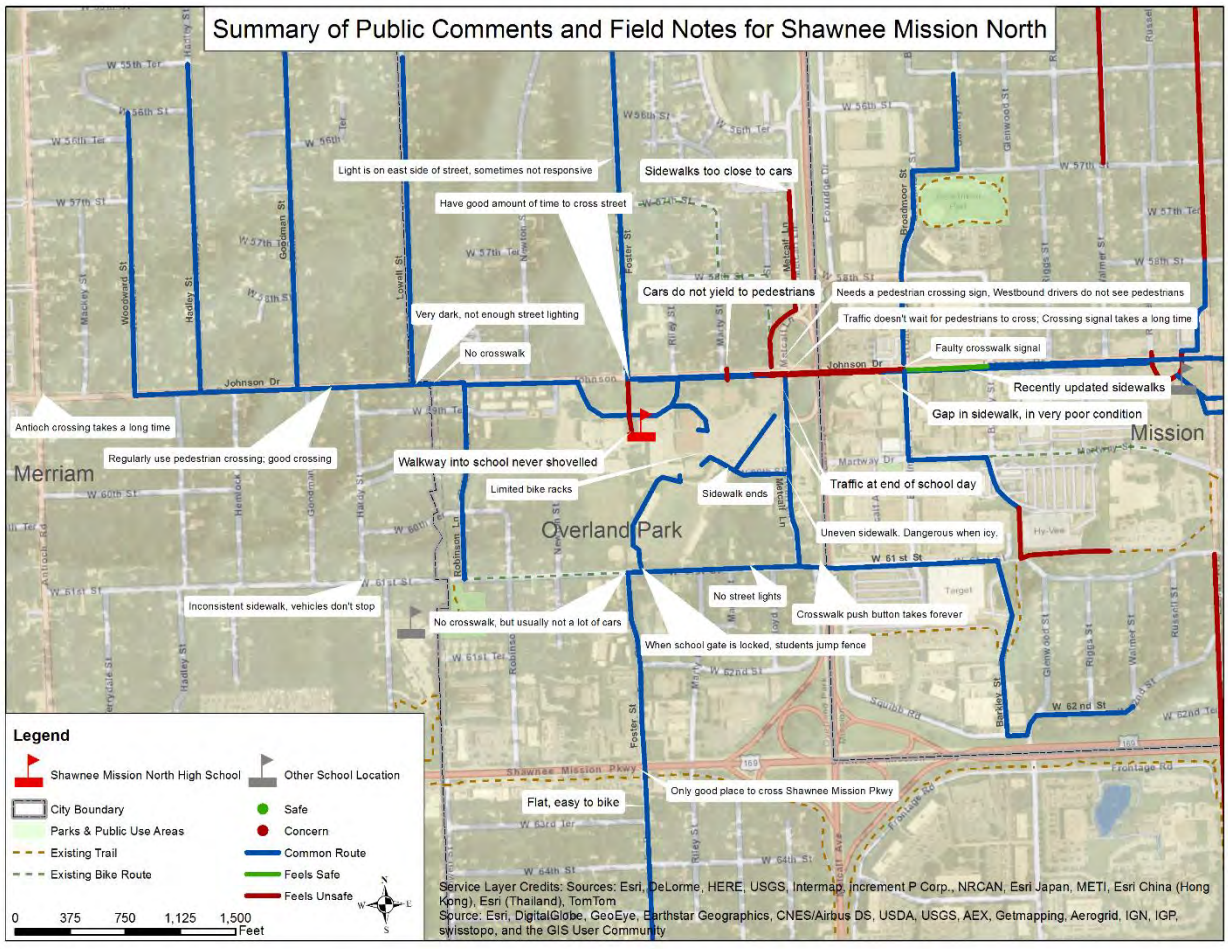

Figure 51 Shawnee Mission North High School public comments and walking audit notes

Table 9 Shawnee Mission North High School Recommendations

Shawnee Mission North High School Recommendations	
Explore transit and bikesharing opportunities	Programmatic
Upgrade bicycle racks**	$4,000
Optimize pedestrian signal timing at 61st & Metcalf Ave.	$1,000
Realign cross walk at south traffic island at Metcalf Lane & Johnson Dr.**	$10,000
Realign cross walk at north traffic island at Metcalf Lane & Johnson Dr.**	$10,000
Sidewalks on south side of Johnson Drive west of Broadmoor	$44,000
Sidewalks on the west side of Broadmoor from Johnson Drive to Martway	$69,000
Subtotal	**$138,000**
** *Improvements are or may be in Overland Park*	

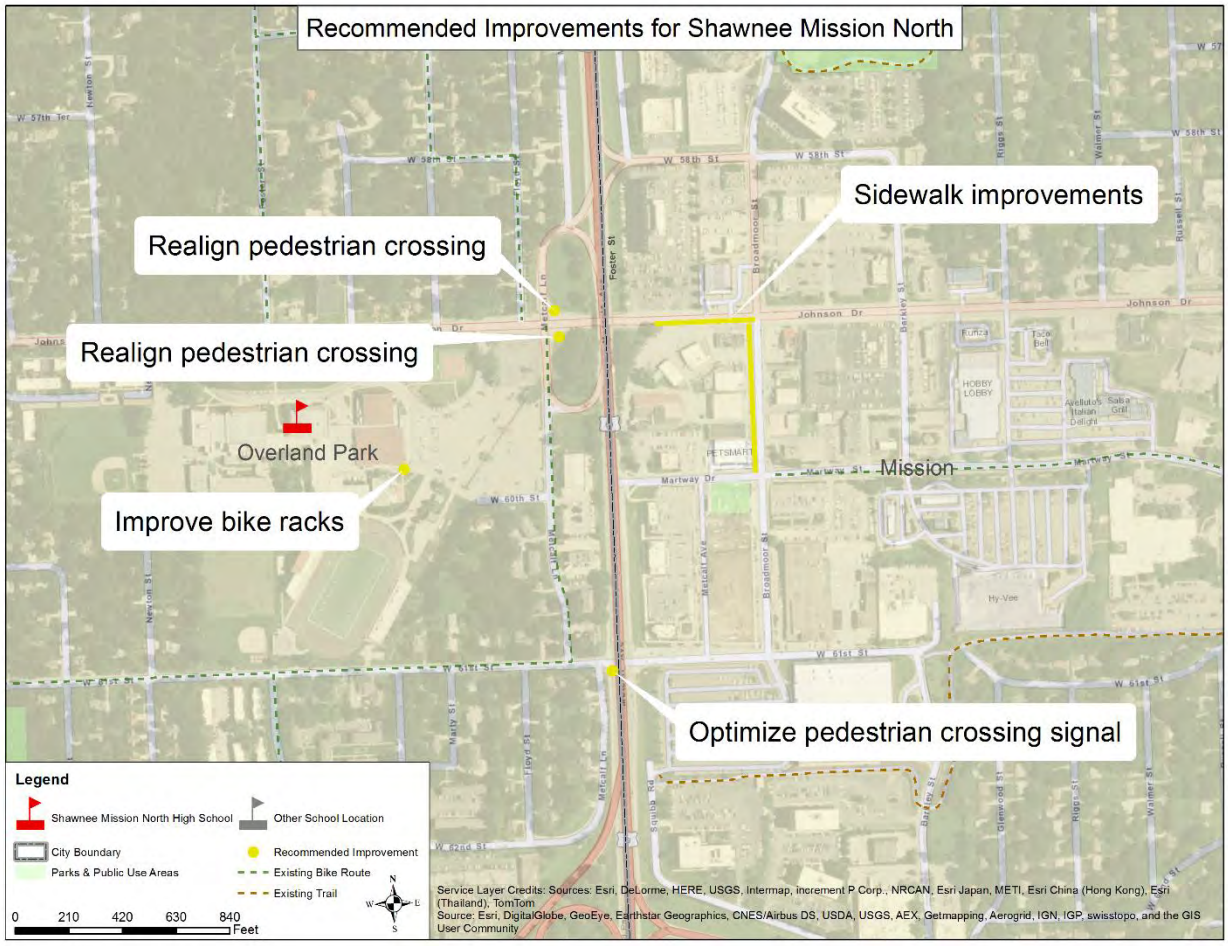

Figure 52 Shawnee Mission North High School Recommendations

Programmatic Recommendations

Explore transit and bikesharing opportunities that connect students to destinations

The Kansas City Area Transportation Authority (KCATA) and the Mid-America Regional Council are currently studying transit in northeast Johnson County as both entities develop strategic plans. Upcoming fare structure changes will provide a subsidy for students purchasing transit passes through participating schools. BikeWalkKC has proposed expanding the Kansas City regional bikeshare program into northeast Johnson County in 2019 - 2020. Together, these developments offer the opportunity to provide significantly more transportation options to students within the next five years. In addition to increasing mobility generally, these changes generate more bicyclist and pedestrian activity in the form of “last mile” travel to their destination. Overland Park, Mission, and the School District should actively engage in these opportunities and advocate for new facilities that serve the high school.

Infrastructure Recommendations

Optimize pedestrian signal timing at 61st Street and Metcalf Avenue

Students in the workshop mentioned how the pedestrian signal took excessive time after the button was activated. While Johnson Drive to the north has sidewalks and goes underneath Metcalf Avenue, 61st Street is the only location within ¾ of a mile to safely cross Metcalf Avenue. Optimizing the pedestrian signal located at 61st Street and Metcalf Avenue would improve walking or bicycling trips for students living to the southeast of the high school, while further facilitating the neighborhood’s connection to destinations for employment, retail, and services in Mission.

Upgrade existing bike racks at Shawnee Mission North High School

Bicycling is an especially effective way to expand the area for students to travel to school without having to rely on a private automobile or school bus. The bike racks at Shawnee Mission North are well utilized, but are a type that could potentially damage bicycles. The existing bike racks, if used to full capacity, would support only the front wheel of bikes. The low height of some of these racks would cause an even greater amount of the bike’s weight to push the wheel against bike rack, potentially bending wheels. These bike racks should be replaced with racks that allow the bike frame, rather than the bike wheel, to lean against the rack and support the weight of the bicycle.

Figure 53 Bicycle Racks at Shawnee Mission North High School

Realign crosswalk at south and north traffic islands at Johnson Drive and Metcalf Lane / Frontage Street.

Johnson Drive is a significant walking corridor for students, particularly to access fast food and retail developments east of Metcalf Avenue during lunch and after school. Students reported right-turning cars often fail to yield to students crossing Metcalf Lane on the south side of Johnson Drive, or Frontage to the north. Failure for cars to yield to pedestrians was especially prevalent after school was dismissed as cars exit the high school parking lot. Realigning the ramps and crossings of these islands would increase the visibility of pedestrians to turning cars.

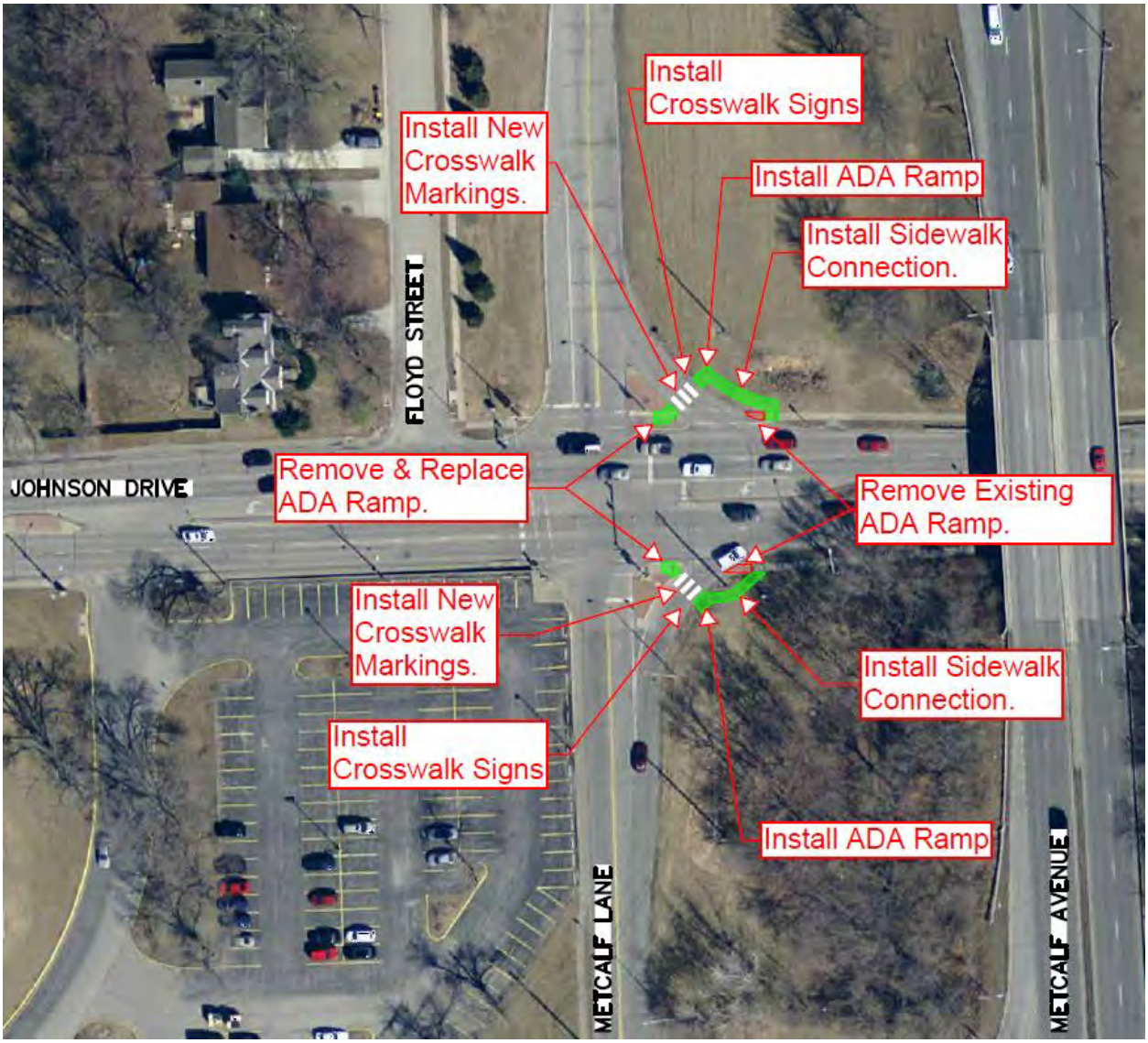

Figure 54 Realigning crosswalks at traffic islands on Metcalf Lane and Johnson Drive

Sidewalks on south side of Johnson Drive west of Broadmoor Street, and west side of Broadmoor from Johnson Drive to Martway

The fast food and retail development along Johnson Drive and Broadmoor Street east of Metcalf Avenue attracts students during lunch or after school. Significant gaps are present in the sidewalks along these streets. As a result, pedestrians conflict with drivers entering or exiting the parking lots fronting these developments. Connecting sidewalks along these portions of Johnson Drive or Broadmoor Street would protect students traveling to and from Shawnee Mission North, as well as students accessing these facilities from Horizons High School.

Figure 55 Adding sidewalk infrastructure on Johnson Drive and Broadmoor Street

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Appendix A – Safe Routes to School Programming Options

(Adapted from materials published by the National Center for Safe Routes to School).

Education – Overview

Education is one of the complementary strategies in a Safe Routes to School (SRTS) program. Education activities include teaching pedestrian, bicyclist and traffic safety and creating awareness of the benefits and goals of SRTS. While education dovetails with engineering and enforcement, it is most closely linked to encouragement strategies. For example, children may learn pedestrian and bicyclist safety skills and then get the chance to join a mileage club that rewards them for walking or bicycling to school. Encouragement activities also offer "teachable moments" to reinforce pedestrian and bicyclist safety education messages.

Planning education strategies includes identifying:

- Who needs to receive information.
- When the education should be delivered.
- What information needs to be shared.
- How the messages will be conveyed.

Who

Audiences for SRTS education include:

- Children
- Parents
- Drivers
- Neighbors

Once a community decides to begin a SRTS program, each of these audiences plays a role in receiving and/or providing related education. Some sub-groups may require particular attention, such as families who do not speak English as a first language, individuals with vision, hearing or mobility impairments, and families with low-incomes. These groups are often overlooked so planning ahead for how they will be reached is important.

When

Before beginning encouragement strategies, children should receive pedestrian and bicyclist safety education. Sometimes education strategies need to begin quickly. For example, in areas with unsafe routes where children are already walking or bicycling out of necessity, education is urgently needed to reduce the risk of injury until other measures can also be put into place. The timing for education activities can also depend on the issues in the community and how education fits with other parts of the SRTS program.

What and How

What information needs to be shared with each audience is presented in this section as "key messages." How the information can be conveyed is described in "strategies." Key messages and strategies are organized by audience. It is worthwhile to read about all groups because there is overlap among them. For example, sometimes parents and neighbors are also drivers near the school and thus need to be reached for a variety of reasons in a variety of ways.

Education – Children

Ways to deliver education

A number of methods are available for teaching children about safety and health. Deciding on a method (or more than one) may be influenced by:

- how much content is to be covered
- the amount of time available
- the desired outcome

For example, one-time instruction, such as an assembly, generally offers the least information and requires the least time. Skills practice, which requires more time and extensive preparation, shows the greatest promise for children to adopt safety skills.

One-time instruction

One-time instruction, such as an assembly, offers an opportunity to reach many children quickly. The event builds school-wide excitement about bicycling and walking while offering a way to introduce safety education in schools where competing demands for class time do not allow for more extensive instruction.

Assemblies work best when they are short, visual, focused on a single topic, age-appropriate and engage children. Educational messages may be taught through skits, songs, chants, photographic or artistic presentations, videos, guest speakers or other ways of engaging a large audience. Classes working on related topics, such as health or air quality, can share what they have learned with other children in the audience.

Children may have a hard time remembering or applying what they learn in these brief sessions. One-time methods can be made more effective by reinforcing them throughout the year by inserting messages in school-wide announcements, signs and newsletter articles.

Classroom or physical education lessons

In a classroom or physical education class, education can be provided in the following ways:

- stand-alone lessons
- lessons integrated into subjects such as language arts and math
- comprehensive curriculum delivered in every grade

Ideally, children will receive a comprehensive bicycle and pedestrian safety curriculum which includes hands-on skills practice. Many schools see bicycle and pedestrian safety, whether as part of a comprehensive curriculum or not, fitting nicely into physical education.

Lessons integrated into classroom subjects

Safety education can be integrated into traditional classroom subjects to meet education standards in many ways. Examples include:

- **Math:** Calculating average walking speeds or distances.
- **Science:** Walking outdoors to collect samples and observe nature; Learning about climate change, pollution and how walking and bicycling can play a protective role.
- **Reading:** Reading about nature or walking.
- **Language arts:** Writing about walking or what is seen on the route to school.
- **Art:** Designing posters to encourage walking.
- **Geography:** Tracking students' walking and bicycling mileage and plotting it on a map; Learning about places that the school or class "visits" as they gather miles. (See more details in Encouragement); Drawing a map of the route to school.
- **Health:** Learning about the cardiovascular system; Calculating heart rate; Using pedometers to count steps.

Parent involvement

Parents can be the best instructors for their children because:

- They can serve as role models for safe walking and bicycling behavior.
- They can observe their child's behavior and provide guidance in real-life situations.

Information about what's being taught in school can be sent home and parents can be asked to reinforce the skills with their children. Encouraging parents to take a walk with their child provides time for them to assess the child's skills, such as whether the child pays attention to traffic, chooses appropriate places to walk and has the ability to gauge gaps in traffic that allow for safe street crossing. Parents can also play a role in the school by volunteering to help with classroom and skills practice.

Sources of instructors

All of these educational strategies require at least one individual who is knowledgeable and willing to teach. A variety of people may take on this role. If instruction is to be provided at the school, teachers may cover the material themselves or they may appreciate guest instructors such as a local bicycle club member or law enforcement officer. Parents can play a central role as instructors for their own children but they may need guidance on what to teach. After-school activities are another opportunity to provide safety training and can tap into other community resources. The following individuals can play a role in educating children:

- Physical education or classroom teacher
- Law enforcement, fire department or safety personnel
- Parent
- Volunteer
- School nurse
- Public health professional
- Local bicycle club member including a League of American Bicyclists (LAB) Instructor
- Community group such as a local Safe Kids coalition

Structured skills practice

Skills practice gives children a safe, supervised environment in which to learn safety behaviors. Pedestrian skills practice includes where and when to cross a street and proper crossing procedure. Bicycle skills training includes bicycle handling drills and may also include a supervised group ride in a neighborhood. Simulated situations, whether on foot or bicycle, require space such as a playground or closed parking lot and more than one adult. Bicycle skills practice also usually requires cones, stop signs and other props.

Skills practice may be included in the following ways:

- Part of classroom or physical education class-based lessons
- Part of an after-school program
- A one-time event such as a bicycle rodeo

Bicycle skills practice or any on-bicycle activity is more logistically complex than pedestrian safety training and a knowledgeable instructor such as a police officer, bicycle club member or experienced physical education teacher is needed. Bicycle skills practice is generally conducted with older elementary children and may occur one-time as a bicycle rodeo, or over several sessions as a more complete bicycle safety training.

Bicycle rodeo

Bicycle rodeos are one-time events for children to practice basic bicycling techniques and can serve as an opportunity to check children's bicycles for fit and functioning and to provide instruction on proper helmet use. Rodeos require a knowledgeable instructor and use a simulated setting for practice. Simulated settings may be playgrounds or parking lots set up with stop signs, traffic cones, and other props. Often a stop sign course is set up to teach children how to stop and look for oncoming traffic. Other activities teach balance, stopping, turning and control. Rodeos are often community-sponsored instead of solely conducted by a school.

Bicycle safety training

Bicycle safety training generally lasts five to ten hours over several sessions and includes both information and on-bicycle practice of safe ways to operate a bicycle. At the end of the course participants apply their knowledge and skills in simulated or actual on-road settings. Simulated activities are as described for a bicycle rodeo, but allow more time for practice and mastery. Knowledgeable instructors may be available from the local law enforcement agency or bicycle club. For example, the League of American Bicyclists offers trained instructors to teach their Bicycle Education program.

Education – Parents

A variety of strategies can be used to reach parents as they teach their children safety skills and drive on the school campus and adjacent streets.

- **Print materials:** To communicate with parents, school web sites, emails to parents, or information sent home with students can all be used. In California, some schools hold "Traffic Safety Days" to promote safe driving in the school zone, as well as encourage safe walking and bicycling. School officials, parent volunteers, police officers and others distribute flyers and talk to drivers who pick up or drop off children. Walkers and bicyclists are given safety information and incentives at a welcome table as they arrive at the school.
- **Enforcement strategies:** Signs, pavement markings, notices and educational flyers placed on windshields of illegally parked motor vehicles remind parents of proper rules and procedures. See Enforcement for more information.
- **Media stories:** Local news stories that focus on Safe Routes to School (SRTS) can also include key messages about pedestrian, bicyclist and traffic safety.
- **Training:** While many parents feel comfortable teaching their child pedestrian safety, they sometimes feel less prepared to teach bicycling rules of the road. One bicycle club in Marin County, California responded to this need by offering a training class for parents on how to teach bicycling skills to their children. Some communities have sought ways to improve parents' driving behavior through training.

In relation to Safe Routes to School (SRTS), parents play a role in their child's safety as:

- **Parents as teachers of safety behaviors:** Practice safe walking and bicycling with your child. Parents teach and model safe behavior for their children. Children have the best chance of retaining and applying walking and bicycling skills if they have a chance to practice them with supervision and reinforcement. It is similar to the need to teach teens to drive — new drivers are not expected to have the skills or knowledge to drive safely without receiving instruction.
- **Parents as drivers on the school campus during drop-off and pick-up times**: Follow correct drop-off and pick-up procedure if driving to the school is necessary. Drivers need to know the appropriate locations for pick up and drop off at the school and any special rules that apply at these times. A well-designed drop-off and pick-up procedure along with drivers who correctly follow the procedure will improve the safety of everyone arriving to or departing from school.
- **Parents as drivers near the school:** Parents are no different than other drivers. Some contribute to safety problems by speeding through school zones and failing to obey traffic signals.

Encouragement - Overview

Encouragement strategies are about having fun — they generate excitement and interest in walking and bicycling. Special events, mileage clubs, contests and ongoing activities all provide ways for parents and children to discover, or re-discover, that walking and bicycling are do-able and a lot of fun.

Encouragement is one of the complementary strategies that safe routes to school (SRTS) programs use to increase the number of children who walk and bicycle to school safely. In particular, encouragement and education strategies are closely intertwined, working together to promote walking and bicycling by rewarding participation and educating children and adults about safety and the benefits of bicycling and walking.

Encouragement activities also play an important role moving the overall SRTS program forward because they build interest and enthusiasm which can buoy support for changes that might require more time and resources, such as constructing a new sidewalk.

In brief, encouragement activities:

- Can be quick and easy to start.
- Can be done with little funding.
- Can be organized by parents, students, teachers or community volunteers.
- Involve all children, including children with disabilities.
- Focus on fun and enjoyment.
- Jumpstart a community's interest in walking and bicycling.
- Show quick success and generate enthusiasm for other strategies that may require a greater investment of time and resources.
- Can foster safe walking, bicycling and physical activity behaviors that will be useful throughout children's lives.
- Offer teachable moments to reinforce safe walking and bicycling behaviors.

There are many encouragement strategies, such as Walk to School Days, when the whole school is invited to take one day off from their usual routine to join in the parade of children walking and bicycling to school. Walking school buses and bicycle trains are organized efforts that group children with adults for safety and for fun while contests help to encourage students to walk or bicycle by offering rewards and recognition.

Encouragement – Special Events

A special event is usually a one-day activity to celebrate walking and bicycling to school. Most often, families walk or bicycle from home or from a group meeting area. Signs, balloons and banners can be used to create an air of excitement and celebration. When they arrive at the school, participants might be greeted by the school principal or a school mascot and receive snacks and small gifts like stickers. A press conference, songs, flag salute or other group activity round out the event.

Volunteers help plan the event, walk with children and give out items at the school. These events offer the added benefits of bringing visibility to SRTS and related issues as well as educating families and the broader community about the benefits and joy of walking and bicycling safely to school. They may be held once a year, such as International Walk to School Day, or several times during the year.

Advantages

- Less labor intensive than ongoing activities.
- Opportunity to engage broader community, including politicians and other community leaders, and bring visibility for SRTS.
- Opportunity to involve diverse groups of students and adults in a common activity.
- Opportunity to gain media coverage.

Considerations

- Requires providing a route, or routes, that will be safe for all participants which may not be a route from their homes.
- Should include all students, including students with disabilities.
- Limited ability to promote daily walking to school.

Quick steps for a special event:

1. Find partners including parents, school personnel, law enforcement and community members.
2. Plan the celebration, including a safe route and any needed volunteers and incentives.
3. For International Walk to School events, register at www.walktoschool.org/register.
4. Promote the event.
5. Have fun.

Encouragement – International Walk to School Day

International Walk to School Day, held in October each year, joins children and adults from around the world to celebrate walking and bicycling to school.

This event can be a fun way to kick off a Safe Routes to School (SRTS) program. In fact, many participating communities use the event to work towards creating safe environments that support walking and bicycling every day. A survey of U.S. Walk to School Coordinators in 2002 found that 43 percent were working towards making permanent changes in conjunction with their event, and that percentage is on the rise (Pedestrian and Bicycle Information Center [PBIC], 2004; PBIC, 2005a). In 2005, over one-half of registered events were part of ongoing activities at the school to promote bicycling and walking (PBIC, 2005b).

Since it began in the US in 1997, participation both within the US and in other countries has grown every year. The event's popularity led to the establishment of October as Walk to School Month, giving communities the flexibility to celebrate on a single day, week or throughout the month. Information about how to register for and plan a local event can be found at *www.walktoschool.org.*

Encouragement – Mileage Clubs and Contests

Mileage clubs and contests encourage children either to begin walking and bicycling to school or to increase their current amount of physical activity by making it fun and rewarding. Generally, children track the amount of miles they walk or bicycle and get a small gift or a chance to win a prize after a certain mileage goal is reached.

Mileage clubs and contests are usually designed in one of three ways:

- on an individual basis where every child logs miles walked or bicycled and has a chance to win;
- as a classroom competition where a classroom's collective miles are compared against other classes; or
- as a competition among schools.

Winners are rewarded with prizes including medals, certificates or trophies.

These activities are very flexible. Depending on the school, the competition aspect can be emphasized or not, and the rewards can be elaborate or simple. In cases where children cannot walk or bicycle to school, because of distance, safety concerns, or a disability, the school can provide credit for distance walked and bicycled at home, to and from a bus stop, or during the school day on campus.

Mileage clubs and contests usually involve incentives like prizes or small gifts. In order to be most effective, incentives need to be provided in concert with other strategies over a period of time — not just given once.

Advantages

- Can provide quick reinforcement for walking and bicycling.
- Children like incentives.
- Can include all students.
- Can include walking and bicycling beyond the trip to school.

Considerations

- Needs a coordinator.
- Requires record-keeping.
- Should be age appropriate and simple in design.

Quick steps to a mileage club or contest:

1. Identify coordinator and (if necessary) obtain school's support.
2. Decide where children can accrue mileage (on the way to school, at home, on the school campus)
3. Create system for logging and tracking mileage or number of times walked / bicycled.
4. Decide on incentives.
5. Promote.
6. Kick off.
7. Recognize and reward participation.
8. Track participation.
9. Make changes as needed.

Encouragement – Walking School Bus or Bicycle Train

A walking school bus and bicycle train both consist of groups of students accompanied by adults that walk or bicycle a pre-planned route to school. Routes can originate from a particular neighborhood or, in order to include children who live too far to walk or bicycle, begin from a parking lot. They may operate daily, weekly or monthly. Often, they are started in order to address parents' concerns about traffic and personal safety while providing a chance for parents and children to socialize.

Advantages

- Can be loosely structured or highly organized (see "Quick steps").
- Can include a meeting point with a parking lot so children and parents who must drive can participate.

Considerations

- Requires identifying appropriate routes.
- Requires parents to walk with children or use waivers to address liability concerns.
- More organized structure requires considerable planning.
- Bicycle train participants need to wear helmets.

Walking school buses and bicycle trains can be loosely structured or highly organized. For example, walking buses or bicycle trains can be as simple as neighborhood families deciding to walk or bicycle together. More formal, organized walking school buses and bicycle have a coordinator who recruits volunteers and participants, creates a schedule and designs a walking route. While requiring more effort, more structured walking school buses and bicycle trains offer the opportunity to involve more children.

Quick steps to a walking school bus or bicycle train

Loose, informal structure

1. Invite families who live nearby to walk or bicycle as a group.
2. Pick a route and take a test walk or ride.
3. Decide how often the group will travel together.
4. Start walking or bicycling.

Highly organized, more formal structure

1. Determine the amount of interest in a walking school bus or bicycle train. Contact potential participants and partners and identify a coordinator.
2. Identify the route(s).
3. Identify a sufficient number of adults to supervise walkers or bicyclists. (The Centers for Disease Control recommends one adult per three children for children ages 4 to 6 and one adult for six children for older elementary children ages 7 to 9 (2000). For bicyclists, one adult per three to six children is advisable.)
4. Finalize logistical details including setting a time schedule, training volunteers and promoting participation.
5. Kick off the activity.
6. Track participation.
7. Make changes to the activity as needed.

Encouragement – On-campus Walking Activities

In situations where distance, safety concerns, or a disability prevents a child from walking or biking to school, communities can encourage walking on the school campus. For example, school officials can establish walking activities before or after school or during recess, physical education or health class. Walk routes on the school grounds provide all students an opportunity to walk a safe route and increase their physical activity. Ideas presented in the Mileage clubs and contests section also provide suggestions for incorporating routine walking into the school day.

Advantages

- Includes children that may otherwise not be able to participate in SRTS activities.

Considerations

- Needs school or volunteer coordinator and support from administration.
- May require time in the school schedule.

Quick steps to on-campus walking activities

1. Identify a coordinator and obtain school's support.
2. Determine the scope of the activity: who will be involved? When will they walk? Where will they walk? For how long will they walk?
3. Set goals for walkers either by accumulated distance, amount of time or number of days walked.
4. Obtain incentives (optional).
5. Promote.
6. Kick off.
7. Track participation.
8. Make changes to the activity as needed.

Encouragement – Park and walk

A pre-determined parking lot acts as the meeting area for families who drive and then park and walk the remaining distance to school. Some communities require parents to walk with their children to school while others have designated adult volunteers to walk groups of children from the parking area to school.

Park and walk campaigns have the potential to reduce traffic congestion around a school and encourage physical activity for parents and children. This strategy is especially helpful for including families who live too far from the school to walk or who do not have a safe route to school.

Advantages

- Includes families who live too far to walk or have an unsafe route.
- Encourages neighborhood involvement.
- Reduces traffic congestion at the school.

Considerations

- Requires identifying a safe route from the parking area to the school.
- Requires working with the parking lots owner.

Quick steps to a park and walk activity

1. Locate a parking lot within walking distance of the school. Work with lot owner to allow use.
2. Map a safe route to school from parking area.
3. Recruit volunteers if parents are not required to walk with their children.
4. Promote it.
5. Kick off.
6. Track participation.
7. Make changes to the activity as needed.

Appendix B – Infrastructure Recommendations, Costs, and Illustrations

ENGINEER'S ESTIMATE - HIGHLANDS

Client: City of Mission
Project: Mission Kansas, Safe Routes to Schools
Project Number: 015-2709
Date: 5/25/2016

ITEM DESCRIPTION	QUANTITY	UNIT	UNIT COST $	COST $
New Sidewalk on the west side of Cedar St from 63rd St. to 61st Terr.				
4" Sidewalk	2360	Sq. Ft.	$4.50	$10,620.00
Combined Sidewalk Retaining wall	52	Cu. Yd.	$800.00	$41,631.11
Unclassified Excavation	271	Cu. Yd.	$15.00	$4,072.22
Rectangular Rapid Flash Beacons (Pair) (Installed)	1	Each	$20,000.00	$20,000.00
Advanced School Crossing Sign	1	Each	$350.00	$350.00
30" White Pre-Formed Thermoplastic	40	Ft.	$20.00	$800.00
ADA ramp	7	Each	$2,600.00	$18,200.00
			SUBTOTAL	**$95,673.33**
		CONTINGENCY	**20%**	**$19,134.67**
			TOTAL	**$114,808.00**
Replace sidewalk at back south entrance, including connection to Asph.				
Remove & Replace 4" Concrete Sidewalk (Existing width)	805	Sq. Ft.	$20.00	$16,100.00
Remove & Replace fence (4' Chain Link)	161	Ft.	$30.00	$4,830.00
Contractor furnished fill to correct cross slope	12	Cu. Yd.	$25.00	$298.15
4" Sidewalk connection	125	Sq. ft.	$4.50	$562.50
			SUBTOTAL	**$21,790.65**
		CONTINGENCY	**20%**	**$4,358.13**
			TOTAL	**$26,148.78**
Replace sidewalk at back north entrance between fences				
Remove & Replace 4" Concrete Sidewalk (Existing width)	840	Sq. Ft.	$20.00	$16,800.00
Contractor furnished fill to correct cross slope	12	Cu. Yd.	$20.00	$248.89
Remove & Replace fence (6' Privacy)	168	Ft.	$40.00	$6,720.00
			SUBTOTAL	**$23,768.89**
		CONTINGENCY	**20%**	**$4,753.78**
			TOTAL	**$28,522.67**
New pedestrian crossing at south back entrance				
ADA ramp	2	Each	$2,600.00	$5,200.00
School Crossing Signs	2	Each	$350.00	$700.00
Wayfinding signs		Each	$350.00	
30" White Pre-Formed Thermoplastic	30	Ft.	$20.00	$600.00
Remove & Replace Curb & Gutter	12	Ft.	$40.00	$480.00
			SUBTOTAL	**$6,980.00**
		CONTINGENCY	**20%**	**$1,396.00**
			TOTAL	**$8,376.00**
New pedestrian crossing at north back entrance				
ADA ramp	2	Each	$2,600.00	$5,200.00
School Crossing Signs	2	Each	$350.00	$700.00
Wayfinding signs	8	Each	$351.00	$2,808.00
30" White Pre-Formed Thermoplastic	30	Ft.	$20.00	$600.00
Remove & Replace Curb & Gutter	12	Ft.	$40.00	$480.00
			SUBTOTAL	**$9,788.00**
		CONTINGENCY	**20%**	**$1,957.60**
			TOTAL	**$11,745.60**
New Rectangular Rapid Flashing Beacon at Nall & 63rd Terr.				
Rectangular Rapid Flash Beacons (Pair) (Installed)	1	Each	$20,000.00	$20,000.00
			SUBTOTAL	**$20,000.00**
		CONTINGENCY	**20%**	**$4,000.00**
			TOTAL	**$24,000.00**

ENGINEER'S ESTIMATE - HIGHLANDS

Client: City of Mission
Project: Mission Kansas, Safe Routes to Schools
Project Number: 015-2709
Date: 5/25/2016

ITEM DESCRIPTION	QUANTITY	UNIT	UNIT COST $	COST $
Reconfigure crossings at 63rd Terr. and Roe Avenue				
Remove & Replace ADA ramp	4	Each	$2,900.00	$11,600.00
4" Sidewalk	55	Sq. Ft.	$4.50	$247.50
School Crossing Signs	4	Each	$350.00	$1,400.00
30" White Pre-Formed Thermoplastic	60	Ft.	$20.00	$1,200.00
Remove & Replace Curb & Gutter	30	Ft.	$40.00	$1,200.00
			SUBTOTAL	**$15,647.50**
		CONTINGENCY	**20%**	**$3,129.50**
			TOTAL	**$18,777.00**

TOTAL **$232,378.04**

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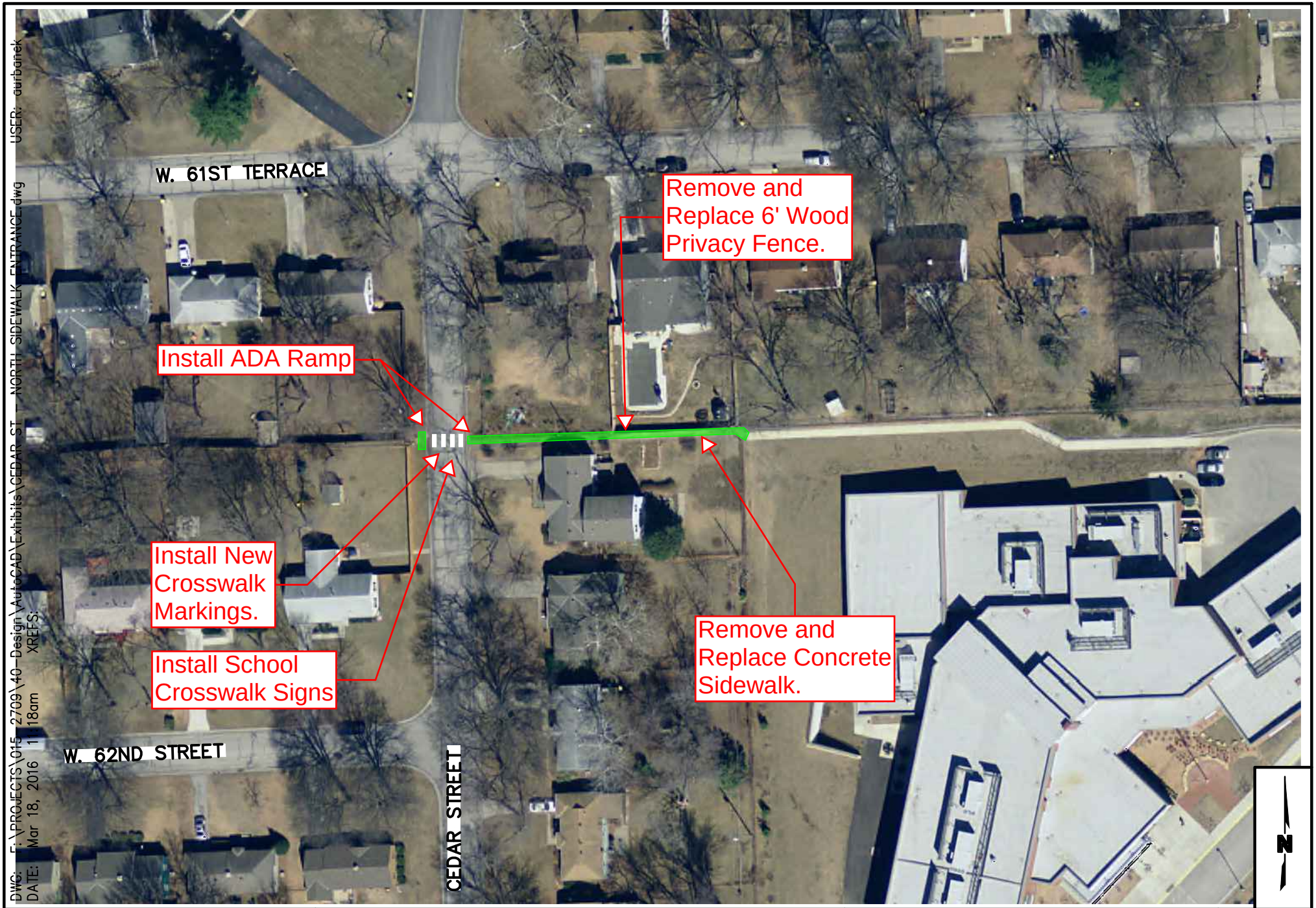
DRAWN BY: AKU		7301 West 133rd Street Suite 200 Overland Park, KS 66213-4750 TEL 913.381.1170 FAX 913.381.1174	7
DATE: 3/18/2016			



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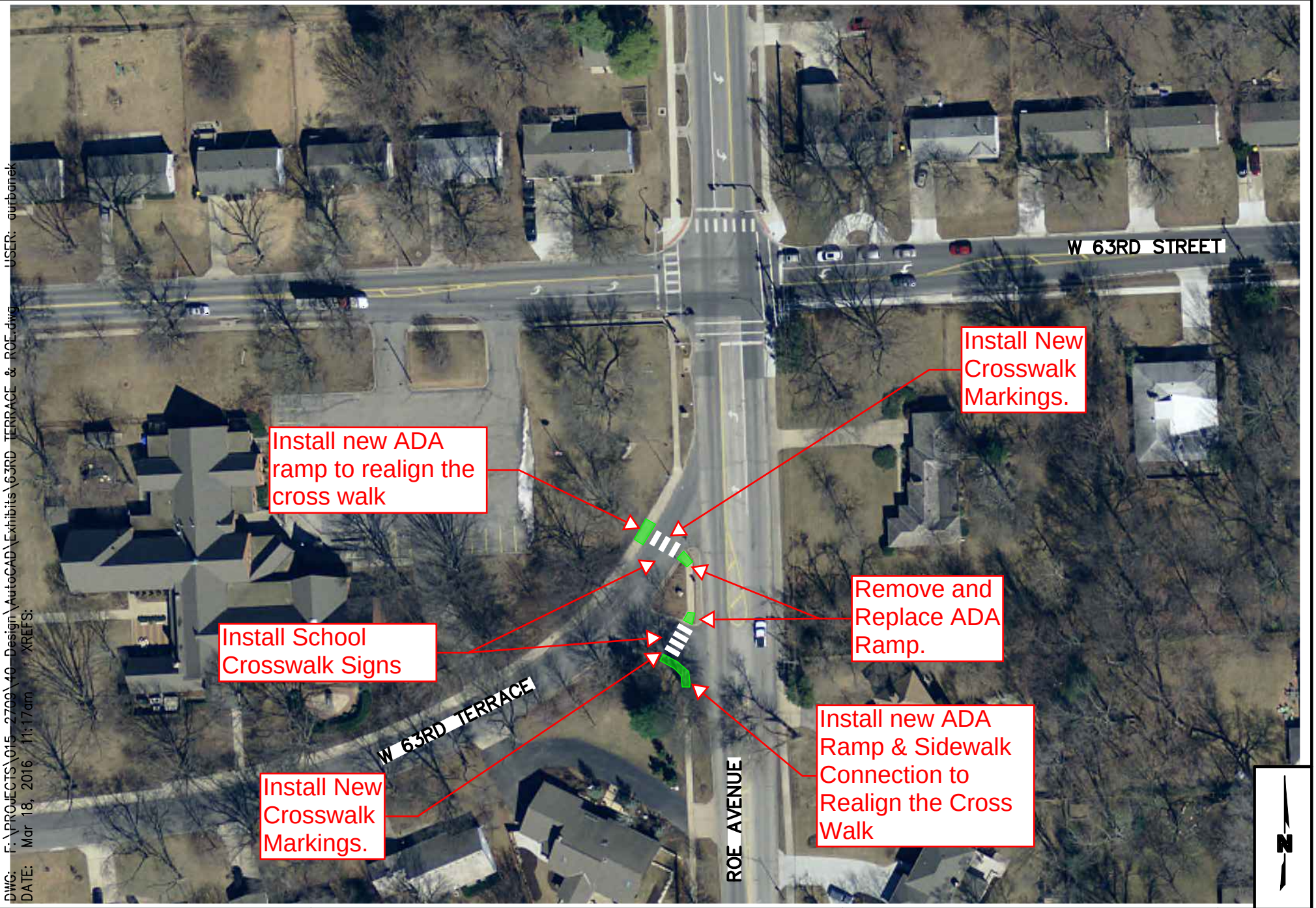
DATE: 3/18/2016			



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DRAWN BY: AKU		7301 West 133rd Street Suite 200 Overland Park, KS 66213-4750 TEL 913.381.1170 FAX 913.381.1174	2
DATE: 3/18/2016			

ENGINEER'S ESTIMATE - RUSHTON

Client: City of Mission
Project: Mission Kansas, Safe Routes to Schools
Project Number: 015-2709
Date: 5/25/2016

ITEM DESCRIPTION	QUANTITY	UNIT	UNIT COST $	COST $
Cross Walk upgrades on 52nd Street (two crossings)				
School Crossing Signs (no posts)	4	Each	$160.00	$640.00
30" White Pre-Formed Thermoplastic	60	Ft.	$20.00	$1,200.00
Remove & Replace ADA ramp	4	Each	$2,900.00	$11,600.00
Remove & Replace Curb & Gutter	26	Ft.	$40.00	$1,040.00
			SUBTOTAL	**$14,480.00**
		CONTINGENCY	**20%**	**$2,896.00**
			TOTAL	**$17,376.00**
Upgrade cross walk at 53rd & Outlook				
Rectangular Rapid Flash Beacons (Pair) (Installed)	1	Each	$20,000.00	$20,000.00
Remove & Replace ADA ramp	2	Each	$2,900.00	$5,800.00
Remove & Replace Curb & Gutter	18	Ft.	$40.00	$720.00
30" White Pre-Formed Thermoplastic	30	Ft.	$20.00	$600.00
Remove & Replace 4" Concrete Sidewalk	50	Sq. Ft.	$12.00	$600.00
			SUBTOTAL	**$27,720.00**
		CONTINGENCY	**20%**	**$5,544.00**
			TOTAL	**$33,264.00**
Stripe bike lane on Lamar from 52nd St. to 51st St.				
Pavement Marking 4" White thermoplastic	615	Ft	$2.50	$1,537.50
Bike lane signage	2	Each	$350.00	$700.00
			SUBTOTAL	**$2,237.50**
		CONTINGENCY	**20%**	**$447.50**
			TOTAL	**$2,685.00**
Stripe bike lane on Lamar from Shawnee Mission Parkway to Foxridge (NB &SB)				
Pavement Marking 4" White thermoplastic	15800	Ft	$2.50	$39,500.00
White Directional Bike Arrows (Pre Formed Thermoplastic)	32	Each	$125.00	$4,000.00
White Bicycle Symbols (Pre Formed Thermoplastic)	32	Each	$225.00	$7,200.00
Pavement marking symbol (Sharrow)	10	Each	$500.00	$5,000.00
Bike lane signage	20	Each	$350.00	$7,000.00
			SUBTOTAL	**$62,700.00**
		CONTINGENCY	**20%**	**$12,540.00**
			TOTAL	**$75,240.00**
Upgrade Cross Walk at 51st & Woodson				
Remove & Replace ADA ramp	2	Each	$2,900.00	$5,800.00
Remove & Replace Curb & Gutter	12	Ft.	$40.00	$480.00
			SUBTOTAL	**$6,280.00**
		CONTINGENCY	**20%**	**$1,256.00**
			TOTAL	**$7,536.00**

TOTAL **$136,101.00**

ENGINEER'S ESTIMATE - RUSHTON

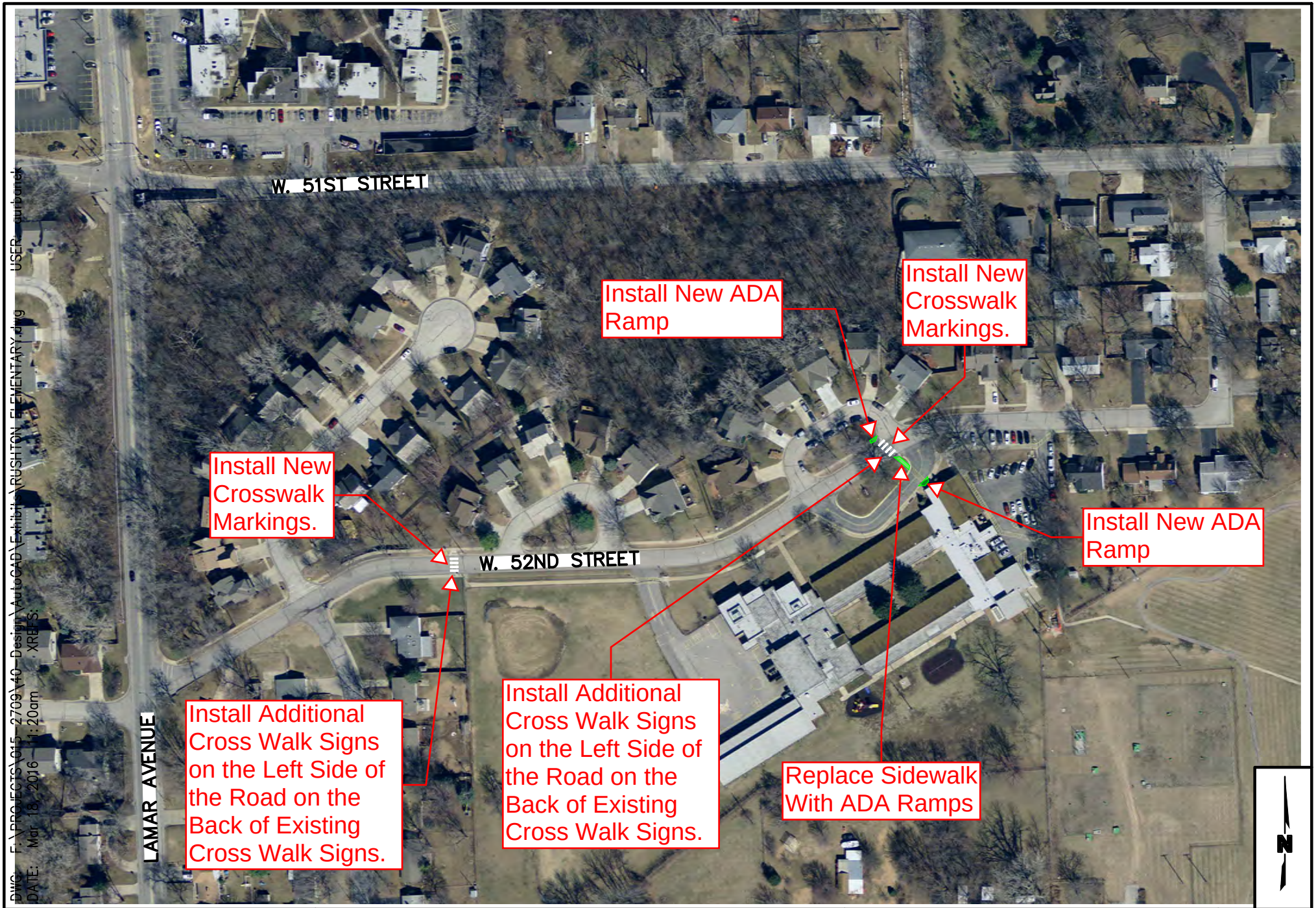
Client: City of Mission
Project: Mission Kansas, Safe Routes to Schools
Project Number: 015-2709
Date: 5/10/2016

ITEM DESCRIPTION	QUANTITY	UNIT	UNIT COST $	COST $
Cross Walk upgrades on 52nd Street (two crossings)				
School Crossing Signs (no posts)	4	Each	$160.00	$640.00
30" White Pre-Formed Thermoplastic	60	Ft.	$20.00	$1,200.00
Remove & Replace ADA ramp	4	Each	$2,900.00	$11,600.00
Remove & Replace Curb & Gutter	26	Ft.	$40.00	$1,040.00
			SUBTOTAL	**$14,480.00**
		CONTINGENCY	**20%**	**$2,896.00**
			TOTAL	**$17,376.00**
Upgrade cross walk at 53rd & Outlook				
Rectangular Rapid Flash Beacons (Pair) (Installed)	1	Each	$20,000.00	$20,000.00
Remove & Replace ADA ramp	2	Each	$2,900.00	$5,800.00
Remove & Replace Curb & Gutter	18	Ft.	$40.00	$720.00
30" White Pre-Formed Thermoplastic	30	Ft.	$20.00	$600.00
Remove & Replace 4" Concrete Sidewalk	50	Sq. Ft.	$12.00	$600.00
			SUBTOTAL	**$27,720.00**
		CONTINGENCY	**20%**	**$5,544.00**
			TOTAL	**$33,264.00**
Stripe bike lane on Lamar from 52nd St. to 51st St.				
Pavement Marking 4" White thermoplastic	615	Ft	$2.50	$1,537.50
Bike lane signage	2	Each	$350.00	$700.00
			SUBTOTAL	**$2,237.50**
		CONTINGENCY	**20%**	**$447.50**
			TOTAL	**$2,685.00**
Stripe bike lane on Lamar from Shawnee Mission Parkway to Foxridge (NB &SB)				
Pavement Marking 4" White thermoplastic	15800	Ft	$2.50	$39,500.00
White Directional Bike Arrows (Pre Formed Thermoplastic)	32	Each	$125.00	$4,000.00
White Bicycle Symbols (Pre Formed Thermoplastic)	32	Each	$225.00	$7,200.00
Pavement marking symbol (Sharrow)	10	Each	$500.00	$5,000.00
Bike lane signage	20	Each	$350.00	$7,000.00
			SUBTOTAL	**$62,700.00**
		CONTINGENCY	**20%**	**$12,540.00**
			TOTAL	**$75,240.00**
Upgrade Cross Walk at 51st & Woodson				
Remove & Replace ADA ramp	2	Each	$2,900.00	$5,800.00
Remove & Replace Curb & Gutter	12	Ft.	$40.00	$480.00
			SUBTOTAL	**$6,280.00**
		CONTINGENCY	**20%**	**$1,256.00**
			TOTAL	**$7,536.00**

ENGINEER'S ESTIMATE - RUSHTON

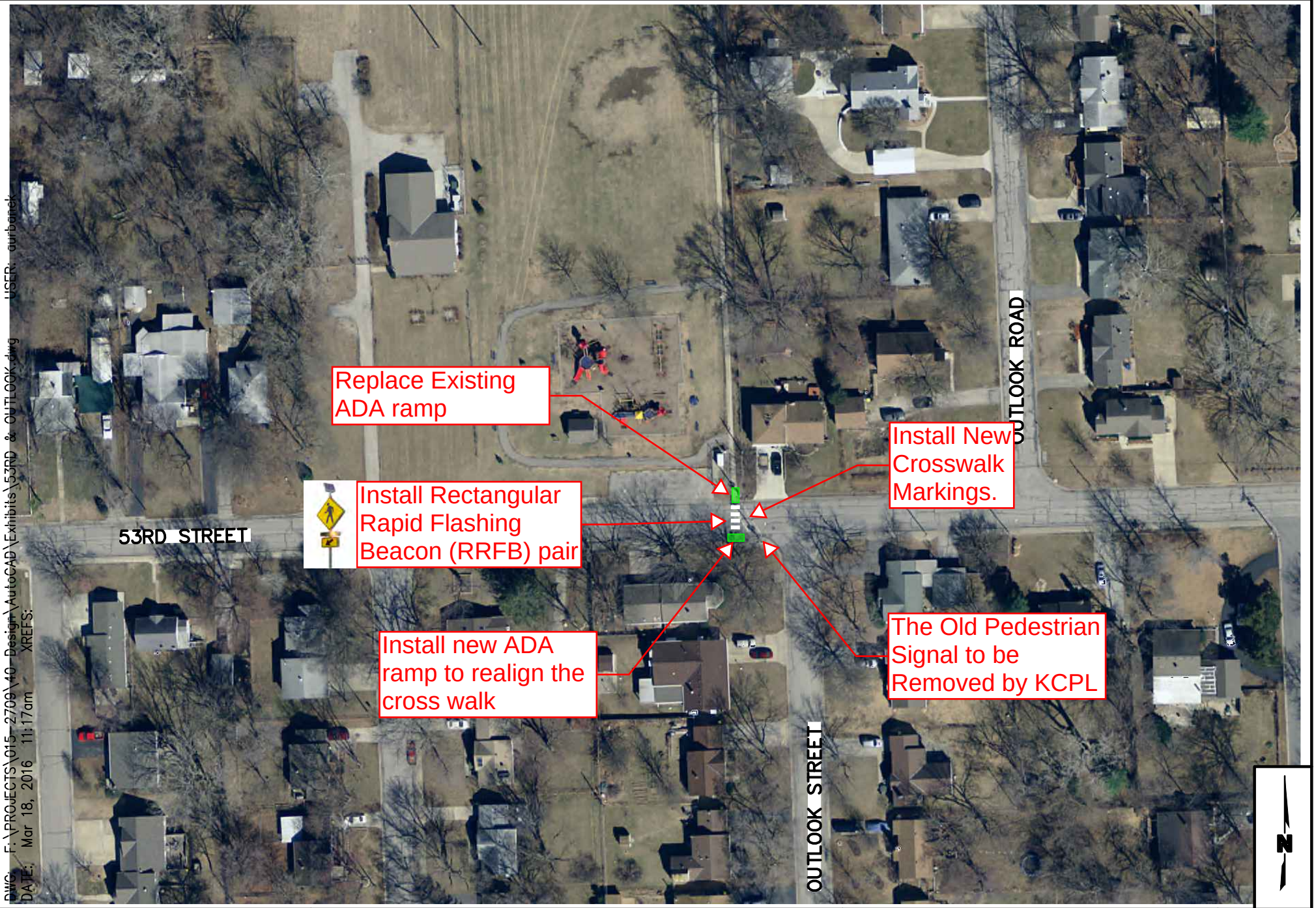
Client: City of Mission
Project: Mission Kansas, Safe Routes to Schools
Project Number: 015-2709
Date: 5/10/2016

ITEM DESCRIPTION	QUANTITY	UNIT	UNIT COST $	COST $
			TOTAL	**$136,101.00**



DWG: F:\PROJECTS\015-2709\40-Design\AutoCAD\Exhibits\RUSHTON ELEMENTARY.dwg USER: aurbanek
DATE: Mar 18, 2016 - 11:20am XREFS:

PROJECT NO: 015-2709	RUSHTON ELEMENTARY	OLSSON ASSOCIATES	EXHIBIT
DRAWN BY: AKU		7301 West 133rd Street Suite 200 Overland Park, KS 66213-4750 TEL 913.381.1170 FAX 913.381.1174	10
DATE: 3/18/2016			



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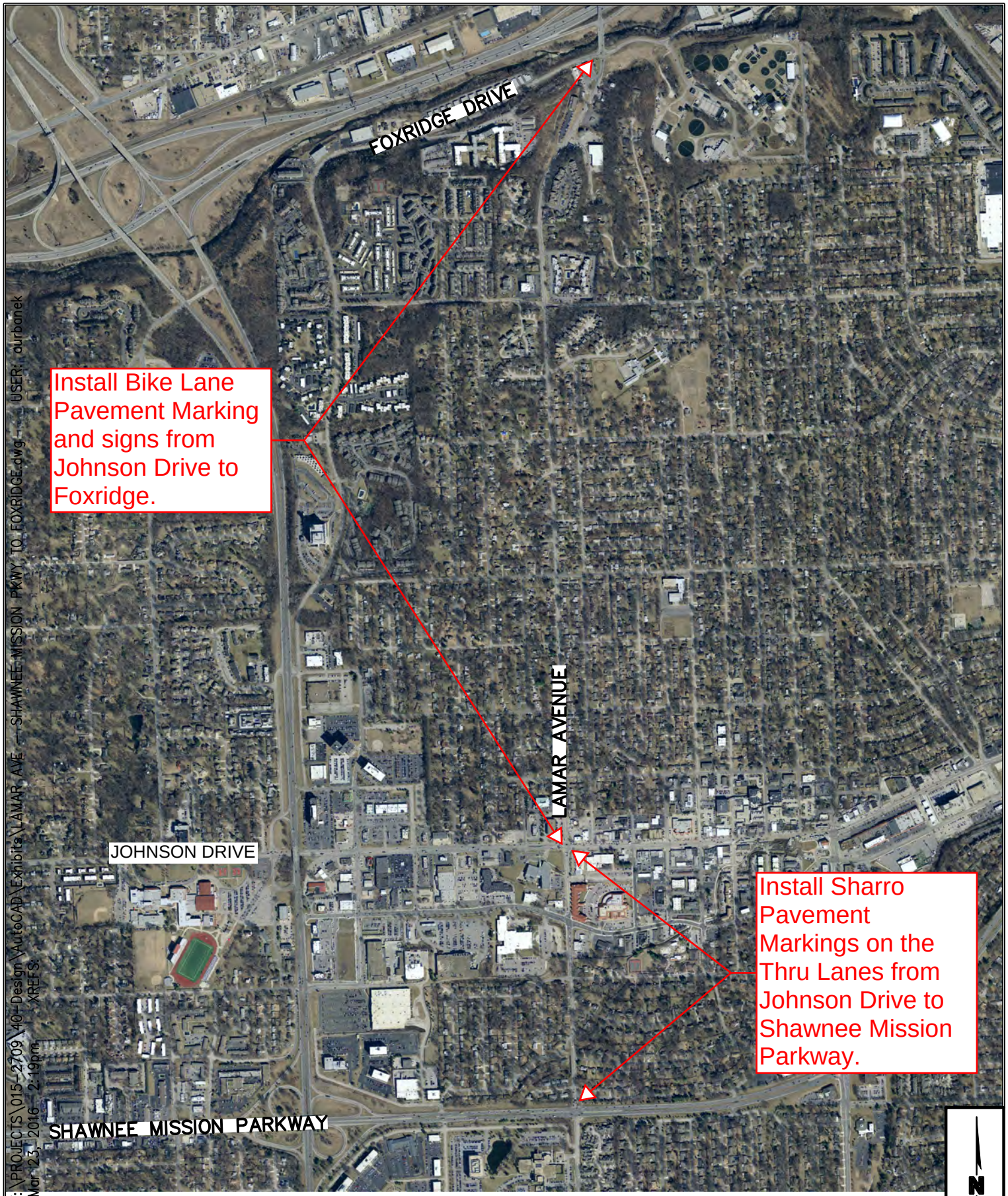
DATE: Mar 18, 2016 11:17am XREFS:

PROJECT NO: 015-2709	53RD STREET & OUTLOOK ROAD	OLSSON ASSOCIATES	EXHIBIT
DRAWN BY: AKU		7301 West 133rd Street Suite 200 Overland Park, KS 66213-4750 TEL 913.381.1170 FAX 913.381.1174	3
DATE: 3/18/2016			



DWG: F:\PROJECTS\015-2709\401-Design\AutoCAD\Exhibits\LAMAR AVE - SHAWNEE MISSION PKWY TO FOXRIDGE.dwg - USER: ourbanek
DATE: Mar 23, 2016 - 2:19pm
XREFS:

PROJECT NO: 015-2709	LAMAR AVE. - SHAWNEE MISSION PKWY TO FOXRIDGE DR.	OLSSON ASSOCIATES	EXHIBIT
DRAWN BY: AKU		7301 West 133rd Street Suite 200 Overland Park, KS 66213-4750 TEL 913.381.1170 FAX 913.381.1174	13
DATE: 3/18/2016			

ENGINEER'S ESTIMATE - HORIZONS

Client: City of Mission
Project: Mission Kansas, Safe Routes to Schools
Project Number: 015-2709
Date: 5/25/2016

ITEM DESCRIPTION	QUANTITY	UNIT	UNIT COST $	COST $
Add pedestrian lighting on Lamar from Johnson Drive to 51st St. (one side)				
Pedestrian lighting system	1	Lump sum	$16,000.00	$16,000.00
			SUBTOTAL	**$16,000.00**
		CONTINGENCY	**20%**	**$3,200.00**
			TOTAL	**$19,200.00**
Optimize pedestrian signal timing at Johnson Drive & Lamar				
Signal technician	1	Lump sum	$600.00	$600.00
			SUBTOTAL	**$600.00**
		CONTINGENCY	**20%**	**$120.00**
			TOTAL	**$720.00**
Optimize pedestrian signal timing of signal at SMP & Lamar				
Signal technician	1	Lump sum	$600.00	$600.00
			SUBTOTAL	**$600.00**
		CONTINGENCY	**20%**	**$120.00**
			TOTAL	**$720.00**
Add pedestrian refuge island on the east leg of SMP & Lamar				
ADA ramp	2	Each	$3,000.00	$6,000.00
Curb and Gutter	60	Ft.	$25.00	$1,500.00
30" White Pre-Formed Thermoplastic	120	Ft.	$20.00	$2,400.00
4" concrete median island pavement	11	Sq. Yd.	$45.00	$500.00
4" Sidewalk	300	Sq. ft.	$4.50	$1,350.00
Remove & Replace ADA ramp	2	Each	$2,900.00	$5,800.00
Remove & Replace Curb & Gutter	20	Ft.	$40.00	$800.00
Add Pedestrian push buttons in the refuge island including wiring	1	Lump Sum	$6,800.00	$6,800.00
			SUBTOTAL	**$25,150.00**
		CONTINGENCY	**20%**	**$5,030.00**
			TOTAL	**$30,180.00**
Complete Crosswalks on west and north legs of SMP & Lamar				
ADA ramp	4	Each	$3,000.00	$12,000.00
4" concrete median island pavement	11	Sq. Yd.	$45.00	$500.00
Curb and Gutter	60	Ft.	$25.00	$1,500.00
30" White Pre-Formed Thermoplastic	224	Ft.	$20.00	$4,480.00
4" Sidewalk	550	Sq. ft.	$4.50	$2,475.00
Remove & Replace Curb & Gutter	32	Ft.	$40.00	$1,280.00
Add Pedestrian push buttons in the refuge island including wiring	1	Lump Sum	$6,800.00	$6,800.00
			SUBTOTAL	**$29,035.00**
		CONTINGENCY	**20%**	**$5,807.00**
			TOTAL	**$34,842.00**

TOTAL **$85,662.00**

ENGINEER'S ESTIMATE - HORIZONS

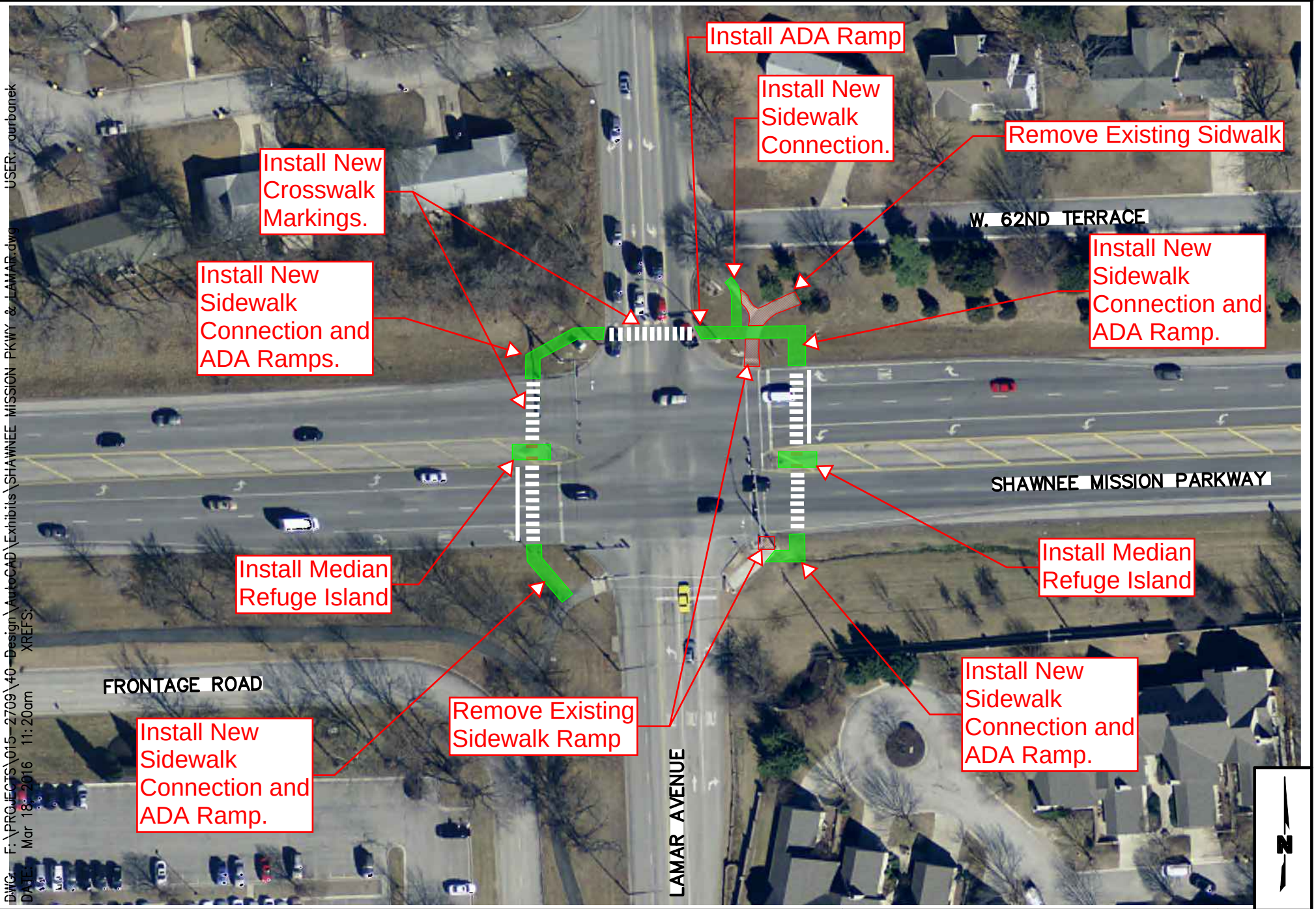
Client: City of Mission
Project: Mission Kansas, Safe Routes to Schools
Project Number: 015-2709
Date: 3/23/2016

ITEM DESCRIPTION	QUANTITY	UNIT	UNIT COST $	COST $
Add pedestrian lighting on Lamar from Johnson Drive to 51st St. (one side)				
Pedestrian lighting system	1	Lump sum	$16,000.00	$16,000.00
			SUBTOTAL	**$16,000.00**
		CONTINGENCY	**20%**	**$3,200.00**
			TOTAL	**$19,200.00**
Optimize pedestrian signal timing at Johnson Drive & Lamar				
Signal technician	1	Lump sum	$600.00	$600.00
			SUBTOTAL	**$600.00**
		CONTINGENCY	**20%**	**$120.00**
			TOTAL	**$720.00**
Optimize pedestrian signal timing of signal at SMP & Lamar				
Signal technician	1	Lump sum	$600.00	$600.00
			SUBTOTAL	**$600.00**
		CONTINGENCY	**20%**	**$120.00**
			TOTAL	**$720.00**
Add pedestrian refuge island on the east leg of SMP & Lamar				
ADA ramp	2	Each	$3,000.00	$6,000.00
Curb and Gutter	60	Ft.	$25.00	$1,500.00
30" White Pre-Formed Thermoplastic	120	Ft.	$20.00	$2,400.00
4" concrete median island pavement	11	Sq. Yd.	$45.00	$500.00
4" Sidewalk	300	Sq. ft.	$4.50	$1,350.00
Remove & Replace ADA ramp	2	Each	$2,900.00	$5,800.00
Remove & Replace Curb & Gutter	20	Ft.	$40.00	$800.00
Add Pedestrian push buttons in the refuge island including wiring	1	Lump Sum	$6,800.00	$6,800.00
			SUBTOTAL	**$25,150.00**
		CONTINGENCY	**20%**	**$5,030.00**
			TOTAL	**$30,180.00**
Complete Crosswalks on west and north legs of SMP & Lamar				
ADA ramp	4	Each	$3,000.00	$12,000.00
4" concrete median island pavement	11	Sq. Yd.	$45.00	$500.00
Curb and Gutter	60	Ft.	$25.00	$1,500.00
30" White Pre-Formed Thermoplastic	224	Ft.	$20.00	$4,480.00
4" Sidewalk	400	Sq. ft.	$4.50	$1,800.00
Remove & Replace Curb & Gutter	32	Ft.	$40.00	$1,280.00
Add Pedestrian push buttons in the refuge island including wiring	1	Lump Sum	$6,800.00	$6,800.00
			SUBTOTAL	**$28,360.00**
		CONTINGENCY	**20%**	**$5,672.00**
			TOTAL	**$34,032.00**

TOTAL **$84,852.00**

DWG: F:\PROJECTS\015-2709\40 Design\AutoCAD\Exhibits\LAMAR AVE - JOHNSON DR TO 51ST.dwg
DATE: Mar 18, 2016 11:20am
XREFS:
USER: aurbanek

PROJECT NO: 015-2709 DRAWN BY: AKU DATE: 3/18/2016	LAMAR AVENUE JOHNSON DR. TO 51ST ST.	OLSSON ASSOCIATES	7301 West 133rd Street Suite 200 Overland Park, KS 66213-4750 TEL 913.381.1170 FAX 913.381.1174	EXHIBIT 9



DWG: F:\PROJECTS\015-2709\40-Design\AutoCAD\Exhibits\SHAWNEE MISSION PKWY & LAMAR.dwg USER: durbanek
DATE: Mar 18, 2016 11:20am XREFS:

PROJECT NO: 015-2709	SHAWNEE MISSION PKWY & LAMAR AVE	OLSSON ASSOCIATES	EXHIBIT
DRAWN BY: AKU		7301 West 133rd Street Suite 200 Overland Park, KS 66213-4750 TEL 913.381.1170 FAX 913.381.1174	11
DATE: 3/18/2016			

ENGINEER'S ESTIMATE - SMN HIGH SCHOOL

Client: City of Mission
Project: Mission Kansas, Safe Routes to Schools
Project Number: 015-2709
Date: 5/25/2016

ITEM DESCRIPTION	QUANTITY	UNIT	UNIT COST $	COST $
Optimize pedestrian signal timing at 61st & Metcalf Ave.				
Signal technician	1	Lump sum	$750.00	$750.00
			SUBTOTAL	**$750.00**
		CONTINGENCY	**20%**	**$150.00**
			TOTAL	**$900.00**
Realign cross walk at south pork chop at Metcalf Lane & Johnson Dr.				
Remove & Replace 4" Concrete Sidewalk	50	Sq. Ft.	$12.00	$600.00
Remove & Replace ADA ramp	2	Each	$2,900.00	$5,800.00
Remove & Replace Curb & Gutter	18	Ft.	$40.00	$720.00
30" White Pre-Formed Thermoplastic	30	Ft.	$20.00	$600.00
4" Sidewalk	100	Sq. ft.	$4.50	$450.00
			SUBTOTAL	**$8,170.00**
		CONTINGENCY	**20%**	**$1,634.00**
			TOTAL	**$9,804.00**
Realign cross walk at north pork chop at Metcalf Lane & Johnson Dr.				
Remove & Replace 4" Concrete Sidewalk	50	Sq. Ft.	$12.00	$600.00
Remove & Replace ADA ramp	2	Each	$2,900.00	$5,800.00
Remove & Replace Curb & Gutter	18	Ft.	$40.00	$720.00
30" White Pre-Formed Thermoplastic	30	Ft.	$20.00	$600.00
4" Sidewalk	100	Sq. ft.	$4.50	$450.00
			SUBTOTAL	**$8,170.00**
		CONTINGENCY	**20%**	**$1,634.00**
			TOTAL	**$9,804.00**
Sidewalks on south side of Johnson Drive west of Broadmoor				
Remove Pavement & Install Curb & Gutter	322	Ft.	$40.00	$12,880.00
Remove & Replace 4" Concrete Sidewalk	635	Sq. Ft.	$20.00	$12,700.00
ADA ramp	3	Each	$3,000.00	$9,000.00
Fill Dirt for islands	91	Cu. Yd	$25.00	$2,283.33
			SUBTOTAL	**$36,863.33**
		CONTINGENCY	**20%**	**$7,372.67**
			TOTAL	**$44,236.00**
Sidewalks on the west side of Broadmoor from Johnson Drive to Martway				
Remove Pavement & Install Curb & Gutter	343	Ft.	$40.00	$13,720.00
Remove & Replace 4" Concrete Sidewalk	1794	Sq. Ft.	$20.00	$35,880.00
ADA ramp	2	Each	$3,000.00	$6,000.00
Fill Dirt for islands	62	Cu. Yd	$25.00	$1,555.56
			SUBTOTAL	**$57,155.56**
		CONTINGENCY	**20%**	**$11,431.11**
			TOTAL	**$68,586.67**

TOTAL **$133,330.67**

DWG: F:\PROJECTS\015-2709\10-Design\AutoCAD\Exhibits\61ST & METCALF.dwg USER: durbanek
DATE: Mar 23, 2016 - 4:26pm XREFS:

PROJECT NO: 015-2709	61ST STREET & METCALF AVENUE	OLSSON ASSOCIATES	EXHIBIT
DRAWN BY: AKU		7301 West 133rd Street Suite 200 Overland Park, KS 66213-4750 TEL 913.381.1170 FAX 913.381.1174	4
DATE: 3/18/2016			

DWG: F:\PROJECTS\015-2709\40-Design\AutoCAD\Exhibits\BROADMOOR.dwg USER: aurbanek
DATE: Apr 14, 2016 3:25pm XREFS:

PROJECT NO: 015-2709	BROADMOOR	OLSSON ASSOCIATES	EXHIBIT
DRAWN BY: AKU		7301 West 133rd Street Suite 200 Overland Park, KS 66213-4750 TEL 913.381.1170 FAX 913.381.1174	14
DATE: 3/18/2016			

Appendix C – School / Public Engagement Materials

OLSSON ASSOCIATES

City of Mission Safe Routes to School - Phase I

Map Instructions

Please use the provided maps, dots and markers to indicate:

- Where students currently walk or bike. (blue dots and markers)
- Identify where the safe portions are. (green dots and markers)
- Where/what the barriers are (physical or otherwise) that make walking difficult? (red dots and markers)
- Where the most common walking paths are. (brown markers)

For the dots, please write a number on the dot on the map, and then write the same number on another dot of the same color, and place on the grids provided at the tables.

OLSSON ASSOCIATES

City of Mission SRTS – Phase I | **November 12, 2015** | **2:45 - 4:45 PM**
OA Project 015-2709 | **SRTS Focus Group & Walking Tour** | **Highlands Elementary School**
PLEASE PRINT

Name of Attendee	Home Address	Email Address	Are you interested in helping with Safe Routes to School activities at your school?
Carrie Dickerson	5833 W 62 St.	onepinkduck@onepinkduck.com	possibly
Michelle Lawson	312 S. Stonecrest Ln	michellelawson@smsd.org	yes
Stacy Pate	5006 W 62nd Ter	stacypate@att.net	maybe
Laine Meyer		jlainemeyer@hotmail.com	yes

Highlands

Map #1

1/2

OLSSON ASSOCIATES

Colored Dot and Number	Description or Comment
1	Stinging insects coming from a neighbors yard (flowering bush)
2	No hard surface
3	Gate that's opened in the morning
4	Scary Dog
5	Traffic
6	Piles of snow / steps
7	Sidewalk into School never plowed.
8	~~da~~ Traffic going in/out of School.
9	Residents ~~task~~ voted not to have sidewalk.

MAP #1
2/2

OLSSON ASSOCIATES

Colored Dot and Number	Description or Comment
10	Church doesn't shovel sidewalks
11	Hill makes poor sight distance

MAP #2 Highlands
1/1

OLSSON ASSOCIATES

Colored Dot and Number	Description or Comment
1	The intersection of Nall and SMP is too busy for kids to safely cross. Cars do not pay attention and an over or underpass would allow for safer crossing.
2	Never ~~felt~~ felt Safe or Mission, too ~~busy~~.
3	Gate is left unlocked during school hours.
4	New yellow Stripe enforced by teachers, keeps kids away from cars at pick up and drop off.

Highlands

Tom Worker-Braddock

From: Tom Worker-Braddock
Sent: Wednesday, November 18, 2015 1:08 PM
To: 'jlainemeyer'
Cc: craig.meyer@populous.com; leaanncombs@smsd.org; 'Glen Cole'; Danielle Murray
Subject: RE: Highlands Elementary Safe Routes to School

Thank you Laine for your comments. I've marked down your route and comments on the map. I also CC'd Glen Cole and Danielle Murray, both from the city, onto this email. As part of this study, we will be looking at the current vehicle drop off situation, and seeing if any changes should be recommended. We also noticed the gate behind the backstop leading to Cedar Street. People do use that to walk to school, and we'll be looking at ways to make that safer, including securing it during school hours.

Typically, this type of study wouldn't examine the safety/security aspects of the playground area, such as playground fence height. However, it sounds like you let the new Principal know your concerns.

If you have any other comments/suggestions, please let me know. You can also contact Glen Cole with the city of mission. His information is below. We'll also add your contact information to the list of interested persons, so you may be contacted about future Safe Routes to School activities concerning Highlands Elementary school in the future.

Glen Cole
City of Mission
(913) 676 - 8365
gcole@missionks.org

Again, thank you for taking the time to send me your comments about improving the walking environment around Highlands Elementary school.

Thanks,
Tom

Tom Worker-Braddock, AICP, LCI #4869 | Multi-Modal Transportation Planning |Olsson Associates
TEL 913.381.1170 | DIR 913.748.2619 |CELL 785.764.6695 | tworkerbraddock@olssonassociates.com

From: jlainemeyer [mailto:jlainemeyer@hotmail.com]
Sent: Wednesday, November 18, 2015 8:49 AM
To: Tom Worker-Braddock <tworkerbraddock@olssonassociates.com>
Cc: craig.meyer@populous.com; leaanncombs@smsd.org
Subject: Highlands Elementary Safe Routes to School

Hi Tom-- I apologize I could not stay for the meeting. I had sick kids waiting for me. But I do feel this is so important and appreciate the time and effort you, the school, and city officials are investing in this. I'm mom to a 2nd grader, a 2016 Kindergartener and a toddler. We will be at Highlands for years to come and hope to walk as much as possible!

You'd asked if I could route my walk. Weather permitting, we walk after school to the Reinhardt neighborhood. There are lots of kids that live in this neighborhood; most parents drive now as many of the kids we know are younger. With some time and maturity, I expect to see lots of these kids walking one day. We cross with Jim at the crosswalk on Roe and walk W 62nd. As far as I know, it's one of the few neighborhood streets that

maintains a sidewalk. We cut through the park to cross at the designated crosswalk at Mission. We get off of Mission as soon as possible at W 61st Terrace. I've never felt safe along Mission especially with kids--it's just too busy. We zig-zag through the neighborhood to the corner of Eastvale and Sunrise.

One of my concerns has been car safety at the school. I feel like our new principal is taking this seriously. The new, yellow stripe along the drop-off area is designed to keep students away from the cars at drop off and pick up. Teachers enforce this. It's smart and an idea that might come in handy as you study other schools and walking routes.

One of my biggest concerns that has not been addressed is the safety and security of the playground. I mention this because the playground is a walking destination for a lot of kids...in some cases, the beginning and end route. Last year, during the first few weeks of school, my daughter had been mistakenly left out on the playground. She's our curious, free spirit who is always bent over collecting rocks, flowers, and checking out the butterfly that's just landed. I learned of this because when picking her up on Friday afternoons (recess was right before dismissal), I noticed she was making a habit of being alone, exploring the lower corner of the playground by the parking lot and recycling bins. There's a lot of elevation change between the school and that corner. I questioned her about this and explained it's really not safe to be so alone and unseen. Hesitantly, she then told me that she'd accidentally stayed on the playground one day. She hadn't realized her class had gone in. An older student noticed she shouldn't have been out there and was given permission to walk her to class. I don't know how long she was out there. My heart hopes it wasn't long. But I began questioning who *was* seeing my child off by herself.

I met with our previous principal and the teacher to address my concerns but nothing really happened. The fence height remained at roughly four feet when it should have been at least six, I believe, according to the original school plans (mentioned by the principal)...Security cameras were not capturing the goings-on in the corners of the playground...And most disappointing, teachers were still congregating at the building (while still lacking the X-Ray vision required to see through the playground equipment). The only thing I believe I accomplished that day is that MY daughter would not go unnoticed if missing from the classroom after recess.

Should this be good enough?

After finding out about the school playground incident, we spoke with our daughter more about what she should be doing to play, walk, etc., smarter. That's when she told me a 'secret'. A handful of girls had gone into the alley way during recess. They were seeing how far they could go through the gate and down the path. This passage is behind the playground backstop and intersects with Cedar St. It does not reveal itself on a map. I share this with you because I do believe it's used to walk to and from school. But I'm not sure the gate is ever locked during school and playground hours; it wasn't last year. I've also seen surrounding residential gates that have the ability to open (and have been open) onto the playground. In light of all that's happening in the world, I feel like we're handing out an invitation. I'm not sure what kind. How far down that alley will the kids go?

Clearly, it's a new year. I'm thankful for those things that have been done and will continue to be done to ensure the safety of our kids. Please let me know if there's any additional information you need for your study. We love our kids, and Highlands is a great school. I know all are in support of this initiative.

Sincerely,
Laine Meyer

OLSSON ASSOCIATES

City of Mission SRTS – Phase I
OA Project 015-2709
PLEASE PRINT

November 16, 2015
SRTS Focus Group & Walking Tour

2:45 - 4:45 PM
Rushton Elementary School

Name of Attendee	Home Address	Email Address	Are you interested in helping with Safe Routes to School activities at your school?
Ashlee Gurrola		ashleecgurrola@mail.com	Yes
Ms. Silvana Singleton		417-529-0077	

Rushton
1/3

OLSSON ASSOCIATES

Colored Dot and Number	Description or Comment
1	The Hill is hard to see for drivers and people walking. Speeding.
2	The sidewalk is small & is difficult to accomodate a large group. There is speeding cars all the times & dangerous for kids that get on the street to pass.
3	Snow removal very bad at 51st + Lamar up to school.
4	Not enough parking so crazy amt of car drivers overcrowding Round-abouts.
18, 5	Police / speed trap
6	Crossing guard at 53 + Lamar (needed) Cars move fast after passing hill & don't watch for peds
7	No sidewalks, speed.
8	Lamar & 53rd cars DO NOT slow down for kids crossing over!
9	Park is very safe

OLSSON ASSOCIATES

Colored Dot and Number	Description or Comment
10	Crossing guard @ 53rd + Lamar
11	Someone got shot
12	Shrubs are overgrown, speeding cars, sidewalk is too narrow.
13	speeding cars
14	corner is... slippery when wet.
15	Sidewalk not smooth for stroller.
16	Snow removal (home owner responsible)
17	Would prefer a crosswalk here across 52nd (current is faded)
18	No X walk across parking lot entrance. Pickups allowed in afternoon

Rushton
3/3

OLSSON ASSOCIATES

Colored Dot and Number	Description or Comment
19	No mail box. Potential area for bullying.
20	Gated
21	Need a sidewalk on Horton St. ~~between~~ South of 53rd Terrace

Rushton

Tom Worker-Braddock

From: Glen Cole <gcole@missionks.org>
Sent: Tuesday, November 17, 2015 10:52 AM
To: Tom Worker-Braddock
Cc: Danielle Murray
Subject: Rushton SRTS - Voicemail

Tom,

Came back to the office to a voice mail I received yesterday afternoon. Ms. Silvana Singleton, 417 529 0077, was unable to make it to our meeting but wanted to request a sidewalk extension on Horton. She lives (on Horton?) between 55th and 56th Street, and has to walk with her child in the street until 52nd Street.

Can you add this to the comments we received yesterday? Thanks again for your work - great job.

Thanks,

Glen Cole
City of Mission
(913) 676 - 8365
gcole@missionks.org

OLSSON ASSOCIATES

City of Mission SRTS – Phase I | **January 27, 2016** | **Horizons High School**
OA Project 015-2709 | **SRTS Focus Group & Walking Tour**
PLEASE PRINT

Name of Attendee	Home Address	Email Address	Are you interested in helping with Safe Routes to School activities at your school?
Victoria Tharp	6700 west 58th	Victoriatharp064@gmail	
Monique Espinoza	5055 Lamar Ave	moniqeovo013@gmail.com	
Emilio Espinoza	5055 Lamar Ave	espinozaemilio41@gmail.com	
Abby Wenz	8108 Mauser	Wenzabbyic@gmail.com	
Micah Maccabi	1623 Walmer St.	strangelove1000@gmail.com	

Horizons 1/27/1

Map #1, ~~Map #~~

1/3

OLSSON ASSOCIATES

Colored Dot and Number	Description or Comment
1	Light takes too long
	To park on campus have to DL, proof of ins, proper registration, permit $20/yr.
2	Sonic drive-actually gets used. 3-way. Shorter wait
3	No sidewalk on one side of lane
4	Jobs at QPDobs
5	Lots of traffic. 7:20-7:30 traffic. 8:15-8:30 traffic
6	Most of restaurants on this side
7	To stop
8	People don't stop

Horizons 1/27/16

Map #1 2/3

OLSSON ASSOCIATES

Colored Dot and Number	Description or Comment
9	Tough crossing
10	Really dark along Lamar
11	People don't shovel snow -People have to walk on the street
12	Easy to cross
13	cars turn while your walking feels unsafe
14	Generally safe
15	Difficult to bike across SMP -Biking on sidewalk, caution for street riding
16	Give free bikes to get people to ride. Bike Share
17	Serve 14 municipalities Students have big walk shed I-35 & Johnson Drive, Quik trip at SMP + retail

Horizons 1/27/16
Map #1 3/3

OLSSON ASSOCIATES

Colored Dot and Number	Description or Comment
18	People walk to North for rides
	-word of mouth for people getting rides. spread out rides from people
	-lights along turnaround residential spacing

Horizons High
12/2/2015

Map #2
1/1

OLSSON ASSOCIATES

Colored Dot and Number	Description or Comment
1	Lots of students mid block cross here.
2	Students cross to get to Starbucks, Qdoba, Arbys, etc.
3, 4, 5, 6, 7	coffee/food/Employment at Taco Bell, McDonalds, Pet World, arbys, Hyvee
8	Some students use the mental health services at Johnson County Mental Health
9	60% of students originally from SMN. sometimes walk there.
10	Difficult crossing at Shawnee Mission Parkway
11	Existing bike racks.

OLSSON ASSOCIATES

City of Mission SRTS – Phase I | **February 3, 2016** | **Shawnee Mission North H.S.**
Project 015-2709 | **SRTS Focus Group**
PLEASE PRINT

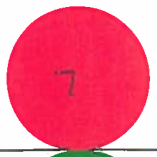
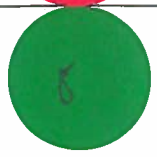
Name of Attendee	Home Address	Email Address	Are you interested in helping with Safe Routes to School activities at your school?
William Hastings	8704 W 49th	Whastings123@gmail.com	Yes
Malik Battle	8216 Johnson Dr	2019mjb@gmail.com	Yes
Ethan Eckel	8509 W 54th ter.	ethanleopard@gmail.com	Yes
Robyn Elam	7221 W 56 ter.	byrdelam@gmail.com	Yes
Isaac Diggs	8012 55 terrace	imdiggs27@gmail.com	Yeah
Laynee Sidebottom	5825 lowell st.	laynee14@gmail.com	Yes
Sam Thompson	6801 lowell st.	3049200@s.smsd.org	yes
Joe Baldwin	5217 W 58th St RoPo	jabaldwin99@yahoo.com	check
Dawine Battle	7264 W 54th St overland Park	3070746@s.smsd.org	Yeah
Will Ballew	7024 Lamar ave Overland Park 5217 West 58th street Roeland Park		

MAP 1
1/2

Table 1

SMN

OLSSON ASSOCIATES

Colored Dot and Number	Description or Comment
	Have good time to cross street
	Antioch crossing takes a long time
	Have to climb fence
	Just cross when opening
	Intersect push button takes forever
	Traffic doesn't wait for peds they just turn Peds just sprint across the crossing
	Stop signs make it more difficult to cross
	Sidewalk is bad
	Inconsistent sidewalk and veh don't stop

MAP 1
2/2

Table 1

SMN

OLSSON ASSOCIATES

Colored Dot and Number	Description or Comment
	Good sidewalk flat
	Shootings occured during summer
	gets muddy when leaves fall
	A lot of people burn leaves

MAP #2
1/1

TABLE 2 SMP

OLSSON ASSOCIATES

Colored Dot and Number	Description or Comment
1	Crossing takes a long time (signal)
2	Good crossing
3	signal in ~~Bad~~ shape
4	only place to cross S.M.P.
5	Johnson Drive pretty Dark
6	cut thru at Hy vee has sketchy people hanging out
7	~~Good~~ sidewalk infront of Star Bucks in Bad shape

MAP 3
1/1

Table #3
SMN 2/3/2016

OLSSON ASSOCIATES

Colored Dot and Number	Description or Comment
1	No Street lights
2	Stranger following you.
3	Bike - flat
4	Walking - up and down
5	McDonald X walk doesn't work
6	Needs a ped Xing sign westbound drivers don't see peds
7	Dangerous car exit when school ends
8	Metal Scraps
9	Open, undefined Parking lot entrance

10 SB traffic don't see peds

11 No X walk, but usually not a lot of cars

12 Gate is perpetually open

13 Use to be easy to Bike, but recent improvements have made it more difficult

MAP 4
1/2

Table 4
SMN

OLSSON ASSOCIATES

Colored Dot and Number	Description or Comment
1	sidewalk too close to cars ✓ walk in streets when snow on ground sidewalks never shoveled
2	cars do not yield to peds
3	"
4	sidewalk ends
5	traffic in (P) lot is an issue in PM but not AM
Notes	bike racks are limited in locations 4 to 6 bikes parked usually
Notes	most people go to lunch outside SMN Sr.s are only allowed
6	gate is sometimes not open No sidewalk connected in parts
7	origin is Nall

MAP 4
2/2

Table 4
SMN

OLSSON ASSOCIATES

Colored Dot and Number	Description or Comment
8	origin is 71 st + Metcalf on east side
9	Not shoveled only sidewalks shoveled are to parking lots
10	recently updated sidewalks
11	sidewalks in poor condition
12	uses pedestrian crossing
13	light is on east side of street light is sometimes not responsive elevation is also an issue
14	dip in entry/exit. Sometimes it rains / freezes over + poses issue for bike/ped

OLSSON ASSOCIATES

City of Mission SRTS – Phase I | **November 12, 2015** | **2:45 - 4:45 PM**
OA Project 015-2709 | **SRTS Focus Group & Walking Tour** | **Highlands Elementary School**
PLEASE PRINT

Name of Attendee	Home Address	Email Address	Are you interested in helping with Safe Routes to School activities at your school?
Carrie Dickerson	5833 W 62 St.	onepinkduck@onepinkduck.com	possibly
Michelle Lawson	312 S. Stonecrest Ln	michellelawson@smsd.org	yes
Stacy Pate	5006 W 62nd Ter	stacypate@att.net	maybe
Laine Meyer		jlainemeyer@hotmail.com	yes

Map #1


6
7
9
Mission
Fairway
Alta Loma
8
5
10
Pointe Village
Legend
Highlands Elementary School
Other School Locations
City Boundary
Highlands Elementary Boundary
Average Daily Traffic Counts
0
500
1,000
Feet
N

MAP #2


Legend
Highlands Elementary School
Other School Locations
City Boundary
Highlands Elementary Boundary
Average Daily Traffic Counts
0
500
1,000
Feet
N

Highlands

Map #1

1/2

OLSSON ASSOCIATES

Colored Dot and Number	Description or Comment
1	Stinging insects coming from a neighbors yard (flowering bush)
2	No hard surface
3	Gate that's opened in the morning
4	Scary Dog
5	Traffic
6	Piles of snow / steps
7	Sidewalk into School never plowed.
8	~~da~~ Traffic going in/out of School.
9	Residents ~~task~~ voted not to have sidewalk.

MAP #1
2/2

OLSSON ASSOCIATES

Colored Dot and Number	Description or Comment
10	Church doesn't shovel sidewalks
11	Hill makes poor sight distance

MAP #2 Highlands
1/1

OLSSON ASSOCIATES

Colored Dot and Number	Description or Comment
1	The intersection of Nall and SMP is too busy for kids to safely cross. Cars do not pay attention and an over or underpass would allow for safer crossing.
2	Never ~~felt~~ felt Safe or Mission, too ~~busy~~.
3	Gate is left unlocked during school hours.
4	New yellow Stripe enforced by teachers, keeps kids away from cars at pick up and drop off.

Highlands

Tom Worker-Braddock

From: Tom Worker-Braddock
Sent: Wednesday, November 18, 2015 1:08 PM
To: 'jlainemeyer'
Cc: craig.meyer@populous.com; leaanncombs@smsd.org; 'Glen Cole'; Danielle Murray
Subject: RE: Highlands Elementary Safe Routes to School

Thank you Laine for your comments. I've marked down your route and comments on the map. I also CC'd Glen Cole and Danielle Murray, both from the city, onto this email. As part of this study, we will be looking at the current vehicle drop off situation, and seeing if any changes should be recommended. We also noticed the gate behind the backstop leading to Cedar Street. People do use that to walk to school, and we'll be looking at ways to make that safer, including securing it during school hours.

Typically, this type of study wouldn't examine the safety/security aspects of the playground area, such as playground fence height. However, it sounds like you let the new Principal know your concerns.

If you have any other comments/suggestions, please let me know. You can also contact Glen Cole with the city of mission. His information is below. We'll also add your contact information to the list of interested persons, so you may be contacted about future Safe Routes to School activities concerning Highlands Elementary school in the future.

Glen Cole
City of Mission
(913) 676 - 8365
gcole@missionks.org

Again, thank you for taking the time to send me your comments about improving the walking environment around Highlands Elementary school.

Thanks,
Tom

Tom Worker-Braddock, AICP, LCI #4869 | Multi-Modal Transportation Planning |Olsson Associates
TEL 913.381.1170 | DIR 913.748.2619 |CELL 785.764.6695 | tworkerbraddock@olssonassociates.com

From: jlainemeyer [mailto:jlainemeyer@hotmail.com]
Sent: Wednesday, November 18, 2015 8:49 AM
To: Tom Worker-Braddock <tworkerbraddock@olssonassociates.com>
Cc: craig.meyer@populous.com; leaanncombs@smsd.org
Subject: Highlands Elementary Safe Routes to School

Hi Tom-- I apologize I could not stay for the meeting. I had sick kids waiting for me. But I do feel this is so important and appreciate the time and effort you, the school, and city officials are investing in this. I'm mom to a 2nd grader, a 2016 Kindergartener and a toddler. We will be at Highlands for years to come and hope to walk as much as possible!

You'd asked if I could route my walk. Weather permitting, we walk after school to the Reinhardt neighborhood. There are lots of kids that live in this neighborhood; most parents drive now as many of the kids we know are younger. With some time and maturity, I expect to see lots of these kids walking one day. We cross with Jim at the crosswalk on Roe and walk W 62nd. As far as I know, it's one of the few neighborhood streets that

maintains a sidewalk. We cut through the park to cross at the designated crosswalk at Mission. We get off of Mission as soon as possible at W 61st Terrace. I've never felt safe along Mission especially with kids--it's just too busy. We zig-zag through the neighborhood to the corner of Eastvale and Sunrise.

One of my concerns has been car safety at the school. I feel like our new principal is taking this seriously. The new, yellow stripe along the drop-off area is designed to keep students away from the cars at drop off and pick up. Teachers enforce this. It's smart and an idea that might come in handy as you study other schools and walking routes.

One of my biggest concerns that has not been addressed is the safety and security of the playground. I mention this because the playground is a walking destination for a lot of kids...in some cases, the beginning and end route. Last year, during the first few weeks of school, my daughter had been mistakenly left out on the playground. She's our curious, free spirit who is always bent over collecting rocks, flowers, and checking out the butterfly that's just landed. I learned of this because when picking her up on Friday afternoons (recess was right before dismissal), I noticed she was making a habit of being alone, exploring the lower corner of the playground by the parking lot and recycling bins. There's a lot of elevation change between the school and that corner. I questioned her about this and explained it's really not safe to be so alone and unseen. Hesitantly, she then told me that she'd accidentally stayed on the playground one day. She hadn't realized her class had gone in. An older student noticed she shouldn't have been out there and was given permission to walk her to class. I don't know how long she was out there. My heart hopes it wasn't long. But I began questioning who *was* seeing my child off by herself.

I met with our previous principal and the teacher to address my concerns but nothing really happened. The fence height remained at roughly four feet when it should have been at least six, I believe, according to the original school plans (mentioned by the principal)...Security cameras were not capturing the goings-on in the corners of the playground...And most disappointing, teachers were still congregating at the building (while still lacking the X-Ray vision required to see through the playground equipment). The only thing I believe I accomplished that day is that MY daughter would not go unnoticed if missing from the classroom after recess.

Should this be good enough?

After finding out about the school playground incident, we spoke with our daughter more about what she should be doing to play, walk, etc., smarter. That's when she told me a 'secret'. A handful of girls had gone into the alley way during recess. They were seeing how far they could go through the gate and down the path. This passage is behind the playground backstop and intersects with Cedar St. It does not reveal itself on a map. I share this with you because I do believe it's used to walk to and from school. But I'm not sure the gate is ever locked during school and playground hours; it wasn't last year. I've also seen surrounding residential gates that have the ability to open (and have been open) onto the playground. In light of all that's happening in the world, I feel like we're handing out an invitation. I'm not sure what kind. How far down that alley will the kids go?

Clearly, it's a new year. I'm thankful for those things that have been done and will continue to be done to ensure the safety of our kids. Please let me know if there's any additional information you need for your study. We love our kids, and Highlands is a great school. I know all are in support of this initiative.

Sincerely,
Laine Meyer

OLSSON ASSOCIATES

City of Mission SRTS – Phase I | **January 27, 2016** | **Horizons High School**
OA Project 015-2709 | **SRTS Focus Group & Walking Tour**
PLEASE PRINT

Name of Attendee	Home Address	Email Address	Are you interested in helping with Safe Routes to School activities at your school?
Victoria Tharp	6700 west 58th	Victoriatharp064@gmail	
Monique Espinoza	5055 Lamar Ave	moniqeovo013@gmail.com	
Emilio Espinoza	5055 Lamar Ave	espinozaemilio41@gmail.com	
Abby Wenz	8108 Mauser	Wenzabbyic@gmail.com	
Micah Maccabi	1623 Walmer St.	strangelove1000@gmail.com	


Portland Park
Legend
Horizons High School
Other School Locations
City Boundary
Parks & Public Use Areas
Bike Routes
Trails
Average Daily Traffic Counts
0
500
1,000
Feet
N

MAP 2 - HORIZONS 1/2

Horizons 1/27/1

Map #1, ~~Map #~~

1/3

OLSSON ASSOCIATES

Colored Dot and Number	Description or Comment
1	Light takes too long
	To park on campus have to DL, proof of ins, proper registration, permit $20/yr.
2	Sonic drive-actually gets used. 3-way. Shorter wait
3	No sidewalk on one side of lane
4	Jobs at QPDobs
5	Lots of traffic. 7:20-7:30 traffic. 8:15-8:30 traffic
6	Most of restaurants on this side
7	To stop
8	People don't stop

Horizons 1/27/16

Map #1 2/3

OLSSON ASSOCIATES

Colored Dot and Number	Description or Comment
9	Tough crossing
10	Really dark along Lamar
11	People don't shovel snow -People have to walk on the street
12	Easy to cross
13	cars turn while your walking feels unsafe
14	Generally safe
15	Difficult to bike across SMP -Biking on sidewalk, caution for street riding
16	Give free bikes to get people to ride. Bike Share
17	Serve 14 municipalities Students have big walk shed I-35 & Johnson Drive, Quik trip at SMP + retail

Horizons 1/27/16
Map #1 3/3

OLSSON ASSOCIATES

Colored Dot and Number	Description or Comment
18	People walk to North for rides
	-word of mouth for people getting rides. spread out rides from people
	-lights along turnaround residential spacing

Horizons High
12/2/2015

Map #2
1/1

OLSSON ASSOCIATES

Colored Dot and Number	Description or Comment
1	Lots of students mid block cross here.
2	Students cross to get to Starbucks, Qdoba, Arbys, etc.
3, 4, 5, 6, 7	coffee/food/Employment at Taco Bell, McDonalds, Pet World, arbys, Hyvee
8	Some students use the mental health services at Johnson County Mental Health
9	60% of students originally from SMN. sometimes walk there.
10	Difficult crossing at Shawnee Mission Parkway
11	Existing bike racks.

OLSSON ASSOCIATES

City of Mission SRTS – Phase I
OA Project 015-2709
PLEASE PRINT

November 16, 2015
SRTS Focus Group & Walking Tour

2:45 - 4:45 PM
Rushton Elementary School

Name of Attendee	Home Address	Email Address	Are you interested in helping with Safe Routes to School activities at your school?
Ashlee Gurrola		ashleecgurrola@mail.com	Yes
Ms. Silvana Singleton		417-529-0077	


Overland Park
Roeland Park
Mission
Overland Park
Legend
Rushton Elementary School
Other School Locations
Rushton Elementary Boundary
City Boundary
Parks & Public Use Areas
Bike Routes
Trails
Average Daily Traffic Counts
0
500
1,000
Feet
N

Rushton
1/3

OLSSON ASSOCIATES

Colored Dot and Number	Description or Comment
1	The Hill is hard to see for drivers and people walking. Speeding.
2	The sidewalk is small & is difficult to accomodate a large group. There is speeding cars all the times & dangerous for kids that get on the street to pass.
3	Snow removal very bad at 51st + Lama up to school.
4	Not enough parking so crazy amt of car drivers overcrowding Round-abouts.
18, 5	Police / speed trap
6	Crossing guard at 53 + Lamar (Needed) Cars move fast after passing hill & don't watch for peds
7	No sidewalks, speed.
8	Lamar & 53rd cars DO NOT slow down for kids crossing over!
9	Park is very safe

OLSSON ASSOCIATES

Colored Dot and Number	Description or Comment
10	Crossing guard @ 53rd + Lamar
11	Someone got shot
12	Shrubs are overgrown, speeding cars, sidewalk is too narrow.
13	speeding cars
14	corner is... slippery when wet.
15	Sidewalk not smooth for stroller.
16	Snow removal (home owner responsible)
17	Would prefer a crosswalk here across 52nd (current is faded)
18	No X walk across parking lot entrance. Pickups allowed in afternoon

Rushton
3/3

OLSSON ASSOCIATES

Colored Dot and Number	Description or Comment
19	No mail box. Potential area for bullying.
20	Gated
21	Need a sidewalk on Horton St. ~~between~~ South of 53rd Terrace

Rushton

Tom Worker-Braddock

From: Glen Cole <gcole@missionks.org>
Sent: Tuesday, November 17, 2015 10:52 AM
To: Tom Worker-Braddock
Cc: Danielle Murray
Subject: Rushton SRTS - Voicemail

Tom,

Came back to the office to a voice mail I received yesterday afternoon. Ms. Silvana Singleton, 417 529 0077, was unable to make it to our meeting but wanted to request a sidewalk extension on Horton. She lives (on Horton?) between 55th and 56th Street, and has to walk with her child in the street until 52nd Street.

Can you add this to the comments we received yesterday? Thanks again for your work - great job.

Thanks,

Glen Cole
City of Mission
(913) 676 - 8365
gcole@missionks.org

OLSSON ASSOCIATES

City of Mission SRTS – Phase I | **February 3, 2016** | **Shawnee Mission North H.S.**
Project 015-2709 | **SRTS Focus Group**
PLEASE PRINT

Name of Attendee	Home Address	Email Address	Are you interested in helping with Safe Routes to School activities at your school?
William Hastings	8704 W 49th	Whastings123@gmail.com	Yes
Malik Battle	8216 Johnson Dr	2019mjb@gmail.com	Yes
Ethan Eckel	8509 W 54th ter.	ethanleopard@gmail.com	Yes
Robyn Elam	7221 W 56 ter.	byrdelam@gmail.com	Yes
Isaac Diggs	8012 55 terrace	imdiggs27@gmail.com	Yeah
Laynee Sidebottom	5825 lowell st.	laynee14@gmail.com	Yes
Sam Thompson	6801 lowell st.	3049200@s.smsd.org	yes
Joe Baldwin	5217 W 58th St RoPo	jabaldwin99@yahoo.com	check
Dawine Battle	7264 W 54th St overland Park	3070746@s.smsd.org	Yeah
Will Ballew	7024 Lamar ave Overland Park 5217 West 58th street Roeland Park		

Table 1 * MAP 1 OF 3 *


Legend
Shawnee Mission North High School
Other School Locations
City Boundary
Trails
Bike Routes
Parks & Public Use Areas
Average Daily Traffic Counts
0
500
1,000
Feet
N
Mission
Merriam
Overland Park
4 800
35 600
4 200
33 400

TABLE 2

To Hardy

To 54th St

To Nall

Map 3 SMN

To 71st

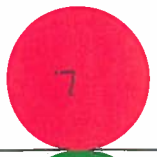
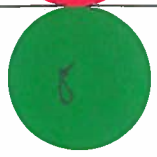
TABLE 4

MAP 1
1/2

Table 1

SMN

OLSSON ASSOCIATES

Colored Dot and Number	Description or Comment
	Have good time to cross street
	Antioch crossing takes a long time
	Have to climb fence
	Just cross when opening
	Intersect push button takes forever
	Traffic doesn't wait for peds they just turn Peds just sprint across the crossing
	Stop signs make it more difficult to cross
	Sidewalk is bad
	Inconsistent sidewalk and veh don't stop

MAP 1
2/2

Table 1

SMN

OLSSON ASSOCIATES

Colored Dot and Number	Description or Comment
	Good sidewalk flat
	Shootings occured during summer
	gets muddy when leaves fall
	A lot of people burn leaves

MAP #2
1/1

TABLE 2 SMP

OLSSON ASSOCIATES

Colored Dot and Number	Description or Comment
1	Crossing takes a long time (signal)
2	Good crossing
3	signal in ~~Bad~~ shape
4	only place to cross S.M.P.
5	Johnson Drive pretty Dark
6	cut thru at Hy vee has sketchy people hanging out
7	~~Good~~ sidewalk infront of Star Bucks in Bad shape

MAP 3
1/1

Table #3
SMN 2/3/2016

OLSSON ASSOCIATES

Colored Dot and Number	Description or Comment
1	No Street lights
2	Stranger following you.
3	Bike - flat
4	Walking - up and down
5	McDonald X walk doesn't work
6	Needs a ped Xing sign westbound drivers don't see peds
7	Dangerous car exit when school ends
8	Metal Scraps
9	Open, undefined Parking lot entrance

10 SB traffic don't see peds

11 No X walk, but usually not a lot of cars

12 Gate is perpetually open

13 Use to be easy to Bike, but recent improvements have made it more difficult

MAP 4
1/2

Table 4
SMN

OLSSON ASSOCIATES

Colored Dot and Number	Description or Comment
1	sidewalk too close to cars ✓ walk in streets when snow on ground sidewalks never shoveled
2	cars do not yield to peds
3	"
4	sidewalk ends
5	traffic in (P) lot is an issue in PM but not AM
Notes	bike racks are limited in locations 4 to 6 bikes parked usually
Notes	most people go to lunch outside SMN Sr.s are only allowed
6	gate is sometimes not open No sidewalk connected in parts
7	origin is Nall

MAP 4
2/2

Table 4
SMN

OLSSON ASSOCIATES

Colored Dot and Number	Description or Comment
8	origin is 71 st + Metcalf on east side
9	Not shoveled only sidewalks shoveled are to parking lots
10	recently updated sidewalks
11	sidewalks in poor condition
12	uses pedestrian crossing
13	light is on east side of street light is sometimes not responsive elevation is also an issue
14	dip in entry/exit. Sometimes it rains / freezes over + poses issue for bike/ped