

City of Albuquerque Elementary & Middle School Crossing Evaluation







Table of Contents

Executive Summary	1
Introduction	2
Crossing Equipment	2
Signs	3
Markings	5
Traffic Signals	6
Crossing Guards	7
Summary of Data Gathered	8
Scoring System	8
Results	10
Conclusions	14
Appendix	15

List of Acronyms

- APD Albuquerque Police Department
- APS Albuquerque Public Schools
- BLUZ Bus Loading and Unloading Zone
- COA City of Albuquerque
- DMD Department of Municipal Development
- HAWK High intensity Actuated crosswalk (interchangeable with PHB)
- MRCOG Mid-Region Council of Governments
- MUTCD Manual on Uniform Traffic Control Devices
- RRFB Rectangular Rapid Flashing Beacon
- PHB Pedestrian Hybrid Beacon (interchangeable with HAWK)



Executive Summary

The Department of Municipal Development (DMD) studied over 350 crossing locations for elementary and middle schools within the City limits. Twenty-four data points were collected for each location, and then a two-step process was used to calculate a crossing score and a crossing rating for each. The first step used a graph to determine if the crossing had sufficient traffic operations infrastructure, such as signs and striping, flashing beacons, or a traffic signal. That determination, combined with an assessment of other factors, such as the quality of the pedestrian facilities and the presence of traffic calming, resulted in the rating. The rating was divided into six (6) categories:

- Prioritized for Funding
- Monitor for Funding
- Meets Minimum Standards
- Exceeds Minimum Standards
- No Students Counted, Within Walk Zone
- No Students Counted, Outside of Walk Zone

DMD evaluated 197 elementary school crossings. Six (6) of them fell into the "Monitor for Funding" category, and sixteen (16) of them had no student use on the count day. The rest either met or exceeded minimum standards. City staff conducted counts at 165 middle school crossings. No students were counted at 97 of the locations, six (6) of them were classified as "Prioritized for Funding," and nine (9) fell into the "Monitor for Funding" category. There were 43 crossings that met minimum standards, and ten (10) exceeded minimum standards. Crossings for elementary schools generally scored higher than middle school crossings due to the presence of crossing guards. A location's crossing rating can change by improving existing infrastructure or installing new infrastructure.

For each of the 6 total crosswalks in the Prioritize for Funding category and 15 total crosswalks in the Monitor for Funding category, DMD identified a recommended remedy and estimated cost. These improvements are a high priority and the City of Albuquerque will request to work with Albuquerque Public School (APS) to jointly seek funding from the State Legislature. DMD will continue to evaluate crosswalks in conjunction with input from APS and State Legislators.

APS does not currently assign crossing guards to middle schools. The City of Albuquerque recommends that APS consider options for staffing middle school crossing guards, including the 15 high-priority middle school crosswalks identified in the study. The City encourages APS to look into allowing trained and certified volunteers, such as parents, to serve as crossing guards during peak hours. The City of Albuquerque is extending an offer to APS to train and certify the volunteers through the Department of Municipal Development. The City aims to work with its partners to be part of the solution to keep children and families safe.



Introduction

The Department of Municipal Development (DMD) was tasked with rating all of the Albuquerque Public Schools (APS) Middle and Elementary school crossings within the City of Albuquerque city limits for APS. Beginning the fall of 2018, likely crossings within elementary and middle school walk zones were identified and evaluated. Charter schools, private schools, or public high schools were not included in the scope. The first two rarely have significant pedestrian volumes, and students who attend the latter either drive to school or should be mature enough to negotiate traffic when on foot.

APS staff provided DMD staff the walk zone areas for all the elementary and middle schools in the form of Geographical Information Service (GIS) data, which was crucial to move the project forward.

The Department of Municipal Development (DMD) Crossing Guard program provided traffic and pedestrian count data for all their staffed crossings, saving DMD hours of work.

The Mid-Region Council of Governments (MRCOG) also provided data sets and valuable advice, along with their own similar study, which focused only on elementary schools.

The MRCOG report provided some general ideas about what elementary school crossings could use improvements to enhance the pedestrian access experience, but it did not go into granular detail as to what desirable infrastructure would be beneficial. The study was a valuable tool for comparing results to see how City's the data matched up with the data in the MRCOG study. When comparing the two lists, matching schools received similar results and there was indication that the same schools had crossings that could benefit from improvements. As the agencies used different scoring criteria, exact overlap did not occur, but it was valuable to see that both studies produced similar results.

Crossing Equipment

There are many mechanisms to call attention to school or pedestrian crossings. An agency can install equipment to draw the driver's attention to the crossing using signs, striping, flashing beacons, Pedestrian Hybrid Beacons (PHBs or HAWKs), or traffic signals. Another way is to change the environment for the pedestrian, by reducing speeds on the road or shortening the crossing distance using a road diet. All of these methods have their appropriate use, and their applicability depends heavily on both motor vehicle and pedestrian volumes.



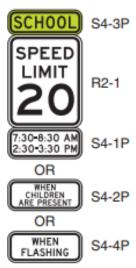
1) Signs

a) S1-1, School Zone and School Crossing sign. These signs are used to define the extents of a school zone, and are posted next to unsignalized crossings. They are in use citywide. Albuquerque's current specification is the high intensity fluorescent yellow-green color, and they are posted at locations that do not have existing traffic control, like stop signs or traffic signals.





b) **R2-1, School Zone 15, 20, and 25 mph speed limit signs**. These signs may be posted with a "When Children Present" plaque, a "When Flashing" plaque, or a plaque with specific times. The speed limits vary depending on the type of school they serve. An elementary school is posted at 15 mph, a middle school at 20 mph, and a high school at 25 mph.





c) R1-5a, Yield Here to Pedestrians sign. These signs are posted in advance of an unsignalized crossing, typically adjacent to "shark's teeth" yield markers. They are not in standard use in the City, but may add an additional level of safety in situations where multiple lanes are being asked to stop for a pedestrian. They remind motorists that per the Uniform Traffic Code, they are required to stop or yield to a pedestrian in a crosswalk.



R1-5a

d) **R1-6, State Law Yield to Pedestrian within Crosswalk.** These signs are posted at ground level and remind drivers of their duty to yield to pedestrians. They shall only be posted on the centerline, lane line, or median, making maintenance a challenge.



R1-6



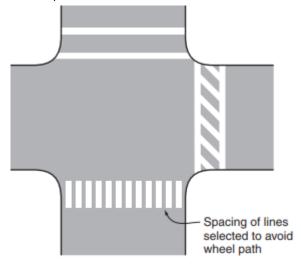
e) **R10-15, Turning Traffic Yield to Pedestrians.** These are posted at traffic signals and remind turning drivers that they are to give crossing pedestrians right-of-way.



R10-15

2) Markings

a) Crosswalk Markings. The City standard is the "Continental" crosswalk, a collection of two foot by ten-foot bars that are spaced out of the wheel path. The majority of the country adopted this style over the last twenty years. DMD is steadily updating all of the old style school zone crosswalks to the "Continental" crosswalks, as these tend to be more visible to motorists.



b) **Yield Line, or "Shark's Teeth."** Used in conjunction with a "Yield Here to Pedestrians" sign. They define the safe stopping distance from a pedestrian. They are especially useful on multi-lane roads where a stopped car could mask a pedestrian's view of oncoming traffic and vice versa.



c) **Road Diet.** This is typically a striping project that reduces the number of driving lanes on a road in an effort to reduce crashes and speeds, and provide space for alternate modes of transportation. It



has the benefit of reducing the number of vehicle lanes a pedestrian must cross at an intersection, even if the actual curb-to-curb width of the road does not change. As with the other items in this section, proper application is important.

3) Traffic Signals

a) Rectangular Rapid Flashing Beacons (RRFB). Posted with a pedestrian crossing sign and a crosswalk at an unsignalized intersection or a mid-block crossing. They are pedestrian actuated flashing beacons at eye level, and are intended to notify an oncoming driver of the presence of a pedestrian. Research has shown increased yield compliance after installation. They are best used on lower speed facilities with one or two vehicle lanes in each direction.



b) **Flashing Beacons.** Standard equipment for many local crossings, typically posted over the road on a mastarm. They are either activated with timers on a set schedule or manually by crossing guards. The beacons notify drivers that a reduced speed limit is in effect.





c) Pedestrian Hybrid Beacon or High Intensity Activated Crosswalk (PHB or HAWK). They are designed to be used at crossing locations with higher motor vehicle and pedestrian volumes and higher motor vehicle speeds than in the RRFB application. They are best placed at mid-block locations; otherwise, access control has to be part of the project. They are designed to stop motor vehicles just long enough for a pedestrian to cross the street.



d) **Standard Traffic Signal.** An intersection must meet one of several criteria in the Manual on Uniform Traffic Control Devices (MUTCD) in order for a signal to be installed. For school crossings, at least 20 students must use the crossing, and it cannot be within 300 feet of another signal. The MUTCD also requires that other measures be considered prior to installation of a signal.



4) Crossing Guards. The City staffs 156 locations for APS and private elementary schools. They provide an extra level of safety for children who are too young to negotiate a street crossing by themselves. They are equipped with safety vests and stop sign paddles. Once they have ensured that traffic is stopped, they direct the waiting children to cross.

There must be a minimum of 350 vehicles on the street to be crossed during the 35 minutes when a crossing guard would be present, and a minimum of 15 students who would use the crossing on a daily basis.

Crossing guards are not placed until proper striping and signage is installed. They are reserved for elementary aged children.



Summary of Data Gathered

After a field review of Monte Vista Elementary School in September, DMD set out to gather more than twenty different pieces of information about each school crossing, with the intent of determining what crossings might benefit from additional investment.

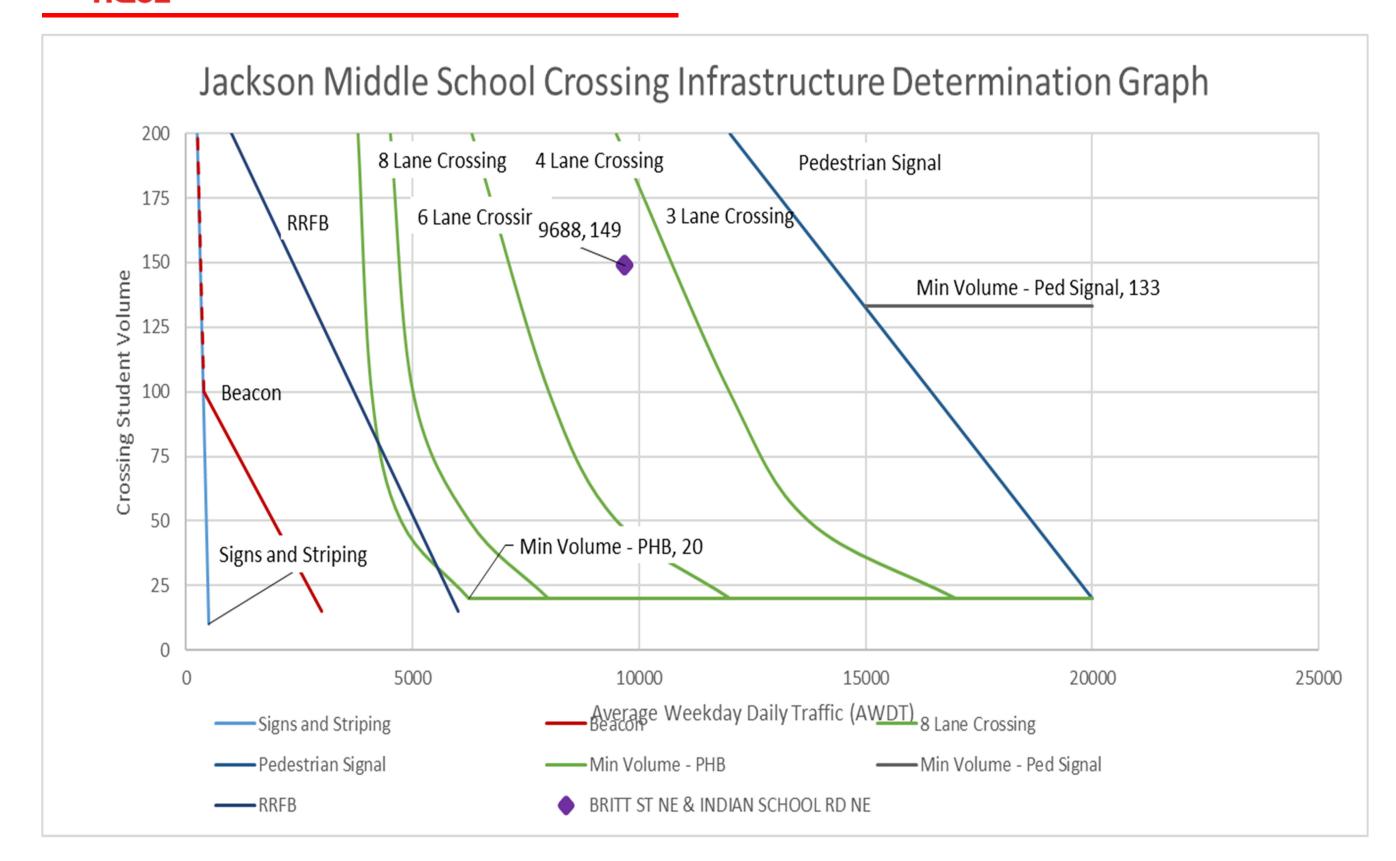
Fields:

- 1) School Name
- 2) School Type
- 3) Intersection
- 4) History of Pedestrian Crashes
- 5) Crosswalk Type
- 6) Crosswalk Condition
- 7) Crossing Guard Presence
- 8) Mid-Block Type Crossing
- 9) Crossing Volume
- 10) Located in School Walk Zone
- 11) Flashing Beacon Presence
- 12) Traffic Signal Type, if any
- 13) Roadway Type
- 14) Speed Limit
- 15) Number of Lanes
- 16) Average Daily Traffic (ADT)
- 17) Pedestrian Facility Quality
- 18) Traffic Calming Presence
- 19) Complete Street Status
- 20) AM Bell Time
- 21) PM Bell Time
- 22) Presence of After School Pedestrians
- 23) Stop Control Type
- 24) Graph Output

Scoring System

DMD used a two-step process to score each crossing. First, a graph was prepared for each school. A point based on pedestrian volume and motor vehicle volume was placed on the graph. The background of the graph had warrant lines for different types of infrastructure. A warrant line to the left of the plotted point indicates the minimum level of infrastructure desired for the crossing. The warrant lines were determined based on information from the Manual on Uniform Traffic Control Devices (MUTCD), City of Albuquerque crossing guard policies and data from other agencies, particularly the City of Boulder Pedestrian Crossing Treatment Installation Guideline.







This graph shows the one crossing for Jackson Middle School. It is located at the intersection of Indian School Rd NE and Britt St NE. Indian School carries 9688 vehicles per day, and 149 students used it on the count day. The point is plotted on the graph using the traffic volume as the x-value (9688 vehicles per day) and the pedestrian volume (149 students) as the y-value.

There are eight lines on the graph, representing five types of infrastructure: signs and striping, flashing beacons, RRFBs, PHBs, and traffic signals. There are four lines for the PHBs for different length crossings. A longer crossing requires fewer motor vehicles and pedestrians to meet the warrant for installation. The warrant lines for the PHBs and traffic signals are taken from the graphs presented in the MUTCD.

Any equipment lines to the left of the crossing point indicate the desired infrastructure for the crossing. In this case, lines for signs and striping, flashing beacons, and RRFBs lie to the left of the point, as do warrant lines for a PHB for an eight-lane crossing, a six-lane crossing, and a four-lane crossing. Indian School is a three-lane road in this section, and the warrant line for a PHB on a three-lane road lies to the right of the point, so the crossing does not warrant a PHB.

The graph outputs were sorted into eight (8) categories: Exceeds Minimum Equipment, Meets Minimum Equipment, Additional Equipment Desired, Outside Walk Zone, Has Minimum Equipment, Outside Walk Zone, Additional Equipment Desired, and No Students Counted. A point value was assigned based on those four ratings. This location has appropriate signs and striping and flashing beacons, but it does not have an RRFB. Therefore, it was given a graph output score based on its rating of "Additional Equipment Desired." That score was added to the following:

- 1) History of Pedestrian Crashes: -1 if crashes happened in the past with the current infrastructure: A crash involving a pedestrian at a crossing location indicates that a closer look should be taken to ensure there are not unique characteristics that heighten the likelihood of a crash. If new equipment had been added since the crash, then no points are deducted.
- Crosswalk Condition: -1 if poor, +1 if good:
 Having a clearly visible crosswalk can raise drivers' awareness to take care when approaching.
- 3) Crossing Guard Presence: +6 if crossing guard present Crossing guards are provided at some elementary school crossings based on pedestrian and motor vehicle volume warrants. APS is working to provide staff for some middle school crossings, but the locations are not determined yet.
- 4) Located in School Walk Zone: -3 if located in school walk zone: A number of crossings are adjacent to schools, but do not serve a walk zone. This value was set to ensure that resources were primarily spent in areas where APS does not provide busing.
- 5) Stop Control: 0 if none, 0 if across the through movement, +1.5 if the crossing is across the stop controlled movement, and +3 if the intersection is an all-way stop.
- 6) Speed Limit: -+1 if 25, 0 if 30, -1.5 if 35, -3 if more than 35.
- 7) Pedestrian Facility Quality: -1 for poor, +1 for good:
 Pedestrian facilities were considered based on availability and quality. This score also included ADA considerations. A sidewalk that was not ADA compliant could not receive a "Good" rating.



- 8) Traffic Calming Presence: +1 for traffic calming: Traffic calming has the potential to slow motor vehicles.
- 9) Complete Street Status: +1 for complete street: Complete streets design takes multiple modes into account, and attempts to make a usable and comfortable space for all users. In order to receive a "Yes" rating, a street needed to have pedestrian, bicycle, and motor vehicle spaces.
- 10) Graph Output: Crossings were sorted into six categories based on location, student volume, and their location within the graph, Exceeds Minimum Standards (+20), Meets Minimum Standards (+14), Additional Equipment Desired (+5), Outside of Walk Zone, Meets Minimum Standards (+17), Outside of Walk Zone, Additional Equipment Desired (+13), and No Students Counted (+25). These scores were developed to identify regularly used crossings within school zones that would benefit from additional infrastructure investment.

Results

Crossings were divided into six (6) different categories:

- Prioritized for Funding
- Monitor for Funding
- Meets Minimum Standards
- Exceeds Minimum Standards
- No Students Counted, Within Walk Zone
- No Students Counted, Outside of Walk Zone

The results of the scoring process resulted in six (6) locations that rated "Prioritized for Funding," and an additional fifteen (15) fell into the "Monitor for Funding" category. They are listed below.

For each of these crosswalks, DMD identified a recommended remedy and estimated cost. These improvements are a high priority and the City of Albuquerque will request to work with APS to jointly seek funding from the State Legislature. DMD will continue to evaluate crosswalks in conjunction with input from APS and State Legislators.

APS does not currently assign crossing guards to middle schools. The City of Albuquerque recommends that APS consider options for staffing middle school crossing guards, including the 15 high-priority middle school crosswalks identified in the study. The City encourages APS to look into allowing trained and certified volunteers, such as parents, to serve as crossing guards during peak hours. The City of Albuquerque is extending an offer to APS to train and certify the volunteers through the Department of Municipal Development. The City aims to work with its partners to be part of the solution to keep children and families safe.



Prioritized for Funding:

Desert Ridge Middle School - Mid-block crossing on Barstow

- Primary deficiency: Additional infrastructure desired.
- Other deficiencies identified: None.
- Recommended remedy: Install RRFBs (\$30K).

Hoover Middle School – Yellowstone and Tivoli

- Primary deficiency: Additional infrastructure desired.
- Other deficiencies identified: Sidewalk not ADA compliant.
- Recommended remedy: Install new signs (\$1K), schedule for ramp installation with other street rehabilitation or under ADA Transition Plan (\$20K).

Jackson Middle School – Indian School Rd NE and Britt St NE

- Primary deficiency: Additional infrastructure desired.
- Other deficiencies identified: None.
- Recommended remedy: Install RRFBs (\$30K).

Jimmy Carter Middle School – Mid-block crossing on Bluewater Rd NW

- Primary deficiency: Additional infrastructure desired.
- Other deficiencies identified: None.
- Recommended remedy: Install RRFBs (\$30K).

Lyndon B Johnson Middle School – Golf Course Rd NW and Taylor Ranch/La Orilla Rd NW

- Primary deficiency: Additional infrastructure desired.
- Other deficiencies identified: None.
- Recommended remedy: Install RRFBs (\$30K Expected completion by early springs 2020).

McKinley Middle School - Comanche Rd NE and Washington St NE

- Primary deficiency: Additional infrastructure desired.
- Other deficiencies identified: Sidewalk not ADA compliant.
- Recommended remedy: Install RRFBs (\$30K) and schedule ADA improvements with other street rehabilitation or through ADA Transition Plan (\$50K).



Monitor for Funding:

7 Bar Elementary – Mid-block crossing on 7 Bar Loop Rd NW

- Primary deficiency: Additional infrastructure desired.
- Other deficiencies identified: None.
- Recommended remedy: Install RRFBs (\$30K).

Chaparral Elementary – Atrisco Dr NW and Western Trail NW

- Primary deficiency: Poor crosswalk stripe.
- Other deficiencies identified: None.
- Recommended remedy: Refresh crosswalk (\$1K).

Desert Ridge Middle School – Barstow St NE and Alameda Blvd NE

- Primary deficiency: Additional infrastructure desired.
- Other deficiencies identified: None.
- Recommended remedy: Install flashing beacons. (\$165K).

East San Jose Elementary – Broadway Blvd SE and Thaxton Av SE

- Primary deficiency: Additional infrastructure desired.
- Other deficiencies identified: None.
- Recommended remedy: Install RRFBs (\$30K).

Eisenhower Middle School – Juan Tabo Blvd NE and Camero Av NE

- Primary deficiency: Sidewalk not ADA compliant.
- Other deficiencies identified: None.
- Recommended remedy: Schedule ADA improvements with other street rehabilitation or through ADA Transition Plan (\$20K).

Governor Bent Elementary - Madeira Dr NE and Hendrix Rd NE

- Primary deficiency: Additional infrastructure desired, needs signs and striping.
- Other deficiencies identified: No ADA ramps on west side.
- Recommended remedy: Install ADA ramps and signs and striping (\$40K)

Hayes Middle School - Lomas Blvd NE and Utah St NE

- Primary deficiency: Inappropriate crossing location.
- Other deficiencies identified: Sidewalk not ADA compliant.
- Recommended remedy: Relocate flashing beacons west to Lomas/Tennessee intersection and remove crosswalk. (price noted below)



Hayes Middle School – Lomas Blvd NE and Tennessee St NE

- Primary deficiency: Additional infrastructure desired.
- Other deficiencies identified: Sidewalk not ADA compliant.
- Recommended remedy: Relocate flashing beacons from Lomas/Utah, schedule ADA improvements with other street rehabilitation or through ADA Transition Plan (\$40K).

Janet Kahn School of Integrated Art – Indian Road NE and Parsifal St NE

- Primary deficiency: Additional infrastructure desired.
- Other deficiencies identified: Sidewalk not ADA compliant.
- Recommended remedy: Install RRFBs (\$30K), schedule ADA improvements with other street rehabilitation or through ADA Transition Plan (\$20k).

Jefferson Middle School - Lomas Blvd NE and Girard Blvd NE

- Primary deficiency: Faded crosswalk.
- Other deficiencies identified: None.
- Recommended remedy: Restripe crosswalk Work complete.

John Adams Middle School - Glenrio Rd NW and Dolores Dr NW

- Primary deficiency: Additional infrastructure desired.
- Other deficiencies identified: Sidewalk not ADA compliant.
- Recommended remedy: Install school zone speed limit signs (\$1K) and schedule ADA improvements with street rehabilitation or ADA Transition Plan (\$20K).

Madison Middle School - Moon St NE and Cherokee Rd NE

- Primary deficiency: Additional infrastructure desired.
- Other deficiencies identified: Sidewalk not ADA compliant.
- Recommended remedy: Install RRFB (\$30K) and install ADA ramps with street rehabilitation or through ADA Transition Plan (\$20K).

Truman Middle School – Benavides Rd SW and 94th St SW

- Primary deficiency: Sidewalk missing and not ADA compliant.
- Other deficiencies identified: Faded crosswalk stripe.
- Recommended remedy: Schedule sidewalk construction and ADA improvements through ADA Transition Plan (\$30K), and restripe crosswalk (\$1k).



Wilson Middle School – Cardenas Dr SE and Ross Av SE

- Primary deficiency: Additional infrastructure desired.
- Other deficiencies identified: Sidewalk not ADA compliant.
- Recommended remedy: Install school zone signs (\$1k), schedule ADA improvements with other street rehabilitation or through ADA Transition Plan (\$20K).

Zia Elementary – Lomas Blvd NE and Jefferson St NE

- Primary deficiency: Additional infrastructure desired.
- Other deficiencies identified: None.
- Recommended remedy: Install RRFBs (\$30K). Per the school's graph, this location could warrant either a HAWK or traffic signal, but would operate safely with the current crossing guard and RRFBs.

An interactive geographical database of all the crossings and associated data, including pedestrian volumes and crossing rating, may be found here:

City of Albuquerque School Crossing Locations

Conclusions

There are 362 crossing locations presented in this report. Of those, twenty-one are identified for varying levels of improvements. Some of these may be staffed by APS employees who will be trained as crossing guards. DMD will evaluate the remaining locations and, as funding permits, develop projects to bring the crossings up to minimum standards.

There were 228 crossings that either met or exceeded minimum standards. DMD will continue its efforts to ensure the infrastructure around these crossings stays in good shape and operational.

There were 113 of the crossings that were not used on the count day. DMD will work through the BLUZ committee process to reevaluate those crossings based on public requests through individual schools' administrative staff. DMD will follow the same process after the construction of a new school.

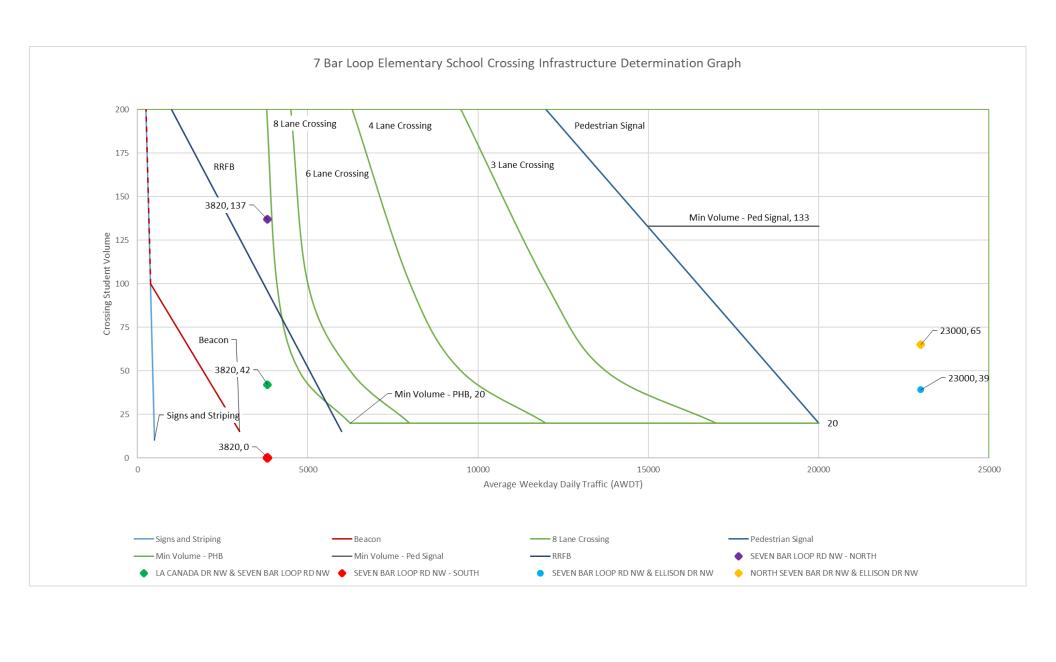
DMD evaluated a number of locations that appeared to be logical crossings for students on their way to and from school, but did not have any use on the count day. Pedestrian volumes are a critical part of the scoring process, and it is not possible to determine a rating if a location is not used. These locations can be revaluated if walking patterns change. The BLUZ Committee, a group of APS, DMD, and APD employees is the best group to approach if residents want a crossing location scored. School principals act as the conduit between the public and the committee.

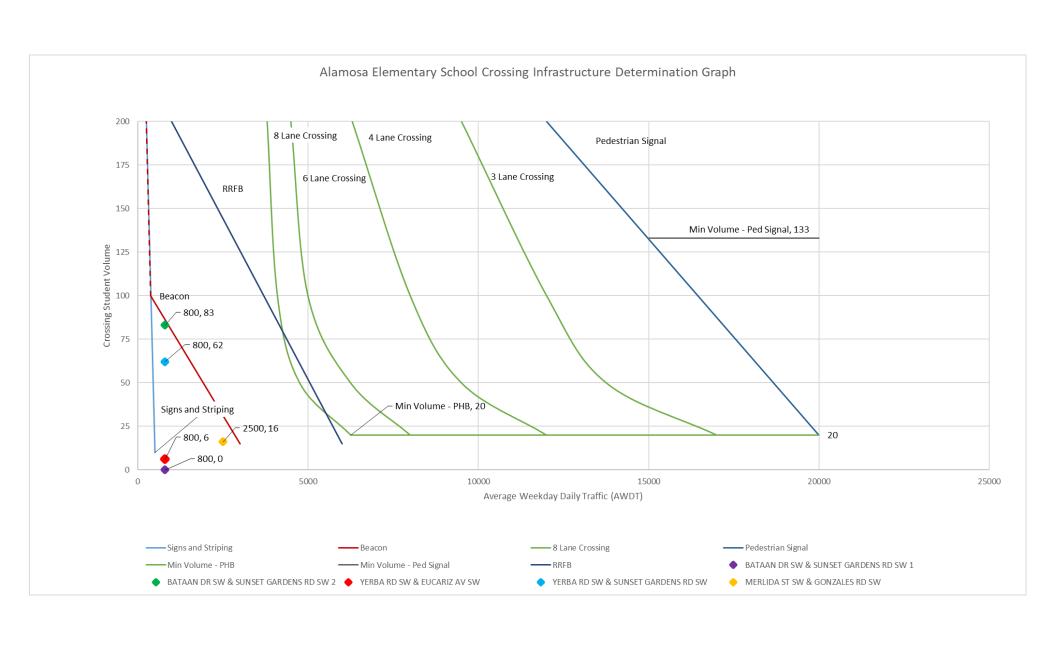
DMD and APS are discussing placing APS personnel at middle school crossing locations. The addition of that staff will improve those locations' crossing ratings. Once DMD knows which crossings will have crossing guards, the ratings will be updated, and the infrastructure recommendations will change.

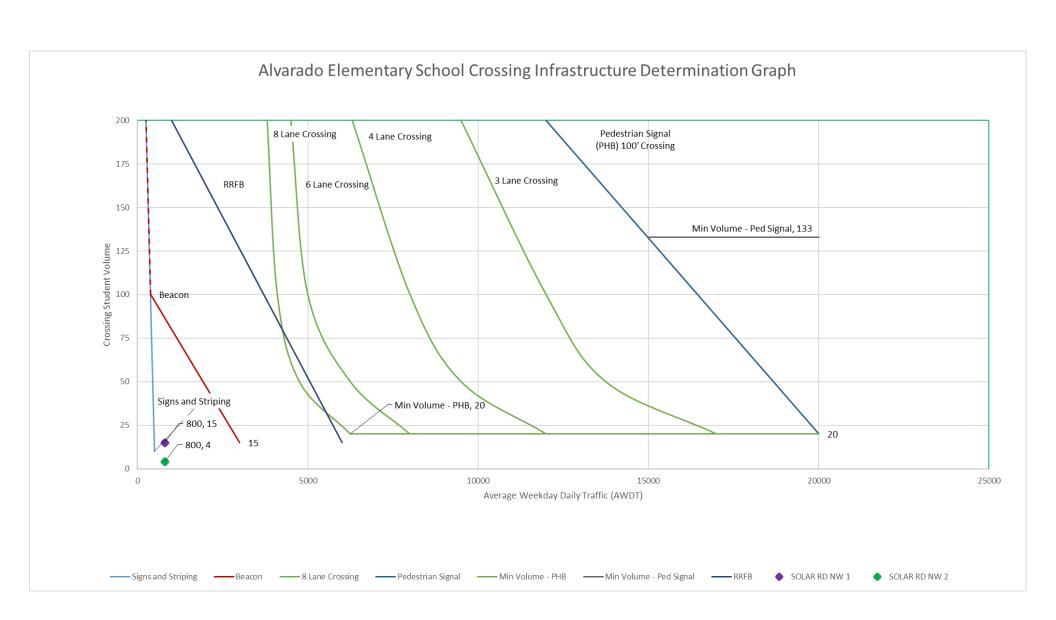


Appendix

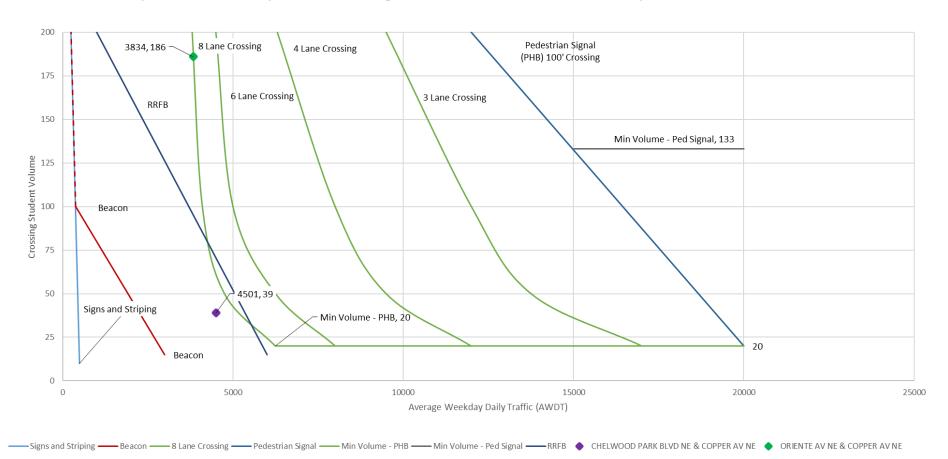
School Graphs, Listed Alphabetically by School Name

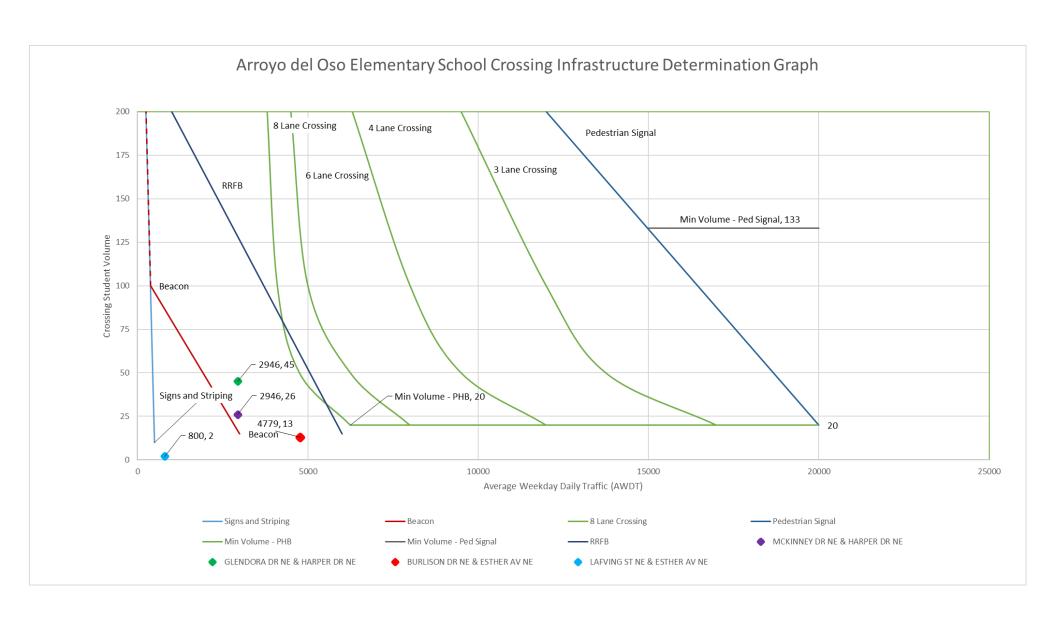


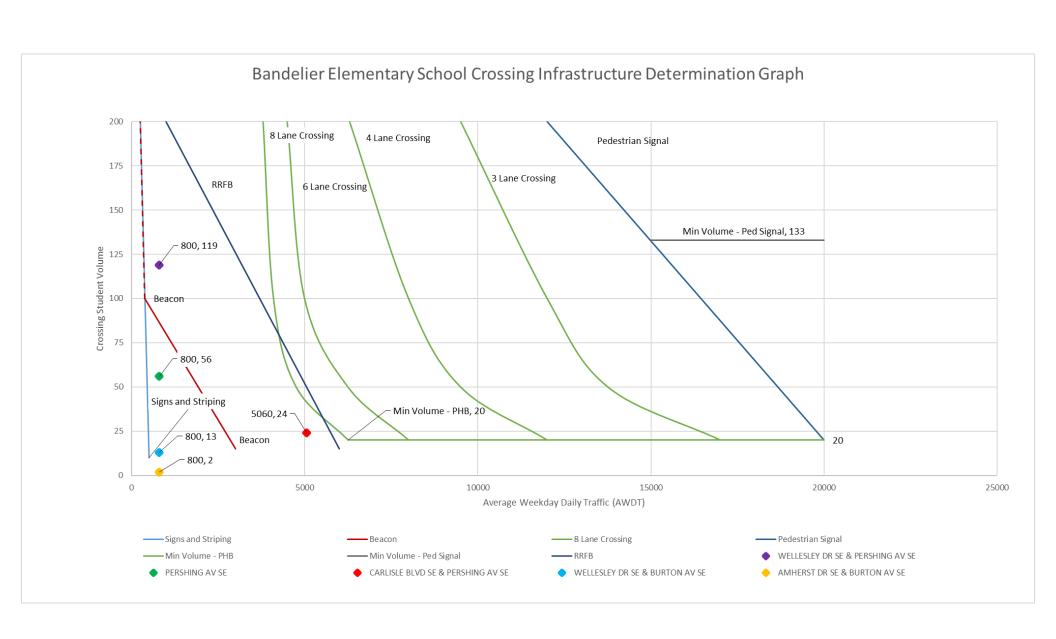


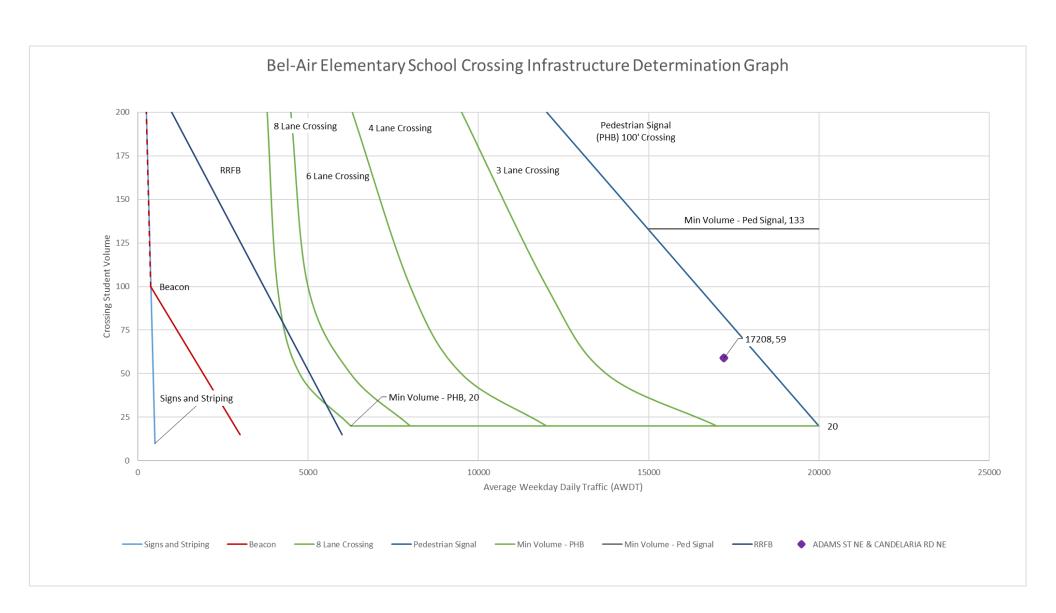


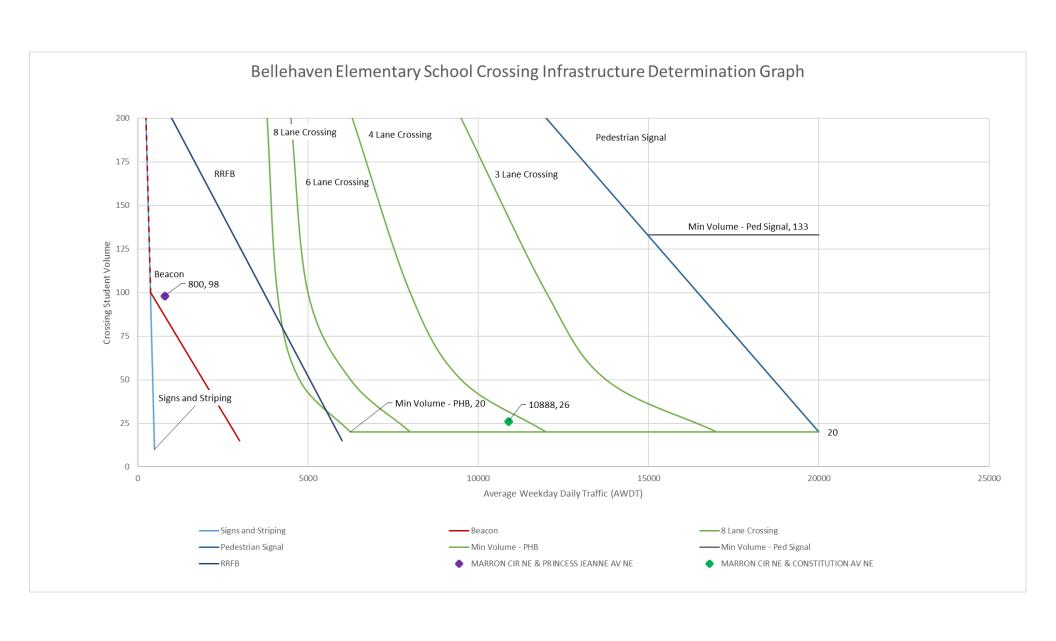


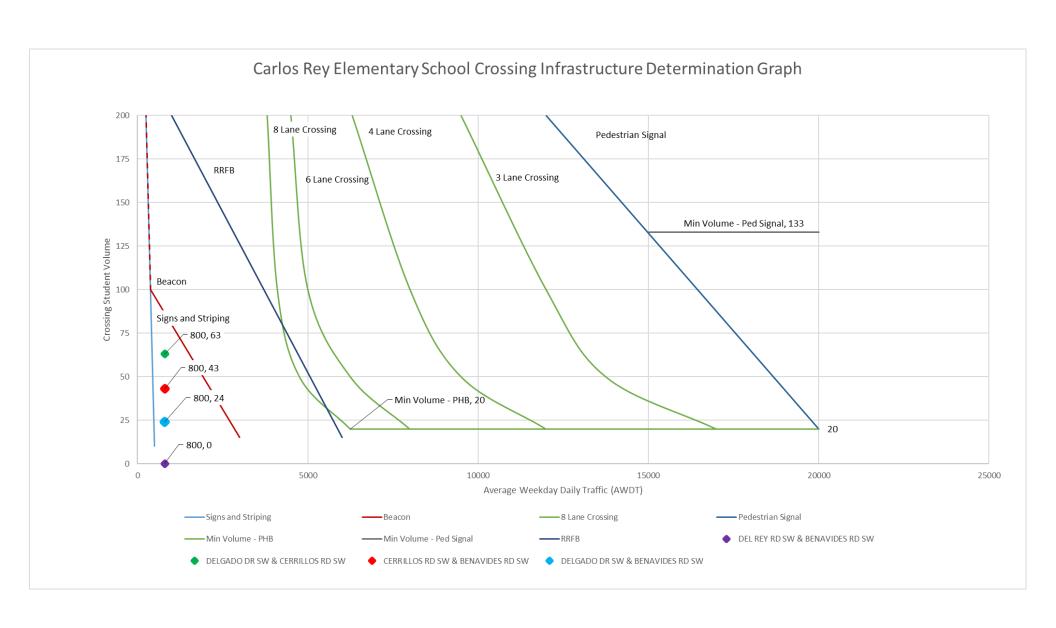




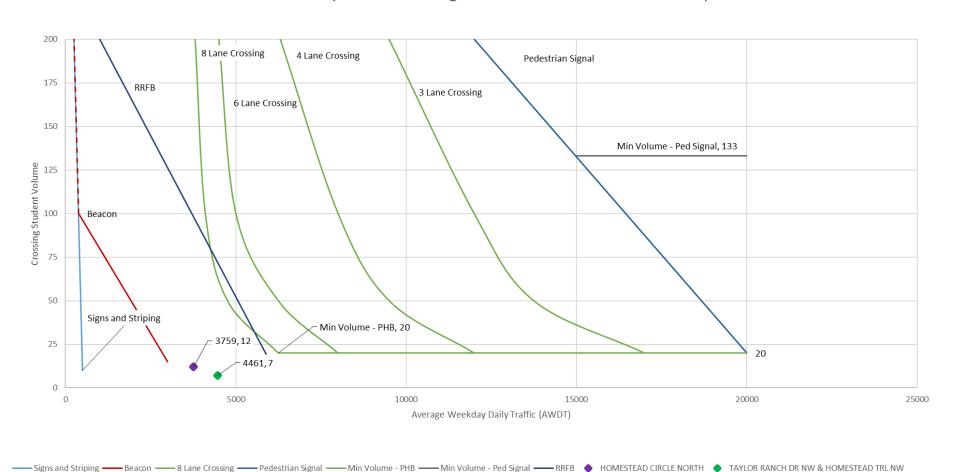




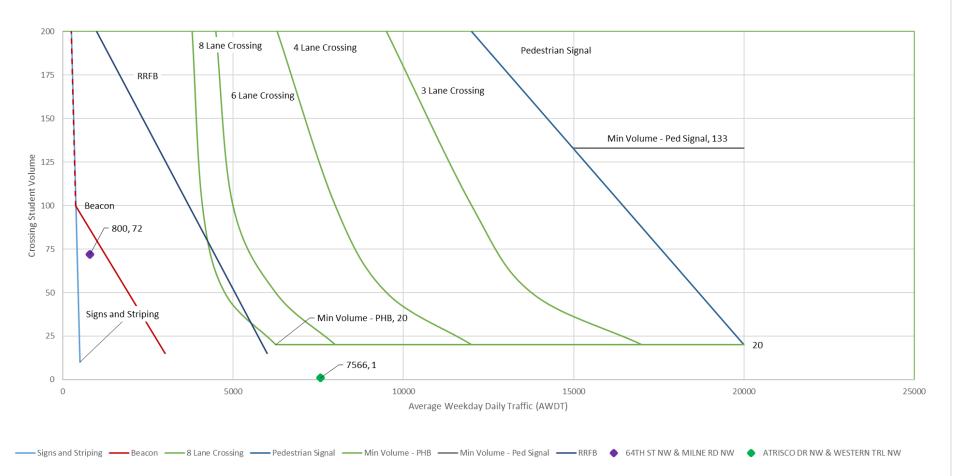


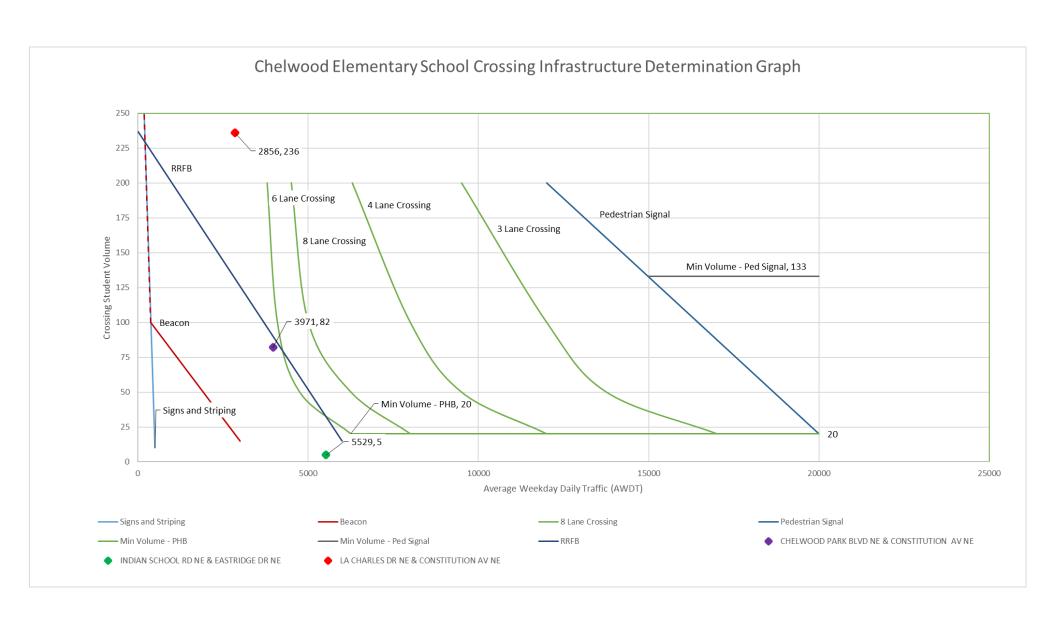


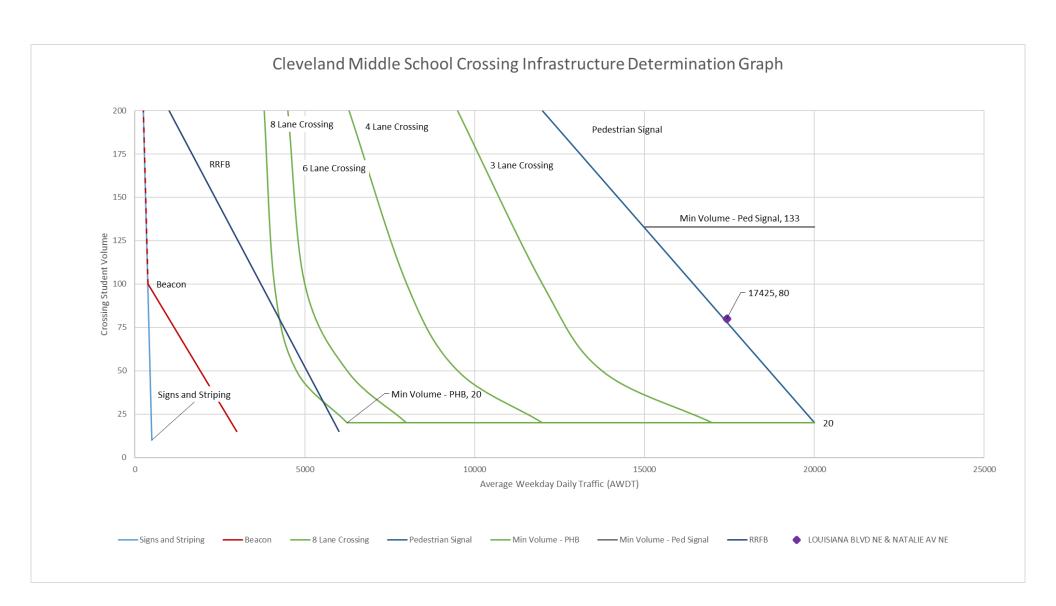


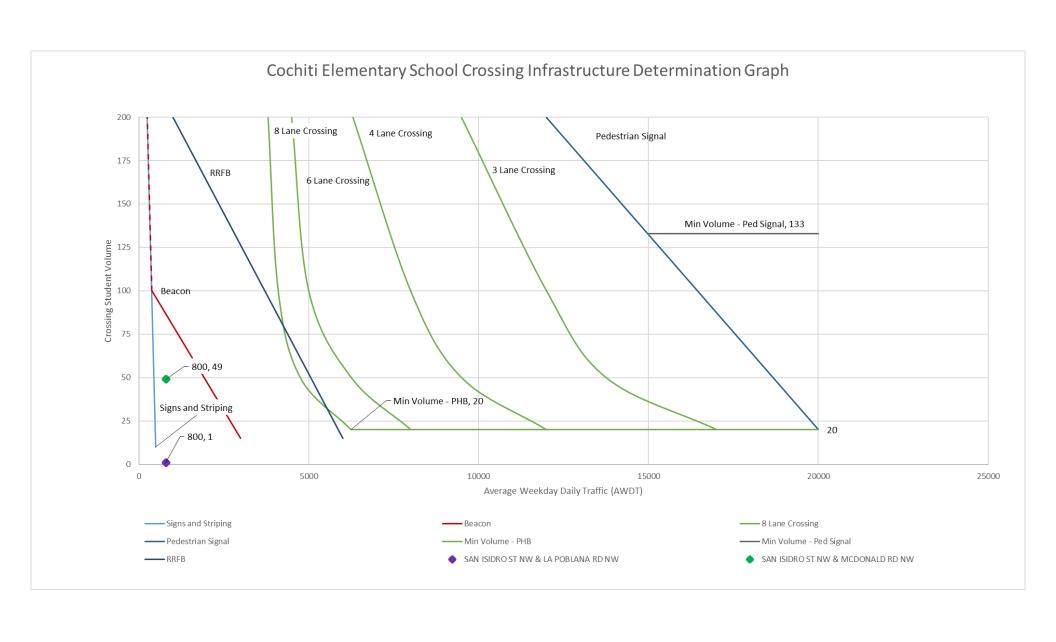


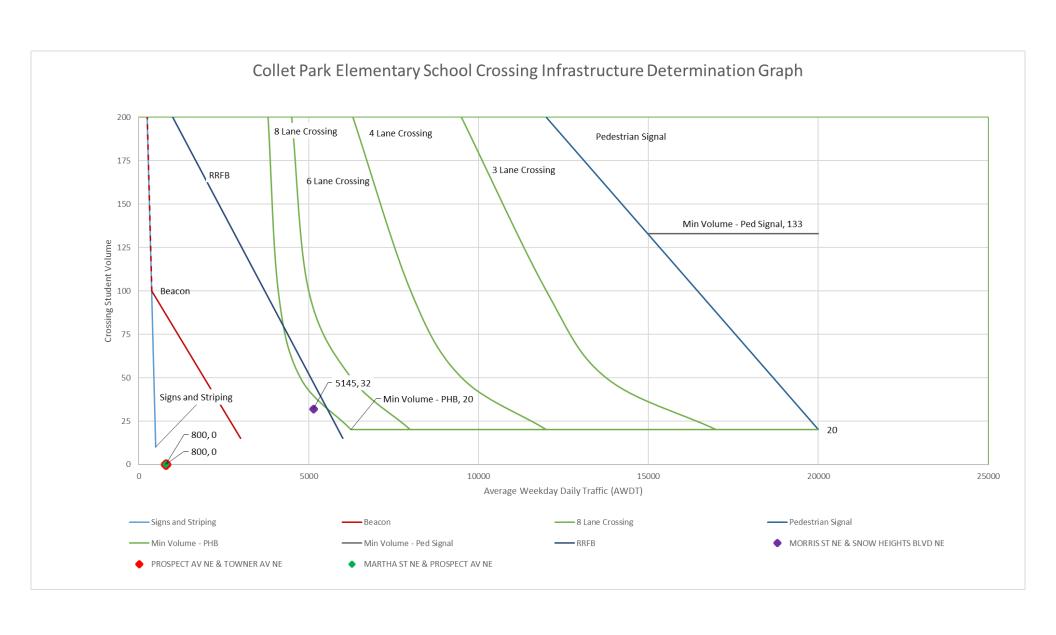


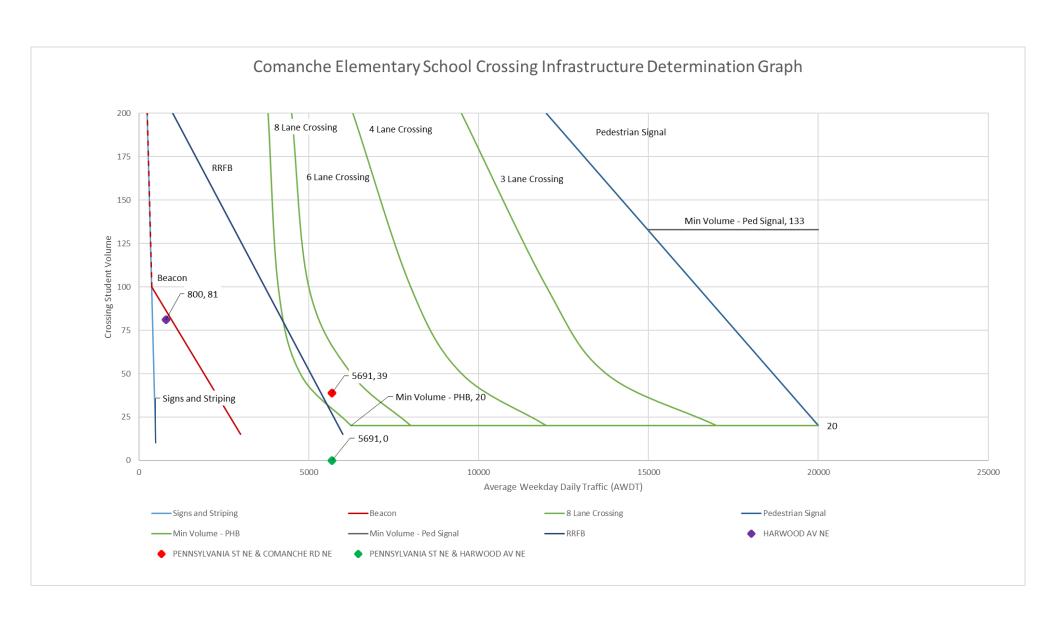


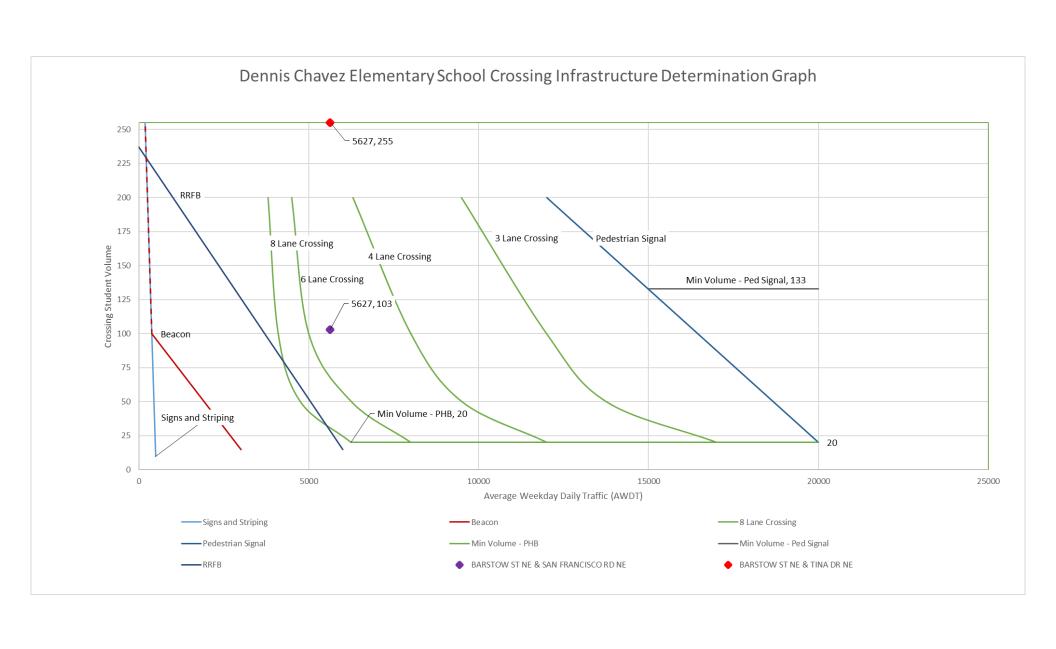


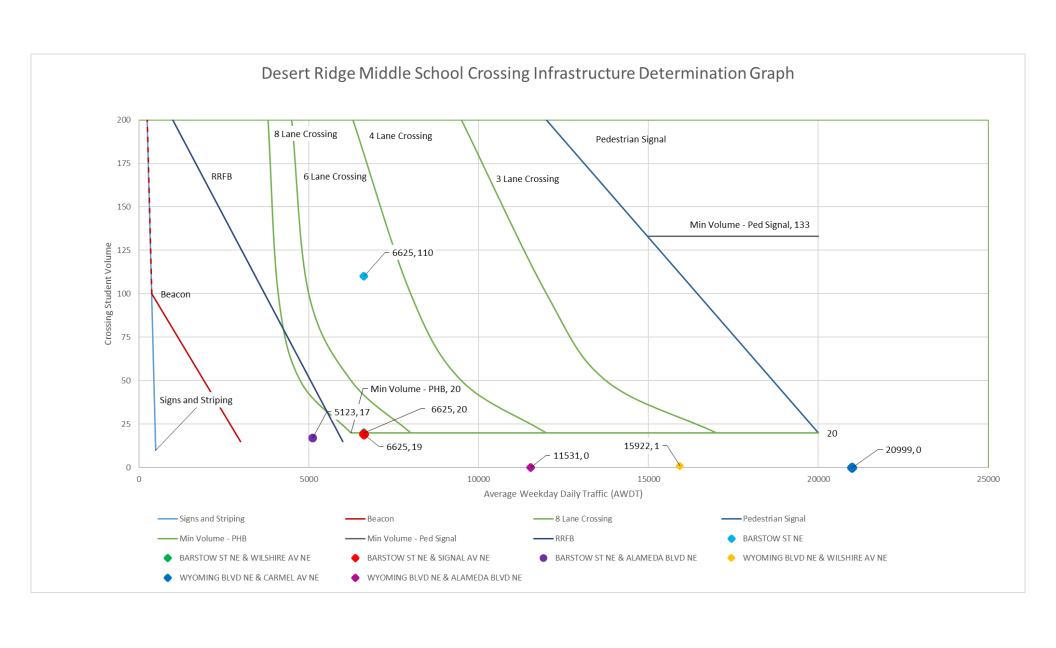




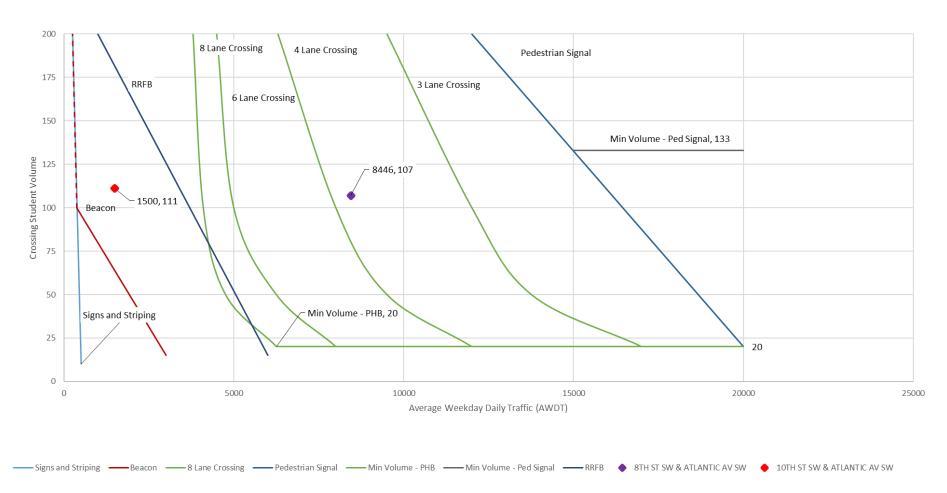


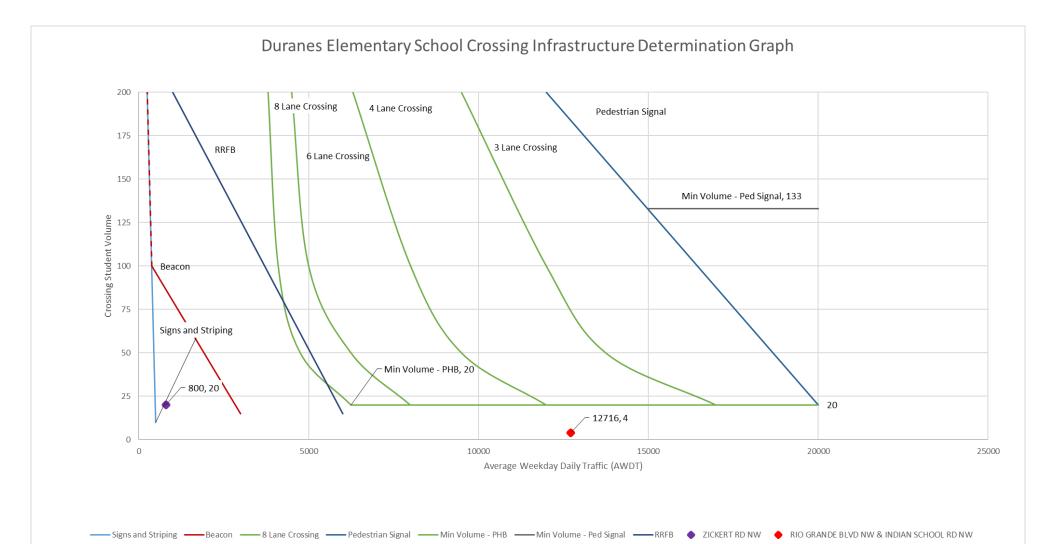


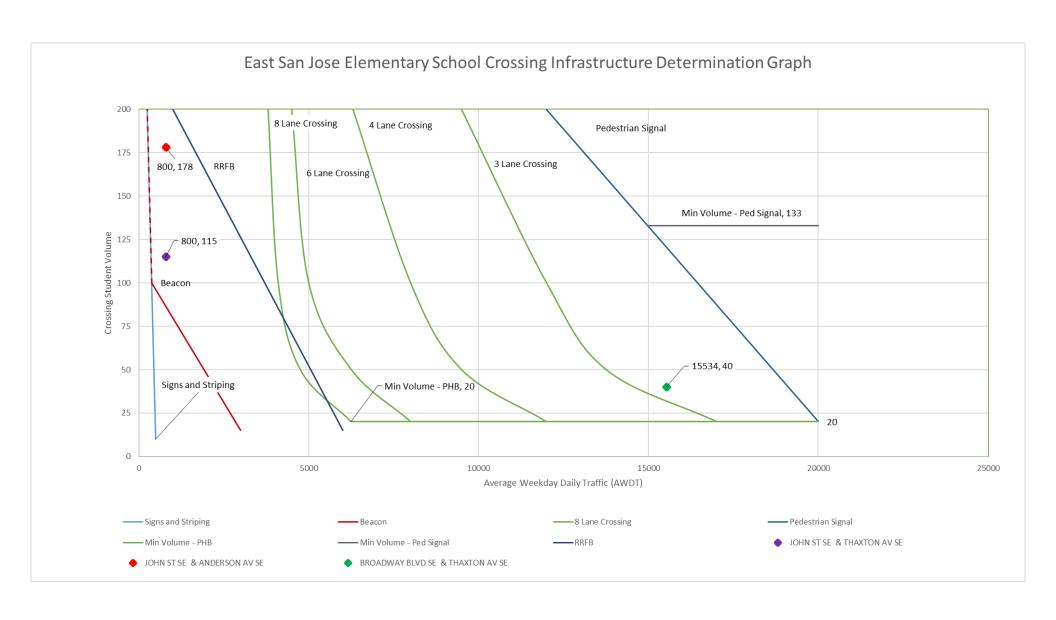


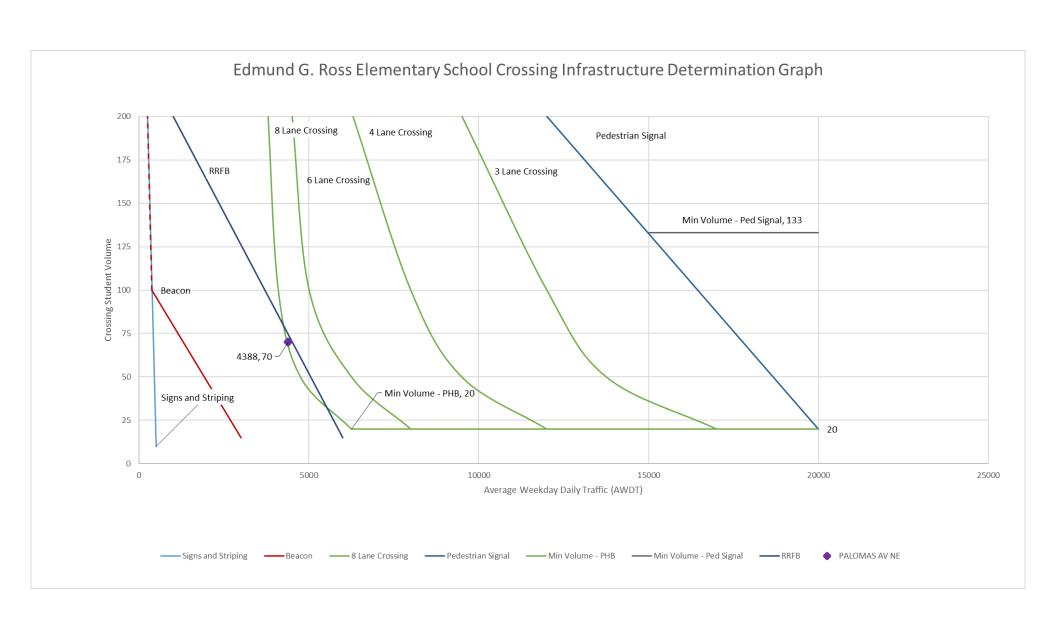


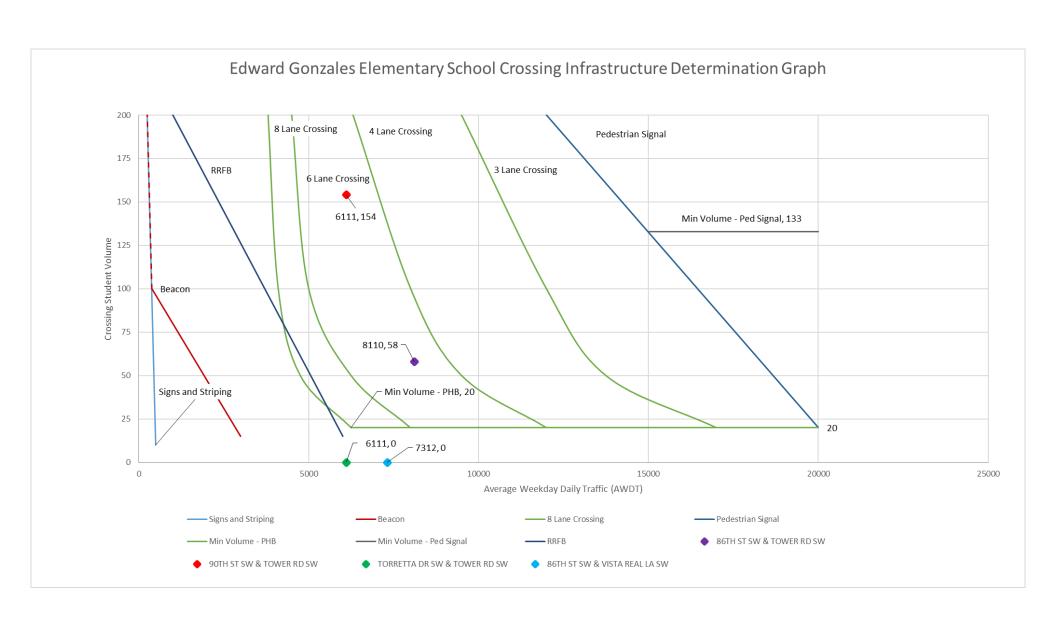


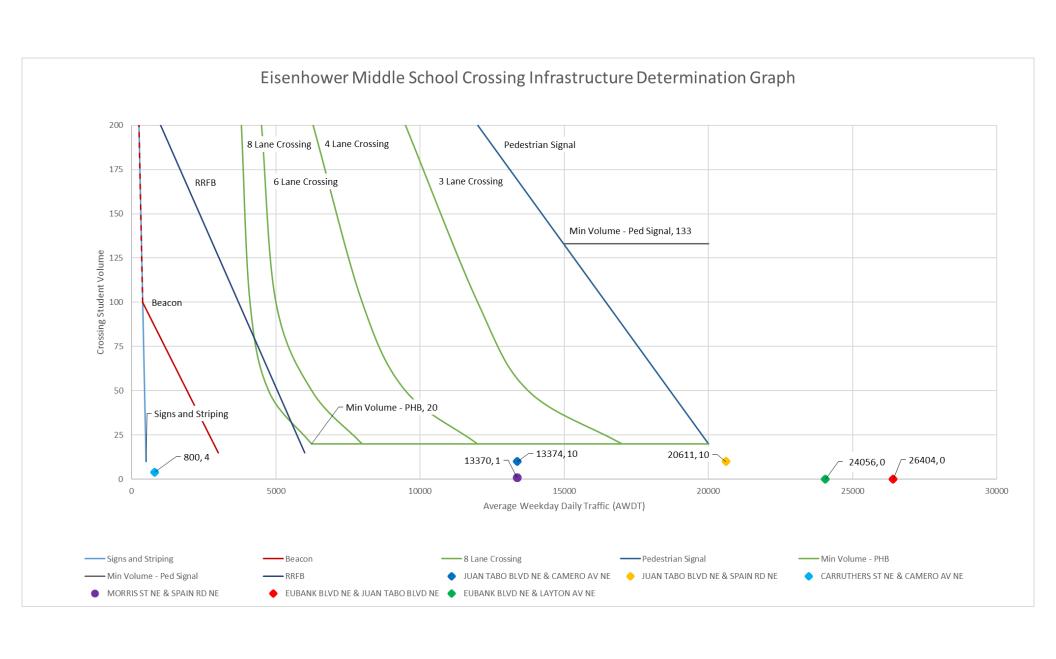


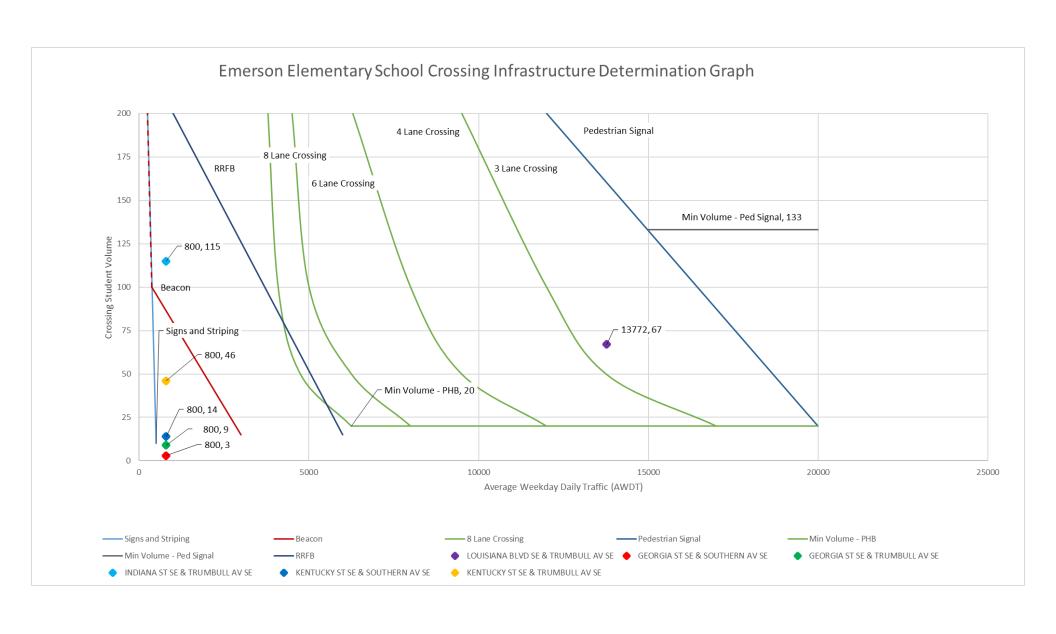


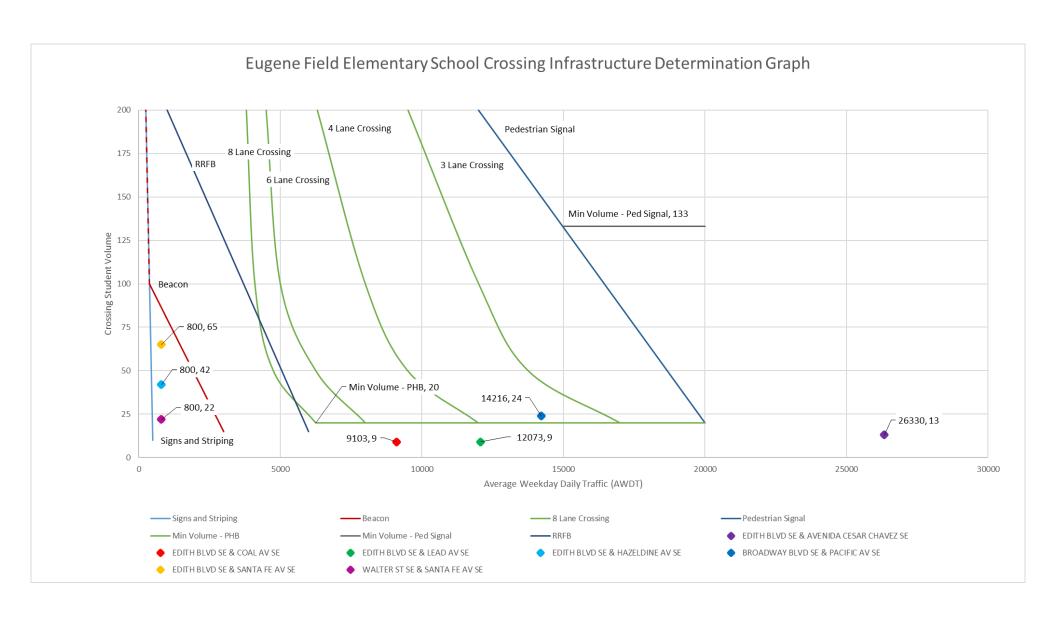


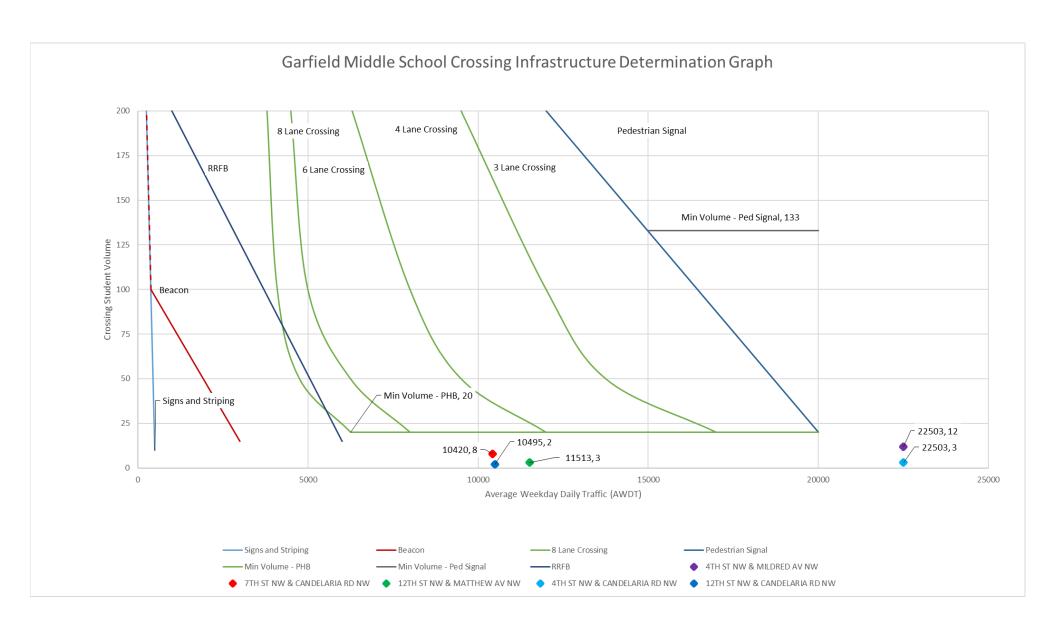


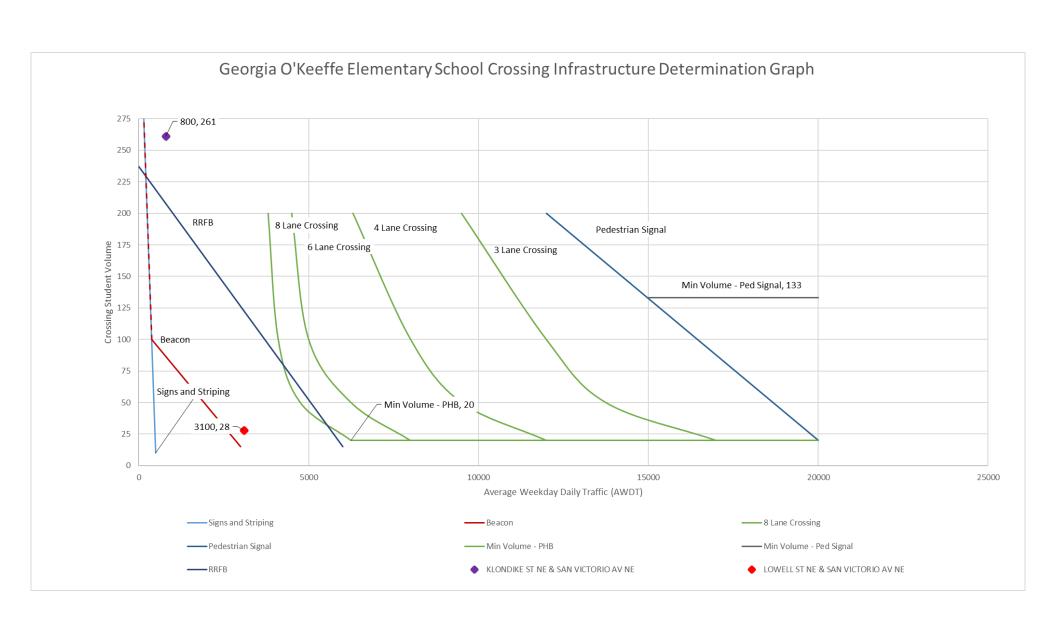


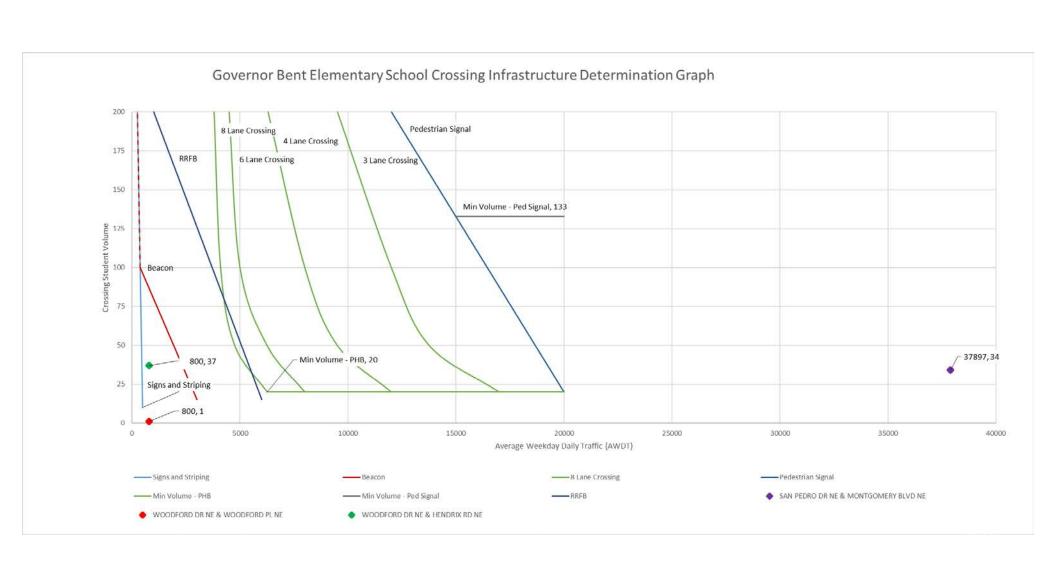


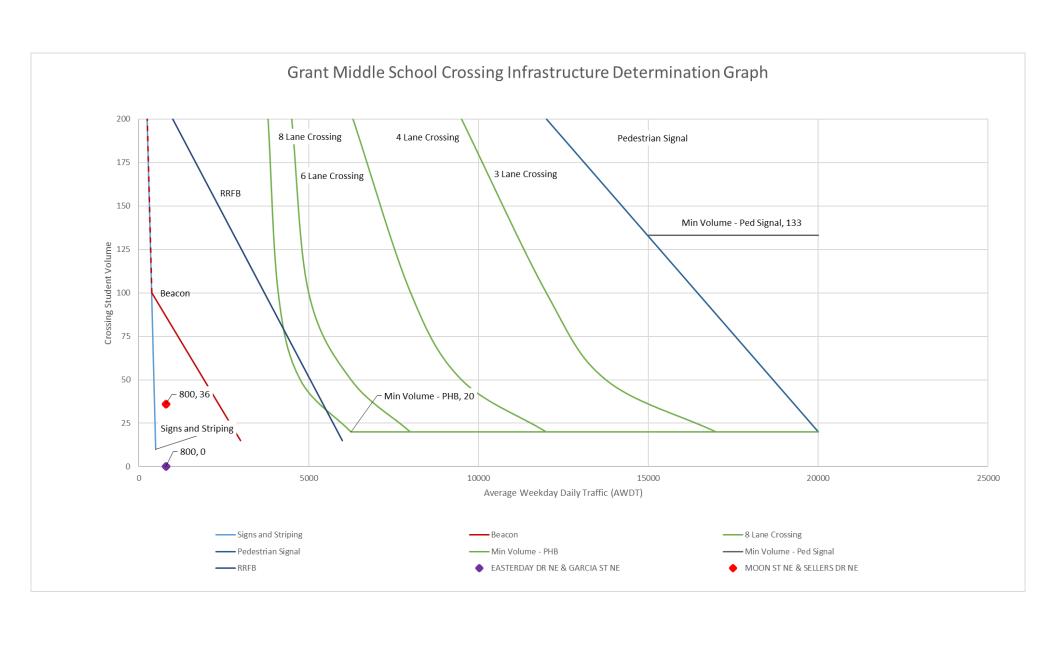


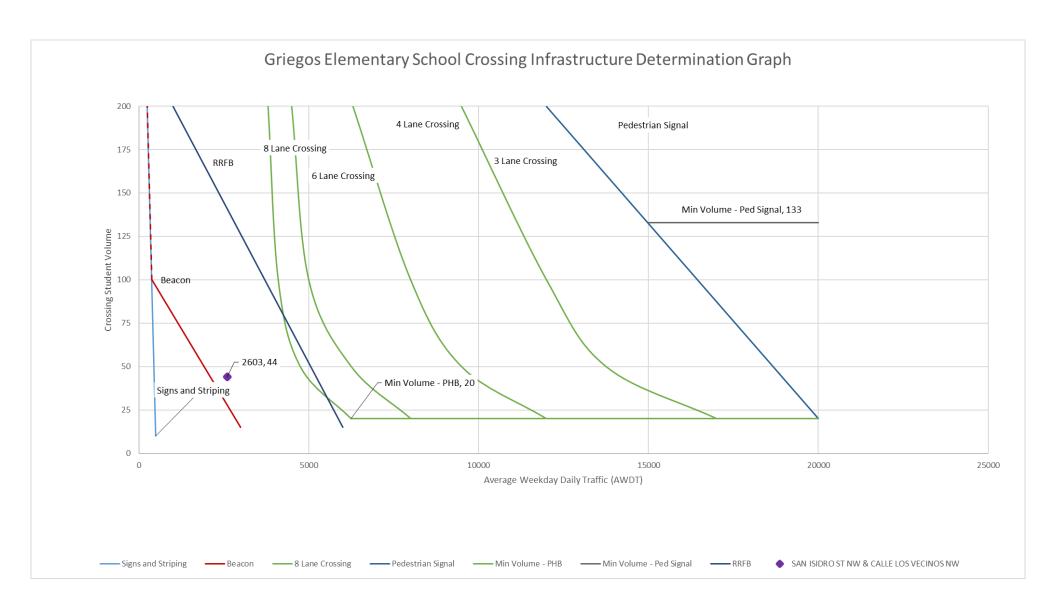


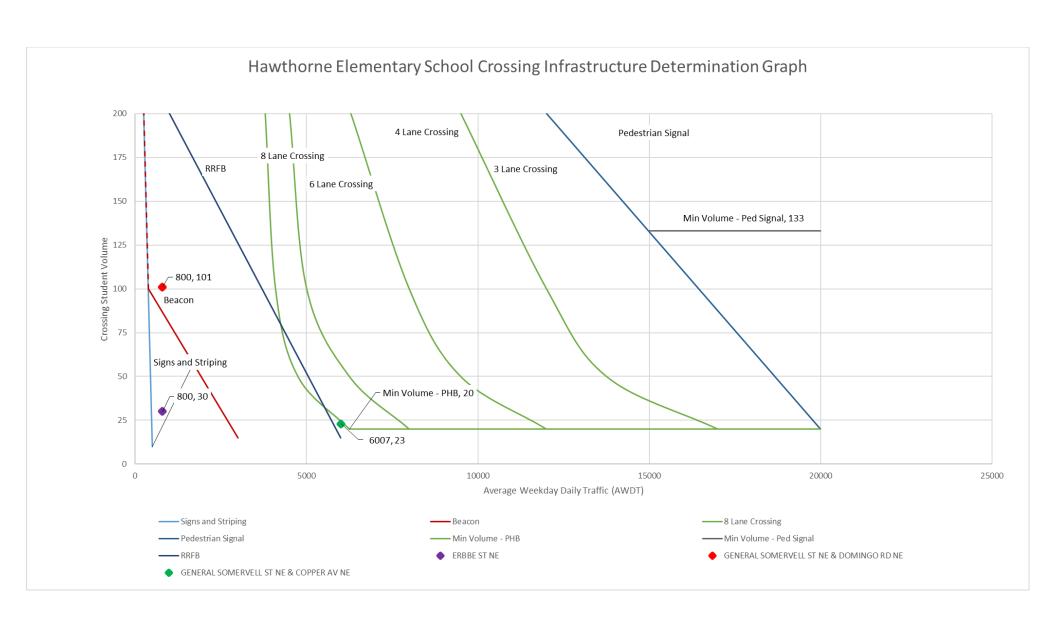


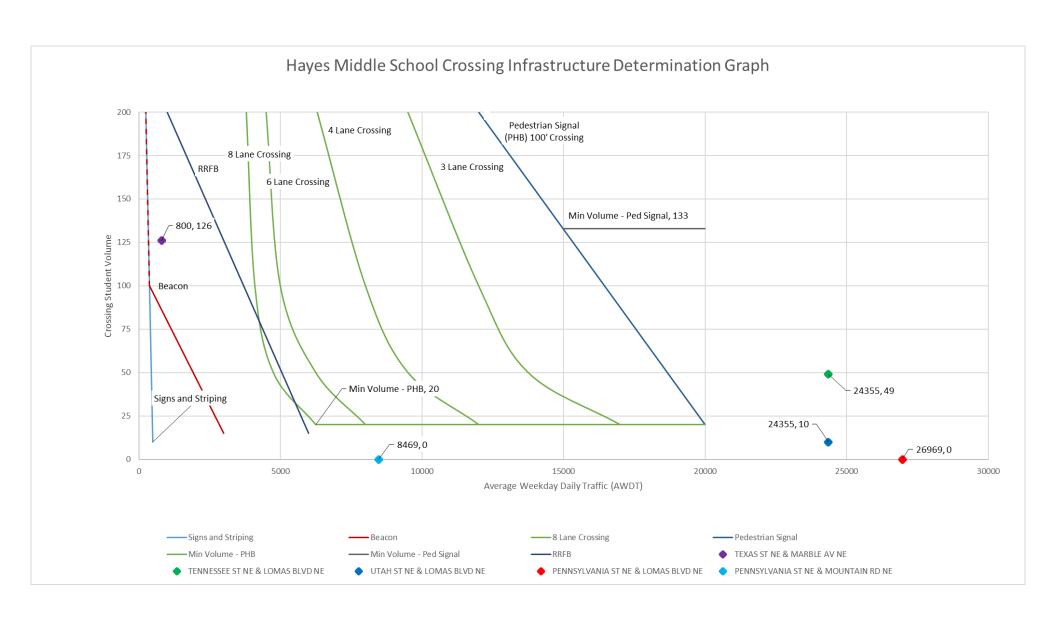


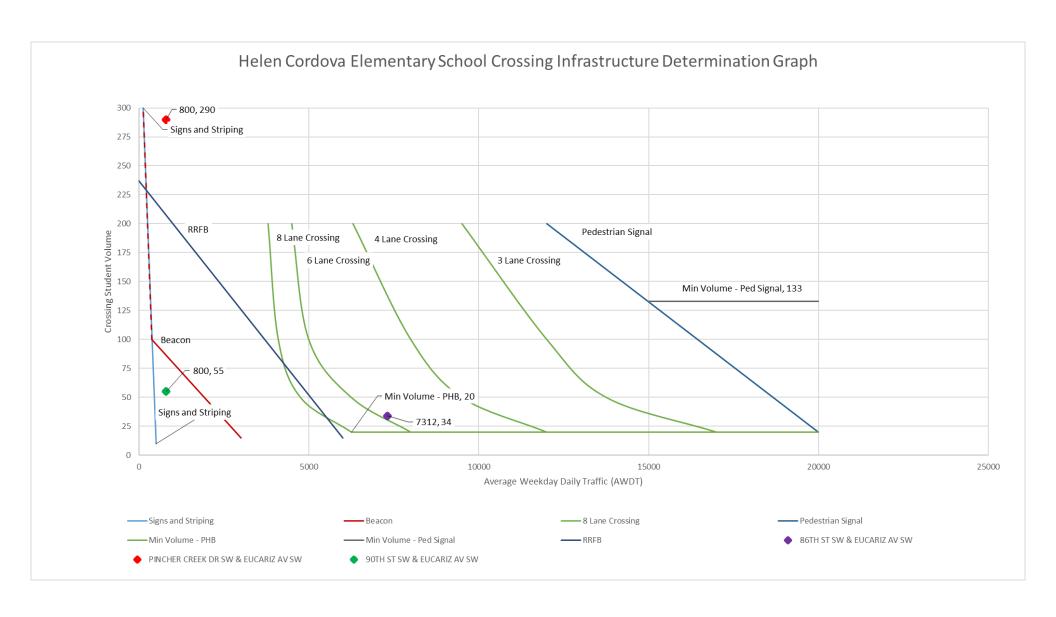


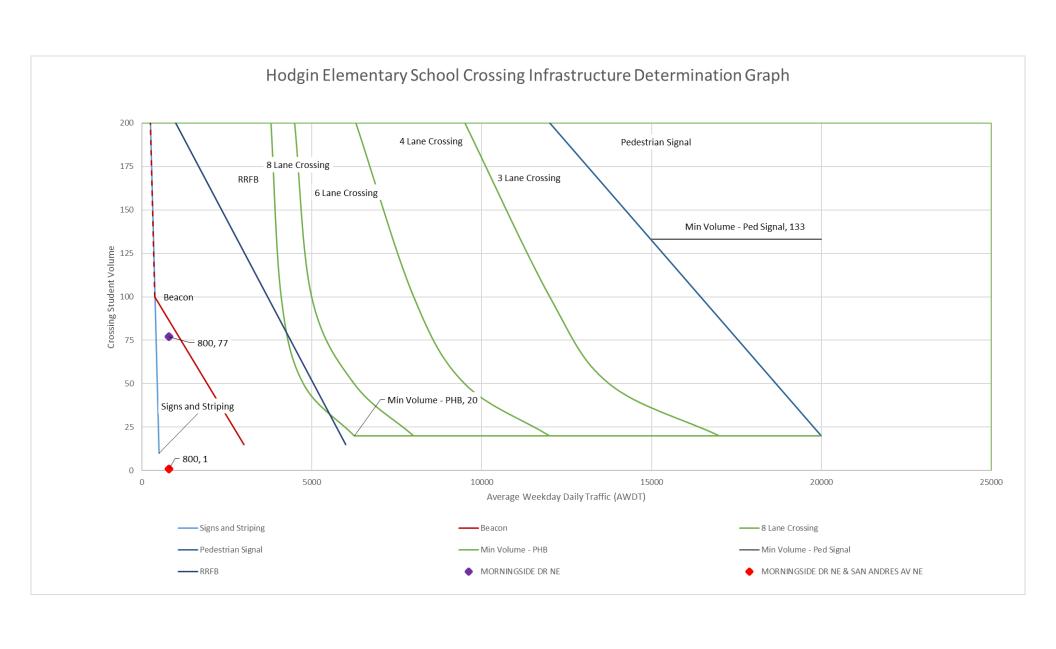


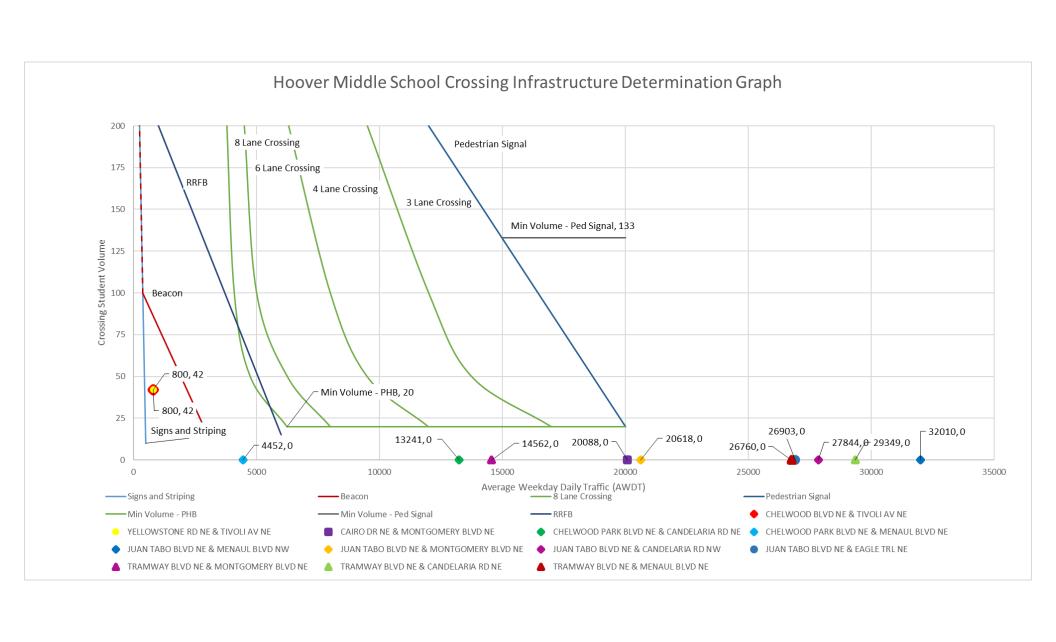


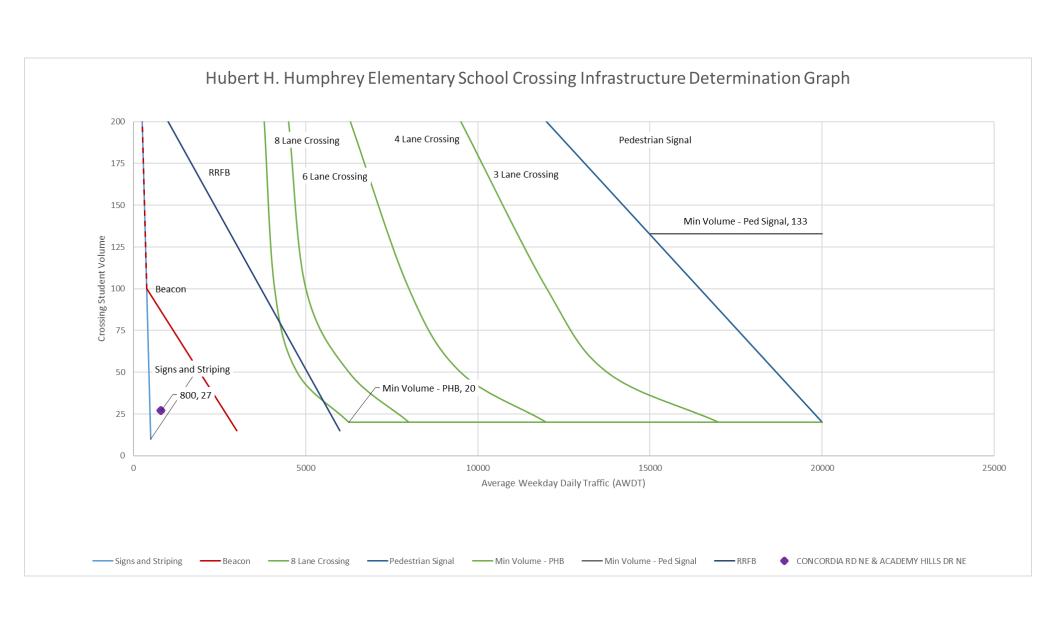


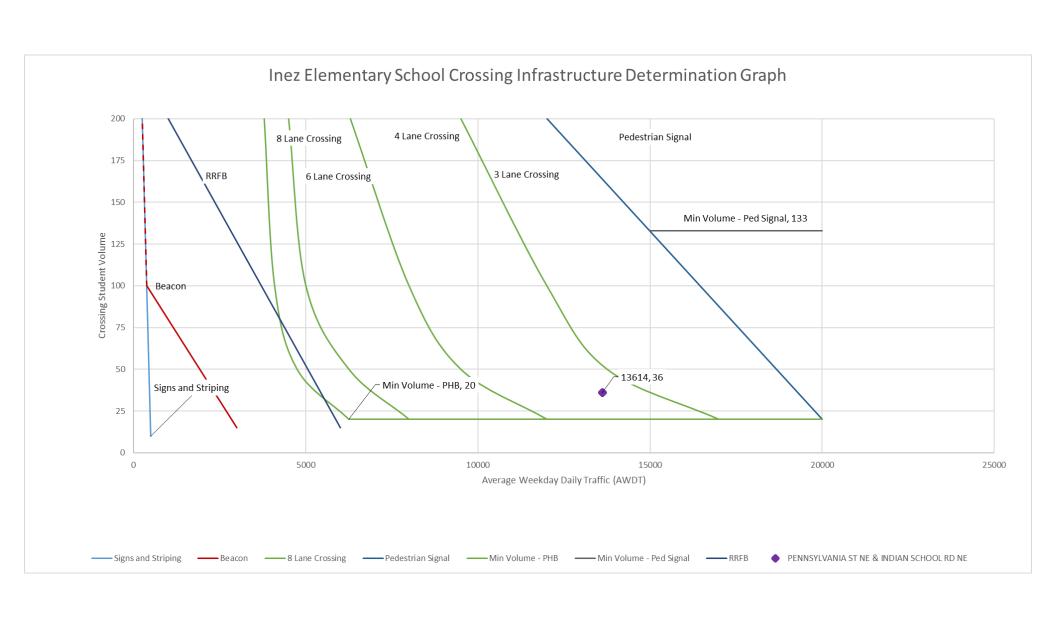


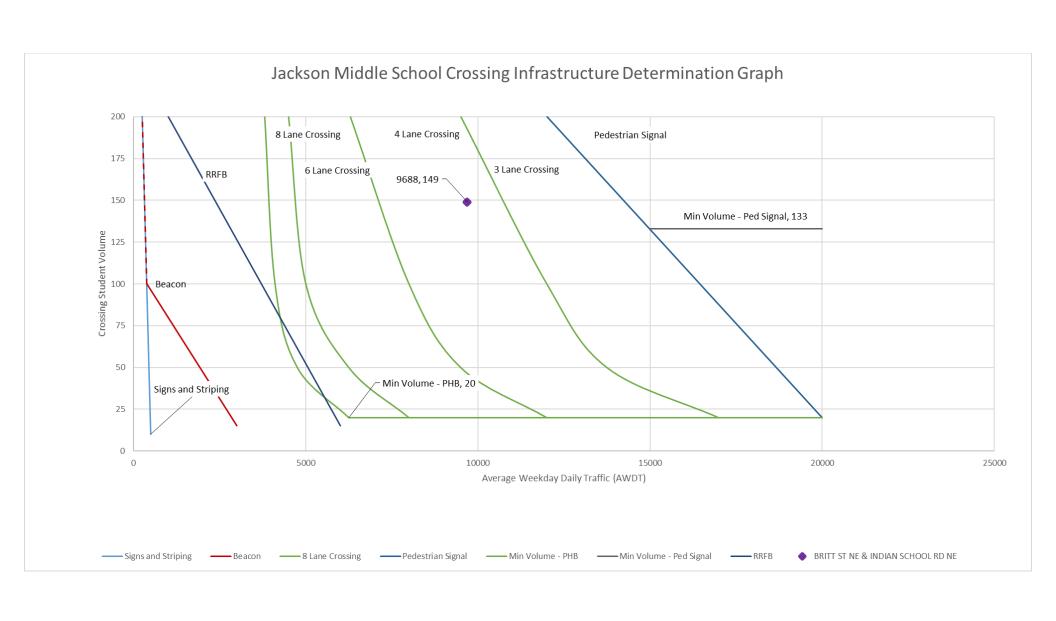


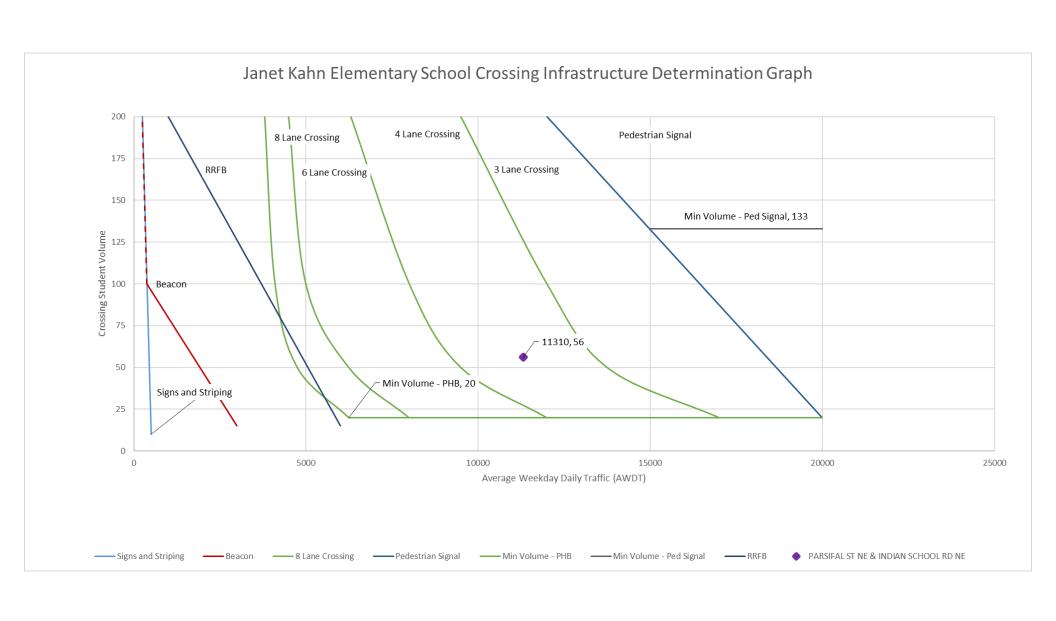


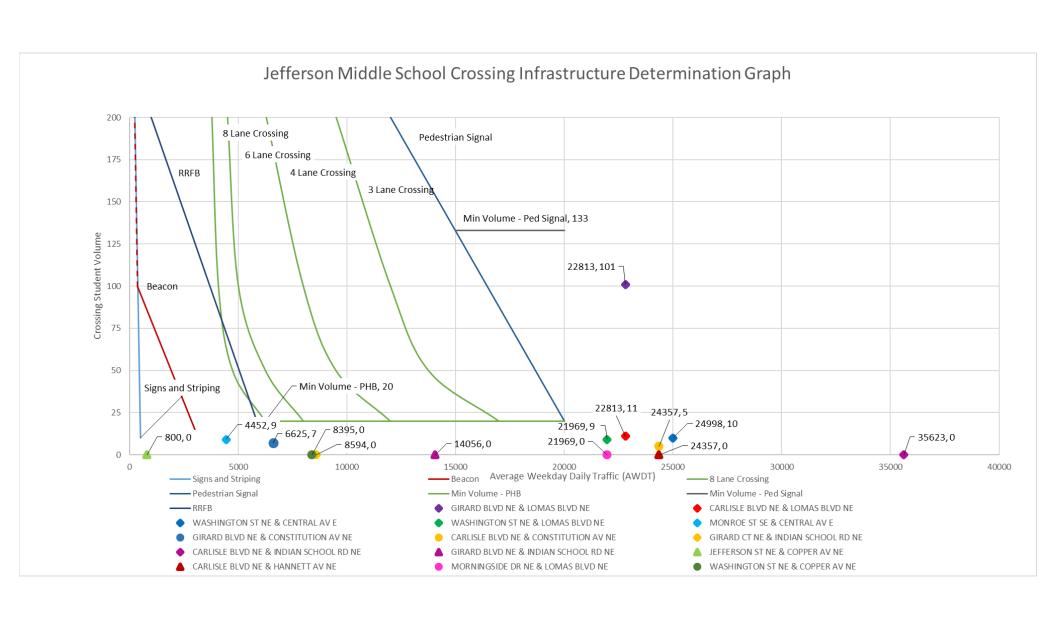


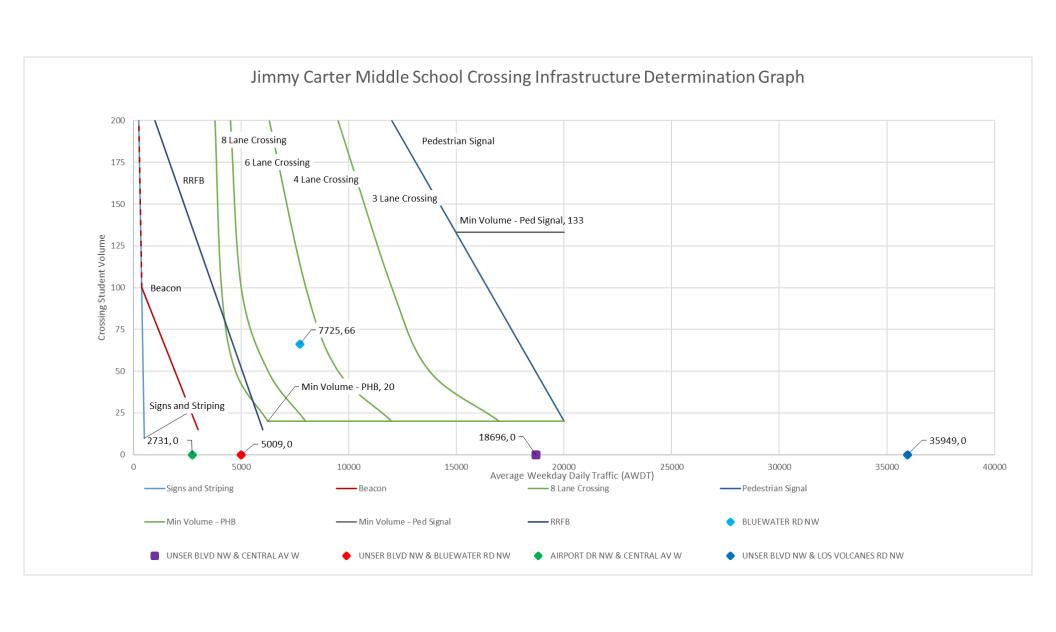


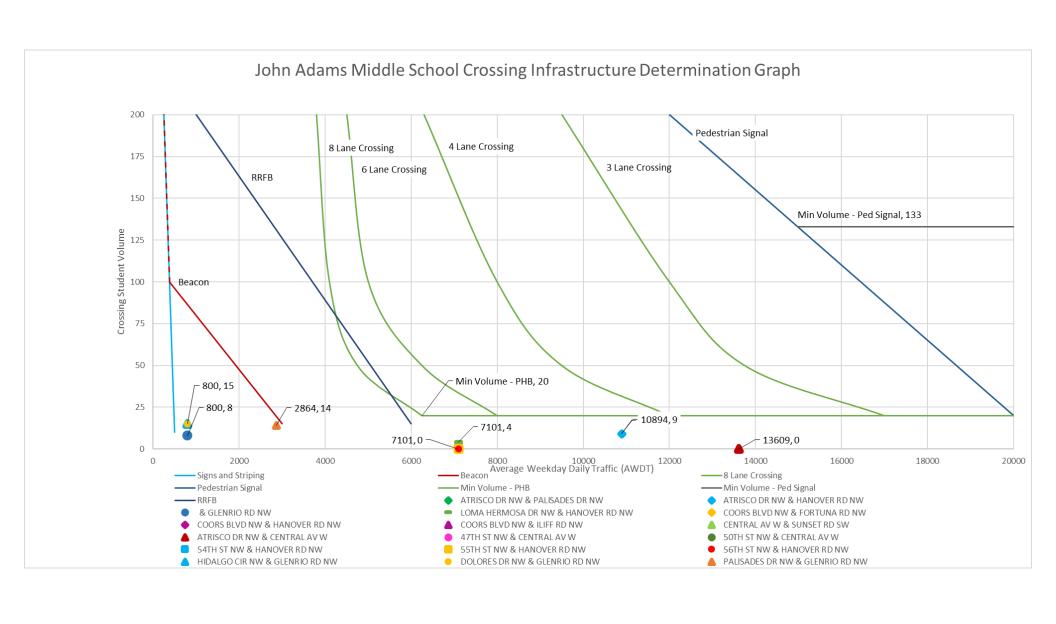


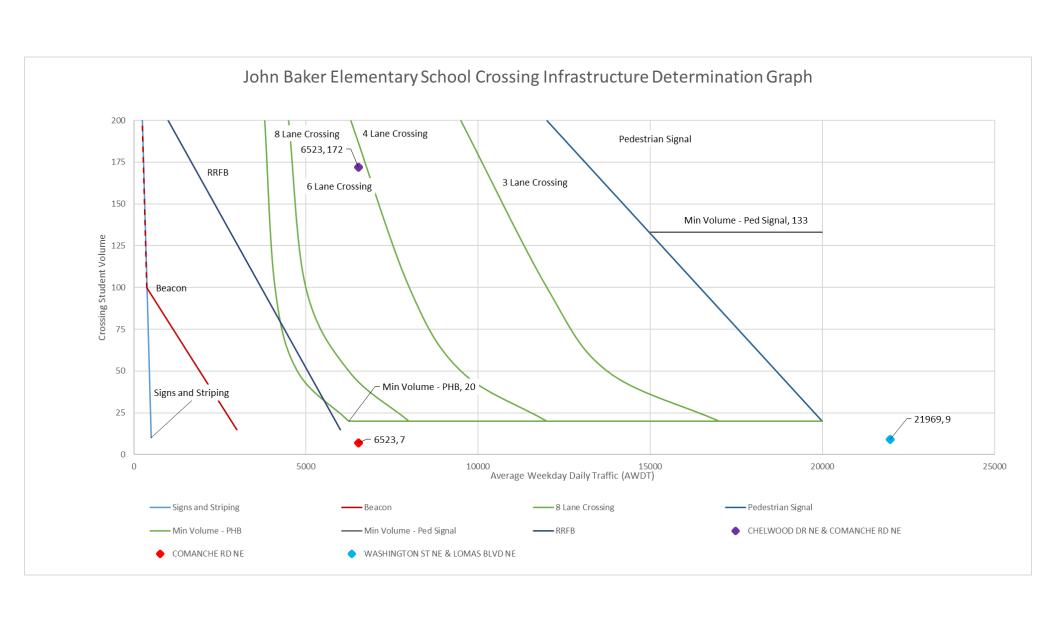


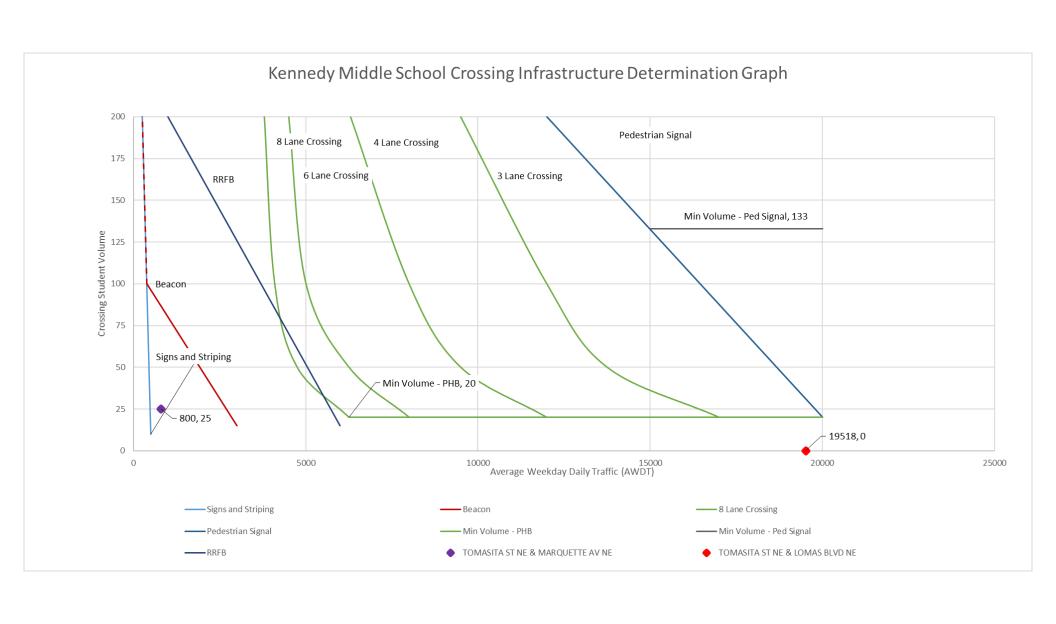




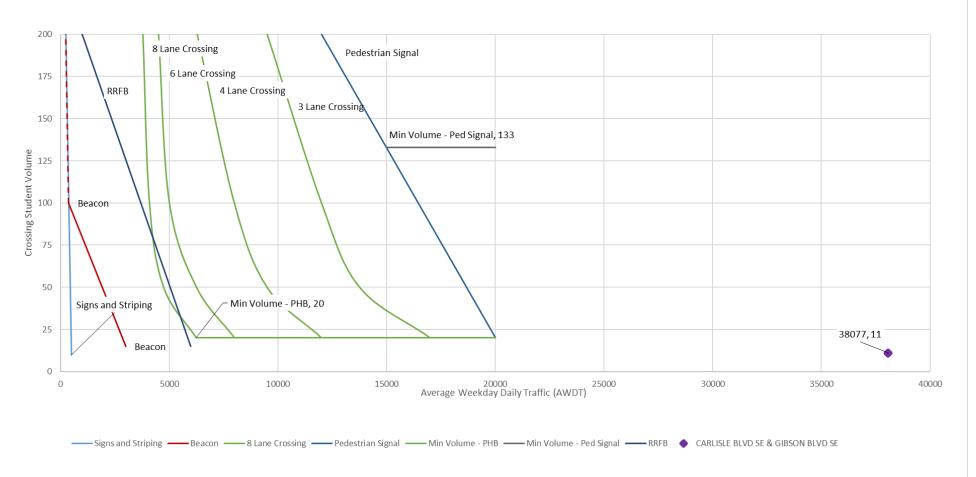


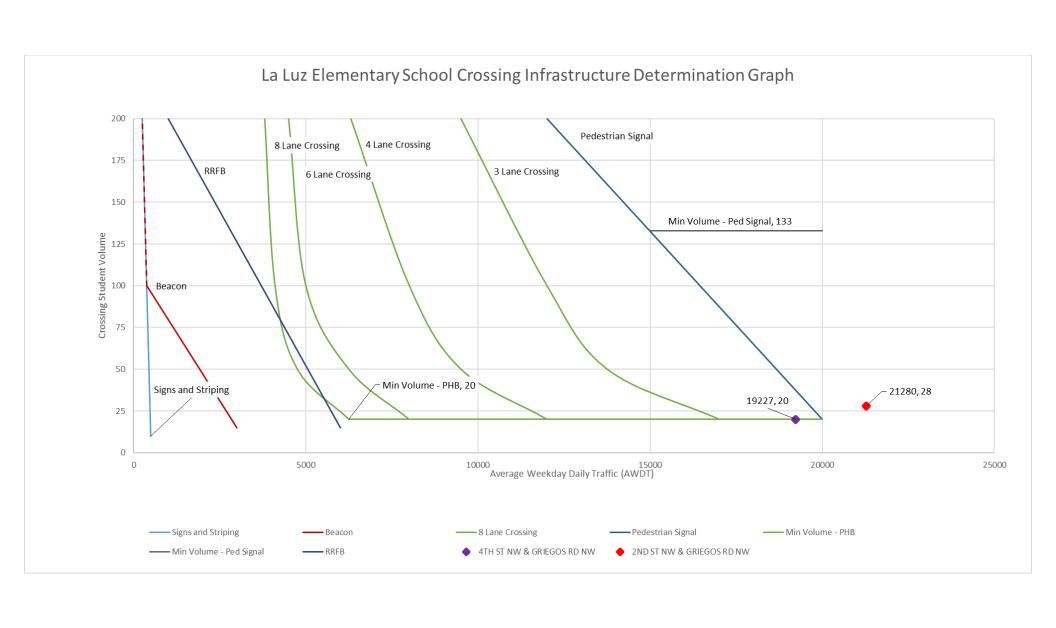


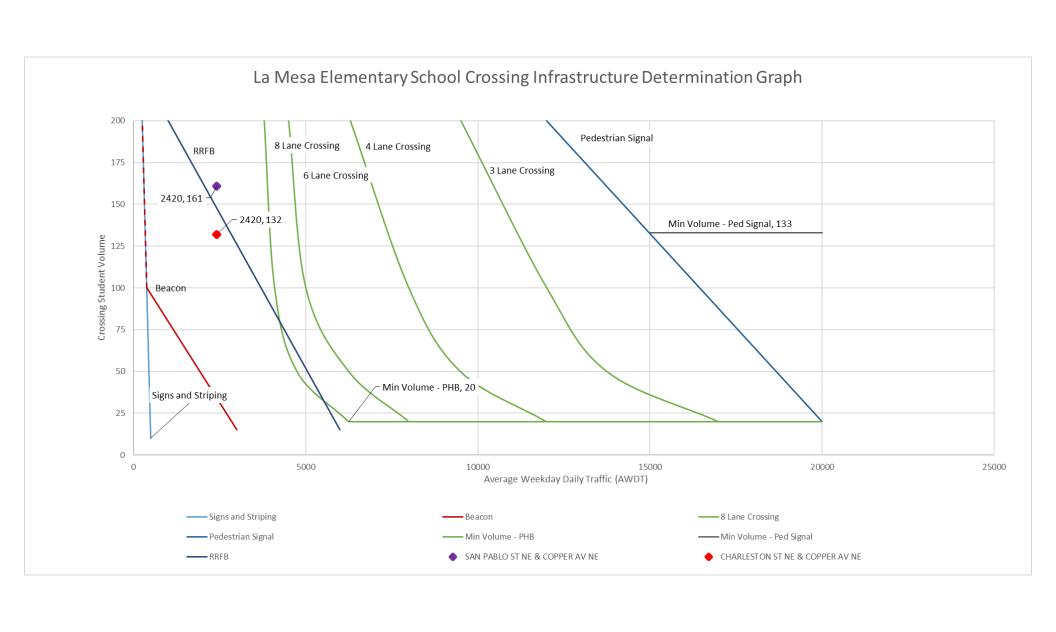


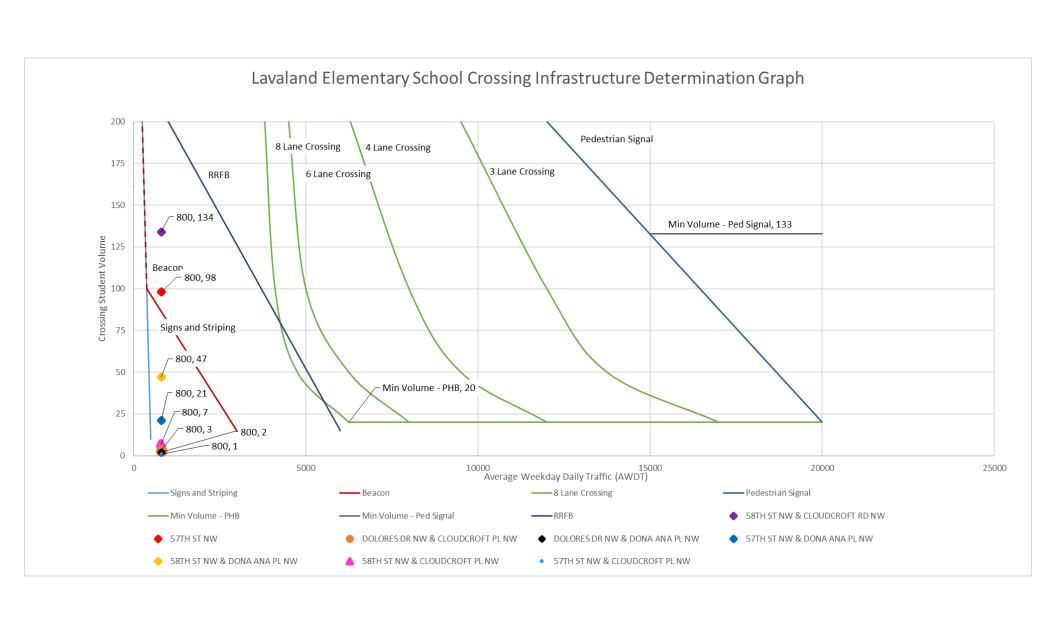


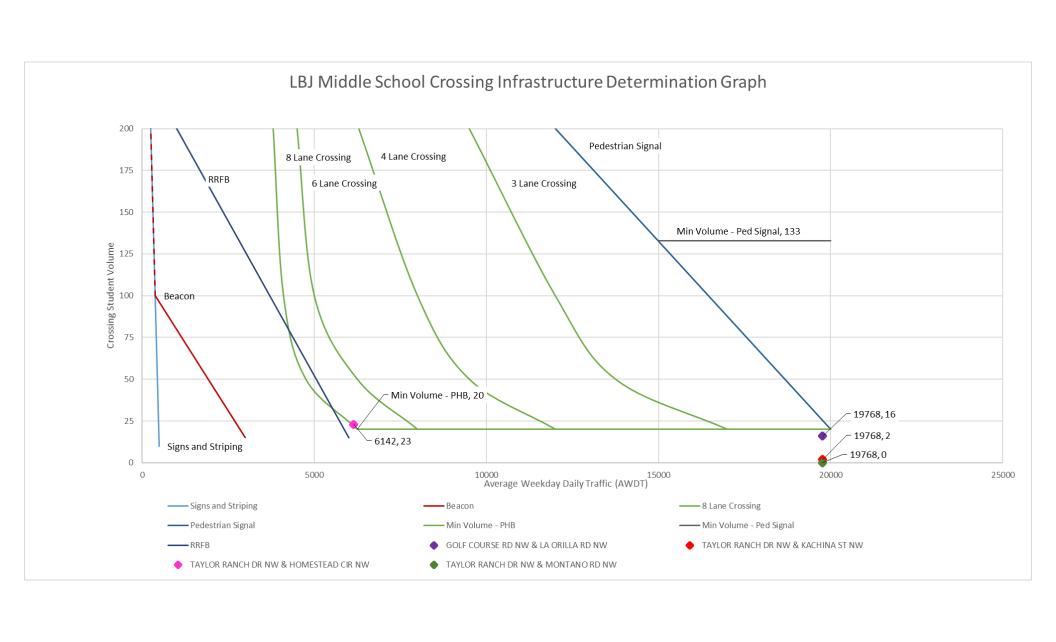


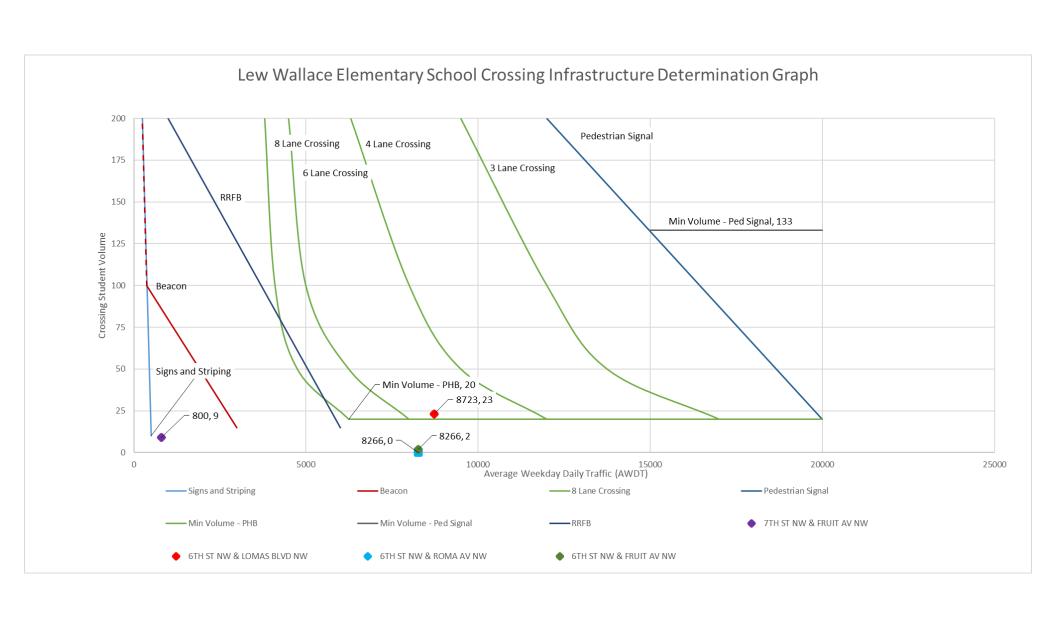


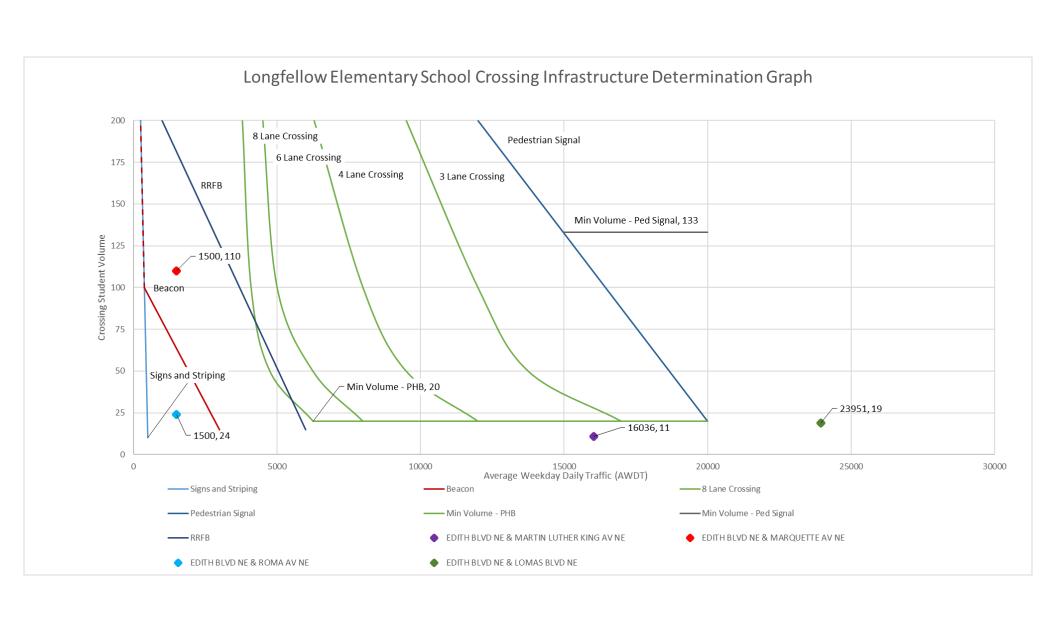


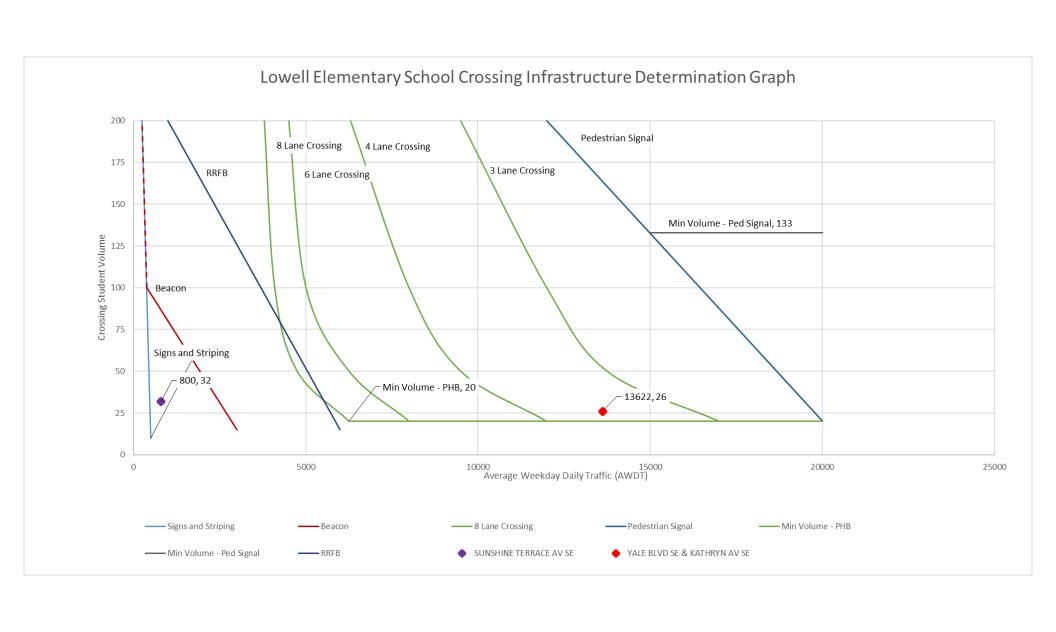


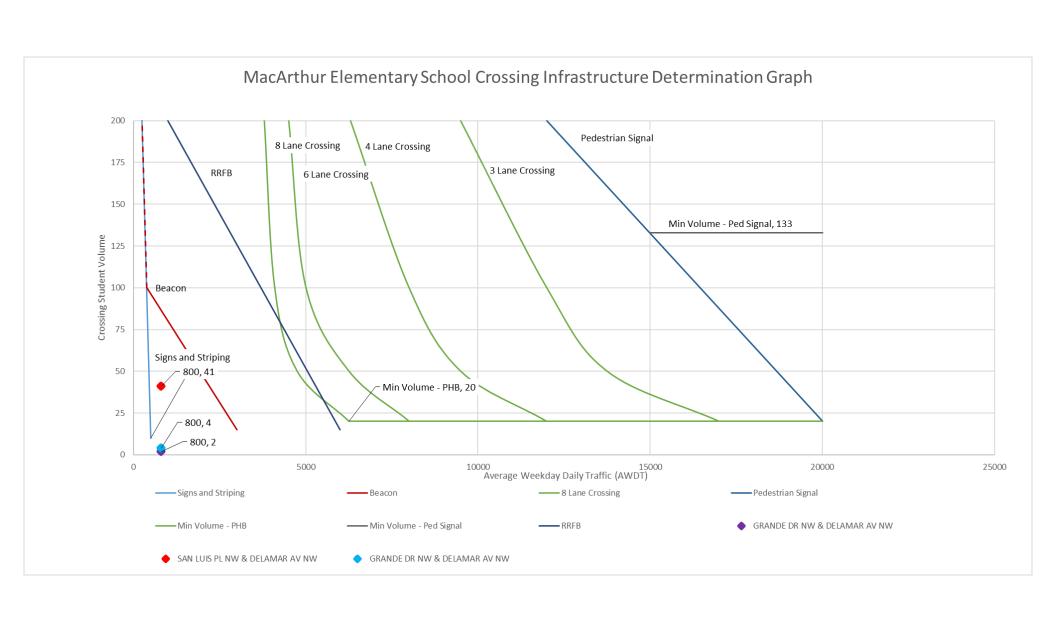


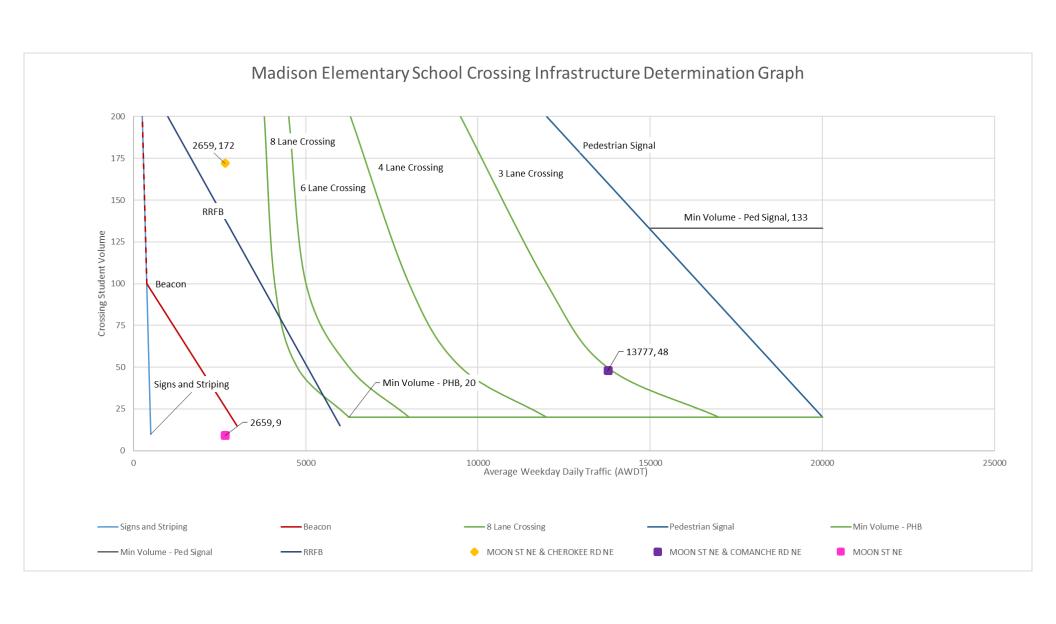


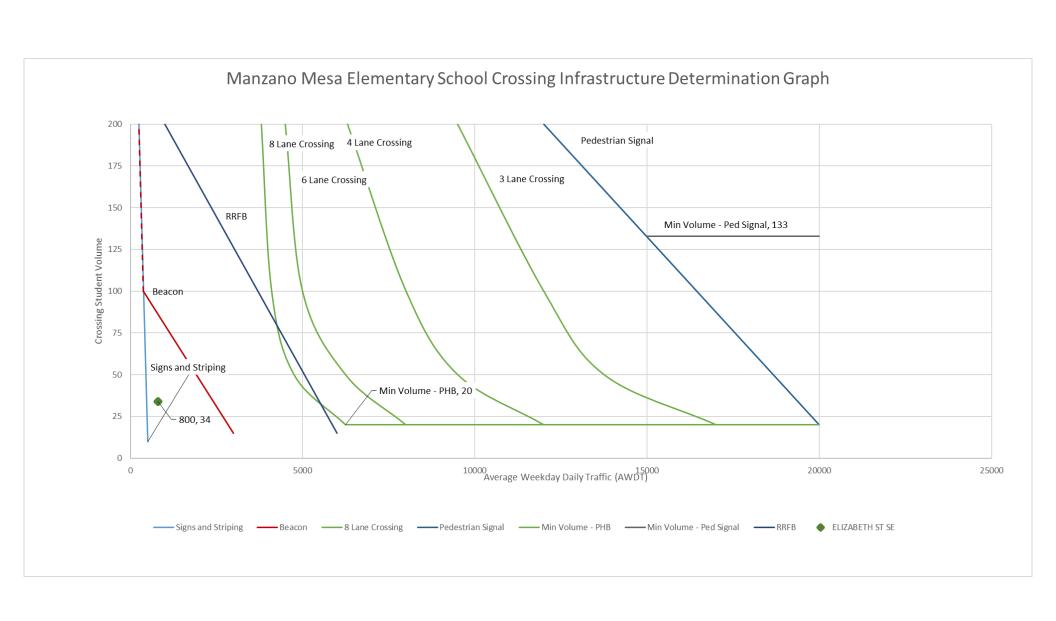


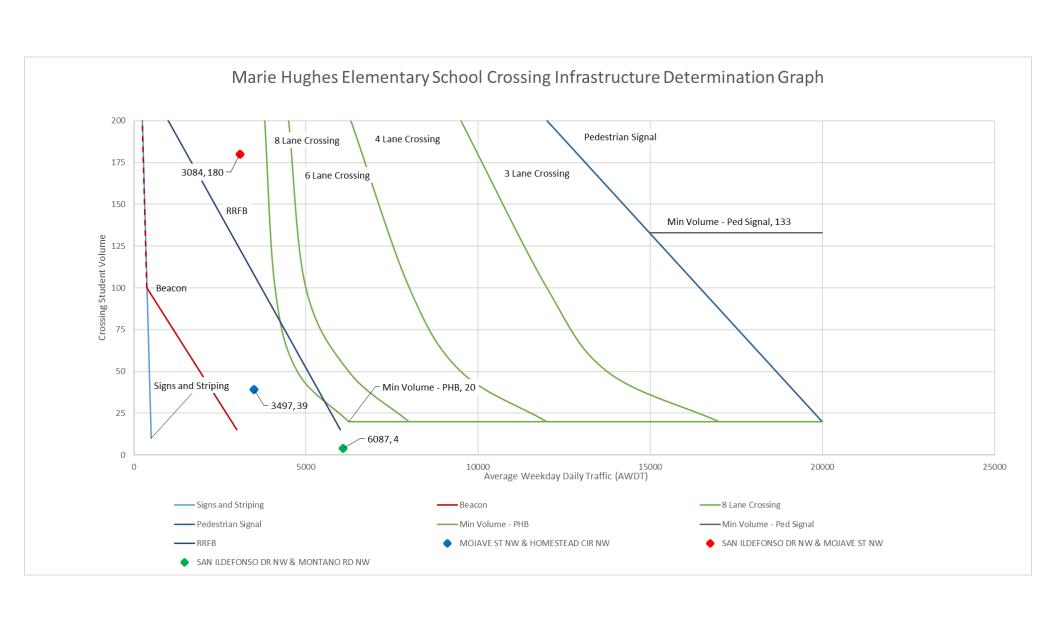


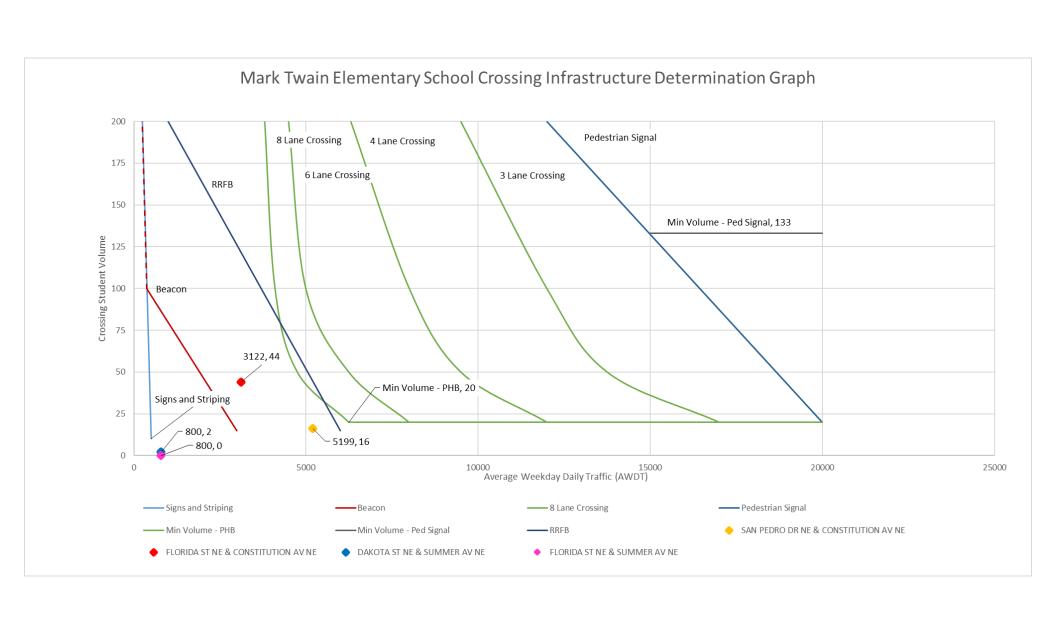


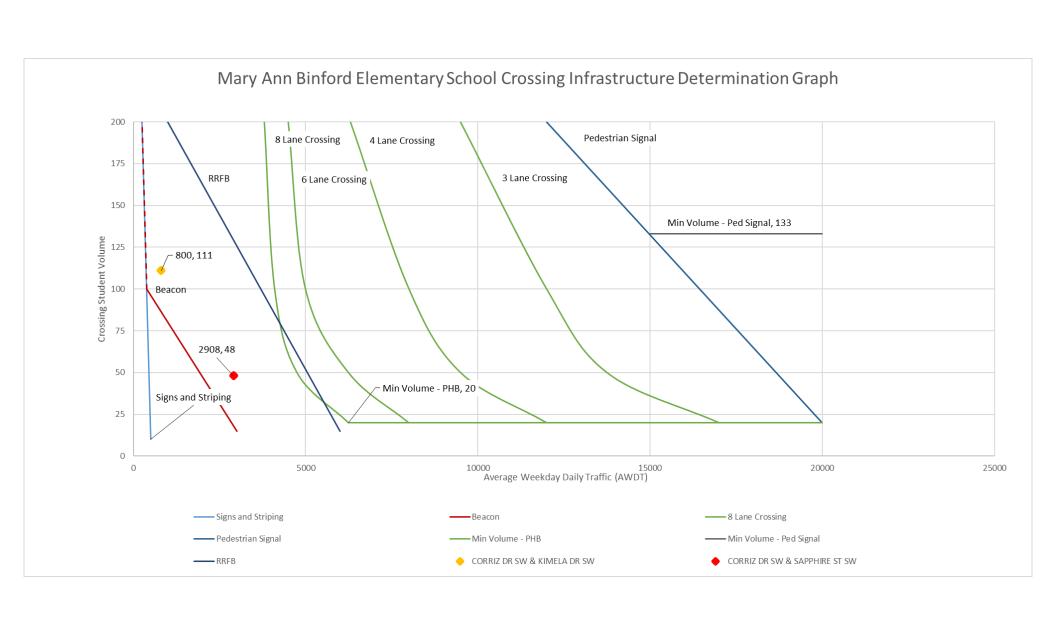


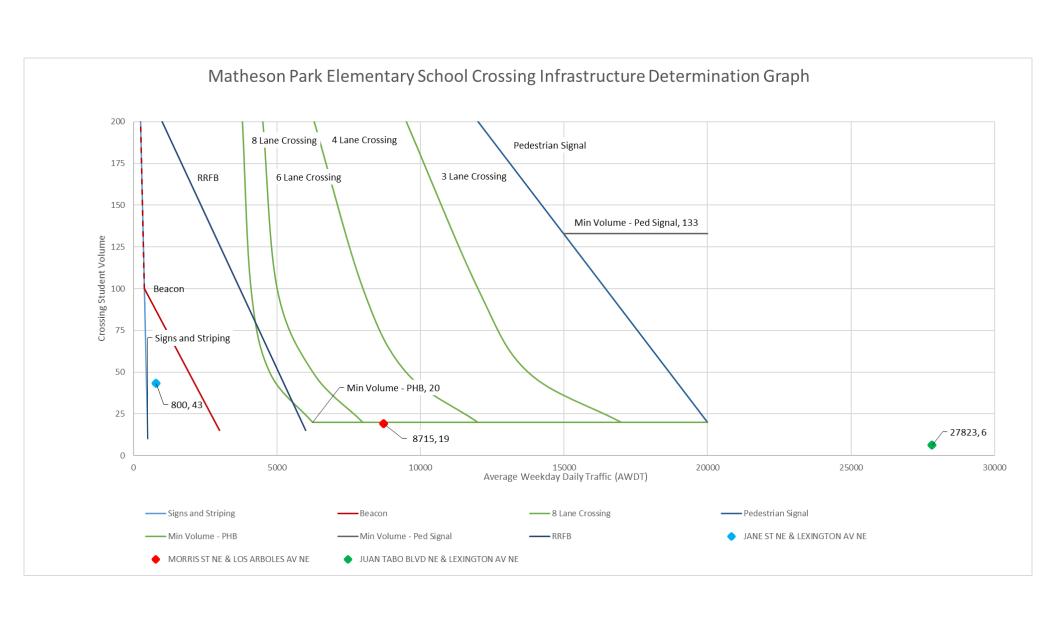


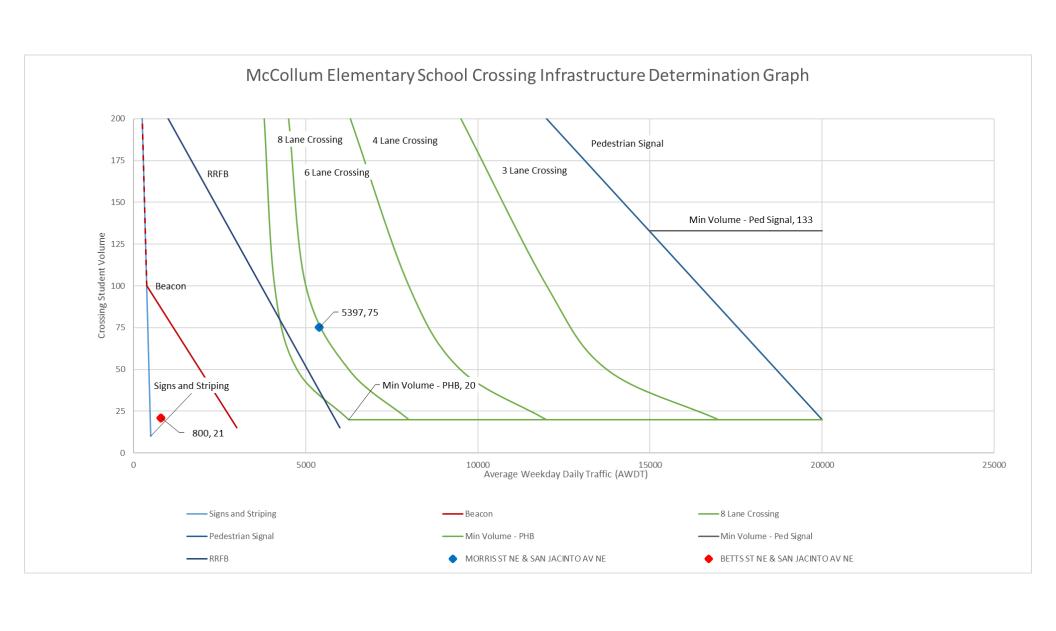


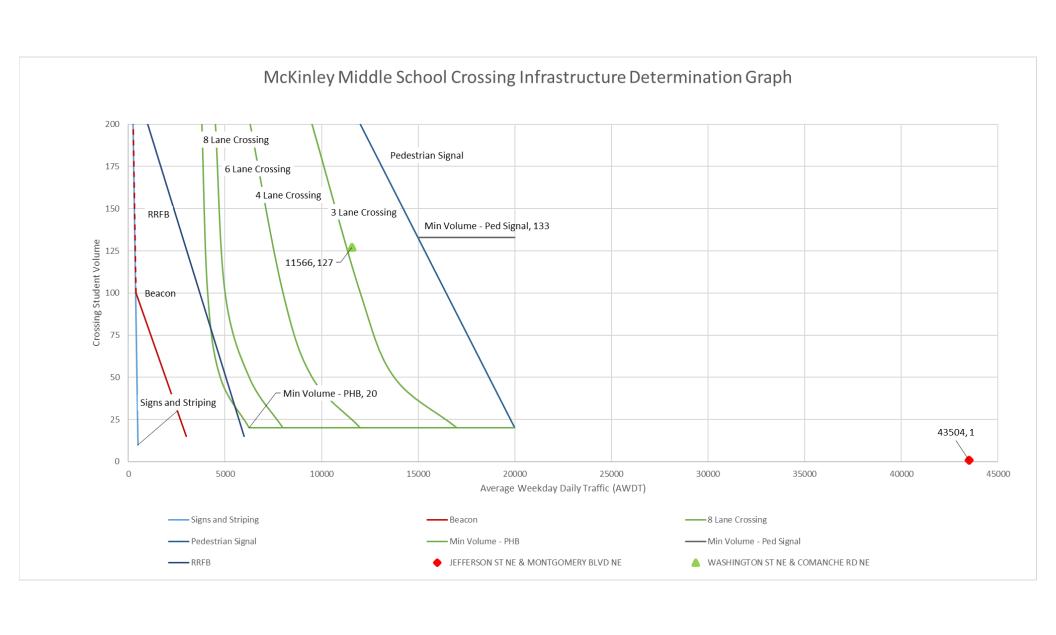


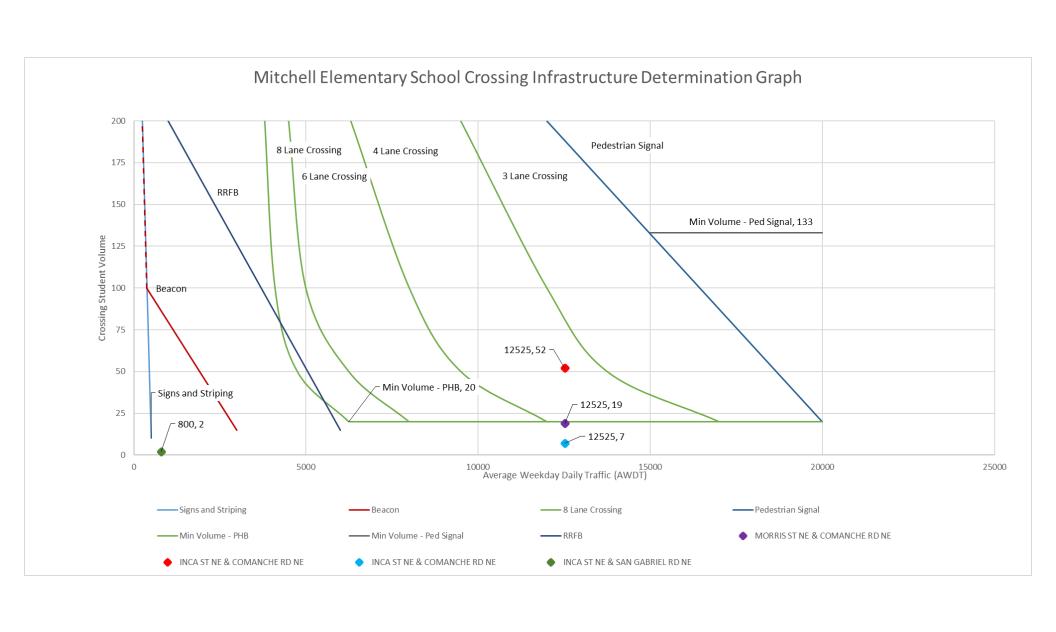


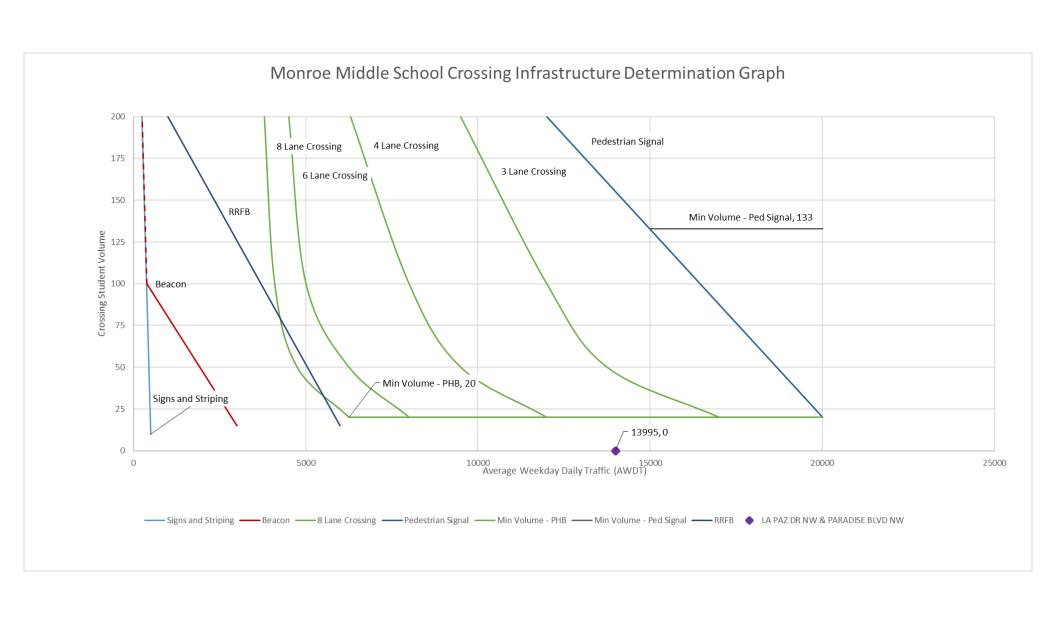


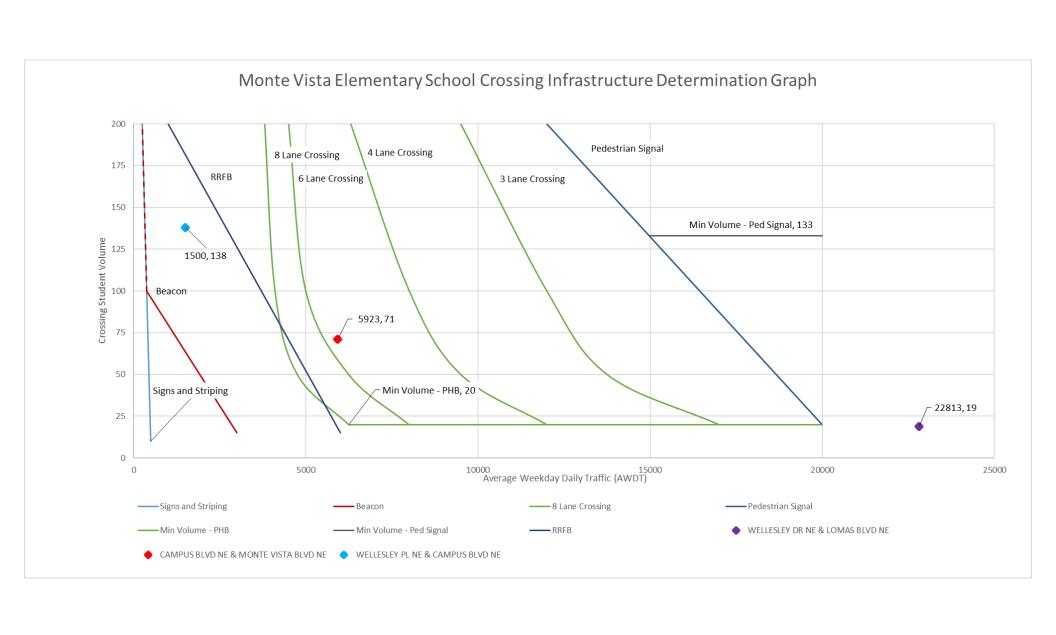


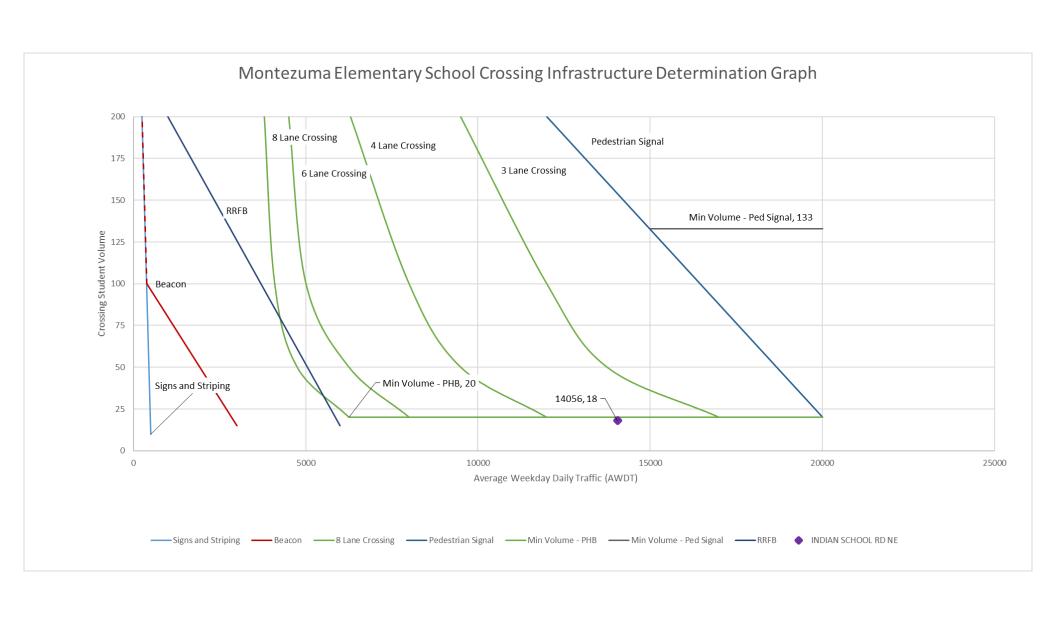


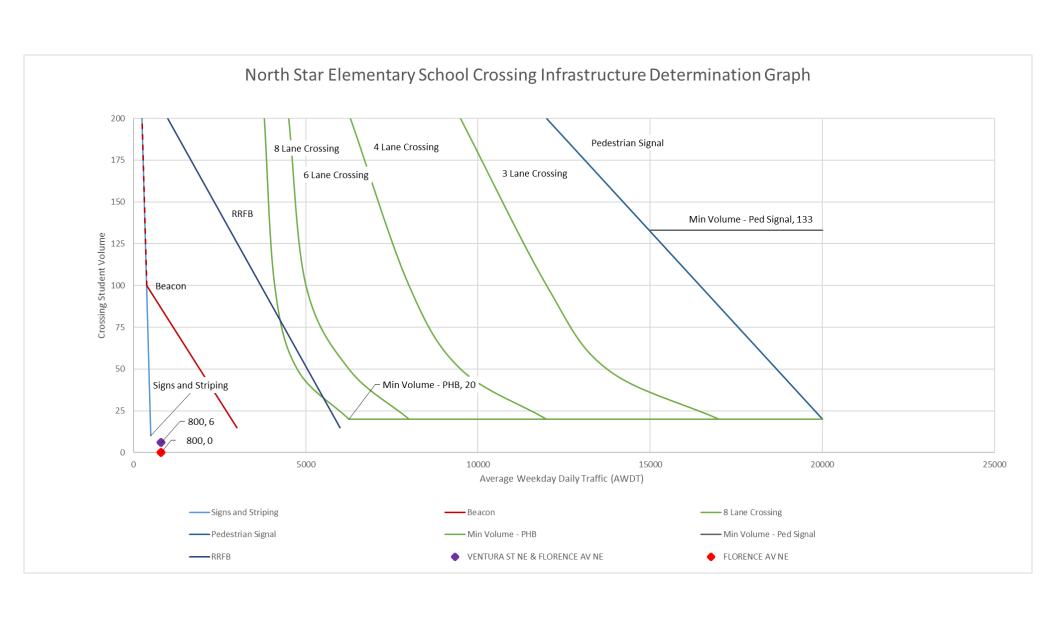


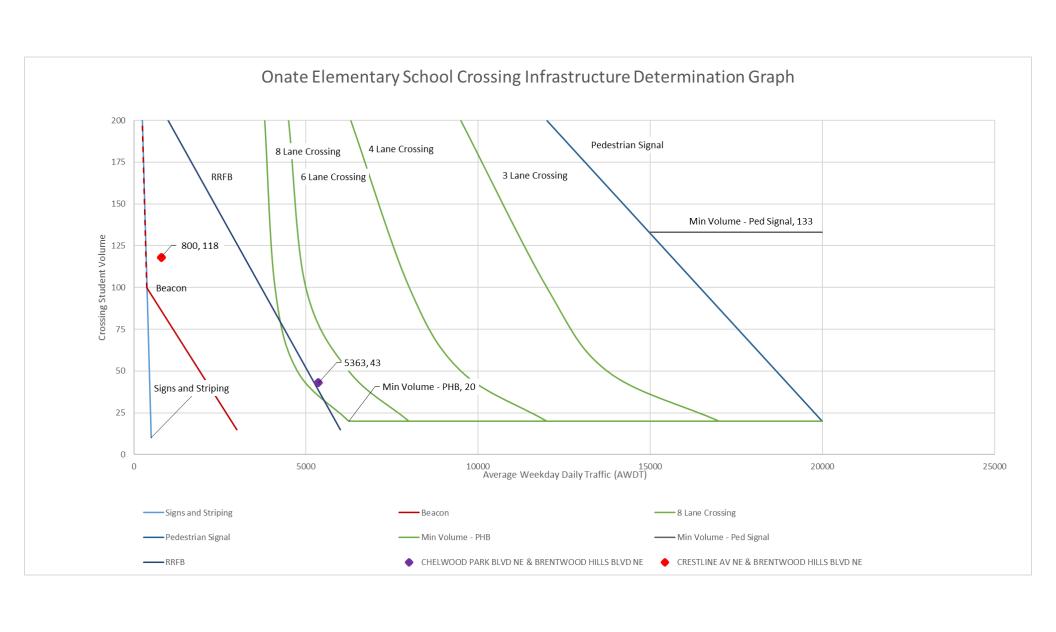


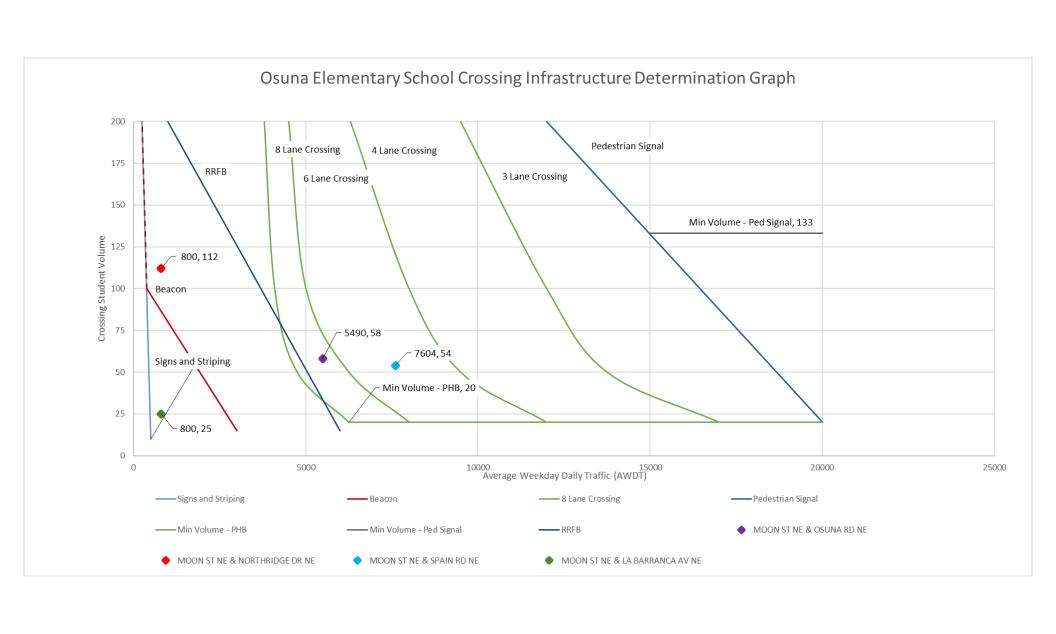


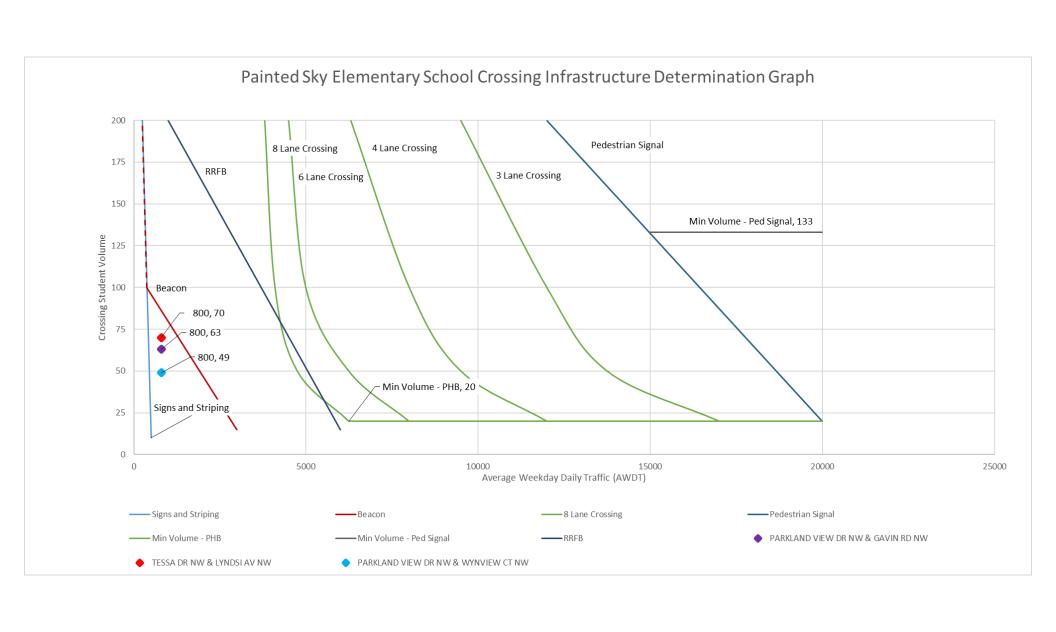


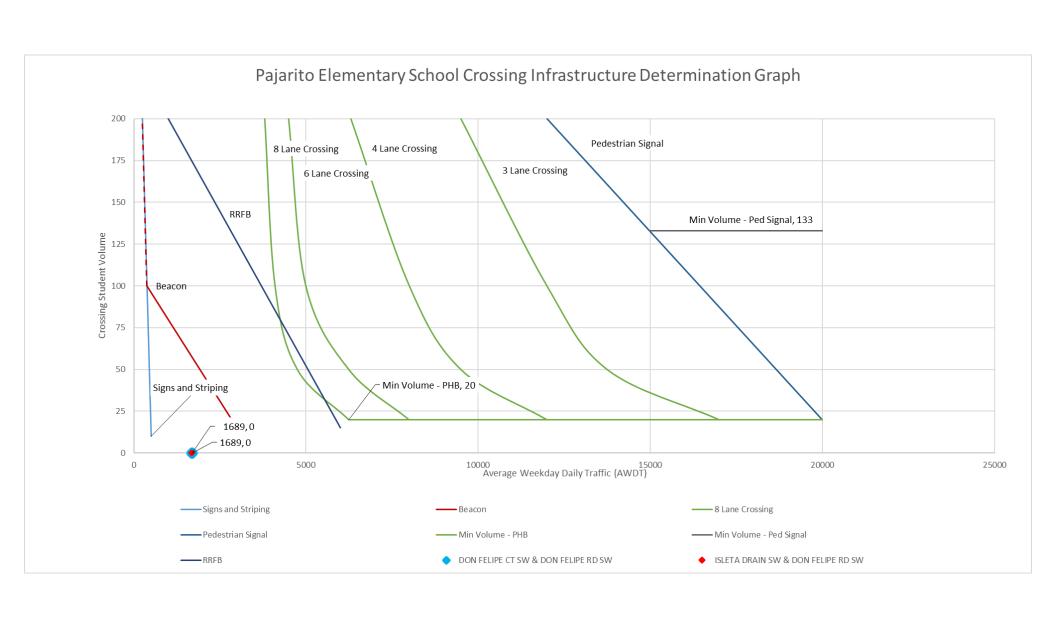


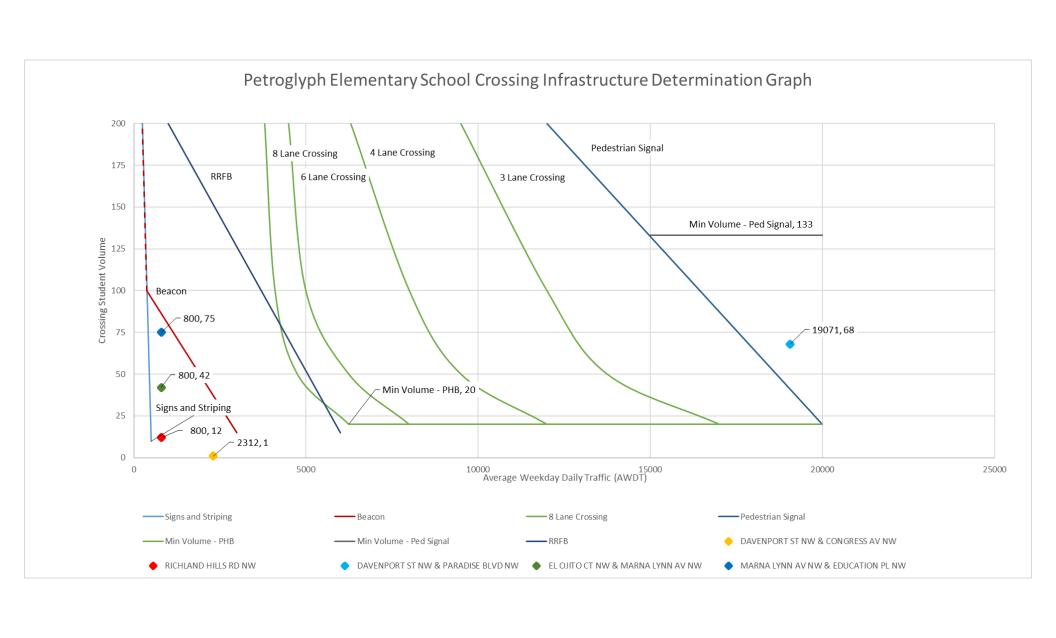


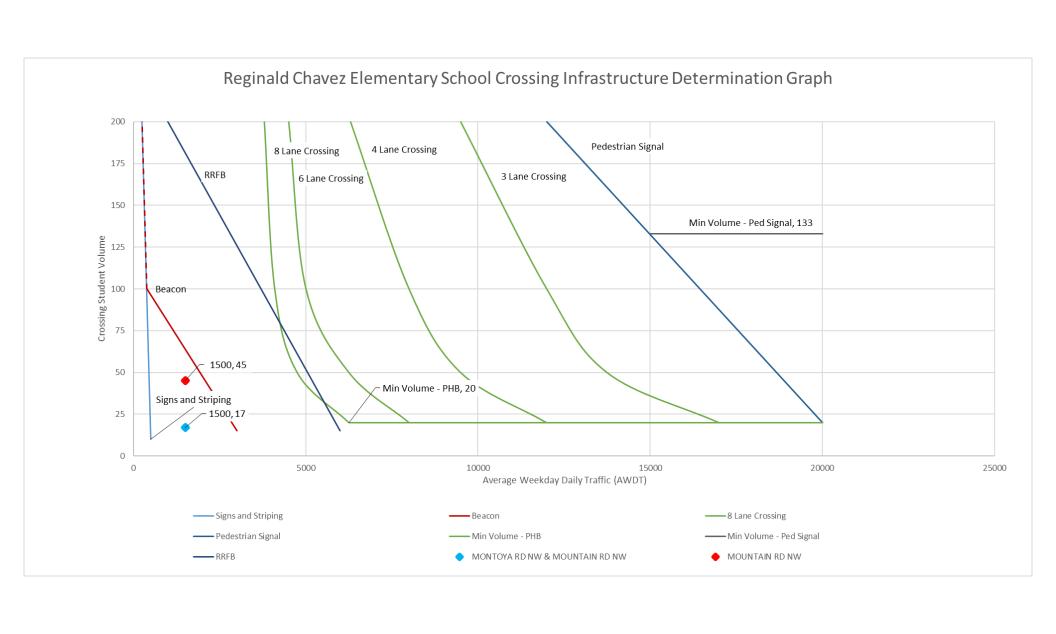


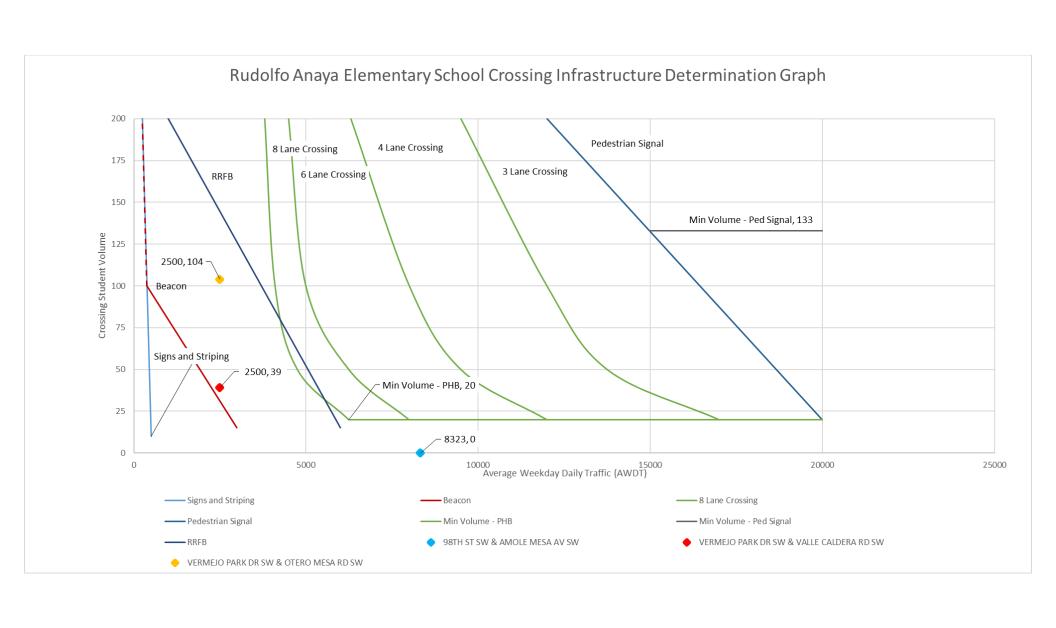


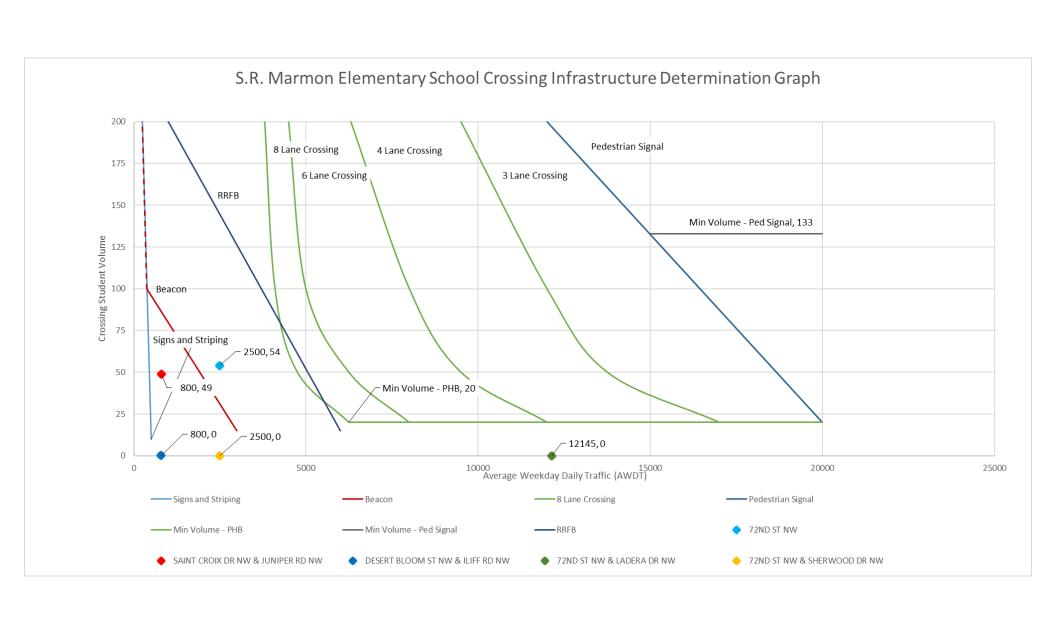


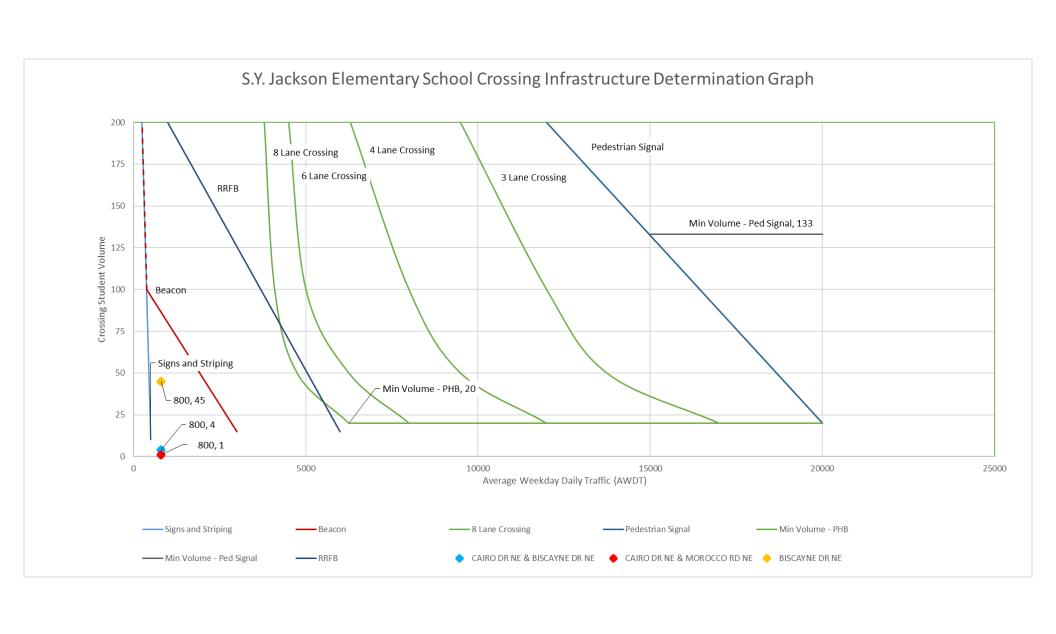


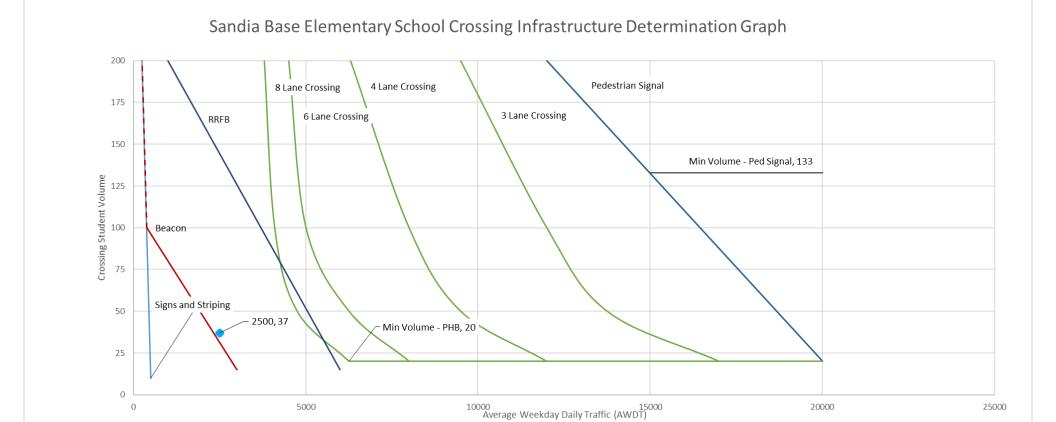




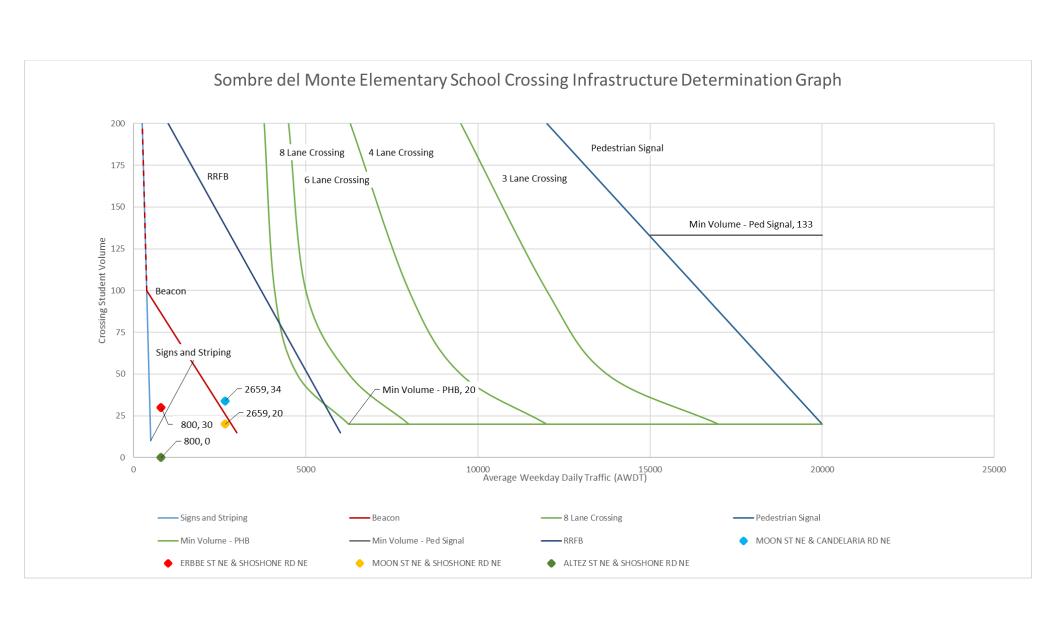


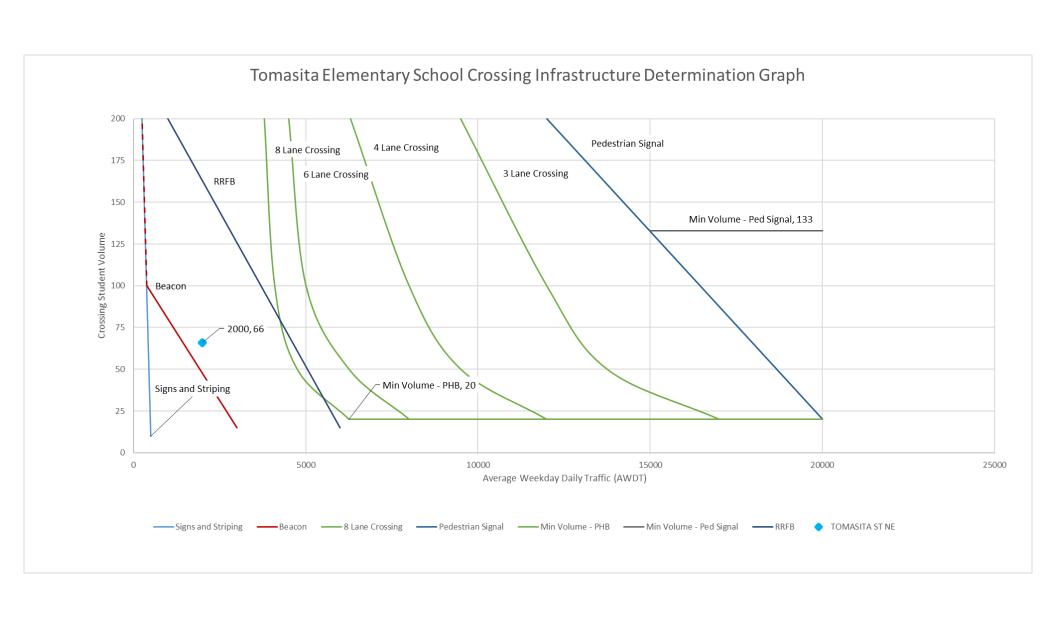


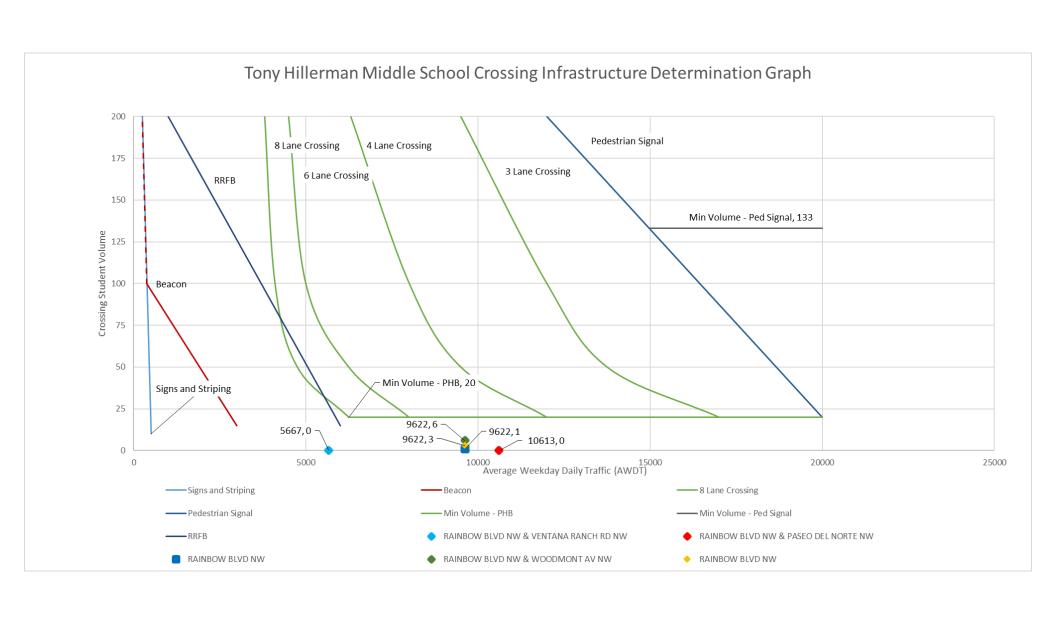


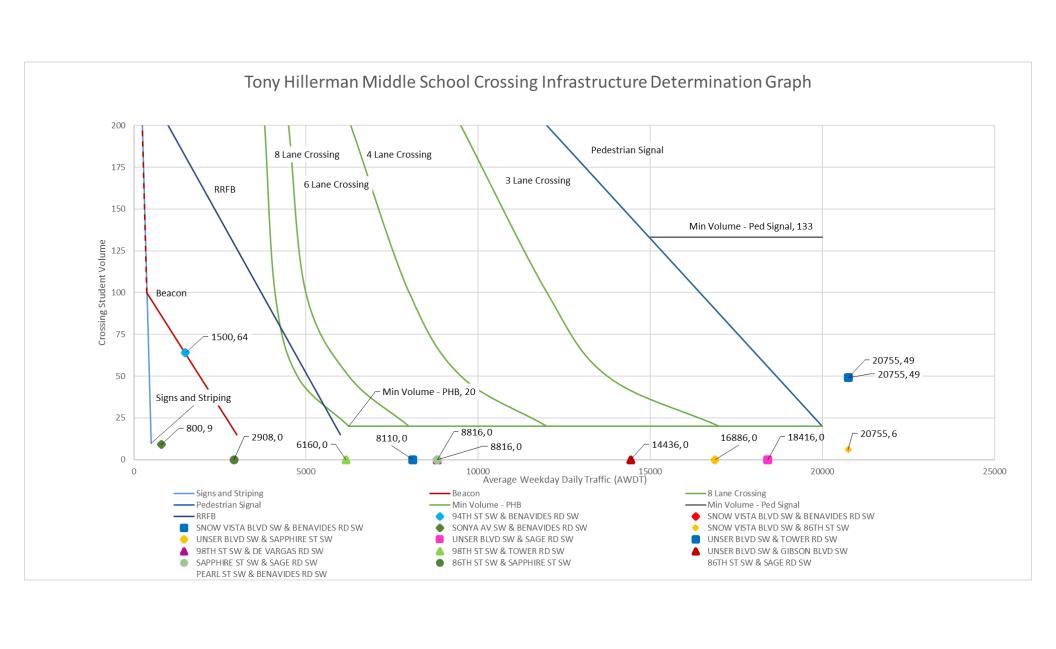


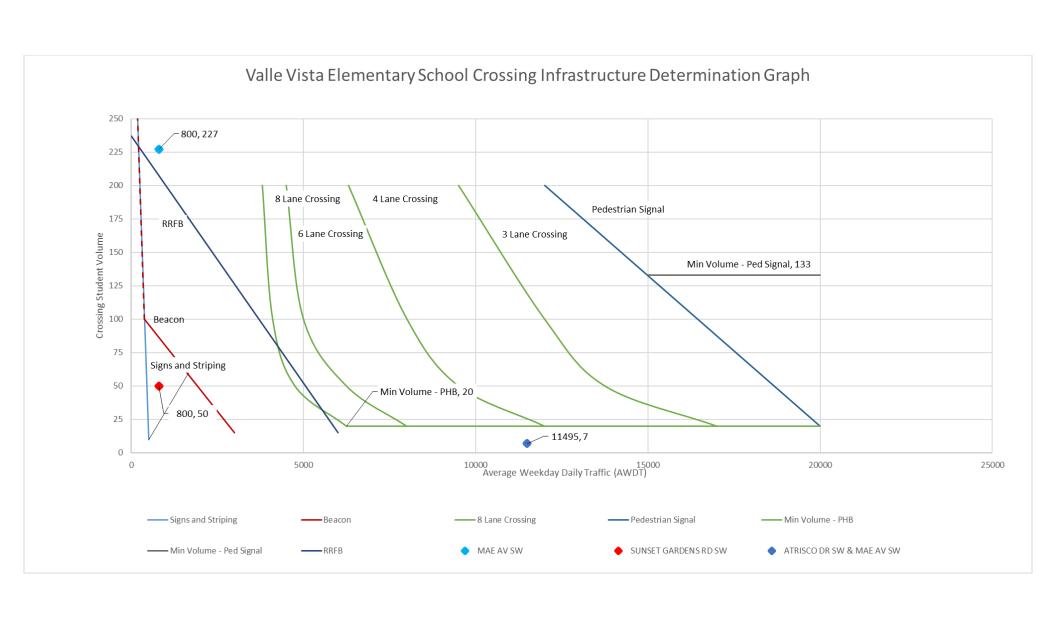
——Signs and Striping ——Beacon ——8 Lane Crossing ——Pedestrian Signal ——Min Volume - PHB ——Min Volume - Ped Signal —— RRFB 🔷 WYOMING BLVD SE & WEST SANDIA CIR SE

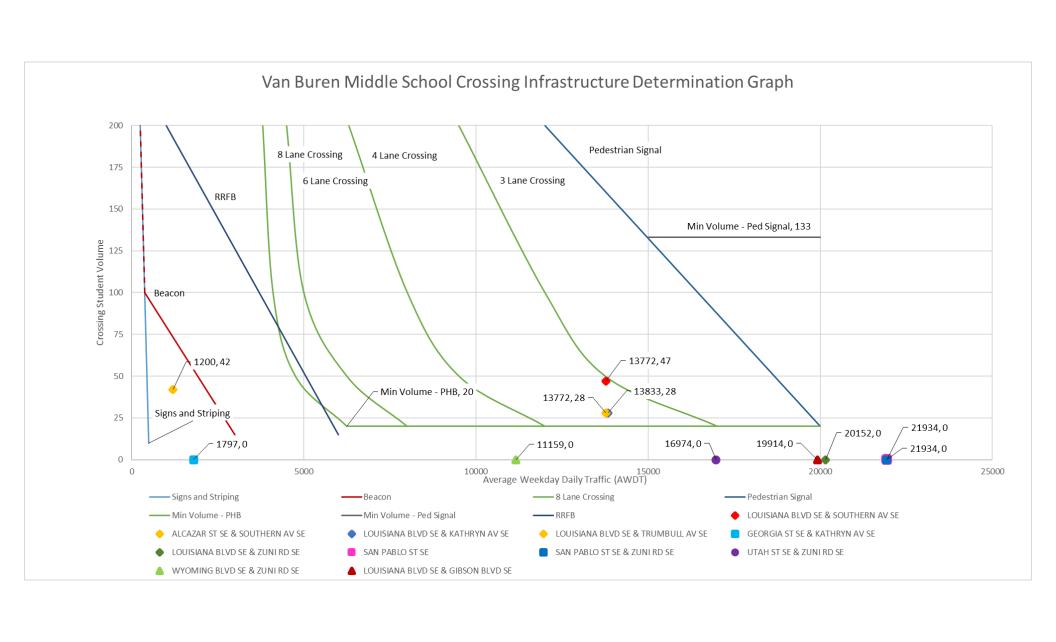


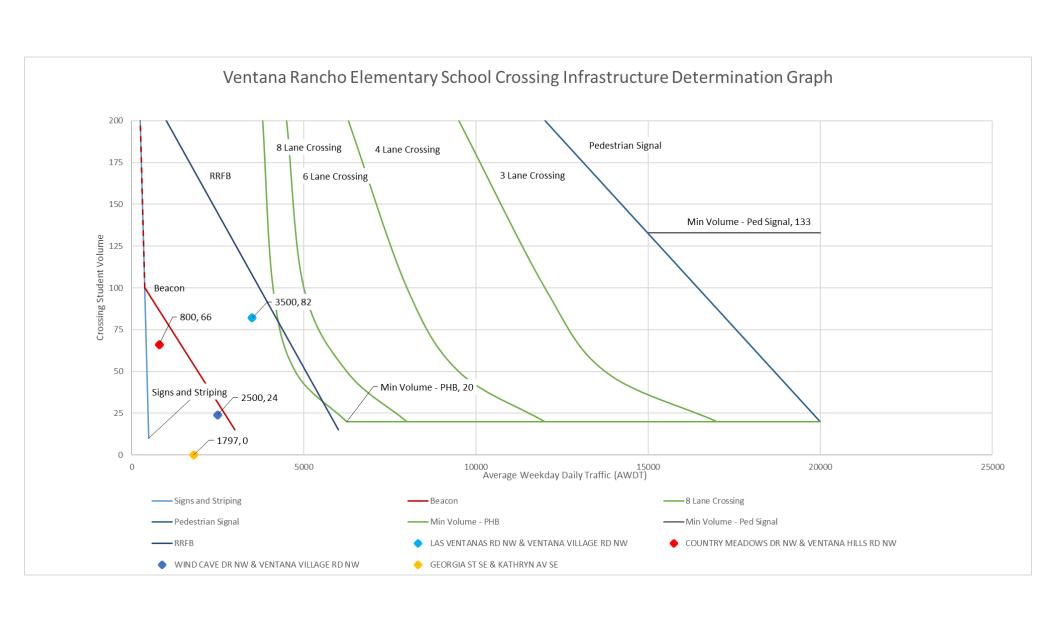




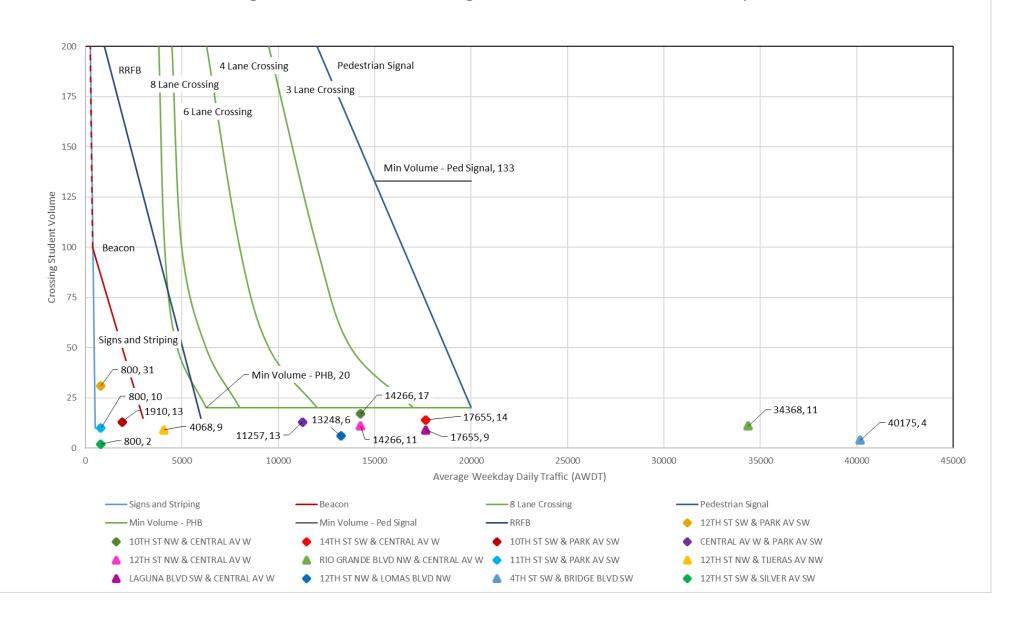




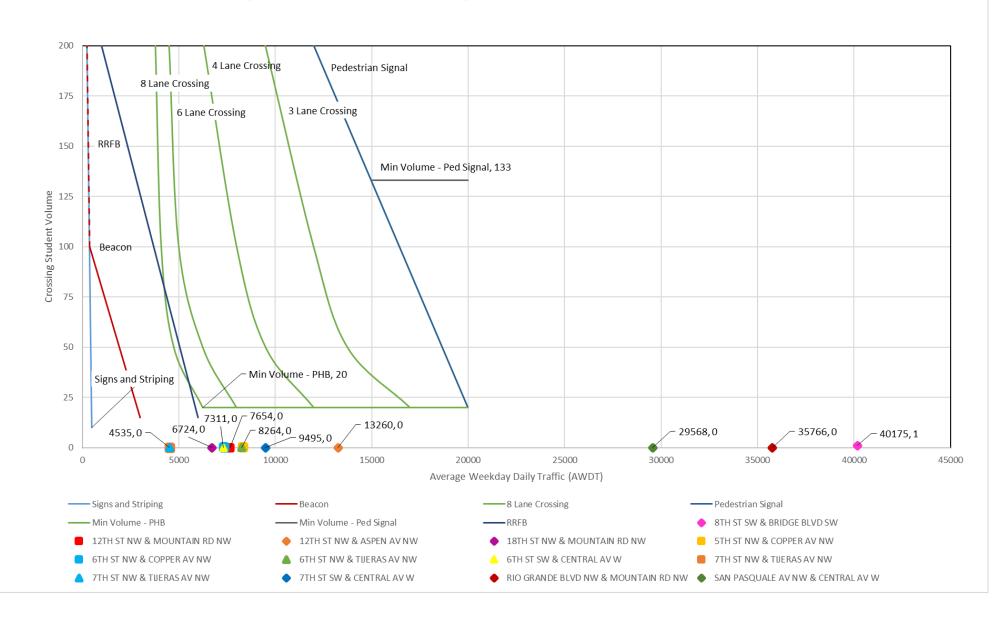


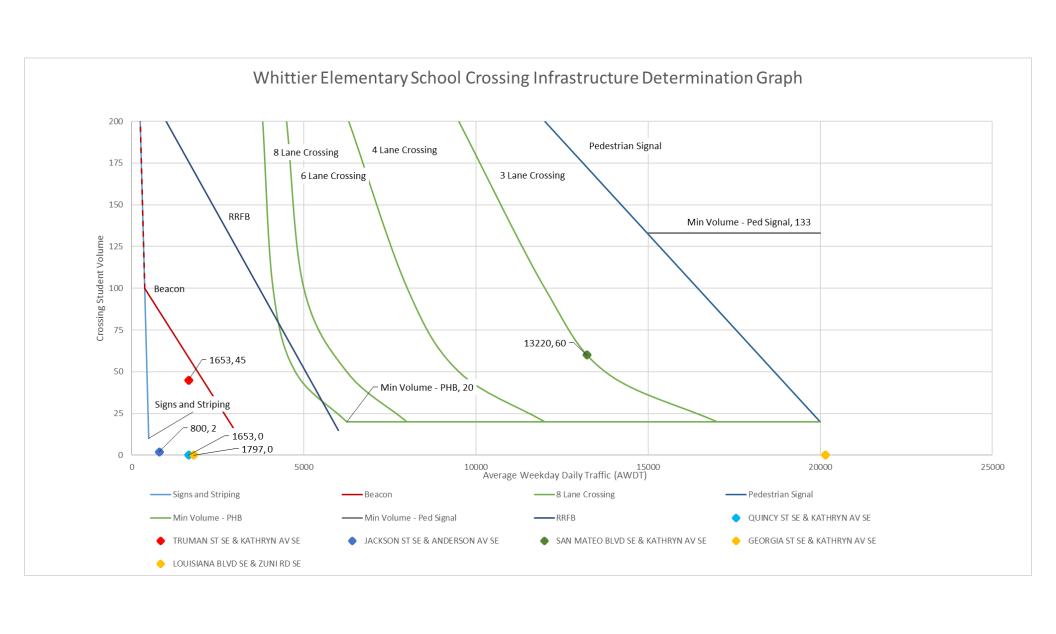


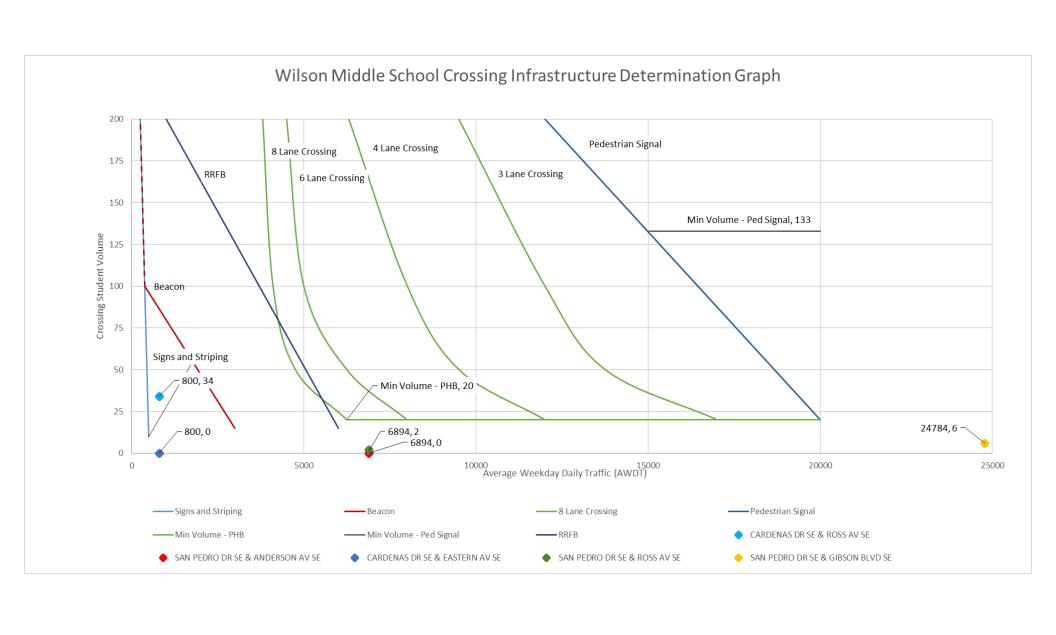
Washington Middle School Crossing Infrastructure Determination Graph 1

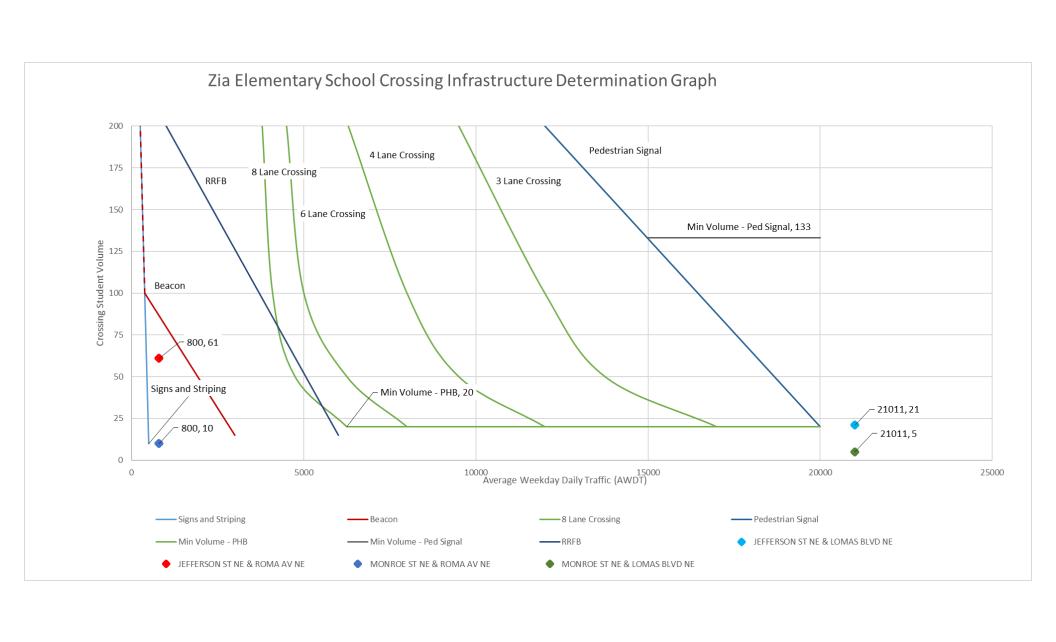


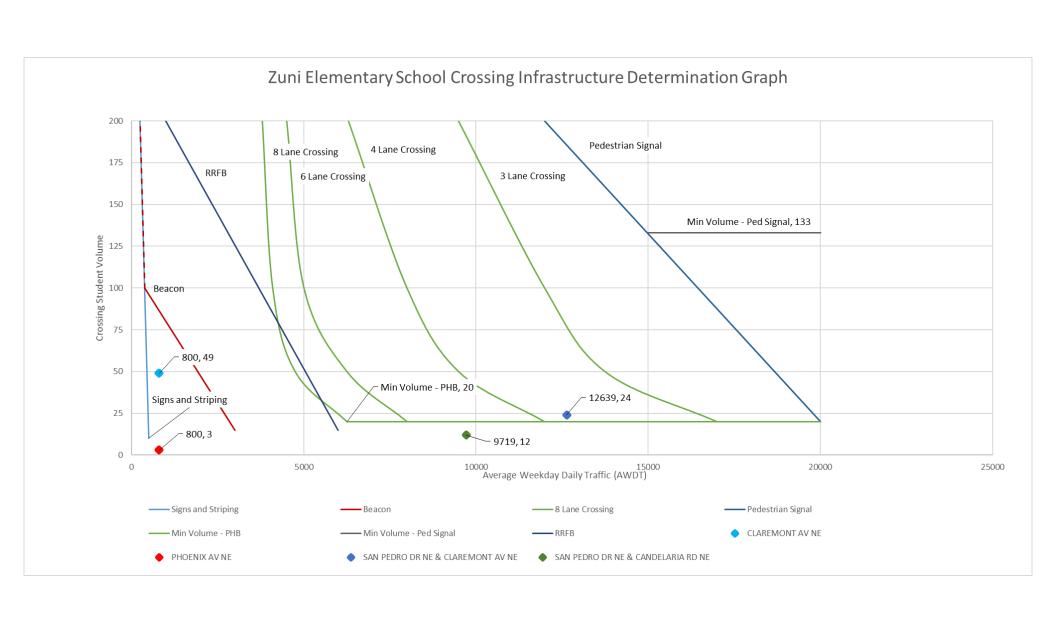
Washington Middle School Crossing Infrastructure Determination Graph 2















Department of Municipal Development