



ELDORADO ELEMENTARY

Traffic Memorandum

Project Number: 1124175

Prepared For: Douglas County
School District

March 2, 2025
Revised:
April 7, 2025



ELDORADO ELEMENTARY

Traffic Memorandum

Highlands Ranch, Colorado

Project Number: 1124175

Prepared For: Douglas County School District
Planning and Construction
2808 Highway 85, Building B
Castle Rock, Colorado 80109

March 2, 2025
Revised:
April 7, 2025



Nicholas J Westphal, PE
Project Manager

Dibble & Associates Consulting Engineers, Inc., dba Dibble





Table of Contents

1. EXECUTIVE SUMMARY	2
2. INTRODUCTION.....	3
2.1 Study Purpose and Scope	3
2.2 Study Area.....	3
2.3 School Description.....	4
3. EXISTING CONDITIONS	5
3.1 Site Observation	5
3.2 Roadway Network	5
3.3 Traffic Safety Analysis	13
4. PROJECTED SITE TRAFFIC IMPACTS	14
4.1 Projected Traffic	14
4.2 Mitigation.....	15
5. CONCLUSIONS/RECOMMENDATIONS.....	16

List of Figures

Figure 1 – Vicinity Map	3
Figure 2 – Eldorado Bus Service Map	4
Figure 3 – Highlands Ranch Parkway at Wildcat Reserve Parkway	6
Figure 4 – Broadway at Kendrick Castillo Way and Burgundy Drive	7
Figure 5 – Highlands Ranch Parkway at Westridge Knolls Avenue/Desert Willow Road.....	8
Figure 6 – Westridge Knolls Avenue at Timbervale Trail	9
Figure 7 – Broadway at Winterthur Way and Fairchild Drive	10
Figure 8 – Kendrick Castillo Way at Westridge Knolls Avenue and Bristle Pine Circle	11
Figure 9 – Broadway at Salford Lane/Sylvester Road	12
Figure 10 – Mitigation Measures for Eldorado.....	15

List of Tables

Table 1 – Roadway Characteristics	13
Table 2 – Annual Crash Summary	14
Table 3 – School Enrollment	14

Appendices

Appendix A Site Observation Note	A
Appendix B Crash Diagrams and Listings.....	B
Appendix C School Questionnaire	C



1. EXECUTIVE SUMMARY

Douglas County School District is considering options for consolidating schools in Highlands Ranch, Colorado. The Eldorado Elementary (Eldorado) consolidation option includes having Saddle Ranch Elementary (Saddle Ranch) consolidate into Eldorado Elementary. In addition, removing 6th grade from the elementary schools is being considered, so if the schools are consolidated, the final enrollment may or may not include 6th grade. This Traffic Memorandum reviews existing traffic and provides potential mitigation measures for current traffic and potential increased traffic challenges due to increased enrollment caused by school consolidations.

Eldorado has a parking area to the southwest of the school, with two access points on Timbervale Trail, and a designated drop-off lane/bus loop with two access points on Westridge Knolls Avenue. School bus service is not provided at Eldorado but may be provided for any students in the new enrollment boundary more than one mile from the school.

The projected 2028-2029 combined enrollment if Saddle Ranch Elementary is consolidated into Eldorado Elementary is 692 students if 6th Grade is retained at the elementary level and 602 students without 6th Grade. These projected combined enrollment numbers are approximately between 50 percent and 70 percent higher than the existing Eldorado enrollment.

Consolidation of the schools will increase traffic at Eldorado with more vehicles using on-street parking, the school parking lot, and the pick-off/drop-off lanes. This will increase impacts to the surrounding roadways during pick-up and drop-off times.

Although increased traffic is expected around Eldorado with the increased enrollment, no traffic mitigation measures are recommended. Douglas County recognizes there will be increased delays around the school during 15-minute peak periods at pick-up and drop-off times.

2. INTRODUCTION

2.1 Study Purpose and Scope

The purpose of this Traffic Memorandum is to discuss the existing traffic patterns at Eldorado Elementary (Eldorado) and potential mitigation measures for current traffic and potential increased traffic due to increased enrollment caused by school consolidations. A potential school consolidation option includes having Saddle Ranch Elementary consolidate into Eldorado.

The scope of this memorandum includes assessing school driveways, nearby intersections, school parking lots, school drop-off and pick-up locations, traffic flow, bicycle and pedestrian facilities, and general traffic challenges at Eldorado.

2.2 Study Area

Eldorado Elementary School is located at 1305 Timbervale Trail in the western region of Highlands Ranch. This is near the intersection of Westridge Knolls Avenue at Timbervale Trail. The parcel number for the property is 222909418001. A vicinity map showing the school's location is provided as **Figure 1**.

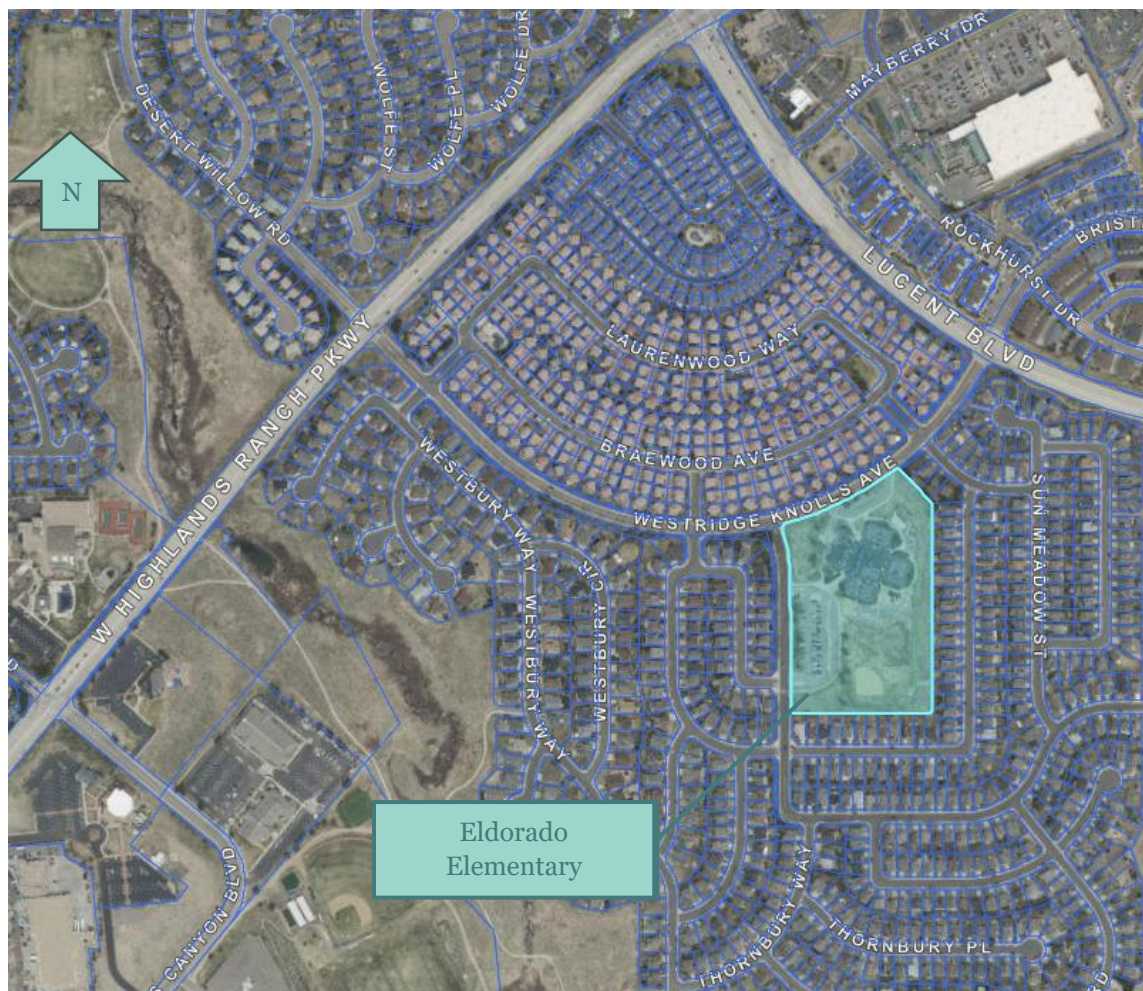


Figure 1 – Vicinity Map

Neighborhood local and collector streets are analyzed for safety challenges, bicycle and pedestrian facilities, parking availability, and queueing lengths. Larger intersections at arterial streets are analyzed for the same items, but also for accident history.

2.3 School Description

Eldorado has a start time of 8:30 AM and an end time of 3:30 PM. The school is located in the neighborhood to the south of the intersection of Highlands Ranch Parkway at Kendrick Castillo Way. Eldorado has a parking area to the southwest of the school, with two access points on Timbervale Trail, and a designated drop-off lane/bus loop with two access points on Westridge Knolls Avenue. Pedestrian crosswalks are located near the southern access point of the parking lot on Timbervale Trail, and at the intersection of Timbervale Trail and Westridge Knolls Avenue. Eldorado has a maximum Capacity of 800 students but the largest enrollment since 2013 is 588 students.

School bus service is not provided at Eldorado. **Figure 2** depicts Eldorado's local attendance boundary in red with the orange circle representing the walking radius. As depicted, the entire local attendance boundary is within one mile, so no local bus service is provided.

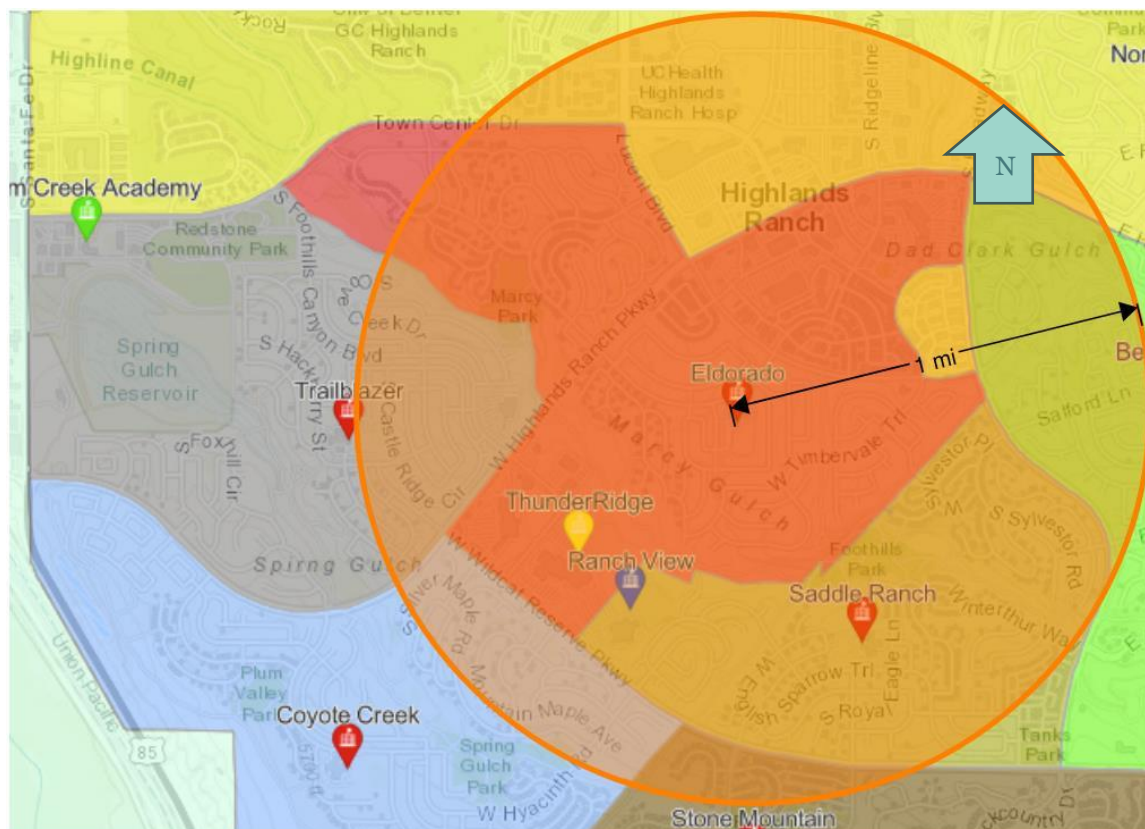


Figure 2 – Eldorado Bus Service Map

3. EXISTING CONDITIONS

3.1 Site Observation

A site observation was performed at Eldorado on November 11, 2024. Field notes from the site observation are included in **Appendix A**. The morning site observation was conducted from 7:45 AM through 9:15 AM and the afternoon site observation was conducted from 2:45 PM through 4:15 PM. Key observations included:

- Long queues on Timbervale Trail
- Increased congestion on Westridge Knolls Avenue
- Sight visibility challenges while exiting the parking lot
- Inadequate space for turning movements from drop-off aisle

3.2 Roadway Network

The Highlands Ranch roadway network is maintained by Douglas County. Eldorado is situated within a built-out neighborhood and is surrounded by local and neighborhood collector streets. The main accesses to the neighborhood are from Highlands Ranch Parkway at Westridge Knolls Avenue, Kendrick Castillo Way at Westridge Knolls Avenue, and Kendrick Castillo Way at Timbervale Trail with Kendrick Castillo Way and Highlands Ranch Parkway being the main arterial street closest to the school. Westridge Knolls Avenue extends from the school entrance to a signalized intersection at Highlands Ranch Parkway and a non-signalized intersection at Kendrick Castillo Way. Saddle Ranch traffic driving to Eldorado will mainly use Wildcat Reserve Parkway to Highlands Ranch Parkway, or Broadway to Kendrick Castillo way.

School zone flashers operate from 8:10 to 8:50 AM and from 3:20 to 4:00PM. One flasher is located on Timbervale Trail and two are located on Westridge Knolls Avenue, each direction from the school. Flashers are approximately 100 feet off the school property line.

Highlands Ranch Parkway at Wildcat Reserve Parkway/Spring Hill Parkway

The intersection of Highlands Ranch Parkway at Wildcat Reserve Parkway is signalized with protected/permissive left-turn lanes/phases all approaches. **Figure 3** shows an aerial of the intersection with the current intersection layout.

Highlands Ranch Parkway left-turn lanes have approximately 125 feet of storage length and 75 feet of taper length for eastbound traffic, and approximately 220 feet of storage length and 80 feet of taper length for westbound traffic, before transitioning to a striped median. There are two through lanes and one bike lane provided for each direction of traffic with a dedicated right-turn lane in each direction. The westbound dedicated right-turn lane is a drop lane starting at Foothills Canyon Boulevard.

Wildcat Reserve Parkway extends to the southeast and Spring Hill Parkway extends to the northwest of the intersection. Each approach provides one through lane and a bike lane in each direction. Wildcat Reserve Parkway has dual dedicated left turn lanes, which combine to provide approximately 770 feet of storage, and a dedicated right turn lane. The left turn lane on Spring Hill Parkway contains 150 feet of storage with a 100 feet taper.

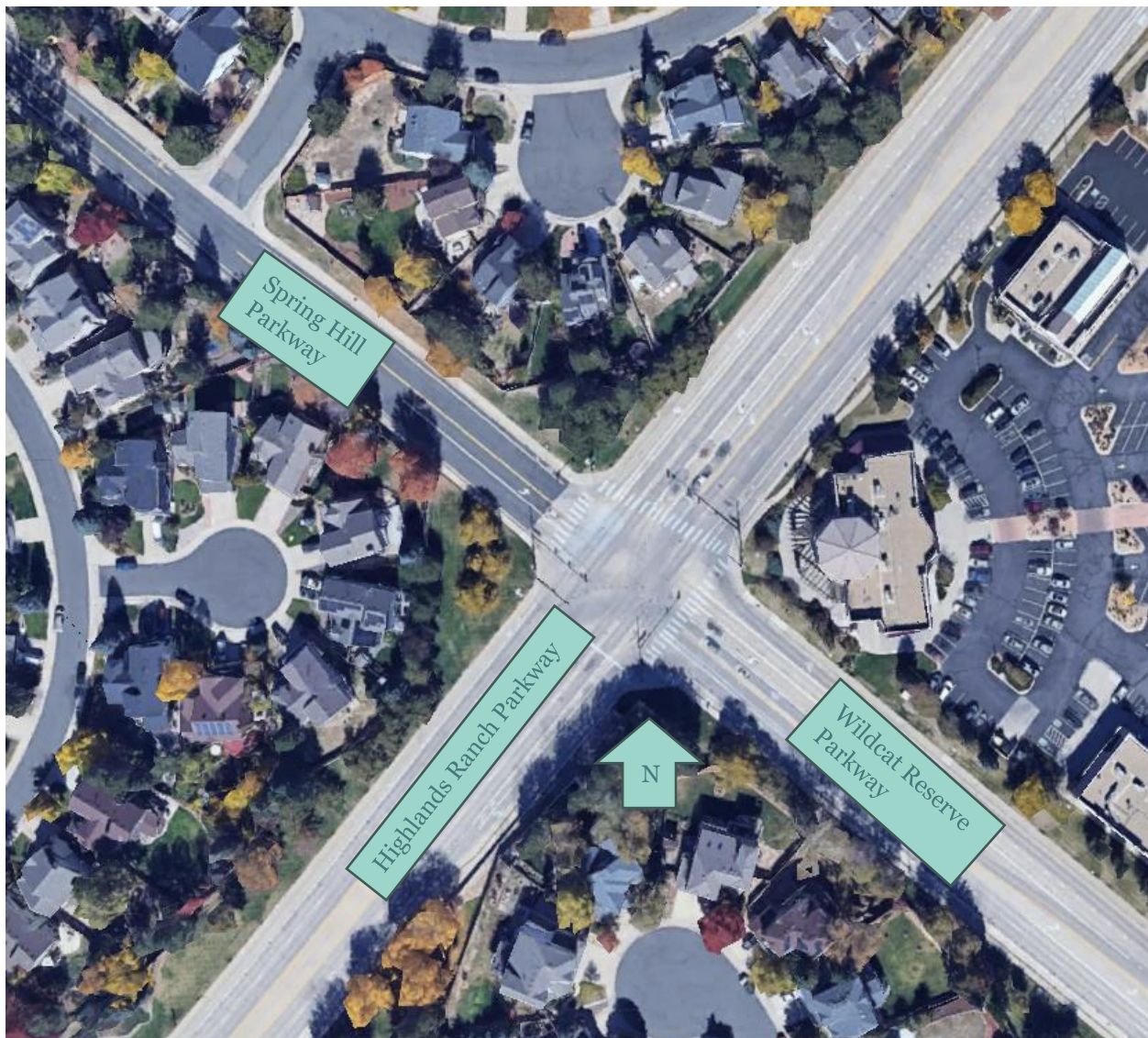


Figure 3 – Highlands Ranch Parkway at Wildcat Reserve Parkway

Broadway at Kendrick Castillo Way/Burgundy Drive

The intersection of Broadway at Kendrick Castillo Way/Burgundy Drive is a signalized four-way intersection with protected left-turn lanes/phases the Broadway approaches and permissive left-turn lanes/phases for the Kendrick Castillo and Burgundy Approaches. **Figure 4** shows an aerial of the intersection with the current intersection layout.

Broadway has three through lanes in the northbound direction and two through lanes in the southbound direction. Broadway's left-turn lanes have approximately 180 feet of storage length and 170 feet of taper length for northbound traffic, and approximately 150 feet of storage length and 170 feet of taper length for southbound traffic, before transitioning to a striped median. A right-turn lane is present for southbound traffic that contains 340 feet of storage before becoming a drop lane. One bike is lane provided for each direction of traffic.

The eastbound approach of Kendrick Castillo way contains a dedicated left-turn lane with 190 feet of storage with a 160-foot taper. One through lane is present, along with a dedicated right-turn lane, which contains 190 feet of storage before becoming a drop lane. Bike lanes are present for both directions of travel on Kendrick Castillo Way.

The Burgundy Drive approach contains one lane shared for all movements. Striping and bike lanes are not present on Burgundy Drive.

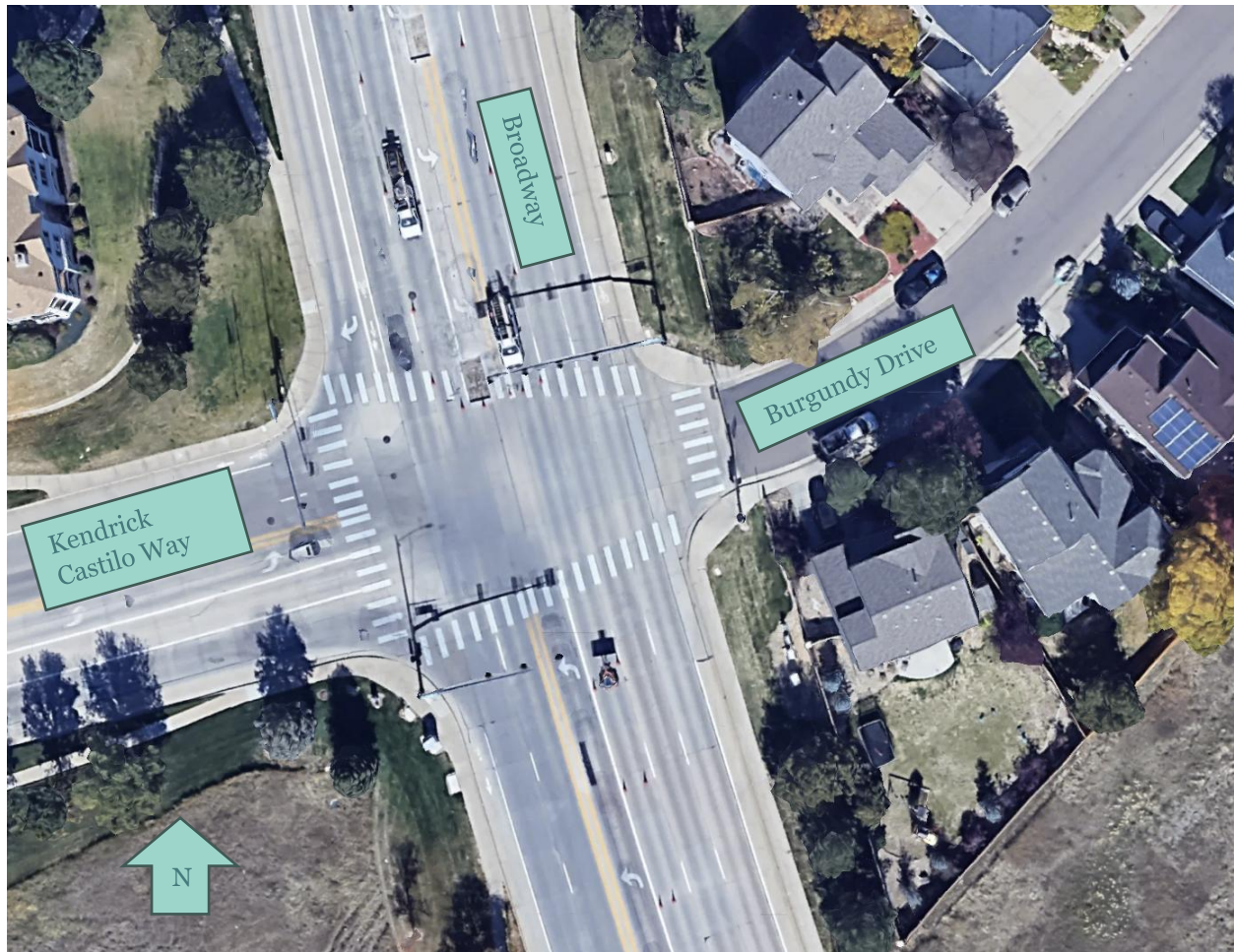


Figure 4 – Broadway at Kendrick Castillo Way and Burgundy Drive

Highlands Ranch Parkway at Desert Willow Road/Westridge Knolls Avenue

The intersection of Highlands Ranch Parkway at Westridge Knolls Avenue is signalized with permissive left-turn lanes/phases for all approaches. **Figure 5** shows an aerial of the intersection with the current intersection layout.

Eastbound Highlands Ranch Parkway has two through lanes and a dedicated left-turn lane. The left turn lane has approximately 140 feet of storage with a 90-foot taper before transitioning to a striped median. There is no dedicated right turn lane. Westbound Highlands Ranch Parkway has two through lanes with a dedicated left-turn lane. The left turn lane has approximately 130 feet of storage with a 150-foot taper before transitioning to a striped median. There is no dedicated right turn lane on this approach. There is a bike lane in each direction on Highlands Ranch Parkway.

Northbound Westridge Knolls Avenue has one through lane and a dedicated left-turn lane with approximately 145 feet of storage and a 45-foot taper. Southbound Desert Willow Road has a shared through and right turn lane. The dedicated left-turn lane has approximately 90 feet of storage and a 50-foot taper. Bike lanes are present on Westridge Knolls Avenue, but they merge with vehicle traffic prior to the intersection.

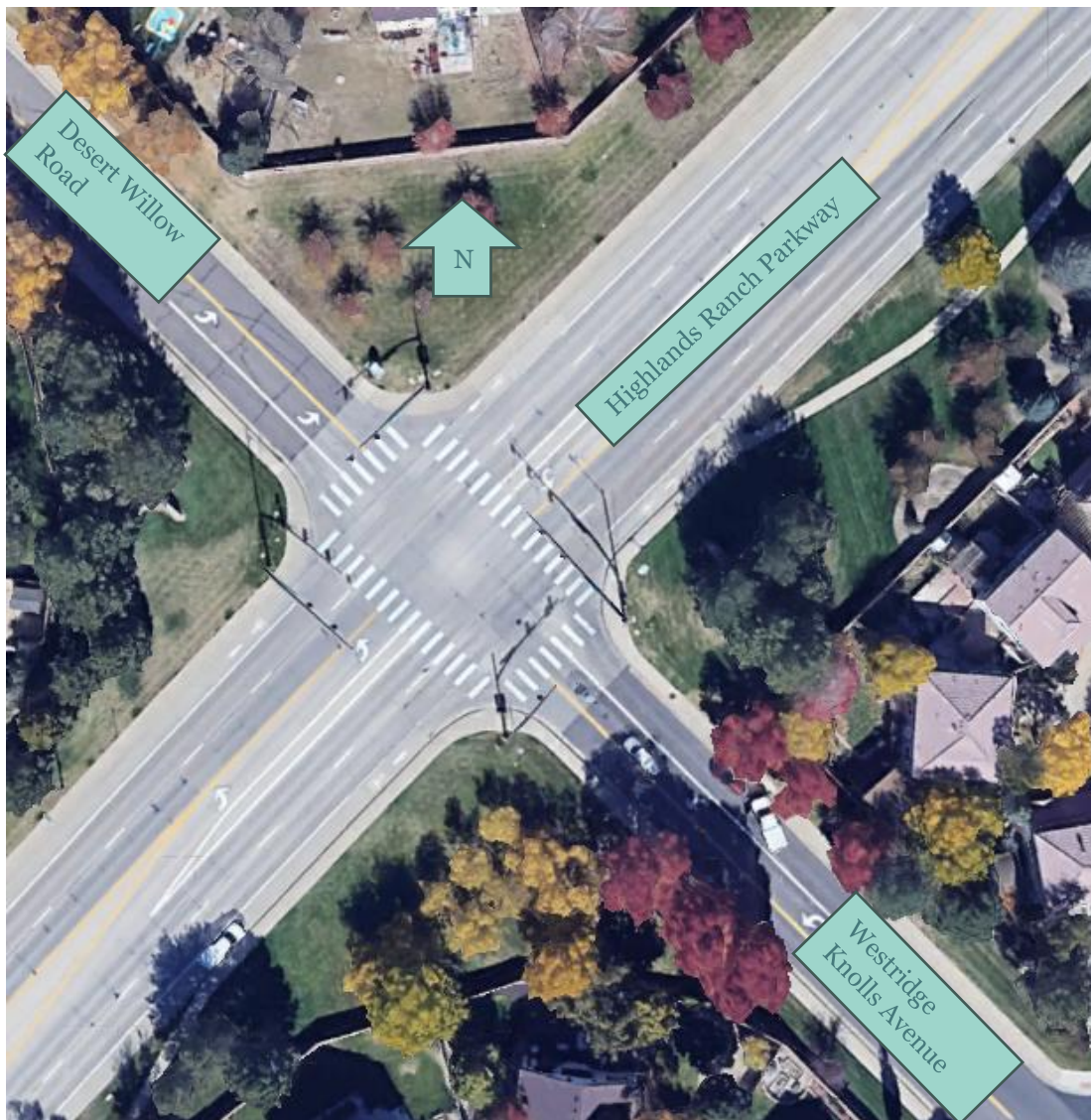


Figure 5 – Highlands Ranch Parkway at Westridge Knolls Avenue/Desert Willow Road

Westridge Knolls Avenue at Timbervale Trail

The intersection of Westridge Knolls Avenue at Timbervale Trail is an unsignalized, 3-way intersection with a stop sign on the Timbervale Trail approach. **Figure 6** shows an aerial of the intersection with the current intersection layout. Each approach to the intersection contains only two lanes, as there are no dedicated lanes for left or right turns. Bike lanes are present on Westridge Knolls Avenue in each direction.



Figure 6 – Westridge Knolls Avenue at Timbervale Trail

Broadway at Winterthur Way and Fairchild Drive

The intersection of Broadway at Winterthur Way and Fairchild Drive is a signalized four-way intersection with permissive left-turn lanes/phases for all approaches. **Figure 7** shows an aerial of the intersection with the current intersection layout.

Broadway left-turn lanes have approximately 190 feet of storage with a 170-foot taper for northbound traffic and 200 feet of storage with a 160-foot taper for southbound traffic, before transitioning to a striped median. Two through lanes and one bike lane are present in each direction of traffic.

The eastbound approach of Winterthur Way contains a dedicated left-turn lane with approximately 120 feet of storage. One through lane is present, which also serves as a shared right-turn lane. Bike lanes are not present on Winterthur Way.

The Fairchild Drive approach contains one lane shared for all movements. A large median is present which divides the two directions of traffic.



Figure 7 – Broadway at Winterthur Way and Fairchild Drive

Kendrick Castillo Way at Westridge Knolls Avenue/Bristle Pine Circle

The intersection of Kendrick Castillo Way at Westridge Knolls Avenue and Bristle Pine Circle is an unsignalized four-way intersection. **Figure 8** shows an aerial of the intersection with the current intersection layout.

Kendrick Castillo has one left-turn lane for westbound traffic, with approximately 150 feet of storage with a 130-foot taper before transitioning to a striped median. Two through lanes and one bike lane are present for each direction of traffic.

The northbound approach of Westridge Knolls Avenue contains a dedicated left-turn lane with approximately 110 feet of storage. One through lane is present, which also serves as a shared right-turn lane. Bike lanes are present for each direction of traffic on Westridge Knolls Avenue but merge with traffic prior to the intersection.

The Bristle Pine Circle approach is one way, containing only southbound traffic. The approach contains a through lane, a dedicated left-turn lane, and a dedicated right-turn lane. The turn lanes each contain 110 feet of storage. There are no bike lanes present on Bristle Pine Circle.



Figure 8 – Kendrick Castillo Way at Westridge Knolls Avenue and Bristle Pine Circle

Broadway at Salford Lane/Sylvestor Road

The intersection of Broadway at Salford Lane/Sylvestor Road is a signalized intersection with protected/permissive left-turn lanes/phases for southbound Broadway Traffic, and permissive left-turn lanes/phases for all other approaches. **Figure 9** shows an aerial of the intersection with the current intersection layout.

Northbound Broadway has two through lanes and a dedicated left-turn lane with approximately 150 feet of storage and a 120-foot taper before transitioning to a striped median. There is no dedicated right-turn lane to turn onto Salford Lane. Southbound Broadway also has two through lanes, with a dedicated left-turn lane to turn onto Salford Lane. This lane has approximately 240 feet of storage with a 120-foot taper before transitioning to a striped median. Bike lanes are present on both directions of Broadway.

The westbound Salford Lane approach has a dedicated left-turn lane, a dedicated right-turn lane, and one through lane. The turning lanes both contain approximately 70 feet of storage with a 40-foot taper. The Sylvestor Road eastbound approach contains one through lane of traffic in each direction and a dedicated left-turn lane with approximately 130 feet of storage. Bike lanes are present on Salford Lane, but merge with traffic before the intersection. There are no bike lanes on Sylvestor Road.

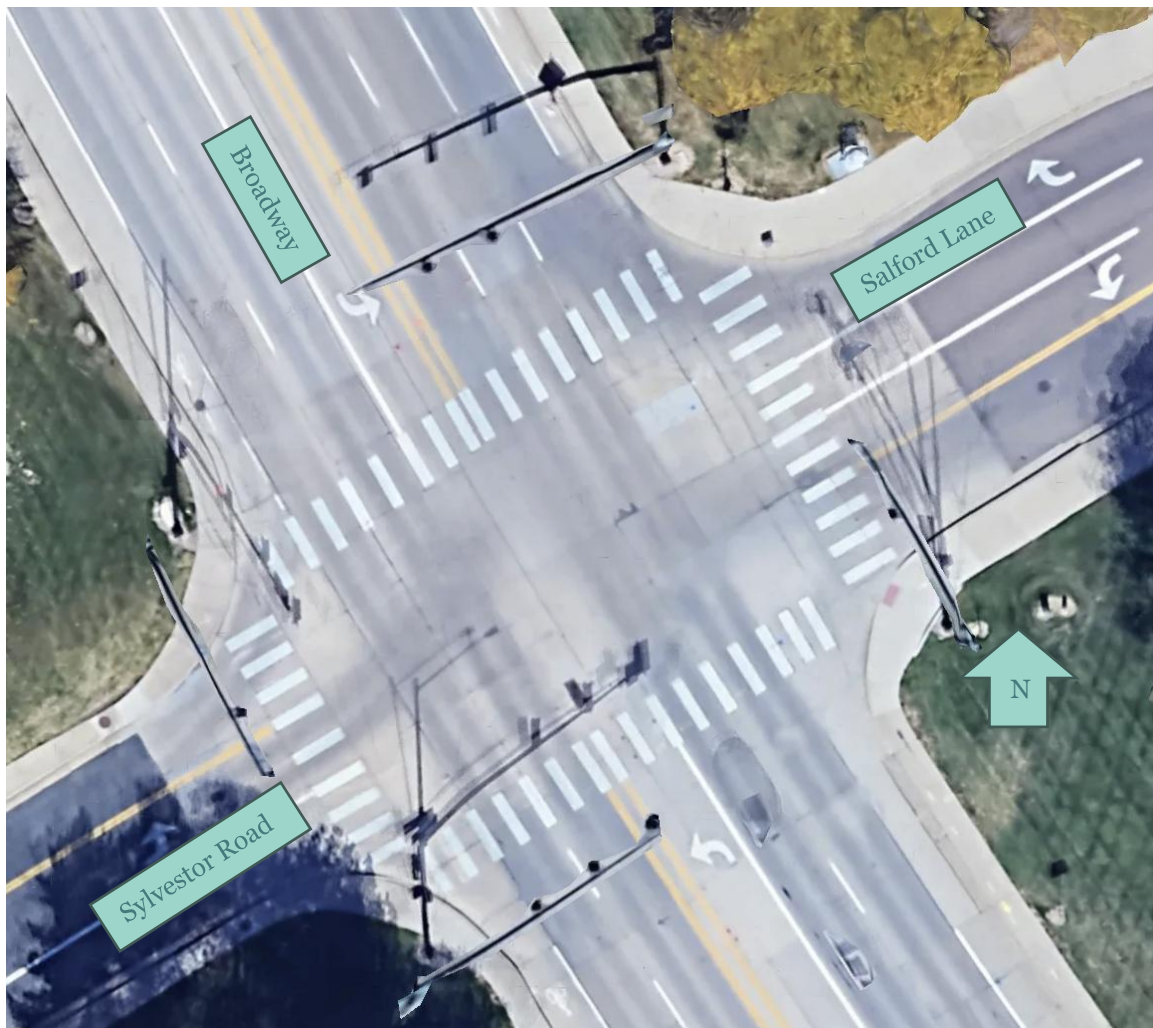


Figure 9 – Broadway at Salford Lane/Sylvester Road



Roadway Characteristics

General features of the roadways along the most likely route from Saddle Ranch to Eldorado are summarized in **Table 1**

Table 1 – Roadway Characteristics

Roadway	Wildcat Reserve Parkway	Highlands Ranch Parkway	Westridge Knolls Avenue	Broadway	Kendrick Castillo Way	Timbervale Trail
Speed Limit	45 mph	45 mph	30 mph	45 mph	40 mph	25 mph
Number of Through Lanes	4	4	2	6	4	2
Lane Width	12 feet	12 feet	12 feet	12 feet	12 feet	17 feet*
Bike Lane Width	5 feet	4-5 feet	5 feet	6 feet	8 feet	None
Median	Striped	Striped	None	Striped	Striped	None
On-Street Parking	None	None	Yes, on South Side near Eldorado	None	None	Both Sides

*Lane width is defined as distance from centerline to edge of pavement

3.3 Traffic Safety Analysis

Intersection Crash Analysis

Crash history was reviewed at the intersections of Highlands Ranch Parkway at Wildcat Reserve Parkway, Highlands Ranch Parkway at Westridge Knolls Avenue, and Broadway at Salford Lane. Crashes were reviewed for the period between 2019 and 2024. **Table 3** Summarizes the year-by-year crash data for the intersections.

Crash diagrams and a listing of crashes are provided in **Appendix B**.

Highlands Ranch Parkway at Wildcat Reserve Parkway

There was a total of 42 crashes at Highlands Ranch Parkway and Wildcat Reserve Parkway over the course of the study period. Nine of these involved injuries. Of the 42 crashes, 22 involved a left turn, and 6 were at night. Two of these accidents involved a 3rd vehicle and one involved a bicycle.

Highlands Ranch Parkway at Westridge Knolls Avenue

There was a total of 22 crashes at Highlands Ranch Parkway and Westridge Knolls Avenue over the course of the study period. Five of these involved injuries. Of the 22 crashes, 5 involved a left turn, and 3 were at night. One of these accidents involved a bicycle and none involved a 3rd vehicle. Four of the five left turn accidents resulted in injuries.

Broadway at Salford Lane

There was a total of 11 crashes at Highlands Ranch Parkway and Wildcat Reserve Parkway over the course of the study period. One of these involved injuries and one resulted in a fatality. Of the 11 crashes, 5 involved a left turn, and one was at night. None of these accidents involved a 3rd vehicle and none involved a bicycle. The accident that resulted in a fatality occurred on a left-turn movement.

Table 2 – Annual Crash Summary

Year	Highlands Ranch Pkwy & Wildcat Reserve Pkwy	Highlands Ranch Pkwy & Westridge Knolls Ave	Broadway & Salford Lane
2019	8	6	3
2020	5	5	0
2021	8	3	3
2022	10	1	2
2023	6	2	1
2024	5	5	2

School Safety

Students are picked up and dropped off primarily via the parking lot to the southwest of the school building. A two-lane, one-way aisle facilitates traffic, with the right lane used to pick-up and drop-off students, and the left lane used to exit the queue. On-street parking is provided for both sides of Timbervale Trail and the south side of Westridge Knolls Avenue. Bike lanes are present on Westridge Knolls Avenue, but these become partially impeded by street parking.

Eldorado was provided with a questionnaire to provide any feedback related to traffic and school safety. Responses to the questionnaire are provided in **Appendix C**.

4. PROJECTED SITE TRAFFIC IMPACTS

4.1 Projected Traffic

Douglas County School District (DCSD) is considering a potential school consolidation option that would consolidate Saddle Ranch Elementary into Eldorado. The consolidation option includes having 6th Grade students remain at the elementary school or a second option that move 6th Grade to the separate middle school. **Table 3** provides data on student enrollment for Eldorado and Saddle Ranch Elementary without 6th Grade.

Table 3 – School Enrollment

School	Ideal Capacity per DCSD	Maximum Historic Enrollment	2023-2024 Enrollment Count*	Projected 2028-2029 Enrollment*	2023-2024 Enrollment Count**	Projected 2028-2029 Enrollment**
Eldorado	506	588	404	387	350	336
Saddle Ranch	529	599	368	305	320	266

*Enrollment values include Pre-School through 6th Grade.

**Enrollment values include Pre-School through 5th Grade. 6th Grade enrollment was assumed to 1/7 of Kindergarten through 6th Grade enrollment.

The projected 2028-2029 combined enrollment if Saddle Ranch Elementary is consolidated into Eldorado Elementary is 692 students if 6th Grade is retained at the elementary level and 602 students without 6th Grade. These projected combined enrollment numbers are approximately between 50 percent and 70 percent higher than the existing Eldorado enrollment.

Since enrollment is not projected to be more than 10 percent of the maximum historic enrollment, traffic data was not collected. However, increased traffic is still expected at Eldorado with the consolidated schools. As depicted in **Figure 2**, portions of the Saddle Ranch Elementary attendance area are outside of the designated one-mile walking radius. Therefore, some of the Saddle Ranch Elementary attendance area may be provided bus service Eldorado.

Consolidation of the schools will increase traffic at Eldorado with more vehicles using on-street parking, the school parking lot, and the pick-off/drop-off lanes. This will increase impacts to the surrounding roadways during pick-up and drop-off times.

4.2 Mitigation

Based on site observations and feedback from the Eldorado Administration, Eldorado faces the following challenges:

- Long queues on Timbervale Trail
- Increased congestion on Westridge Knolls Avenue
- Sight visibility challenges while exiting the parking lot due to parked vehicles

To address the queueing on Timbervale Trail, the parking lot could be rerouted to increase the number of vehicles that queue onsite. This could be done by closing the entrance at the south end of the parking lot and converting the left-turn exit lane to the parking lot entrance at the north end as seen in **Figure 13**. However, this creates many new inefficiencies. First, if the queue ultimately still extends on to Timbervale Trail, then on-street parking will be lost. Secondly, this creates an inefficiency in the parking lot as the queue will be blocking parking spaces and there will be only one exit lane. Due to these items, it is not recommended to adjust the parking lot.



Figure 10 – Mitigation Measures for Eldorado

5. CONCLUSIONS/RECOMMENDATIONS

This Traffic Impact Study addresses existing traffic pattern concerns and potential traffic challenges at Eldorado Elementary School, while considering the anticipated increase in traffic due to possible consolidations with Saddle Ranch Elementary. Two options are being considered if schools are consolidated: one maintaining 6th grade at the elementary school and one moving 6th grade to the middle school.

Traffic will be increased with the additional enrollment, but additional bus service may be offered, limiting the impact of the increased enrollment. Although increased traffic is expected around Eldorado with the increased enrollment, no traffic mitigation measures are recommended. Douglas County recognizes there will be increased delays around the school during 15-minute peak periods at pick-up and drop-off times.

**Minor grammatical changes were made on April 7, 2025 to provide additional clarity.*



Appendix A Site Observation Note



TRAFFIC OBSERVATION REPORT

Project Name	DCSD Traffic Study	Project No.	1124175
Observer	Nate Hittle		
Location	Eldorado Elementary School		
Time	8:30 AM	AM / PM	
			DATE November 11, 2024
			M T W Th F S S

Queueing Data

Start Time: 8:20 AM

End Time: 8:45 AM

Maximum Queueing Length: 450 ft

Total Storage Length Available: 450 ft

Comments:

The drop-off lane in the parking lot on the east side of W Timbervale Trail was the most utilized location for parents to drop off students. The cars queued up in the right lane, and the left lane was often used by exiting vehicles to bypass the other queueing vehicles. The drop off at S Westridge Knolls Avenue was less popular, due to its smaller queue storage capacity. However, the queue for this location extended into S Westridge Knolls Avenue. At one point, traffic was at a standstill in both directions for vehicles trying to turn into this area.

On-Street Parking Locations and Availability

Comments:

On-street parking is provided on both sides of W Timbervale Trail. On-street parking was available on S Westridge Knolls Avenue adjacent to the bike lane. The cars parked in this area partially obstructed the bike lane. This was likely due to the snow on the side of the road taking up space in the parking lane. On-street parking was also available on some of the side streets, but it did not appear that these spaces were utilized.

Crosswalk Locations and Usage

Comments:

Crosswalks were located at various locations around the school. The most used crosswalks existed at the intersection of Timbervale Trail and S Westridge Knolls Ave, and at the exit of the parking lot on W Timbervale Trail. Crossing guards were present at both of these locations.

Roadway Characteristics

Speed Limit(s) and Location(s):

The speed limits on S Westridge Knolls Ave and W Timbervale Trail are respectively 30 and 25 mph. The school zone speed limit is 15 mph on both streets.

Signage:

Signage present on the public roads includes speed limit signs, school zone speed limit signs, stop signs, No Parking signs, school crossing signs, "No U turns in School Zone" signs, and bike lane signs. One-way signs, 10 mph speed advisory signs, and student drop-off signs were present within the parking lot.

Bike Lanes:

Bike lanes are present on S Westridge Knolls Ave. As previously mentioned parked vehicles often impeded this lane,

Other Comments:

The drop-off lane constricts significantly near the end, only allowing one vehicle to pass at once. This constriction can cause difficulties exiting for vehicles in the left drop-off lane.

Sight Visibility Challenges

Comments:

The left sight line for turning on to Timbervale Trail from the northern access to the parking lot is obstructed by a tree.

Congestion Areas

Comments:

W Timbervale Trail becomes congested in the northbound direction, approaching S Westridge Knolls Ave. The queue length for this approach was estimated to be as long as 200 ft at its peak.

General Traffic Observations

Comments:

The weather at the time of observation was approximately 35° and sunny. The sidewalks were mostly clear of snow. However, some snow present on the sides of the road may have made crossing the road more difficult for pedestrians.



TRAFFIC OBSERVATION REPORT

Project Name	DCSD Traffic Study	Project No.	1124175
Observer	Nate Hittle		
Location	Eldorado Elementary School		
Time	3:30 PM	AM / PM	
		DATE	November 11, 2024
		M	T W Th F S S

Queueing Data

Start Time: 3:10 PM

End Time: 3:40 PM

Maximum Queueing Length: 670 ft

Total Storage Length Available: 450 ft

Comments:

Vehicles began arriving to the parking lot around 3:00 PM and parked in parking spaces. The lot was completely full by 3:20. Vehicles began parking outside of parking spots, but did not obstruct the flow of traffic. As the queue approached the southern access to W Timbervale Trail, cars began turning around. Eventually, the queue backed up into Timbervale Trail and extended to W Mulberry Ln.

On-Street Parking Locations and Availability

Comments:

On-street parking is provided on both sides of W Timbervale Trail. Both sides of the street were utilized for parking. On-street parking was available on S Westridge Knolls Avenue adjacent to the bike lane. The cars parked in this area partially obstructed the bike lane. This was likely due to the snow on the side of the road taking up space in the parking lane. On-street parking was also available on some of the side streets, but it did not appear that these spaces were utilized.

Crosswalk Locations and Usage

Comments:

Crosswalks were located at various locations around the school. The most used crosswalks existed at the intersection of Timbervale Trail and S Westridge Knolls Ave, and at the exit of the parking lot on W Timbervale Trail. Crossing guards were present at both of these locations. Pedestrians with cars parked on the west side of W Timbervale Trail often did not use a crosswalk.

Roadway Characteristics

Speed Limit(s) and Location(s):

The speed limits on S Westridge Knolls Ave and W Timbervale Trail are respectively 30 and 25 mph. The school zone speed limit is 15 mph on both streets.

Signage:

Signage present on the public roads includes speed limit signs, school zone speed limit signs, stop signs, No Parking signs, school crossing signs, "No U turns in School Zone" signs, and bike lane signs. One-way signs, 10 mph speed advisory signs, and student drop-off signs were present within the parking lot.

Bike Lanes:

Bike lanes are present on S Westridge Knolls Ave. As previously mentioned parked vehicles often impeded this lane,

Other Comments:

The drop-off lane constricts significantly near the end, only allowing one vehicle to pass at once. This constriction can cause difficulties exiting for vehicles in the left drop-off lane.

Sight Visibility Challenges

Comments:

The left sight line for turning on to Timbervale Trail from the northern access to the parking lot is obstructed by a tree.

Congestion Areas

Comments:

W Timbervale Trail becomes congested in the northbound direction, approaching S Westridge Knolls Ave. The queue length for this approach was estimated to be 250 ft at its peak. There was also an instance of congestion on southbound Timbervale Trail, which was caused by cars attempting to turn left into the parking lot.

General Traffic Observations

Comments:

The weather at the time of observation was approximately 55° and sunny. The sidewalks were mostly clear of snow. However, some snow present on the sides of the road may have made crossing the road more difficult for pedestrians.

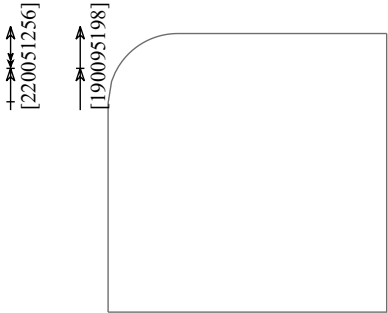
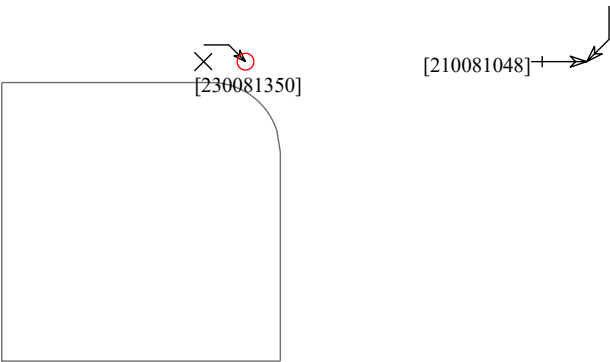
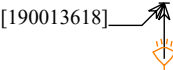
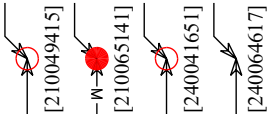
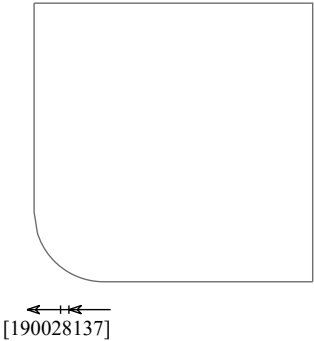
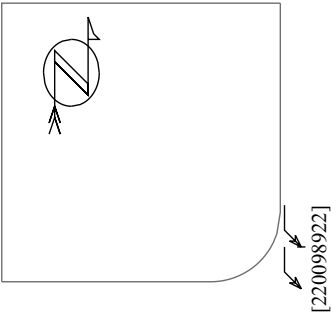


Appendix B Crash Diagrams and Listings

BROADWAY & SALFORD WAY RD
2019 - 2024

11 Crashes

Clear



- ← Straight
- ←+ Stopped
- ← Unknown
- ↔ Backing
- ↔↔ Overtaking
- ↔↔ Sideswipe

- ▢ Parked
- ↗ Weaving
- ↗ Changing Ln
- ↗ Right turn
- ↗ Left turn
- ↗ U-turn

- × Pedestrian
- × Bicycle
- Injury
- Fatality
- 🔦 Nighttime
- 🚫 DUI

- ◀ 3rd Vehicle
- ←M- Motorcycle
- ←○ Overturn

- Fixed objects:
- General
 - ☒ Animal
 - ☒ Public Obj
 - ☒ Private Obj

BROADWAY & SALFORD WAY RD
2019 - 2024

11 Crashes

Clear

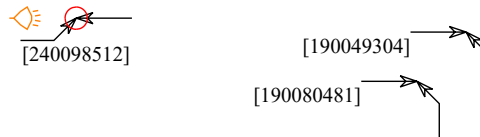
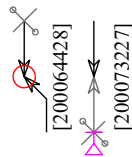
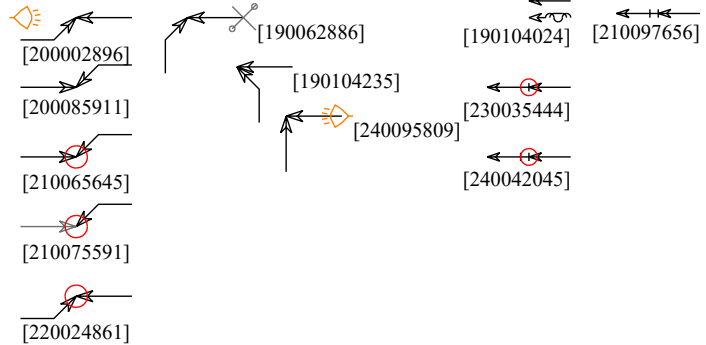
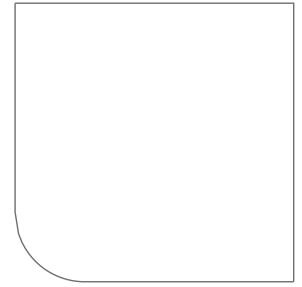
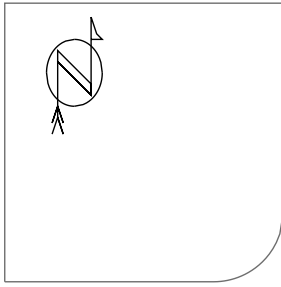
Casetrackingid	Accidenttime	Accidentdate	Primarystreet	_Crossstreet	Onroadaddress	Numberinjured	Numberkilled	Harmfuleventl
190013618	8:38 pm	1/31/2019	SYLVESTOR RD	BROADWAY		0	0	Front to Rear
190028137	8:40 am	3/6/2019	SALFORD LN	BROADWAY		0	0	Front to Rear
190095198	3:15 pm	8/21/2019	BROADWAY	SALFORD LN		0	0	Front to Rear
210049415	8:05 pm	6/19/2021	BROADWAY	SALFORD LN		0	0	Front to Side
210065141	7:30 pm	8/11/2021	BROADWAY	SALFORD LN		0	1	Front to Side
210081048	5:54 pm	10/6/2021	SYLVESTOR RD	BROADWAY		0	0	Front to Front
220051256	9:15 am	6/29/2022	BROADWAY	SALFORD LN		0	0	Front to Rear
220098922	12:10 pm	12/17/2022	BROADWAY	SYLVESTOR RD		0	0	Front to Rear
230081350	3:15 pm	9/19/2023	SYLVESTOR RD	BROADWAY		1	0	Pedestrian
240041651	2:25 pm	5/5/2024	BROADWAY	SALFORD LN		0	0	Front to Front
240064617	10:15 am	7/10/2024	BROADWAY	SALFORD LN		0	0	Front to Front

HIGHLANDS RANCH PKWY & WESTRIDGE KNOLLS AVE

2019 - 2024

22 Crashes

Clear



[240089353]

[240089341]

[200063208]

[190022017]



- ← Straight
- ←+ Stopped
- ← Unknown
- ↔ Backing
- ↔ Overtaking
- ↔ Sideswipe

- ▭ Parked
- ↗ Weaving
- ↗ Changing Ln
- ↗ Right turn
- ↗ Left turn
- ↗ U-turn

- × Pedestrian
- ⊗ Bicycle
- Injury
- Fatality
- ⚡ Nighttime
- ⚡ DUI

- ◀ 3rd Vehicle
- ←M- Motorcycle
- ←○ Overturn

- Fixed objects:
- General
 - ⊗ Animal
 - ⊗ Public Obj
 - ⊗ Private Obj

Crash Magic Online 11/14/2024

HIGHLANDS RANCH PKWY & WESTRIDGE KNOLLS AVE

2019 - 2024

22 Crashes

[Clear](#)

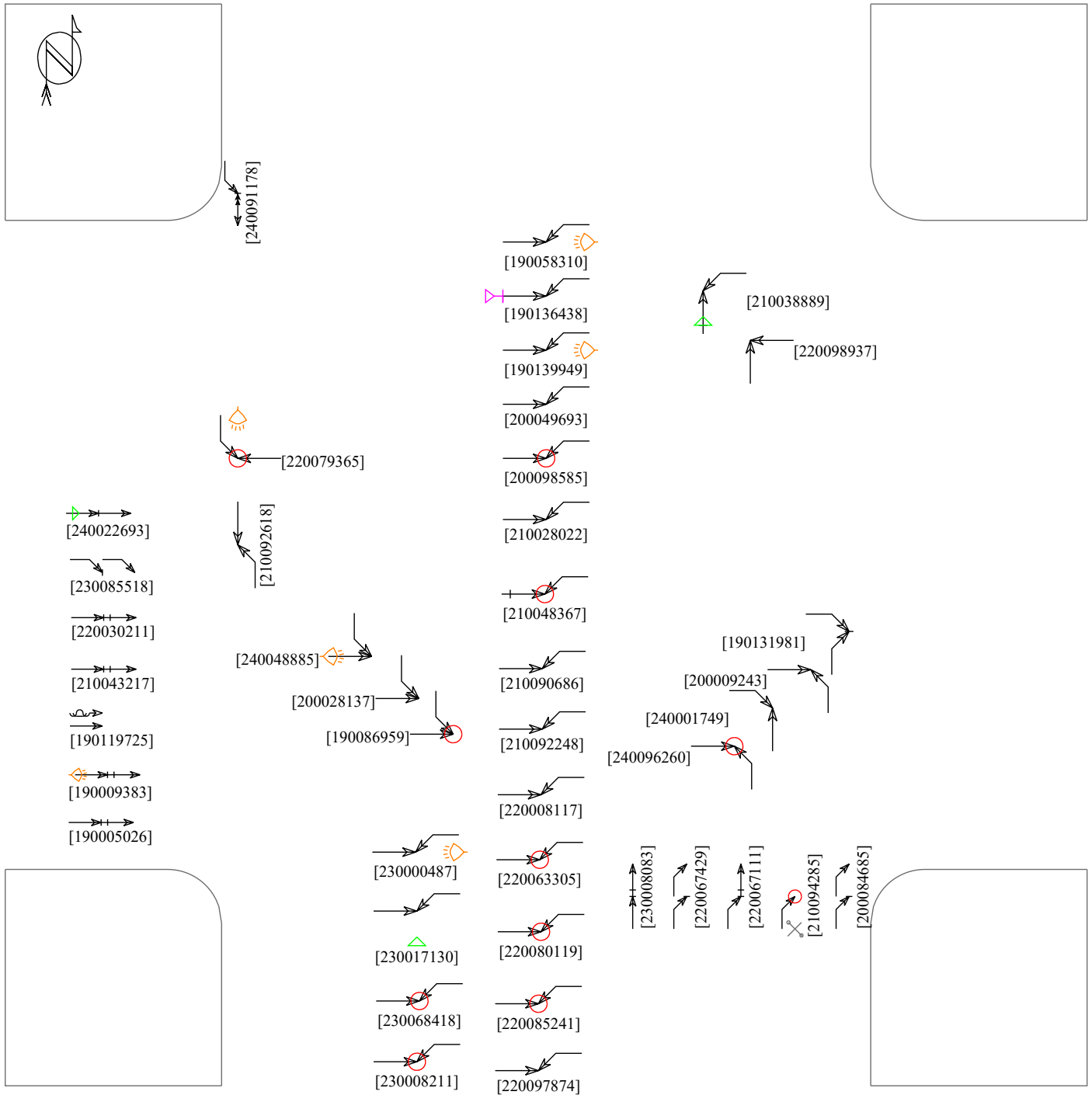
Casetrackingid	Accidenttime	Accidentdate	Primarystreet	Crossstreet	Onroadaddress	Numberinjured	Numberkilled	Harmfuleventl
190022017	11:38 am	2/20/2019	HIGHLANDS RANCH PKWY	WESTRIDGE KNOLLS AVE		0	0	Front to Rear
190049304	12:23 pm	4/25/2019	HIGHLANDS RANCH PKWY	WESTRIDGE KNOLLS AVE		0	0	Front to Side
190062886	2:22 pm	5/29/2019	WESTRIDGE KNOLLS AVE	HIGHLANDS RANCH PKWY		0	0	Front to Side
190080481	7:18 am	7/12/2019	HIGHLANDS RANCH PKWY	WESTRIDGE KNOLLS AVE		0	0	Front to Side
190104024	6:35 pm	9/13/2019	HIGHLANDS RANCH PKWY	DESERT WILLOW RD		0	0	Side to Side - Same Direction
190104235	2:08 pm	9/14/2019	DESERT WILLOW RD	HIGHLANDS RANCH PKWY		0	0	Front to Side
200002896	8:26 pm	1/8/2020	HIGHLANDS RANCH PKWY	DESERT WILLOW RD		0	0	Front to Side
200063208	11:14 am	7/4/2020	HIGHLANDS RANCH PKWY	WESTRIDGE KNOLLS AVE		0	0	Front to Rear
200064428	7:15 pm	7/7/2020	HIGHLANDS RANCH PKWY	WESTRIDGE KNOLLS AVE		1	0	Bicycle / Motorized Bicycle
200073227	1:01 pm	8/6/2020	HIGHLANDS RANCH PKWY	DESERT WILLOW RD		0	0	Bicycle / Motorized Bicycle
200085911	9:14 am	9/18/2020	HIGHLANDS RANCH PKWY	WESTRIDGE KNOLLS AVE		0	0	Front to Side
210065645	3:05 pm	8/13/2021	HIGHLANDS RANCH PKWY	WESTRIDGE KNOLLS AVE		0	0	Front to Side
210075591	3:24 pm	9/17/2021	HIGHLANDS RANCH PKWY	WESTRIDGE KNOLLS AVE		3	0	Front to Side
210097656	1:23 pm	12/7/2021	HIGHLANDS RANCH PKWY	DESERT WILLOW RD		0	0	Front to Rear
220024861	3:44 pm	3/31/2022	HIGHLANDS RANCH PKWY	WESTRIDGE KNOLLS AVE		0	0	Front to Front
230035444	5:09 pm	4/26/2023	HIGHLANDS RANCH PKWY	WESTRIDGE KNOLLS AVE		0	0	Front to Rear
230038020	6:35 pm	5/4/2023	HIGHLANDS RANCH PKWY	WESTRIDGE KNOLLS AVE		1	0	Bicycle / Motorized Bicycle
240042045	5:02 pm	5/6/2024	HIGHLANDS RANCH PKWY	DESERT WILLOW RD		2	0	Front to Rear
240089341	3:08 pm	9/27/2024	HIGHLANDS RANCH PKWY	WESTRIDGE KNOLLS AVE		0	0	Front to Rear
240089353	3:41 pm	9/24/2024	HIGHLANDS RANCH PKWY	WESTRIDGE KNOLLS AVE		0	0	Front to Rear
240095809	10:11 pm	10/15/2024	HIGHLANDS RANCH PKWY	WESTRIDGE KNOLLS AVE		0	0	Front to Side
240098512	8:54 pm	10/24/2024	HIGHLANDS RANCH PKWY	DESERT WILLOW RD		1	0	Front to Front

HIGHLANDS RANCH PKWY & WILDCAT RESERVE PKWY

2019 - 2024

42 Crashes

Clear



← Straight
 ←+ Stopped
 ← Unknown
 ↔ Backing
 ↔ Overtaking
 ← Sideswipe

▭ Parked
 ← Weaving
 ← Changing Ln
 ↘ Right turn
 ↙ Left turn
 ↻ U-turn

× Pedestrian
 ⊗ Bicycle
 ○ Injury
 ● Fatality
 ☀ Nighttime
 ♀ DUI

◀ 3rd Vehicle
 ←M- Motorcycle
 ←○ Overturn

Fixed objects:
 □ General ☒ Animal
 ☑ Public Obj ☒ Private Obj

Crash Magic Online 11/14/2024

HIGHLANDS RANCH PKWY & WILDCAT RESERVE PKWY

2019 - 2024

42 Crashes

Clear

Casetrackingid	Accidenttime	Accidentdate	Primarystreet	Crossstreet	Onroadaddress	Numberinjured	Numberkilled	Harmfulevent1
190005026	2:38 pm	1/12/2019	HIGHLANDS RANCH PKWY	WILDCAT RESERVE PKWY		0	0	Front to Rear
190009383	12:00 am	1/22/2019	HIGHLANDS RANCH PKWY	WILDCAT RESERVE PKWY		0	0	Front to Rear
190058310	9:58 pm	5/17/2019	WILDCAT RESERVE PKWY	HIGHLANDS RANCH PKWY		0	0	Front to Side
190086959	4:44 pm	7/30/2019	WILDCAT RESERVE PKWY	HIGHLANDS RANCH PKWY		1	0	Front to Front
190119725	12:58 pm	10/23/2019	HIGHLANDS RANCH PKWY	WILDCAT RESERVE PKWY		0	0	Side to Side - Same Direction
190131981	1:11 pm	11/25/2019	HIGHLANDS RANCH PKWY	WILDCAT RESERVE PKWY		0	0	Front to Rear
190136438	4:35 pm	12/7/2019	WILDCAT RESERVE PKWY	HIGHLANDS RANCH PKWY		0	0	Front to Side
190139949	9:34 pm	12/16/2019	HIGHLANDS RANCH PKWY	WILDCAT RESERVE PKWY		0	0	Front to Front
200009243	12:55 pm	1/25/2020	HIGHLANDS RANCH PKWY	WILDCAT RESERVE PKWY		0	0	Front to Side
200028137	6:50 pm	3/11/2020	WILDCAT RESERVE PKWY	HIGHLANDS RANCH PKWY		0	0	Front to Side
200049693	4:00 pm	5/23/2020	WILDCAT RESERVE PKWY	HIGHLANDS RANCH PKWY		0	0	Front to Side
200084685	9:00 am	9/14/2020	WILDCAT RESERVE PKWY	HIGHLANDS RANCH PKWY		0	0	Front to Rear
200098585	5:00 pm	10/31/2020	HIGHLANDS RANCH PKWY	WILDCAT RESERVE PKWY		2	0	Front to Front
210028022	2:02 pm	4/8/2021	HIGHLANDS RANCH PKWY	WILDCAT RESERVE PKWY		0	0	Front to Side
210038889	7:00 pm	5/17/2021	WILDCAT RESERVE PKWY	HIGHLANDS RANCH PKWY		0	0	Front to Side
210043217	2:20 pm	6/1/2021	HIGHLANDS RANCH PKWY	WILDCAT RESERVE PKWY		0	0	Front to Rear
210048367	5:40 pm	6/16/2021	WILDCAT RESERVE PKWY	HIGHLANDS RANCH PKWY		2	0	Front to Side
210090686	5:01 pm	11/11/2021	HIGHLANDS RANCH PKWY	WILDCAT RESERVE PKWY		0	0	Front to Side

Casetrackingid	Accidenttime	Accidentdate	Primarystreet	Crossstreet	Onroadaddress	Numberinjured	Numberkilled	Harmfuleventl
210092248	1:55 am	11/17/2021	HIGHLANDS RANCH PKWY	WILDCAT RESERVE PKWY		0	0	Front to Side
210092618	3:55 pm	11/18/2021	HIGHLANDS RANCH PKWY	WILDCAT RESERVE PKWY		0	0	Front to Side
210094285	2:20 pm	11/24/2021	HIGHLANDS RANCH PKWY	WILDCAT RESERVE PKWY		1	0	Bicycle / Motorized Bicycle
220008117	1:15 pm	2/1/2022	HIGHLANDS RANCH PKWY	WILDCAT RESERVE PKWY		0	0	Front to Side
220030211	5:01 pm	4/18/2022	HIGHLANDS RANCH PKWY	WILDCAT RESERVE PKWY		0	0	Front to Rear
220063305	7:09 am	8/10/2022	HIGHLANDS RANCH PKWY	WILDCAT RESERVE PKWY		0	0	Front to Side
220067111	6:25 pm	8/23/2022	WILDCAT RESERVE PKWY	HIGHLANDS RANCH PKWY		0	0	Front to Rear
220067429	4:46 pm	8/24/2022	WILDCAT RESERVE PKWY	HIGHLANDS RANCH PKWY		0	0	Front to Rear
220079365	8:20 pm	10/4/2022	SPRING HILL PKWY	HIGHLANDS RANCH PKWY		1	0	Front to Front
220080119	7:22 am	10/7/2022	HIGHLANDS RANCH PKWY	SPRING HILL PKWY		1	0	Front to Side
220085241	8:10 am	10/26/2022	HIGHLANDS RANCH PKWY	WILDCAT RESERVE PKWY		1	0	Front to Side
220097874	7:44 am	12/14/2022	HIGHLANDS RANCH PKWY	WILDCAT RESERVE PKWY		0	0	Front to Side
220098937	1:22 pm	12/17/2022	HIGHLANDS RANCH PKWY	WILDCAT RESERVE PKWY		0	0	Front to Side
230000487	5:52 pm	1/3/2023	HIGHLANDS RANCH PKWY	WILDCAT RESERVE PKWY		0	0	Front to Front
230008083	3:28 pm	1/31/2023	WILDCAT RESERVE PKWY	HIGHLANDS RANCH PKWY		0	0	Front to Rear
230008211	7:05 am	2/1/2023	HIGHLANDS RANCH PKWY	WILDCAT RESERVE PKWY		1	0	Front to Side
230017130	1:00 pm	3/2/2023	HIGHLANDS RANCH PKWY	WILDCAT RESERVE PKWY		0	0	Front to Side
230068418	5:18 pm	8/7/2023	HIGHLANDS RANCH PKWY	WILDCAT RESERVE PKWY		3	0	Front to Front
230085518	10:56 am	10/3/2023	HIGHLANDS RANCH PKWY	WILDCAT RESERVE PKWY		0	0	Front to Rear
240001749	9:15 am	1/6/2024	WILDCAT RESERVE PKWY	HIGHLANDS RANCH PKWY		0	0	Front to Front

Casetrackingid	Accidenttime	Accidentdate	Primarystreet	Crossstreet	Onroadaddress	Numberinjured	Numberkilled	Harmfuleventl
240022693	2:56 pm	3/7/2024	HIGHLANDS RANCH PKWY	WILDCAT RESERVE PKWY		0	0	Front to Rear
240048885	9:40 pm	5/26/2024	HIGHLANDS RANCH PKWY	WILDCAT RESERVE PKWY		0	0	Front to Front
240091178	3:35 pm	9/30/2024	SPRING HILL PKWY	HIGHLANDS RANCH PKWY		0	0	Front to Rear
240096260	11:22 am	10/17/2024	HIGHLANDS RANCH PKWY	WILDCAT RESERVE PKWY		1	0	Front to Side



Appendix C School Questionnaire

Review: DCSD Traffic and Pedestrian Safety Questionnaire

Respondent

9

Anonymous

13:53

Time to complete

1. What school do you represent?

Score / 0 pts

Eldorado

2. Please provide your name.

Score / 0 pts

Julie Crawford

3. Please provide your email.

Score / 0 pts

jccrawford@dcsdk12.org

4. Please provide feedback on crosswalks. Are crosswalks provided in adequate locations? Do families in general abide by crosswalk locations? Are additional crosswalk locations desired?

Score / 0 pts

I would love to have one more crosswalk but all in all our system runs really well.

5. Please provide feedback on pickup/drop-off.

Score / 0 pts

Where are your schools pickup and drop-off locations? Is there adequate length or do vehicle queues extend on to public roadways?

We have two drop off locations. The front (called Kiss and Go) and the back (called the Quick and Go). I believe it is adequate length.

6. If available, can you provide your school's written pickup and drop-off procedures? Please send to nick.westphal@dibblecorp.com.

Score / 0 pts

Here is a google doc:
https://docs.google.com/document/d/1bLLVnabfutQW2-y_Wm15D7BJJJeDhrxWI-TykAo-wkM/edit?tab=t.0

7. Please provide feedback on parking lot safety. Is there an adequate number of parking spaces? Are there any sight visibility challenges when exiting a parking lot (e.g. parked vehicles blocking views)? If so, where?

Score / 0 pts

We are all good

8. Please provide feedback on roadway safety. Do vehicles in general follow traffic laws such as speed limits, stop signs, no parking zones, etc.?

Score / 0 pts

Yes for the most part

9. Does your school have a designated bus drop-off area? Are there any conflicts between buses and other vehicles?

Score / 0 pts

Yes and yes sometimes since we have the quick and go in the back bus loop

10. Please provide any general information related to vehicle and pedestrian safety at or around your school that you would like to share.

Score / 0 pts

No answer provided.