Field/Meeting Record

STATE OF ALASKA
Department of Transportation and Public Facilities
Central Region-Division of Design and Engineering Services
Traffic & Safety, Highway Design Section

To: File **Date:** March 6, 2020

Phone No.: 269-0639

From: Scott E. Thomas, P.E. SET
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Subject: O'Malley Elementary School
O' Malley Road Observation

Based upon a request from the Road Service Area and area legislator, DOTPF conducted additional observation of the intersection of O'Malley Road and Rockridge Drive. This was done February 20, 2020, the week after major snow events and half school days. Peak 45 minute periods were recorded on video and will be processed for traffic count updates as part of the ongoing Design project. The goal was to re-check the design features of planned O'Malley Road upgrades originally analyzed in 2014, and see what can be done about ongoing congestion and safety concerns.

Observations

1. Westbound traffic downhill peaked for 20 minutes about 8:40 to 9:00 AM.
2. WB traffic slowed well and appropriately on icy roads for left turning vehicles ahead.
3. No significant queues or delays occurred on O'Malley Road.
4. Eastbound queuing was not an observed problem.
5. Traffic reentering O'Malley Road mostly made left turns. A few motorists took shorter gaps than desirable, but were adequately served without mainline conflict. Gaps were sufficient just by letting traffic pass one more vehicle on the mainline.
6. Eastbound uphill traffic peaked for about 20 minutes from 3:15-3:35 PM.
7. EB traffic has an easy time decelerating. Right turns did not back onto O'Malley.

Afterwards, meeting with Kelly Eagleton, school principal, provided more information:

1. Queues can extend onto O'Malley Road and back along the mainline O'Malley Road.
2. Winter conditions may have made motorists slower, more careful than when there is dry pavement in fall and spring.
3. Parent dropoff/pickup traffic is higher than bus traffic.
4. This French Immersion school is expected to grow fast. A popular lottery system will lead to adding a grade level or classroom per year for about 5 more years. This means about 25 more students per year for the next 5 years, not expected by bus. Possibly 125 more drop-offs, or 250 vehicles per hour increase.
5. Onsite bus circulation has to line up behind the school (diagonally), and then depart around the south side of the building outside of the parent flow.
6. Kids onsite have to carefully come back inside along the building/bus area in a coned off area.
7. Parents line up single file for dropoff/pickup on the north side hockey rink loop.
8. A second lane is kept open around the hockey rink loop.
9. The hockey rink staging is a closed by a gate until 3:20 PM to restrict to a closed campus. Traffic can queue along Rockridge Dr to O'Malley Rd, waiting for campus lanes to open.

Crash History Review

The Highway Safety Improvement Program crash database from 2012-2017 shows 3 crashes that are school related. All were reported as westbound rear-end crashes with minor injuries or property damage reported. Inattention was a concern in crashes in this area. Interviews with the adjacent Anchorage Fire Department staff indicate concerns for past occurrences of westbound run off road crashes avoiding drivers stopped to turn into Rockridge Drive.

A previous analysis of intersection traffic and safety was summarized on August 27, 2014 for the O'Malley Road Reconstruction Project, Phase II. Crash data at that time was available from 2002 through 2011. Rockridge Drive was found to be below state average crash rates, and based on turning volumes, a candidate for an eastbound left turn lane for traffic coming down the hill.

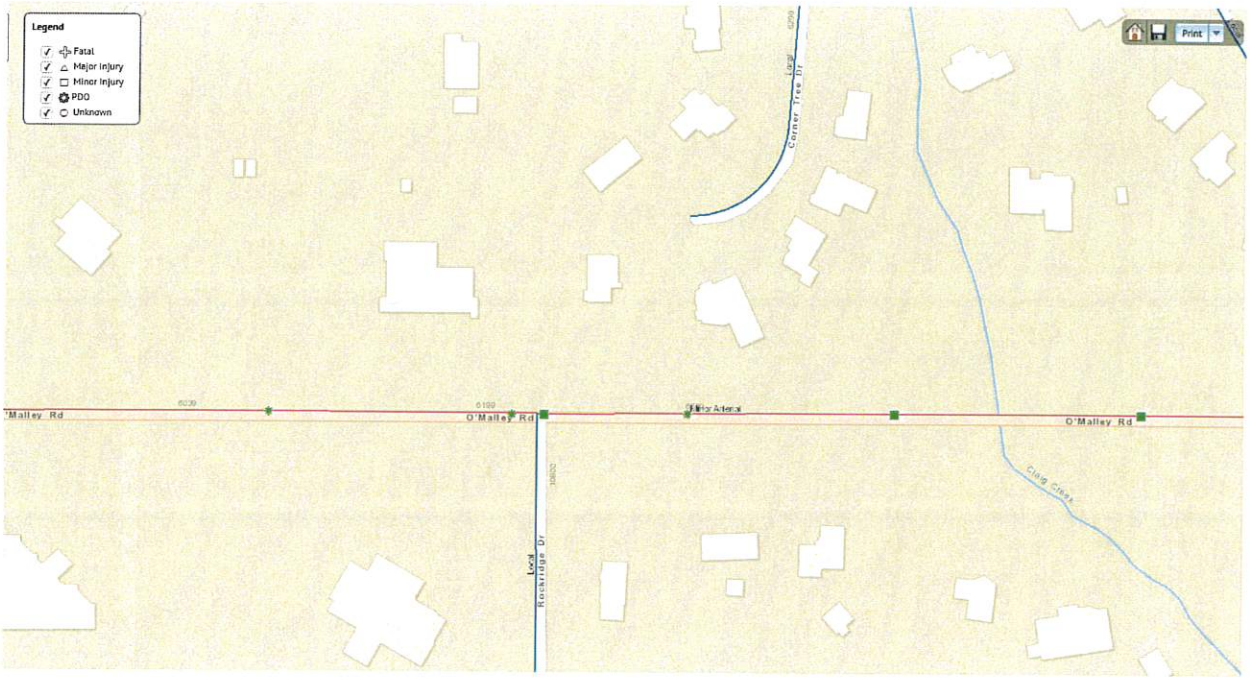
Initial Findings

1. The O'Malley Road project will benefit school traffic by building a center left turn lane and shoulders. Construction will begin in 2020 through 2021.
2. Intersection lighting exists on a CEA pole being relocated by the project. Ownership and maintenance of the existing fixture and possible replacement fixtures is under review.
3. Congestion and circulation constraints are at school entrances and onsite.
4. The school once had over 600 students. It is now over 300 and growing again, about a classroom per year.
5. Immersion school growth could add 200 to 250 trips per hour to Rockridge Drive.
6. Lower crash frequencies and good visibility do not indicate the need for added warnings at this intersection. Planned turn lane improvements will directly target crash patterns.
7. Signal criteria would not be met for a full hour any hours of the day.
8. A signal is not recommended with a downhill grade of 6% to the east.
9. Signals introduce new rear-end crash patterns. This would be expected westbound
10. Other immersion schools have similar road frontage of over 600 feet, or two blocks.
11. Most O'Malley Elementary frontage to the south is too steep for separated circulation.
12. Aerial views of three other ASD Immersion schools are *attached*. Other immersion schools use different circulation patterns, one-way driveways, multi-lane dropoff/pickup, and do not appear to use two-way driveways or gates. Other sites are at less risk of queueing onto main highways.
13. The hockey rink loop appears to be a recent onsite circulation improvement.
14. Faculty traffic duty with coned loading routes boosts arrival/departure safety.
15. Parent education and patience is critical to arrival/departure safety.

Recommendations

1. DOTPF should refer the site to ASD Facilities and MOA Traffic for further review of Rockridge school zone traffic circulation, consistent with our 1996 joint Agreement.
2. DOTPF recommends scoping/scheduling/budgeting a Traffic Impact Analysis of immersion school re-growth in student population. This would evaluate circulation needs both onsite and on Rockridge Drive.
3. O'Malley Elementary may benefit from different circulation concepts at other immersion schools and other schools with intensive parent dropoff/pickup. (Consider Sand Lake Elementary, Scenic Park Elementary, Chugiak Elementary, Grace Christian School K-12 or others).
4. Multilane dropoff/pickup and opening the gate sooner could reduce traffic backups.
5. A long term capital project may have potential to access Birch Road and tap into available capacity to be served at the existing signal. This increases peak storage and left turn service.

2012-2016 HSIP Additional Crash History review



From left to right, west to east.

1. 10/11/12 7:00 AM Dark, Fog Smoke. Sideswipe – one vehicle. (Other ATV?) Not apparently on road. Not school related.
2. 1/11/14 9:00 AM Dawn. PU out of gas, backing down hill, no lights, hit snowbank, slid into EB vehicle. Not school or road infrastructure related. PDO
3. **11/27/13 EB LT, 3 veh queue. High speed rear end. Westbound. PDO Airbags all veh.**
4. 11/20/15 FRI 7:39 AM Dark, lighted. Minor Injury. NB LT angle pulled out from STOP and hit SU Truck going EB. Not school related.
5. **8/31/15 3:23 PM Daylight, Dry. 4 veh queue WB. Rear end. Possible Injury**
6. **1/10/14 3:16 PM Daylight, Icy, Snow. RearEnd-HeadOn. 4 veh queue WB, Unit 1 hit veh and then into oncoming lane. PDO.**
7. 1/17/16 11:20 AM Guardrail impact WB and then into EB vehicle. Possible Injury. Not school related.
8. 8/24/15 4:41 PM Daylight, Dry Driveway LT NB to O'Malley, FTY. WB Vehicle lost control and rolled vehicle. SVROR. Not school related.
9. 2/8/12 11:38 PM Freezing rain, icy. EB loss of traction. V1 Stopped. V2 went around, lost traction and slid backwards into V1. Not school related.
10. 1/15/16 4:00 PM Angle. Daylight, Icy. Rockridge Dr. School bus into drive clipped corner of waiting vehicle. Well after school hours. SB. (not in picture – south on Rockridge)