

East Lake Elementary Parent-Teacher Organization Meeting

May 4, 2021

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Meeting Objectives

- * Discuss Safety Concerns Highway Safety in Dakota County
- * Share Traffic Engineering Principals
- * **Recognize Traffic Engineering Tradeoffs**
- * How 160th Street (County 46) & Diamond Path (County 33) Fits
- * Future intersection study (starting this year)

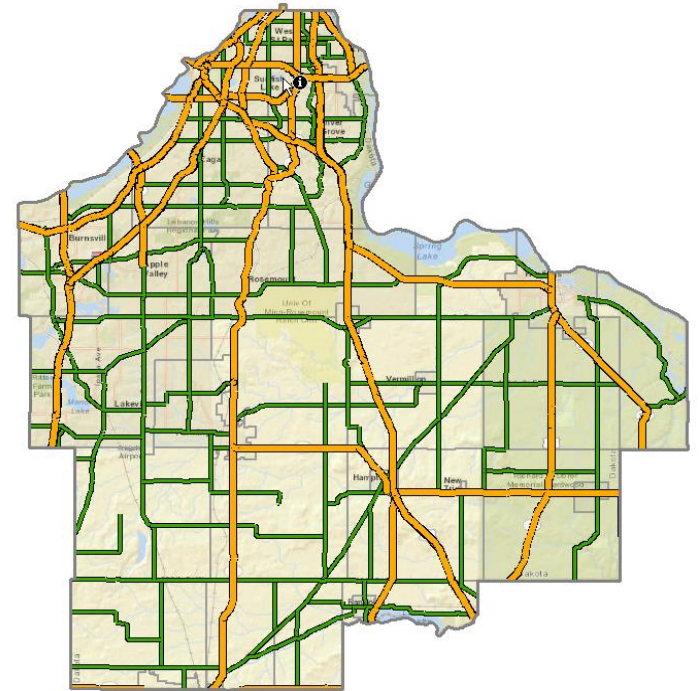
160th St & Diamond Path

Concerns We've Heard

- * Presented Information at PTO Dec. 2017
- * Difficulty Crossing 160th Street
- * Excessive speeds and heavy truck traffic
- * Safety prioritized – Planning for a study in 2021
- * Concern for recent crashes

County Highway System

- * 424 Miles of Road
 - * Just under 1500 Intersections
 - * Side Street stop - 1300
 - * Traffic Signal – 135
 - * All Way Stop - 36
 - * Roundabout - 7
- * 160th Street (County 46)
Minor Arterial & Cross County
Connection from I-35 to Hastings



Highway Safety is our Top Priority

- * Transportation Plan Overarching Principal
- * County Highway Safety Plan
- * Toward Zero Death Initiative (4 “E” approach)
- * County Board Strategic Measure
- * School Area Travel Safety Study



Traffic Engineering

Traffic Engineering is Risk Management

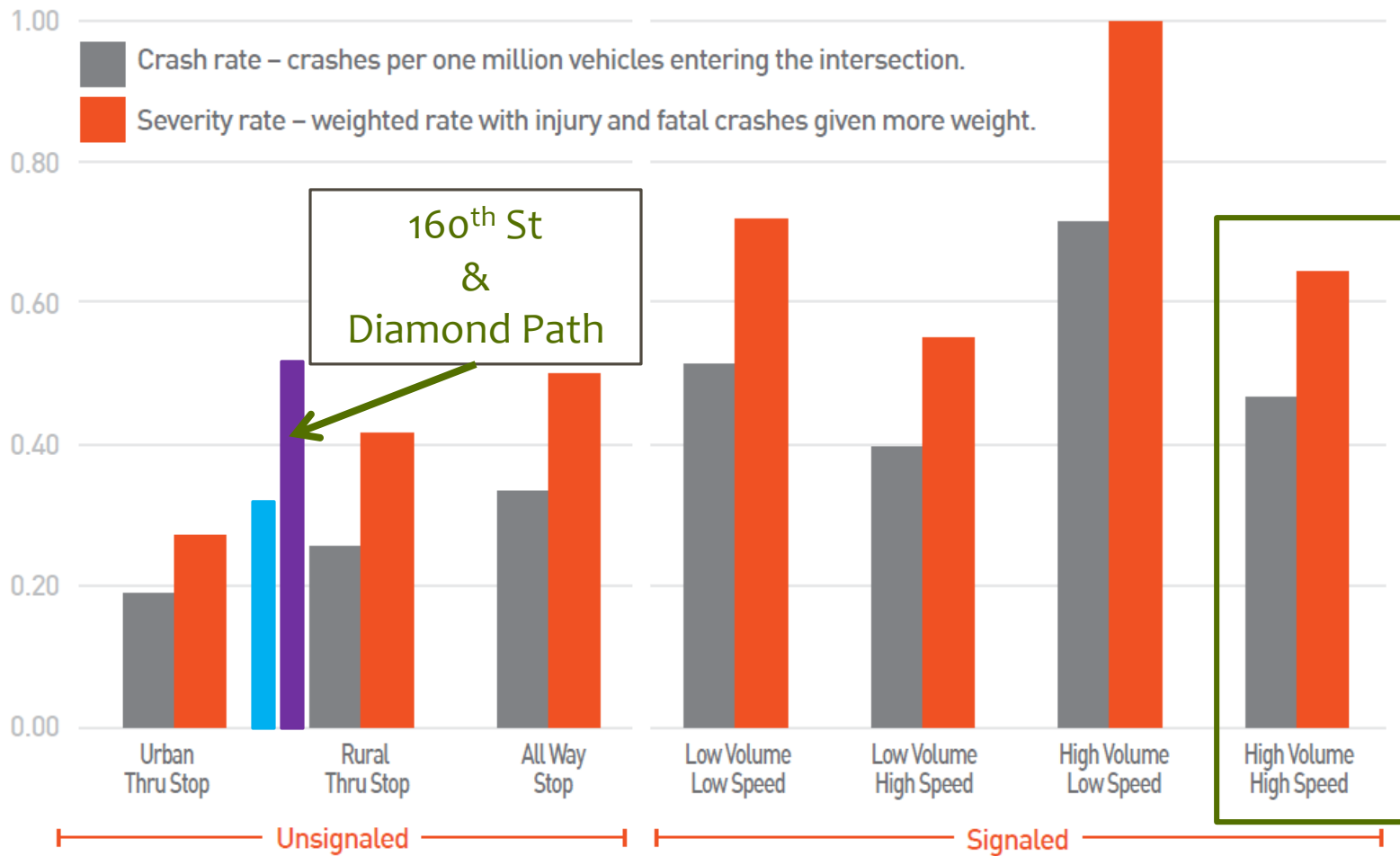
- * All Traffic Control has crash risk
- * Driver Error – Factor in Engineering Decision Making

Consider traffic control tradeoffs to minimize risk

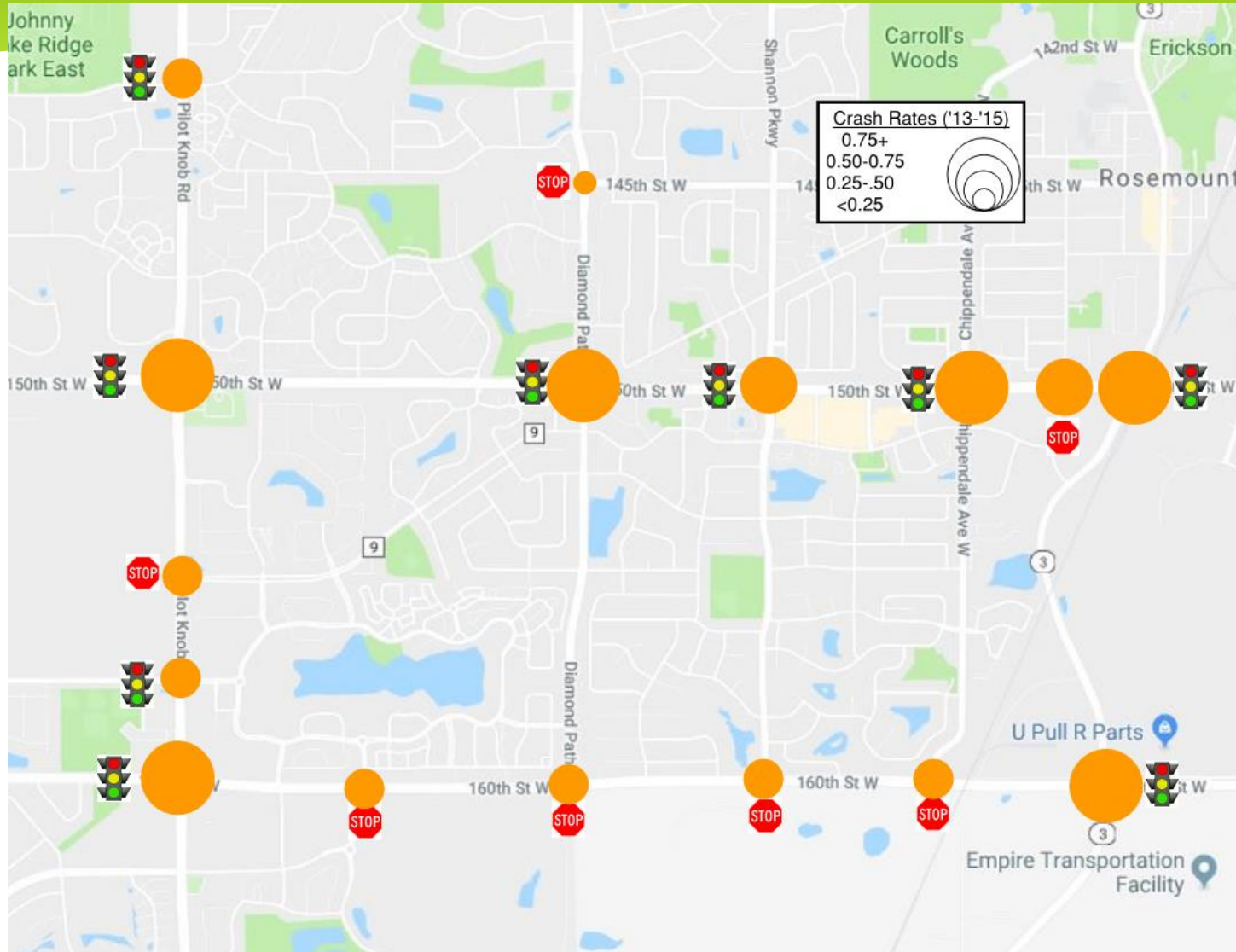
- * Assess Traffic Conditions
- * Traffic Control Change does not necessarily improve safety

Traffic Engineer Review is centered around reducing chance for Driver Error

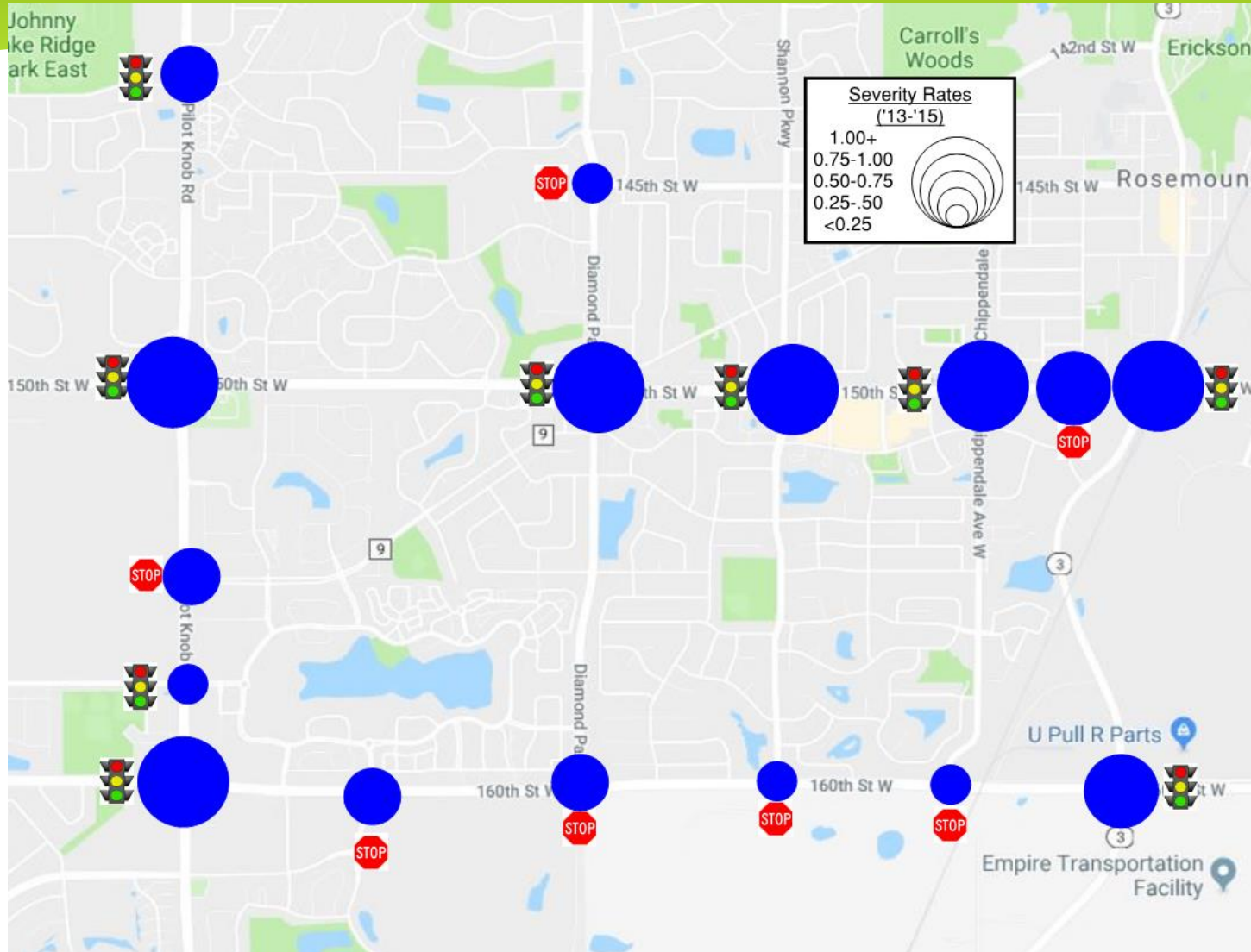
Crash Data By Traffic Control



Crash Rates – Area Intersections



Severity Rates – Area Intersections



Traffic Control Tradeoffs

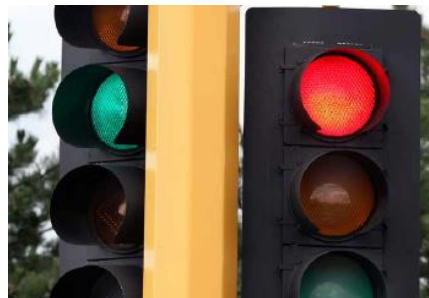
Side Stop

Used for

- * Unbalanced approach traffic
- * Maintain through road mobility
- * Lowest average crash and severity rates

Drawbacks

- * Side streets rely on gaps
- * Side street delay
- * Crash risk increases with traffic volumes



Traffic Signal

Used for

- * Consistently high volumes of traffic
- * Collector or arterial routes

Drawbacks

- * Additional decision making
- * Increased risk of crashes compared to other traffic control
- * Can create delay
- * Rarely improve safety

Traffic Control Tradeoffs

Reduced Conflict Intersections



Used for:

- Reducing vehicle conflict points
- Heavy mainline volume
- Increase safety

Drawbacks

- Indirect route to destination
- May increase time
- Consider location for U-turns



Traffic Engineering Review Process

- * Field Review
- * Crash/Safety Review (3 years / look for trends)
- * Traffic Volume and Delay

- * Evaluate traffic control
 - * Typically look at 8 hour needs
 - * Comparison System-wide / Standard Criteria

Intersection Monitoring 160th/Diamond Path

- * Traffic volumes counts
- * Crash data – majority are angle crashes
- * Assess against signal criteria
- * Field Observations
 - * Pedestrian using tunnel for crossing to/from school
 - * Before and after school (15 min)
 - * Many vehicles turn right and make a U-turn

Future Considerations / Next Steps

- * Diamond Path (Future County 33) to south – long term
- * Improve safety – under the current conditions with school and residential area traffic
- * Next Steps: Study this year – involving city partners and public engagement



Discussion