



TOWN OF  
**QUEEN CREEK**  
ARIZONA

# **Rittenhouse Rd and Village Loop South Traffic Signal**

Presentation to Town Council

Wednesday, January 18, 2012

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# Warrant Analysis

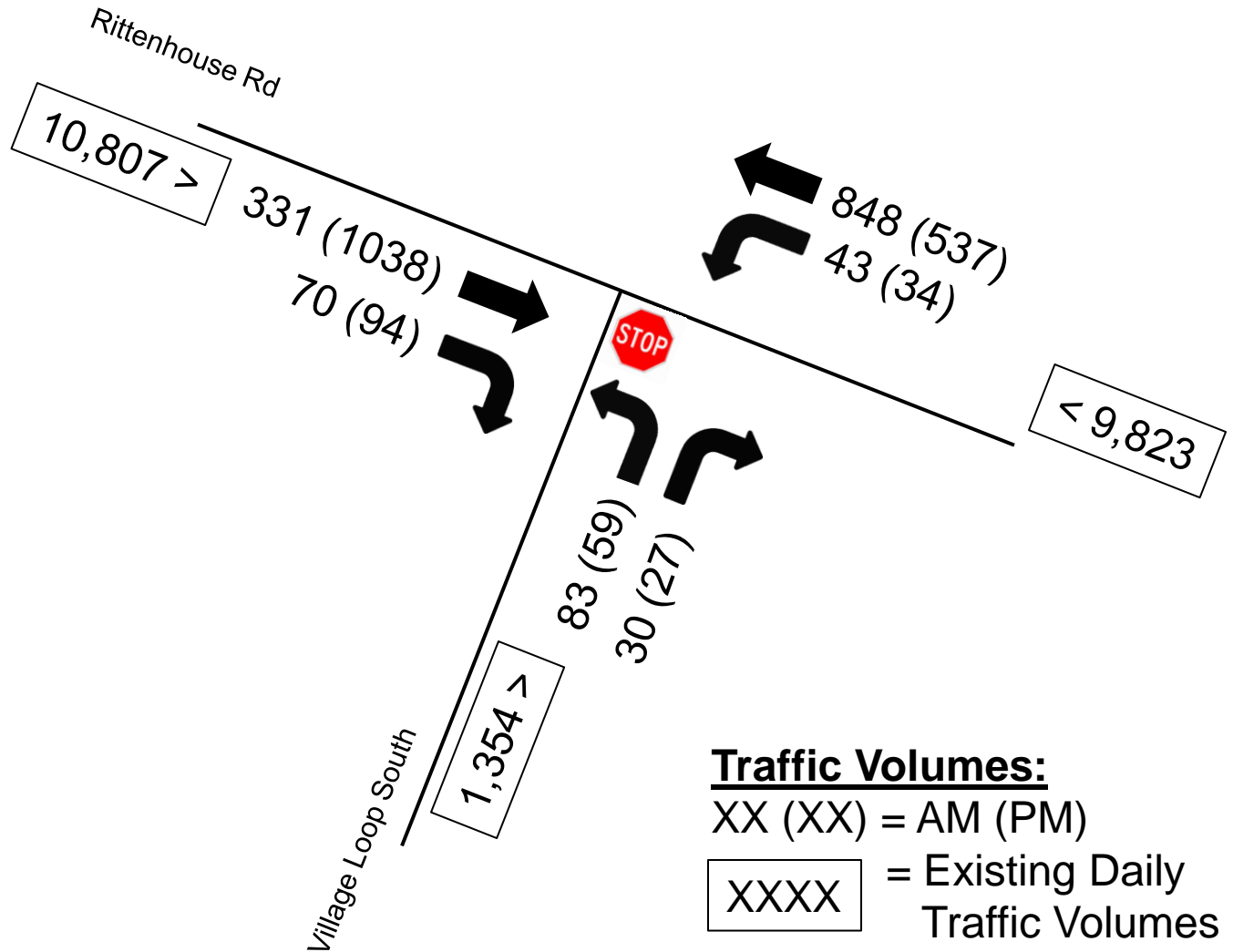
- Analyze existing traffic operations at the intersection (*vehicle counts*);
- Evaluate collision history and determine trends;
- Examine travel speeds on Rittenhouse Rd
- Conduct traffic signal warrant analysis;



# Warrant Analysis

- Traffic speed, volume and turning movement counts consisting of:
  - 24-hour speed and volume counts
  - Peak hour turning movement counts (7:00 am to 9:00 am and 4:00 pm to 6:00 pm)

# Existing Traffic Volumes





# Level of Service

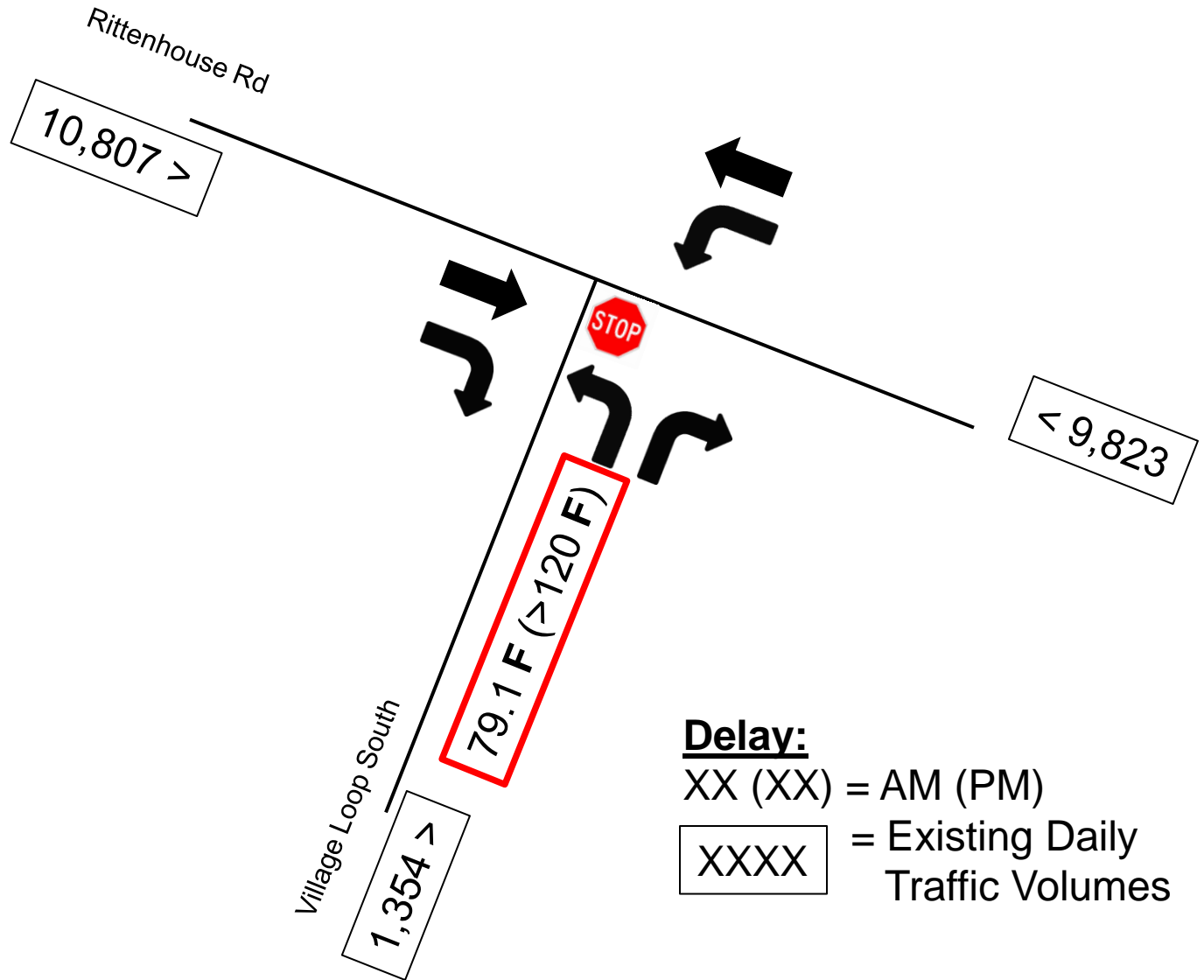
- Intersection efficiency is measured in Level of Service (LOS)

| Level of Service | Delay                             |
|------------------|-----------------------------------|
| <b>A</b>         | < 10 seconds                      |
| <b>B</b>         | > 10 and < 15 seconds per vehicle |
| <b>C</b>         | > 15 and < 25 seconds per vehicle |
| <b>D</b>         | > 25 and < 35 seconds per vehicle |
| <b>E</b>         | > 35 and < 50 seconds per vehicle |
| <b>F</b>         | > 50 seconds per vehicle          |

*LOS D typically considered adequate operation at both signalized and unsignalized intersections.*

# Existing Delay

- Competing traffic on Rittenhouse Rd throughout the day for 15 of 24 Hours
- Total of 4 reported collisions past 5 years



# Intersection Example

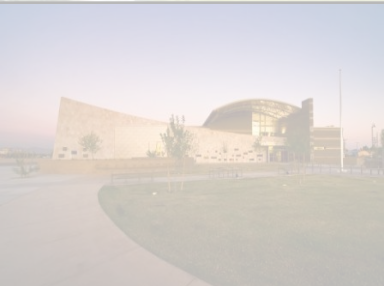




# Schedule

- Notice to Proceed end of January
- Anticipated Completion / Turn-on in April





Questions?