



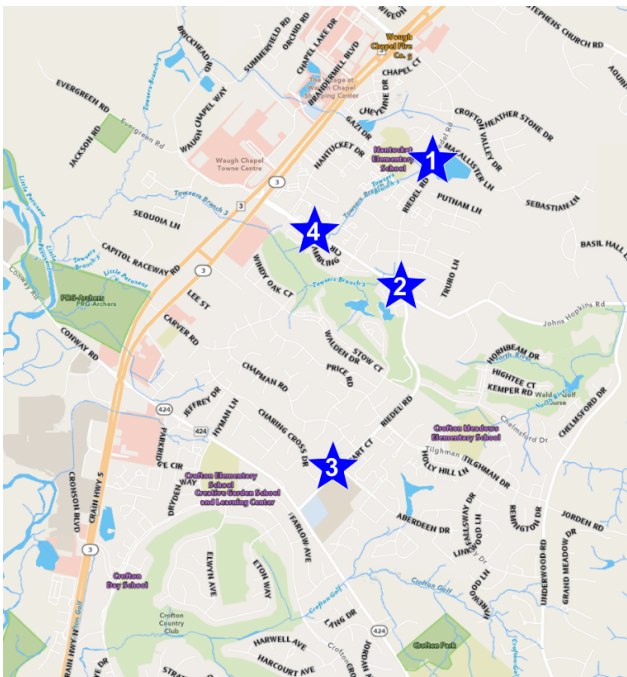
Karen Henry, Director

TECHNICAL MEMORANDUM

TO: File
FROM: Erik Terry, Engineer III, Traffic Engineering Division
SUBJECT: Riedel Rd & Johns Hopkins Rd - Data Collection Summary
DATE: January 1, 2024

Data Collection

Statrak radar devices were set at various locations along Riedel Road and Johns Hopkins Road from December 11, 2023 through December 17, 2023. Vehicle speeds, traffic volumes and vehicle class data was collected and averaged for a 7 day period to determine the median speed (50%), the prevailing speed (85%), average daily traffic (ADT) and the percentage of small, medium and large vehicles traveling the subject roads.



Data Collection Locations

1. Riedel Rd south of Macallister Ln
2. Riedel Rd between Johns Hopkins Rd
3. Riedel Rd south of Aberdeen Dr
4. Johns Hopkins Rd west of Riedel Rd

Speed & Volume Data Summary Table








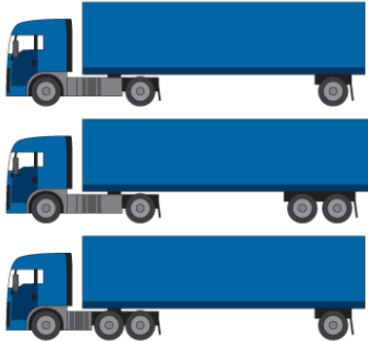





Year	Method	Location	Posted Speed Limit (mph)	Median Speed - 50% (mph)	Prevailing Speed - 85% (mph)	Average Daily Traffic (veh/day)
2023	Statrak	<i>Location 1</i> - Riedel Rd south of Macallister Ln	35	37	41	10,861
2023	Statrak	<i>Location 2</i> - Riedel Rd between Johns Hopkins Rd	35	34	38	16,164
2023	Statrak	<i>Location 3</i> - Riedel Rd south of Aberdeen Dr	35	34	39	15,426
2023	Statrak	<i>Location 4</i> - Johns Hopkins Rd west of Riedel Rd	35	39	44	8,456

Notes: The median speed is the speed below which 50% of motorists travel. Similarly, the prevailing speed is the speed at below which 85% of motorists travel.

Vehicle Class Data Summary Table

Location	% Small (class 1)	% Medium (class 2-3)	% Large (class 4-12)	Average Daily Traffic (veh/day)
<i>Location 1</i> - Riedel Rd south of Macallister Ln	.1	98.1	1.8	10,861
<i>Location 2</i> - Riedel Rd between Johns Hopkins Rd	.8	97.2	2	16,164
<i>Location 3</i> - Riedel Rd south of Aberdeen Dr	.3	97.1	2	15,426
<i>Location 4</i> - Johns Hopkins Rd west of Riedel Rd	1	98	1	8,456

Appendix

FHWA Vehicle Classifications			
<p>1. Motorcycles 2 axles, 2 or 3 tires</p> 	<p>2. Passenger Cars 2 axles, can have 1- or 2-axle trailers</p> 	<p>3. Pickups, Panels, Vans 2 axles, 4-tire single units Can have 1 or 2 axle trailers</p> 	<p>4. Buses 2 or 3 axles, full length</p> 
<p>5. Single Unit 2-Axle Trucks 2 axles, 6 tires (dual rear tires), single-unit</p> 	<p>6. Single Unit 3-Axle Trucks 3 axles, single unit</p> 	<p>7. Single Unit 4 or More-Axle Trucks 4 or more axles, single unit</p> 	<p>8. Single Trailer 3- or 4-Axle Trucks 3 or 4 axles, single trailer</p> 
<p>9. Single Trailer 5-Axle Trucks 5 axles, single trailer</p> 	<p>10. Single Trailer 6 or More-Axle Trucks 6 or more axles, single trailer</p> 		<p>12. Multi-Trailer 6-Axle Trucks 6 axles, multiple trailers</p> 
<p>11. Multi-Trailer 5 or Less-Axle Trucks 5 or less axles, multiple trailers</p> 		<p>13. Multi-Trailer 7 or More-Axle Trucks 7 or more axles, multiple trailers</p> 	



Start: 2023-12-11
End: 2023-12-17
Times: 0:00:00-23:59:59

Speed Range: 1-150 mph
Violation Threshold: 10
Lanes Included: 1, 2

Speed

Speed Limit	35 mph
85th Percentile Speed	41 mph
50th Percentile Speed	37 mph
Average Speed	36.7 mph
Pace Speed Range (10 mph)	32 - 42 mph
Max Speed	77 mph
Min Speed	12 mph

Vehicles

Total Vehicles	72555 counts
85th Percentile Vehicles	64500 counts

Volumes

	Time	5 Day (Mon-Fri)	7 Day (Sun-Sat)
ADT		10861	10365
AM Peak	8:00 - 9:00	824	699
PM Peak	17:00 - 18:00	968	875
	Over Threshold	% Violators	Avg Violator Speed
Sunday	139	1.9	48.1
Monday	174	1.7	47.7
Tuesday	196	1.8	48.0
Wednesday	238	2.2	48.2
Thursday	216	2.0	48.2
Friday	240	2.0	48.0
Saturday	263	2.4	48.2

Class Counts

	Number	%
Small (Class 1)	107	0.1
Medium (Class 2-3)	71159	98.1
Large (Class 4-12)	1289	1.8



Start: 2023-12-11
End: 2023-12-17
Times: 0:00:00-23:59:59

Speed Range: 1-150 mph
Violation Threshold: 10
Lanes Included: 1, 2

Speed

Speed Limit	35 mph
85th Percentile Speed	38 mph
50th Percentile Speed	34 mph
Average Speed	33.5 mph
Pace Speed Range (10 mph)	29 - 39 mph
Max Speed	63 mph
Min Speed	5 mph

Vehicles

Total Vehicles	109263 counts
85th Percentile Vehicles	98335 counts

Volumes

	Time	5 Day (Mon-Fri)	7 Day (Sun-Sat)
ADT		16164	15609
AM Peak	8:00 - 9:00	1164	997
PM Peak	16:00 - 17:00	1426	1337
	Over Threshold	% Violators	Avg Violator Speed
Sunday	61	0.5	48.9
Monday	43	0.3	47.6
Tuesday	79	0.5	47.8
Wednesday	82	0.5	48.3
Thursday	74	0.5	48.3
Friday	75	0.4	48.6
Saturday	84	0.5	47.8

Class Counts

	Number	%
Small (Class 1)	917	0.8
Medium (Class 2-3)	106211	97.2
Large (Class 4-12)	2135	2.0



Start: 2023-12-08
End: 2023-12-15
Times: 0:00:00-23:59:59

Speed Range: 1-150 mph
Violation Threshold: 10
Lanes Included: 1, 2

Speed

Speed Limit	35 mph
85th Percentile Speed	39 mph
50th Percentile Speed	34 mph
Average Speed	34.0 mph
Pace Speed Range (10 mph)	29 - 39 mph
Max Speed	74 mph
Min Speed	12 mph

Vehicles

Total Vehicles	117551 counts
85th Percentile Vehicles	102762 counts

Volumes

	Time	5 Day (Mon-Fri)	7 Day (Sun-Sat)
ADT		15426	14693
AM Peak	8:00 - 9:00	1078	961
PM Peak	16:00 - 17:00	1270	1200

	Over Threshold	% Violators	Avg Violator Speed
Sunday	117	1.1	48.0
Monday	114	0.8	48.2
Tuesday	169	1.1	48.4
Wednesday	208	1.3	47.9
Thursday	178	1.1	48.1
Friday	401	1.2	48.2
Saturday	207	1.4	48.1

Class Counts

	Number	%
Small (Class 1)	362	0.3
Medium (Class 2-3)	114797	97.7
Large (Class 4-12)	2392	2.0



Start: 2023-12-11
End: 2023-12-17
Times: 0:00:00-23:59:59

Speed Range: 1-150 mph
Violation Threshold: 10
Lanes Included: 1, 2

Speed

Speed Limit	35 mph
85th Percentile Speed	44 mph
50th Percentile Speed	38 mph
Average Speed	38.8 mph
Pace Speed Range (10 mph)	33 - 43 mph
Max Speed	88 mph
Min Speed	12 mph

Vehicles

Total Vehicles	59005 counts
85th Percentile Vehicles	51901 counts

Volumes

	Time	5 Day (Mon-Fri)	7 Day (Sun-Sat)
ADT		8456	8429
AM Peak	11:00 - 12:00	506	552
PM Peak	17:00 - 18:00	863	786
	Over Threshold	% Violators	Avg Violator Speed
Sunday	550	7.5	48.8
Monday	449	8.5	49.3
Tuesday	794	9.2	49.1
Wednesday	819	9.2	49.2
Thursday	867	9.6	49.1
Friday	930	9.0	49.4
Saturday	898	9.6	49.0

Class Counts

	Number	%
Small (Class 1)	608	1.0
Medium (Class 2-3)	57801	98.0
Large (Class 4-12)	596	1.0