

**St. Paul Avenue and North Street Corridor Two-Way Street
Conversion Study
Scope of Services
June 29, 2016**

As requested, the following study task descriptions and level of effort details are summarized from our study proposal dated June 17, 2016. If you have any questions on the following information, please do not hesitate to contact us.

SCOPE OF SERVICES

Task One: Traffic Forecasting and Intersection Distribution

- a. Ayres Associates will assemble 24-hour street segment and peak hour intersection turning movement traffic count data, traffic signal timings and intersection geometrics provided by the City of Waukesha for the ten study intersections.
(2 hours)
- b. Ayres Associates will develop year 2016 and 2026 24-hour traffic forecasts based on historic traffic growth trend count data provided by the City of Waukesha for the study street segments. The year 2026 traffic projection will be adjusted based on SEWRPC projected traffic impacts associated with construction of the West Waukesha Bypass.
(4 hours)
- c. Ayres Associates will develop a balanced year 2016 existing morning and evening peak hour intersection turning movement trip distribution summary for the study intersections.
(8 hours)
- d. Ayres Associates will develop projected year 2026 existing intersection turning movement volumes based on the existing balanced morning and evening peak hour intersection turning movement volumes from Task 1c.
(4 hours)
- e. Ayres Associates will reassign the year 2026 one-way morning and evening peak hour traffic projection for the ten study intersections to represent year 2026 two-way intersection turning movement volumes.
(12 hours)
- f. Ayres Associates will redistribute the year 2026 one- and two-way peak hour intersection turning movement volumes to represent traffic conditions under a set of three alternative sub-segment street operation scenarios for the St. Paul Avenue/North Street corridor that involve a combination one-way/two-way operation for the following study street segments:
 - i. Wisconsin Avenue to Madison Street
 - ii. Madison Street to Barstow Avenue
 - iii. Barstow Avenue to Albert Street**(24 hours)**

Total Task 1 = 54 Hours

Task 2: St. Paul Avenue/North Street Corridor Traffic Analysis

- a. Ayres Associates will conduct a one-way year 2026 morning and evening peak hour traffic operation analysis of the study intersections utilizing the intersection capacity methodology documented in the TRB Year 2010 Highway Capacity Manual. This analysis will include development of a SYNCHRO traffic progression model and analysis.
(24 hours)
- b. Ayres Associates will conduct a two-way year 2026 morning and evening peak hour traffic operation analysis of the study intersections utilizing the intersection capacity methodology documented in the TRB Year 2010 Highway Capacity Manual. This analysis will include development of a SYNCHRO traffic progression model and analysis.
(20 hours)
- c. Ayres Associates will analyze three basic year 2026 alternate sub-segment scenarios for the conversion of St. Paul Avenue/North Street to a two-way operation based on the following segments along the corridor:
 - i. Wisconsin Avenue to Madison Street
 - ii. Madison Street to Barstow Avenue
 - iii. Barstow Avenue to Albert Street**(40 hours)**
- d. This analysis includes identification of intersection geometric and traffic control improvements required to facilitate two-way operation of the ten St. Paul Avenue/North Street corridor study intersections.
(7 hours)
- e. Ayres Associates will prepare an opinion on the estimated street improvement costs associated with the conversion of St. Paul Avenue/North Street to two-way operation between South Washington Avenue and Moreland Boulevard for all three alternatives presented (no-build, two-way conversion, two-way segmented conversion).
(24 hours)

Total Task 2 = 115 Hours

Task 3: Report

- a. Ayres Associates will prepare a draft report summarizing the study procedure and findings for review and comment by the City of Waukesha.
(44 hours)
- b. A final report will be submitted to the City of Waukesha upon receipt of their comments on the draft report.
(22 hours)

Total Task 3 = 66 Hours

Task 4: Meetings

Ayres Associates will attend up to three study progress meetings to discuss study process and findings with the City of Waukesha staff and one City Common Council meeting to discuss the final report.

(16 hours)

Total project labor is 251 hours

Schedule

- a. Ayres Associates will submit a draft report for review and comment by September 15, 2016.
- b. Ayres Associates will submit a final report within 2 weeks of receipt of draft report review comments from the City of Waukesha.

Compensation

Compensation for the study shall be a lump sum amount of Twenty-Six Thousand Three Hundred dollars (\$ 26,300.00).

**St. Paul Avenue and North Street Corridor Two-Way Street
Conversion Study
Scope of Services – Labor Summary
July 6, 2016**

As requested, the following general study task descriptions and labor distribution are summarized from our study Scope of Services dated June 29, 2016. If you have any questions on the following information, please do not hesitate to contact us.

SCOPE OF SERVICES

Task	K.Voigt	J.Davis	T. Hickman	A. Motl	Total
Task One: Traffic Forecasting and Intersection Distribution					
a.	0	0	0	2	2
b.	0	1	3	0	4
c.	0	1	1	6	8
d.	0	1	1	2	4
e.	2	2	2	6	12
f.	0	1	8	15	24
subtotal	2	6	15	31	54
Task 2: St. Paul Avenue/North Street Corridor Traffic Analysis					
a.	1	1	6	16	24
b.	1	1	2	16	20
c.	1	3	12	24	40
d.	0	2	5	0	7
e.	0	2	22	0	24
subtotal	3	9	47	56	115
Task 3: Report					
a.	3	2	8	36	49
b.	0	1	4	12	17
subtotal	3	3	12	48	66
Task 4: Meetings					
	0	8	8	0	16
Total Labor	8	26	82	135	251