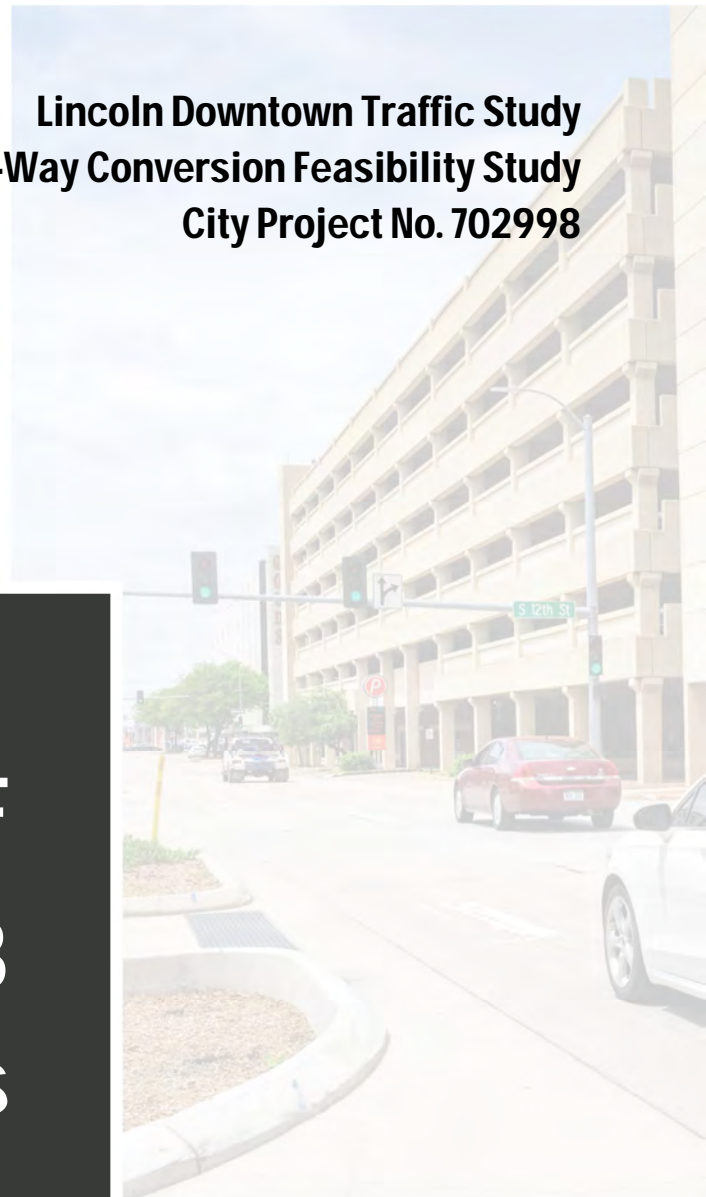
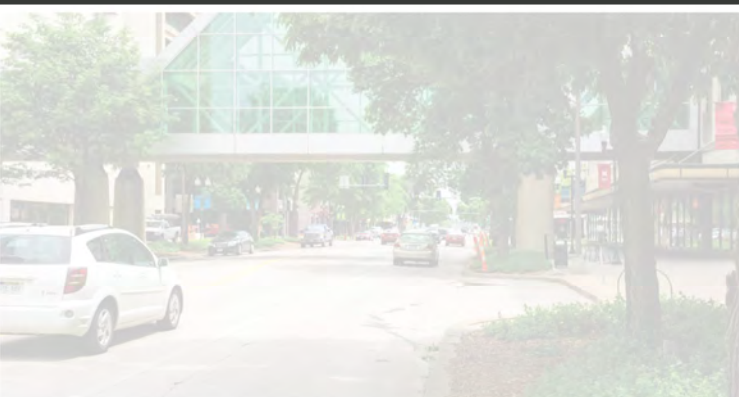




**Lincoln Downtown Traffic Study
Two-Way Conversion Feasibility Study
City Project No. 702998**



**Appendix F
Scenario 3
Signal Warrants**



SCENARIO 3				
Intersection	Assumed Warrant 1	Warrant 3		Signalization Assumption
	Satisfied? (Y/N)	Satisfied? (Y/N)		
		AM	PM	
N. 9th St & Q St	N	Y	Y	Maintain
N. 9th St & P St	Y	Y	Y	Maintain
N. 10th St & Q St	Y	Y	Y	Maintain
N. 10th St & P St	Y	Y	Y	Maintain
N. 12th St & Q St	N	N	N	Maintain
N. 12th St & P St	N	N	N	Maintain
N. 13th St & Q St	N	N	N	Maintain
Centennial Mall & P St	N	N	N	Maintain
N. 16th St & Q St	N	N	Y	Maintain
N. 16th St & P St	N	N	N	Maintain
N. 16th St & O St	Y	Y	Y	Maintain
N. 16th St & L St	Y	Y	Y	Maintain
N. 16th St & K St	Y	Y	Y	Maintain
N. 16th St & J St (Ped)	N	N	N	Maintain
N. 16th St & G St	N	N	N	Maintain
N. 16th St & D St	N	N	N	Maintain
N. 16th St & A St	Y	N	Y	Maintain
N. 16th St & South St	Y	Y	Y	Maintain
N. 17th St & Q St	N	Y	N	Maintain
N. 17th St & P St	Y	N	Y	Maintain
N. 17th St & O St	Y	Y	Y	Maintain
N. 17th St & L St	Y	Y	Y	Maintain
N. 17th St & K St	Y	Y	Y	Maintain
N. 17th St & J St (Ped)	N	N	N	Maintain
N. 17th St & G St	N	N	N	Maintain
N. 17th St & D St	N	N	N	Maintain
N. 17th St & A St	Y	Y	Y	Maintain
N. 17th St & Washington St	N	N	N	Maintain
N. 17th St & South St	Y	Y	Y	Maintain
Antelope Valley Pkwy & Q St	Y	Y	Y	Maintain
Antelope Valley Pkwy & P St	Y	Y	Y	Maintain

TRAFFIC SIGNAL WARRANT SUMMARY

City: **Lincoln**
County:
District:

Engineer: **John P Diediker**
Date: **January 10, 2020**

Major Street: **9th St**
Minor Street: **Q St**

Lanes: **5** Major Approach Speed: **25**
Lanes: **1** Minor Approach Speed: **25**

MUTCD Electronic Reference to Chapter 4: <http://mutcd.fhwa.dot.gov/pdfs/2009r1r2/part4.pdf>

Volume Level Criteria

1. Is the posted speed or 85th-percentile of major street > 40 mph (70 km/h)?
2. Is the intersection in a built-up area of an isolated community with a population < 10,000?

☐ Yes ☒ No

☐ Yes ☒ No

"70%" volume level **may** be used if Question 1 **or** 2 above is answered "Yes"

☐ 70% ☒ 100%

WARRANT 3 - PEAK HOUR

If all three criteria are fulfilled **or** the plotted point lies above the appropriate line, then the warrant is satisfied.

Applicable: ☒ Yes ☐ No

Satisfied: ☒ Yes ☐ No

Unusual condition justifying use of warrant:

Record hour when criteria are fulfilled and the corresponding delay or volume in boxes provided.

Peak Hour 100% Volume		
Time	Major Vol.	Minor Vol.
AM	2610	353

Peak Hour 70% Volume		
Time	Major Vol.	Minor Vol.

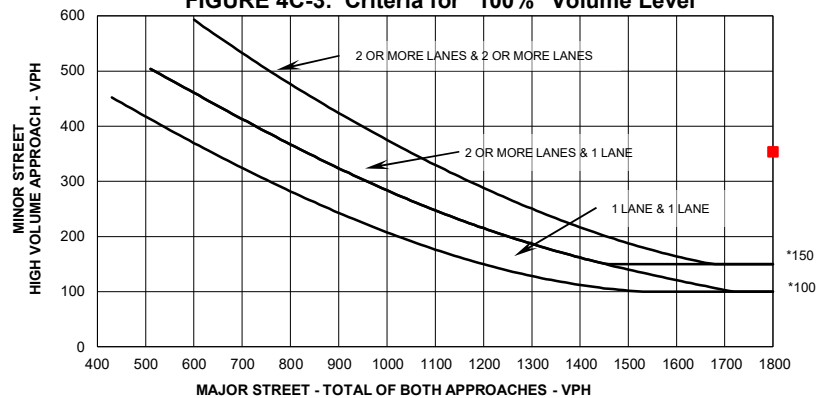
Criteria

1. Delay on Minor Approach *(vehicle-hours)		
Approach Lanes	1	2
Delay Criteria*	4.0	5.0
Delay*		
Fulfilled?:	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No

2. Volume on Minor Approach One-Direction *(vehicles per hour)		
Approach Lanes	1	2
Volume Criteria*	100	150
Volume*		
Fulfilled?:	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No

3. Total Intersection Entering Volume *(vehicles per hour)		
No. of Approaches	3	4
Volume Criteria*	650	800
Volume*		
Fulfilled?:	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No

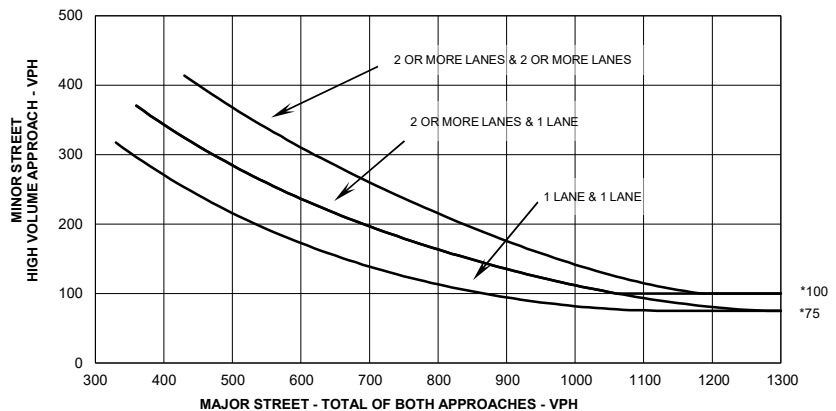
Plot volume combination on the applicable figure below.

FIGURE 4C-3: Criteria for "100%" Volume Level

* Note: 150 vph applies as the lower threshold volume for a minor street approach with two or more lanes and 100 vph applies as the lower threshold volume threshold for a minor street approach with one lane.

FIGURE 4C-4: Criteria for "70%" Volume Level

(Community Less than 10,000 population or above 70 km/hr (40 mph) on Major Street)



* Note: 100 vph applies as the lower threshold volume for a minor street approach with two or more lanes and 75 vph applies as the lower threshold volume threshold for a minor street approach with one lane.

TRAFFIC SIGNAL WARRANT SUMMARY

City: **Lincoln**
County:
District:

Engineer: **John P Diediker**
Date: **January 13, 2020**

Major Street: **9th St**
Minor Street: **Q St**

Lanes: **5** Major Approach Speed: **25**
Lanes: **1** Minor Approach Speed: **25**

MUTCD Electronic Reference to Chapter 4: <http://mutcd.fhwa.dot.gov/pdfs/2009r1r2/part4.pdf>

Volume Level Criteria

1. Is the posted speed or 85th-percentile of major street > 40 mph (70 km/h)?
2. Is the intersection in a built-up area of an isolated community with a population < 10,000?

☐ Yes ☒ No

☐ Yes ☒ No

"70%" volume level **may** be used if Question 1 **or** 2 above is answered "Yes"

☐ 70% ☒ 100%

WARRANT 3 - PEAK HOUR

If all three criteria are fulfilled **or** the plotted point lies above the appropriate line, then the warrant is satisfied.

Applicable: ☒ Yes ☐ No

Satisfied: ☒ Yes ☐ No

Unusual condition justifying use of warrant:

Record hour when criteria are fulfilled and the corresponding delay or volume in boxes provided.

Peak Hour 100% Volume		
Time	Major Vol.	Minor Vol.
PM	2050	526

Peak Hour 70% Volume		
Time	Major Vol.	Minor Vol.

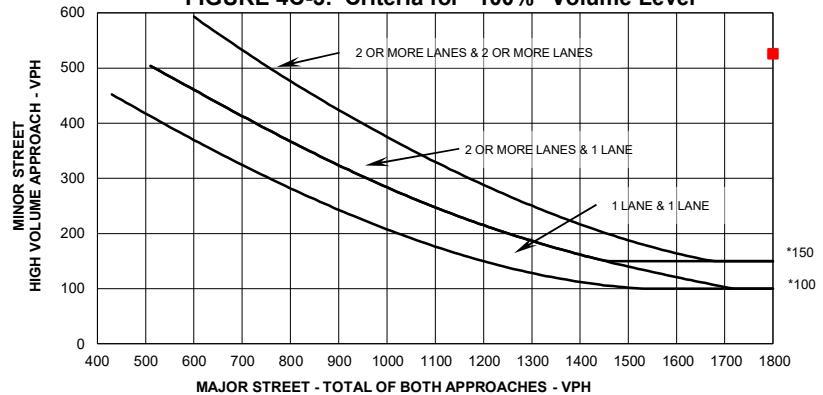
Criteria

1. Delay on Minor Approach *(vehicle-hours)		
Approach Lanes	1	2
Delay Criteria*	4.0	5.0
Delay*		
Fulfilled?:	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No

2. Volume on Minor Approach One-Direction *(vehicles per hour)		
Approach Lanes	1	2
Volume Criteria*	100	150
Volume*		
Fulfilled?:	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No

3. Total Intersection Entering Volume *(vehicles per hour)		
No. of Approaches	3	4
Volume Criteria*	650	800
Volume*		
Fulfilled?:	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No

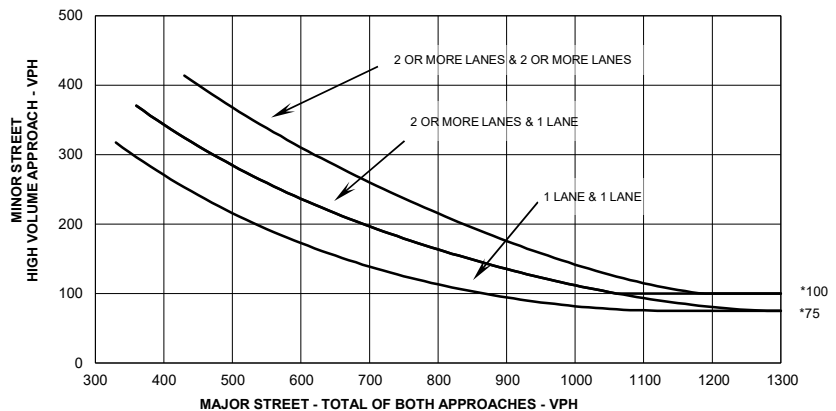
Plot volume combination on the applicable figure below.

FIGURE 4C-3: Criteria for "100%" Volume Level

* Note: 150 vph applies as the lower threshold volume for a minor street approach with two or more lanes and 100 vph applies as the lower threshold volume threshold for a minor street approach with one lane.

FIGURE 4C-4: Criteria for "70%" Volume Level

(Community Less than 10,000 population or above 70 km/hr (40 mph) on Major Street)



* Note: 100 vph applies as the lower threshold volume for a minor street approach with two or more lanes and 75 vph applies as the lower threshold volume threshold for a minor street approach with one lane.

TRAFFIC SIGNAL WARRANT SUMMARY

City: **Lincoln**
County:
District:

Engineer: **John P Diediker**
Date: **January 17, 2020**

Major Street: **9th St**
Minor Street: **P St**

Lanes: **5** Major Approach Speed: **25**
Lanes: **2** Minor Approach Speed: **25**

MUTCD Electronic Reference to Chapter 4: <http://mutcd.fhwa.dot.gov/pdfs/2009r1r2/part4.pdf>

Volume Level Criteria

1. Is the posted speed or 85th-percentile of major street > 40 mph (70 km/h)?
2. Is the intersection in a built-up area of an isolated community with a population < 10,000?

☐ Yes ☒ No

☐ Yes ☒ No

"70%" volume level **may** be used if Question 1 **or** 2 above is answered "Yes"

☐ 70% ☒ 100%

WARRANT 3 - PEAK HOUR

If all three criteria are fulfilled **or** the plotted point lies above the appropriate line, then the warrant is satisfied.

Applicable: ☒ Yes ☐ No

Satisfied: ☒ Yes ☐ No

Unusual condition justifying use of warrant:

Record hour when criteria are fulfilled and the corresponding delay or volume in boxes provided.

Peak Hour 100% Volume		
Time	Major Vol.	Minor Vol.
AM	2839	178

Peak Hour 70% Volume		
Time	Major Vol.	Minor Vol.

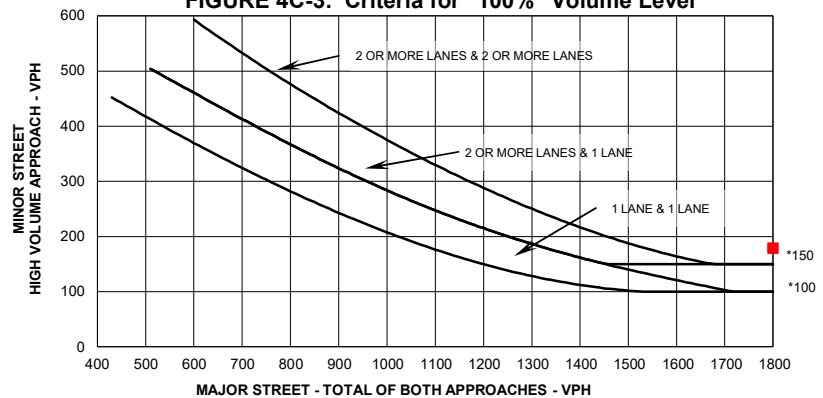
Criteria

1. Delay on Minor Approach *(vehicle-hours)		
Approach Lanes	1	2
Delay Criteria*	4.0	5.0
Delay*		
Fulfilled?:	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No

2. Volume on Minor Approach One-Direction *(vehicles per hour)		
Approach Lanes	1	2
Volume Criteria*	100	150
Volume*		
Fulfilled?:	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No

3. Total Intersection Entering Volume *(vehicles per hour)		
No. of Approaches	3	4
Volume Criteria*	650	800
Volume*		
Fulfilled?:	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No

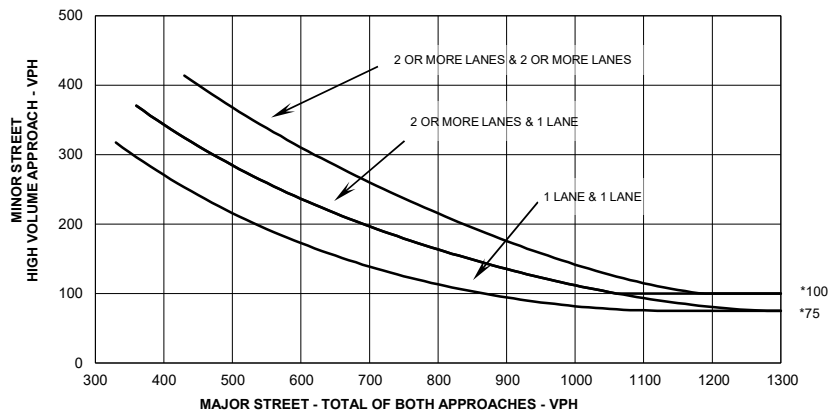
Plot volume combination on the applicable figure below.

FIGURE 4C-3: Criteria for "100%" Volume Level

* Note: 150 vph applies as the lower threshold volume for a minor street approach with two or more lanes and 100 vph applies as the lower threshold volume threshold for a minor street approach with one lane.

FIGURE 4C-4: Criteria for "70%" Volume Level

(Community Less than 10,000 population or above 70 km/hr (40 mph) on Major Street)



* Note: 100 vph applies as the lower threshold volume for a minor street approach with two or more lanes and 75 vph applies as the lower threshold volume threshold for a minor street approach with one lane.

TRAFFIC SIGNAL WARRANT SUMMARY

City: **Lincoln**
County:
District:

Engineer: **John P Diediker**
Date: **January 17, 2020**

Major Street: **9th St**
Minor Street: **P St**

Lanes: **5** Major Approach Speed: **25**
Lanes: **2** Minor Approach Speed: **25**

MUTCD Electronic Reference to Chapter 4: <http://mutcd.fhwa.dot.gov/pdfs/2009r1r2/part4.pdf>

Volume Level Criteria

1. Is the posted speed or 85th-percentile of major street > 40 mph (70 km/h)?
2. Is the intersection in a built-up area of an isolated community with a population < 10,000?

☐ Yes ☒ No

☐ Yes ☒ No

"70%" volume level **may** be used if Question 1 **or** 2 above is answered "Yes"

☐ 70% ☒ 100%

WARRANT 3 - PEAK HOUR

If all three criteria are fulfilled **or** the plotted point lies above the appropriate line, then the warrant is satisfied.

Applicable: ☒ Yes ☐ No

Satisfied: ☒ Yes ☐ No

Unusual condition justifying use of warrant:

Record hour when criteria are fulfilled and the corresponding delay or volume in boxes provided.

Peak Hour 100% Volume		
Time	Major Vol.	Minor Vol.
PM	2717	357

Peak Hour 70% Volume		
Time	Major Vol.	Minor Vol.

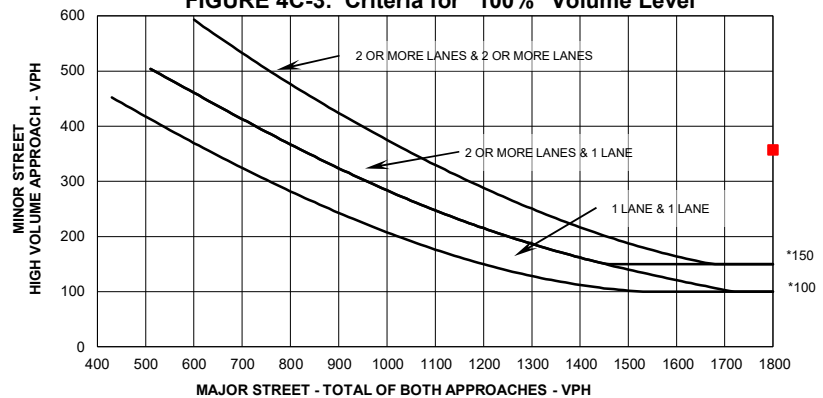
Criteria

1. Delay on Minor Approach *(vehicle-hours)		
Approach Lanes	1	2
Delay Criteria*	4.0	5.0
Delay*		
Fulfilled?:	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No

2. Volume on Minor Approach One-Direction *(vehicles per hour)		
Approach Lanes	1	2
Volume Criteria*	100	150
Volume*		
Fulfilled?:	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No

3. Total Intersection Entering Volume *(vehicles per hour)		
No. of Approaches	3	4
Volume Criteria*	650	800
Volume*		
Fulfilled?:	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No

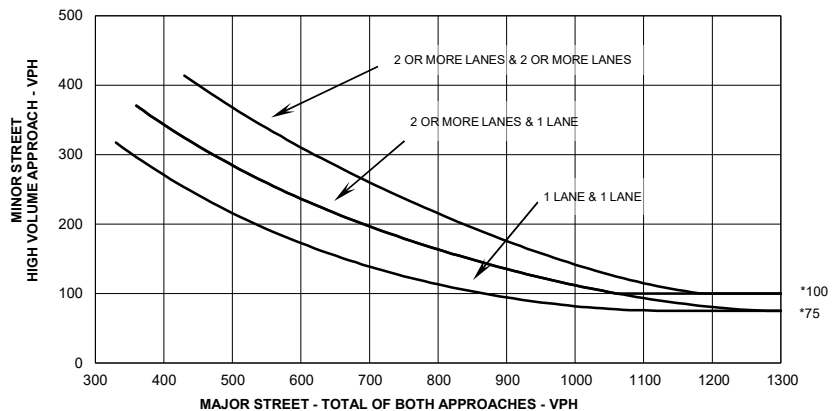
Plot volume combination on the applicable figure below.

FIGURE 4C-3: Criteria for "100%" Volume Level

* Note: 150 vph applies as the lower threshold volume for a minor street approach with two or more lanes and 100 vph applies as the lower threshold volume threshold for a minor street approach with one lane.

FIGURE 4C-4: Criteria for "70%" Volume Level

(Community Less than 10,000 population or above 70 km/hr (40 mph) on Major Street)



* Note: 100 vph applies as the lower threshold volume for a minor street approach with two or more lanes and 75 vph applies as the lower threshold volume threshold for a minor street approach with one lane.

TRAFFIC SIGNAL WARRANT SUMMARY

City: **Lincoln**
County:
District:

Engineer: **John P Diediker**
Date: **January 17, 2020**

Major Street: **10th St**
Minor Street: **Q St**

Lanes: **5** Major Approach Speed: **25**
Lanes: **4** Minor Approach Speed: **25**

MUTCD Electronic Reference to Chapter 4: <http://mutcd.fhwa.dot.gov/pdfs/2009r1r2/part4.pdf>

Volume Level Criteria

1. Is the posted speed or 85th-percentile of major street > 40 mph (70 km/h)?
2. Is the intersection in a built-up area of an isolated community with a population < 10,000?

☐ Yes ☒ No

☐ Yes ☒ No

"70%" volume level **may** be used if Question 1 **or** 2 above is answered "Yes"

☐ 70% ☒ 100%

WARRANT 3 - PEAK HOUR

If all three criteria are fulfilled **or** the plotted point lies above the appropriate line, then the warrant is satisfied.

Applicable: ☒ Yes ☐ No

Satisfied: ☒ Yes ☐ No

Unusual condition justifying use of warrant:

Record hour when criteria are fulfilled and the corresponding delay or volume in boxes provided.

Peak Hour 100% Volume		
Time	Major Vol.	Minor Vol.
AM	2129	604

Peak Hour 70% Volume		
Time	Major Vol.	Minor Vol.

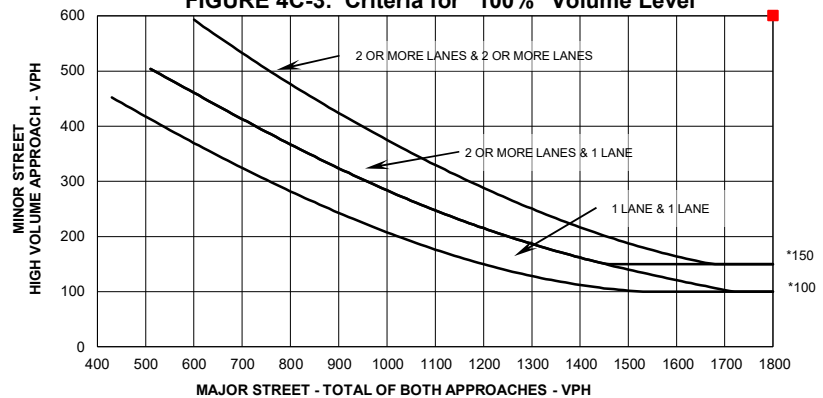
Criteria

1. Delay on Minor Approach *(vehicle-hours)		
Approach Lanes	1	2
Delay Criteria*	4.0	5.0
Delay*		
Fulfilled?:	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No

2. Volume on Minor Approach One-Direction *(vehicles per hour)		
Approach Lanes	1	2
Volume Criteria*	100	150
Volume*		
Fulfilled?:	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No

3. Total Intersection Entering Volume *(vehicles per hour)		
No. of Approaches	3	4
Volume Criteria*	650	800
Volume*		
Fulfilled?:	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No

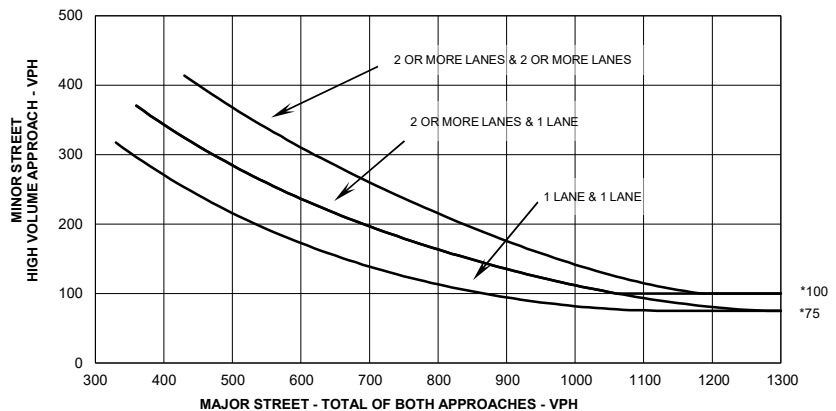
Plot volume combination on the applicable figure below.

FIGURE 4C-3: Criteria for "100%" Volume Level

* Note: 150 vph applies as the lower threshold volume for a minor street approach with two or more lanes and 100 vph applies as the lower threshold volume threshold for a minor street approach with one lane.

FIGURE 4C-4: Criteria for "70%" Volume Level

(Community Less than 10,000 population or above 70 km/hr (40 mph) on Major Street)



* Note: 100 vph applies as the lower threshold volume for a minor street approach with two or more lanes and 75 vph applies as the lower threshold volume threshold for a minor street approach with one lane.

TRAFFIC SIGNAL WARRANT SUMMARY

City: **Lincoln**
 County:
 District:

Engineer: **John P Diediker**
 Date: **January 17, 2020**

Major Street: **10th St**
 Minor Street: **Q St**

Lanes: **5** Major Approach Speed: **25**
 Lanes: **4** Minor Approach Speed: **25**

MUTCD Electronic Reference to Chapter 4: <http://mutcd.fhwa.dot.gov/pdfs/2009r1r2/part4.pdf>

Volume Level Criteria

1. Is the posted speed or 85th-percentile of major street > 40 mph (70 km/h)?
2. Is the intersection in a built-up area of an isolated community with a population < 10,000?

☐ Yes ☒ No

☐ Yes ☒ No

"70%" volume level **may** be used if Question 1 **or** 2 above is answered "Yes"

☐ 70% ☒ 100%

WARRANT 3 - PEAK HOUR

If all three criteria are fulfilled **or** the plotted point lies above the appropriate line, then the warrant is satisfied.

Applicable: ☒ Yes ☐ No

Satisfied: ☒ Yes ☐ No

Unusual condition justifying use of warrant:

Record hour when criteria are fulfilled and the corresponding delay or volume in boxes provided.

Peak Hour 100% Volume		
Time	Major Vol.	Minor Vol.
PM	2931	1076

Peak Hour 70% Volume		
Time	Major Vol.	Minor Vol.

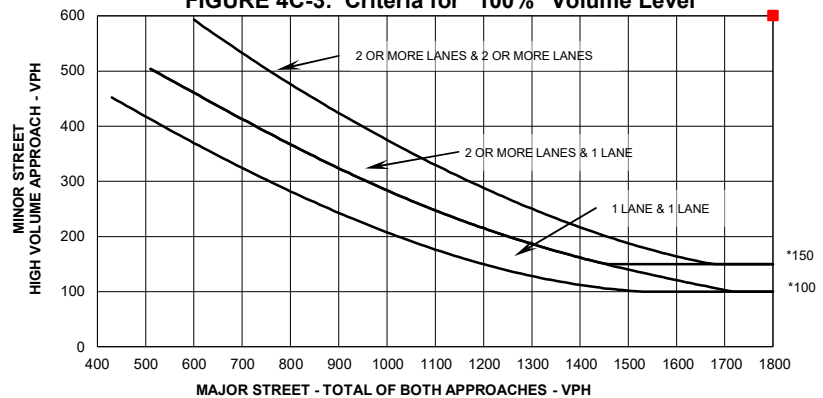
Criteria

1. Delay on Minor Approach *(vehicle-hours)		
Approach Lanes	1	2
Delay Criteria*	4.0	5.0
Delay*		
Fulfilled?:	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No

2. Volume on Minor Approach One-Direction *(vehicles per hour)		
Approach Lanes	1	2
Volume Criteria*	100	150
Volume*		
Fulfilled?:	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No

3. Total Intersection Entering Volume *(vehicles per hour)		
No. of Approaches	3	4
Volume Criteria*	650	800
Volume*		
Fulfilled?:	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No

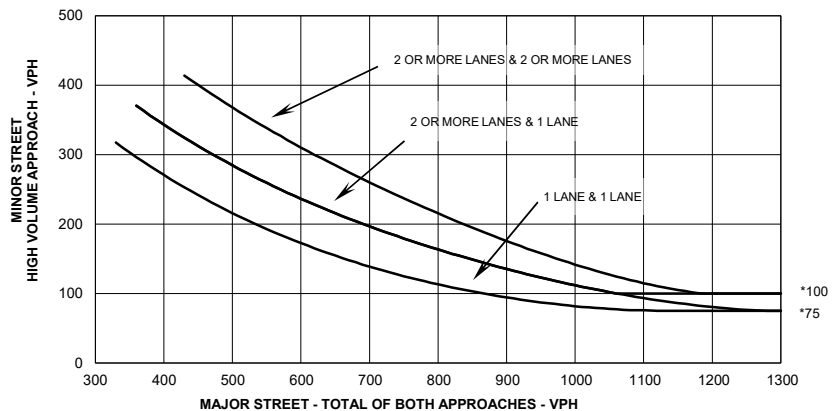
Plot volume combination on the applicable figure below.

FIGURE 4C-3: Criteria for "100%" Volume Level

* Note: 150 vph applies as the lower threshold volume for a minor street approach with two or more lanes and 100 vph applies as the lower threshold volume threshold for a minor street approach with one lane.

FIGURE 4C-4: Criteria for "70%" Volume Level

(Community Less than 10,000 population or above 70 km/hr (40 mph) on Major Street)



* Note: 100 vph applies as the lower threshold volume for a minor street approach with two or more lanes and 75 vph applies as the lower threshold volume threshold for a minor street approach with one lane.

TRAFFIC SIGNAL WARRANT SUMMARY

City: **Lincoln**
County:
District:

Engineer: **John P Diediker**
Date: **January 17, 2020**

Major Street: **10th St**
Minor Street: **P St**

Lanes: **4** Major Approach Speed: **25**
Lanes: **2** Minor Approach Speed: **25**

MUTCD Electronic Reference to Chapter 4: <http://mutcd.fhwa.dot.gov/pdfs/2009r1r2/part4.pdf>

Volume Level Criteria

1. Is the posted speed or 85th-percentile of major street > 40 mph (70 km/h)?
2. Is the intersection in a built-up area of an isolated community with a population < 10,000?

☐ Yes ☒ No

☐ Yes ☒ No

"70%" volume level **may** be used if Question 1 **or** 2 above is answered "Yes"

☐ 70% ☒ 100%

WARRANT 3 - PEAK HOUR

If all three criteria are fulfilled **or** the plotted point lies above the appropriate line, then the warrant is satisfied.

Applicable: ☒ Yes ☐ No

Satisfied: ☒ Yes ☐ No

Unusual condition justifying use of warrant:

Record hour when criteria are fulfilled and the corresponding delay or volume in boxes provided.

Peak Hour 100% Volume		
Time	Major Vol.	Minor Vol.
AM	2001	718

Peak Hour 70% Volume		
Time	Major Vol.	Minor Vol.

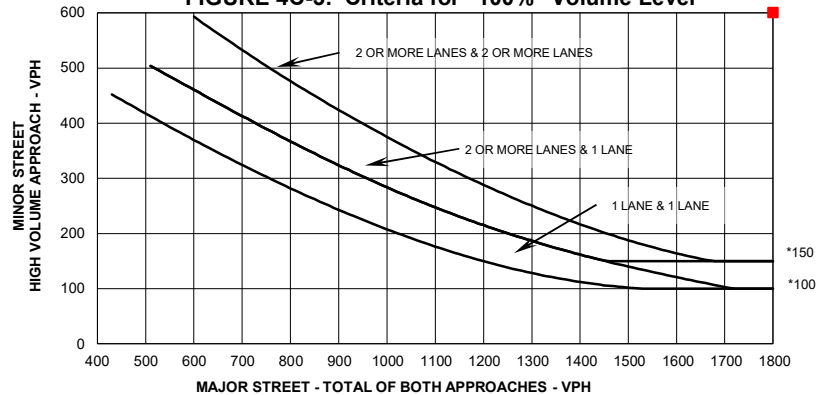
Criteria

1. Delay on Minor Approach *(vehicle-hours)		
Approach Lanes	1	2
Delay Criteria*	4.0	5.0
Delay*		
Fulfilled?:	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No

2. Volume on Minor Approach One-Direction *(vehicles per hour)		
Approach Lanes	1	2
Volume Criteria*	100	150
Volume*		
Fulfilled?:	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No

3. Total Intersection Entering Volume *(vehicles per hour)		
No. of Approaches	3	4
Volume Criteria*	650	800
Volume*		
Fulfilled?:	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No

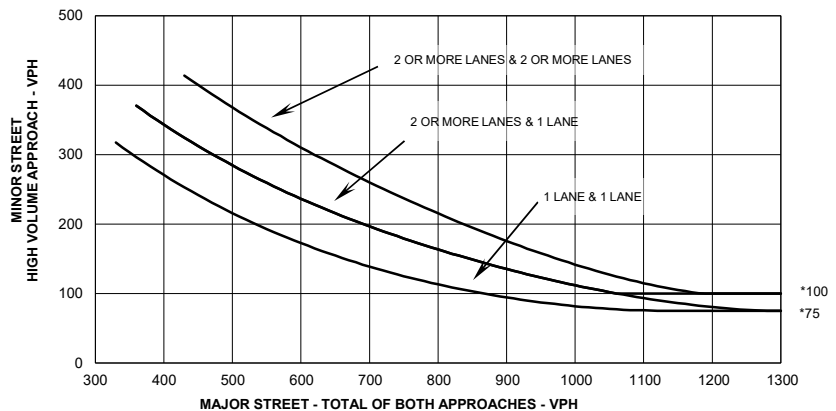
Plot volume combination on the applicable figure below.

FIGURE 4C-3: Criteria for "100%" Volume Level

* Note: 150 vph applies as the lower threshold volume for a minor street approach with two or more lanes and 100 vph applies as the lower threshold volume threshold for a minor street approach with one lane.

FIGURE 4C-4: Criteria for "70%" Volume Level

(Community Less than 10,000 population or above 70 km/hr (40 mph) on Major Street)



* Note: 100 vph applies as the lower threshold volume for a minor street approach with two or more lanes and 75 vph applies as the lower threshold volume threshold for a minor street approach with one lane.

TRAFFIC SIGNAL WARRANT SUMMARY

City: **Lincoln**
County:
District:

Engineer: **John P Diediker**
Date: **January 17, 2020**

Major Street: **10th St**
Minor Street: **P St**

Lanes: **4** Major Approach Speed: **25**
Lanes: **2** Minor Approach Speed: **25**

MUTCD Electronic Reference to Chapter 4: <http://mutcd.fhwa.dot.gov/pdfs/2009r1r2/part4.pdf>

Volume Level Criteria

1. Is the posted speed or 85th-percentile of major street > 40 mph (70 km/h)?
2. Is the intersection in a built-up area of an isolated community with a population < 10,000?

☐ Yes ☒ No

☐ Yes ☒ No

"70%" volume level **may** be used if Question 1 **or** 2 above is answered "Yes"

☐ 70% ☒ 100%

WARRANT 3 - PEAK HOUR

If all three criteria are fulfilled **or** the plotted point lies above the appropriate line, then the warrant is satisfied.

Applicable: ☒ Yes ☐ No

Satisfied: ☒ Yes ☐ No

Unusual condition justifying use of warrant:

Record hour when criteria are fulfilled and the corresponding delay or volume in boxes provided.

Peak Hour 100% Volume		
Time	Major Vol.	Minor Vol.
PM	2378	803

Peak Hour 70% Volume		
Time	Major Vol.	Minor Vol.

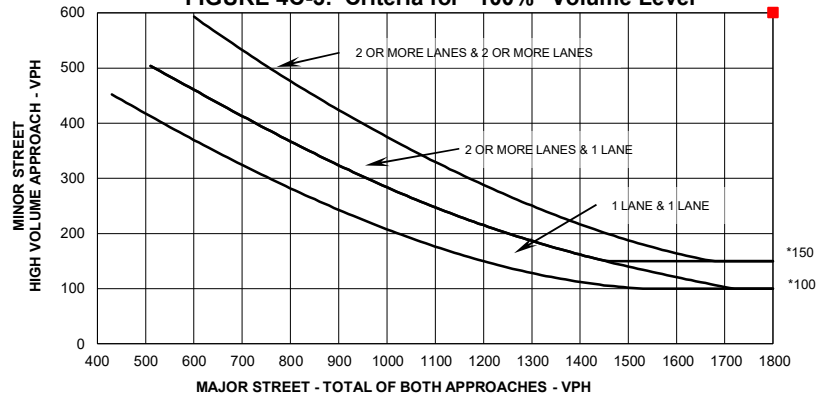
Criteria

1. Delay on Minor Approach *(vehicle-hours)		
Approach Lanes	1	2
Delay Criteria*	4.0	5.0
Delay*		
Fulfilled?:	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No

2. Volume on Minor Approach One-Direction *(vehicles per hour)		
Approach Lanes	1	2
Volume Criteria*	100	150
Volume*		
Fulfilled?:	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No

3. Total Intersection Entering Volume *(vehicles per hour)		
No. of Approaches	3	4
Volume Criteria*	650	800
Volume*		
Fulfilled?:	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No

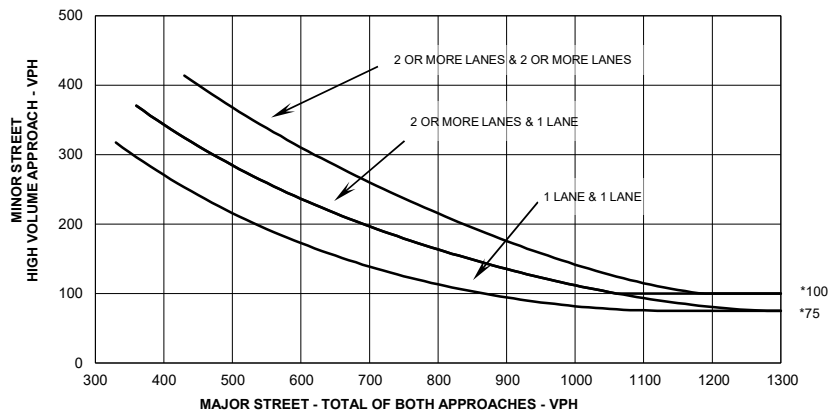
Plot volume combination on the applicable figure below.

FIGURE 4C-3: Criteria for "100%" Volume Level

* Note: 150 vph applies as the lower threshold volume for a minor street approach with two or more lanes and 100 vph applies as the lower threshold volume threshold for a minor street approach with one lane.

FIGURE 4C-4: Criteria for "70%" Volume Level

(Community Less than 10,000 population or above 70 km/hr (40 mph) on Major Street)



* Note: 100 vph applies as the lower threshold volume for a minor street approach with two or more lanes and 75 vph applies as the lower threshold volume threshold for a minor street approach with one lane.

TRAFFIC SIGNAL WARRANT SUMMARY

City: **Lincoln**
County:
District:

Engineer: **John P Diediker**
Date: **January 17, 2020**

Major Street: **Q St**
Minor Street: **12th St**

Lanes: **4** Major Approach Speed: **25**
Lanes: **2** Minor Approach Speed: **25**

MUTCD Electronic Reference to Chapter 4: <http://mutcd.fhwa.dot.gov/pdfs/2009r1r2/part4.pdf>

Volume Level Criteria

1. Is the posted speed or 85th-percentile of major street > 40 mph (70 km/h)?
2. Is the intersection in a built-up area of an isolated community with a population < 10,000?

☐ Yes ☒ No

☐ Yes ☒ No

"70%" volume level **may** be used if Question 1 **or** 2 above is answered "Yes"

☐ 70% ☒ 100%

WARRANT 3 - PEAK HOUR

If all three criteria are fulfilled **or** the plotted point lies above the appropriate line, then the warrant is satisfied.

Applicable: ☒ Yes ☐ No

Satisfied: ☐ Yes ☒ No

Unusual condition justifying use of warrant:

Record hour when criteria are fulfilled and the corresponding delay or volume in boxes provided.

Peak Hour 100% Volume		
Time	Major Vol.	Minor Vol.
AM	691	126

Peak Hour 70% Volume		
Time	Major Vol.	Minor Vol.

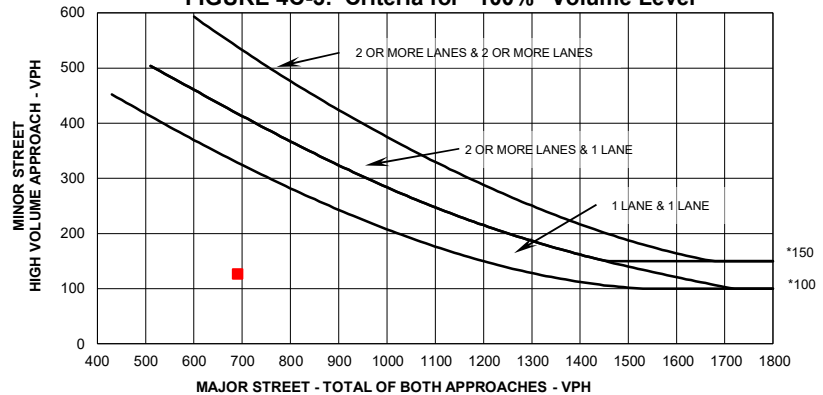
Criteria

1. Delay on Minor Approach *(vehicle-hours)		
Approach Lanes	1	2
Delay Criteria*	4.0	5.0
Delay*		
Fulfilled?:	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No

2. Volume on Minor Approach One-Direction *(vehicles per hour)		
Approach Lanes	1	2
Volume Criteria*	100	150
Volume*		
Fulfilled?:	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No

3. Total Intersection Entering Volume *(vehicles per hour)		
No. of Approaches	3	4
Volume Criteria*	650	800
Volume*		
Fulfilled?:	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No

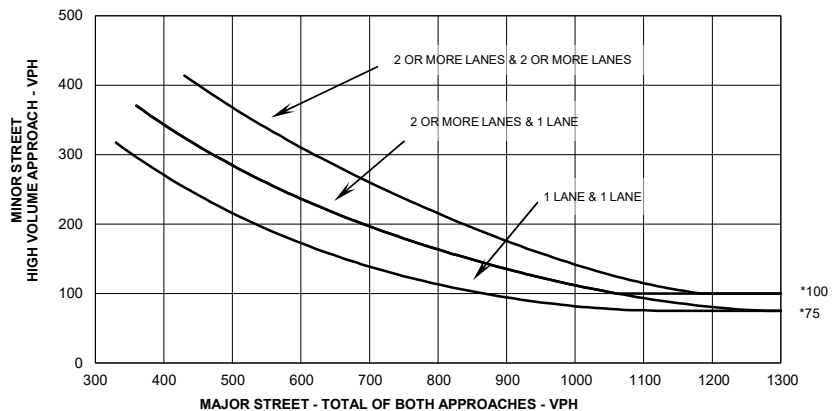
Plot volume combination on the applicable figure below.

FIGURE 4C-3: Criteria for "100%" Volume Level

* Note: 150 vph applies as the lower threshold volume for a minor street approach with two or more lanes and 100 vph applies as the lower threshold volume threshold for a minor street approach with one lane.

FIGURE 4C-4: Criteria for "70%" Volume Level

(Community Less than 10,000 population or above 70 km/hr (40 mph) on Major Street)



* Note: 100 vph applies as the lower threshold volume for a minor street approach with two or more lanes and 75 vph applies as the lower threshold volume threshold for a minor street approach with one lane.

TRAFFIC SIGNAL WARRANT SUMMARY

City: **Lincoln**
County:
District:

Engineer: **John P Diediker**
Date: **January 17, 2020**

Major Street: **Q St**
Minor Street: **12th St**

Lanes: **4** Major Approach Speed: **25**
Lanes: **2** Minor Approach Speed: **25**

MUTCD Electronic Reference to Chapter 4: <http://mutcd.fhwa.dot.gov/pdfs/2009r1r2/part4.pdf>

Volume Level Criteria

1. Is the posted speed or 85th-percentile of major street > 40 mph (70 km/h)?
2. Is the intersection in a built-up area of an isolated community with a population < 10,000?

☐ Yes ☒ No

☐ Yes ☒ No

"70%" volume level **may** be used if Question 1 **or** 2 above is answered "Yes"

☐ 70% ☒ 100%

WARRANT 3 - PEAK HOUR

If all three criteria are fulfilled **or** the plotted point lies above the appropriate line, then the warrant is satisfied.

Applicable: ☒ Yes ☐ No

Satisfied: ☐ Yes ☒ No

Unusual condition justifying use of warrant:

Record hour when criteria are fulfilled and the corresponding delay or volume in boxes provided.

Peak Hour 100% Volume		
Time	Major Vol.	Minor Vol.
PM	847	103

Peak Hour 70% Volume		
Time	Major Vol.	Minor Vol.

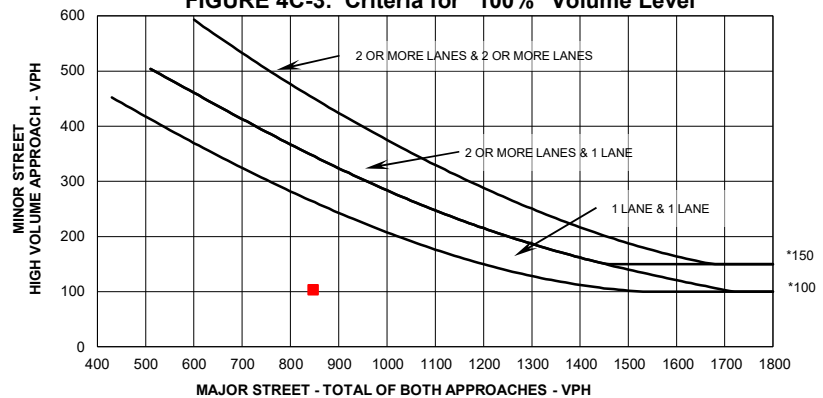
Criteria

1. Delay on Minor Approach *(vehicle-hours)		
Approach Lanes	1	2
Delay Criteria*	4.0	5.0
Delay*		
Fulfilled?:	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No

2. Volume on Minor Approach One-Direction *(vehicles per hour)		
Approach Lanes	1	2
Volume Criteria*	100	150
Volume*		
Fulfilled?:	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No

3. Total Intersection Entering Volume *(vehicles per hour)		
No. of Approaches	3	4
Volume Criteria*	650	800
Volume*		
Fulfilled?:	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No

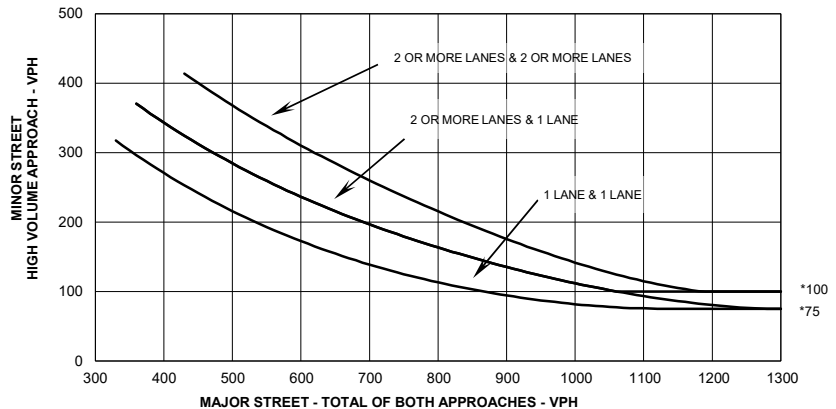
Plot volume combination on the applicable figure below.

FIGURE 4C-3: Criteria for "100%" Volume Level

* Note: 150 vph applies as the lower threshold volume for a minor street approach with two or more lanes and 100 vph applies as the lower threshold volume threshold for a minor street approach with one lane.

FIGURE 4C-4: Criteria for "70%" Volume Level

(Community Less than 10,000 population or above 70 km/hr (40 mph) on Major Street)



* Note: 100 vph applies as the lower threshold volume for a minor street approach with two or more lanes and 75 vph applies as the lower threshold volume threshold for a minor street approach with one lane.

TRAFFIC SIGNAL WARRANT SUMMARY

City: **Lincoln**
County:
District:

Engineer: **John P Diediker**
Date: **January 17, 2020**

Major Street: **P St**
Minor Street: **12th St**

Lanes: **3** Major Approach Speed: **25**
Lanes: **1** Minor Approach Speed: **25**

MUTCD Electronic Reference to Chapter 4: <http://mutcd.fhwa.dot.gov/pdfs/2009r1r2/part4.pdf>

Volume Level Criteria

1. Is the posted speed or 85th-percentile of major street > 40 mph (70 km/h)?
2. Is the intersection in a built-up area of an isolated community with a population < 10,000?

☐ Yes ☒ No

☐ Yes ☒ No

"70%" volume level **may** be used if Question 1 **or** 2 above is answered "Yes"

☐ 70% ☒ 100%

WARRANT 3 - PEAK HOUR

If all three criteria are fulfilled **or** the plotted point lies above the appropriate line, then the warrant is satisfied.

Applicable: ☒ Yes ☐ No

Satisfied: ☐ Yes ☒ No

Unusual condition justifying use of warrant:

Record hour when criteria are fulfilled and the corresponding delay or volume in boxes provided.

Peak Hour 100% Volume		
Time	Major Vol.	Minor Vol.
AM	570	88

Peak Hour 70% Volume		
Time	Major Vol.	Minor Vol.

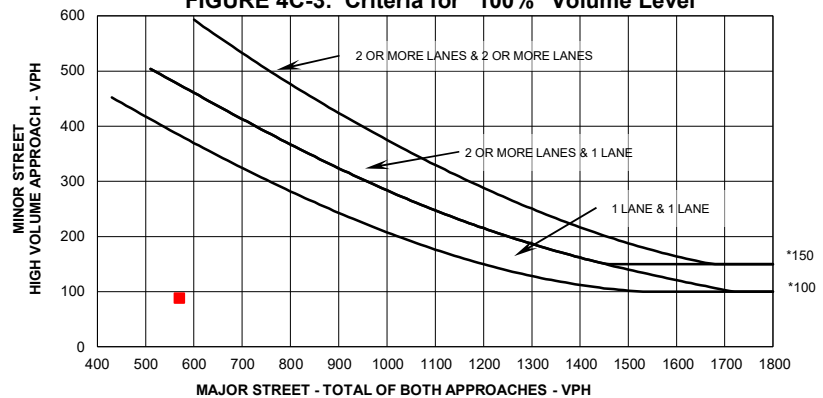
Criteria

1. Delay on Minor Approach *(vehicle-hours)		
Approach Lanes	1	2
Delay Criteria*	4.0	5.0
Delay*		
Fulfilled?:	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No

2. Volume on Minor Approach One-Direction *(vehicles per hour)		
Approach Lanes	1	2
Volume Criteria*	100	150
Volume*		
Fulfilled?:	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No

3. Total Intersection Entering Volume *(vehicles per hour)		
No. of Approaches	3	4
Volume Criteria*	650	800
Volume*		
Fulfilled?:	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No

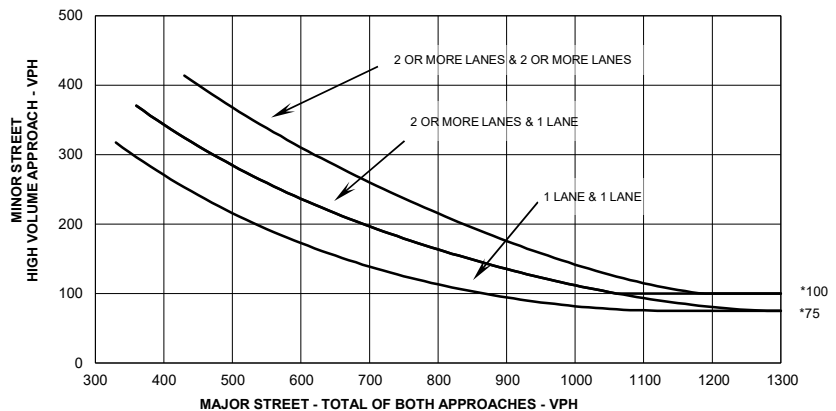
Plot volume combination on the applicable figure below.

FIGURE 4C-3: Criteria for "100%" Volume Level

* Note: 150 vph applies as the lower threshold volume for a minor street approach with two or more lanes and 100 vph applies as the lower threshold volume threshold for a minor street approach with one lane.

FIGURE 4C-4: Criteria for "70%" Volume Level

(Community Less than 10,000 population or above 70 km/hr (40 mph) on Major Street)



* Note: 100 vph applies as the lower threshold volume for a minor street approach with two or more lanes and 75 vph applies as the lower threshold volume threshold for a minor street approach with one lane.

TRAFFIC SIGNAL WARRANT SUMMARY

City: **Lincoln**
County:
District:

Engineer: **John P Diediker**
Date: **January 17, 2020**

Major Street: **P St**
Minor Street: **12th St**

Lanes: **3** Major Approach Speed: **25**
Lanes: **1** Minor Approach Speed: **25**

MUTCD Electronic Reference to Chapter 4: <http://mutcd.fhwa.dot.gov/pdfs/2009r1r2/part4.pdf>

Volume Level Criteria

1. Is the posted speed or 85th-percentile of major street > 40 mph (70 km/h)?
2. Is the intersection in a built-up area of an isolated community with a population < 10,000?

☐ Yes ☒ No

☐ Yes ☒ No

"70%" volume level **may** be used if Question 1 **or** 2 above is answered "Yes"

☐ 70% ☒ 100%

WARRANT 3 - PEAK HOUR

If all three criteria are fulfilled **or** the plotted point lies above the appropriate line, then the warrant is satisfied.

Applicable: ☒ Yes ☐ No

Satisfied: ☐ Yes ☒ No

Unusual condition justifying use of warrant:

Record hour when criteria are fulfilled and the corresponding delay or volume in boxes provided.

Peak Hour 100% Volume		
Time	Major Vol.	Minor Vol.
PM	684	163

Peak Hour 70% Volume		
Time	Major Vol.	Minor Vol.

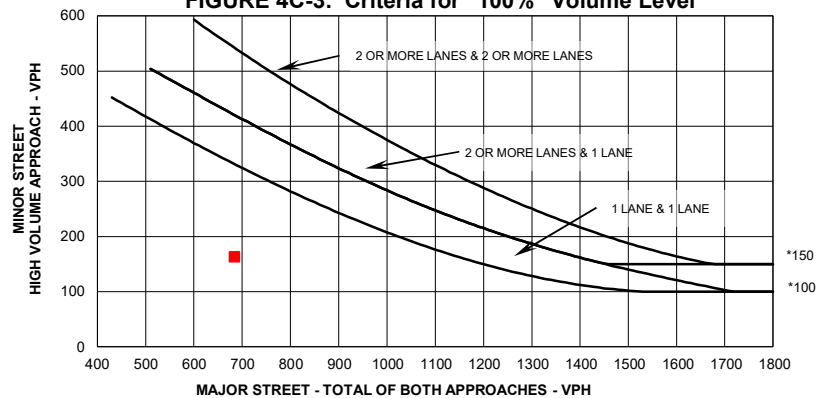
Criteria

1. Delay on Minor Approach *(vehicle-hours)		
Approach Lanes	1	2
Delay Criteria*	4.0	5.0
Delay*		
Fulfilled?:	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No

2. Volume on Minor Approach One-Direction *(vehicles per hour)		
Approach Lanes	1	2
Volume Criteria*	100	150
Volume*		
Fulfilled?:	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No

3. Total Intersection Entering Volume *(vehicles per hour)		
No. of Approaches	3	4
Volume Criteria*	650	800
Volume*		
Fulfilled?:	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No

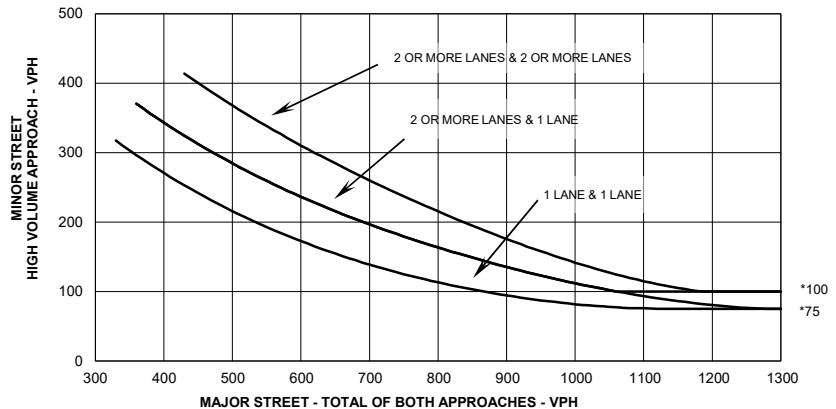
Plot volume combination on the applicable figure below.

FIGURE 4C-3: Criteria for "100%" Volume Level

* Note: 150 vph applies as the lower threshold volume for a minor street approach with two or more lanes and 100 vph applies as the lower threshold volume threshold for a minor street approach with one lane.

FIGURE 4C-4: Criteria for "70%" Volume Level

(Community Less than 10,000 population or above 70 km/hr (40 mph) on Major Street)



* Note: 100 vph applies as the lower threshold volume for a minor street approach with two or more lanes and 75 vph applies as the lower threshold volume threshold for a minor street approach with one lane.

TRAFFIC SIGNAL WARRANT SUMMARY

City: **Lincoln**
County:
District:

Engineer: **John P Diediker**
Date: **January 17, 2020**

Major Street: **Q St**
Minor Street: **13th St**

Lanes: **4** Major Approach Speed: **25**
Lanes: **2** Minor Approach Speed: **25**

MUTCD Electronic Reference to Chapter 4: <http://mutcd.fhwa.dot.gov/pdfs/2009r1r2/part4.pdf>

Volume Level Criteria

1. Is the posted speed or 85th-percentile of major street > 40 mph (70 km/h)?
2. Is the intersection in a built-up area of an isolated community with a population < 10,000?

☐ Yes ☒ No

☐ Yes ☒ No

"70%" volume level **may** be used if Question 1 **or** 2 above is answered "Yes"

☐ 70% ☒ 100%

WARRANT 3 - PEAK HOUR

If all three criteria are fulfilled **or** the plotted point lies above the appropriate line, then the warrant is satisfied.

Applicable: ☒ Yes ☐ No

Satisfied: ☐ Yes ☒ No

Unusual condition justifying use of warrant:

Record hour when criteria are fulfilled and the corresponding delay or volume in boxes provided.

Peak Hour 100% Volume		
Time	Major Vol.	Minor Vol.
AM	745	52

Peak Hour 70% Volume		
Time	Major Vol.	Minor Vol.

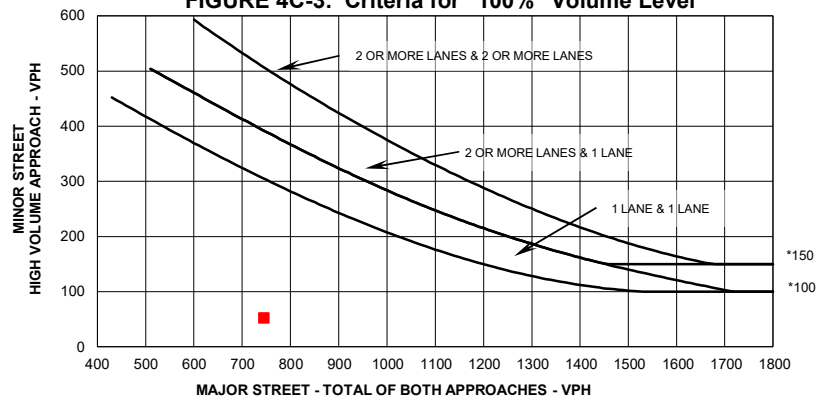
Criteria

1. Delay on Minor Approach *(vehicle-hours)		
Approach Lanes	1	2
Delay Criteria*	4.0	5.0
Delay*		
Fulfilled?:	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No

2. Volume on Minor Approach One-Direction *(vehicles per hour)		
Approach Lanes	1	2
Volume Criteria*	100	150
Volume*		
Fulfilled?:	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No

3. Total Intersection Entering Volume *(vehicles per hour)		
No. of Approaches	3	4
Volume Criteria*	650	800
Volume*		
Fulfilled?:	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No

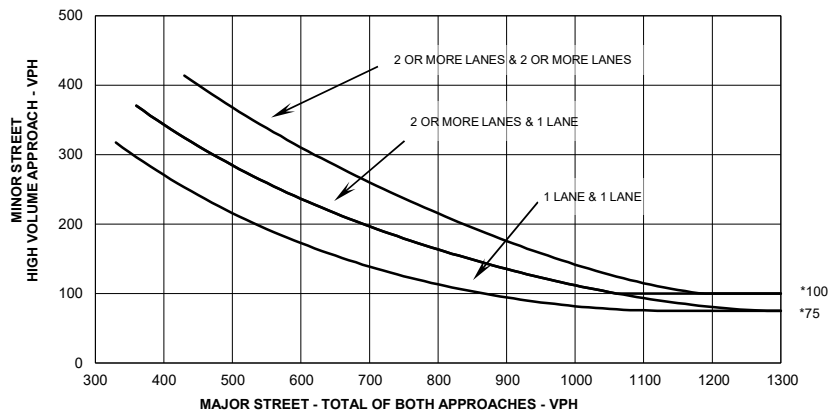
Plot volume combination on the applicable figure below.

FIGURE 4C-3: Criteria for "100%" Volume Level

* Note: 150 vph applies as the lower threshold volume for a minor street approach with two or more lanes and 100 vph applies as the lower threshold volume threshold for a minor street approach with one lane.

FIGURE 4C-4: Criteria for "70%" Volume Level

(Community Less than 10,000 population or above 70 km/hr (40 mph) on Major Street)



* Note: 100 vph applies as the lower threshold volume for a minor street approach with two or more lanes and 75 vph applies as the lower threshold volume threshold for a minor street approach with one lane.

TRAFFIC SIGNAL WARRANT SUMMARY

City: **Lincoln**
County:
District:

Engineer: **John P Diediker**
Date: **January 17, 2020**

Major Street: **Q St**
Minor Street: **13th St**

Lanes: **4** Major Approach Speed: **25**
Lanes: **2** Minor Approach Speed: **25**

MUTCD Electronic Reference to Chapter 4: <http://mutcd.fhwa.dot.gov/pdfs/2009r1r2/part4.pdf>

Volume Level Criteria

1. Is the posted speed or 85th-percentile of major street > 40 mph (70 km/h)?
2. Is the intersection in a built-up area of an isolated community with a population < 10,000?

☐ Yes ☒ No

☐ Yes ☒ No

"70%" volume level **may** be used if Question 1 **or** 2 above is answered "Yes"

☐ 70% ☒ 100%

WARRANT 3 - PEAK HOUR

If all three criteria are fulfilled **or** the plotted point lies above the appropriate line, then the warrant is satisfied.

Applicable: ☒ Yes ☐ No

Satisfied: ☐ Yes ☒ No

Unusual condition justifying use of warrant:

Record hour when criteria are fulfilled and the corresponding delay or volume in boxes provided.

Peak Hour 100% Volume		
Time	Major Vol.	Minor Vol.
PM	964	92

Peak Hour 70% Volume		
Time	Major Vol.	Minor Vol.

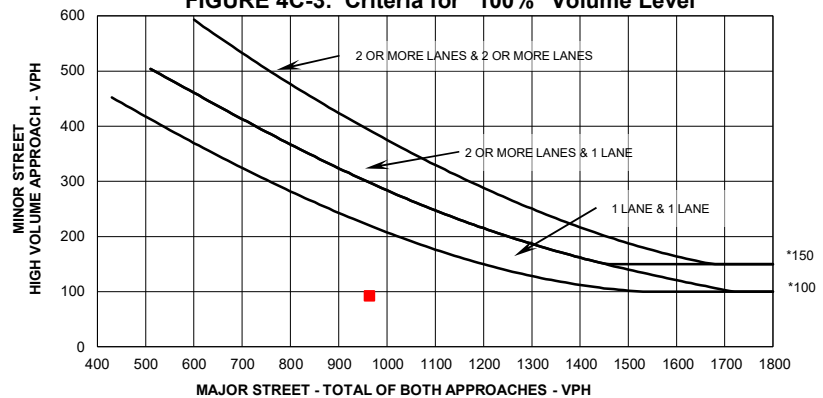
Criteria

1. Delay on Minor Approach *(vehicle-hours)		
Approach Lanes	1	2
Delay Criteria*	4.0	5.0
Delay*		
Fulfilled?:	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No

2. Volume on Minor Approach One-Direction *(vehicles per hour)		
Approach Lanes	1	2
Volume Criteria*	100	150
Volume*		
Fulfilled?:	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No

3. Total Intersection Entering Volume *(vehicles per hour)		
No. of Approaches	3	4
Volume Criteria*	650	800
Volume*		
Fulfilled?:	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No

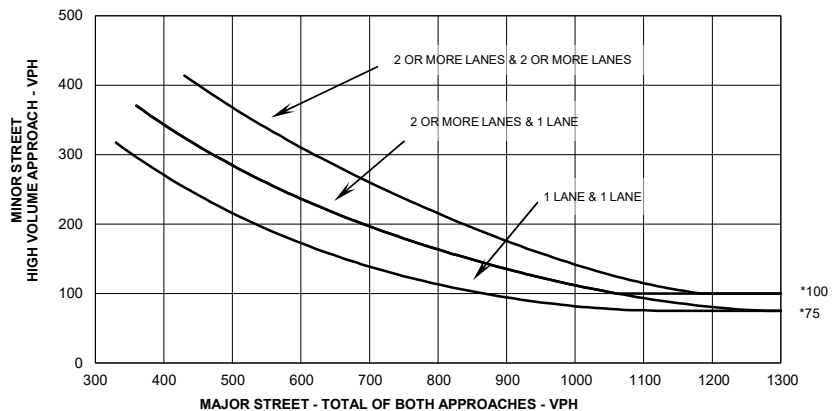
Plot volume combination on the applicable figure below.

FIGURE 4C-3: Criteria for "100%" Volume Level

* Note: 150 vph applies as the lower threshold volume for a minor street approach with two or more lanes and 100 vph applies as the lower threshold volume threshold for a minor street approach with one lane.

FIGURE 4C-4: Criteria for "70%" Volume Level

(Community Less than 10,000 population or above 70 km/hr (40 mph) on Major Street)



* Note: 100 vph applies as the lower threshold volume for a minor street approach with two or more lanes and 75 vph applies as the lower threshold volume threshold for a minor street approach with one lane.

TRAFFIC SIGNAL WARRANT SUMMARY

City: **Lincoln**
County:
District:

Engineer: **John P Diediker**
Date: **January 10, 2020**

Major Street: **P St**
Minor Street: **13th St**

Lanes: **3** Major Approach Speed: **25**
Lanes: **1** Minor Approach Speed: **25**

MUTCD Electronic Reference to Chapter 4: <http://mutcd.fhwa.dot.gov/pdfs/2009r1r2/part4.pdf>

Volume Level Criteria

1. Is the posted speed or 85th-percentile of major street > 40 mph (70 km/h)?
2. Is the intersection in a built-up area of an isolated community with a population < 10,000?

☐ Yes ☒ No

☐ Yes ☒ No

"70%" volume level **may** be used if Question 1 **or** 2 above is answered "Yes"

☐ 70% ☒ 100%

WARRANT 3 - PEAK HOUR

If all three criteria are fulfilled **or** the plotted point lies above the appropriate line, then the warrant is satisfied.

Applicable: ☒ Yes ☐ No

Satisfied: ☐ Yes ☒ No

Unusual condition justifying use of warrant:

Record hour when criteria are fulfilled and the corresponding delay or volume in boxes provided.

Peak Hour 100% Volume		
Time	Major Vol.	Minor Vol.
AM	485	86

Peak Hour 70% Volume		
Time	Major Vol.	Minor Vol.

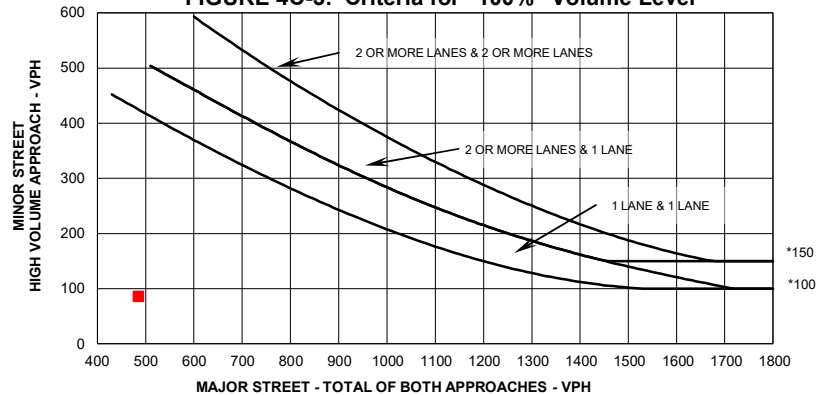
Criteria

1. Delay on Minor Approach *(vehicle-hours)		
Approach Lanes	1	2
Delay Criteria*	4.0	5.0
Delay*		
Fulfilled?:	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No

2. Volume on Minor Approach One-Direction *(vehicles per hour)		
Approach Lanes	1	2
Volume Criteria*	100	150
Volume*		
Fulfilled?:	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No

3. Total Intersection Entering Volume *(vehicles per hour)		
No. of Approaches	3	4
Volume Criteria*	650	800
Volume*		
Fulfilled?:	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No

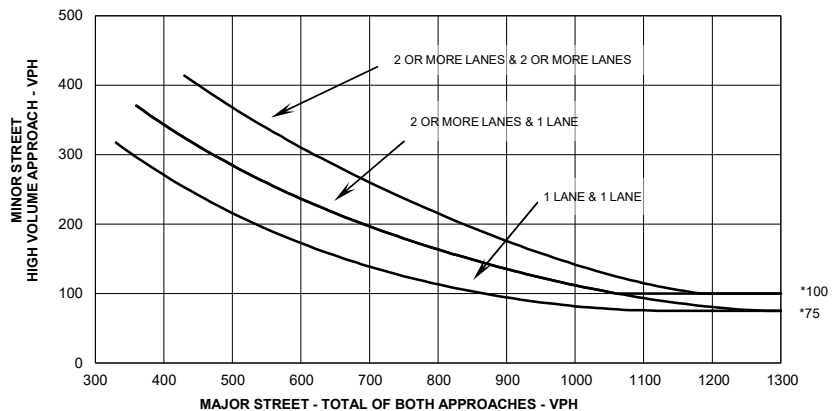
Plot volume combination on the applicable figure below.

FIGURE 4C-3: Criteria for "100%" Volume Level

* Note: 150 vph applies as the lower threshold volume for a minor street approach with two or more lanes and 100 vph applies as the lower threshold volume threshold for a minor street approach with one lane.

FIGURE 4C-4: Criteria for "70%" Volume Level

(Community Less than 10,000 population or above 70 km/hr (40 mph) on Major Street)



* Note: 100 vph applies as the lower threshold volume for a minor street approach with two or more lanes and 75 vph applies as the lower threshold volume threshold for a minor street approach with one lane.

State of Florida Department of Transportation

TRAFFIC SIGNAL WARRANT SUMMARY

Form 750-020-01
TRAFFIC ENGINEERING
10/15

City: **Lincoln**
County:
District:

Engineer: **John P Diediker**
Date: **January 10, 2020**

Major Street: **P St**
Minor Street: **13th St**

Lanes: **3** Major Approach Speed: **25**
Lanes: **1** Minor Approach Speed: **25**

MUTCD Electronic Reference to Chapter 4: <http://mutcd.fhwa.dot.gov/pdfs/2009r1r2/part4.pdf>

Volume Level Criteria

1. Is the posted speed or 85th-percentile of major street > 40 mph (70 km/h)?
2. Is the intersection in a built-up area of an isolated community with a population < 10,000?

☐ Yes ☒ No

☐ Yes ☒ No

"70%" volume level **may** be used if Question 1 **or** 2 above is answered "Yes"

☐ 70% ☒ 100%

WARRANT 3 - PEAK HOUR

If all three criteria are fulfilled **or** the plotted point lies above the appropriate line, then the warrant is satisfied.

Applicable: ☒ Yes ☐ No

Satisfied: ☐ Yes ☒ No

Unusual condition justifying use of warrant:

Record hour when criteria are fulfilled and the corresponding delay or volume in boxes provided.

Peak Hour 100% Volume		
Time	Major Vol.	Minor Vol.
PM	969	279

Peak Hour 70% Volume		
Time	Major Vol.	Minor Vol.

Criteria

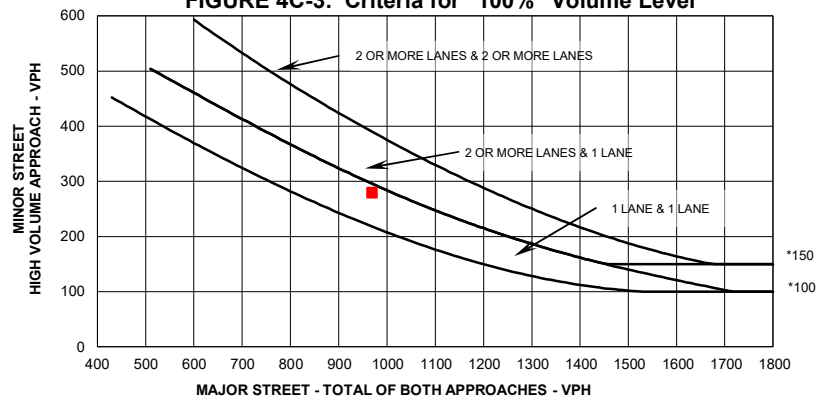
1. Delay on Minor Approach *(vehicle-hours)		
Approach Lanes	1	2
Delay Criteria*	4.0	5.0
Delay*		
Fulfilled?:	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No

2. Volume on Minor Approach One-Direction *(vehicles per hour)		
Approach Lanes	1	2
Volume Criteria*	100	150
Volume*		
Fulfilled?:	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No

3. Total Intersection Entering Volume *(vehicles per hour)		
No. of Approaches	3	4
Volume Criteria*	650	800
Volume*		
Fulfilled?:	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No

Plot volume combination on the applicable figure below.

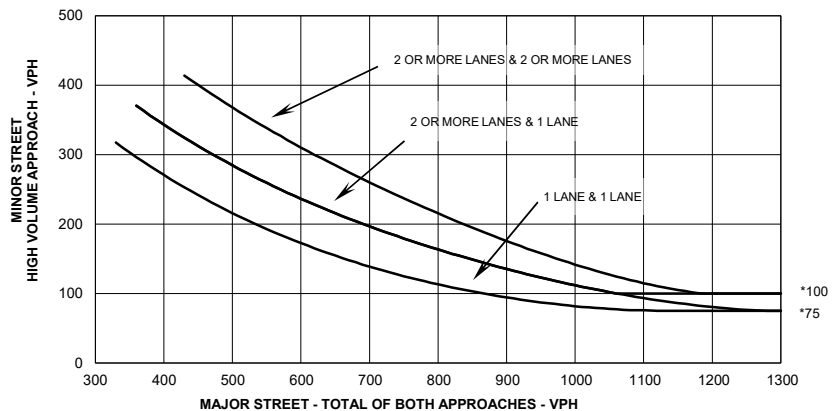
FIGURE 4C-3: Criteria for "100%" Volume Level



* Note: 150 vph applies as the lower threshold volume for a minor street approach with two or more lanes and 100 vph applies as the lower threshold volume threshold for a minor street approach with one lane.

FIGURE 4C-4: Criteria for "70%" Volume Level

(Community Less than 10,000 population or above 70 km/hr (40 mph) on Major Street)



* Note: 100 vph applies as the lower threshold volume for a minor street approach with two or more lanes and 75 vph applies as the lower threshold volume threshold for a minor street approach with one lane.

TRAFFIC SIGNAL WARRANT SUMMARY

City: **Lincoln**
County:
District:

Engineer: **John P Diediker**
Date: **January 17, 2020**

Major Street: **P St**
Minor Street: **Centennial Mall**

Lanes: **3** Major Approach Speed: **25**
Lanes: **1** Minor Approach Speed: **25**

MUTCD Electronic Reference to Chapter 4: <http://mutcd.fhwa.dot.gov/pdfs/2009r1r2/part4.pdf>

Volume Level Criteria

1. Is the posted speed or 85th-percentile of major street > 40 mph (70 km/h)?
2. Is the intersection in a built-up area of an isolated community with a population < 10,000?

☐ Yes ☒ No

☐ Yes ☒ No

"70%" volume level **may** be used if Question 1 **or** 2 above is answered "Yes"

☐ 70% ☒ 100%

WARRANT 3 - PEAK HOUR

If all three criteria are fulfilled **or** the plotted point lies above the appropriate line, then the warrant is satisfied.

Applicable: ☒ Yes ☐ No

Satisfied: ☐ Yes ☒ No

Unusual condition justifying use of warrant:

Record hour when criteria are fulfilled and the corresponding delay or volume in boxes provided.

Peak Hour 100% Volume		
Time	Major Vol.	Minor Vol.
AM	324	29

Peak Hour 70% Volume		
Time	Major Vol.	Minor Vol.

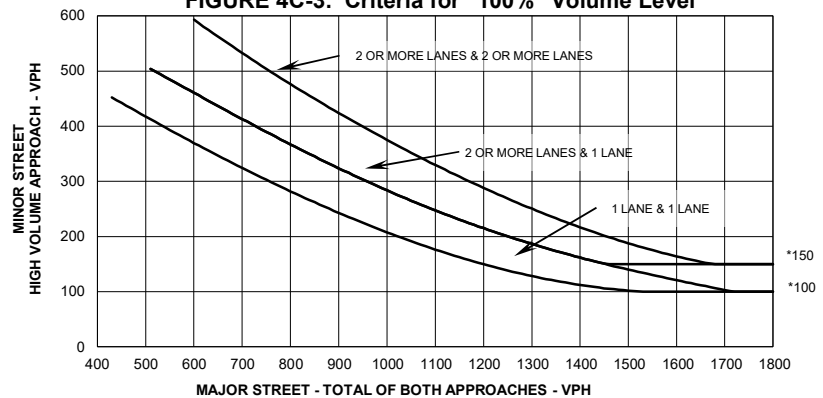
Criteria

1. Delay on Minor Approach *(vehicle-hours)		
Approach Lanes	1	2
Delay Criteria*	4.0	5.0
Delay*		
Fulfilled?:	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No

2. Volume on Minor Approach One-Direction *(vehicles per hour)		
Approach Lanes	1	2
Volume Criteria*	100	150
Volume*		
Fulfilled?:	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No

3. Total Intersection Entering Volume *(vehicles per hour)		
No. of Approaches	3	4
Volume Criteria*	650	800
Volume*		
Fulfilled?:	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No

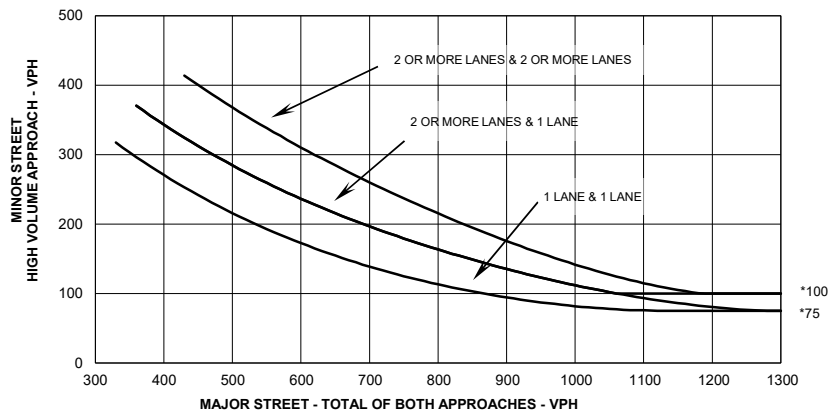
Plot volume combination on the applicable figure below.

FIGURE 4C-3: Criteria for "100%" Volume Level

* Note: 150 vph applies as the lower threshold volume for a minor street approach with two or more lanes and 100 vph applies as the lower threshold volume threshold for a minor street approach with one lane.

FIGURE 4C-4: Criteria for "70%" Volume Level

(Community Less than 10,000 population or above 70 km/hr (40 mph) on Major Street)



* Note: 100 vph applies as the lower threshold volume for a minor street approach with two or more lanes and 75 vph applies as the lower threshold volume threshold for a minor street approach with one lane.

TRAFFIC SIGNAL WARRANT SUMMARY

City: **Lincoln**
County:
District:

Engineer: **John P Diediker**
Date: **January 17, 2020**

Major Street: **P St**
Minor Street: **Centennial Mall**

Lanes: **3** Major Approach Speed: **25**
Lanes: **1** Minor Approach Speed: **25**

MUTCD Electronic Reference to Chapter 4: <http://mutcd.fhwa.dot.gov/pdfs/2009r1r2/part4.pdf>

Volume Level Criteria

1. Is the posted speed or 85th-percentile of major street > 40 mph (70 km/h)?
2. Is the intersection in a built-up area of an isolated community with a population < 10,000?

☐ Yes ☒ No

☐ Yes ☒ No

"70%" volume level **may** be used if Question 1 **or** 2 above is answered "Yes"

☐ 70% ☒ 100%

WARRANT 3 - PEAK HOUR

If all three criteria are fulfilled **or** the plotted point lies above the appropriate line, then the warrant is satisfied.

Applicable: ☒ Yes ☐ No

Satisfied: ☐ Yes ☒ No

Unusual condition justifying use of warrant:

Record hour when criteria are fulfilled and the corresponding delay or volume in boxes provided.

Peak Hour 100% Volume		
Time	Major Vol.	Minor Vol.
PM	846	38

Peak Hour 70% Volume		
Time	Major Vol.	Minor Vol.

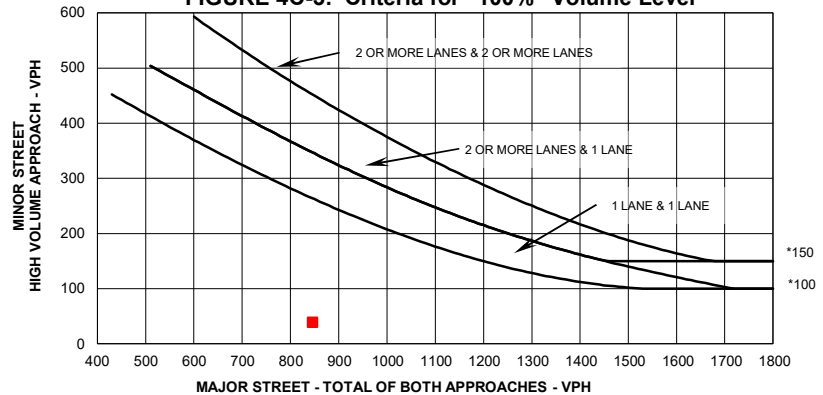
Criteria

1. Delay on Minor Approach *(vehicle-hours)		
Approach Lanes	1	2
Delay Criteria*	4.0	5.0
Delay*		
Fulfilled?:	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No

2. Volume on Minor Approach One-Direction *(vehicles per hour)		
Approach Lanes	1	2
Volume Criteria*	100	150
Volume*		
Fulfilled?:	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No

3. Total Intersection Entering Volume *(vehicles per hour)		
No. of Approaches	3	4
Volume Criteria*	650	800
Volume*		
Fulfilled?:	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No

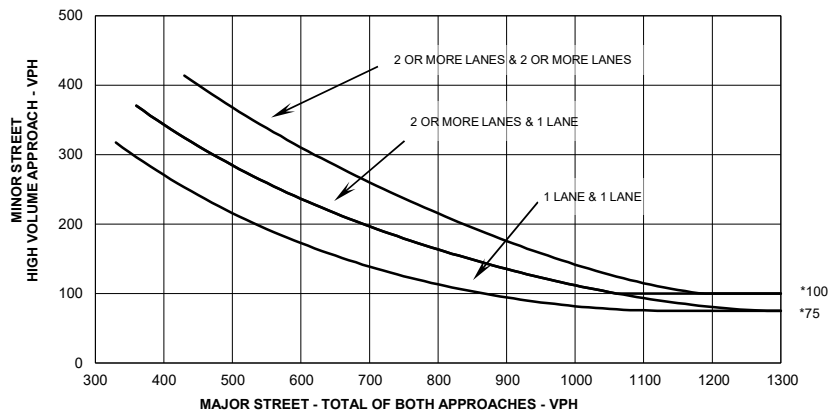
Plot volume combination on the applicable figure below.

FIGURE 4C-3: Criteria for "100%" Volume Level

* Note: 150 vph applies as the lower threshold volume for a minor street approach with two or more lanes and 100 vph applies as the lower threshold volume threshold for a minor street approach with one lane.

FIGURE 4C-4: Criteria for "70%" Volume Level

(Community Less than 10,000 population or above 70 km/hr (40 mph) on Major Street)



* Note: 100 vph applies as the lower threshold volume for a minor street approach with two or more lanes and 75 vph applies as the lower threshold volume threshold for a minor street approach with one lane.

TRAFFIC SIGNAL WARRANT SUMMARY

City: **Lincoln**
County:
District:

Engineer: **John P Diediker**
Date: **January 17, 2020**

Major Street: **Q St**
Minor Street: **N 16th St**

Lanes: **4** Major Approach Speed: **25**
Lanes: **2** Minor Approach Speed: **25**

MUTCD Electronic Reference to Chapter 4: <http://mutcd.fhwa.dot.gov/pdfs/2009r1r2/part4.pdf>

Volume Level Criteria

1. Is the posted speed or 85th-percentile of major street > 40 mph (70 km/h)?
2. Is the intersection in a built-up area of an isolated community with a population < 10,000?

☐ Yes ☒ No

☐ Yes ☒ No

"70%" volume level **may** be used if Question 1 **or** 2 above is answered "Yes"

☐ 70% ☒ 100%

WARRANT 3 - PEAK HOUR

If all three criteria are fulfilled **or** the plotted point lies above the appropriate line, then the warrant is satisfied.

Applicable: ☒ Yes ☐ No

Satisfied: ☐ Yes ☒ No

Unusual condition justifying use of warrant:

Record hour when criteria are fulfilled and the corresponding delay or volume in boxes provided.

Peak Hour 100% Volume		
Time	Major Vol.	Minor Vol.
AM	1172	151

Peak Hour 70% Volume		
Time	Major Vol.	Minor Vol.

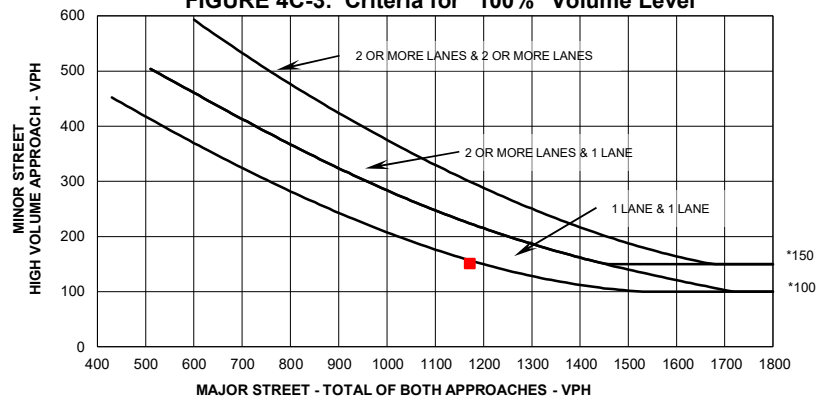
Criteria

1. Delay on Minor Approach *(vehicle-hours)		
Approach Lanes	1	2
Delay Criteria*	4.0	5.0
Delay*		
Fulfilled?:	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No

2. Volume on Minor Approach One-Direction *(vehicles per hour)		
Approach Lanes	1	2
Volume Criteria*	100	150
Volume*		
Fulfilled?:	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No

3. Total Intersection Entering Volume *(vehicles per hour)		
No. of Approaches	3	4
Volume Criteria*	650	800
Volume*		
Fulfilled?:	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No

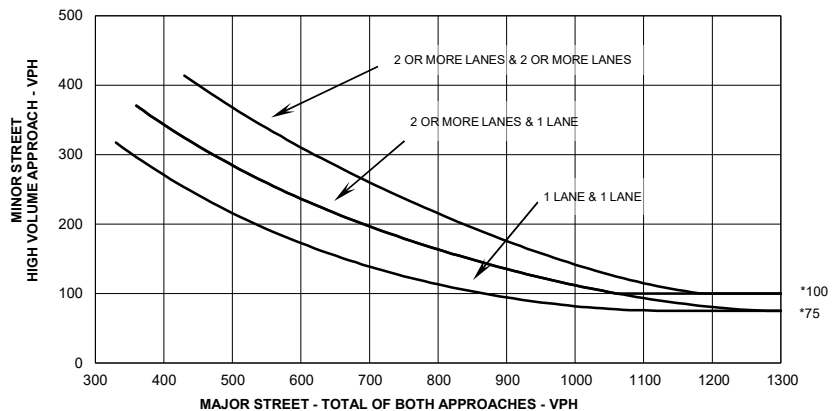
Plot volume combination on the applicable figure below.

FIGURE 4C-3: Criteria for "100%" Volume Level

* Note: 150 vph applies as the lower threshold volume for a minor street approach with two or more lanes and 100 vph applies as the lower threshold volume threshold for a minor street approach with one lane.

FIGURE 4C-4: Criteria for "70%" Volume Level

(Community Less than 10,000 population or above 70 km/hr (40 mph) on Major Street)



* Note: 100 vph applies as the lower threshold volume for a minor street approach with two or more lanes and 75 vph applies as the lower threshold volume threshold for a minor street approach with one lane.

TRAFFIC SIGNAL WARRANT SUMMARY

City: **Lincoln**
County:
District:

Engineer: **John P Diediker**
Date: **January 17, 2020**

Major Street: **Q St**
Minor Street: **N 16th St**

Lanes: **4** Major Approach Speed: **25**
Lanes: **2** Minor Approach Speed: **25**

MUTCD Electronic Reference to Chapter 4: <http://mutcd.fhwa.dot.gov/pdfs/2009r1r2/part4.pdf>

Volume Level Criteria

1. Is the posted speed or 85th-percentile of major street > 40 mph (70 km/h)?
2. Is the intersection in a built-up area of an isolated community with a population < 10,000?

☐ Yes ☒ No

☐ Yes ☒ No

"70%" volume level **may** be used if Question 1 **or** 2 above is answered "Yes"

☐ 70% ☒ 100%

WARRANT 3 - PEAK HOUR

If all three criteria are fulfilled **or** the plotted point lies above the appropriate line, then the warrant is satisfied.

Applicable: ☒ Yes ☐ No

Satisfied: ☒ Yes ☐ No

Unusual condition justifying use of warrant:

Record hour when criteria are fulfilled and the corresponding delay or volume in boxes provided.

Peak Hour 100% Volume		
Time	Major Vol.	Minor Vol.
PM	999	370

Peak Hour 70% Volume		
Time	Major Vol.	Minor Vol.

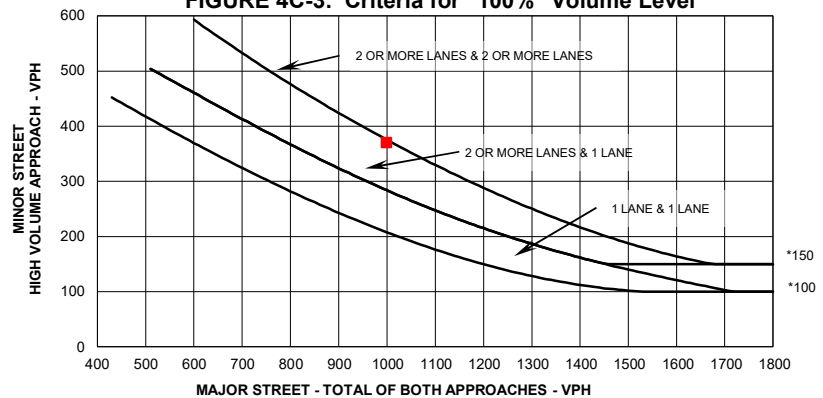
Criteria

1. Delay on Minor Approach *(vehicle-hours)		
Approach Lanes	1	2
Delay Criteria*	4.0	5.0
Delay*		
Fulfilled?:	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No

2. Volume on Minor Approach One-Direction *(vehicles per hour)		
Approach Lanes	1	2
Volume Criteria*	100	150
Volume*		
Fulfilled?:	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No

3. Total Intersection Entering Volume *(vehicles per hour)		
No. of Approaches	3	4
Volume Criteria*	650	800
Volume*		
Fulfilled?:	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No

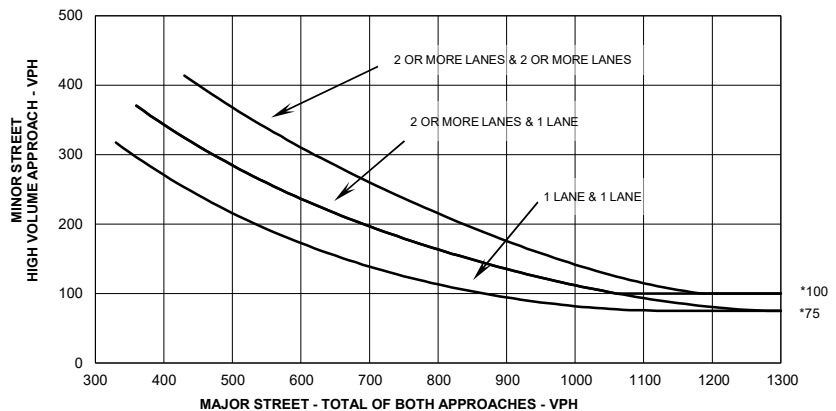
Plot volume combination on the applicable figure below.

FIGURE 4C-3: Criteria for "100%" Volume Level

* Note: 150 vph applies as the lower threshold volume for a minor street approach with two or more lanes and 100 vph applies as the lower threshold volume threshold for a minor street approach with one lane.

FIGURE 4C-4: Criteria for "70%" Volume Level

(Community Less than 10,000 population or above 70 km/hr (40 mph) on Major Street)



* Note: 100 vph applies as the lower threshold volume for a minor street approach with two or more lanes and 75 vph applies as the lower threshold volume threshold for a minor street approach with one lane.

State of Florida Department of Transportation

TRAFFIC SIGNAL WARRANT SUMMARY

Form 750-020-01
TRAFFIC ENGINEERING
10/15

City: **Lincoln**
County: _____
District: _____

Engineer: **John P Diediker**
Date: **January 17, 2020**

Major Street: **P St**
Minor Street: **N 16th St**

Lanes: **3** Major Approach Speed: **25**
Lanes: **3** Minor Approach Speed: **25**

MUTCD Electronic Reference to Chapter 4: <http://mutcd.fhwa.dot.gov/pdfs/2009r1r2/part4.pdf>

Volume Level Criteria

1. Is the posted speed or 85th-percentile of major street > 40 mph (70 km/h)?
2. Is the intersection in a built-up area of an isolated community with a population < 10,000?

☐ Yes ☒ No

☐ Yes ☒ No

"70%" volume level **may** be used if Question 1 **or** 2 above is answered "Yes"

☐ 70% ☒ 100%

WARRANT 3 - PEAK HOUR

If all three criteria are fulfilled **or** the plotted point lies above the appropriate line, then the warrant is satisfied.

Applicable: ☒ Yes ☐ No

Satisfied: ☐ Yes ☒ No

Unusual condition justifying use of warrant:

Record hour when criteria are fulfilled and the corresponding delay or volume in boxes provided.

Peak Hour 100% Volume		
Time	Major Vol.	Minor Vol.
AM	309	235

Peak Hour 70% Volume		
Time	Major Vol.	Minor Vol.

Criteria

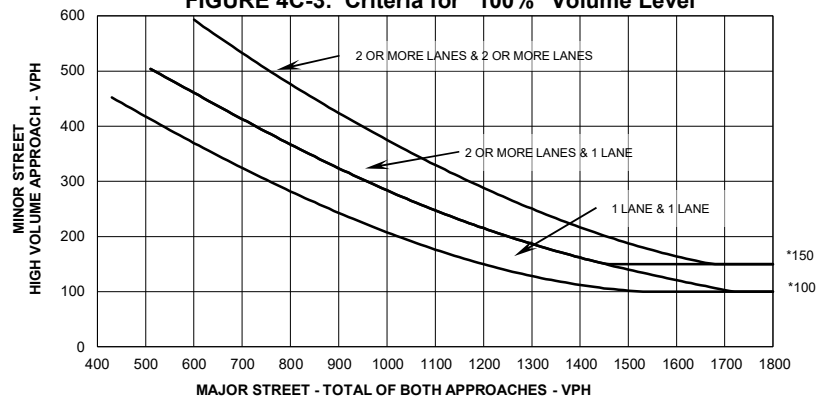
1. Delay on Minor Approach *(vehicle-hours)		
Approach Lanes	1	2
Delay Criteria*	4.0	5.0
Delay*		
Fulfilled?:	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No

2. Volume on Minor Approach One-Direction *(vehicles per hour)		
Approach Lanes	1	2
Volume Criteria*	100	150
Volume*		
Fulfilled?:	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No

3. Total Intersection Entering Volume *(vehicles per hour)		
No. of Approaches	3	4
Volume Criteria*	650	800
Volume*		
Fulfilled?:	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No

Plot volume combination on the applicable figure below.

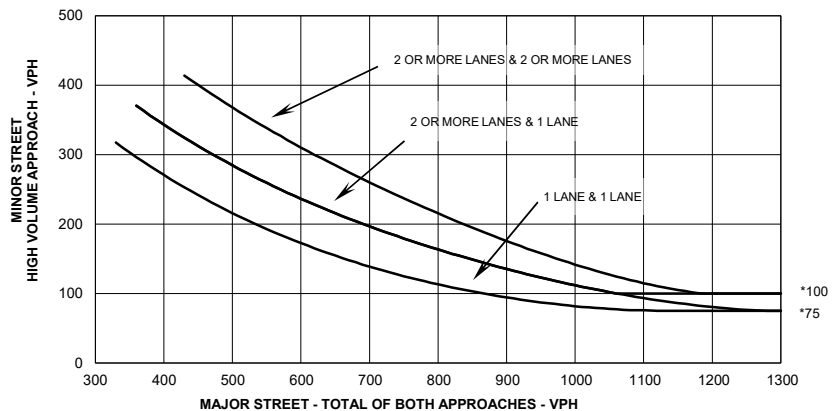
FIGURE 4C-3: Criteria for "100%" Volume Level



* Note: 150 vph applies as the lower threshold volume for a minor street approach with two or more lanes and 100 vph applies as the lower threshold volume threshold for a minor street approach with one lane.

FIGURE 4C-4: Criteria for "70%" Volume Level

(Community Less than 10,000 population or above 70 km/hr (40 mph) on Major Street)



* Note: 100 vph applies as the lower threshold volume for a minor street approach with two or more lanes and 75 vph applies as the lower threshold volume threshold for a minor street approach with one lane.

TRAFFIC SIGNAL WARRANT SUMMARY

City: **Lincoln**
County:
District:

Engineer: **John P Diediker**
Date: **January 17, 2020**

Major Street: **P St**
Minor Street: **N 16th St**

Lanes: **3** Major Approach Speed: **25**
Lanes: **3** Minor Approach Speed: **25**

MUTCD Electronic Reference to Chapter 4: <http://mutcd.fhwa.dot.gov/pdfs/2009r1r2/part4.pdf>

Volume Level Criteria

1. Is the posted speed or 85th-percentile of major street > 40 mph (70 km/h)?
2. Is the intersection in a built-up area of an isolated community with a population < 10,000?

☐ Yes ☒ No

☐ Yes ☒ No

"70%" volume level **may** be used if Question 1 **or** 2 above is answered "Yes"

☐ 70% ☒ 100%

WARRANT 3 - PEAK HOUR

If all three criteria are fulfilled **or** the plotted point lies above the appropriate line, then the warrant is satisfied.

Applicable: ☒ Yes ☐ No

Satisfied: ☐ Yes ☒ No

Unusual condition justifying use of warrant:

Record hour when criteria are fulfilled and the corresponding delay or volume in boxes provided.

Peak Hour 100% Volume		
Time	Major Vol.	Minor Vol.
PM	599	553

Peak Hour 70% Volume		
Time	Major Vol.	Minor Vol.

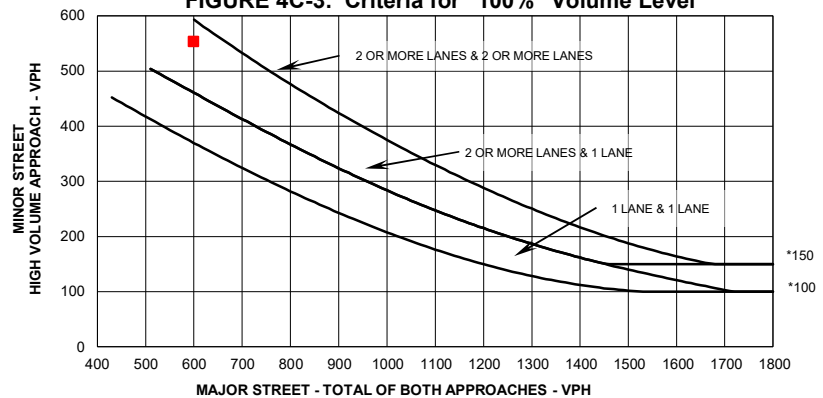
Criteria

1. Delay on Minor Approach *(vehicle-hours)		
Approach Lanes	1	2
Delay Criteria*	4.0	5.0
Delay*		
Fulfilled?:	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No

2. Volume on Minor Approach One-Direction *(vehicles per hour)		
Approach Lanes	1	2
Volume Criteria*	100	150
Volume*		
Fulfilled?:	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No

3. Total Intersection Entering Volume *(vehicles per hour)		
No. of Approaches	3	4
Volume Criteria*	650	800
Volume*		
Fulfilled?:	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No

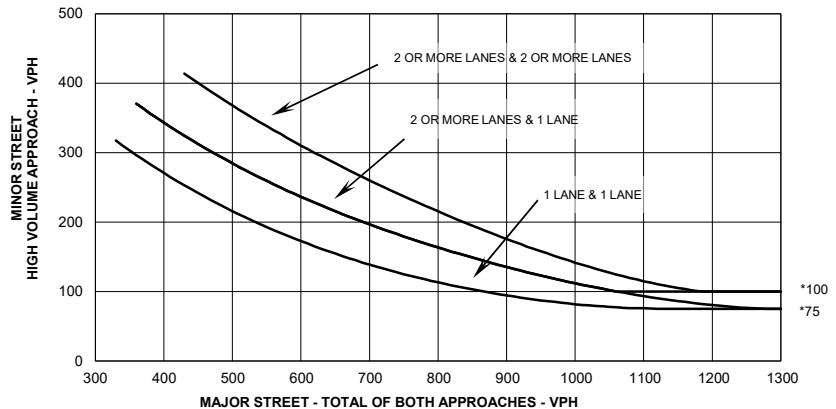
Plot volume combination on the applicable figure below.

FIGURE 4C-3: Criteria for "100%" Volume Level

* Note: 150 vph applies as the lower threshold volume for a minor street approach with two or more lanes and 100 vph applies as the lower threshold volume threshold for a minor street approach with one lane.

FIGURE 4C-4: Criteria for "70%" Volume Level

(Community Less than 10,000 population or above 70 km/hr (40 mph) on Major Street)



* Note: 100 vph applies as the lower threshold volume for a minor street approach with two or more lanes and 75 vph applies as the lower threshold volume threshold for a minor street approach with one lane.

TRAFFIC SIGNAL WARRANT SUMMARY

City: **Lincoln**
 County:
 District:

Engineer: **John P Diediker**
 Date: **January 17, 2020**

Major Street: **O St**
 Minor Street: **16th St**

Lanes: **2** Major Approach Speed: **25**
 Lanes: **4** Minor Approach Speed: **25**

MUTCD Electronic Reference to Chapter 4: <http://mutcd.fhwa.dot.gov/pdfs/2009r1r2/part4.pdf>

Volume Level Criteria

1. Is the posted speed or 85th-percentile of major street > 40 mph (70 km/h)?
2. Is the intersection in a built-up area of an isolated community with a population < 10,000?

☐ Yes ☒ No

☐ Yes ☒ No

"70%" volume level **may** be used if Question 1 **or** 2 above is answered "Yes"

☐ 70% ☒ 100%

WARRANT 3 - PEAK HOUR

If all three criteria are fulfilled **or** the plotted point lies above the appropriate line, then the warrant is satisfied.

Applicable: ☒ Yes ☐ No

Satisfied: ☒ Yes ☐ No

Unusual condition justifying use of warrant:

Record hour when criteria are fulfilled and the corresponding delay or volume in boxes provided.

Peak Hour 100% Volume		
Time	Major Vol.	Minor Vol.
AM	1662	333

Peak Hour 70% Volume		
Time	Major Vol.	Minor Vol.

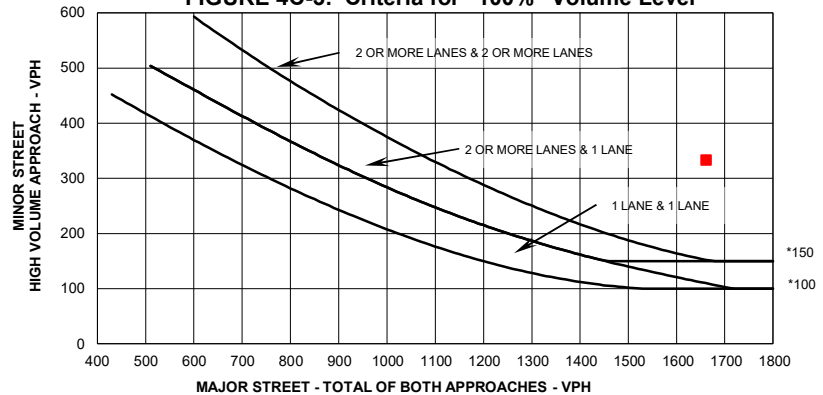
Criteria

1. Delay on Minor Approach *(vehicle-hours)		
Approach Lanes	1	2
Delay Criteria*	4.0	5.0
Delay*		
Fulfilled?:	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No

2. Volume on Minor Approach One-Direction *(vehicles per hour)		
Approach Lanes	1	2
Volume Criteria*	100	150
Volume*		
Fulfilled?:	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No

3. Total Intersection Entering Volume *(vehicles per hour)		
No. of Approaches	3	4
Volume Criteria*	650	800
Volume*		
Fulfilled?:	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No

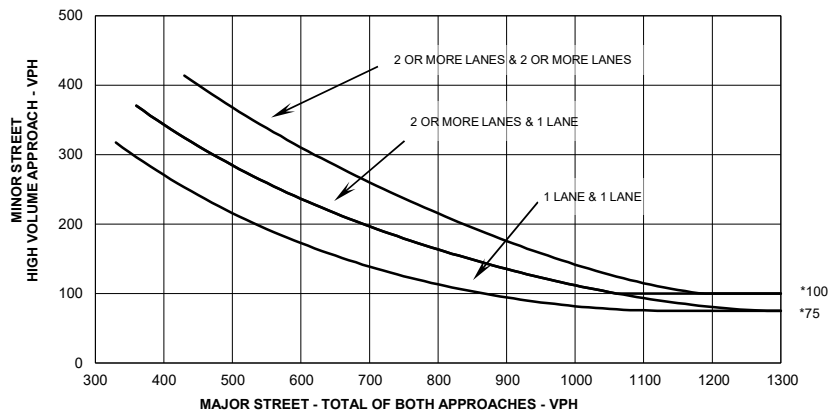
Plot volume combination on the applicable figure below.

FIGURE 4C-3: Criteria for "100%" Volume Level

* Note: 150 vph applies as the lower threshold volume for a minor street approach with two or more lanes and 100 vph applies as the lower threshold volume threshold for a minor street approach with one lane.

FIGURE 4C-4: Criteria for "70%" Volume Level

(Community Less than 10,000 population or above 70 km/hr (40 mph) on Major Street)



* Note: 100 vph applies as the lower threshold volume for a minor street approach with two or more lanes and 75 vph applies as the lower threshold volume threshold for a minor street approach with one lane.

TRAFFIC SIGNAL WARRANT SUMMARY

City: **Lincoln**
 County:
 District:

Engineer: **John P Diediker**
 Date: **January 17, 2020**

Major Street: **O St**
 Minor Street: **16th St**

Lanes: **2** Major Approach Speed: **25**
 Lanes: **4** Minor Approach Speed: **25**

MUTCD Electronic Reference to Chapter 4: <http://mutcd.fhwa.dot.gov/pdfs/2009r1r2/part4.pdf>

Volume Level Criteria

1. Is the posted speed or 85th-percentile of major street > 40 mph (70 km/h)?
2. Is the intersection in a built-up area of an isolated community with a population < 10,000?

☐ Yes ☒ No

☐ Yes ☒ No

"70%" volume level **may** be used if Question 1 **or** 2 above is answered "Yes"

☐ 70% ☒ 100%

WARRANT 3 - PEAK HOUR

If all three criteria are fulfilled **or** the plotted point lies above the appropriate line, then the warrant is satisfied.

Applicable: ☒ Yes ☐ No

Satisfied: ☒ Yes ☐ No

Unusual condition justifying use of warrant:

Record hour when criteria are fulfilled and the corresponding delay or volume in boxes provided.

Peak Hour 100% Volume		
Time	Major Vol.	Minor Vol.
PM	1866	623

Peak Hour 70% Volume		
Time	Major Vol.	Minor Vol.

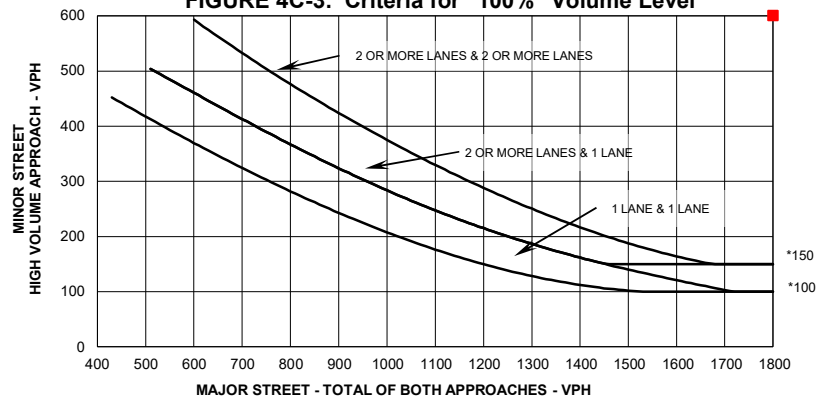
Criteria

1. Delay on Minor Approach *(vehicle-hours)		
Approach Lanes	1	2
Delay Criteria*	4.0	5.0
Delay*		
Fulfilled?:	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No

2. Volume on Minor Approach One-Direction *(vehicles per hour)		
Approach Lanes	1	2
Volume Criteria*	100	150
Volume*		
Fulfilled?:	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No

3. Total Intersection Entering Volume *(vehicles per hour)		
No. of Approaches	3	4
Volume Criteria*	650	800
Volume*		
Fulfilled?:	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No

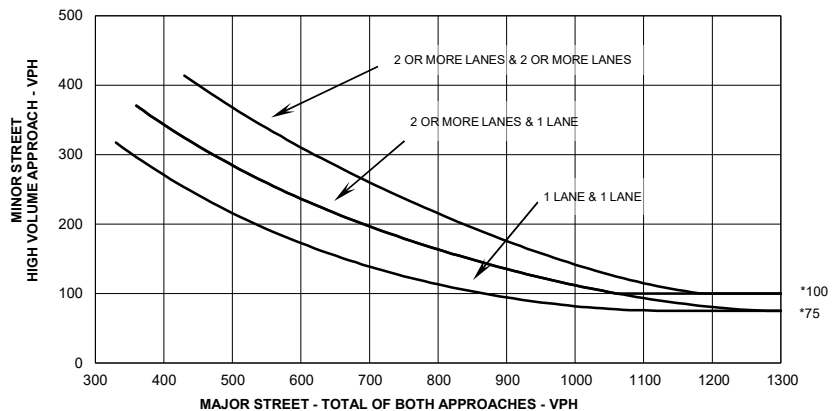
Plot volume combination on the applicable figure below.

FIGURE 4C-3: Criteria for "100%" Volume Level

* Note: 150 vph applies as the lower threshold volume for a minor street approach with two or more lanes and 100 vph applies as the lower threshold volume threshold for a minor street approach with one lane.

FIGURE 4C-4: Criteria for "70%" Volume Level

(Community Less than 10,000 population or above 70 km/hr (40 mph) on Major Street)



* Note: 100 vph applies as the lower threshold volume for a minor street approach with two or more lanes and 75 vph applies as the lower threshold volume threshold for a minor street approach with one lane.

TRAFFIC SIGNAL WARRANT SUMMARY

City: **Lincoln**
County:
District:

Engineer: **John P Diediker**
Date: **January 17, 2020**

Major Street: **L St**
Minor Street: **16th St**

Lanes: **4** Major Approach Speed: **25**
Lanes: **4** Minor Approach Speed: **25**

MUTCD Electronic Reference to Chapter 4: <http://mutcd.fhwa.dot.gov/pdfs/2009r1r2/part4.pdf>

Volume Level Criteria

1. Is the posted speed or 85th-percentile of major street > 40 mph (70 km/h)?
2. Is the intersection in a built-up area of an isolated community with a population < 10,000?

☐ Yes ☒ No

☐ Yes ☒ No

"70%" volume level **may** be used if Question 1 **or** 2 above is answered "Yes"

☐ 70% ☒ 100%

WARRANT 3 - PEAK HOUR

If all three criteria are fulfilled **or** the plotted point lies above the appropriate line, then the warrant is satisfied.

Applicable: ☒ Yes ☐ No

Satisfied: ☒ Yes ☐ No

Unusual condition justifying use of warrant:

Record hour when criteria are fulfilled and the corresponding delay or volume in boxes provided.

Peak Hour 100% Volume		
Time	Major Vol.	Minor Vol.
AM	2034	488

Peak Hour 70% Volume		
Time	Major Vol.	Minor Vol.

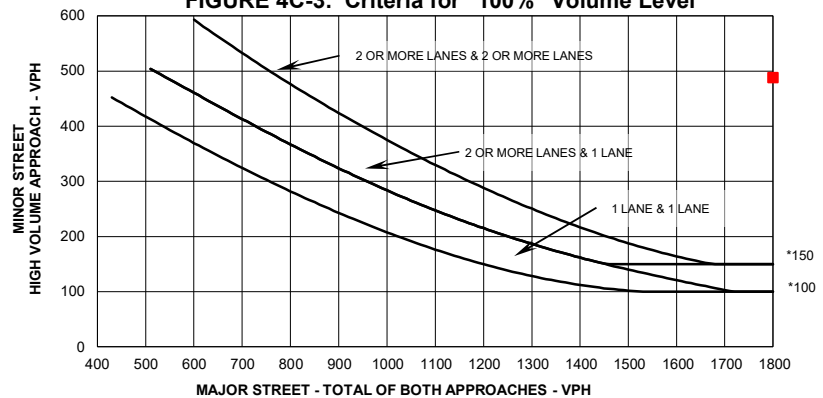
Criteria

1. Delay on Minor Approach *(vehicle-hours)		
Approach Lanes	1	2
Delay Criteria*	4.0	5.0
Delay*		
Fulfilled?:	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No

2. Volume on Minor Approach One-Direction *(vehicles per hour)		
Approach Lanes	1	2
Volume Criteria*	100	150
Volume*		
Fulfilled?:	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No

3. Total Intersection Entering Volume *(vehicles per hour)		
No. of Approaches	3	4
Volume Criteria*	650	800
Volume*		
Fulfilled?:	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No

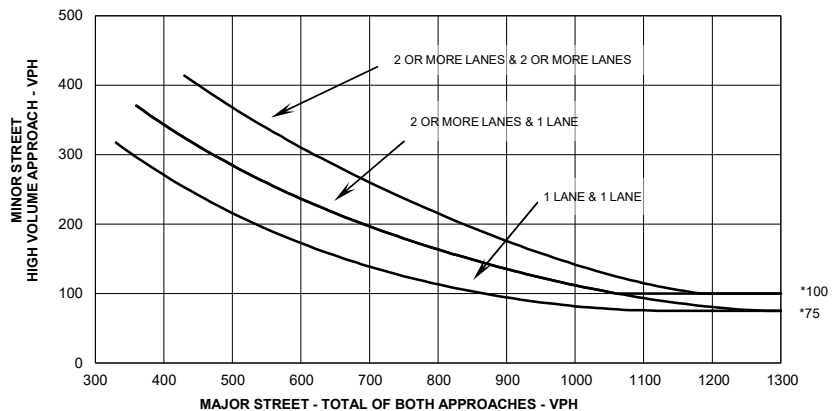
Plot volume combination on the applicable figure below.

FIGURE 4C-3: Criteria for "100%" Volume Level

* Note: 150 vph applies as the lower threshold volume for a minor street approach with two or more lanes and 100 vph applies as the lower threshold volume threshold for a minor street approach with one lane.

FIGURE 4C-4: Criteria for "70%" Volume Level

(Community Less than 10,000 population or above 70 km/hr (40 mph) on Major Street)



* Note: 100 vph applies as the lower threshold volume for a minor street approach with two or more lanes and 75 vph applies as the lower threshold volume threshold for a minor street approach with one lane.

TRAFFIC SIGNAL WARRANT SUMMARY

City: **Lincoln**
County:
District:

Engineer: **John P Diediker**
Date: **January 17, 2020**

Major Street: **L St**
Minor Street: **16th St**

Lanes: **4** Major Approach Speed: **25**
Lanes: **4** Minor Approach Speed: **25**

MUTCD Electronic Reference to Chapter 4: <http://mutcd.fhwa.dot.gov/pdfs/2009r1r2/part4.pdf>

Volume Level Criteria

1. Is the posted speed or 85th-percentile of major street > 40 mph (70 km/h)?
2. Is the intersection in a built-up area of an isolated community with a population < 10,000?

☐ Yes ☒ No

☐ Yes ☒ No

"70%" volume level **may** be used if Question 1 **or** 2 above is answered "Yes"

☐ 70% ☒ 100%

WARRANT 3 - PEAK HOUR

If all three criteria are fulfilled **or** the plotted point lies above the appropriate line, then the warrant is satisfied.

Applicable: ☒ Yes ☐ No

Satisfied: ☒ Yes ☐ No

Unusual condition justifying use of warrant:

Record hour when criteria are fulfilled and the corresponding delay or volume in boxes provided.

Peak Hour 100% Volume		
Time	Major Vol.	Minor Vol.
PM	1108	1209

Peak Hour 70% Volume		
Time	Major Vol.	Minor Vol.

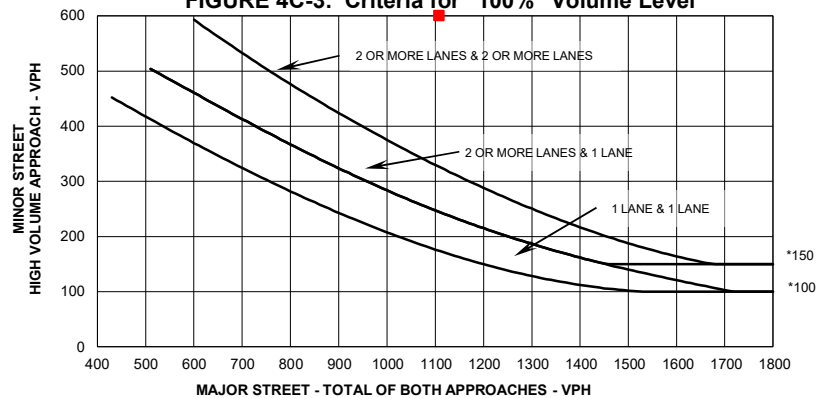
Criteria

1. Delay on Minor Approach *(vehicle-hours)		
Approach Lanes	1	2
Delay Criteria*	4.0	5.0
Delay*		
Fulfilled?:	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No

2. Volume on Minor Approach One-Direction *(vehicles per hour)		
Approach Lanes	1	2
Volume Criteria*	100	150
Volume*		
Fulfilled?:	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No

3. Total Intersection Entering Volume *(vehicles per hour)		
No. of Approaches	3	4
Volume Criteria*	650	800
Volume*		
Fulfilled?:	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No

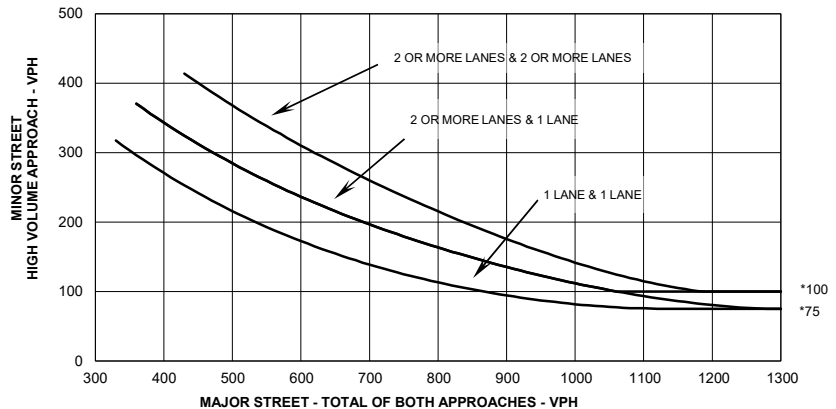
Plot volume combination on the applicable figure below.

FIGURE 4C-3: Criteria for "100%" Volume Level

* Note: 150 vph applies as the lower threshold volume for a minor street approach with two or more lanes and 100 vph applies as the lower threshold volume threshold for a minor street approach with one lane.

FIGURE 4C-4: Criteria for "70%" Volume Level

(Community Less than 10,000 population or above 70 km/hr (40 mph) on Major Street)



* Note: 100 vph applies as the lower threshold volume for a minor street approach with two or more lanes and 75 vph applies as the lower threshold volume threshold for a minor street approach with one lane.

TRAFFIC SIGNAL WARRANT SUMMARY

City: **Lincoln**
County:
District:

Engineer: **John P Diediker**
Date: **January 17, 2020**

Major Street: **K St**
Minor Street: **16th St**

Lanes: **4** Major Approach Speed: **25**
Lanes: **4** Minor Approach Speed: **25**

MUTCD Electronic Reference to Chapter 4: <http://mutcd.fhwa.dot.gov/pdfs/2009r1r2/part4.pdf>

Volume Level Criteria

1. Is the posted speed or 85th-percentile of major street > 40 mph (70 km/h)?
2. Is the intersection in a built-up area of an isolated community with a population < 10,000?

☐ Yes ☒ No

☐ Yes ☒ No

"70%" volume level **may** be used if Question 1 **or** 2 above is answered "Yes"

☐ 70% ☒ 100%

WARRANT 3 - PEAK HOUR

If all three criteria are fulfilled **or** the plotted point lies above the appropriate line, then the warrant is satisfied.

Applicable: ☒ Yes ☐ No

Satisfied: ☒ Yes ☐ No

Unusual condition justifying use of warrant:

Record hour when criteria are fulfilled and the corresponding delay or volume in boxes provided.

Peak Hour 100% Volume		
Time	Major Vol.	Minor Vol.
AM	1499	443

Peak Hour 70% Volume		
Time	Major Vol.	Minor Vol.

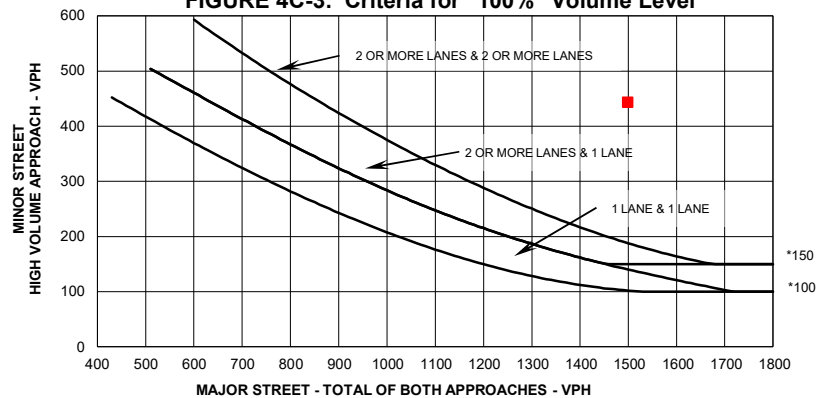
Criteria

1. Delay on Minor Approach *(vehicle-hours)		
Approach Lanes	1	2
Delay Criteria*	4.0	5.0
Delay*		
Fulfilled?:	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No

2. Volume on Minor Approach One-Direction *(vehicles per hour)		
Approach Lanes	1	2
Volume Criteria*	100	150
Volume*		
Fulfilled?:	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No

3. Total Intersection Entering Volume *(vehicles per hour)		
No. of Approaches	3	4
Volume Criteria*	650	800
Volume*		
Fulfilled?:	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No

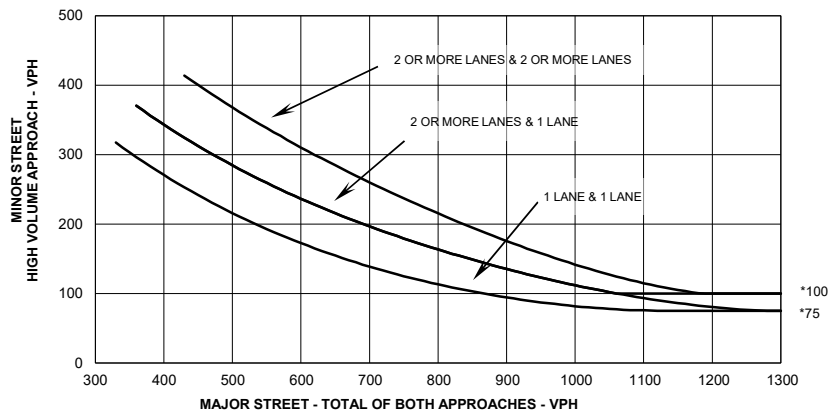
Plot volume combination on the applicable figure below.

FIGURE 4C-3: Criteria for "100%" Volume Level

* Note: 150 vph applies as the lower threshold volume for a minor street approach with two or more lanes and 100 vph applies as the lower threshold volume threshold for a minor street approach with one lane.

FIGURE 4C-4: Criteria for "70%" Volume Level

(Community Less than 10,000 population or above 70 km/hr (40 mph) on Major Street)



* Note: 100 vph applies as the lower threshold volume for a minor street approach with two or more lanes and 75 vph applies as the lower threshold volume threshold for a minor street approach with one lane.

TRAFFIC SIGNAL WARRANT SUMMARY

City: **Lincoln**
 County:
 District:

Engineer: **John P Diediker**
 Date: **January 17, 2020**

Major Street: **K St**
 Minor Street: **16th St**

Lanes: **4** Major Approach Speed: **25**
 Lanes: **4** Minor Approach Speed: **25**

MUTCD Electronic Reference to Chapter 4: <http://mutcd.fhwa.dot.gov/pdfs/2009r1r2/part4.pdf>

Volume Level Criteria

1. Is the posted speed or 85th-percentile of major street > 40 mph (70 km/h)?
2. Is the intersection in a built-up area of an isolated community with a population < 10,000?

☐ Yes ☒ No

☐ Yes ☒ No

"70%" volume level **may** be used if Question 1 **or** 2 above is answered "Yes"

☐ 70% ☒ 100%

WARRANT 3 - PEAK HOUR

If all three criteria are fulfilled **or** the plotted point lies above the appropriate line, then the warrant is satisfied.

Applicable: ☒ Yes ☐ No

Satisfied: ☒ Yes ☐ No

Unusual condition justifying use of warrant:

Record hour when criteria are fulfilled and the corresponding delay or volume in boxes provided.

Peak Hour 100% Volume		
Time	Major Vol.	Minor Vol.
PM	1930	1120

Peak Hour 70% Volume		
Time	Major Vol.	Minor Vol.

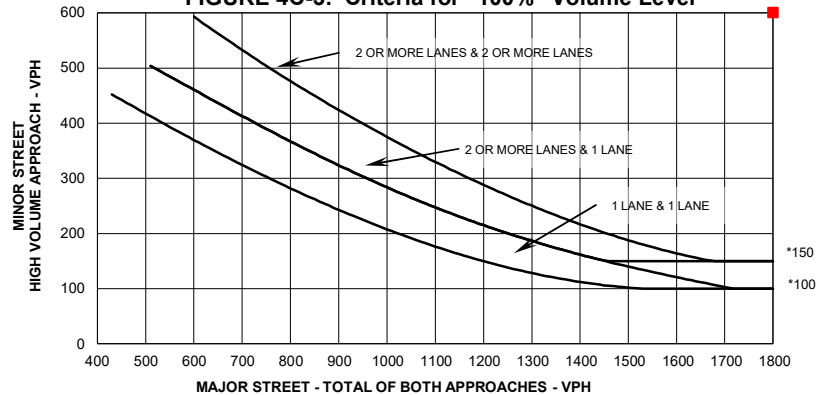
Criteria

1. Delay on Minor Approach *(vehicle-hours)		
Approach Lanes	1	2
Delay Criteria*	4.0	5.0
Delay*		
Fulfilled?:	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No

2. Volume on Minor Approach One-Direction *(vehicles per hour)		
Approach Lanes	1	2
Volume Criteria*	100	150
Volume*		
Fulfilled?:	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No

3. Total Intersection Entering Volume *(vehicles per hour)		
No. of Approaches	3	4
Volume Criteria*	650	800
Volume*		
Fulfilled?:	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No

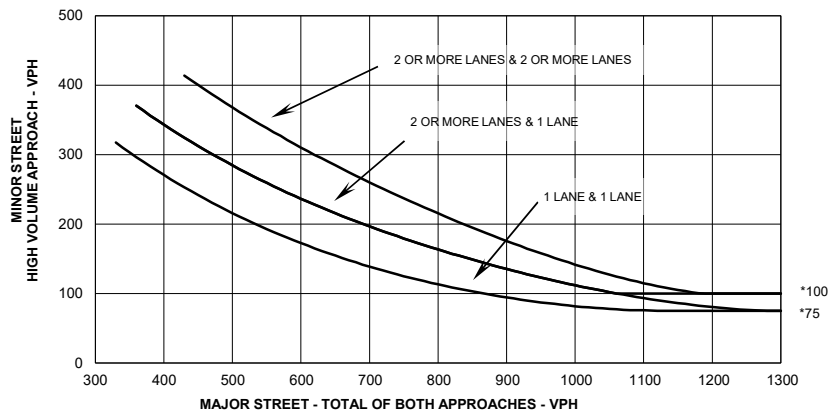
Plot volume combination on the applicable figure below.

FIGURE 4C-3: Criteria for "100%" Volume Level

* Note: 150 vph applies as the lower threshold volume for a minor street approach with two or more lanes and 100 vph applies as the lower threshold volume threshold for a minor street approach with one lane.

FIGURE 4C-4: Criteria for "70%" Volume Level

(Community Less than 10,000 population or above 70 km/hr (40 mph) on Major Street)



* Note: 100 vph applies as the lower threshold volume for a minor street approach with two or more lanes and 75 vph applies as the lower threshold volume threshold for a minor street approach with one lane.

TRAFFIC SIGNAL WARRANT SUMMARY

City: **Lincoln**
County:
District:

Engineer: **John P Diediker**
Date: **January 17, 2020**

Major Street: **16th St**
Minor Street: **G St**

Lanes: **3** Major Approach Speed: **25**
Lanes: **1** Minor Approach Speed: **25**

MUTCD Electronic Reference to Chapter 4: <http://mutcd.fhwa.dot.gov/pdfs/2009r1r2/part4.pdf>

Volume Level Criteria

1. Is the posted speed or 85th-percentile of major street > 40 mph (70 km/h)?
2. Is the intersection in a built-up area of an isolated community with a population < 10,000?

☐ Yes ☒ No

☐ Yes ☒ No

"70%" volume level **may** be used if Question 1 **or** 2 above is answered "Yes"

☐ 70% ☒ 100%

WARRANT 3 - PEAK HOUR

If all three criteria are fulfilled **or** the plotted point lies above the appropriate line, then the warrant is satisfied.

Applicable: ☒ Yes ☐ No

Satisfied: ☐ Yes ☒ No

Unusual condition justifying use of warrant:

Record hour when criteria are fulfilled and the corresponding delay or volume in boxes provided.

Peak Hour 100% Volume		
Time	Major Vol.	Minor Vol.
AM	792	179

Peak Hour 70% Volume		
Time	Major Vol.	Minor Vol.

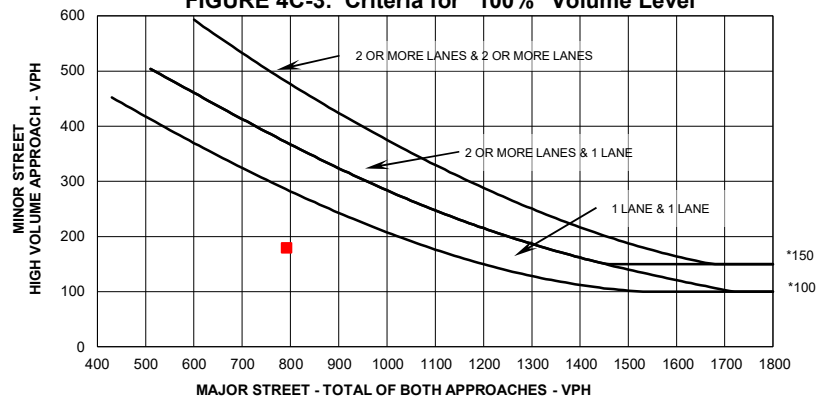
Criteria

1. Delay on Minor Approach *(vehicle-hours)		
Approach Lanes	1	2
Delay Criteria*	4.0	5.0
Delay*		
Fulfilled?:	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No

2. Volume on Minor Approach One-Direction *(vehicles per hour)		
Approach Lanes	1	2
Volume Criteria*	100	150
Volume*		
Fulfilled?:	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No

3. Total Intersection Entering Volume *(vehicles per hour)		
No. of Approaches	3	4
Volume Criteria*	650	800
Volume*		
Fulfilled?:	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No

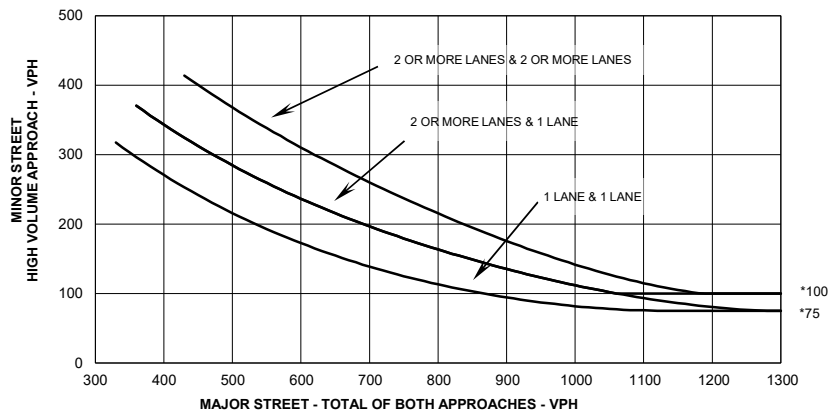
Plot volume combination on the applicable figure below.

FIGURE 4C-3: Criteria for "100%" Volume Level

* Note: 150 vph applies as the lower threshold volume for a minor street approach with two or more lanes and 100 vph applies as the lower threshold volume threshold for a minor street approach with one lane.

FIGURE 4C-4: Criteria for "70%" Volume Level

(Community Less than 10,000 population or above 70 km/hr (40 mph) on Major Street)



* Note: 100 vph applies as the lower threshold volume for a minor street approach with two or more lanes and 75 vph applies as the lower threshold volume threshold for a minor street approach with one lane.

TRAFFIC SIGNAL WARRANT SUMMARY

City: **Lincoln**
County:
District:

Engineer: **John P Diediker**
Date: **January 17, 2020**

Major Street: **16th St**
Minor Street: **G St**

Lanes: **3** Major Approach Speed: **25**
Lanes: **1** Minor Approach Speed: **25**

MUTCD Electronic Reference to Chapter 4: <http://mutcd.fhwa.dot.gov/pdfs/2009r1r2/part4.pdf>

Volume Level Criteria

1. Is the posted speed or 85th-percentile of major street > 40 mph (70 km/h)?
2. Is the intersection in a built-up area of an isolated community with a population < 10,000?

☐ Yes ☒ No

☐ Yes ☒ No

"70%" volume level **may** be used if Question 1 **or** 2 above is answered "Yes"

☐ 70% ☒ 100%

WARRANT 3 - PEAK HOUR

If all three criteria are fulfilled **or** the plotted point lies above the appropriate line, then the warrant is satisfied.

Applicable: ☒ Yes ☐ No

Satisfied: ☐ Yes ☒ No

Unusual condition justifying use of warrant:

Record hour when criteria are fulfilled and the corresponding delay or volume in boxes provided.

Peak Hour 100% Volume		
Time	Major Vol.	Minor Vol.
PM	816	128

Peak Hour 70% Volume		
Time	Major Vol.	Minor Vol.

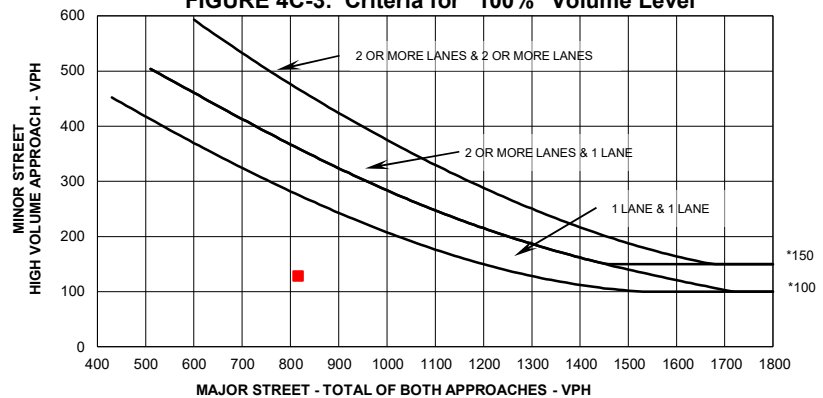
Criteria

1. Delay on Minor Approach *(vehicle-hours)		
Approach Lanes	1	2
Delay Criteria*	4.0	5.0
Delay*		
Fulfilled?:	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No

2. Volume on Minor Approach One-Direction *(vehicles per hour)		
Approach Lanes	1	2
Volume Criteria*	100	150
Volume*		
Fulfilled?:	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No

3. Total Intersection Entering Volume *(vehicles per hour)		
No. of Approaches	3	4
Volume Criteria*	650	800
Volume*		
Fulfilled?:	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No

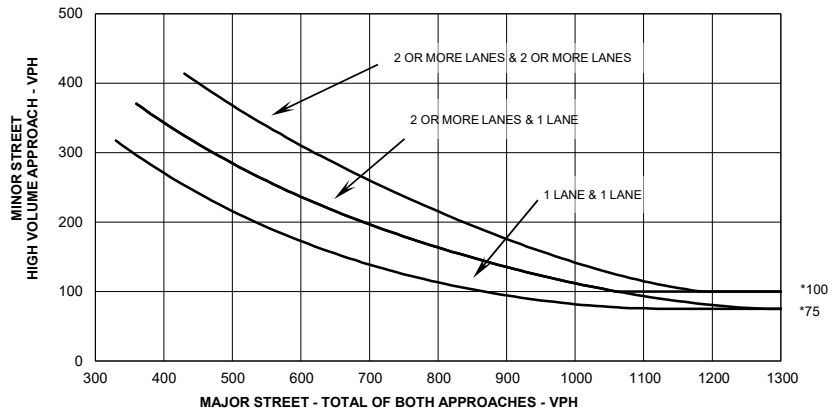
Plot volume combination on the applicable figure below.

FIGURE 4C-3: Criteria for "100%" Volume Level

* Note: 150 vph applies as the lower threshold volume for a minor street approach with two or more lanes and 100 vph applies as the lower threshold volume threshold for a minor street approach with one lane.

FIGURE 4C-4: Criteria for "70%" Volume Level

(Community Less than 10,000 population or above 70 km/hr (40 mph) on Major Street)



* Note: 100 vph applies as the lower threshold volume for a minor street approach with two or more lanes and 75 vph applies as the lower threshold volume threshold for a minor street approach with one lane.

TRAFFIC SIGNAL WARRANT SUMMARY

City: **Lincoln**
County:
District:

Engineer: **John P Diediker**
Date: **January 17, 2020**

Major Street: **16th St**
Minor Street: **D St**

Lanes: **3** Major Approach Speed: **25**
Lanes: **1** Minor Approach Speed: **25**

MUTCD Electronic Reference to Chapter 4: <http://mutcd.fhwa.dot.gov/pdfs/2009r1r2/part4.pdf>

Volume Level Criteria

1. Is the posted speed or 85th-percentile of major street > 40 mph (70 km/h)?
2. Is the intersection in a built-up area of an isolated community with a population < 10,000?

☐ Yes ☒ No

☐ Yes ☒ No

"70%" volume level **may** be used if Question 1 **or** 2 above is answered "Yes"

☐ 70% ☒ 100%

WARRANT 3 - PEAK HOUR

If all three criteria are fulfilled **or** the plotted point lies above the appropriate line, then the warrant is satisfied.

Applicable: ☒ Yes ☐ No

Satisfied: ☐ Yes ☒ No

Unusual condition justifying use of warrant:

Record hour when criteria are fulfilled and the corresponding delay or volume in boxes provided.

Peak Hour 100% Volume		
Time	Major Vol.	Minor Vol.
AM	666	64

Peak Hour 70% Volume		
Time	Major Vol.	Minor Vol.

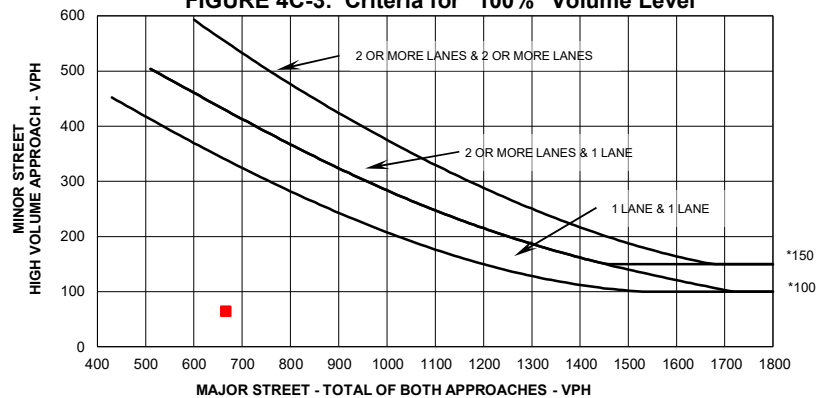
Criteria

1. Delay on Minor Approach *(vehicle-hours)		
Approach Lanes	1	2
Delay Criteria*	4.0	5.0
Delay*		
Fulfilled?:	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No

2. Volume on Minor Approach One-Direction *(vehicles per hour)		
Approach Lanes	1	2
Volume Criteria*	100	150
Volume*		
Fulfilled?:	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No

3. Total Intersection Entering Volume *(vehicles per hour)		
No. of Approaches	3	4
Volume Criteria*	650	800
Volume*		
Fulfilled?:	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No

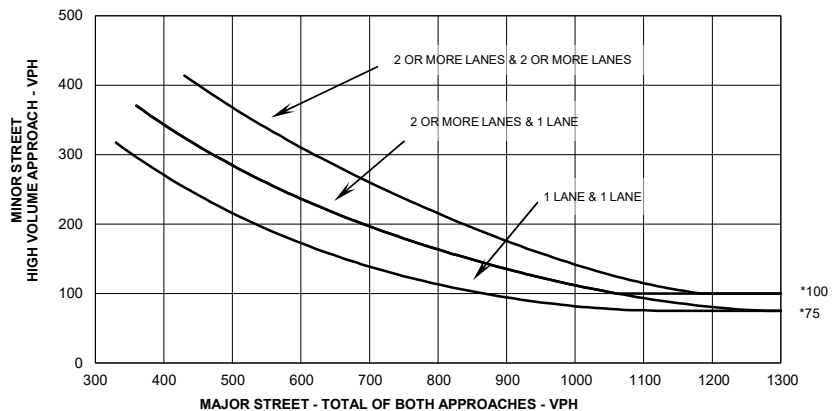
Plot volume combination on the applicable figure below.

FIGURE 4C-3: Criteria for "100%" Volume Level

* Note: 150 vph applies as the lower threshold volume for a minor street approach with two or more lanes and 100 vph applies as the lower threshold volume threshold for a minor street approach with one lane.

FIGURE 4C-4: Criteria for "70%" Volume Level

(Community Less than 10,000 population or above 70 km/hr (40 mph) on Major Street)



* Note: 100 vph applies as the lower threshold volume for a minor street approach with two or more lanes and 75 vph applies as the lower threshold volume threshold for a minor street approach with one lane.

TRAFFIC SIGNAL WARRANT SUMMARY

City: **Lincoln**
County:
District:

Engineer: **John P Diediker**
Date: **January 17, 2020**

Major Street: **16th St**
Minor Street: **D St**

Lanes: **3** Major Approach Speed: **25**
Lanes: **1** Minor Approach Speed: **25**

MUTCD Electronic Reference to Chapter 4: <http://mutcd.fhwa.dot.gov/pdfs/2009r1r2/part4.pdf>

Volume Level Criteria

1. Is the posted speed or 85th-percentile of major street > 40 mph (70 km/h)?
2. Is the intersection in a built-up area of an isolated community with a population < 10,000?

☐ Yes ☒ No

☐ Yes ☒ No

"70%" volume level **may** be used if Question 1 **or** 2 above is answered "Yes"

☐ 70% ☒ 100%

WARRANT 3 - PEAK HOUR

If all three criteria are fulfilled **or** the plotted point lies above the appropriate line, then the warrant is satisfied.

Applicable: ☒ Yes ☐ No

Satisfied: ☐ Yes ☒ No

Unusual condition justifying use of warrant:

Record hour when criteria are fulfilled and the corresponding delay or volume in boxes provided.

Peak Hour 100% Volume		
Time	Major Vol.	Minor Vol.
PM	1097	69

Peak Hour 70% Volume		
Time	Major Vol.	Minor Vol.

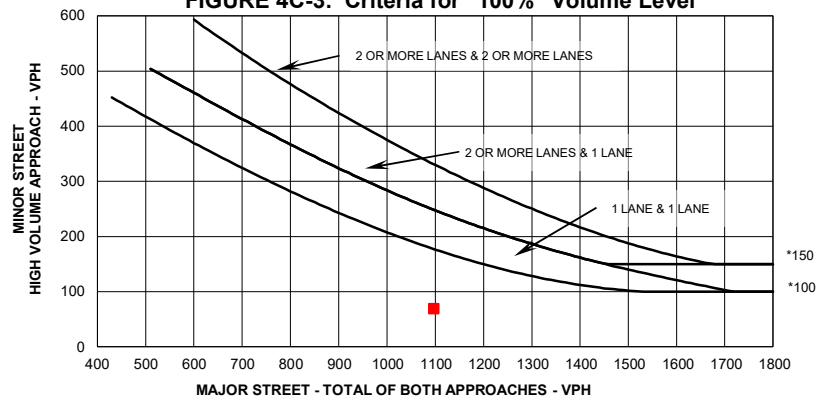
Criteria

1. Delay on Minor Approach *(vehicle-hours)		
Approach Lanes	1	2
Delay Criteria*	4.0	5.0
Delay*		
Fulfilled?:	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No

2. Volume on Minor Approach One-Direction *(vehicles per hour)		
Approach Lanes	1	2
Volume Criteria*	100	150
Volume*		
Fulfilled?:	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No

3. Total Intersection Entering Volume *(vehicles per hour)		
No. of Approaches	3	4
Volume Criteria*	650	800
Volume*		
Fulfilled?:	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No

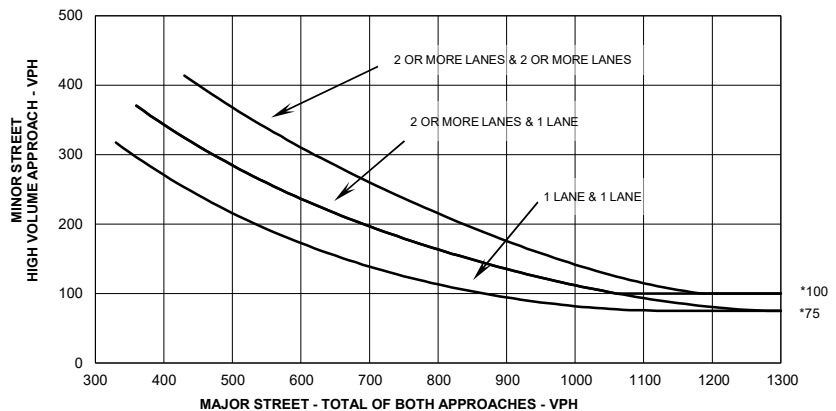
Plot volume combination on the applicable figure below.

FIGURE 4C-3: Criteria for "100%" Volume Level

* Note: 150 vph applies as the lower threshold volume for a minor street approach with two or more lanes and 100 vph applies as the lower threshold volume threshold for a minor street approach with one lane.

FIGURE 4C-4: Criteria for "70%" Volume Level

(Community Less than 10,000 population or above 70 km/hr (40 mph) on Major Street)



* Note: 100 vph applies as the lower threshold volume for a minor street approach with two or more lanes and 75 vph applies as the lower threshold volume threshold for a minor street approach with one lane.

TRAFFIC SIGNAL WARRANT SUMMARY

City: **Lincoln**
County:
District:

Engineer: **John P Diediker**
Date: **January 22, 2020**

Major Street: **A St**
Minor Street: **16th St**

Lanes: **2** Major Approach Speed: **25**
Lanes: **3** Minor Approach Speed: **25**

MUTCD Electronic Reference to Chapter 4: <http://mutcd.fhwa.dot.gov/pdfs/2009r1r2/part4.pdf>

Volume Level Criteria

1. Is the posted speed or 85th-percentile of major street > 40 mph (70 km/h)?
2. Is the intersection in a built-up area of an isolated community with a population < 10,000?

☐ Yes ☒ No

☐ Yes ☒ No

"70%" volume level **may** be used if Question 1 **or** 2 above is answered "Yes"

☐ 70% ☒ 100%

WARRANT 3 - PEAK HOUR

If all three criteria are fulfilled **or** the plotted point lies above the appropriate line, then the warrant is satisfied.

Applicable: ☒ Yes ☐ No

Satisfied: ☒ Yes ☐ No

Unusual condition justifying use of warrant:

Record hour when criteria are fulfilled and the corresponding delay or volume in boxes provided.

Peak Hour 100% Volume		
Time	Major Vol.	Minor Vol.
AM	876	583

Peak Hour 70% Volume		
Time	Major Vol.	Minor Vol.

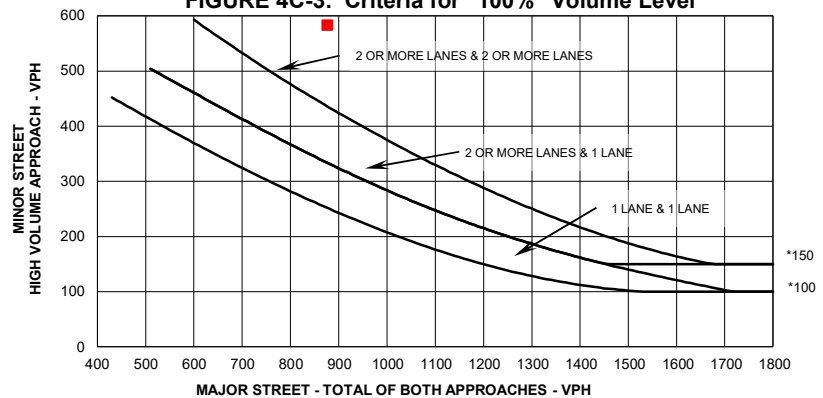
Criteria

1. Delay on Minor Approach *(vehicle-hours)		
Approach Lanes	1	2
Delay Criteria*	4.0	5.0
Delay*		
Fulfilled?:	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No

2. Volume on Minor Approach One-Direction *(vehicles per hour)		
Approach Lanes	1	2
Volume Criteria*	100	150
Volume*		
Fulfilled?:	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No

3. Total Intersection Entering Volume *(vehicles per hour)		
No. of Approaches	3	4
Volume Criteria*	650	800
Volume*		
Fulfilled?:	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No

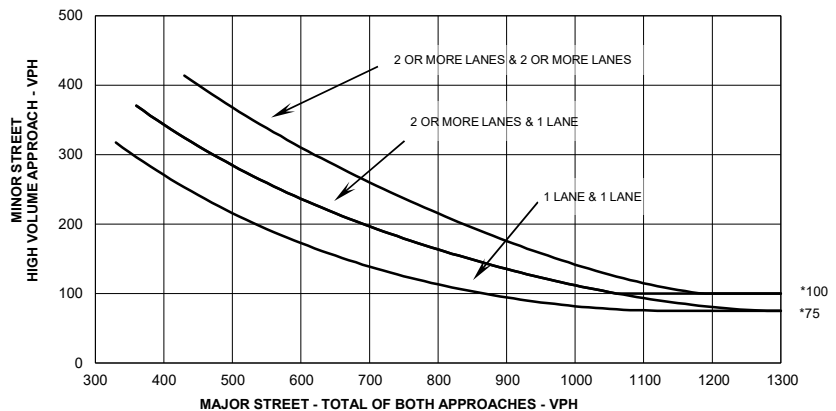
Plot volume combination on the applicable figure below.

FIGURE 4C-3: Criteria for "100%" Volume Level

* Note: 150 vph applies as the lower threshold volume for a minor street approach with two or more lanes and 100 vph applies as the lower threshold volume threshold for a minor street approach with one lane.

FIGURE 4C-4: Criteria for "70%" Volume Level

(Community Less than 10,000 population or above 70 km/hr (40 mph) on Major Street)



* Note: 100 vph applies as the lower threshold volume for a minor street approach with two or more lanes and 75 vph applies as the lower threshold volume threshold for a minor street approach with one lane.

TRAFFIC SIGNAL WARRANT SUMMARY

City: **Lincoln**
County:
District:

Engineer: **John P Diediker**
Date: **January 22, 2020**

Major Street: **A St**
Minor Street: **16th St**

Lanes: **2** Major Approach Speed: **25**
Lanes: **3** Minor Approach Speed: **25**

MUTCD Electronic Reference to Chapter 4: <http://mutcd.fhwa.dot.gov/pdfs/2009r1r2/part4.pdf>

Volume Level Criteria

1. Is the posted speed or 85th-percentile of major street > 40 mph (70 km/h)?
2. Is the intersection in a built-up area of an isolated community with a population < 10,000?

☐ Yes ☒ No

☐ Yes ☒ No

"70%" volume level **may** be used if Question 1 **or** 2 above is answered "Yes"

☐ 70% ☒ 100%

WARRANT 3 - PEAK HOUR

If all three criteria are fulfilled **or** the plotted point lies above the appropriate line, then the warrant is satisfied.

Applicable: ☒ Yes ☐ No

Satisfied: ☒ Yes ☐ No

Unusual condition justifying use of warrant:

Record hour when criteria are fulfilled and the corresponding delay or volume in boxes provided.

Peak Hour 100% Volume		
Time	Major Vol.	Minor Vol.
PM	911	458

Peak Hour 70% Volume		
Time	Major Vol.	Minor Vol.

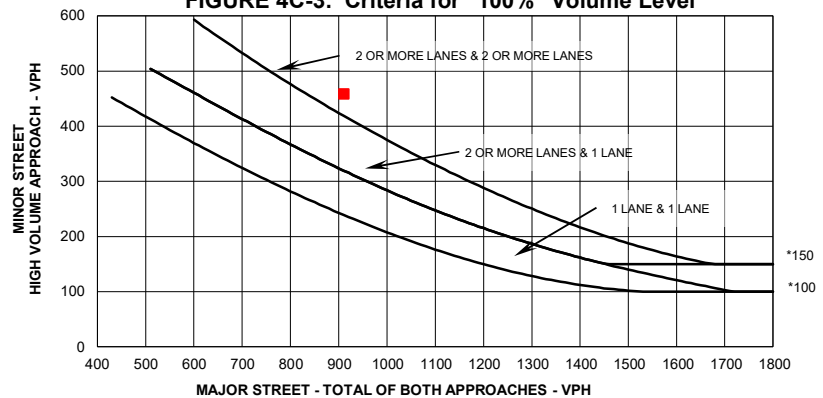
Criteria

1. Delay on Minor Approach *(vehicle-hours)		
Approach Lanes	1	2
Delay Criteria*	4.0	5.0
Delay*		
Fulfilled?:	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No

2. Volume on Minor Approach One-Direction *(vehicles per hour)		
Approach Lanes	1	2
Volume Criteria*	100	150
Volume*		
Fulfilled?:	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No

3. Total Intersection Entering Volume *(vehicles per hour)		
No. of Approaches	3	4
Volume Criteria*	650	800
Volume*		
Fulfilled?:	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No

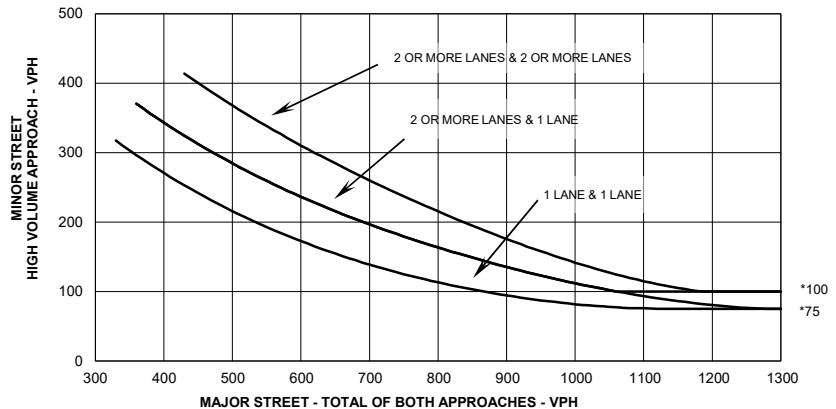
Plot volume combination on the applicable figure below.

FIGURE 4C-3: Criteria for "100%" Volume Level

* Note: 150 vph applies as the lower threshold volume for a minor street approach with two or more lanes and 100 vph applies as the lower threshold volume threshold for a minor street approach with one lane.

FIGURE 4C-4: Criteria for "70%" Volume Level

(Community Less than 10,000 population or above 70 km/hr (40 mph) on Major Street)



* Note: 100 vph applies as the lower threshold volume for a minor street approach with two or more lanes and 75 vph applies as the lower threshold volume threshold for a minor street approach with one lane.

TRAFFIC SIGNAL WARRANT SUMMARY

City: **Lincoln**
County:
District:

Engineer: **John P Diediker**
Date: **January 22, 2020**

Major Street: **South St**
Minor Street: **16th St**

Lanes: **2** Major Approach Speed: **25**
Lanes: **2** Minor Approach Speed: **25**

MUTCD Electronic Reference to Chapter 4: <http://mutcd.fhwa.dot.gov/pdfs/2009r1r2/part4.pdf>

Volume Level Criteria

1. Is the posted speed or 85th-percentile of major street > 40 mph (70 km/h)?
2. Is the intersection in a built-up area of an isolated community with a population < 10,000?

☐ Yes ☒ No

☐ Yes ☒ No

"70%" volume level **may** be used if Question 1 **or** 2 above is answered "Yes"

☐ 70% ☒ 100%

WARRANT 3 - PEAK HOUR

If all three criteria are fulfilled **or** the plotted point lies above the appropriate line, then the warrant is satisfied.

Applicable: ☒ Yes ☐ No

Satisfied: ☒ Yes ☐ No

Unusual condition justifying use of warrant:

Record hour when criteria are fulfilled and the corresponding delay or volume in boxes provided.

Peak Hour 100% Volume		
Time	Major Vol.	Minor Vol.
AM	1889	164

Peak Hour 70% Volume		
Time	Major Vol.	Minor Vol.

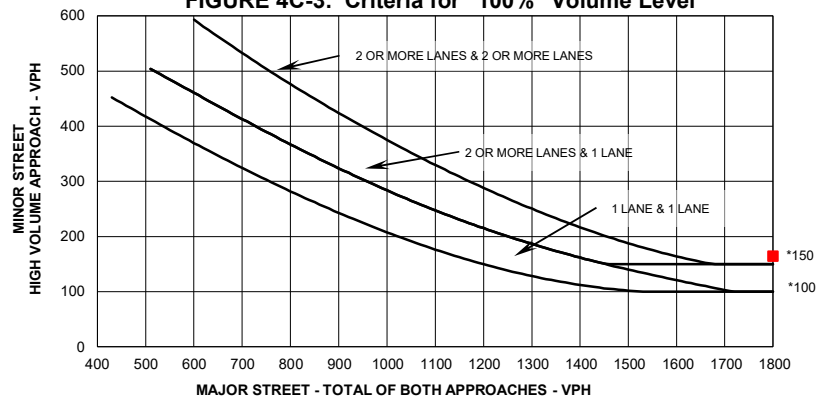
Criteria

1. Delay on Minor Approach *(vehicle-hours)		
Approach Lanes	1	2
Delay Criteria*	4.0	5.0
Delay*		
Fulfilled?:	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No

2. Volume on Minor Approach One-Direction *(vehicles per hour)		
Approach Lanes	1	2
Volume Criteria*	100	150
Volume*		
Fulfilled?:	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No

3. Total Intersection Entering Volume *(vehicles per hour)		
No. of Approaches	3	4
Volume Criteria*	650	800
Volume*		
Fulfilled?:	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No

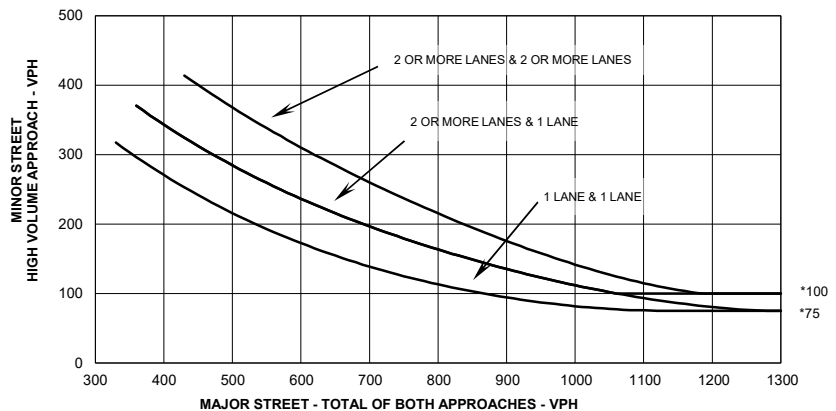
Plot volume combination on the applicable figure below.

FIGURE 4C-3: Criteria for "100%" Volume Level

* Note: 150 vph applies as the lower threshold volume for a minor street approach with two or more lanes and 100 vph applies as the lower threshold volume threshold for a minor street approach with one lane.

FIGURE 4C-4: Criteria for "70%" Volume Level

(Community Less than 10,000 population or above 70 km/hr (40 mph) on Major Street)



* Note: 100 vph applies as the lower threshold volume for a minor street approach with two or more lanes and 75 vph applies as the lower threshold volume threshold for a minor street approach with one lane.

TRAFFIC SIGNAL WARRANT SUMMARY

City: **Lincoln**
County:
District:

Engineer: **John P Diediker**
Date: **January 22, 2020**

Major Street: **South St**
Minor Street: **16th St**

Lanes: **2** Major Approach Speed: **25**
Lanes: **2** Minor Approach Speed: **25**

MUTCD Electronic Reference to Chapter 4: <http://mutcd.fhwa.dot.gov/pdfs/2009r1r2/part4.pdf>

Volume Level Criteria

1. Is the posted speed or 85th-percentile of major street > 40 mph (70 km/h)?
2. Is the intersection in a built-up area of an isolated community with a population < 10,000?

☐ Yes ☒ No

☐ Yes ☒ No

"70%" volume level **may** be used if Question 1 **or** 2 above is answered "Yes"

☐ 70% ☒ 100%

WARRANT 3 - PEAK HOUR

If all three criteria are fulfilled **or** the plotted point lies above the appropriate line, then the warrant is satisfied.

Applicable: ☒ Yes ☐ No

Satisfied: ☒ Yes ☐ No

Unusual condition justifying use of warrant:

Record hour when criteria are fulfilled and the corresponding delay or volume in boxes provided.

Peak Hour 100% Volume		
Time	Major Vol.	Minor Vol.
PM	1900	428

Peak Hour 70% Volume		
Time	Major Vol.	Minor Vol.

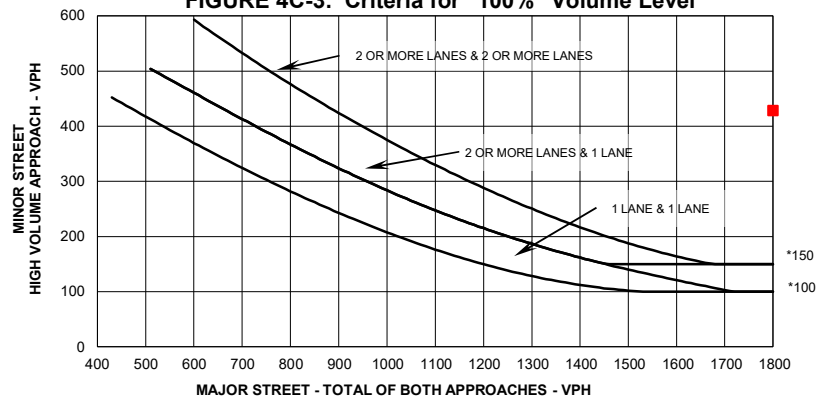
Criteria

1. Delay on Minor Approach *(vehicle-hours)		
Approach Lanes	1	2
Delay Criteria*	4.0	5.0
Delay*		
Fulfilled?:	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No

2. Volume on Minor Approach One-Direction *(vehicles per hour)		
Approach Lanes	1	2
Volume Criteria*	100	150
Volume*		
Fulfilled?:	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No

3. Total Intersection Entering Volume *(vehicles per hour)		
No. of Approaches	3	4
Volume Criteria*	650	800
Volume*		
Fulfilled?:	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No

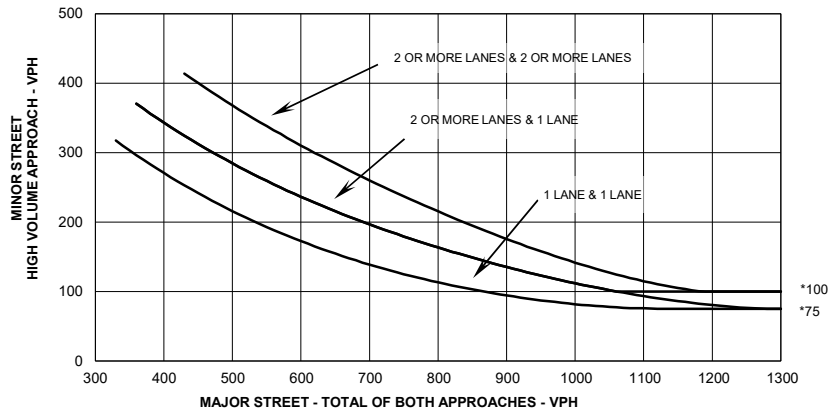
Plot volume combination on the applicable figure below.

FIGURE 4C-3: Criteria for "100%" Volume Level

* Note: 150 vph applies as the lower threshold volume for a minor street approach with two or more lanes and 100 vph applies as the lower threshold volume threshold for a minor street approach with one lane.

FIGURE 4C-4: Criteria for "70%" Volume Level

(Community Less than 10,000 population or above 70 km/hr (40 mph) on Major Street)



* Note: 100 vph applies as the lower threshold volume for a minor street approach with two or more lanes and 75 vph applies as the lower threshold volume threshold for a minor street approach with one lane.

TRAFFIC SIGNAL WARRANT SUMMARY

City: **Lincoln**
 County:
 District:

Engineer: **John P Diediker**
 Date: **January 17, 2020**

Major Street: **Q St**
 Minor Street: **N 17th St**

Lanes: **4** Major Approach Speed: **25**
 Lanes: **2** Minor Approach Speed: **25**

MUTCD Electronic Reference to Chapter 4: <http://mutcd.fhwa.dot.gov/pdfs/2009r1r2/part4.pdf>

Volume Level Criteria

1. Is the posted speed or 85th-percentile of major street > 40 mph (70 km/h)?
2. Is the intersection in a built-up area of an isolated community with a population < 10,000?

☐ Yes ☒ No

☐ Yes ☒ No

"70%" volume level **may** be used if Question 1 **or** 2 above is answered "Yes"

☐ 70% ☒ 100%

WARRANT 3 - PEAK HOUR

If all three criteria are fulfilled **or** the plotted point lies above the appropriate line, then the warrant is satisfied.

Applicable: ☒ Yes ☐ No

Satisfied: ☒ Yes ☐ No

Unusual condition justifying use of warrant:

Record hour when criteria are fulfilled and the corresponding delay or volume in boxes provided.

Peak Hour 100% Volume		
Time	Major Vol.	Minor Vol.
AM	621	738

Peak Hour 70% Volume		
Time	Major Vol.	Minor Vol.

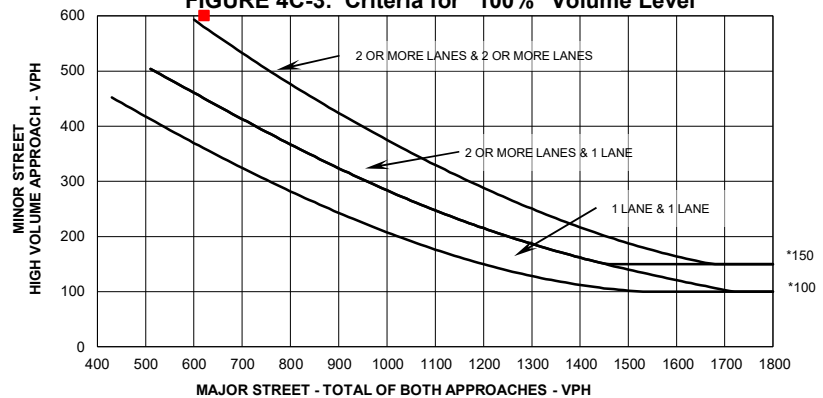
Criteria

1. Delay on Minor Approach *(vehicle-hours)		
Approach Lanes	1	2
Delay Criteria*	4.0	5.0
Delay*		
Fulfilled?:	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No

2. Volume on Minor Approach One-Direction *(vehicles per hour)		
Approach Lanes	1	2
Volume Criteria*	100	150
Volume*		
Fulfilled?:	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No

3. Total Intersection Entering Volume *(vehicles per hour)		
No. of Approaches	3	4
Volume Criteria*	650	800
Volume*		
Fulfilled?:	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No

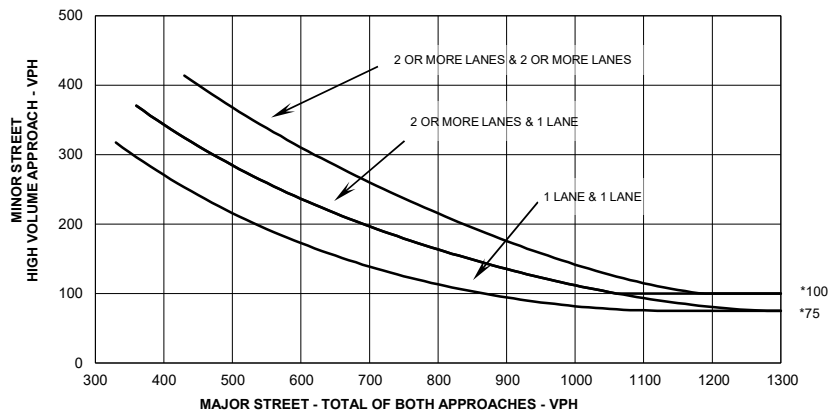
Plot volume combination on the applicable figure below.

FIGURE 4C-3: Criteria for "100%" Volume Level

* Note: 150 vph applies as the lower threshold volume for a minor street approach with two or more lanes and 100 vph applies as the lower threshold volume threshold for a minor street approach with one lane.

FIGURE 4C-4: Criteria for "70%" Volume Level

(Community Less than 10,000 population or above 70 km/hr (40 mph) on Major Street)



* Note: 100 vph applies as the lower threshold volume for a minor street approach with two or more lanes and 75 vph applies as the lower threshold volume threshold for a minor street approach with one lane.

TRAFFIC SIGNAL WARRANT SUMMARY

City: **Lincoln**
County:
District:

Engineer: **John P Diediker**
Date: **January 17, 2020**

Major Street: **Q St**
Minor Street: **N 17th St**

Lanes: **4** Major Approach Speed: **25**
Lanes: **2** Minor Approach Speed: **25**

MUTCD Electronic Reference to Chapter 4: <http://mutcd.fhwa.dot.gov/pdfs/2009r1r2/part4.pdf>

Volume Level Criteria

1. Is the posted speed or 85th-percentile of major street > 40 mph (70 km/h)?
2. Is the intersection in a built-up area of an isolated community with a population < 10,000?

☐ Yes ☒ No

☐ Yes ☒ No

"70%" volume level **may** be used if Question 1 **or** 2 above is answered "Yes"

☐ 70% ☒ 100%

WARRANT 3 - PEAK HOUR

If all three criteria are fulfilled **or** the plotted point lies above the appropriate line, then the warrant is satisfied.

Applicable: ☒ Yes ☐ No

Satisfied: ☐ Yes ☒ No

Unusual condition justifying use of warrant:

Record hour when criteria are fulfilled and the corresponding delay or volume in boxes provided.

Peak Hour 100% Volume		
Time	Major Vol.	Minor Vol.
PM	597	539

Peak Hour 70% Volume		
Time	Major Vol.	Minor Vol.

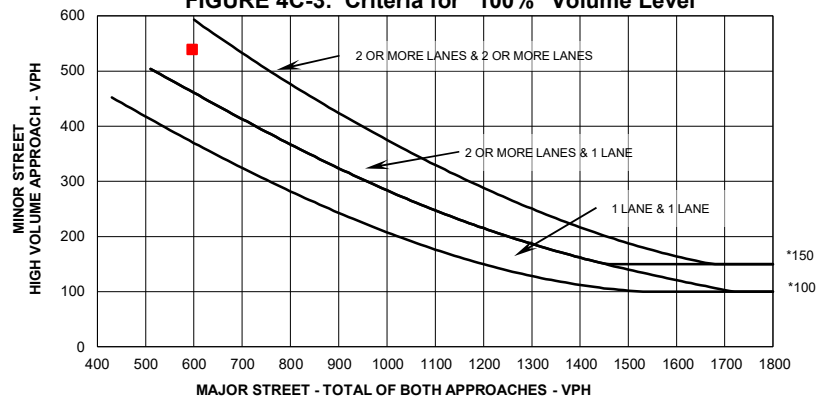
Criteria

1. Delay on Minor Approach *(vehicle-hours)		
Approach Lanes	1	2
Delay Criteria*	4.0	5.0
Delay*		
Fulfilled?:	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No

2. Volume on Minor Approach One-Direction *(vehicles per hour)		
Approach Lanes	1	2
Volume Criteria*	100	150
Volume*		
Fulfilled?:	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No

3. Total Intersection Entering Volume *(vehicles per hour)		
No. of Approaches	3	4
Volume Criteria*	650	800
Volume*		
Fulfilled?:	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No

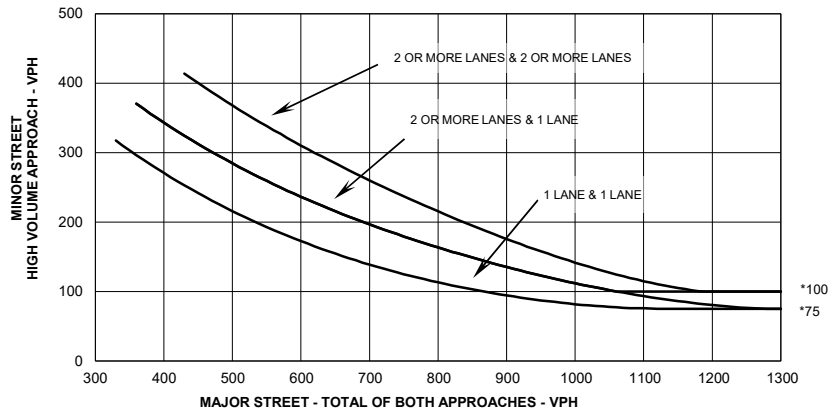
Plot volume combination on the applicable figure below.

FIGURE 4C-3: Criteria for "100%" Volume Level

* Note: 150 vph applies as the lower threshold volume for a minor street approach with two or more lanes and 100 vph applies as the lower threshold volume threshold for a minor street approach with one lane.

FIGURE 4C-4: Criteria for "70%" Volume Level

(Community Less than 10,000 population or above 70 km/hr (40 mph) on Major Street)



* Note: 100 vph applies as the lower threshold volume for a minor street approach with two or more lanes and 75 vph applies as the lower threshold volume threshold for a minor street approach with one lane.

TRAFFIC SIGNAL WARRANT SUMMARY

City: **Lincoln**
County:
District:

Engineer: **John P Diediker**
Date: **January 17, 2020**

Major Street: **N 17th St**
Minor Street: **P St**

Lanes: **3** Major Approach Speed: **25**
Lanes: **3** Minor Approach Speed: **25**

MUTCD Electronic Reference to Chapter 4: <http://mutcd.fhwa.dot.gov/pdfs/2009r1r2/part4.pdf>

Volume Level Criteria

1. Is the posted speed or 85th-percentile of major street > 40 mph (70 km/h)?
2. Is the intersection in a built-up area of an isolated community with a population < 10,000?

☐ Yes ☒ No

☐ Yes ☒ No

"70%" volume level **may** be used if Question 1 **or** 2 above is answered "Yes"

☐ 70% ☒ 100%

WARRANT 3 - PEAK HOUR

If all three criteria are fulfilled **or** the plotted point lies above the appropriate line, then the warrant is satisfied.

Applicable: ☒ Yes ☐ No

Satisfied: ☐ Yes ☒ No

Unusual condition justifying use of warrant:

Record hour when criteria are fulfilled and the corresponding delay or volume in boxes provided.

Peak Hour 100% Volume		
Time	Major Vol.	Minor Vol.
AM	919	190

Peak Hour 70% Volume		
Time	Major Vol.	Minor Vol.

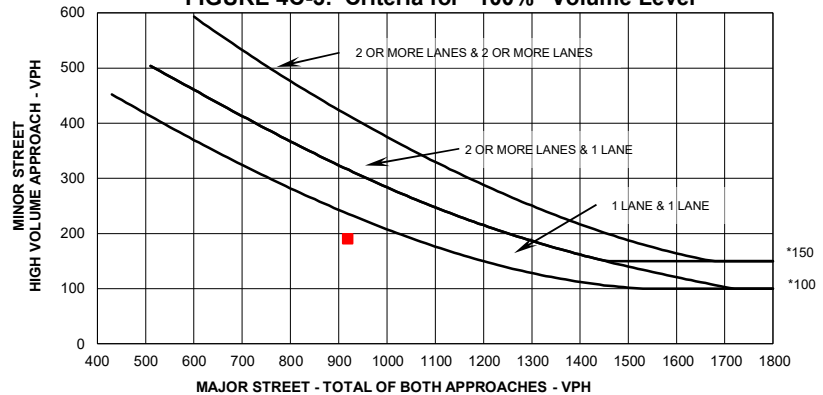
Criteria

1. Delay on Minor Approach *(vehicle-hours)		
Approach Lanes	1	2
Delay Criteria*	4.0	5.0
Delay*		
Fulfilled?:	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No

2. Volume on Minor Approach One-Direction *(vehicles per hour)		
Approach Lanes	1	2
Volume Criteria*	100	150
Volume*		
Fulfilled?:	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No

3. Total Intersection Entering Volume *(vehicles per hour)		
No. of Approaches	3	4
Volume Criteria*	650	800
Volume*		
Fulfilled?:	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No

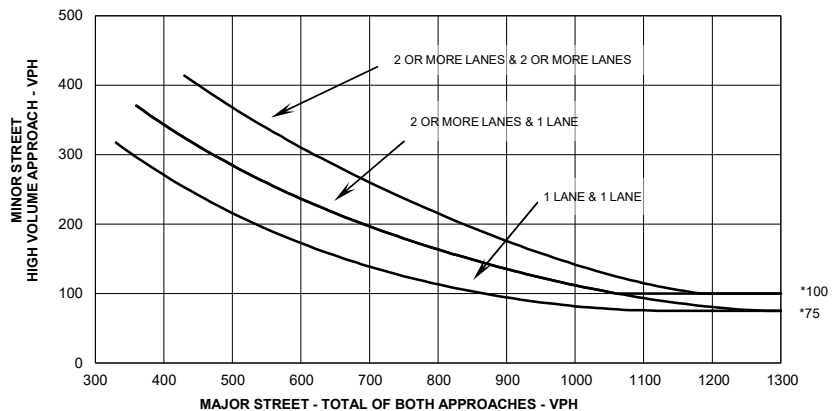
Plot volume combination on the applicable figure below.

FIGURE 4C-3: Criteria for "100%" Volume Level

* Note: 150 vph applies as the lower threshold volume for a minor street approach with two or more lanes and 100 vph applies as the lower threshold volume threshold for a minor street approach with one lane.

FIGURE 4C-4: Criteria for "70%" Volume Level

(Community Less than 10,000 population or above 70 km/hr (40 mph) on Major Street)



* Note: 100 vph applies as the lower threshold volume for a minor street approach with two or more lanes and 75 vph applies as the lower threshold volume threshold for a minor street approach with one lane.

TRAFFIC SIGNAL WARRANT SUMMARY

City: **Lincoln**
County:
District:

Engineer: **John P Diediker**
Date: **January 17, 2020**

Major Street: **N 17th St**
Minor Street: **P st**

Lanes: **3** Major Approach Speed: **25**
Lanes: **3** Minor Approach Speed: **25**

MUTCD Electronic Reference to Chapter 4: <http://mutcd.fhwa.dot.gov/pdfs/2009r1r2/part4.pdf>

Volume Level Criteria

1. Is the posted speed or 85th-percentile of major street > 40 mph (70 km/h)?
2. Is the intersection in a built-up area of an isolated community with a population < 10,000?

☐ Yes ☒ No

☐ Yes ☒ No

"70%" volume level **may** be used if Question 1 **or** 2 above is answered "Yes"

☐ 70% ☒ 100%

WARRANT 3 - PEAK HOUR

If all three criteria are fulfilled **or** the plotted point lies above the appropriate line, then the warrant is satisfied.

Applicable: ☒ Yes ☐ No

Satisfied: ☒ Yes ☐ No

Unusual condition justifying use of warrant:

Record hour when criteria are fulfilled and the corresponding delay or volume in boxes provided.

Peak Hour 100% Volume		
Time	Major Vol.	Minor Vol.
PM	741	642

Peak Hour 70% Volume		
Time	Major Vol.	Minor Vol.

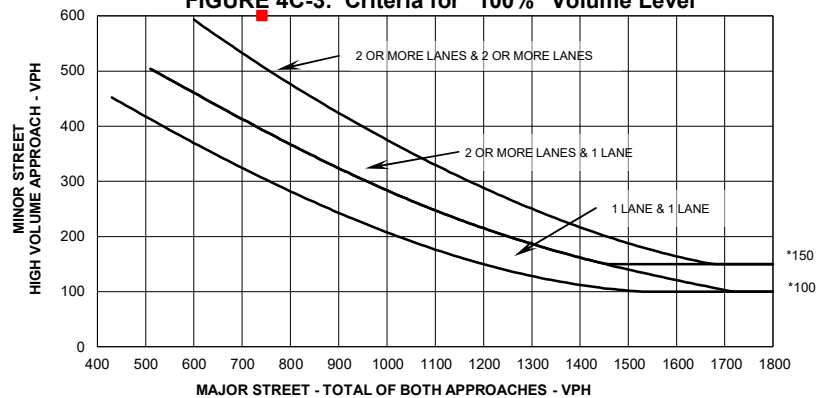
Criteria

1. Delay on Minor Approach *(vehicle-hours)		
Approach Lanes	1	2
Delay Criteria*	4.0	5.0
Delay*		
Fulfilled?:	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No

2. Volume on Minor Approach One-Direction *(vehicles per hour)		
Approach Lanes	1	2
Volume Criteria*	100	150
Volume*		
Fulfilled?:	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No

3. Total Intersection Entering Volume *(vehicles per hour)		
No. of Approaches	3	4
Volume Criteria*	650	800
Volume*		
Fulfilled?:	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No

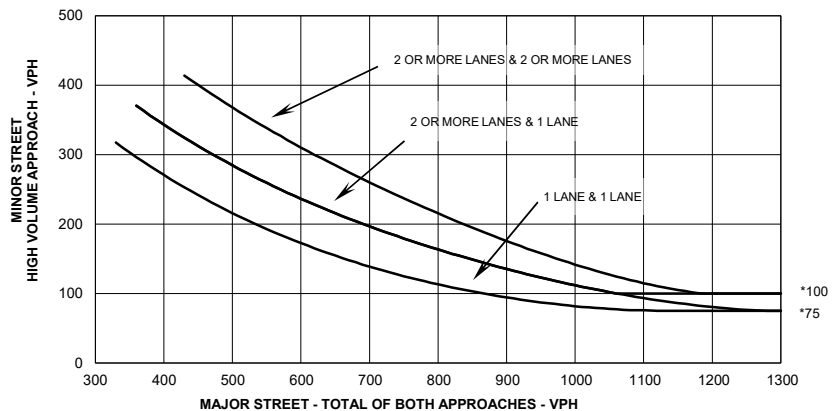
Plot volume combination on the applicable figure below.

FIGURE 4C-3: Criteria for "100%" Volume Level

* Note: 150 vph applies as the lower threshold volume for a minor street approach with two or more lanes and 100 vph applies as the lower threshold volume threshold for a minor street approach with one lane.

FIGURE 4C-4: Criteria for "70%" Volume Level

(Community Less than 10,000 population or above 70 km/hr (40 mph) on Major Street)



* Note: 100 vph applies as the lower threshold volume for a minor street approach with two or more lanes and 75 vph applies as the lower threshold volume threshold for a minor street approach with one lane.

TRAFFIC SIGNAL WARRANT SUMMARY

City: **Lincoln**
County:
District:

Engineer: **John P Diediker**
Date: **January 17, 2020**

Major Street: **O St**
Minor Street: **17th St**

Lanes: **2** Major Approach Speed: **25**
Lanes: **3** Minor Approach Speed: **25**

MUTCD Electronic Reference to Chapter 4: <http://mutcd.fhwa.dot.gov/pdfs/2009r1r2/part4.pdf>

Volume Level Criteria

1. Is the posted speed or 85th-percentile of major street > 40 mph (70 km/h)?
2. Is the intersection in a built-up area of an isolated community with a population < 10,000?

☐ Yes ☒ No

☐ Yes ☒ No

"70%" volume level **may** be used if Question 1 **or** 2 above is answered "Yes"

☐ 70% ☒ 100%

WARRANT 3 - PEAK HOUR

If all three criteria are fulfilled **or** the plotted point lies above the appropriate line, then the warrant is satisfied.

Applicable: ☒ Yes ☐ No

Satisfied: ☒ Yes ☐ No

Unusual condition justifying use of warrant:

Record hour when criteria are fulfilled and the corresponding delay or volume in boxes provided.

Peak Hour 100% Volume		
Time	Major Vol.	Minor Vol.
AM	1590	1304

Peak Hour 70% Volume		
Time	Major Vol.	Minor Vol.

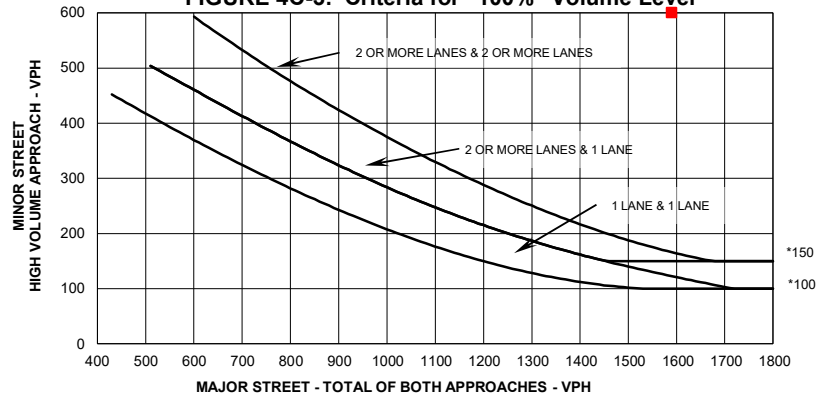
Criteria

1. Delay on Minor Approach *(vehicle-hours)		
Approach Lanes	1	2
Delay Criteria*	4.0	5.0
Delay*		
Fulfilled?:	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No

2. Volume on Minor Approach One-Direction *(vehicles per hour)		
Approach Lanes	1	2
Volume Criteria*	100	150
Volume*		
Fulfilled?:	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No

3. Total Intersection Entering Volume *(vehicles per hour)		
No. of Approaches	3	4
Volume Criteria*	650	800
Volume*		
Fulfilled?:	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No

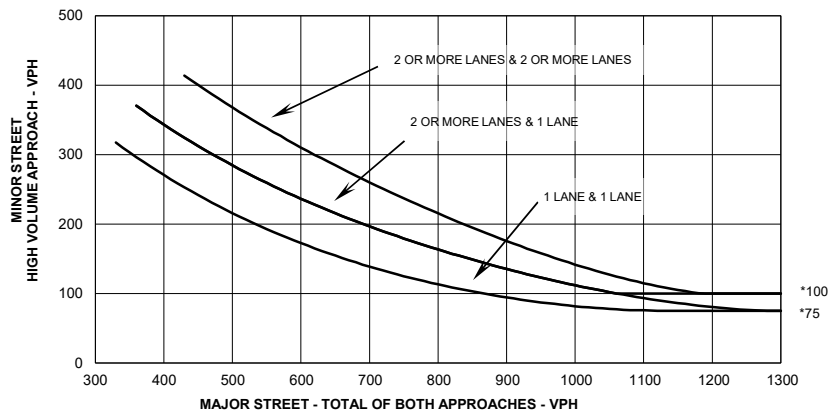
Plot volume combination on the applicable figure below.

FIGURE 4C-3: Criteria for "100%" Volume Level

* Note: 150 vph applies as the lower threshold volume for a minor street approach with two or more lanes and 100 vph applies as the lower threshold volume threshold for a minor street approach with one lane.

FIGURE 4C-4: Criteria for "70%" Volume Level

(Community Less than 10,000 population or above 70 km/hr (40 mph) on Major Street)



* Note: 100 vph applies as the lower threshold volume for a minor street approach with two or more lanes and 75 vph applies as the lower threshold volume threshold for a minor street approach with one lane.

TRAFFIC SIGNAL WARRANT SUMMARY

City: **Lincoln**
County:
District:

Engineer: **John P Diediker**
Date: **January 17, 2020**

Major Street: **O St**
Minor Street: **17th St**

Lanes: **2** Major Approach Speed: **25**
Lanes: **3** Minor Approach Speed: **25**

MUTCD Electronic Reference to Chapter 4: <http://mutcd.fhwa.dot.gov/pdfs/2009r1r2/part4.pdf>

Volume Level Criteria

1. Is the posted speed or 85th-percentile of major street > 40 mph (70 km/h)?
2. Is the intersection in a built-up area of an isolated community with a population < 10,000?

☐ Yes ☒ No

☐ Yes ☒ No

"70%" volume level **may** be used if Question 1 **or** 2 above is answered "Yes"

☐ 70% ☒ 100%

WARRANT 3 - PEAK HOUR

If all three criteria are fulfilled **or** the plotted point lies above the appropriate line, then the warrant is satisfied.

Applicable: ☒ Yes ☐ No

Satisfied: ☒ Yes ☐ No

Unusual condition justifying use of warrant:

Record hour when criteria are fulfilled and the corresponding delay or volume in boxes provided.

Peak Hour 100% Volume		
Time	Major Vol.	Minor Vol.
PM	1760	1173

Peak Hour 70% Volume		
Time	Major Vol.	Minor Vol.

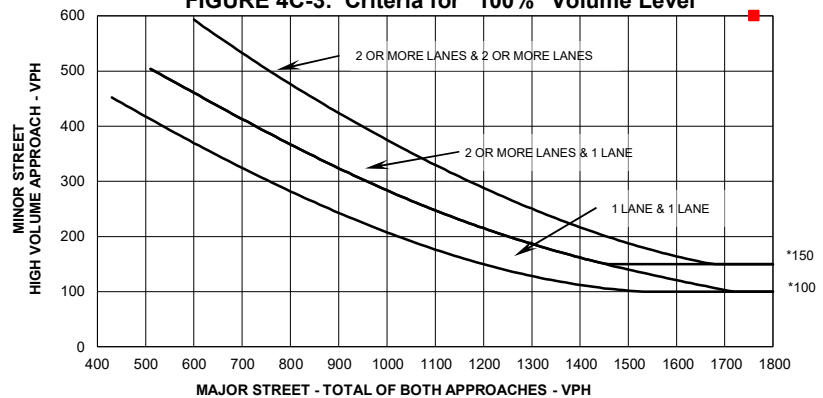
Criteria

1. Delay on Minor Approach *(vehicle-hours)		
Approach Lanes	1	2
Delay Criteria*	4.0	5.0
Delay*		
Fulfilled?:	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No

2. Volume on Minor Approach One-Direction *(vehicles per hour)		
Approach Lanes	1	2
Volume Criteria*	100	150
Volume*		
Fulfilled?:	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No

3. Total Intersection Entering Volume *(vehicles per hour)		
No. of Approaches	3	4
Volume Criteria*	650	800
Volume*		
Fulfilled?:	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No

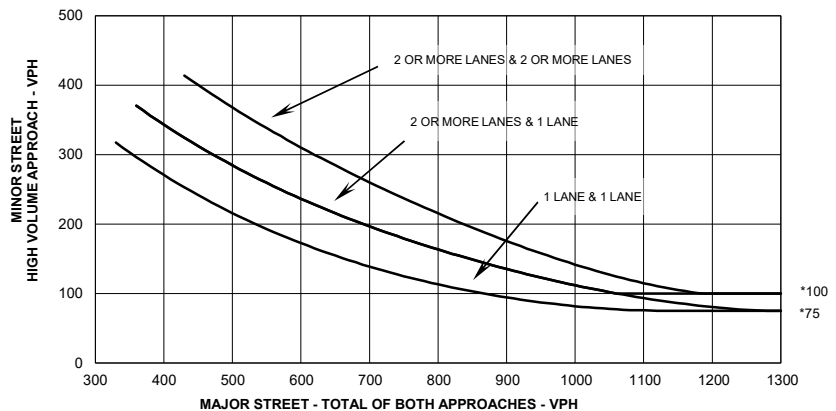
Plot volume combination on the applicable figure below.

FIGURE 4C-3: Criteria for "100%" Volume Level

* Note: 150 vph applies as the lower threshold volume for a minor street approach with two or more lanes and 100 vph applies as the lower threshold volume threshold for a minor street approach with one lane.

FIGURE 4C-4: Criteria for "70%" Volume Level

(Community Less than 10,000 population or above 70 km/hr (40 mph) on Major Street)



* Note: 100 vph applies as the lower threshold volume for a minor street approach with two or more lanes and 75 vph applies as the lower threshold volume threshold for a minor street approach with one lane.

TRAFFIC SIGNAL WARRANT SUMMARY

City: **Lincoln**
 County:
 District:

Engineer: **John P Diediker**
 Date: **January 17, 2020**

Major Street: **L St**
 Minor Street: **17th St**

Lanes: **4** Major Approach Speed: **25**
 Lanes: **4** Minor Approach Speed: **25**

MUTCD Electronic Reference to Chapter 4: <http://mutcd.fhwa.dot.gov/pdfs/2009r1r2/part4.pdf>

Volume Level Criteria

1. Is the posted speed or 85th-percentile of major street > 40 mph (70 km/h)?
2. Is the intersection in a built-up area of an isolated community with a population < 10,000?

☐ Yes ☒ No

☐ Yes ☒ No

"70%" volume level **may** be used if Question 1 **or** 2 above is answered "Yes"

☐ 70% ☒ 100%

WARRANT 3 - PEAK HOUR

If all three criteria are fulfilled **or** the plotted point lies above the appropriate line, then the warrant is satisfied.

Applicable: ☒ Yes ☐ No

Satisfied: ☒ Yes ☐ No

Unusual condition justifying use of warrant:

Record hour when criteria are fulfilled and the corresponding delay or volume in boxes provided.

Peak Hour 100% Volume		
Time	Major Vol.	Minor Vol.
AM	2021	1291

Peak Hour 70% Volume		
Time	Major Vol.	Minor Vol.

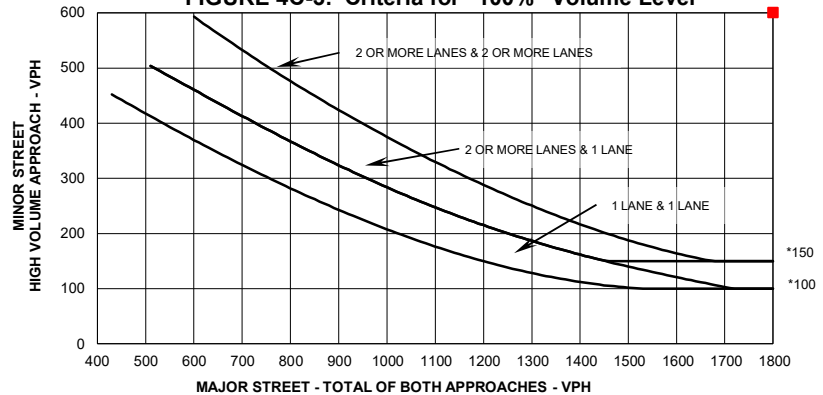
Criteria

1. Delay on Minor Approach *(vehicle-hours)		
Approach Lanes	1	2
Delay Criteria*	4.0	5.0
Delay*		
Fulfilled?:	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No

2. Volume on Minor Approach One-Direction *(vehicles per hour)		
Approach Lanes	1	2
Volume Criteria*	100	150
Volume*		
Fulfilled?:	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No

3. Total Intersection Entering Volume *(vehicles per hour)		
No. of Approaches	3	4
Volume Criteria*	650	800
Volume*		
Fulfilled?:	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No

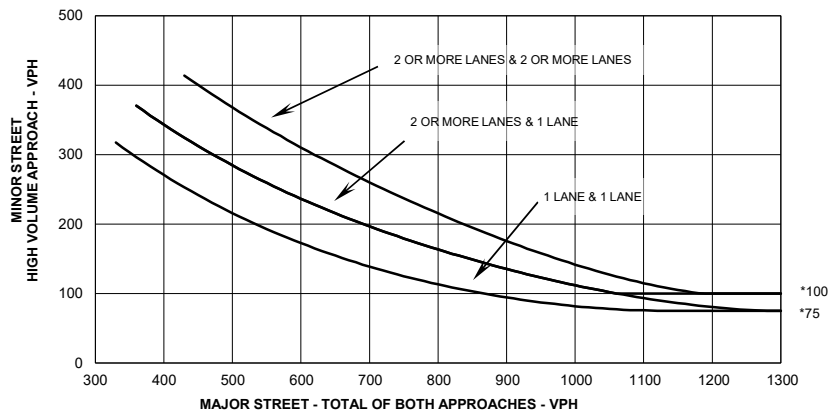
Plot volume combination on the applicable figure below.

FIGURE 4C-3: Criteria for "100%" Volume Level

* Note: 150 vph applies as the lower threshold volume for a minor street approach with two or more lanes and 100 vph applies as the lower threshold volume threshold for a minor street approach with one lane.

FIGURE 4C-4: Criteria for "70%" Volume Level

(Community Less than 10,000 population or above 70 km/hr (40 mph) on Major Street)



* Note: 100 vph applies as the lower threshold volume for a minor street approach with two or more lanes and 75 vph applies as the lower threshold volume threshold for a minor street approach with one lane.

TRAFFIC SIGNAL WARRANT SUMMARY

City: **Lincoln**
County:
District:

Engineer: **John P Diediker**
Date: **January 17, 2020**

Major Street: **L St**
Minor Street: **17th St**

Lanes: **4** Major Approach Speed: **25**
Lanes: **4** Minor Approach Speed: **25**

MUTCD Electronic Reference to Chapter 4: <http://mutcd.fhwa.dot.gov/pdfs/2009r1r2/part4.pdf>

Volume Level Criteria

1. Is the posted speed or 85th-percentile of major street > 40 mph (70 km/h)?
2. Is the intersection in a built-up area of an isolated community with a population < 10,000?

☐ Yes ☒ No

☐ Yes ☒ No

"70%" volume level **may** be used if Question 1 **or** 2 above is answered "Yes"

☐ 70% ☒ 100%

WARRANT 3 - PEAK HOUR

If all three criteria are fulfilled **or** the plotted point lies above the appropriate line, then the warrant is satisfied.

Applicable: ☒ Yes ☐ No

Satisfied: ☒ Yes ☐ No

Unusual condition justifying use of warrant:

Record hour when criteria are fulfilled and the corresponding delay or volume in boxes provided.

Peak Hour 100% Volume		
Time	Major Vol.	Minor Vol.
PM	1155	915

Peak Hour 70% Volume		
Time	Major Vol.	Minor Vol.

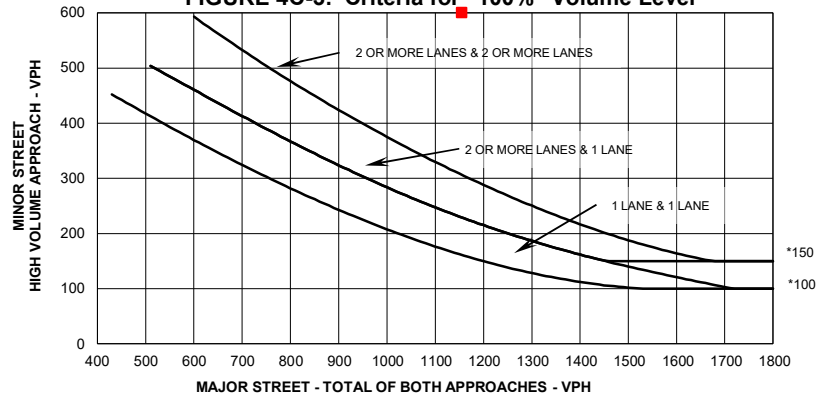
Criteria

1. Delay on Minor Approach *(vehicle-hours)		
Approach Lanes	1	2
Delay Criteria*	4.0	5.0
Delay*		
Fulfilled?:	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No

2. Volume on Minor Approach One-Direction *(vehicles per hour)		
Approach Lanes	1	2
Volume Criteria*	100	150
Volume*		
Fulfilled?:	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No

3. Total Intersection Entering Volume *(vehicles per hour)		
No. of Approaches	3	4
Volume Criteria*	650	800
Volume*		
Fulfilled?:	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No

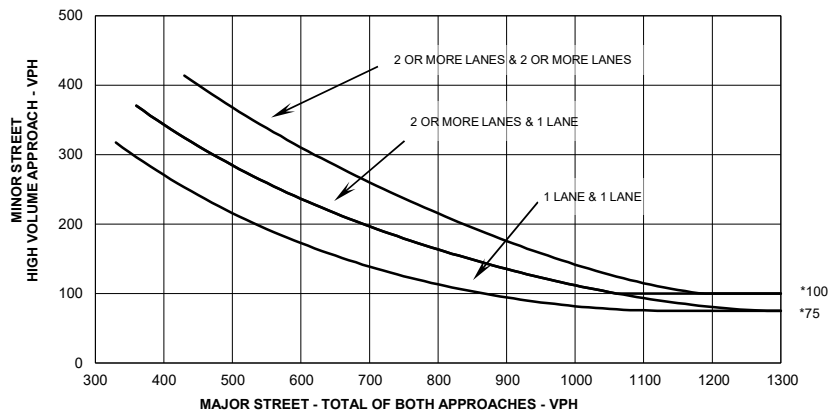
Plot volume combination on the applicable figure below.

FIGURE 4C-3: Criteria for "100%" Volume Level

* Note: 150 vph applies as the lower threshold volume for a minor street approach with two or more lanes and 100 vph applies as the lower threshold volume threshold for a minor street approach with one lane.

FIGURE 4C-4: Criteria for "70%" Volume Level

(Community Less than 10,000 population or above 70 km/hr (40 mph) on Major Street)



* Note: 100 vph applies as the lower threshold volume for a minor street approach with two or more lanes and 75 vph applies as the lower threshold volume threshold for a minor street approach with one lane.

TRAFFIC SIGNAL WARRANT SUMMARY

City: **Lincoln**
 County:
 District:

Engineer: **John P Diediker**
 Date: **January 17, 2020**

Major Street: **K St**
 Minor Street: **17th St**

Lanes: **3** Major Approach Speed: **25**
 Lanes: **4** Minor Approach Speed: **25**

MUTCD Electronic Reference to Chapter 4: <http://mutcd.fhwa.dot.gov/pdfs/2009r1r2/part4.pdf>

Volume Level Criteria

1. Is the posted speed or 85th-percentile of major street > 40 mph (70 km/h)?
2. Is the intersection in a built-up area of an isolated community with a population < 10,000?

☐ Yes ☒ No

☐ Yes ☒ No

"70%" volume level **may** be used if Question 1 **or** 2 above is answered "Yes"

☐ 70% ☒ 100%

WARRANT 3 - PEAK HOUR

If all three criteria are fulfilled **or** the plotted point lies above the appropriate line, then the warrant is satisfied.

Applicable: ☒ Yes ☐ No

Satisfied: ☒ Yes ☐ No

Unusual condition justifying use of warrant:

Record hour when criteria are fulfilled and the corresponding delay or volume in boxes provided.

Peak Hour 100% Volume		
Time	Major Vol.	Minor Vol.
AM	1534	1098

Peak Hour 70% Volume		
Time	Major Vol.	Minor Vol.

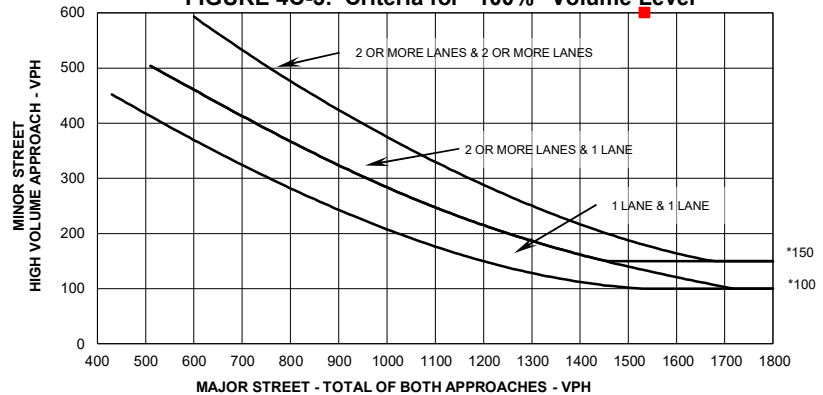
Criteria

1. Delay on Minor Approach *(vehicle-hours)		
Approach Lanes	1	2
Delay Criteria*	4.0	5.0
Delay*		
Fulfilled?:	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No

2. Volume on Minor Approach One-Direction *(vehicles per hour)		
Approach Lanes	1	2
Volume Criteria*	100	150
Volume*		
Fulfilled?:	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No

3. Total Intersection Entering Volume *(vehicles per hour)		
No. of Approaches	3	4
Volume Criteria*	650	800
Volume*		
Fulfilled?:	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No

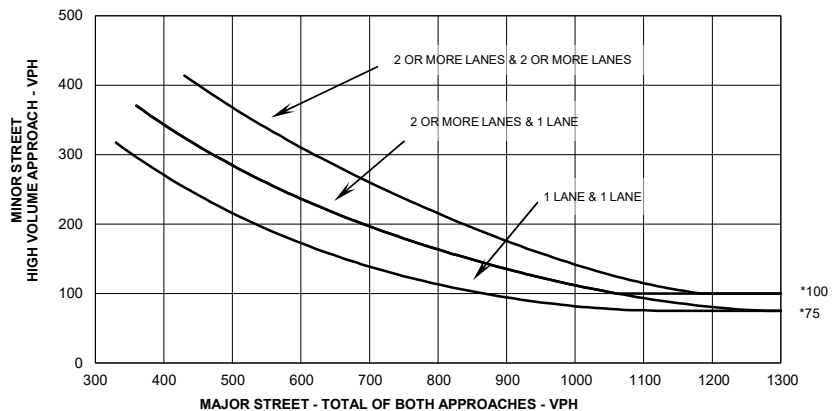
Plot volume combination on the applicable figure below.

FIGURE 4C-3: Criteria for "100%" Volume Level

* Note: 150 vph applies as the lower threshold volume for a minor street approach with two or more lanes and 100 vph applies as the lower threshold volume threshold for a minor street approach with one lane.

FIGURE 4C-4: Criteria for "70%" Volume Level

(Community Less than 10,000 population or above 70 km/hr (40 mph) on Major Street)



* Note: 100 vph applies as the lower threshold volume for a minor street approach with two or more lanes and 75 vph applies as the lower threshold volume threshold for a minor street approach with one lane.

TRAFFIC SIGNAL WARRANT SUMMARY

City: **Lincoln**
County:
District:

Engineer: **John P Diediker**
Date: **January 17, 2020**

Major Street: **K St**
Minor Street: **17th St**

Lanes: **3** Major Approach Speed: **25**
Lanes: **4** Minor Approach Speed: **25**

MUTCD Electronic Reference to Chapter 4: <http://mutcd.fhwa.dot.gov/pdfs/2009r1r2/part4.pdf>

Volume Level Criteria

1. Is the posted speed or 85th-percentile of major street > 40 mph (70 km/h)?
2. Is the intersection in a built-up area of an isolated community with a population < 10,000?

☐ Yes ☒ No

☐ Yes ☒ No

"70%" volume level **may** be used if Question 1 **or** 2 above is answered "Yes"

☐ 70% ☒ 100%

WARRANT 3 - PEAK HOUR

If all three criteria are fulfilled **or** the plotted point lies above the appropriate line, then the warrant is satisfied.

Applicable: ☒ Yes ☐ No

Satisfied: ☒ Yes ☐ No

Unusual condition justifying use of warrant:

Record hour when criteria are fulfilled and the corresponding delay or volume in boxes provided.

Peak Hour 100% Volume		
Time	Major Vol.	Minor Vol.
PM	2269	671

Peak Hour 70% Volume		
Time	Major Vol.	Minor Vol.

Criteria

1. Delay on Minor Approach *(vehicle-hours)		
Approach Lanes	1	2
Delay Criteria*	4.0	5.0
Delay*		
Fulfilled?:	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No

2. Volume on Minor Approach One-Direction *(vehicles per hour)		
Approach Lanes	1	2
Volume Criteria*	100	150
Volume*		
Fulfilled?:	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No

3. Total Intersection Entering Volume *(vehicles per hour)		
No. of Approaches	3	4
Volume Criteria*	650	800
Volume*		
Fulfilled?:	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No

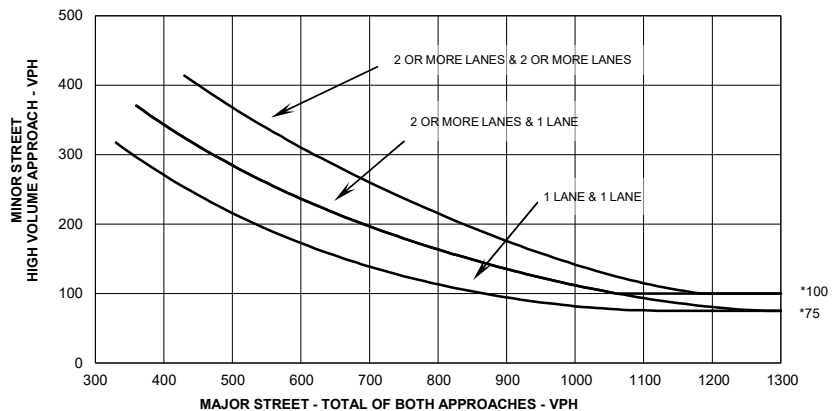
Plot volume combination on the applicable figure below.

FIGURE 4C-3: Criteria for "100%" Volume Level

* Note: 150 vph applies as the lower threshold volume for a minor street approach with two or more lanes and 100 vph applies as the lower threshold volume threshold for a minor street approach with one lane.

FIGURE 4C-4: Criteria for "70%" Volume Level

(Community Less than 10,000 population or above 70 km/hr (40 mph) on Major Street)



* Note: 100 vph applies as the lower threshold volume for a minor street approach with two or more lanes and 75 vph applies as the lower threshold volume threshold for a minor street approach with one lane.

State of Florida Department of Transportation

TRAFFIC SIGNAL WARRANT SUMMARY

Form 750-020-01
TRAFFIC ENGINEERING
10/15

City: **Lincoln**
County:
District:

Engineer: **John P Diediker**
Date: **January 17, 2020**

Major Street: **17th St**
Minor Street: **G St**

Lanes: **4** Major Approach Speed: **25**
Lanes: **1** Minor Approach Speed: **25**

MUTCD Electronic Reference to Chapter 4: <http://mutcd.fhwa.dot.gov/pdfs/2009r1r2/part4.pdf>

Volume Level Criteria

1. Is the posted speed or 85th-percentile of major street > 40 mph (70 km/h)?
2. Is the intersection in a built-up area of an isolated community with a population < 10,000?

☐ Yes ☒ No

☐ Yes ☒ No

"70%" volume level **may** be used if Question 1 **or** 2 above is answered "Yes"

☐ 70% ☒ 100%

WARRANT 3 - PEAK HOUR

If all three criteria are fulfilled **or** the plotted point lies above the appropriate line, then the warrant is satisfied.

Applicable: ☒ Yes ☐ No

Satisfied: ☐ Yes ☒ No

Unusual condition justifying use of warrant:

Record hour when criteria are fulfilled and the corresponding delay or volume in boxes provided.

Peak Hour 100% Volume		
Time	Major Vol.	Minor Vol.
AM	792	213

Peak Hour 70% Volume		
Time	Major Vol.	Minor Vol.

Criteria

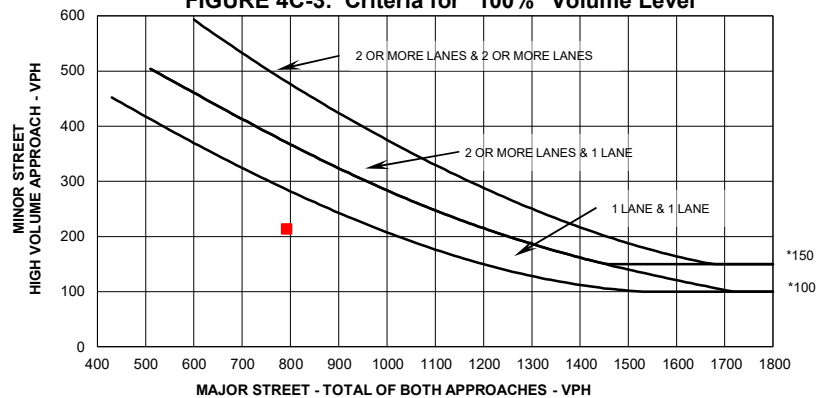
1. Delay on Minor Approach *(vehicle-hours)		
Approach Lanes	1	2
Delay Criteria*	4.0	5.0
Delay*		
Fulfilled?:	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No

2. Volume on Minor Approach One-Direction *(vehicles per hour)		
Approach Lanes	1	2
Volume Criteria*	100	150
Volume*		
Fulfilled?:	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No

3. Total Intersection Entering Volume *(vehicles per hour)		
No. of Approaches	3	4
Volume Criteria*	650	800
Volume*		
Fulfilled?:	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No

Plot volume combination on the applicable figure below.

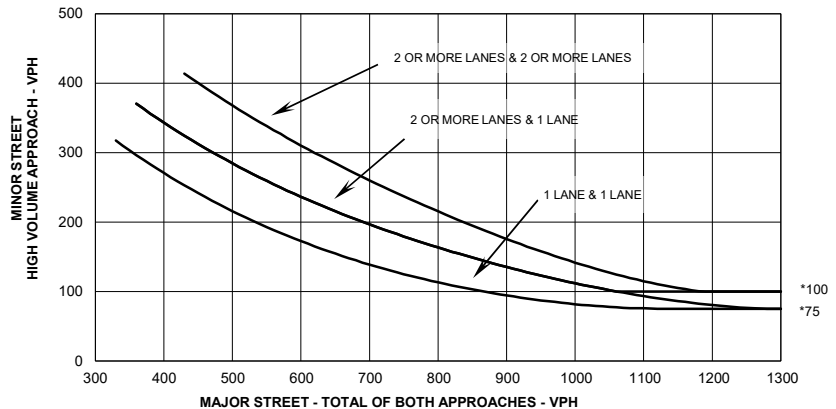
FIGURE 4C-3: Criteria for "100%" Volume Level



* Note: 150 vph applies as the lower threshold volume for a minor street approach with two or more lanes and 100 vph applies as the lower threshold volume threshold for a minor street approach with one lane.

FIGURE 4C-4: Criteria for "70%" Volume Level

(Community Less than 10,000 population or above 70 km/hr (40 mph) on Major Street)



* Note: 100 vph applies as the lower threshold volume for a minor street approach with two or more lanes and 75 vph applies as the lower threshold volume threshold for a minor street approach with one lane.

TRAFFIC SIGNAL WARRANT SUMMARY

City: **Lincoln**
County:
District:

Engineer: **John P Diediker**
Date: **January 17, 2020**

Major Street: **17th St**
Minor Street: **G St**

Lanes: **4** Major Approach Speed: **25**
Lanes: **1** Minor Approach Speed: **25**

MUTCD Electronic Reference to Chapter 4: <http://mutcd.fhwa.dot.gov/pdfs/2009r1r2/part4.pdf>

Volume Level Criteria

1. Is the posted speed or 85th-percentile of major street > 40 mph (70 km/h)?
2. Is the intersection in a built-up area of an isolated community with a population < 10,000?

☐ Yes ☒ No

☐ Yes ☒ No

"70%" volume level **may** be used if Question 1 **or** 2 above is answered "Yes"

☐ 70% ☒ 100%

WARRANT 3 - PEAK HOUR

If all three criteria are fulfilled **or** the plotted point lies above the appropriate line, then the warrant is satisfied.

Applicable: ☒ Yes ☐ No

Satisfied: ☐ Yes ☒ No

Unusual condition justifying use of warrant:

Record hour when criteria are fulfilled and the corresponding delay or volume in boxes provided.

Peak Hour 100% Volume		
Time	Major Vol.	Minor Vol.
PM	816	166

Peak Hour 70% Volume		
Time	Major Vol.	Minor Vol.

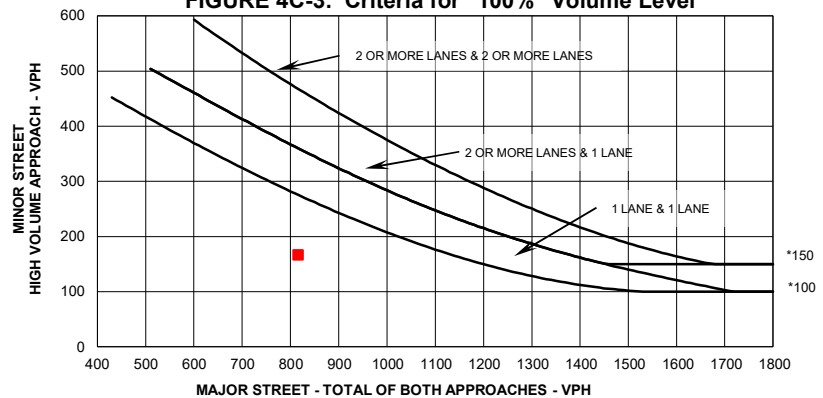
Criteria

1. Delay on Minor Approach *(vehicle-hours)		
Approach Lanes	1	2
Delay Criteria*	4.0	5.0
Delay*		
Fulfilled?:	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No

2. Volume on Minor Approach One-Direction *(vehicles per hour)		
Approach Lanes	1	2
Volume Criteria*	100	150
Volume*		
Fulfilled?:	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No

3. Total Intersection Entering Volume *(vehicles per hour)		
No. of Approaches	3	4
Volume Criteria*	650	800
Volume*		
Fulfilled?:	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No

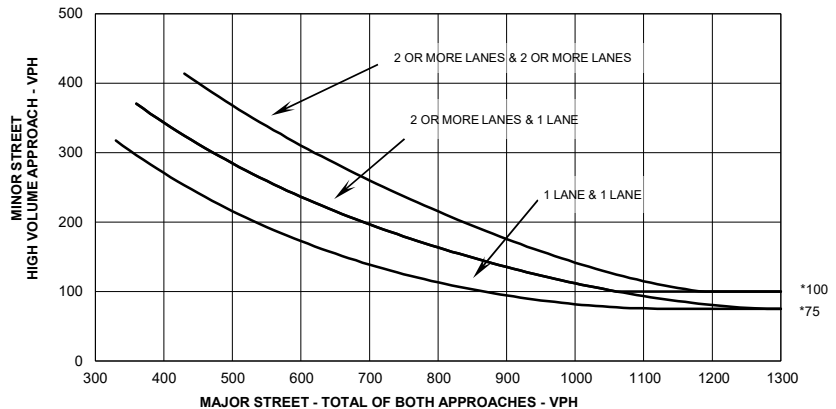
Plot volume combination on the applicable figure below.

FIGURE 4C-3: Criteria for "100%" Volume Level

* Note: 150 vph applies as the lower threshold volume for a minor street approach with two or more lanes and 100 vph applies as the lower threshold volume threshold for a minor street approach with one lane.

FIGURE 4C-4: Criteria for "70%" Volume Level

(Community Less than 10,000 population or above 70 km/hr (40 mph) on Major Street)



* Note: 100 vph applies as the lower threshold volume for a minor street approach with two or more lanes and 75 vph applies as the lower threshold volume threshold for a minor street approach with one lane.

TRAFFIC SIGNAL WARRANT SUMMARY

City: **Lincoln**
County:
District:

Engineer: **John P Diediker**
Date: **January 22, 2020**

Major Street: **17th St**
Minor Street: **D St**

Lanes: **4** Major Approach Speed: **25**
Lanes: **1** Minor Approach Speed: **25**

MUTCD Electronic Reference to Chapter 4: <http://mutcd.fhwa.dot.gov/pdfs/2009r1r2/part4.pdf>

Volume Level Criteria

1. Is the posted speed or 85th-percentile of major street > 40 mph (70 km/h)?
2. Is the intersection in a built-up area of an isolated community with a population < 10,000?

☐ Yes ☒ No

☐ Yes ☒ No

"70%" volume level **may** be used if Question 1 **or** 2 above is answered "Yes"

☐ 70% ☒ 100%

WARRANT 3 - PEAK HOUR

If all three criteria are fulfilled **or** the plotted point lies above the appropriate line, then the warrant is satisfied.

Applicable: ☒ Yes ☐ No

Satisfied: ☐ Yes ☒ No

Unusual condition justifying use of warrant:

Record hour when criteria are fulfilled and the corresponding delay or volume in boxes provided.

Peak Hour 100% Volume		
Time	Major Vol.	Minor Vol.
AM	666	85

Peak Hour 70% Volume		
Time	Major Vol.	Minor Vol.

Criteria

1. Delay on Minor Approach *(vehicle-hours)		
Approach Lanes	1	2
Delay Criteria*	4.0	5.0
Delay*		
Fulfilled?:	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No

2. Volume on Minor Approach One-Direction *(vehicles per hour)		
Approach Lanes	1	2
Volume Criteria*	100	150
Volume*		
Fulfilled?:	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No

3. Total Intersection Entering Volume *(vehicles per hour)		
No. of Approaches	3	4
Volume Criteria*	650	800
Volume*		
Fulfilled?:	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No

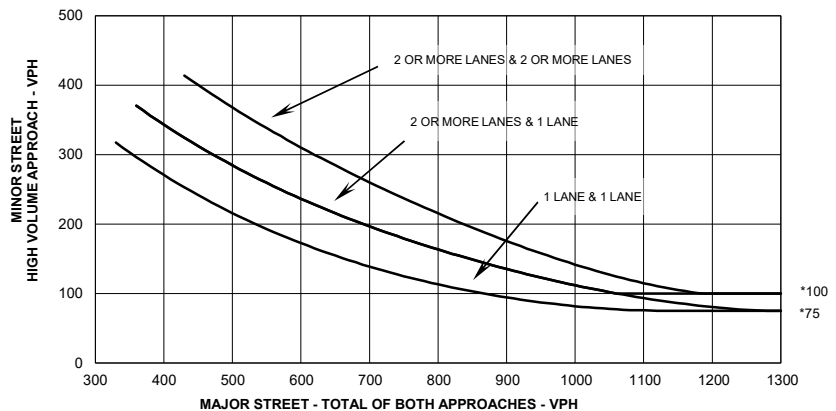
Plot volume combination on the applicable figure below.

FIGURE 4C-3: Criteria for "100%" Volume Level

* Note: 150 vph applies as the lower threshold volume for a minor street approach with two or more lanes and 100 vph applies as the lower threshold volume threshold for a minor street approach with one lane.

FIGURE 4C-4: Criteria for "70%" Volume Level

(Community Less than 10,000 population or above 70 km/hr (40 mph) on Major Street)



* Note: 100 vph applies as the lower threshold volume for a minor street approach with two or more lanes and 75 vph applies as the lower threshold volume threshold for a minor street approach with one lane.

State of Florida Department of Transportation

TRAFFIC SIGNAL WARRANT SUMMARY

Form 750-020-01
TRAFFIC ENGINEERING
10/15

City: **Lincoln**
County: _____
District: _____

Engineer: **John P Diediker**
Date: **January 22, 2020**

Major Street: **17th St**
Minor Street: **D St**

Lanes: **4** Major Approach Speed: **25**
Lanes: **1** Minor Approach Speed: **25**

MUTCD Electronic Reference to Chapter 4: <http://mutcd.fhwa.dot.gov/pdfs/2009r1r2/part4.pdf>

Volume Level Criteria

1. Is the posted speed or 85th-percentile of major street > 40 mph (70 km/h)?
2. Is the intersection in a built-up area of an isolated community with a population < 10,000?

☐ Yes ☒ No

☐ Yes ☒ No

"70%" volume level **may** be used if Question 1 **or** 2 above is answered "Yes"

☐ 70% ☒ 100%

WARRANT 3 - PEAK HOUR

If all three criteria are fulfilled **or** the plotted point lies above the appropriate line, then the warrant is satisfied.

Applicable: ☒ Yes ☐ No

Satisfied: ☐ Yes ☒ No

Unusual condition justifying use of warrant:

Record hour when criteria are fulfilled and the corresponding delay or volume in boxes provided.

Peak Hour 100% Volume		
Time	Major Vol.	Minor Vol.
PM	697	77

Peak Hour 70% Volume		
Time	Major Vol.	Minor Vol.

Criteria

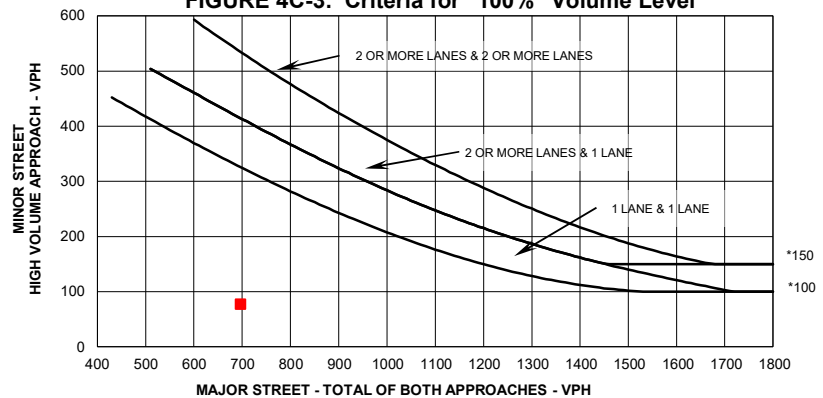
1. Delay on Minor Approach *(vehicle-hours)		
Approach Lanes	1	2
Delay Criteria*	4.0	5.0
Delay*		
Fulfilled?:	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No

2. Volume on Minor Approach One-Direction *(vehicles per hour)		
Approach Lanes	1	2
Volume Criteria*	100	150
Volume*		
Fulfilled?:	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No

3. Total Intersection Entering Volume *(vehicles per hour)		
No. of Approaches	3	4
Volume Criteria*	650	800
Volume*		
Fulfilled?:	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No

Plot volume combination on the applicable figure below.

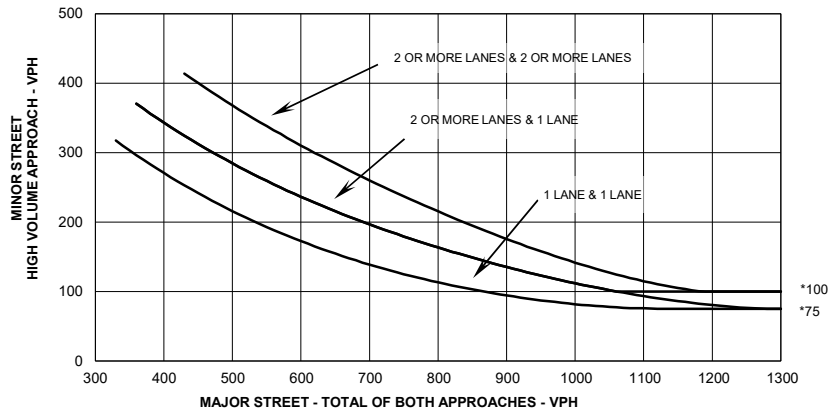
FIGURE 4C-3: Criteria for "100%" Volume Level



* Note: 150 vph applies as the lower threshold volume for a minor street approach with two or more lanes and 100 vph applies as the lower threshold volume threshold for a minor street approach with one lane.

FIGURE 4C-4: Criteria for "70%" Volume Level

(Community Less than 10,000 population or above 70 km/hr (40 mph) on Major Street)



* Note: 100 vph applies as the lower threshold volume for a minor street approach with two or more lanes and 75 vph applies as the lower threshold volume threshold for a minor street approach with one lane.

TRAFFIC SIGNAL WARRANT SUMMARY

City: **Lincoln**
County:
District:

Engineer: **John P Diediker**
Date: **January 22, 2020**

Major Street: **A St**
Minor Street: **17th St**

Lanes: **1** Major Approach Speed: **25**
Lanes: **3** Minor Approach Speed: **25**

MUTCD Electronic Reference to Chapter 4: <http://mutcd.fhwa.dot.gov/pdfs/2009r1r2/part4.pdf>

Volume Level Criteria

1. Is the posted speed or 85th-percentile of major street > 40 mph (70 km/h)?
2. Is the intersection in a built-up area of an isolated community with a population < 10,000?

☐ Yes ☒ No

☐ Yes ☒ No

"70%" volume level **may** be used if Question 1 **or** 2 above is answered "Yes"

☐ 70% ☒ 100%

WARRANT 3 - PEAK HOUR

If all three criteria are fulfilled **or** the plotted point lies above the appropriate line, then the warrant is satisfied.

Applicable: ☒ Yes ☐ No

Satisfied: ☒ Yes ☐ No

Unusual condition justifying use of warrant:

Record hour when criteria are fulfilled and the corresponding delay or volume in boxes provided.

Peak Hour 100% Volume		
Time	Major Vol.	Minor Vol.
AM	723	583

Peak Hour 70% Volume		
Time	Major Vol.	Minor Vol.

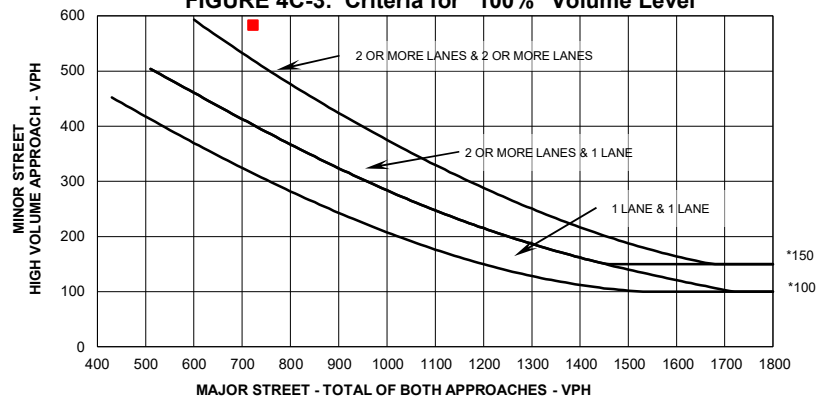
Criteria

1. Delay on Minor Approach *(vehicle-hours)		
Approach Lanes	1	2
Delay Criteria*	4.0	5.0
Delay*		
Fulfilled?:	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No

2. Volume on Minor Approach One-Direction *(vehicles per hour)		
Approach Lanes	1	2
Volume Criteria*	100	150
Volume*		
Fulfilled?:	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No

3. Total Intersection Entering Volume *(vehicles per hour)		
No. of Approaches	3	4
Volume Criteria*	650	800
Volume*		1
Fulfilled?:	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No

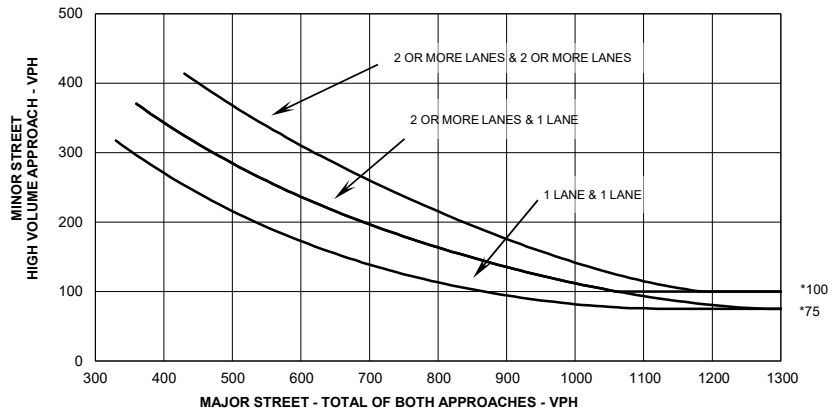
Plot volume combination on the applicable figure below.

FIGURE 4C-3: Criteria for "100%" Volume Level

* Note: 150 vph applies as the lower threshold volume for a minor street approach with two or more lanes and 100 vph applies as the lower threshold volume threshold for a minor street approach with one lane.

FIGURE 4C-4: Criteria for "70%" Volume Level

(Community Less than 10,000 population or above 70 km/hr (40 mph) on Major Street)



* Note: 100 vph applies as the lower threshold volume for a minor street approach with two or more lanes and 75 vph applies as the lower threshold volume threshold for a minor street approach with one lane.

TRAFFIC SIGNAL WARRANT SUMMARY

City: **Lincoln**
County:
District:

Engineer: **John P Diediker**
Date: **January 22, 2020**

Major Street: **A St**
Minor Street: **17th St**

Lanes: **1** Major Approach Speed: **25**
Lanes: **3** Minor Approach Speed: **25**

MUTCD Electronic Reference to Chapter 4: <http://mutcd.fhwa.dot.gov/pdfs/2009r1r2/part4.pdf>

Volume Level Criteria

1. Is the posted speed or 85th-percentile of major street > 40 mph (70 km/h)?
2. Is the intersection in a built-up area of an isolated community with a population < 10,000?

☐ Yes ☒ No

☐ Yes ☒ No

"70%" volume level **may** be used if Question 1 **or** 2 above is answered "Yes"

☐ 70% ☒ 100%

WARRANT 3 - PEAK HOUR

If all three criteria are fulfilled **or** the plotted point lies above the appropriate line, then the warrant is satisfied.

Applicable: ☒ Yes ☐ No

Satisfied: ☒ Yes ☐ No

Unusual condition justifying use of warrant:

Record hour when criteria are fulfilled and the corresponding delay or volume in boxes provided.

Peak Hour 100% Volume		
Time	Major Vol.	Minor Vol.
PM	885	458

Peak Hour 70% Volume		
Time	Major Vol.	Minor Vol.

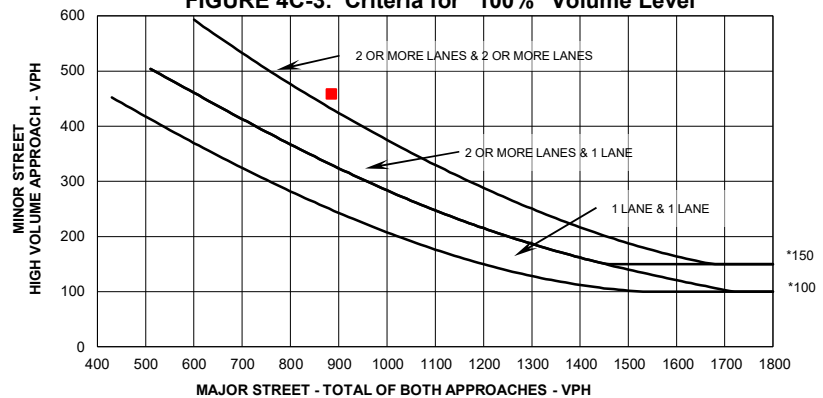
Criteria

1. Delay on Minor Approach *(vehicle-hours)		
Approach Lanes	1	2
Delay Criteria*	4.0	5.0
Delay*		
Fulfilled?:	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No

2. Volume on Minor Approach One-Direction *(vehicles per hour)		
Approach Lanes	1	2
Volume Criteria*	100	150
Volume*		
Fulfilled?:	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No

3. Total Intersection Entering Volume *(vehicles per hour)		
No. of Approaches	3	4
Volume Criteria*	650	800
Volume*		
Fulfilled?:	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No

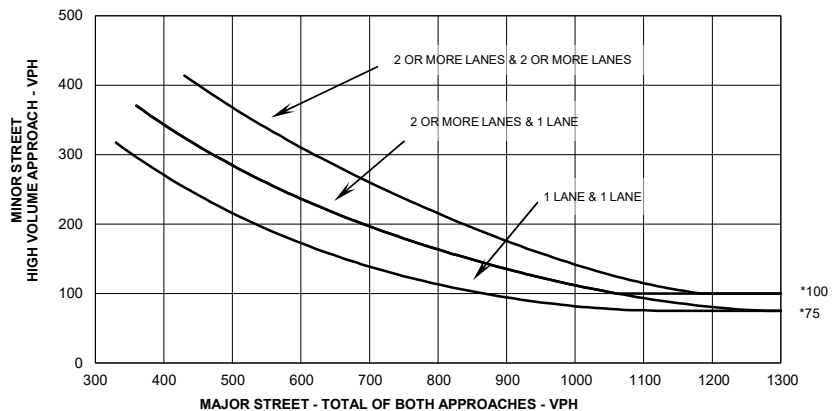
Plot volume combination on the applicable figure below.

FIGURE 4C-3: Criteria for "100%" Volume Level

* Note: 150 vph applies as the lower threshold volume for a minor street approach with two or more lanes and 100 vph applies as the lower threshold volume threshold for a minor street approach with one lane.

FIGURE 4C-4: Criteria for "70%" Volume Level

(Community Less than 10,000 population or above 70 km/hr (40 mph) on Major Street)



* Note: 100 vph applies as the lower threshold volume for a minor street approach with two or more lanes and 75 vph applies as the lower threshold volume threshold for a minor street approach with one lane.

TRAFFIC SIGNAL WARRANT SUMMARY

City: **Lincoln**
 County:
 District:

Engineer: **John P Diediker**
 Date: **January 22, 2020**

Major Street: **17th St**
 Minor Street: **Washington St**

Lanes: **2** Major Approach Speed: **25**
 Lanes: **1** Minor Approach Speed: **25**

MUTCD Electronic Reference to Chapter 4: <http://mutcd.fhwa.dot.gov/pdfs/2009r1r2/part4.pdf>

Volume Level Criteria

1. Is the posted speed or 85th-percentile of major street > 40 mph (70 km/h)?
2. Is the intersection in a built-up area of an isolated community with a population < 10,000?

☐ Yes ☒ No

☐ Yes ☒ No

"70%" volume level **may** be used if Question 1 **or** 2 above is answered "Yes"

☐ 70% ☒ 100%

WARRANT 3 - PEAK HOUR

If all three criteria are fulfilled **or** the plotted point lies above the appropriate line, then the warrant is satisfied.

Applicable: ☒ Yes ☐ No

Satisfied: ☐ Yes ☒ No

Unusual condition justifying use of warrant:

--

Record hour when criteria are fulfilled and the corresponding delay or volume in boxes provided.

Peak Hour 100% Volume		
Time	Major Vol.	Minor Vol.
AM	1072	126

Peak Hour 70% Volume		
Time	Major Vol.	Minor Vol.

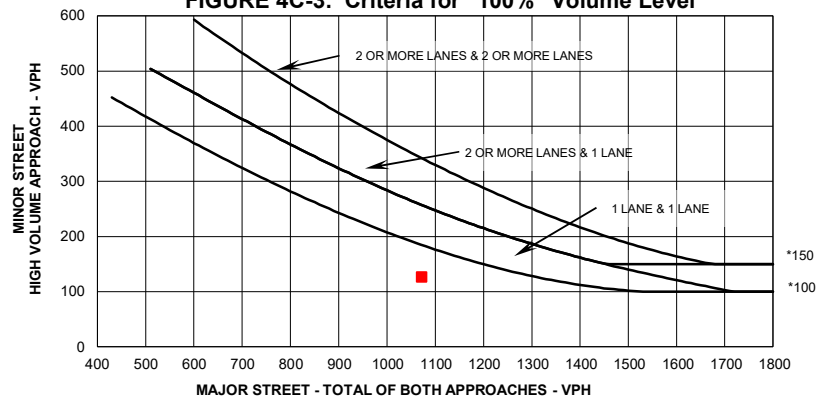
Criteria

1. Delay on Minor Approach *(vehicle-hours)		
Approach Lanes	1	2
Delay Criteria*	4.0	5.0
Delay*		
Fulfilled?:	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No

2. Volume on Minor Approach One-Direction *(vehicles per hour)		
Approach Lanes	1	2
Volume Criteria*	100	150
Volume*		
Fulfilled?:	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No

3. Total Intersection Entering Volume *(vehicles per hour)		
No. of Approaches	3	4
Volume Criteria*	650	800
Volume*		
Fulfilled?:	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No

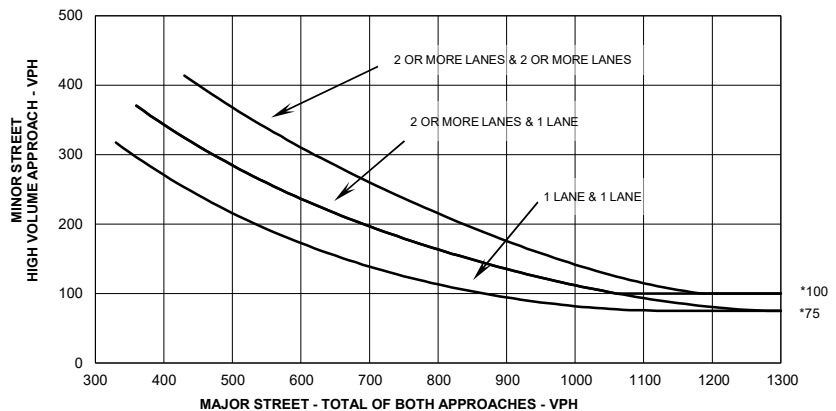
Plot volume combination on the applicable figure below.

FIGURE 4C-3: Criteria for "100%" Volume Level

* Note: 150 vph applies as the lower threshold volume for a minor street approach with two or more lanes and 100 vph applies as the lower threshold volume threshold for a minor street approach with one lane.

FIGURE 4C-4: Criteria for "70%" Volume Level

(Community Less than 10,000 population or above 70 km/hr (40 mph) on Major Street)



* Note: 100 vph applies as the lower threshold volume for a minor street approach with two or more lanes and 75 vph applies as the lower threshold volume threshold for a minor street approach with one lane.

TRAFFIC SIGNAL WARRANT SUMMARY

City: **Lincoln**
 County:
 District:

Engineer: **John P Diediker**
 Date: **January 22, 2020**

Major Street: **17th St**
 Minor Street: **Washington St**

Lanes: **2** Major Approach Speed: **25**
 Lanes: **1** Minor Approach Speed: **25**

MUTCD Electronic Reference to Chapter 4: <http://mutcd.fhwa.dot.gov/pdfs/2009r1r2/part4.pdf>

Volume Level Criteria

1. Is the posted speed or 85th-percentile of major street > 40 mph (70 km/h)?
2. Is the intersection in a built-up area of an isolated community with a population < 10,000?

☐ Yes ☒ No

☐ Yes ☒ No

"70%" volume level **may** be used if Question 1 **or** 2 above is answered "Yes"

☐ 70% ☒ 100%

WARRANT 3 - PEAK HOUR

If all three criteria are fulfilled **or** the plotted point lies above the appropriate line, then the warrant is satisfied.

Applicable: ☒ Yes ☐ No

Satisfied: ☐ Yes ☒ No

Unusual condition justifying use of warrant:

Record hour when criteria are fulfilled and the corresponding delay or volume in boxes provided.

Peak Hour 100% Volume		
Time	Major Vol.	Minor Vol.
PM	617	160

Peak Hour 70% Volume		
Time	Major Vol.	Minor Vol.

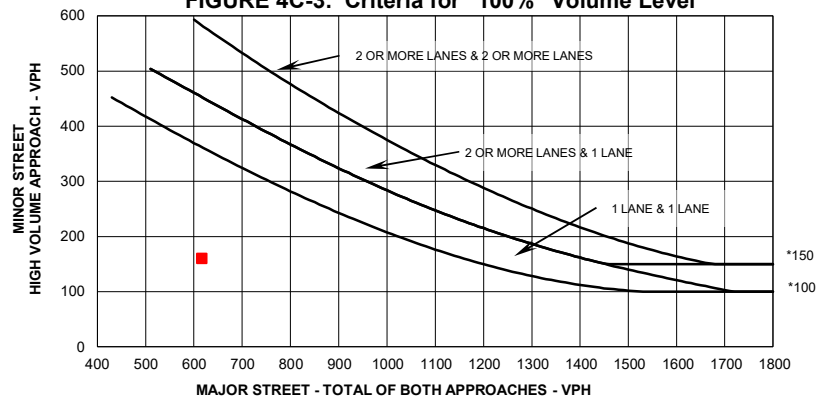
Criteria

1. Delay on Minor Approach *(vehicle-hours)		
Approach Lanes	1	2
Delay Criteria*	4.0	5.0
Delay*		
Fulfilled?:	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No

2. Volume on Minor Approach One-Direction *(vehicles per hour)		
Approach Lanes	1	2
Volume Criteria*	100	150
Volume*		
Fulfilled?:	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No

3. Total Intersection Entering Volume *(vehicles per hour)		
No. of Approaches	3	4
Volume Criteria*	650	800
Volume*		
Fulfilled?:	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No

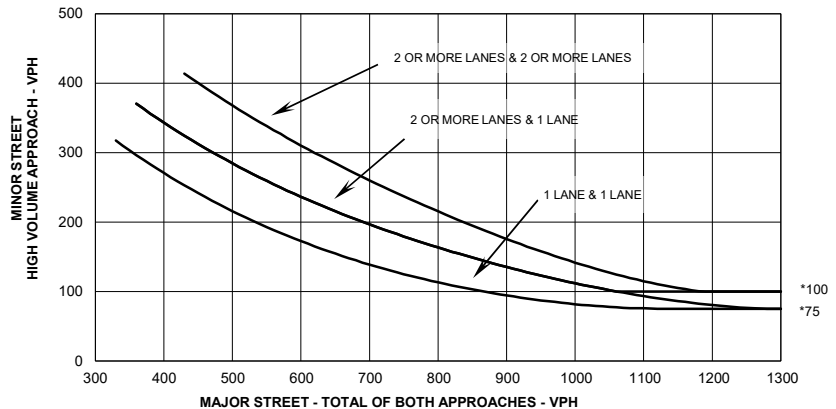
Plot volume combination on the applicable figure below.

FIGURE 4C-3: Criteria for "100%" Volume Level

* Note: 150 vph applies as the lower threshold volume for a minor street approach with two or more lanes and 100 vph applies as the lower threshold volume threshold for a minor street approach with one lane.

FIGURE 4C-4: Criteria for "70%" Volume Level

(Community Less than 10,000 population or above 70 km/hr (40 mph) on Major Street)



* Note: 100 vph applies as the lower threshold volume for a minor street approach with two or more lanes and 75 vph applies as the lower threshold volume threshold for a minor street approach with one lane.

TRAFFIC SIGNAL WARRANT SUMMARY

City: **Lincoln**
County:
District:

Engineer: **John P Diediker**
Date: **January 22, 2020**

Major Street: **South St**
Minor Street: **17th St**

Lanes: **2** Major Approach Speed: **25**
Lanes: **2** Minor Approach Speed: **25**

MUTCD Electronic Reference to Chapter 4: <http://mutcd.fhwa.dot.gov/pdfs/2009r1r2/part4.pdf>

Volume Level Criteria

1. Is the posted speed or 85th-percentile of major street > 40 mph (70 km/h)?
2. Is the intersection in a built-up area of an isolated community with a population < 10,000?

☐ Yes ☒ No

☐ Yes ☒ No

"70%" volume level **may** be used if Question 1 **or** 2 above is answered "Yes"

☐ 70% ☒ 100%

WARRANT 3 - PEAK HOUR

If all three criteria are fulfilled **or** the plotted point lies above the appropriate line, then the warrant is satisfied.

Applicable: ☒ Yes ☐ No

Satisfied: ☒ Yes ☐ No

Unusual condition justifying use of warrant:

Record hour when criteria are fulfilled and the corresponding delay or volume in boxes provided.

Peak Hour 100% Volume		
Time	Major Vol.	Minor Vol.
AM	1436	788

Peak Hour 70% Volume		
Time	Major Vol.	Minor Vol.

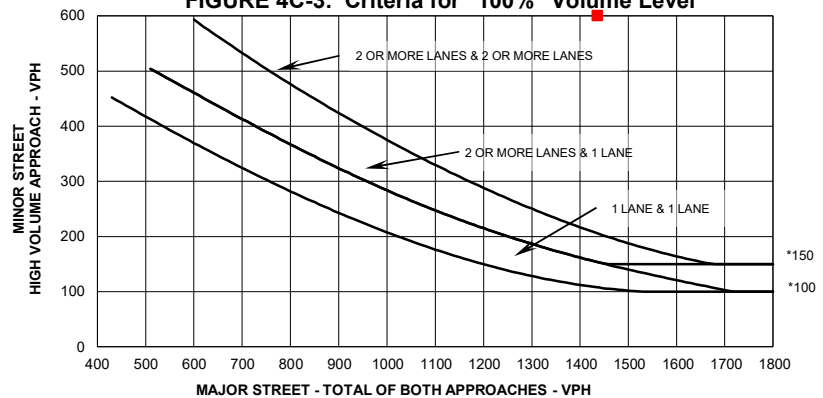
Criteria

1. Delay on Minor Approach *(vehicle-hours)		
Approach Lanes	1	2
Delay Criteria*	4.0	5.0
Delay*		
Fulfilled?:	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No

2. Volume on Minor Approach One-Direction *(vehicles per hour)		
Approach Lanes	1	2
Volume Criteria*	100	150
Volume*		
Fulfilled?:	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No

3. Total Intersection Entering Volume *(vehicles per hour)		
No. of Approaches	3	4
Volume Criteria*	650	800
Volume*		
Fulfilled?:	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No

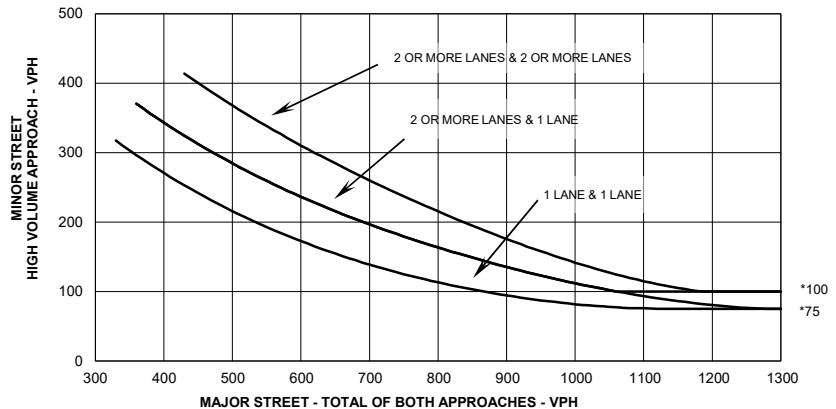
Plot volume combination on the applicable figure below.

FIGURE 4C-3: Criteria for "100%" Volume Level

* Note: 150 vph applies as the lower threshold volume for a minor street approach with two or more lanes and 100 vph applies as the lower threshold volume threshold for a minor street approach with one lane.

FIGURE 4C-4: Criteria for "70%" Volume Level

(Community Less than 10,000 population or above 70 km/hr (40 mph) on Major Street)



* Note: 100 vph applies as the lower threshold volume for a minor street approach with two or more lanes and 75 vph applies as the lower threshold volume threshold for a minor street approach with one lane.

TRAFFIC SIGNAL WARRANT SUMMARY

City: **Lincoln**
County:
District:

Engineer: **John P Diediker**
Date: **January 22, 2020**

Major Street: **South St**
Minor Street: **17th St**

Lanes: **2** Major Approach Speed: **25**
Lanes: **2** Minor Approach Speed: **25**

MUTCD Electronic Reference to Chapter 4: <http://mutcd.fhwa.dot.gov/pdfs/2009r1r2/part4.pdf>

Volume Level Criteria

1. Is the posted speed or 85th-percentile of major street > 40 mph (70 km/h)?
2. Is the intersection in a built-up area of an isolated community with a population < 10,000?

☐ Yes ☒ No

☐ Yes ☒ No

"70%" volume level **may** be used if Question 1 **or** 2 above is answered "Yes"

☐ 70% ☒ 100%

WARRANT 3 - PEAK HOUR

If all three criteria are fulfilled **or** the plotted point lies above the appropriate line, then the warrant is satisfied.

Applicable: ☒ Yes ☐ No

Satisfied: ☒ Yes ☐ No

Unusual condition justifying use of warrant:

Record hour when criteria are fulfilled and the corresponding delay or volume in boxes provided.

Peak Hour 100% Volume		
Time	Major Vol.	Minor Vol.
PM	2086	425

Peak Hour 70% Volume		
Time	Major Vol.	Minor Vol.

Criteria

1. Delay on Minor Approach *(vehicle-hours)		
Approach Lanes	1	2
Delay Criteria*	4.0	5.0
Delay*		
Fulfilled?:	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No

2. Volume on Minor Approach One-Direction *(vehicles per hour)		
Approach Lanes	1	2
Volume Criteria*	100	150
Volume*		
Fulfilled?:	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No

3. Total Intersection Entering Volume *(vehicles per hour)		
No. of Approaches	3	4
Volume Criteria*	650	800
Volume*		
Fulfilled?:	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No

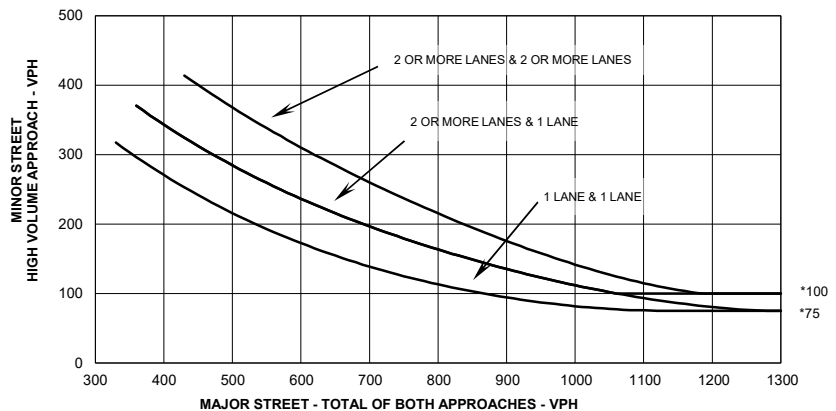
Plot volume combination on the applicable figure below.

FIGURE 4C-3: Criteria for "100%" Volume Level

* Note: 150 vph applies as the lower threshold volume for a minor street approach with two or more lanes and 100 vph applies as the lower threshold volume threshold for a minor street approach with one lane.

FIGURE 4C-4: Criteria for "70%" Volume Level

(Community Less than 10,000 population or above 70 km/hr (40 mph) on Major Street)



* Note: 100 vph applies as the lower threshold volume for a minor street approach with two or more lanes and 75 vph applies as the lower threshold volume threshold for a minor street approach with one lane.

TRAFFIC SIGNAL WARRANT SUMMARY

City: **Lincoln**
County:
District:

Engineer: **John P Diediker**
Date: **January 17, 2020**

Major Street: **Antelope Valley Pkwy**
Minor Street: **Q St**

Lanes: **3** Major Approach Speed: **35**
Lanes: **3** Minor Approach Speed: **25**

MUTCD Electronic Reference to Chapter 4: <http://mutcd.fhwa.dot.gov/pdfs/2009r1r2/part4.pdf>

Volume Level Criteria

1. Is the posted speed or 85th-percentile of major street > 40 mph (70 km/h)?
2. Is the intersection in a built-up area of an isolated community with a population < 10,000?

☐ Yes ☒ No

☐ Yes ☒ No

"70%" volume level **may** be used if Question 1 **or** 2 above is answered "Yes"

☐ 70% ☒ 100%

WARRANT 3 - PEAK HOUR

If all three criteria are fulfilled **or** the plotted point lies above the appropriate line, then the warrant is satisfied.

Applicable: ☒ Yes ☐ No

Satisfied: ☒ Yes ☐ No

Unusual condition justifying use of warrant:

--

Record hour when criteria are fulfilled and the corresponding delay or volume in boxes provided.

Peak Hour 100% Volume		
Time	Major Vol.	Minor Vol.
AM	2018	151

Peak Hour 70% Volume		
Time	Major Vol.	Minor Vol.

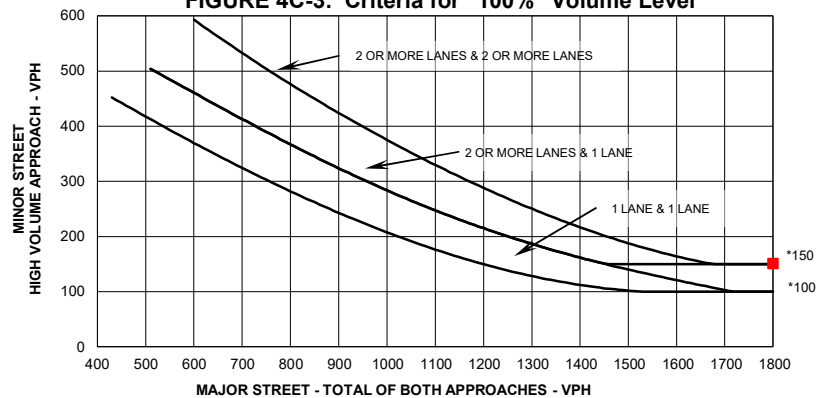
Criteria

1. Delay on Minor Approach *(vehicle-hours)		
Approach Lanes	1	2
Delay Criteria*	4.0	5.0
Delay*		
Fulfilled?:	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No

2. Volume on Minor Approach One-Direction *(vehicles per hour)		
Approach Lanes	1	2
Volume Criteria*	100	150
Volume*		
Fulfilled?:	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No

3. Total Intersection Entering Volume *(vehicles per hour)		
No. of Approaches	3	4
Volume Criteria*	650	800
Volume*		
Fulfilled?:	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No

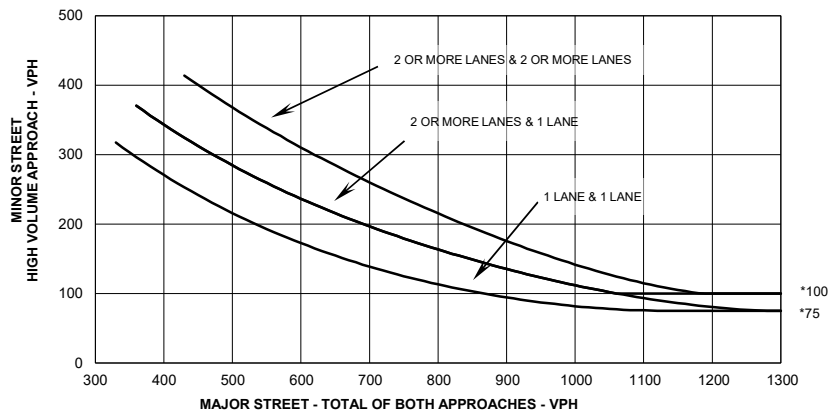
Plot volume combination on the applicable figure below.

FIGURE 4C-3: Criteria for "100%" Volume Level

* Note: 150 vph applies as the lower threshold volume for a minor street approach with two or more lanes and 100 vph applies as the lower threshold volume threshold for a minor street approach with one lane.

FIGURE 4C-4: Criteria for "70%" Volume Level

(Community Less than 10,000 population or above 70 km/hr (40 mph) on Major Street)



* Note: 100 vph applies as the lower threshold volume for a minor street approach with two or more lanes and 75 vph applies as the lower threshold volume threshold for a minor street approach with one lane.

State of Florida Department of Transportation

TRAFFIC SIGNAL WARRANT SUMMARY

Form 750-020-01
TRAFFIC ENGINEERING
10/15

City: **Lincoln**
County: _____
District: _____

Engineer: **John P Diediker**
Date: **January 17, 2020**

Major Street: **Antelope Valley Pkwy**
Minor Street: **P St**

Lanes: **3** Major Approach Speed: **35**
Lanes: **3** Minor Approach Speed: **25**

MUTCD Electronic Reference to Chapter 4: <http://mutcd.fhwa.dot.gov/pdfs/2009r1r2/part4.pdf>

Volume Level Criteria

1. Is the posted speed or 85th-percentile of major street > 40 mph (70 km/h)?
2. Is the intersection in a built-up area of an isolated community with a population < 10,000?

☐ Yes ☒ No

☐ Yes ☒ No

"70%" volume level **may** be used if Question 1 **or** 2 above is answered "Yes"

☐ 70% ☒ 100%

WARRANT 3 - PEAK HOUR

If all three criteria are fulfilled **or** the plotted point lies above the appropriate line, then the warrant is satisfied.

Applicable: ☒ Yes ☐ No

Satisfied: ☒ Yes ☐ No

Unusual condition justifying use of warrant:

Record hour when criteria are fulfilled and the corresponding delay or volume in boxes provided.

Peak Hour 100% Volume		
Time	Major Vol.	Minor Vol.
PM	2486	417

Peak Hour 70% Volume		
Time	Major Vol.	Minor Vol.

Criteria

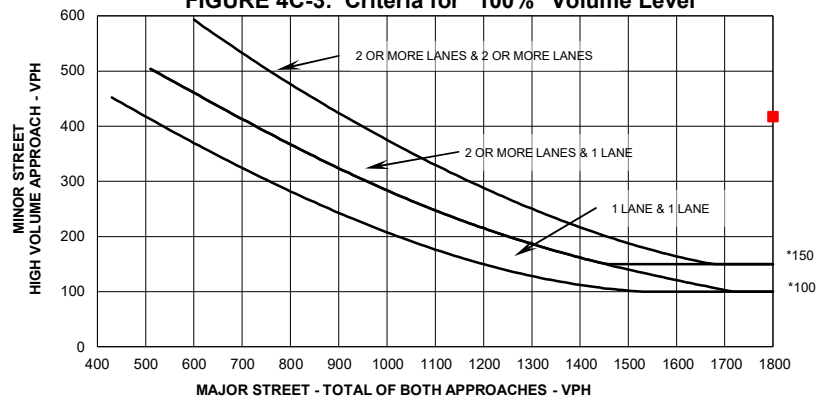
1. Delay on Minor Approach *(vehicle-hours)		
Approach Lanes	1	2
Delay Criteria*	4.0	5.0
Delay*		
Fulfilled?:	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No

2. Volume on Minor Approach One-Direction *(vehicles per hour)		
Approach Lanes	1	2
Volume Criteria*	100	150
Volume*		
Fulfilled?:	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No

3. Total Intersection Entering Volume *(vehicles per hour)		
No. of Approaches	3	4
Volume Criteria*	650	800
Volume*		
Fulfilled?:	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No

Plot volume combination on the applicable figure below.

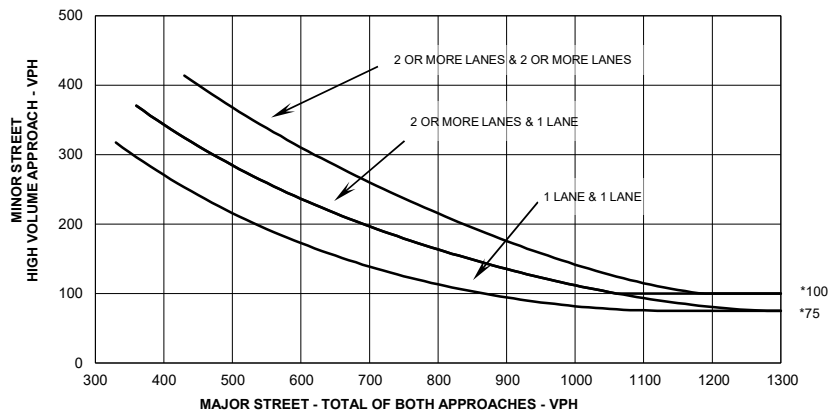
FIGURE 4C-3: Criteria for "100%" Volume Level



* Note: 150 vph applies as the lower threshold volume for a minor street approach with two or more lanes and 100 vph applies as the lower threshold volume threshold for a minor street approach with one lane.

FIGURE 4C-4: Criteria for "70%" Volume Level

(Community Less than 10,000 population or above 70 km/hr (40 mph) on Major Street)



* Note: 100 vph applies as the lower threshold volume for a minor street approach with two or more lanes and 75 vph applies as the lower threshold volume threshold for a minor street approach with one lane.

TRAFFIC SIGNAL WARRANT SUMMARY

City: **Lincoln**
County:
District:

Engineer: **John P Diediker**
Date: **January 17, 2020**

Major Street: **Antelope Valley Pkwy**
Minor Street: **P St**

Lanes: **3** Major Approach Speed: **35**
Lanes: **3** Minor Approach Speed: **25**

MUTCD Electronic Reference to Chapter 4: <http://mutcd.fhwa.dot.gov/pdfs/2009r1r2/part4.pdf>

Volume Level Criteria

1. Is the posted speed or 85th-percentile of major street > 40 mph (70 km/h)?
2. Is the intersection in a built-up area of an isolated community with a population < 10,000?

☐ Yes ☒ No

☐ Yes ☒ No

"70%" volume level **may** be used if Question 1 **or** 2 above is answered "Yes"

☐ 70% ☒ 100%

WARRANT 3 - PEAK HOUR

If all three criteria are fulfilled **or** the plotted point lies above the appropriate line, then the warrant is satisfied.

Applicable: ☒ Yes ☐ No

Satisfied: ☒ Yes ☐ No

Unusual condition justifying use of warrant:

Record hour when criteria are fulfilled and the corresponding delay or volume in boxes provided.

Peak Hour 100% Volume		
Time	Major Vol.	Minor Vol.
AM	2062	151

Peak Hour 70% Volume		
Time	Major Vol.	Minor Vol.

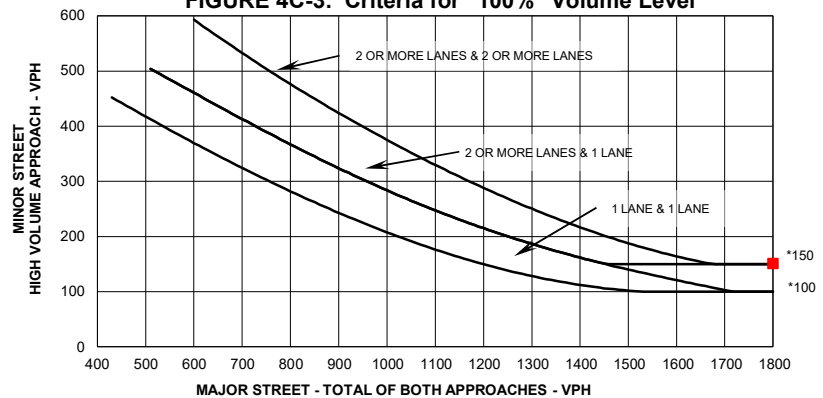
Criteria

1. Delay on Minor Approach *(vehicle-hours)		
Approach Lanes	1	2
Delay Criteria*	4.0	5.0
Delay*		
Fulfilled?:	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No

2. Volume on Minor Approach One-Direction *(vehicles per hour)		
Approach Lanes	1	2
Volume Criteria*	100	150
Volume*		
Fulfilled?:	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No

3. Total Intersection Entering Volume *(vehicles per hour)		
No. of Approaches	3	4
Volume Criteria*	650	800
Volume*		
Fulfilled?:	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No

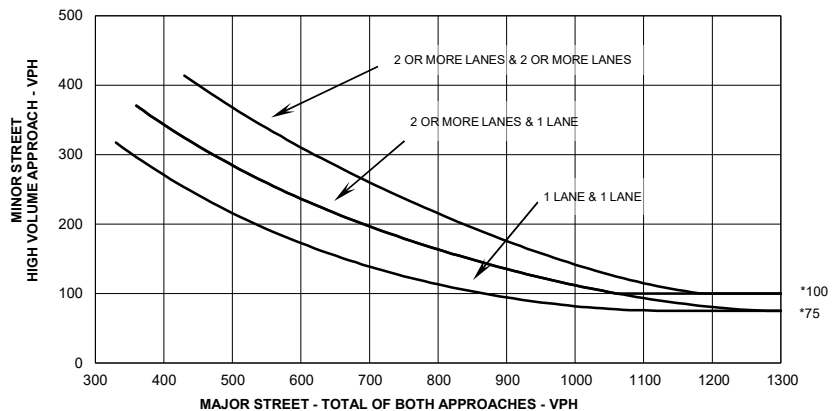
Plot volume combination on the applicable figure below.

FIGURE 4C-3: Criteria for "100%" Volume Level

* Note: 150 vph applies as the lower threshold volume for a minor street approach with two or more lanes and 100 vph applies as the lower threshold volume threshold for a minor street approach with one lane.

FIGURE 4C-4: Criteria for "70%" Volume Level

(Community Less than 10,000 population or above 70 km/hr (40 mph) on Major Street)



* Note: 100 vph applies as the lower threshold volume for a minor street approach with two or more lanes and 75 vph applies as the lower threshold volume threshold for a minor street approach with one lane.

TRAFFIC SIGNAL WARRANT SUMMARY

City: **Lincoln**
County:
District:

Engineer: **John P Diediker**
Date: **January 17, 2020**

Major Street: **Antelope Valley Pkwy**
Minor Street: **Q St**

Lanes: **3** Major Approach Speed: **35**
Lanes: **4** Minor Approach Speed: **25**

MUTCD Electronic Reference to Chapter 4: <http://mutcd.fhwa.dot.gov/pdfs/2009r1r2/part4.pdf>

Volume Level Criteria

1. Is the posted speed or 85th-percentile of major street > 40 mph (70 km/h)?
2. Is the intersection in a built-up area of an isolated community with a population < 10,000?

☐ Yes ☒ No

☐ Yes ☒ No

"70%" volume level **may** be used if Question 1 **or** 2 above is answered "Yes"

☐ 70% ☒ 100%

WARRANT 3 - PEAK HOUR

If all three criteria are fulfilled **or** the plotted point lies above the appropriate line, then the warrant is satisfied.

Applicable: ☒ Yes ☐ No

Satisfied: ☒ Yes ☐ No

Unusual condition justifying use of warrant:

Record hour when criteria are fulfilled and the corresponding delay or volume in boxes provided.

Peak Hour 100% Volume		
Time	Major Vol.	Minor Vol.
PM	2253	417

Peak Hour 70% Volume		
Time	Major Vol.	Minor Vol.

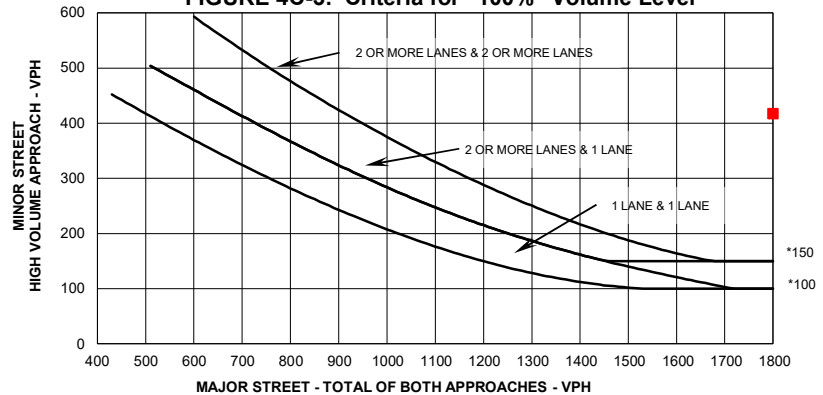
Criteria

1. Delay on Minor Approach *(vehicle-hours)		
Approach Lanes	1	2
Delay Criteria*	4.0	5.0
Delay*		
Fulfilled?:	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No

2. Volume on Minor Approach One-Direction *(vehicles per hour)		
Approach Lanes	1	2
Volume Criteria*	100	150
Volume*		
Fulfilled?:	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No

3. Total Intersection Entering Volume *(vehicles per hour)		
No. of Approaches	3	4
Volume Criteria*	650	800
Volume*		
Fulfilled?:	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No

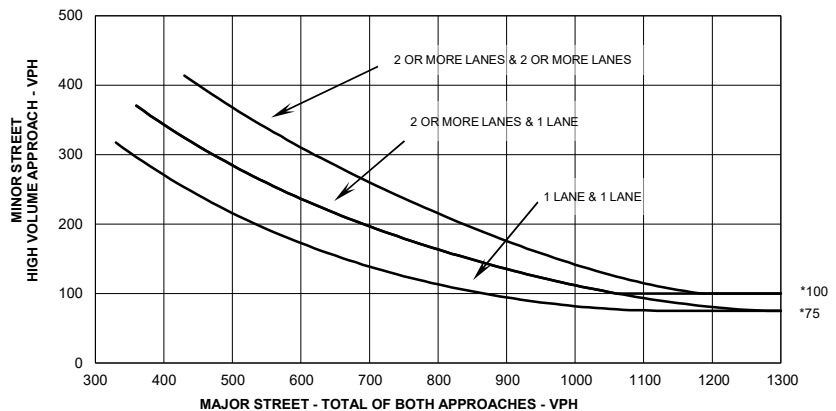
Plot volume combination on the applicable figure below.

FIGURE 4C-3: Criteria for "100%" Volume Level

* Note: 150 vph applies as the lower threshold volume for a minor street approach with two or more lanes and 100 vph applies as the lower threshold volume threshold for a minor street approach with one lane.

FIGURE 4C-4: Criteria for "70%" Volume Level

(Community Less than 10,000 population or above 70 km/hr (40 mph) on Major Street)



* Note: 100 vph applies as the lower threshold volume for a minor street approach with two or more lanes and 75 vph applies as the lower threshold volume threshold for a minor street approach with one lane.