

Study Review Committee Meeting #3

CASSELTON ND HWY 18 CORRIDOR STUDY

Wednesday, July 15, 2026

Introductions

Existing Conditions

Existing Conditions - Intersection traffic level of service

Intersection Vehicle Delay & Level of Service AM Peak Hr - Existing Conditions (2025)					
Hwy 18 Intersection	East leg	West leg	North leg	South leg	Intersection Overall
LOS (veh delay - provided in sec / veh)					
Cottonwood Dr	-	B (11)	A (0)	A (0)	A (1)
Morningside Dr	B (11)	-	A (0)	A (0)	A (2)
11 th St	-	B (12)	A (0)	A (0)	A (0)
13 th St	-	B (10)	A (0)	A (0)	A (0)
Industrial Blvd	B (11)	B (12)	A (0)	A (0)	A (1)
37 th St	B (12)	C (15)	A (1)	A (1)	A (3)

Intersection Vehicle Delay & Level of Service PM Peak Hr - Existing Conditions (2025)					
Hwy 18 Intersection	East leg	West leg	North leg	South leg	Intersection Overall
LOS (veh delay - provided in sec / veh)					
Cottonwood Dr	-				
Morningside Dr	B (13)	-	A (1)	A (0)	A (1)
11 th St	-	A (0)	A (0)	A (0)	A (0)
13 th St	-	A (9)	A (0)	A (0)	A (0)
Industrial Blvd	B (12)	B (14)	A (0)	A (1)	A (2)
37 th St	C (15)	B (13)	A (1)	A (0)	A (3)

Stakeholder engagement

Future Conditions

Future Conditions – Traffic



Future Conditions – Traffic



Future Conditions – 2050

Similar comparisons (~8,500 ADT)

Sheyenne St – 40th Ave to 52nd Ave



40th Ave S – 25th St to I-94



Future Conditions – Full Build

Similar comparisons (~13,500 ADT)

42nd St – 32nd Ave to 13th Ave



Sheyenne St – 32nd Ave to 40th Ave



Future Conditions – Traffic (2035)

Intersection Vehicle Delay & Level of Service AM Peak Hr - 2035					
Hwy 18 Intersection	East leg	West leg	North leg	South leg	Intersection Overall
LOS (veh delay - provided in sec / veh)					
Cottonwood Dr	-	B (12)	A (0)	A (0)	A (1)
Morningside Dr	B (12)	-	A (0)	A (0)	A (1)
11 th St	-	B (13)	A (0)	A (0)	A (0)
13 th St	-	B (12)	A (0)	A (0)	A (1)
Industrial Blvd	B (12)	B (13)	A (0)	A (0)	A (1)
37 th St	C (17)	B (13)	A (1)	A (1)	A (3)
Note: All intersection traffic control, capacity, and layout the same as existing conditions.					

Intersection Vehicle Delay & Level of Service PM Peak Hr - 2035					
Hwy 18 Intersection	East leg	West leg	North leg	South leg	Intersection Overall
LOS (veh delay - provided in sec / veh)					
Cottonwood Dr	-	B (12)	A (0)	A (0)	A (0)
Morningside Dr	B (14)	-	A (1)	A (0)	A (1)
11 th St	-	C (15)	A (0)	A (0)	A (1)
13 th St	-	B (13)	A (0)	A (0)	A (1)
Industrial Blvd	B (12)	C (16)	A (0)	A (0)	A (2)
37 th St	B (14)	C (17)	A (1)	A (0)	A (3)
Note: All intersection traffic control, capacity, and layout the same as existing conditions.					

Future Conditions – Traffic (2050)

Intersection Vehicle Delay & Level of Service AM Peak Hr - 2050					
Hwy 18 Intersection	East leg	West leg	North leg	South leg	Intersection Overall
	LOS (veh delay - provided in sec / veh)				
Cottonwood Dr	-	B (14)	A (0)	A (0)	A (0)
Morningside Dr	B (15)	-	A (0)	A (0)	A (1)
11 th St	-	D (33)	A (0)	A (1)	A (5)
13 th St	-	B (14)	A (0)	A (0)	A (1)
Industrial Blvd	B (15)	C (17)	A (0)	A (1)	A (1)
37 th St	E (36)	C (22)	A (0)	A (1)	A (5)
Note: All intersection traffic control, capacity, and layout the same as existing conditions.					

PM Peak Hr - 2050					
Hwy 18 Intersection	East leg	West leg	North leg	South leg	Intersection Overall
	LOS (veh delay - provided in sec / veh)				
Cottonwood Dr	-	B (15)	A (0)	A (0)	A (0)
Morningside Dr	C (18)	-	A (1)	A (0)	A (1)
11 th St	-	D (27)	A (0)	A (0)	A (2)
13 th St	-	C (16)	A (0)	A (0)	A (1)
Industrial Blvd	C (16)	C (24)	A (0)	A (0)	A (2)
37 th St	E (38)	D (26)	A (1)	A (1)	A (6)
Note: All intersection traffic control, capacity, and layout the same as existing conditions.					

Future Conditions – Traffic (Full Build)

Intersection Vehicle Delay & Level of Service AM Peak Hr – FULL BUILD					
Hwy 18 Intersection	East leg	West leg	North leg	South leg	Intersection Overall
LOS (veh delay - provided in sec / veh)					
Cottonwood Dr	-	C (20)	A (0)	A (0)	A (0)
Morningside Dr	C (25)	-	A (0)	A (0)	A (1)
11 th St	-	F (694)	A (0)	A (1)	F (94)
13 th St	-	E (37)	A (0)	A (1)	A (3)
Industrial Blvd	C (24)	D (32)	A (0)	A (0)	A (1)
37 th St	F (320)	F (188)	A (0)	A (1)	E (37)
Note: All intersection traffic control, capacity, and layout the same as existing conditions.					

Intersection Vehicle Delay & Level of Service PM Peak Hr – FULL BUILD					
Hwy 18 Intersection	East leg	West leg	North leg	South leg	Intersection Overall
LOS (veh delay - provided in sec / veh)					
Cottonwood Dr	-	C (23)	A (0)	A (0)	A (0)
Morningside Dr	E (36)	-	A (1)	A (0)	A (1)
11 th St	-	F (999+)	A (0)	A (1)	F (170)
13 th St	-	F (401)	A (0)	A (1)	D (32)
Industrial Blvd	D (25)	F (84)	A (0)	A (0)	A (7)
37 th St	F (310)	F (311)	A (0)	A (1)	F (54)
Note: All intersection traffic control, capacity, and layout the same as existing conditions.					

Future Conditions – Turn Lane Analysis

Left turn lane warrant analysis					
Intersection	Dir.	Existing (2025)	2035	2050	Full Build
Cottonwood Dr	NB	No	No	Maybe*	Maybe*
Morningside Dr	SB	Yes	Yes	Yes	Yes
11 th Street	NB	No	Yes	Yes	Yes
13 th Street	NB	No	Yes	Yes	Yes
Industrial Blvd	NB	Maybe*	Yes	Yes	Yes
Industrial Blvd	SB	No	Maybe*	Yes	Yes
37 th Street	NB	Yes – AI	Yes – AI	Yes – AI	Yes – AI
37 th Street	SB	Yes – AI	Yes – AI	Yes – AI	Yes – AI

Future Conditions – Signal Analysis

Traffic Signal Warrant Analysis Future Conditions			
Intersection	2035	2050	Full Build
Cottonwood / Morningside Dr	Not met	Not met	Not met
11 th Street	Not met	Warrant met	Warrant met
13 th Street	Not met	Not met	Warrant met
Industrial Blvd	Not met	Not met	Warrant met
37 th Street	Not met	Warrant met	Warrant met

Per the MUTCD, when considering the installation of a traffic signal, alternatives should also be considered. These alternatives include but are not limited to:

- Roundabouts
- Installation of turn lanes on minor approach
- Geometric intersection changes
- Restrictions to turn movements

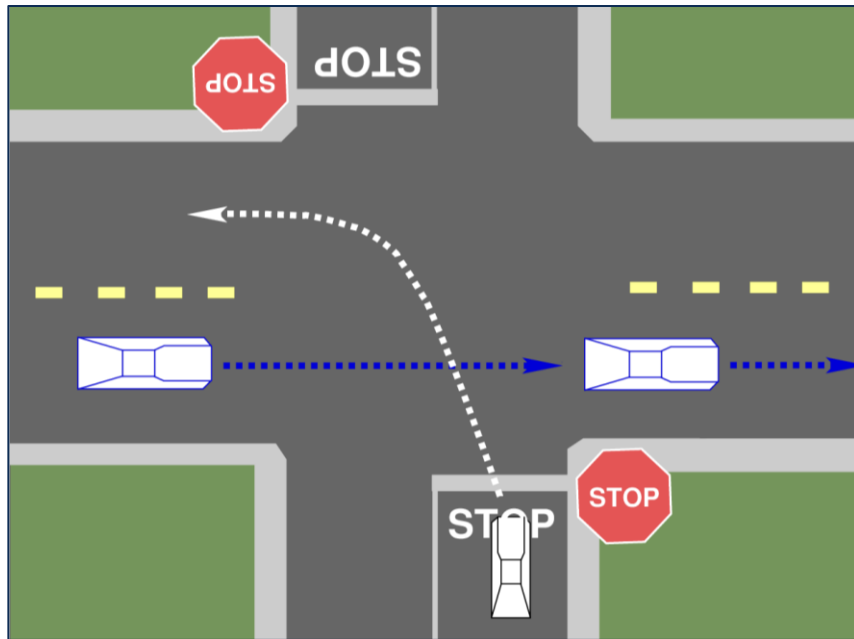
Roadway & Intersection Alternatives

Intersection Alternatives

Suggested Intersection Types (from page 14 of NDDOT Traffic Operation Manual)			
Intersection	2035	2050	Full Build
Cottonwood Dr	Two-way stop control	Two-way stop control	- Two-way stop control - Access management
Morningside Dr	Two-way stop control	Two-way stop control	- Two-way stop control - Access management
11 th Street	Two-way stop control	- Two-way stop control - Reduced conflict intersection - Roundabout	- Two-way stop control - Reduced conflict intersection - Roundabout - Traffic signal
13 th Street	Two-way stop control	Two-way stop control	- Two-way stop control - Reduced conflict intersection - Roundabout - Traffic signal
Industrial Blvd	Two-way stop control	Two-way stop control	- Two-way stop control - Access management
37 th Street	- Two-way stop control - Reduced conflict intersection - Roundabout	- Two-way stop control - Reduced conflict intersection - Roundabout - Traffic signal	- Two-way stop control - Reduced conflict intersection - Roundabout - Traffic signal

Intersection Alternatives

Two-way stop



Pros:

- Cost effective
- Easy to implement
- Familiar to drivers

Cons:

- Potential for high injury crashes (angle/T-bone crashes)
- Under high traffic, can cause delay/driver frustration on side streets

Intersection Alternatives

Reduced Conflict Intersection



Pros:

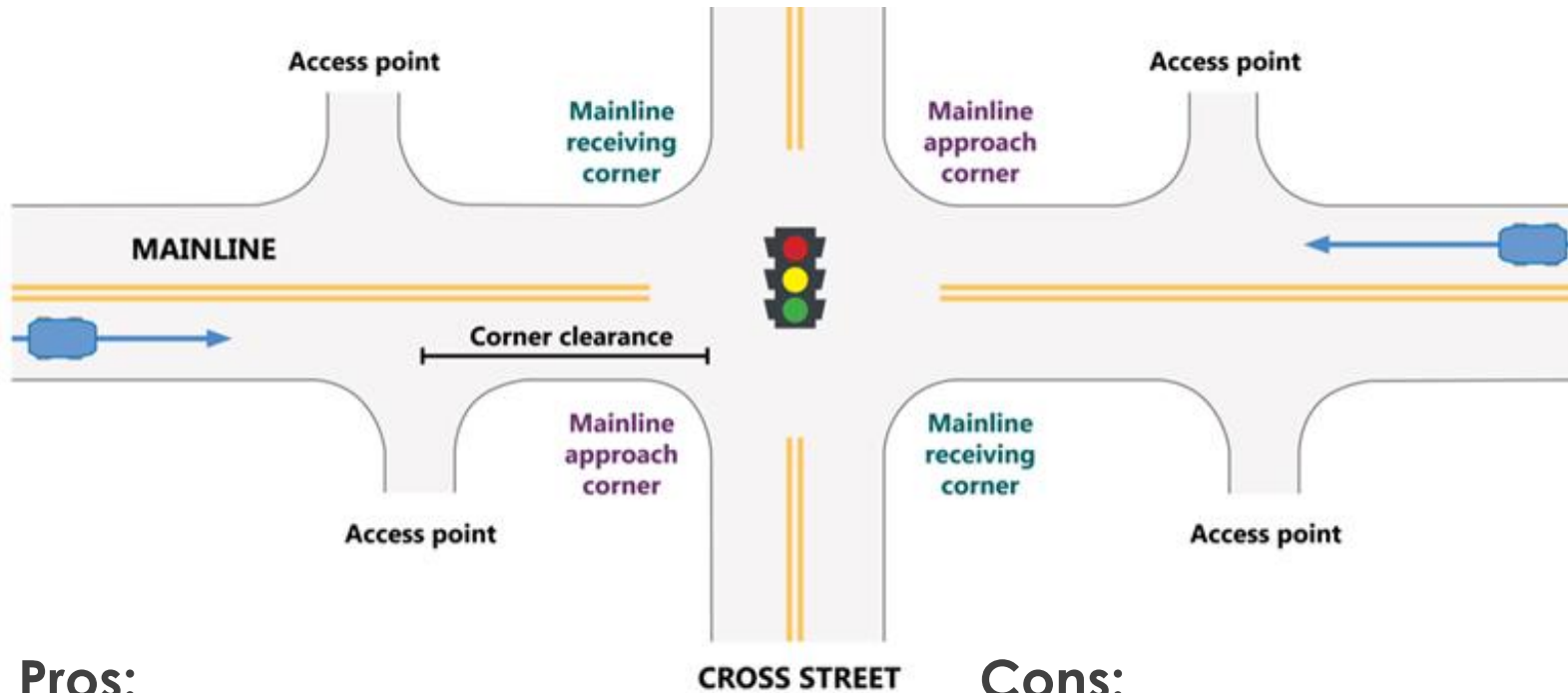
- Removes potential for angle/T-bone crashes
- Efficient operations on mainline

Cons:

- Less familiar to drivers
- Inconvenient for drivers from side street

Intersection Alternatives

Access Control



Pros:

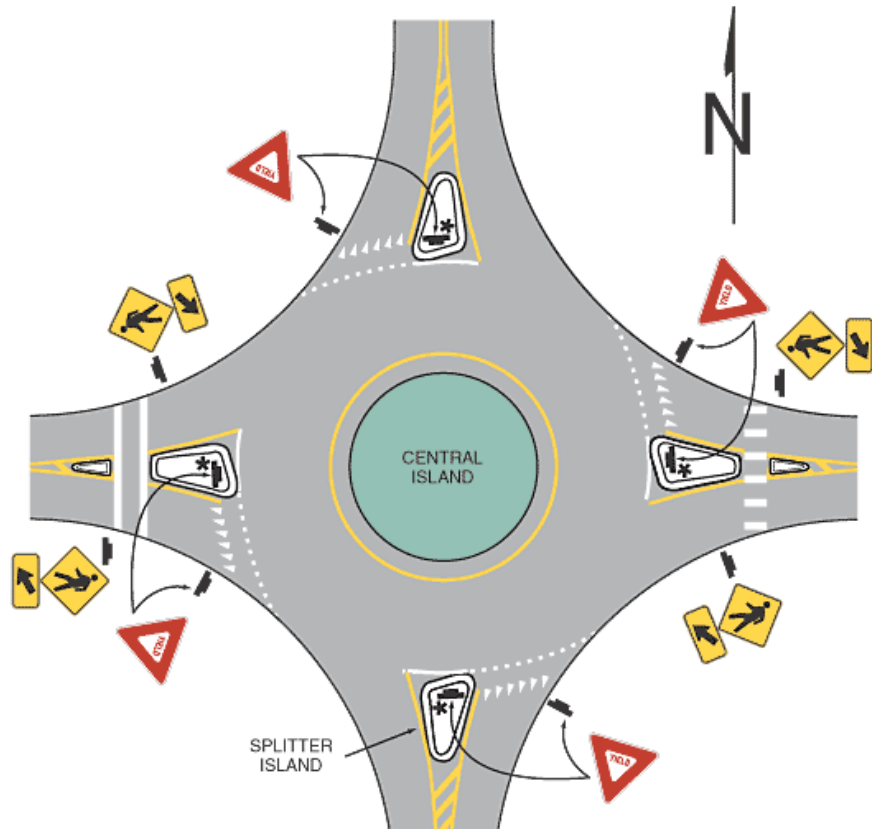
- Increased safety for all users
- Increased traffic operations

Cons:

- Not always popular with adjacent businesses

Intersection Alternatives

Roundabouts



Pros:

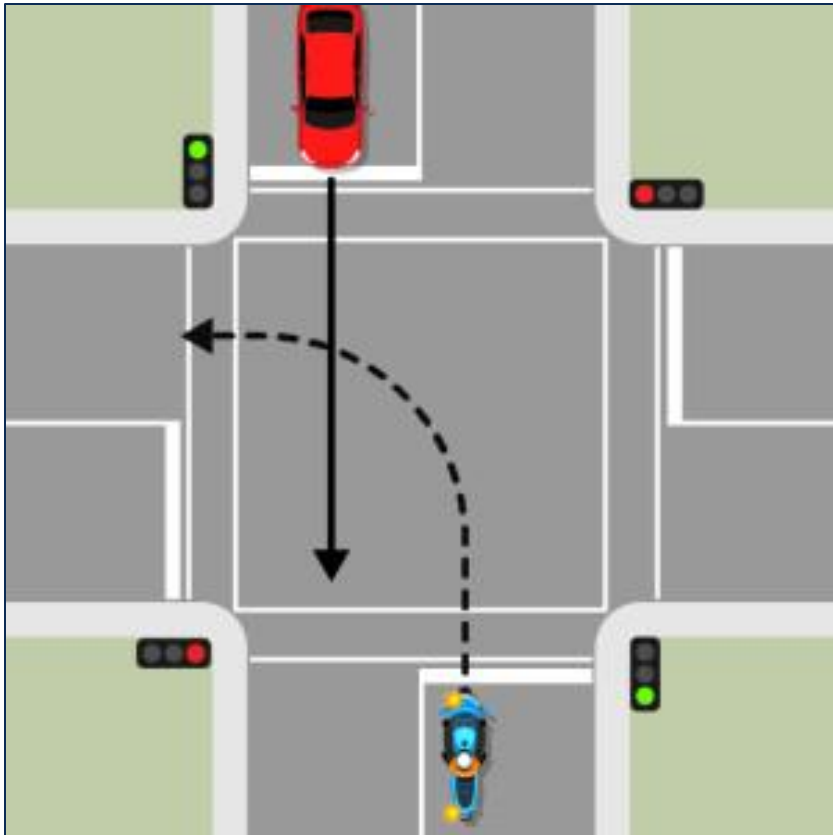
- Safer than two-way stop or signalized intersection
- More efficient than stop control or signalized intersections

Cons:

- Typically more expensive than traffic signal or stop control intersections
- Mixed feelings by public
- More difficult for snow removal

Intersection Alternatives

Traffic Signal



Pros:

- Provide more traffic throughput compared to stop-control intersections
- Provided dedicated time for pedestrian crossings

Cons:

- Possibility for high injury crashes (angle/T-bone crashes)
- Requires routine analysis & signal retiming

Public Engagement

Next Steps

Task	2026												2027	
	Jan	Feb	Mar	Apr	May	June	July	Aug	Sept	Oct	Nov	Dec	Jan	Feb
Project Kickoff														
Process 2025 Traffic Counts														
Gather Existing Conditions/Policies														
SRC Meeting #1														
Development of Future Conditions														
Turn Lane/Signal Warrant Analysis (Exist. Conditions)														
Analysis of Future Conditions														
SRC Meeting #2														
Development of Preliminary Alternatives														
Stakeholder (public) Outreach														
SRC Meeting #3														
Further Development of Alternatives														
Stakeholder / Public Outreach														
SRC Meeting #4														
Development of Draft Report														
Review of Draft Report														
SRC Meeting #5														
Finalize Report														
Presentations to Jurisdiction(s) / Boards														

Additional Discussion?

