

3.0 FIELD INVENTORY AND OBSERVATIONS

3.1 Existing Street Network

Downtown Lincoln is home to an array of retail services, an employment hub, and adjacent to the University of Nebraska-Lincoln city campus, the Railyard, and Pinnacle Bank Arena. Multiple one-way streets function as extensions of major transportation facilities pulling local and regional traffic into the area. 9th and 10th streets serve as the termini of Interstate I-180 as it connects downtown to Interstate I-80. 9th and 10th streets continue through the downtown area as a one-way couplet and converge at Van Dorn Street into Nebraska Highway 2. K and L streets are extensions of Rosa Parks Way which connects to U.S. Highway 77 and west Lincoln. To the east, the two streets converge to form Capitol Parkway/Normal Boulevard which continue to southeast Lincoln to a terminus at S. 70th Street.

Other one-way streets within the downtown area include the north/south oriented 11th, 12th, 13th, 14th, 16th, and 17th streets. East/west streets include M, N, P, and Q streets. O Street (U.S. Highway 34) is a major east/west street through central Lincoln and operates as a two-way street throughout the city limits. The corridors of 12th, 13th, and P streets all have segments of varying lengths that are two-way operations. These segmented operations can intensify the general perception that downtown is confusing and hard to navigate for out-of-town visitors.

The general study boundaries are 9th to 17th streets and K to Q streets. The one-way pairs of 16th and 17th streets from South to K streets, and P and Q streets from 17th to 27th streets are also included in this study. The study area street characteristics are shown in **Table 1** on the following page. Functional classifications reported are based on the City of Lincoln Access Management Policy (AMP).

3.2 Geometry and Intersection Control

All intersections along 9th to 17th streets and K to Q streets are signalized intersections. 16th and 17th streets from South to K streets contain a mix of signalized and unsignalized intersections. There are a total of 67 signalized intersections and one unsignalized intersection evaluated with this study. Existing lane configurations and intersection traffic controls are illustrated in **Figure 3** and **Figure 4**.

Table 1. Downtown Street Characteristics

Street	Section	Type	Posted Speed	Function Classification
9 th Street (K-P)	4-Lane	One-Way	25 mph	Major Arterial
9 th Street (P-Q)	5-Lane	One-Way	25 mph	Major Arterial
10 th Street (K-P)	4-Lane	One-Way	25 mph	Major Arterial
10 th Street (P-Q)	5-Lane	One-Way	25 mph	Major Arterial
11 th Street	2-Lane	One-Way	25 mph	Collector
12 th Street (K-N)	2-Lane	One-Way	25 mph	Collector
12 th Street (N-Q)	2-Lane	Undivided	25 mph	Collector
13 th Street (K-O)	3-Lane	One-Way	25 mph	Minor Arterial
13 th Street (O-Q)	3-Lane	Undivided	25 mph	Minor Arterial
14 th Street	2-Lane	One-Way	25 mph	Collector
Centennial Mall	2-Lane	Undivided	25 mph	Collector
16 th Street (South-L)	2-Lane	One-Way	25 mph	Minor Arterial
16 th Street (L-P)	3-Lane	One-Way	25 mph	Minor Arterial
16 th Street (P-Q)	2-Lane	One-Way	25 mph	Minor Arterial
17 th Street (South-L)	2-Lane	One-Way	25 mph	Minor Arterial
17 th Street (L-Q)	4-Lane	One-Way	25 mph	Minor Arterial
K Street	4-Lane	One-Way	30 mph	Minor Arterial
L Street	3-Lane	One-Way	30 mph	Minor Arterial
M Street	3-Lane	One-Way	25 mph	Collector
N Street	2-Lane	One-Way	25 mph	Collector
O Street	5-Lane	Undivided	25 mph	Major Arterial
P Street (9 th -10 th)	3-Lane	One-Way	25 mph	Minor Arterial
P Street (10 th -11 th)	3-Lane	Divided	25 mph	Minor Arterial
P Street (11 th -27 th)	3-Lane	One-Way	25 mph	Minor Arterial
Q Street	4-Lane	One-Way	25 mph	Minor Arterial

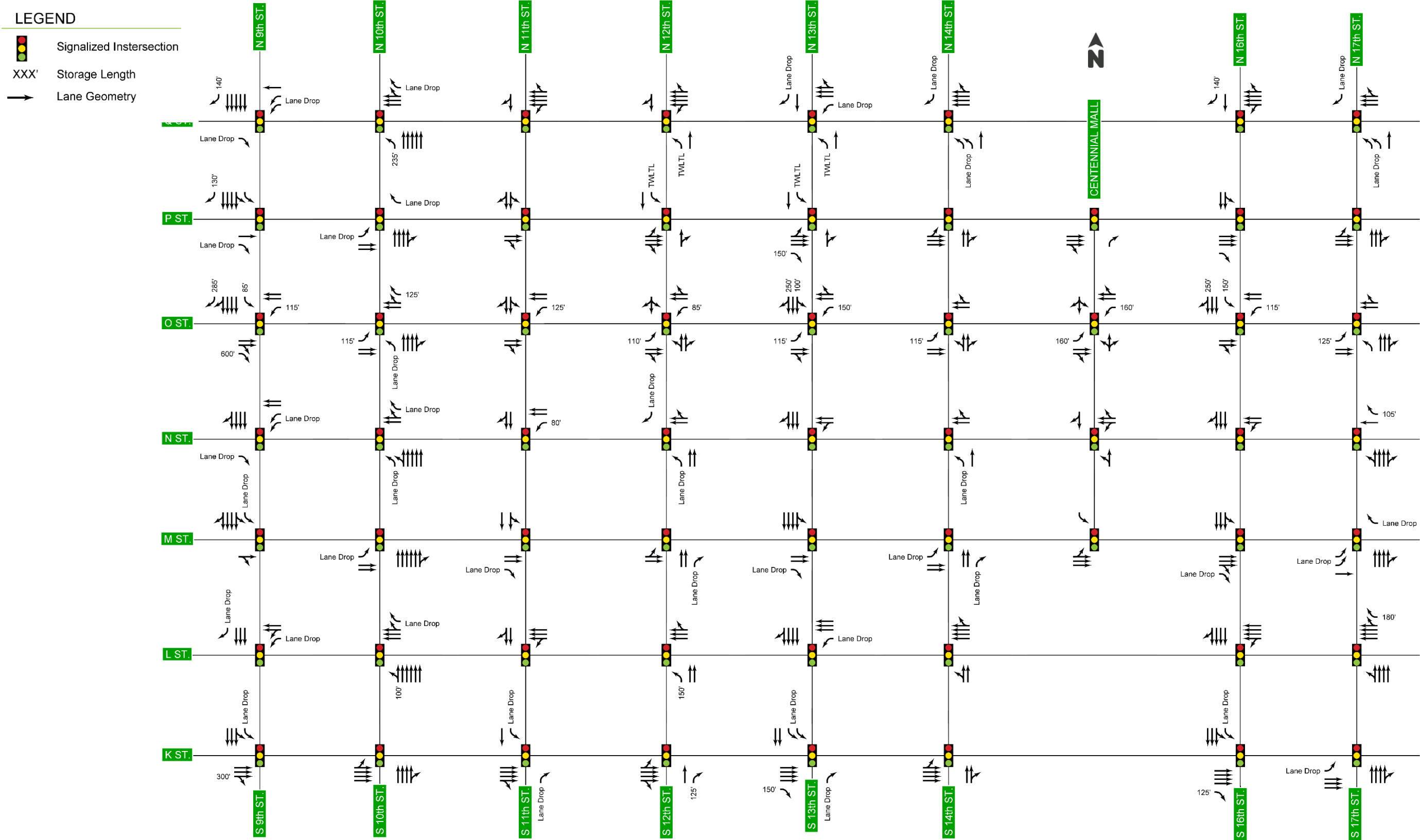




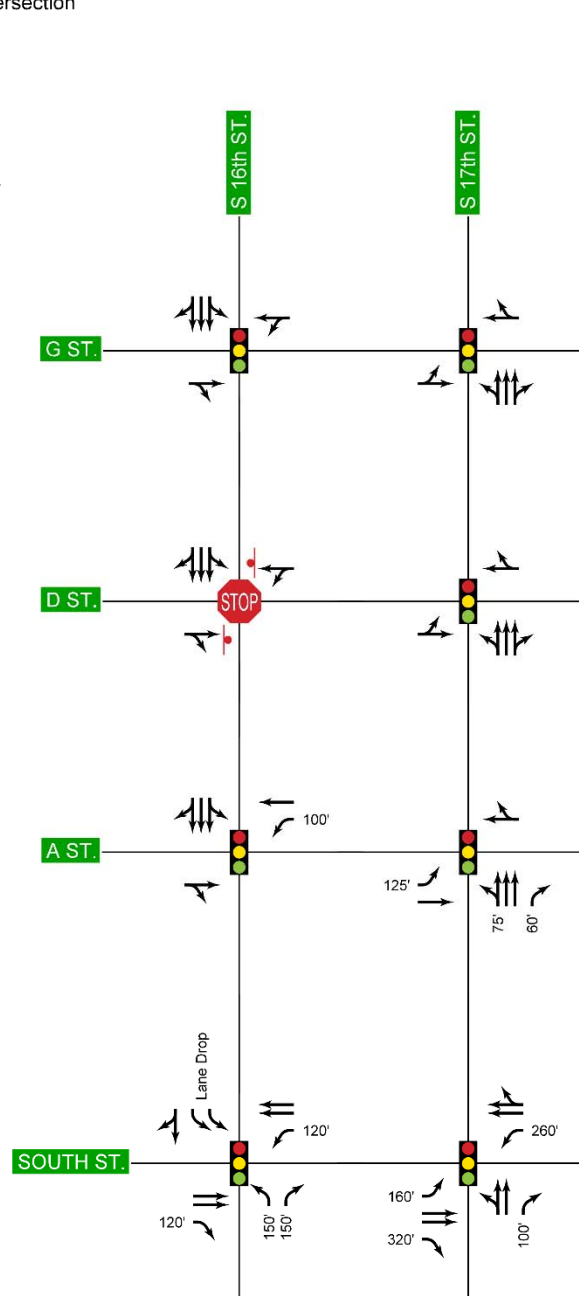


Figure 3. Existing Lane Configuration and Intersection Traffic Control (North)

LEGEND

-  Signalized Intersection
- XXX' Storage Length
-  Stop Controlled Intersection
-  Stop Sign
-  Lane Geometry



* Multiple unsignalized intersections exist between each signalized intersection shown.

Figure 4. Existing Lane Configuration and Intersection Traffic Control (South)

3.3 Traffic Volume

The City of Lincoln maintains a database of intersection turning movement volumes and provided the information for this study. Traffic volumes were collected over a three-year period from 2017 to 2019 and include a mix of 8-hour, 12-hour, and 24-hour time periods at signalized intersections. Turning movement counts include vehicular, bicycle, and pedestrian volumes. Existing peak hour traffic volumes (North) are illustrated in **Figure 5**. Pedestrian and bicycle volumes (North) are illustrated in **Figure 6**. The extended south network traffic, pedestrian, and bicycle volumes (South) are shown in **Figure 7**. Existing count data is summarized in **Appendix A**.

3.4 On-Street Parking Inventory

The City's Urban Development Department provided a historic on-street parking inventory and occupancy data from 2011 through 2013. For the purpose of this study, this data was deemed out of date because major land-use changes have occurred including the development of the Railyard and Pinnacle Bank Arena. For this reason, the provided occupancy data was not considered in the decision-making process.

Since the on-street database was not current, an on-street parking inventory was performed using aerial and street view photography for the Scenario 2 study corridors. This data was used as a baseline for comparison to potential two-way concepts analyzed in this study. A summary of this parking inventory is illustrated in **Table 2** and **Table 3**.

LEGEND
AM (PM) Peak Hour Volume

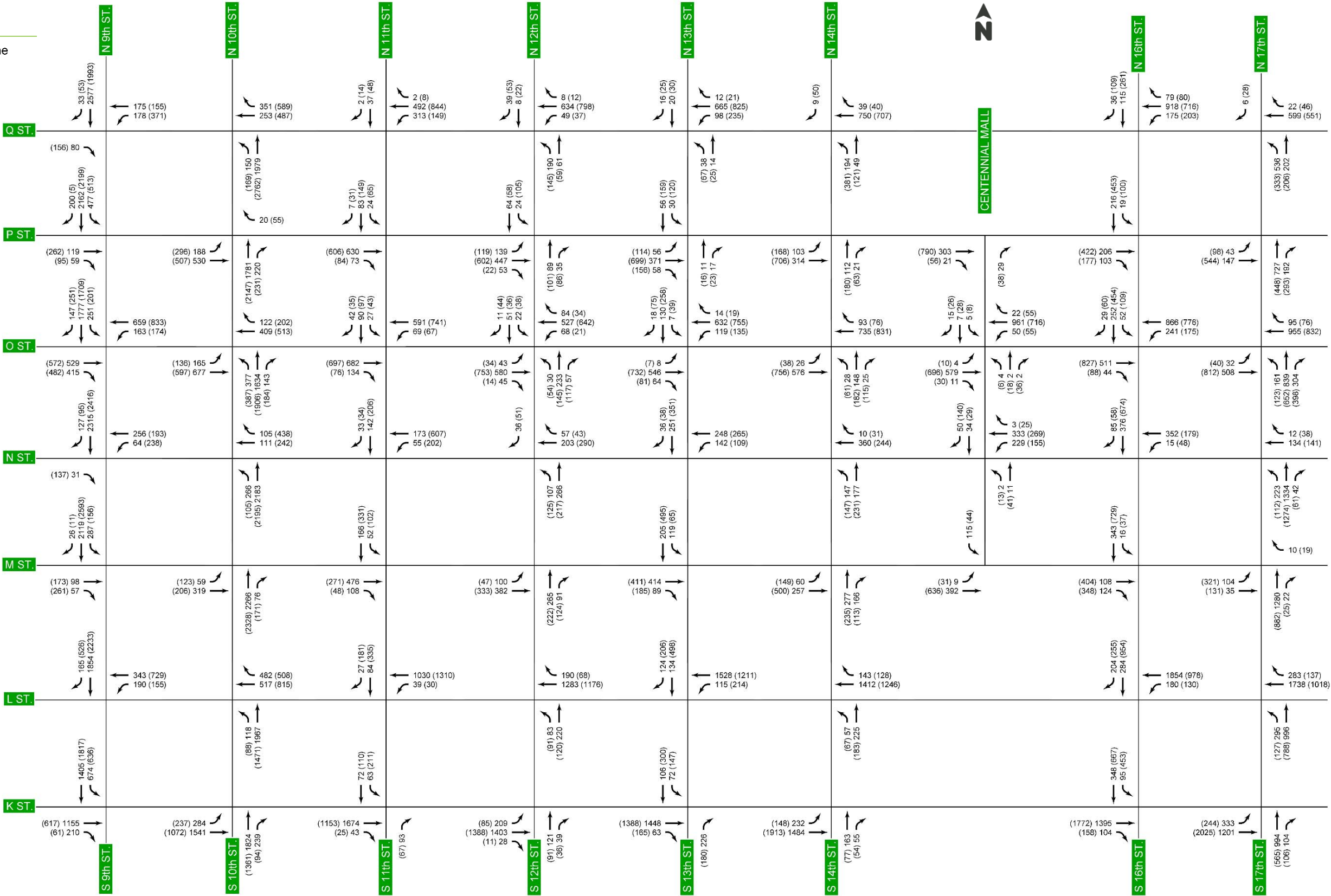


Figure 5. Existing Vehicular Traffic Volumes (North)

LEGEND

AM (PM) Pedestrian Peak Hour Volume

AM (PM) Bicyclist Peak Hour Volume



Figure 6. Existing Pedestrian and Bicycle Volumes (North)



LEGEND

AM (PM) Peak Hour Volume

LEGEND

AM (PM) Pedestrian Peak Hour Volume

AM (PM) Bicyclist Peak Hour Volume

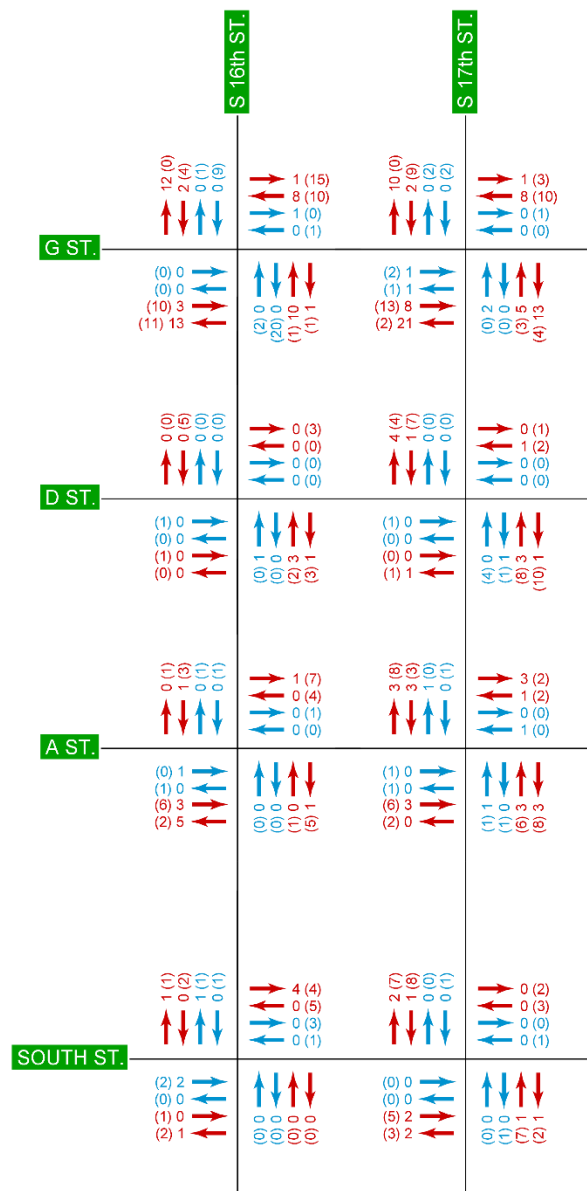
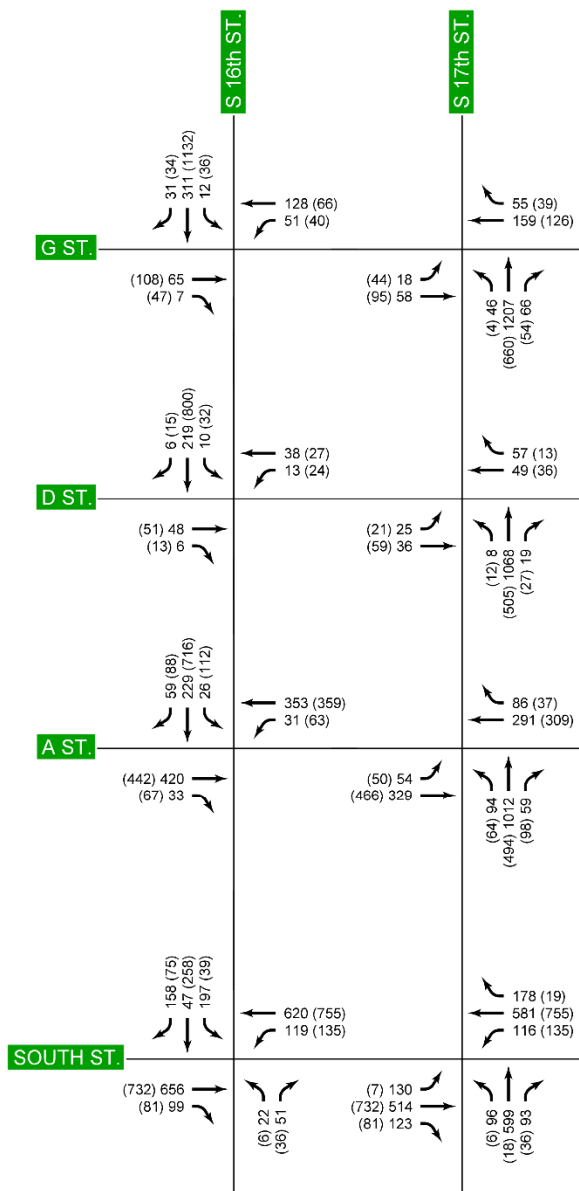


Figure 7. Existing Traffic, Pedestrian, and Bicycle Volumes (South)

Table 2. Parking Summary (North/South Streets)

Corridor		11 th Street			12 th Street			13 th Street			14 th Street		
		Marked Stall	Handi-capped	Total	Marked Stall	Handi-capped	Total	Marked Stall	Handi-capped	Total	Marked Stall	Handi-capped	Total
Lincoln Mall – K St	West Curb	6	0	6	15	1	16	2	0	2	18	0	18
	East Curb	10	1	11	5	0	5	2	0	2	12	0	12
K St – L St	West Curb	18	0	18	12	0	12	5	0	5	11	0	11
	East Curb	22	0	22	22	0	22	2	0	2	6	0	6
L St – M St	West Curb	12	0	12	11	0	11	0	2	2	8	0	8
	East Curb	11	0	11	11	0	11	1	1	2	0	2	2
M St – N St	West Curb	11	2	13	10	0	10	2	1	3	8	0	8
	East Curb	15	0	15	16	1	17	2	1	3	18	0	18
N St – O St	West Curb	0	0	0	0	0	0	1	1	2	14	0	14
	East Curb	14	0	14	10	0	10	9	1	10	5	0	5
O St – P St	West Curb	13	2	15	13	2	15	0	0	0	4	0	4
	East Curb	15	2	17	8	0	8	8	1	9	14	2	16
P St – Q St	West Curb	0	0	0	4	2	6	10	2	12	3	0	3
	East Curb	7	0	7	9	2	11	7	0	7	15	2	17
Total		154	7	161	146	8	154	51	10	61	136	6	142

Table 3. Parking Summary (East/West Streets)

Corridor		M Street			N Street		
		Marked Stall	Handi-capped	Total	Marked Stall	Handi-capped	Total
8 th St – 9 th St	North Curb	12	0	12	7	0	7
	South Curb	9	0	9	6	0	6
9 th St – 10 th St	North Curb	7	1	8	4	0	4
	South Curb	11	1	12	0	0	0
10 th St – 11 th St	North Curb	12	0	12	2	0	2
	South Curb	8	0	8	11	0	11
11 th St – 12 th St	North Curb	23	2	25	5	0	5
	South Curb	17	2	19	5	0	5
12 th St – 13 th St	North Curb	20	0	20	20	1	21
	South Curb	3	0	3	10	0	10
13 th St – 14 th St	North Curb	5	0	5	12	1	13
	South Curb	12	0	12	9	0	9
14 th St – Centennial Mall	North Curb	18	0	18	19	2	21
	South Curb	2	0	2	7	0	7
Centennial Mall – 16 th St	North Curb	13	0	13	20	0	20
	South Curb	7	0	7	6	0	6
16 th St – 17 th St	North Curb	0	0	0	7	1	8
	South Curb	8	0	8	5	0	5
17 th St – 18 th St	North Curb	7	0	7	0	0	0
	South Curb	9	0	9	7	0	7
Total		203	6	209	162	5	167

3.5 Guide/Wayfinding Signage

Existing guide/wayfinding signage was photographed and geospatially located during on-site field reviews. This data was collected to make recommendations for required updates with the two-way conversion. During field reviews, existing signage was noted to be incorrectly oriented (Haymarket Park Complex on 10th Street is not consistent with 9th Street and no further direction is given further northbound on 10th Street) or provided direction to destinations no longer in use (Pershing Auditorium). It is recommended to remove or alter these three signs immediately. The guide/wayfinding signage summary and expected removals are illustrated in **Figure 8**. The recommendations for immediate removal or modification are noted below:

1. Remove northbound 10th Street Haymarket Park Complex.
2. Remove or replace sign without Pershing Auditorium destination.
3. Remove or replace sign without southbound 9th Street Haymarket Park Complex guide.

3.6 Pedestrian/Bicycle Facilities

The downtown area is well utilized by pedestrian and bicyclists, though data shows pedestrian volumes are greater. Sidewalks are provided for pedestrian use throughout the study area. Pedestrian activity is generally greater on the north end of the downtown area than the south. UNL campus north of downtown and the commercial entities congregated around O and P streets likely play a large roll in these trends. 12th, 13th, and 14th streets also tend to see higher pedestrian volumes while corridors east or west of these streets tend to see decreased pedestrian volumes.

Bicycles are restricted from sidewalk use within downtown by city ordinance. Exclusive bicycle facilities exist on 11th and 14th streets (bike lanes), and N Street (cycle track). Bicyclists are more likely to use existing bike lanes, but overall volumes are not contained to precise locations. These bicycle facilities are important to the last mile connection from trails and downtown bicycle friendly facilities. Ridership is often affected by the ease/comfort level that is experienced by users to get to their destination. Dedicated facilities that separate bicycle users from vehicles provides riders an acceptable route to their destination and increases the likelihood of ridership.

The City of Lincoln currently operates a bicycle sharing program called BikeLNK. As part of the program, users can use an app on their cellular device or kiosk terminal to rent a bicycle and return to various locations. Plans can be purchased for visitors in short term increments or monthly and yearly plans for frequent users. Trips under an hour are free for users with a plan while anything over the allotted hour incurs usage fees.



The Downtown Master Plan lays out priorities for the future of the downtown bicycle network from the *Lincoln Bike Plan*. When 13th Street is converted to two-way operations, new bike lanes should be added to 13th Street (one in both directions). Once the new bike lanes are provided, the existing bike lanes on 11th and 14th streets could be eliminated. In addition, once 16th Street is converted to two-way operations, buffered bike lanes should be added from South to Q streets. This would link to the existing bike lanes through UNL campus. The current on-street bike networks and BikeLNK Stations map are illustrated in **Figure 9**.

3.7 Transit Facilities

StarTran operates a bus center at the corner of 11th and N streets next to the Gold's Building. All bus routes begin and terminate from this location except Route #48 which interlines with Route #54 (which terminates at the Gold's Building). Loading areas are located either on 11th Street between N and O streets and N Street between 10th and 11th streets. Route #55 has four other stops in or adjacent to the downtown area at 11th and Lincoln Mall, State Office Building, 13th and Q streets, and 8th and Q streets.

The City of Lincoln is currently developing plans to relocate this facility to a new multi-modal transit center facility, but a location and funding plan has yet to be finalized. For the purposes of this study, the facility will remain at the current location. A map of StarTran bus routes is illustrated in **Figure 10**.

3.8 Parking Garage Access

The downtown and adjacent area has multiple large traffic generators including Memorial Stadium, the Lied Center, Pinnacle Bank Arena, Marcus Lincoln Grand Cinema, state and federal office buildings, the State Capitol, numerous businesses and commercial entities, and UNL city campus. Many users of these facilities take advantage of various public and private parking garages within the study area to reach their destination. Accessing a specific garage and entrance from one-way streets can be circuitous based on the origin-destination of the trip. A map of the multi-level parking facilities area is illustrated in **Figure 11**.



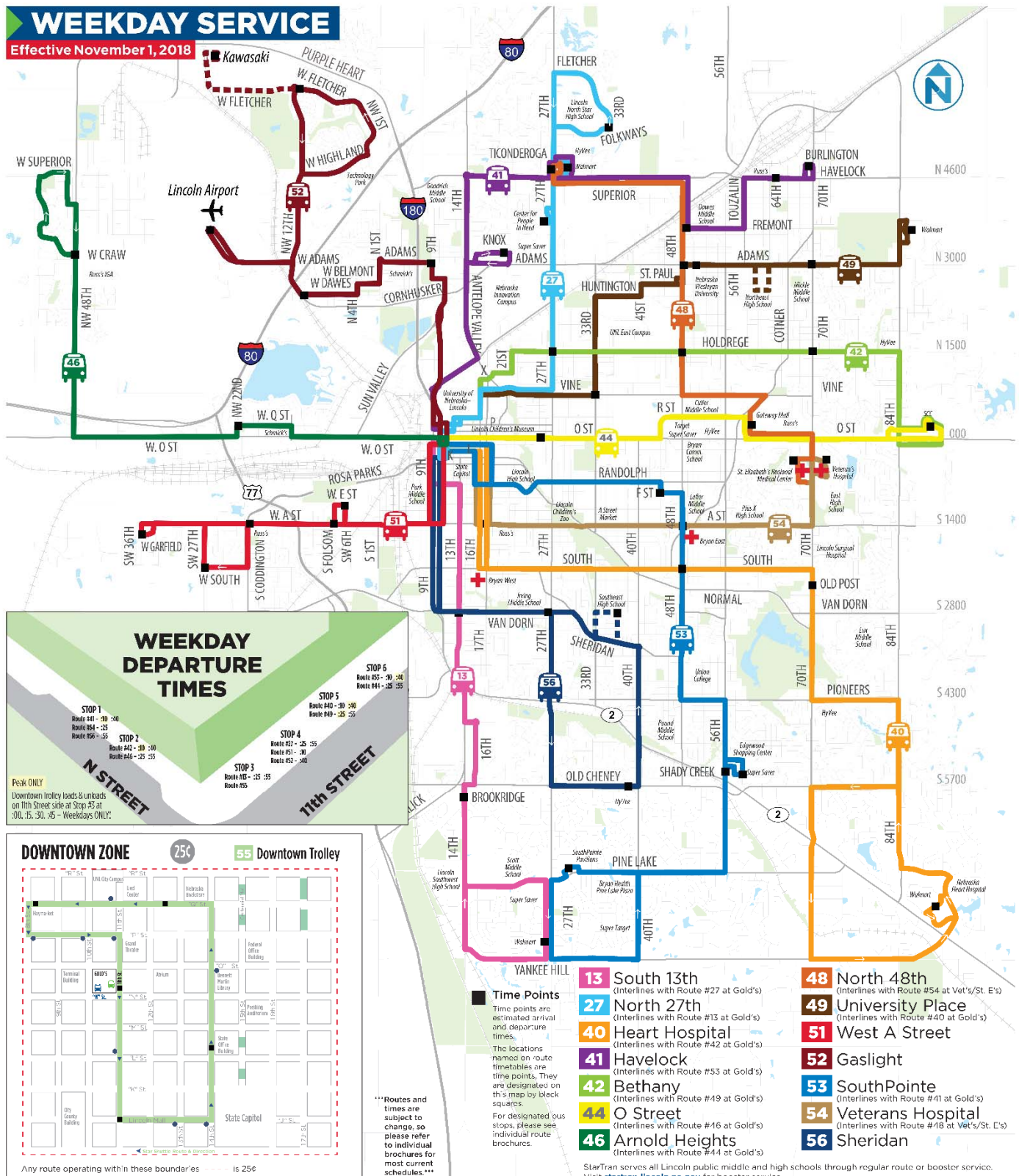


Figure 10. Existing StarTran Service Routes

