BRIEFING NOTES

NAME OF GROUP:	PLANNING COMMISSION
DATE, TIME AND PLACE OF MEETING:	Wednesday, January 9, 2019, 11:15 a.m. Studio Rm. 113, County-City Building, 555 South 10th Street, Lincoln, Nebraska.
MEMBERS IN ATTENDANCE:	Dick Campbell, Deane Finnegan, Tracy Edgerton, Christy Joy and Sändra Washington; (Tom Beckius, Tracy Corr, Maja Harris and Dennis Scheer absent).
OTHERS IN ATTENDANCE:	Paul Barnes, Kellee Van Bruggen, Andrew Thierolf and Amy Huffman of the Planning Department, Sara Hartzell, Parks Department; Kris Humphrey, Transportation and Utilities Department.
STATED PURPOSE:	Briefing on **"On-Street Bike Facilities Street Plan"** and **"33rd & Cornhusker Subarea Plan and Corridor Enhancement"**.

Paul Barnes, Planning Department, called the meeting to order and acknowledged the posting of the Open Meetings Act in the back of the room.

On-Street Bike Facilities Street Plan (Exhibit A)

Kellee Van Bruggen said this project has been a joint effort with the MPO and the City. The final draft is available online and there will be public hearing for the adoption of these plans into the Long Range Transportation Plan and the Comprehensive Plan. The process started in February, 2018, when we looked at what the existing network included. It is a great starting point, with a strong trail system, but one thing heard repeatedly was the lack of connection available to reach destination points. There are 248 miles of trails, 140 designated bike routes, 2.34 miles of bike lanes and 1.31 miles of 2-way cycle track.

In important consideration for the plan was to build an understanding of who it is being developed for. Based on a Portland study that looked at nation-wide trends, around 4-7% of the population can be considered "strong and fearless"; biking is a large part of their identity, they feel comfortable on roads and do not necessarily need facilities to encourage them to commute by bike. The next group are considered "enthused and confident" bikers. They prefer facilities but are still willing to mix with traffic on roads with lower speed limits. The largest group makes up around 50% of the general population and they are the "interested but concerned" group who might bike more if there were facilities in place to make it simpler and safer. The final category are those who have no interest or are unable to bike.

Reaching out to the large "interested but concerned" category presents the greatest opportunities for improvement. If facilities are designed for all ages and abilities, it may address concerns and help that group feel safe enough to choose biking. Another key component of the plan is to build off the strength of the existing trails network for connecting people and places by identifying gaps where on-street facilities will create a lower stress environment. The vision is to create a bike-friendly community where it is safe and convenient to choose biking as a form of transportation and recreation.

Safety was the main concern we heard. People want to be able to get to their destination in a safe way. Embracing bike culture is another important aspect; it is important to have an environment with responsibility from all transit users and to have good relationships between the bike/vehicles communities.

The network will be developed in a series of steps that take into consideration factors like population density, employment density, zero-vehicle households, and those who use the Star Tran/bike facilities. It is important to connect users via bike stations, parks, trails and rec centers, schools and the university, libraries, and B-3 zoning areas with local shops, which are popular destinations for bikers.

All of the various demands were layered together to make a bike heat map. It is clear that the biggest demand is in the downtown and university area, though there are some clusters farther out. The lowest areas of need are at the far edges of town. This map is helpful as we determine what facilities will look like. Washington asked about a heat signature in the north part of town. Van Bruggen said that is the Havelock neighborhood. There are areas around town where a trail connection could have activated the area. Sara Hartzell, Parks Department, noted that there are a lot of apartments in that area, as well.

Van Bruggen said consideration will be given to existing conditions in each segment including traffic, stress levels, travel lanes, bike facilities and intersection control, and the speed of cross traffic. Finnegan asked if the stress level for drivers of vehicles was a factored in. Van Bruggen said this information was geared toward those on bikes. She went on to say that when these factors are applied, much of the city looks like it is at stress level 1. That is due to the volume of residential streets where there is lower traffic volume, lower speeds and more parked vehicles which also slow traffic down. The red, stress level 4 areas are along arterial systems.

Also available was a public comment map where participants could go online and give location-specific feedback. 413 comments were received and this helped to identify some barriers. Most frequently mentioned were the 11th and 14th Street bike lanes where people did not feel safe as a biker or a driver. It is appropriate to reevaluate how those function. Other comments were mainly addressing difficult intersections. All of this information will guide the development

approach. There are areas where a road diet might be considered, residential bike lanes can be more spaced out, and we can address barriers, add bike stations and increase access to destination points. The desired goal is to reach a stress level of 1 or 2. Tracy Edgerton asked what a “road diet” is. Van Bruggen said it is a technique where the number or width of vehicle travel lanes is reduced in order to achieve improvement in the flow of both vehicle and bicycle traffic.

Van Bruggen said there are many ways of achieving these goals and they don’t have to be complicated or expensive. In some cases it can be as simple as marking the area. Facilities can be buffered lanes. Campbell asked how wide the bike lanes are. Van Bruggen said they can be between 4-6 feet; the preference here is to stay at 5 feet. With additional buffers, they can be 3 feet, at minimum. There are also side paths that are parallel to high-volume roadways. These often call for intersection improvements. We plan to introduce more bike boulevards and buffered lanes, but the majority of projects are bike routes and side paths. Washington asked for an example of a street that could work as a bike boulevard. Van Bruggen said parts of Sumner Street, and 17th Street, south of South Street, could both work. Since this would be a new idea in Lincoln, we anticipate a public process before implementation.

Van Bruggen went on to say that proposed is 11 miles of boulevards, 7.5 miles of road diet, 11.5 of lane diets where wide lanes could be narrowed to create room for bikes, 47 miles of bike routes, 58 side paths, 7.7 miles of road construction where streets need to be widened and we will partner with transportation projects, and 88 intersection enhancements. This amounts to 135 projects. 112 are segment and intersection, 23 are stand-alone intersection enhancements. The average length of projects is 0.9 miles. Implementation will be a fluid process done in partnership with Transportation and Utilities Department.

The initial rounds of prioritization and phasing of the projects include addressing barriers, bicycle demand, safety, connectivity, and social equity. Cost is obviously a factor. At this stage, this is a planning document so specific costs are not attached, but merely categorized as low, medium, or high. Ease of implementation will be a factor with some steps, and will require public input.

Lincoln currently has a silver rating based on what we have been doing. Washington asked if there is a goal to be gold. Van Bruggen said the ratings go up to diamond. Sara Hartzell said there are a couple of platinum cities, such as Madison. Van Bruggen said they prefer to see a designated bike person employed by the City. They also demand more spending for bike lanes on arterials, but that doesn’t make sense for our city. They overlooked our trail system as a commuter system, seeing it more as a recreational facility, but we do see a spike in use during peak hours. We are under executive order to have Complete Streets look at projects to see where we can incorporate pedestrian and transit systems that make sense.

Throughout this process, many meetings were held and included the Tech Advisory Committee, staff, Nebraska Department of Transportation, the Bike Facility Advisory Committee, stakeholders, educational institutions, neighborhood groups, businesses and non-profits. The project website is still active and the public map is still available. Staff sent out several email blasts, posted on social media, distributed posters and postcards, had public commenting open throughout the process, and had two open house events. The amendments to the LRTP and the Comprehensive Plan will be heard by Planning Commission on January 23rd and the Comprehensive Plan amendment will then go to City Council on February11th.

Finnegan asked how long it will take to implement the plan. Van Bruggen said it will take many years and will be done as funding allows, including the public process and design phases. Campbell asked what sources are available for funding. Van Bruggen said funding is determined project-by-project and can include CIP general funds, Complete Streets, and other sources. Washington asked about policy recommendations. Barnes said that will occur during implementation steps. There is a lot of material to carry forward and balancing it with other projects is part of the process. Washington commented the policy aspect is interesting to her and she was curious if any of these items would be seen as part of a CUP review or other similar planning items. Barnes said this plan is more focused on densely populated areas whereas items like CUPs occur more on the fringes of town. As trails are built out, and as arterials are extended, we do need to keep reviewing connection with the rest of the network and the city.

Commissioners thank staff for their good work.

Cornhusker Subarea Plan and Corridor Enhancement (Exhibit B)

Barnes introduced Kris Humphrey, here representing the RTSD, which is where this material is rooted.

Kris Humphrey said in 2015, the RTSD started a project in an effort to solve issues along the rail corridor between 27th and 48th Street, near Cornhusker Highway. The goals are to increase safety, reduce congestion and delays, increase multi-modal connectivity and make sure infrastructure will be complementary to the LRTP and serve future land use needs. There are around 65 trains per day along this corridor and around 20,000 vehicles per day at the two intersections of 33rd and Adams. Those numbers are multiplied to come up with 1.3 million for the exposure rating. For context, in order to get the funding, NDOT uses a number of 50,000. That is one of the highest exposure factors in the state. Emergency equipment do not use these intersections as a primary routes. Star Trans also does not cross this area.

At the end of 2016, we still needed to answer question of whether infrastructure improvements will uphold the future land use needs. That is when the concept of the subarea came into play. When we developed transportation alternatives, we had a lot of community involvement. An

advisory committee of 40-50 people helped to develop a list of priorities and key factors. The consensus item were used to develop this plan.

The goals include closing the rail crossings along this corridor, retaining the character, and recognizing that existing traffic movement may need to change. As we proceed with the design, more of the detailed questions that still remain will be addressed, including access to businesses.

The RTSD project will realign 33rd Street from just north of Huntington, go over the tracks and then come down to an at-grade intersection with Cornhusker Highway just east of 31st Street. The Adams street connection will go over the tracks and Cornhusker Highway and fishhook back to an at-grade intersection at around 40th street on the north side of Cornhusker. That would close both at-grade railroad crossings. We also propose to close the crossing at 44th Street, but will have a pedestrian/bicycle, grade-separated crossing. There are some industrial uses there, so there is need to construct a road that connects back to 40th and Fremont to prevent that traffic from cutting through the neighborhood area neighborhood.

In the subarea plan, we also have a couple for RSTD projects. One is an extension of 33rd Street up to Superior. Salt Creek Roadway is proposed to be extended along the grain bins and continue the alignment to Cornhusker Highway. The existing highway would "T" into that new extension. Campbell asked if the bend in 33rd is to meet the standards for adding a perpendicular street. Humphrey said it helps with the bridge length. It was also done to provide the most distance between the tracks and Cornhusker highway since a high clearance is needed there. Campbell thought there was a discussion to combine 33rd and Adams. Humphrey said that is true. There have probably been 60 different alternatives on the table and all have been analyzed. What you see today is the preferred proposed alternative to take forward. One modification would be not to connect Adams Street back up, but to have it be funneled up elsewhere. It is similar to the way Holdrege Street functioned pre-Antelope Valley. This fits nicely with the subarea plan. As we move forward in design, if anything gets modified, it will come back through the entire process.

Barnes said this was an opportunity to look at this area on a long-term timeframe. The subarea plan looks at all of the existing features and characteristics but also looks at short and long term redevelopment opportunities, as well as transportation, mobility, and aesthetic enhancements.

The proposed future land use has the overlay of the proposed build outs. The plan has changes from what is currently shown in the Comprehensive Plan. As we worked with stakeholders, we learned that there is a strong history, but also an interest for more redevelopment opportunities and more connection to and preservation of greenspace. Note that in the land use map there are some changes, for example, the fishhook of Adams is shown as green space,

but there could be chances for redevelopment there, so be aware that changes could occur as the design is worked out.

Campbell asked where it is shown that 33rd will cross Cornhusker and be connected to Superior. Humphrey said that will be shown in the LRTP. Barnes said there will be a couple of responsible agencies for seeing that through. RTSD is leading the separated crossings, but because we took a subarea approach, we looked at a larger area to see what will make sense, longer-term. People continue to support the connection of 33rd to Superior.

Barnes went on to say the plan has several components including a variety of areas called out for redevelopment. Some are shown on vacant land, and a lot of existing properties along cornhusker corridor are identified for site and building improvements. The vision is to mark this as an important entryway corridor into our community. The biggest redevelopment concept focuses on the 33rd and Cornhusker intersection, which will be a huge project for the area and will probably garner a lot of interest. 33rd and Superior is another redevelopment node.

Finnegan asked if there are any business that will have to be purchased. Barnes said that aspect will be mostly connected to the transportation project. Campbell asked if the 33rd Street curve will be west of there. Yes, said Humphrey. There is a salvage yard south for the tracks. North there is a metal structure with 2-3 business and loading docks. Washington wondered about the mobile homes. Humphrey said that is outside of the subarea.

Barnes went on to say the subarea plan provides some graphics to convey the big vision for what this area could become. The grain elevators are operating today. If, in the future, those become available, the idea is that the site would be repurposed for mixed use. In other areas, grain elevators have been reused. Selective infill is also shown to help build up the density of the site. It would include some residential units, office, commercial.

Another piece of the subarea plan is transportation and mobility. We take a multi-modal approach, and look at how a trail network will fit and at how we could enhance Star Tran service to this area.

The end on the plan is a section on aesthetics. This shows how it will tie in to the corridor enhancement plan, with recommendations for streetscapes and intersection enhancements. Along the corridor, there are opportunities for screening and public art. This is a high-traffic corridor so enhancing its appeal is the intent. The corridor plan provides recommendations for improvements for the right-of-way and recommendations for design standards to be applied to private property. This corridor plan provides the framework but does not adopt them. Staff will take that forward into the next step, but this has been through the public process and is supported, overall.

Edgerton asked about the time frame for these changes. Barnes said this is the planning level documentation. There could be improvements that could happen at any time along the way. Humphrey added that it serves as a placeholder for projects, as well. Barnes said the corridor is broken into four zones. For example, Zone 1 is on the western edge near 11th Street. There is a 6-lane corridor. We show median enhancements. Just to the west, there have been entryway improvements and this picks up on those and ties it into the rest of this corridor. This is still a State highway so placement of things in the right-of-way will still need the approval of NDOT and there are some restrictions based on access. As redevelopment happens, hopefully some access points will consolidate and we can get more continuous street trees.

The plan calls out a hierarchical list of recommended intersection improvements. At the highest level are Gateways at either end, on 11th and 56th, with the highest level of treatment. The materials are higher quality to tie in to the airport entryway elements for consistency.

Finnegan commented on how much this will change this area for the better. Barnes said the next level is where the future Salt Creek Roadway meets Cornhusker. It brings in similar place making elements, enhanced landscaping and enhanced medians.

The plan provides guidance on the standards, like minimum width of sidewalks. Everything needs to be ADA accessible. Pedestrian islands are called out and all of the materials in the corridor should be durable and easy to maintain. There are places where screening and landscaping are called out, specifically along the railroad. We may need to work with City-owned and private property owners on the street trees. There are details on other types of landscaping in medians and buffers, including proper irrigation.

The design piece talks about standards that would apply to private property. From 56th to City limits is a primary entryway corridor and there is guidance in the Comp Plan for that; this picks it up from 56th Street, in to town. Building design, site design, and signage design are the specific areas we look at. We want consistent setbacks and building orientation, façade types, transparency, entry door orientation, awnings and canopies, lighting, and drive-thrus. Again, this is guidance and is not specific to any project.

Site design looks at layout, parking lots, driveway consolidation, screening and overall pedestrian furnishings. This is not only for motorists but also for pedestrians and bicyclists. On signage design, there are many options. This approach is to encourage use of monument signs instead of pole signs to help beautify the corridor. It also encourages multi-tenant signs.

This will be presented to Mayor's Neighborhood Roundtable next Monday. There will be an informational open house. Planning Commission action will be on the 23rd in the form of both a Comprehensive Plan Amendment and an amendment to the LRTP. The LRTP will move on to MPO, and the Comp Plan will move on to City Council.

Humphrey said over the next 2-3 years, we will be completing the environmental investigations in the area and the preliminary engineering, then right-of-way acquisition, and ultimately construction. If everything stays on schedule, construction would take place in 2026 for the RTSD project. Washington asked if there is funding for the planning and environmental aspects. Humphrey said yes. Right now, everything is funded by the RTSD. We also have a Memo of Understanding between RTSD, NDOT, and BNSF Railroad that we are all committed for the project. Right now it is a combination of funds.

Finnegan commented on how much thought goes in to these projects. It is amazing just how much effort it takes to plan so far out into the future. Humphrey said it is helpful that they have a very responsive, engaged advisory committee. Barnes added that projects in the subarea and corridor have been looked at for the past year. Olsson Associates is our consultant who has been leading a lot of this, so they have also been very helpful. Humphrey added that all of this information is on the website www.33rdcornhusker.com.

Edgerton asked for clarification about implementation after Planning Commission action. Barnes said the MPO Officials Committee will vote to amend the LRTP. That will reflect the new segments of these projects. City Council will act on the subarea and corridor plans, adopting them by reference, and then making some changes to future land use and other minor pieces of the Comprehensive Plan.

There being no further business, the meeting was adjourned at 12:45 p.m.

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EXHIBIT A

LincolnBikePlan

On-Street Bicycle Facilities Plan

Planning Commission

January 9, 2019

FELSBURG HOLT & ULLEVIG

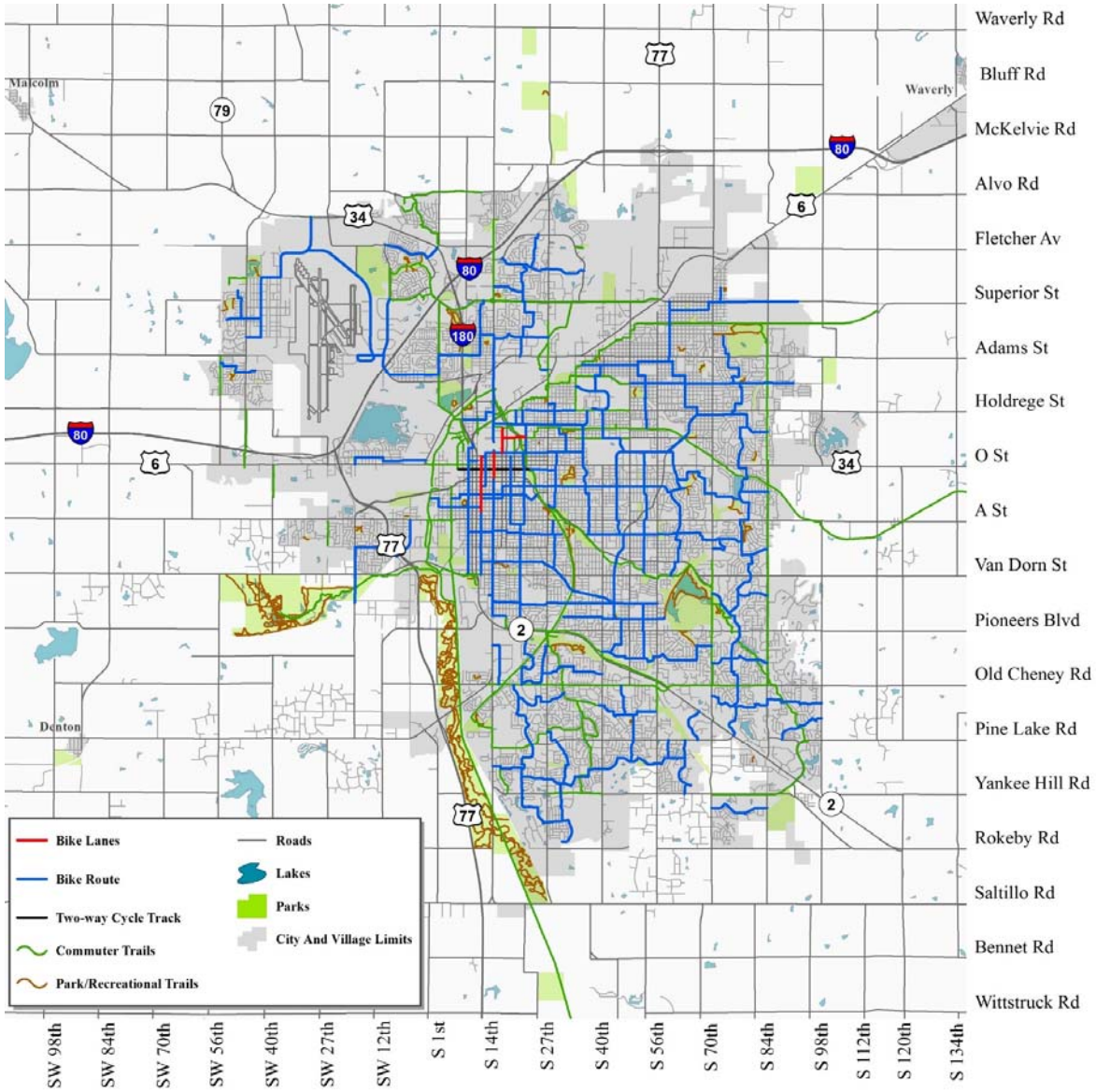
Existing Bike Network

248 miles of trails

140 miles of designated bike routes

2.34 miles of bike lanes

1.31 miles of two-way cycle tracks



Accommodating all ages and abilities

Source: Portland Bureau of Transportation

	“Strong and Fearless” Bicyclists are bicycle enthusiasts who will ride their bicycle for any trip type, with bicycling being their primary commuting mode. Bicycling is part of their identity, and they will ride on nearly any roadway in any conditions.	4–7% of the population
	“Enthused and Confident” Bicyclists are encouraged to bicycle by the availability of bicycle facilities. They will occasionally ride in traffic when bicycle facilities are not present but prefer to ride within their own facility. These riders may not always choose to bicycle but are comfortable doing so in many cases. Investing in additional bicycling infrastructure to improve safety and connectivity will lead to these riders making more bike trips.	5–9% of the population
	“Interested but Concerned” Bicyclists are typically the largest group of a population. They are interested in biking but are concerned about their safety. They do not like using routes without bicycle facilities because they are nervous about mixing with motorized vehicles. They primarily ride their bicycle for short trips and for recreational reasons. The addition of bicycle facilities that remove them from interacting with motorized vehicles would increase their likelihood of riding.	51–56% of the population
	“No Way, No How” are people who have no interest in bicycling due to immense safety concerns, weather, topography, are unable, and/or simply lack interest.	31–37% of the population

What are the greatest opportunities?

1. Design for all ages and abilities
2. Build from strong trail network
3. Connect people with places
4. Add dedicated on-street bike facilities
5. Create a low-stress bicycle network

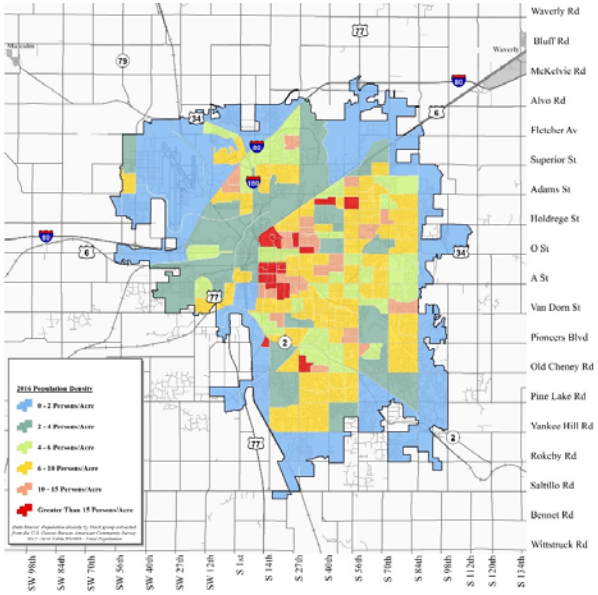
Vision

Lincoln will be a bicycle-friendly community where bicycling is safe and convenient for all and a common form of transportation and recreation.

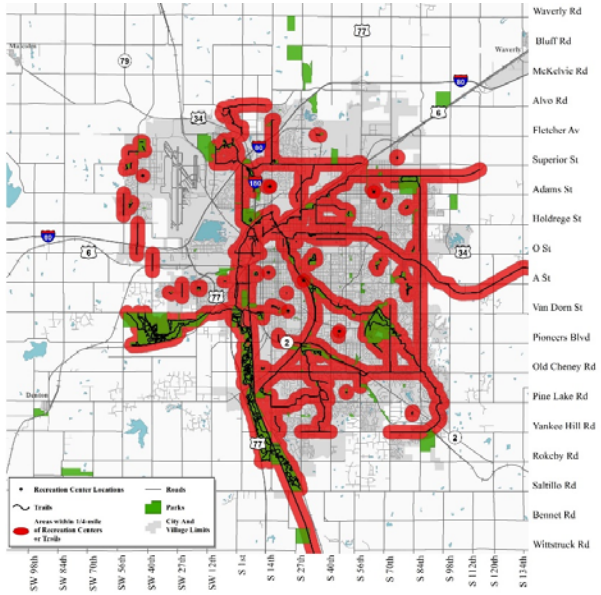
Goals

- **Safety:** A safe environment for all travel modes.
- **Comfort:** A network of low-stress bike facilities that are comfortable for all ages and abilities.
- **Culture:** A culture of respect and responsibility for all transportation system users.
- **Equity:** A network that provides equal access to bicycling for all members of the community.
- **Connected:** A network that connects people with places.
- **Ridership:** A bicycle network and culture that increases bicycling for all trip purposes.
- **Education:** A community that is aware of travel options, rules of the road, and the benefits of bicycling.
- **Funding:** Sustainable and reliable funding for bicycle infrastructure and programs.
- **Travel Options:** A multimodal system that provides travel options to support a more compact, livable urban environment.
- **Bicycle Friendly:** A community that is recognized as a Gold Level Bicycle Friendly Community.

Network Development



Population Density

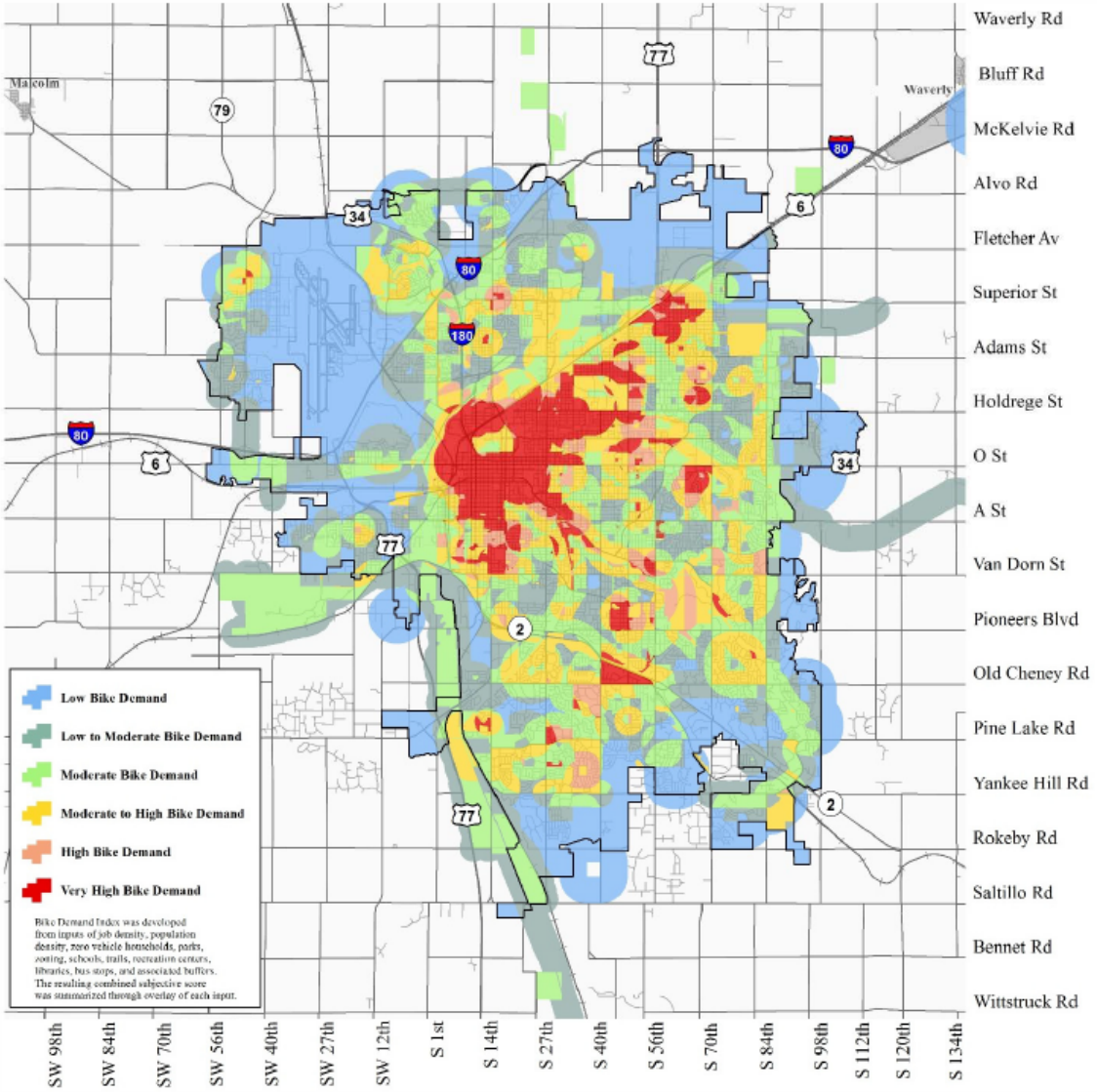


Parks, Trails, Recreation Centers

Connecting People with Places:
Bicycle Demand Factors

- Population density
- Employment density
- Zero vehicle households
- StarTran bus stops
- BikeLNK stations
- Parks, trails, rec centers
- Schools and universities
- Libraries
- B3 zoning

Composite Bike Demand Heat Map (All Factors Combined)



Bicycle Level of Traffic Stress

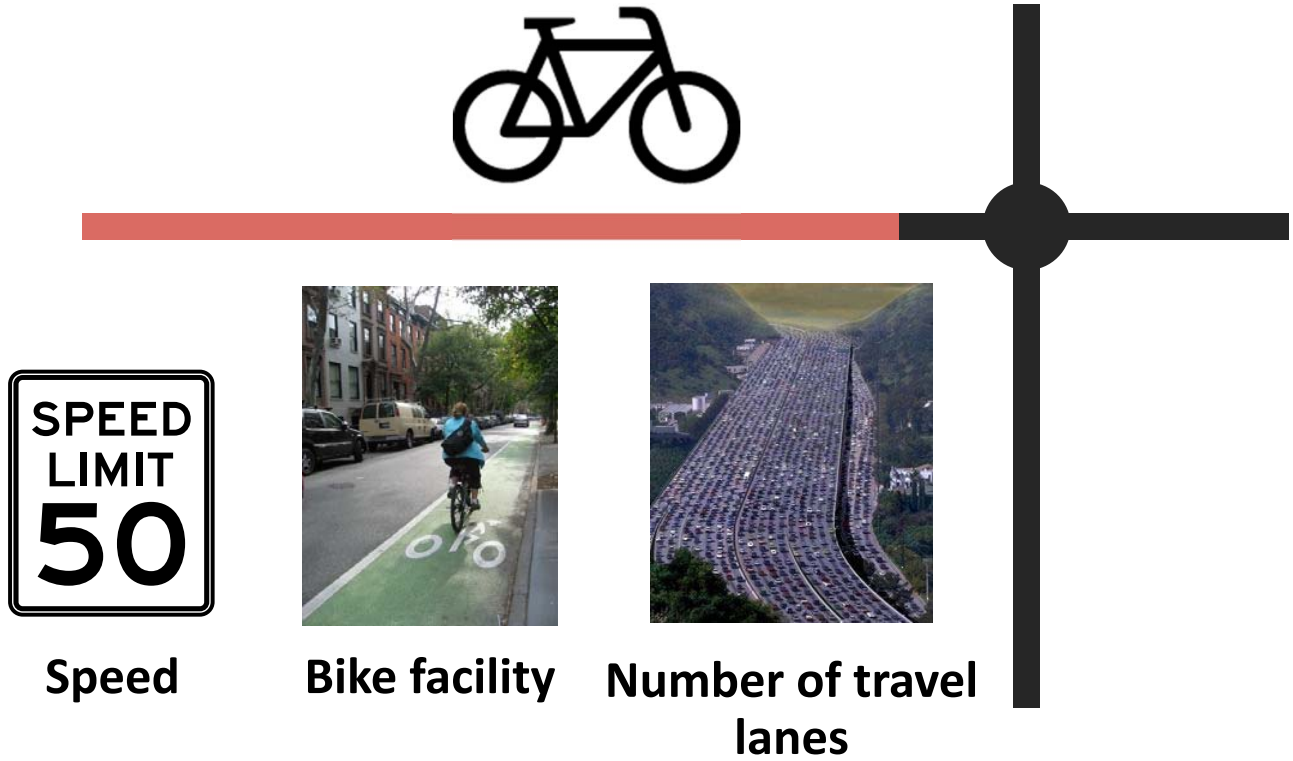
Strong and Fearless

Enthused and Confident

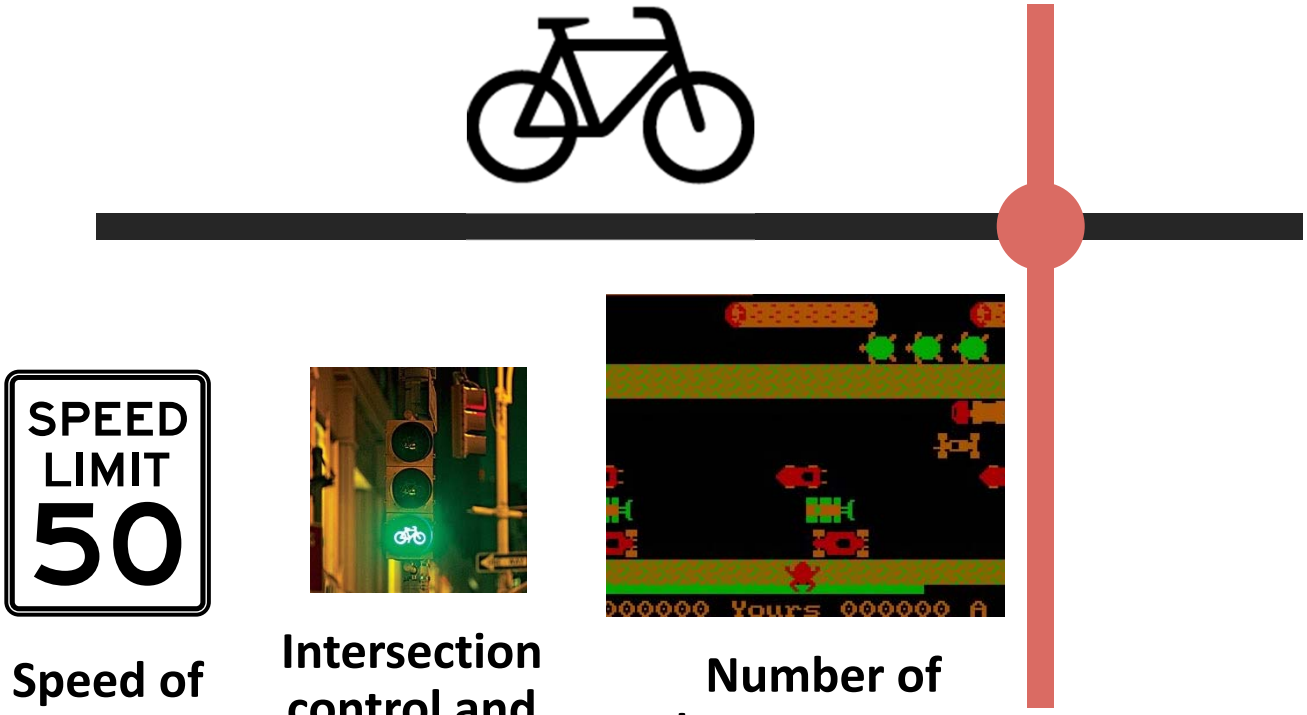
Interested but Concerned

8 to 80

Bicycle Level of Traffic Stress

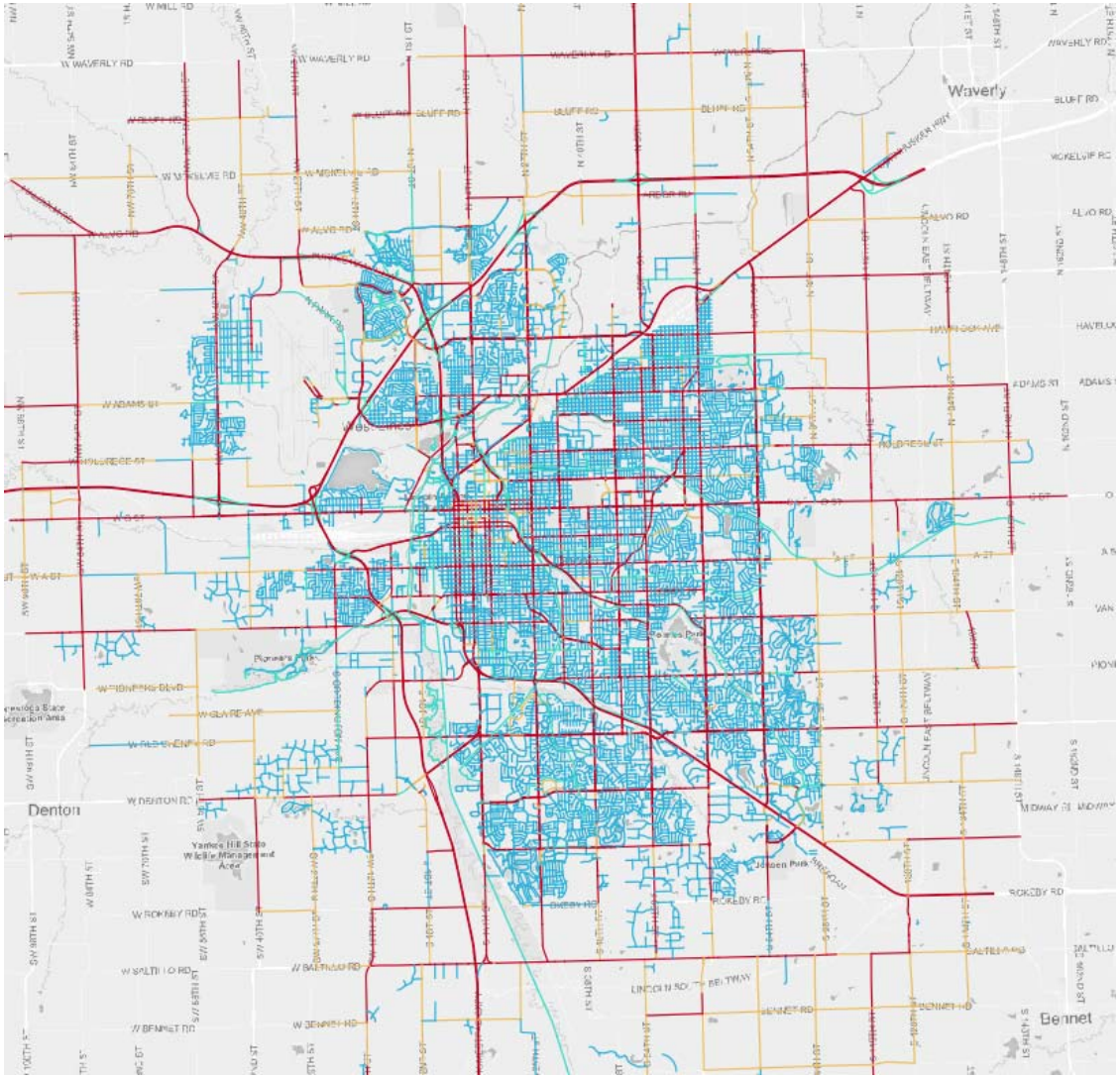


Bicycle Level of Traffic Stress

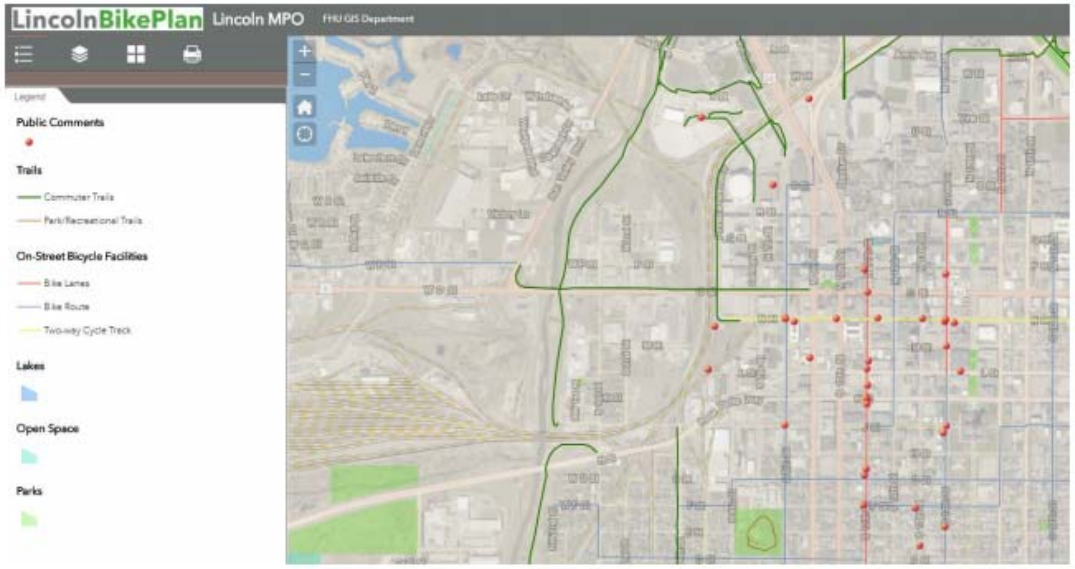


LTS Overall

LTS 4 LTS 3 LTS 2 LTS1



Public Commenting Map



- 413 location-specific comments were posted.
  - Identified barriers and shared ideas for improving network.
- Areas most frequently mentioned:
  - 11th and 14th Street bike lanes
  - Intersections of 9th/10th Street with Van Dorn Street and High Street
  - Intersection of Vine Street and Antelope Valley Parkway
  - Intersection of Cornhusker Highway with 1st Street and 14th Street
  - Intersection of Cotner Boulevard and Vine Street
  - Intersection of 56th Street and Highway 2

Network Development Approach

Fully connected on-street & trail network; build from existing

Higher density network in Downtown area to lower density at the City edge

Collector streets considered preferable

Four-lanes streets with 12,000 vpd (or less) considered for road diet

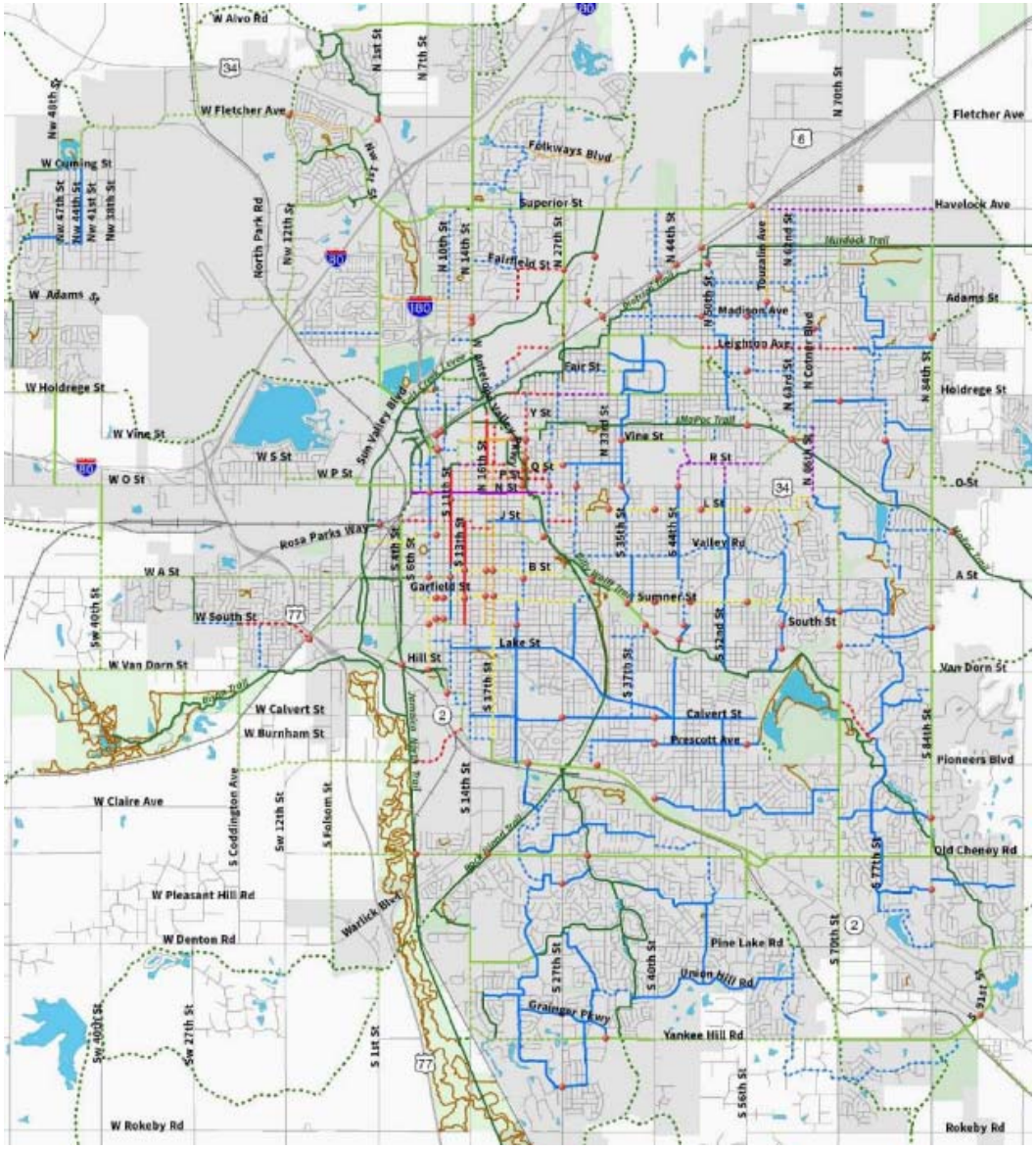
Address barriers identified by public, incorporate ideas

Direct access to BikeLNK stations; proximate access (~ ¼ mi.) to schools recreation centers, libraries

Preference for bike lanes to flow in same direction as traffic

Desire for LTS 1 or 2 (using Bicycle Facility Selection Chart); recognize some facilities will evolve over time

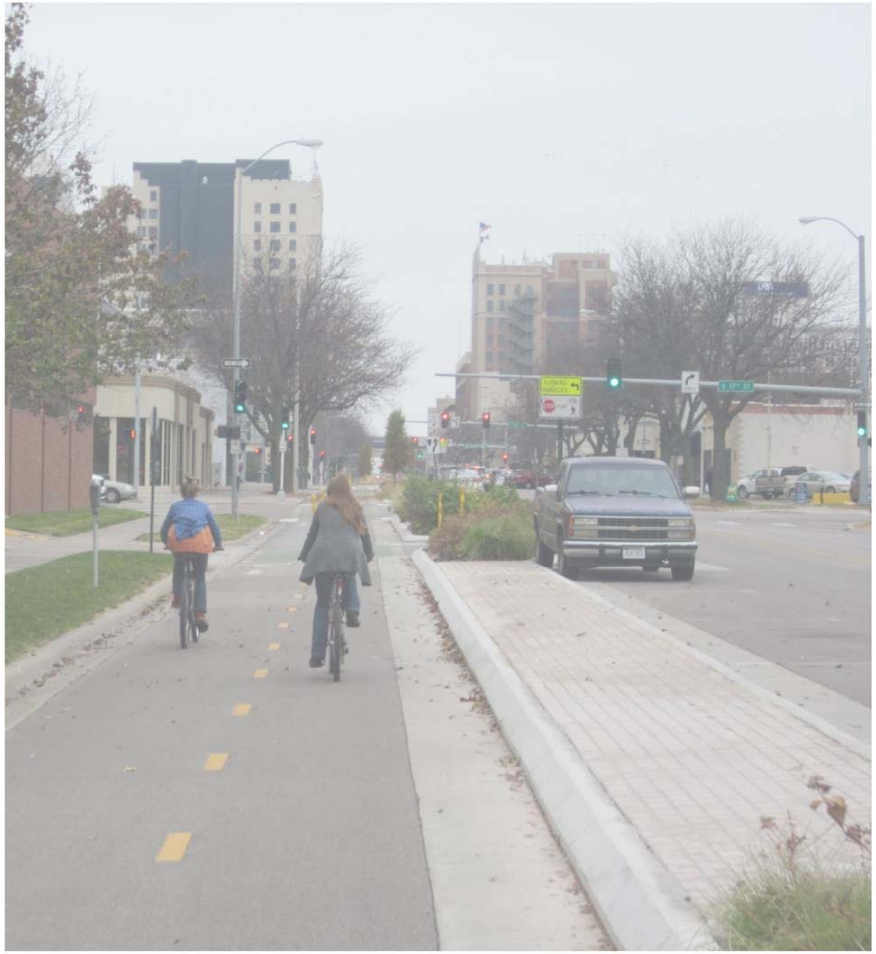
Bike Network



Bike Network

Legend

- Existing Separated Bike Lane
- Proposed Separated Bike Lane
- Existing Buffered Bike Lane
- Proposed Buffered Bike Lane
- Existing Bike Lane
- Proposed Bike Lane
- Proposed Bicycle Boulevard
- Existing Shared Lane
- Proposed Shared Lane
- Existing Sidepath
- Proposed Sidepath
- Trails
- Proposed Trails
- Park/Recreational Trails
- Intersection Enhancements



LincolnBikePlan

On-Street Bicycle Facilities Plan

DRAFT

Bicycle Facility Design Guide

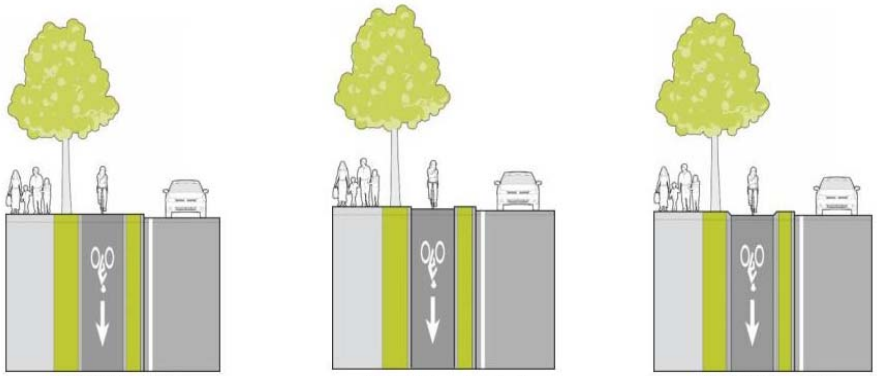
2018

Bicycle Facilities:

Separated Bike Lanes

ONE-WAY SEPARATED BIKE LANES

One-way separated bike lanes in the direction of motorized travel provide intuitive and simplified transitions to existing bike lanes and shared travel lanes.



One-way Sidewalk-level Separated Bike Lane

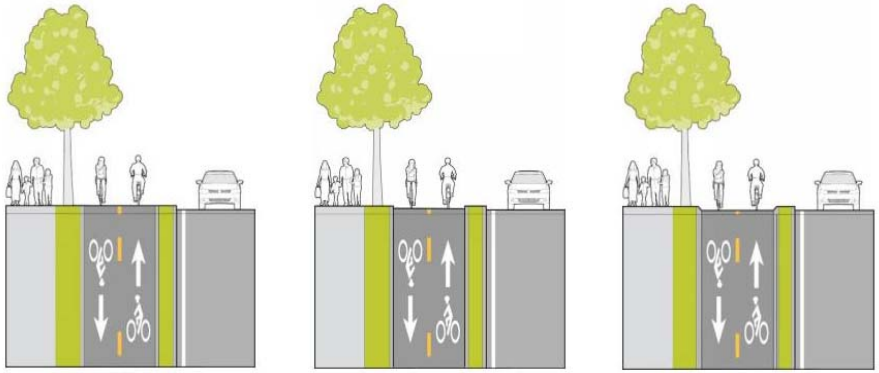
One-way Intermediate-level Separated Bike Lane

One-way Street-level Separated Bike Lane

TWO-WAY SEPARATED BIKE LANES

Two-way separated bike lanes will require special attention to transition the contra-flow bicyclist into existing bike lanes and shared travel lanes.

Depending on context, motorists may not expect bicyclists to approach crossings from both directions. For this reason, two-way separated bike lanes may require detailed treatments at alley, driveway, and cross street crossings to enhance the safety of these crossings.



Two-way Sidewalk-level Separated Bike Lane

Two-way Intermediate-level Separated Bike Lane

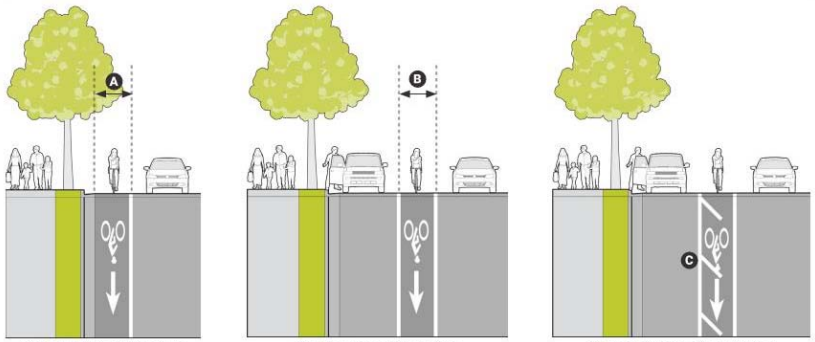
Two-way Street-level Separated Bike Lane

Bicycle Facilities:

Bike Lanes & Buffered Bike Lanes

BIKE LANES

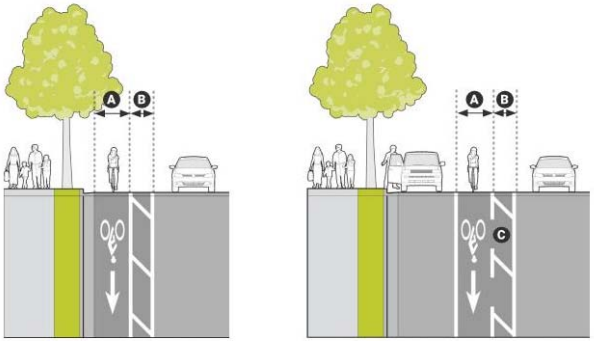
Bicycle lanes provide an exclusive space for bicyclists in the roadway. Bicycle lanes are established through the use of lines and symbols on the roadway surface. Bicycle lanes are for one-way travel and are normally provided in both directions on two-way streets and/or on one side of a one-way street. Bicyclists are not required to remain in a bicycle lane when traveling on a street and may leave the bicycle lane as necessary to make turns, pass other bicyclists, or to properly position themselves for other necessary movements. Bicycle lanes may only be used temporarily by vehicles accessing parking spaces and entering and exiting driveways and alleys. Stopping, standing and parking in bike lanes is prohibited.



Bike Lane Adjacent to a Curb *Bike Lane Adjacent to Parking* *Bike Lane with Door Zone Marking*

BUFFERED BIKE LANES

Buffered bicycle lanes are created by painting or otherwise creating a flush buffer zone between a bicycle lane and the adjacent travel lane. While buffers are typically used between bicycle lanes and motor vehicle travel lanes to increase bicyclist comfort, they can also be provided between bicycle lanes and parking lanes in locations with high parking turnover to discourage bicyclists from riding too close to parked vehicles.



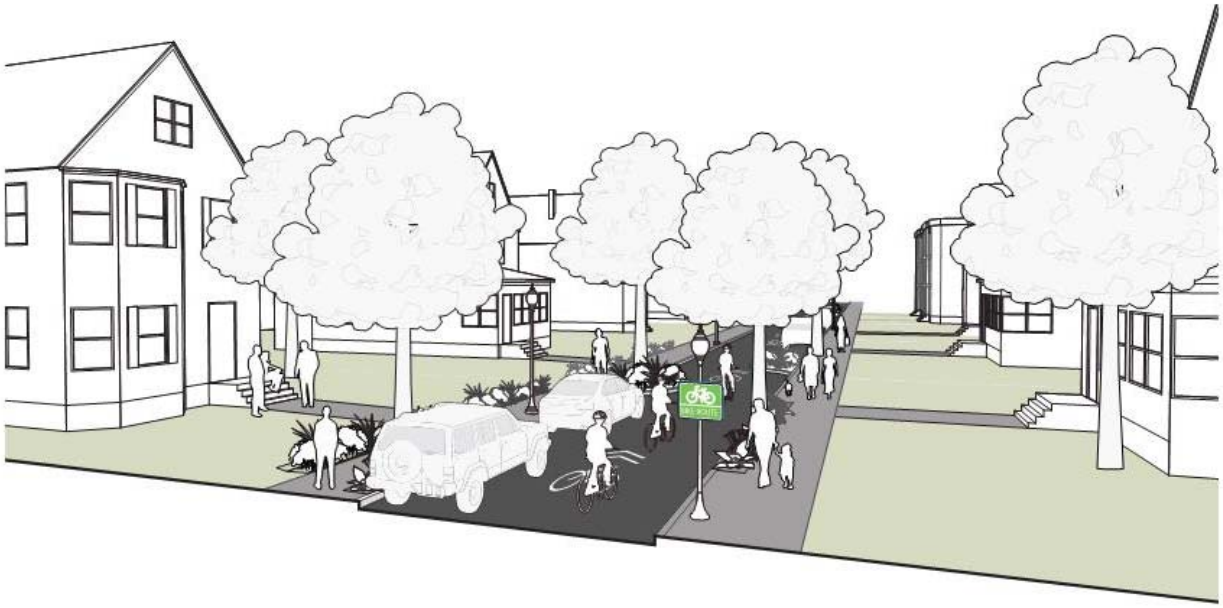
Buffered Bike Lane Adjacent to a Curb *Buffered Bike Lane Adjacent to Parking*

Bicycle Facilities:

Bicycle Boulevards

BICYCLE BOULEVARDS

Bicycle boulevards incorporate traffic calming treatments with the primary goal of prioritizing bicycle through-travel, while discouraging motor vehicle traffic and maintaining relatively low motor vehicle speeds. These treatments are typically applied on quiet streets, often through residential neighborhoods. Treatments vary depending on context, but often include traffic diverters, speed attenuators such as speed humps or chicanes, pavement markings, and signs. Bicycle boulevards are also known as neighborhood greenways and neighborhood bikeways, among other locally-preferred terms.



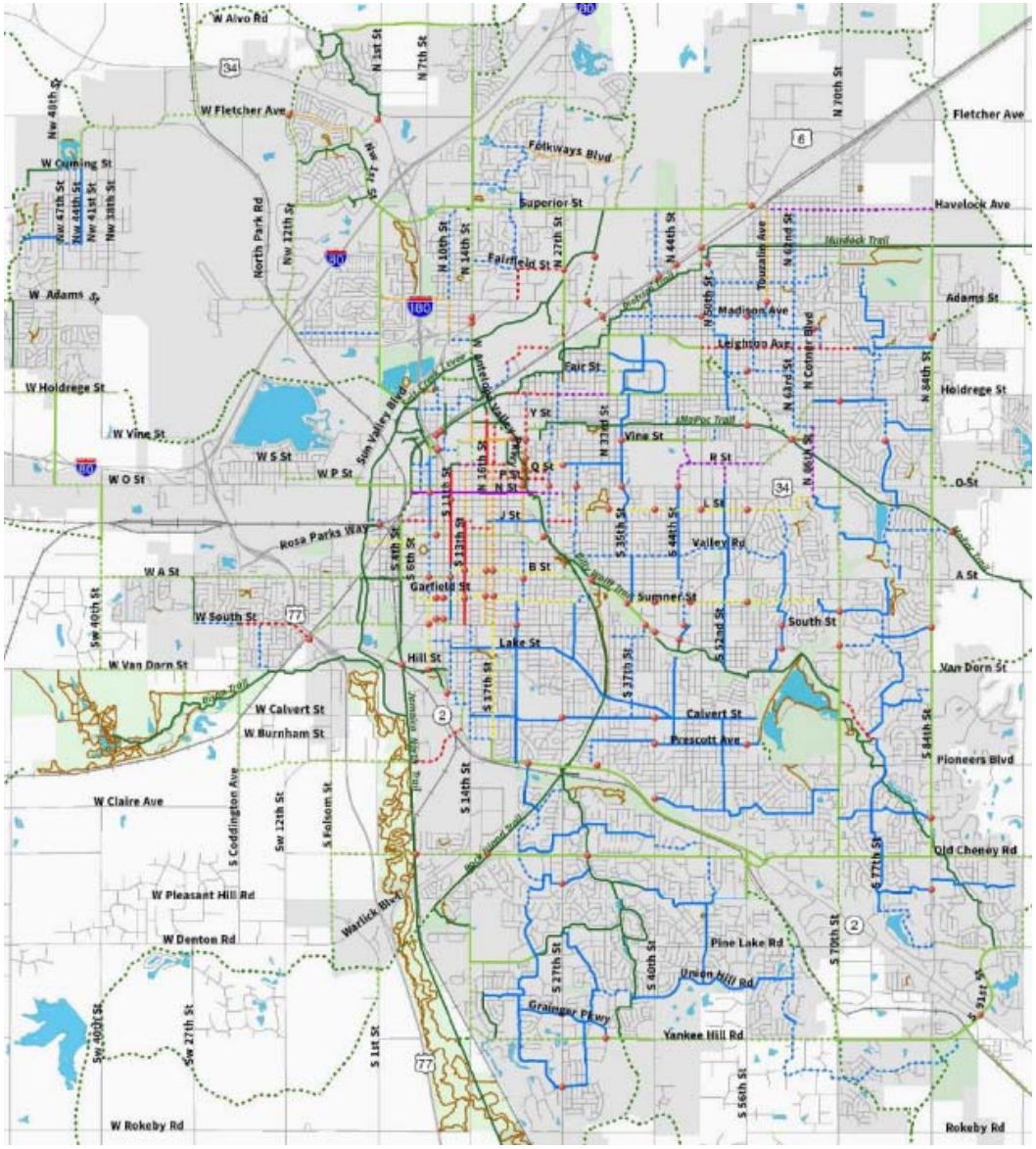
Bicycle Facilities:

Sidepaths

SIDEPATHS

A shared use path constructed parallel to and within the right-of-way of a roadway is referred to as a sidepath. Sidepaths may be desirable along high-volume or high-speed roadways, where accommodating bicyclists within the roadway in a safe and comfortable way is impractical. Since sidepaths are shared by bicyclists and pedestrians, they are most appropriate where pedestrian volumes are relatively low. Sidepaths may present increased conflicts between path users and motor vehicles at intersections and driveway crossings.

The design of sidepaths closely resembles the design of shared use paths between intersections. However, sidepaths should be designed similarly to separated bike lanes at intersections.

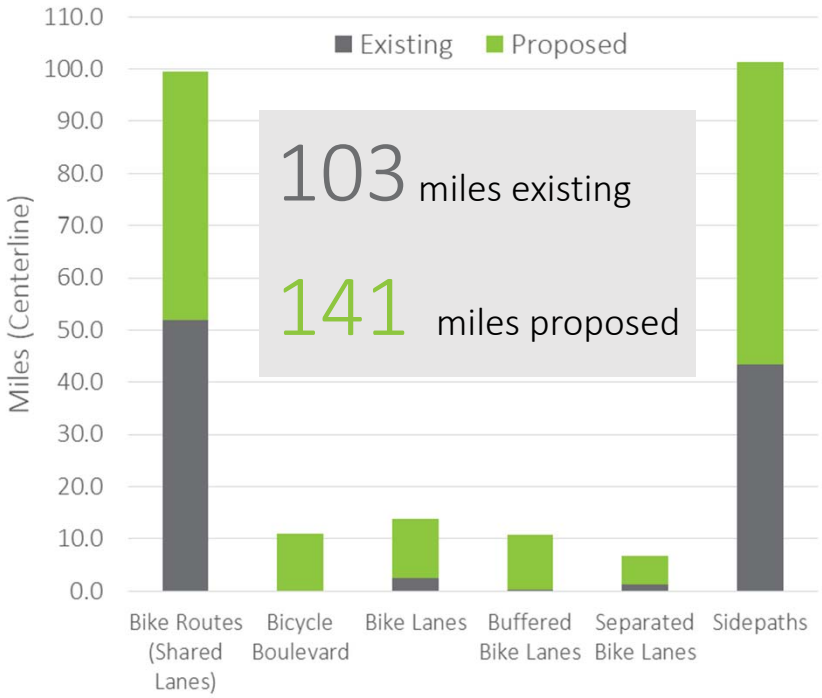


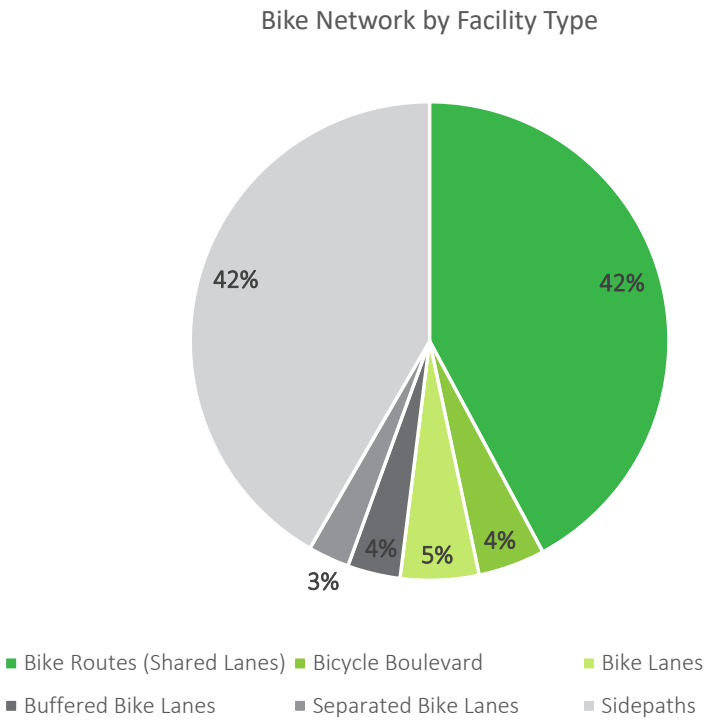
Bike Network

Legend

- Existing Separated Bike Lane
- Proposed Separated Bike Lane
- Existing Buffered Bike Lane
- Proposed Buffered Bike Lane
- Existing Bike Lane
- Proposed Bike Lane
- Proposed Bicycle Boulevard
- Existing Shared Lane
- Proposed Shared Lane
- Existing Sidepath
- Proposed Sidepath
- Trails
- Proposed Trails
- Park/Recreational Trails
- Intersection Enhancements

Refined Bike Network…by the numbers

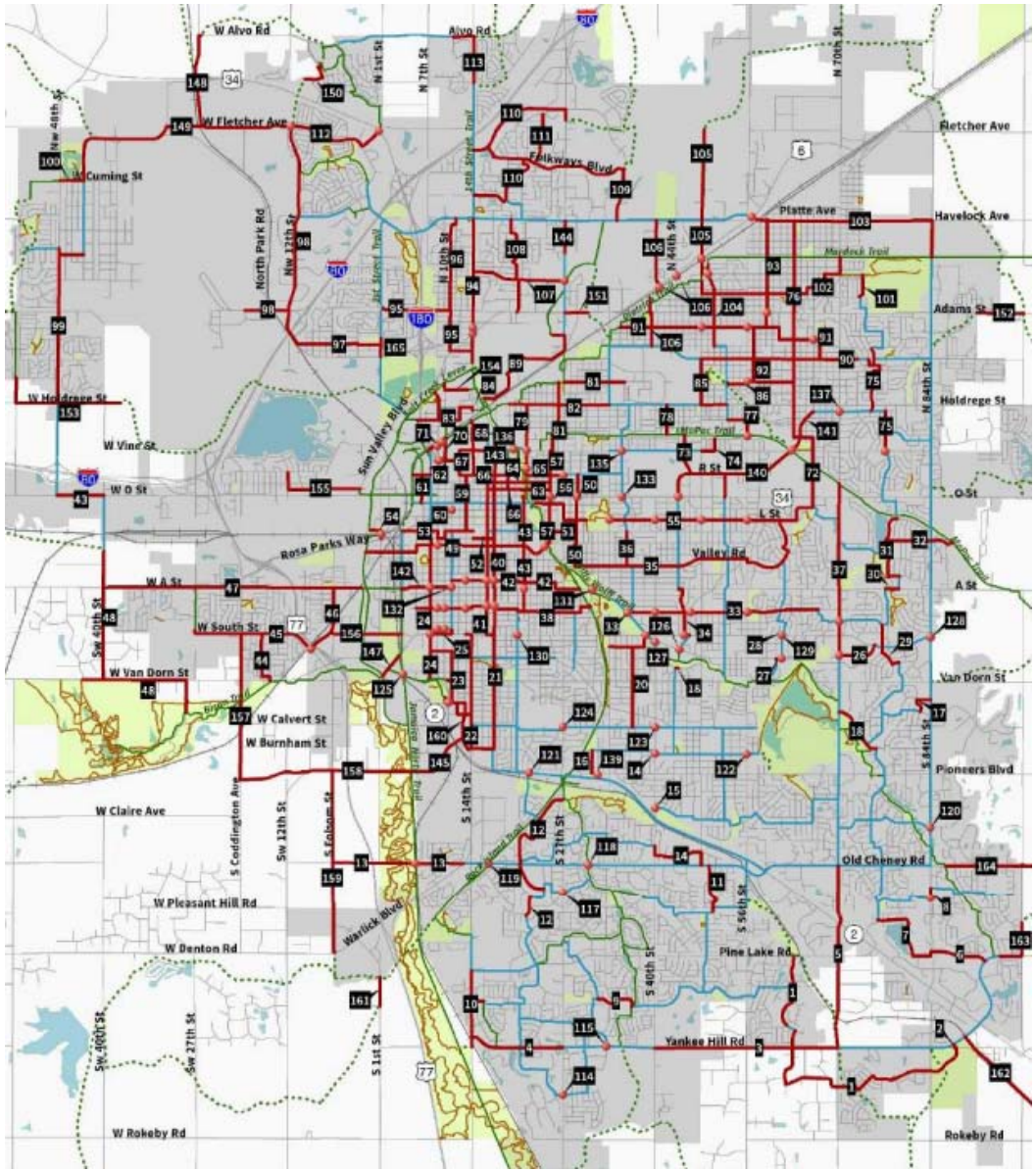




Actions Required

Projects

Identification ● Prioritization ● High Priority



135 Projects

112 segment projects (many include intersection enhancements)

23 stand-alone intersection enhancements

0.9 miles average project length

Grouped based on logical construction/implementation

Project Prioritization and Phasing

Barriers

- Number of public comments received identifying barriers and/or improvement ideas within project area (1/8 mile buffer)

Bicycle Demand

- Potential bicycle demand, using previously developed metrics)

Safety

- Number of bicycle crashes within project area (1/8 mile buffer)
- Existing Level of Traffic Stress (LTS)

Connectivity

- Closing a gap between existing bikeways (on-street or trail)
- Expanding existing on-street network
- Connecting major destinations

Social Equity

- Low income and minority populations (25th percentile, 50th percentile)

Prioritization Methodology: Step 2 (COST)

Low

- Signing & Striping
- Restriping
- RRFB

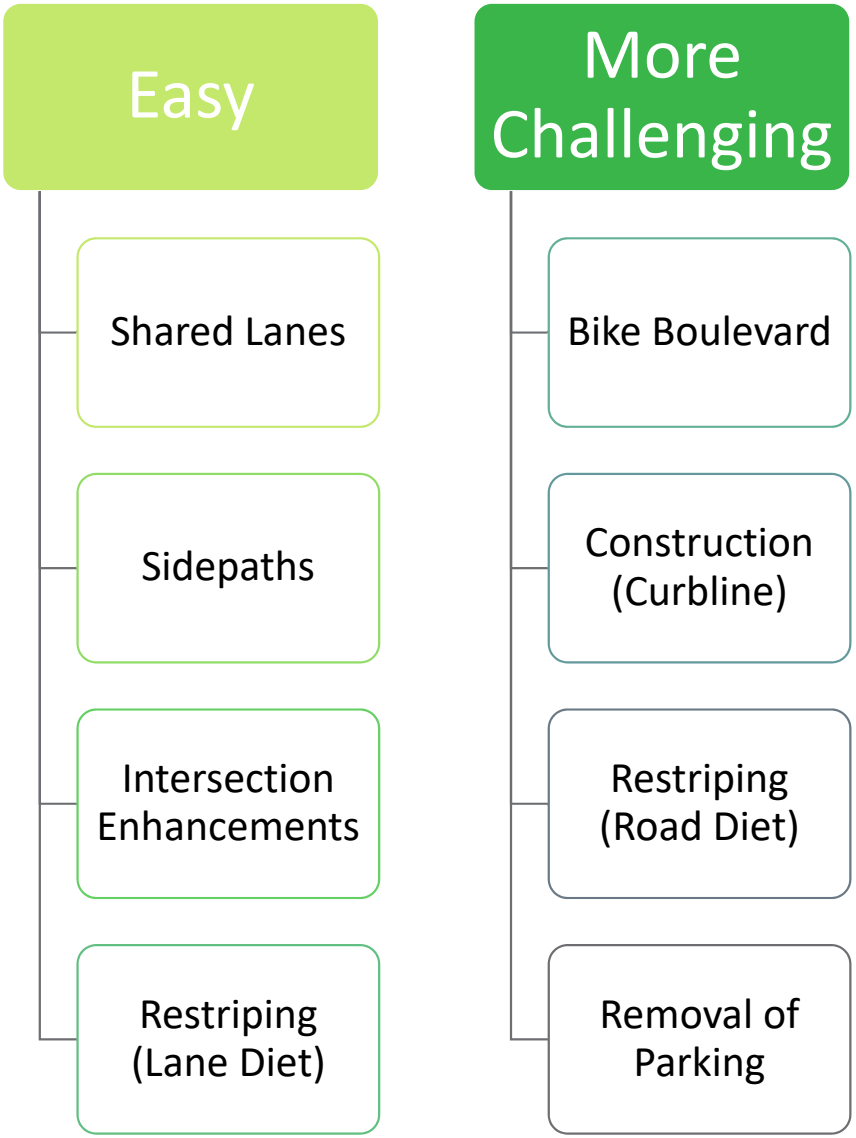
Medium

- Bike Boulevard
- Sidepath Construction
- Node modifications
- Signal

High

- Construction (Curbline)
- Bridge or Tunnel

Prioritization Methodology: Step 2 (EASE OF IMPLEMENTA-TION)



Complete Streets Program

Vision Zero

Public Participation

Bicycle Friendly Community Application

Ordinances

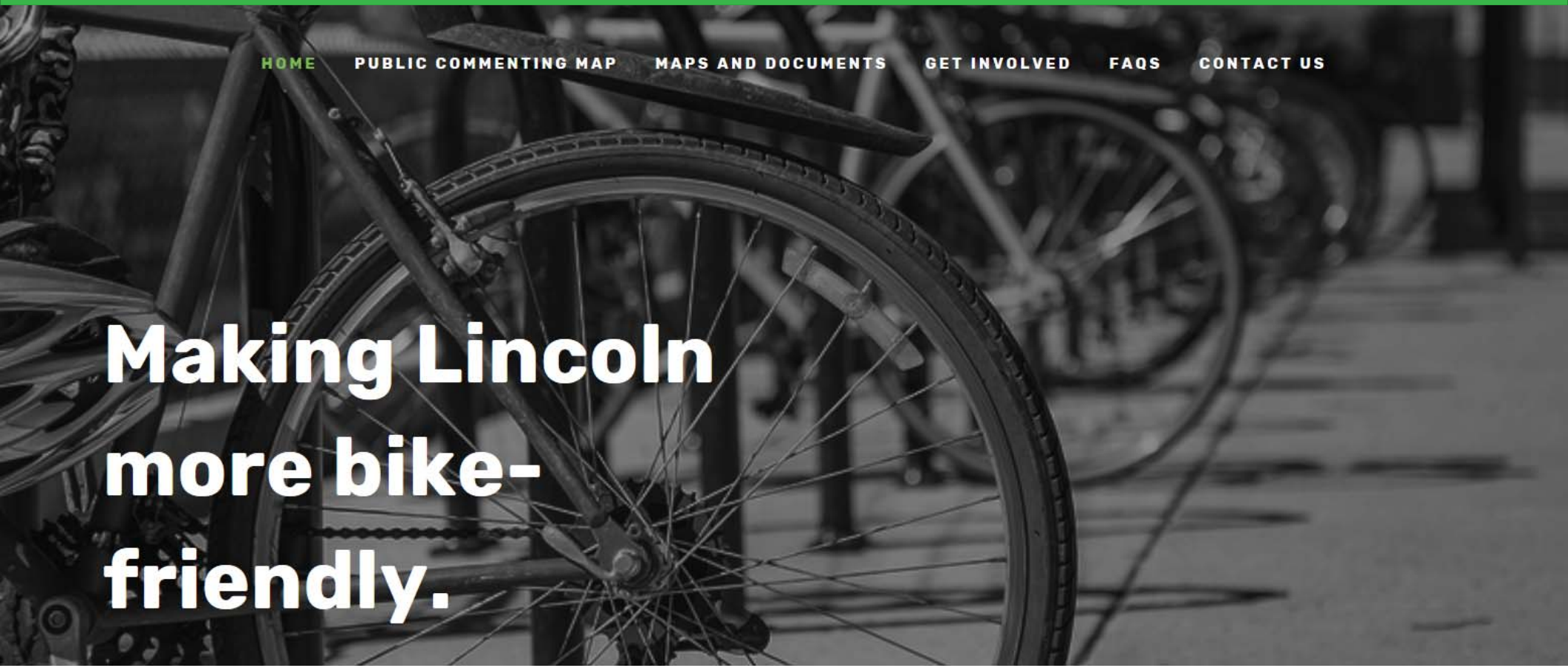
Initial Policy Recommendations

Community Engagement

Committees

- Technical Advisory Committee
  - Interdepartmental Staff
  - Nebraska Department of Transportation
- Bicycle Facilities Advisory Committee
  - Stakeholders
  - Educational institutions
  - Neighborhood groups
  - Businesses
  - Non-profit organizations

Project Website: LincolnBikePlan.com



Communication Strategies

- Email distribution list
- Social media
- Posters and postcards
- LES Sustainable Living Event, Farmers Market, Coffee Shops
- StarTran, Libraries, Matt Talbot Kitchen, Lincoln Bike Kitchen
- Open House Events on May 1st and August 20th
- Survey and Public Commenting Map

Next Steps

LRTP and Comprehensive Plan Amendment

- Planning Commission Public Hearing on 1/23

LRTP Amendment

- MPO Technical Committee on 1/31
- MPO Officials Committee on 2/8

Comprehensive Plan Amendment

- City Council Introduction on 2/4
- City Council Public Hearing on 2/11

EXHIBIT B

Lincoln/Lancaster County Railroad Transportation Safety District (RTSD)

N. 33rd & Cornhusker Project

Planning Commission Briefing

1.9.2019

IMPROVING SAFETY FOR A BETTER TOMORROW

N. 33rd & Cornhusker

Primary Objectives:

- **SAFETY** – *Develop and analyze various roadway alignments in the vicinity of 33rd & Cornhusker Highway to identify transportation alternatives which would eliminate or reduce vehicular, pedestrian, and bicyclist conflicts at the at-grade crossings with the BNSF Railway tracks in this area of northeast Lincoln.*
- **TRAFFIC & CONGESTION** – *Reduce delay time and improve travel times for motorists, pedestrians, and bicyclists crossing the rail corridor*
- **MOBILITY/MULTI-MODAL** – *Incorporate accommodations for vehicles, pedestrians, bicyclists, and transit in the transportation alternatives to provide a more efficient transportation system.*
- **LRTP COMPATIBLE** – *Incorporate the City of Lincoln's long-range planning objectives for this area during the transportation alternatives analysis.*

33rd & Cornhusker - Planning & Enviro. Linkages (PEL) Study

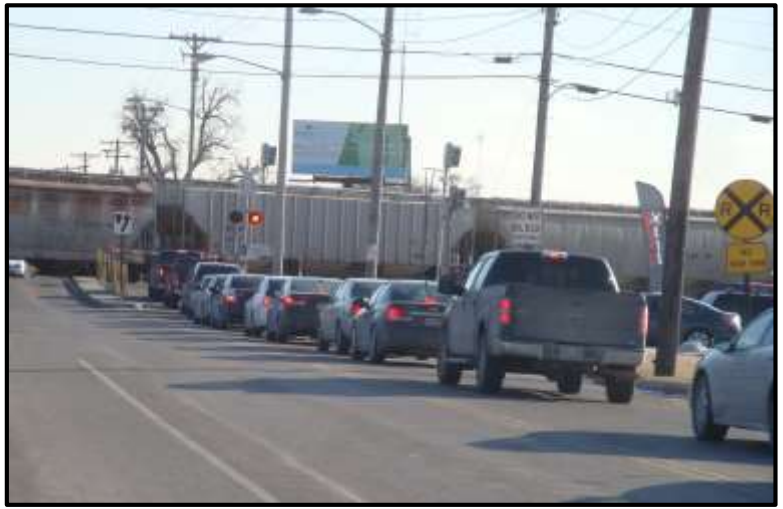
BNSF Corridor: 65 trains per day

33rd & Adams Streets: 20,000+ veh. per day

Combined Exposure: > 1,300,000

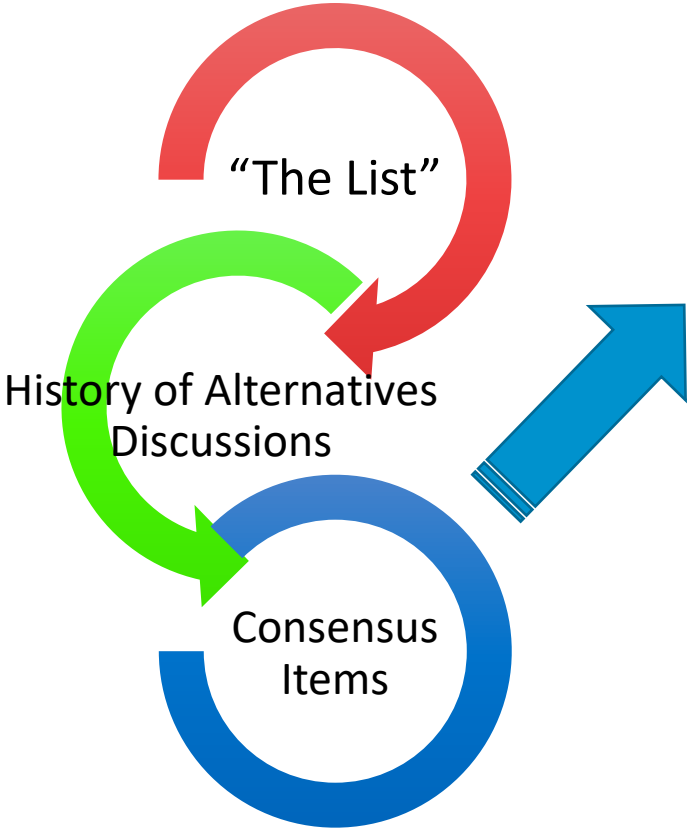
NDOT Grade Separation Min.: > 50,000

Train Blockages: >15% of time (3.5 hrs. per day)



33rd & Cornhusker - Planning Phase

N. 33rd & Cornhusker – Steps to Preliminary Preferred Alternative



- Transportation Improvements conform to Subarea Plan
- 33rd Street Extension to Superior
- Salt Creek Roadway Extension to Cornhusker
- Closure of RR crossings, include pedestrian structure at 44th
- No urban interchanges
- Existing traffic movements may change
- 29th/State Fair Park & Cornhusker intersection may need to change ultimately

- Access management/ Access to individual businesses
- Adams Street connection
- 29th Street/Back-door connection north of Cornhusker on 27th
- Specific Right-of-Way impacts
- Intersection Configurations

N. 33rd & Cornhusker – Alternatives – Not Final!

Alt 1D

Preliminary Preferred Alternative

RTSD-Build

(Not Final – Subject to Change)

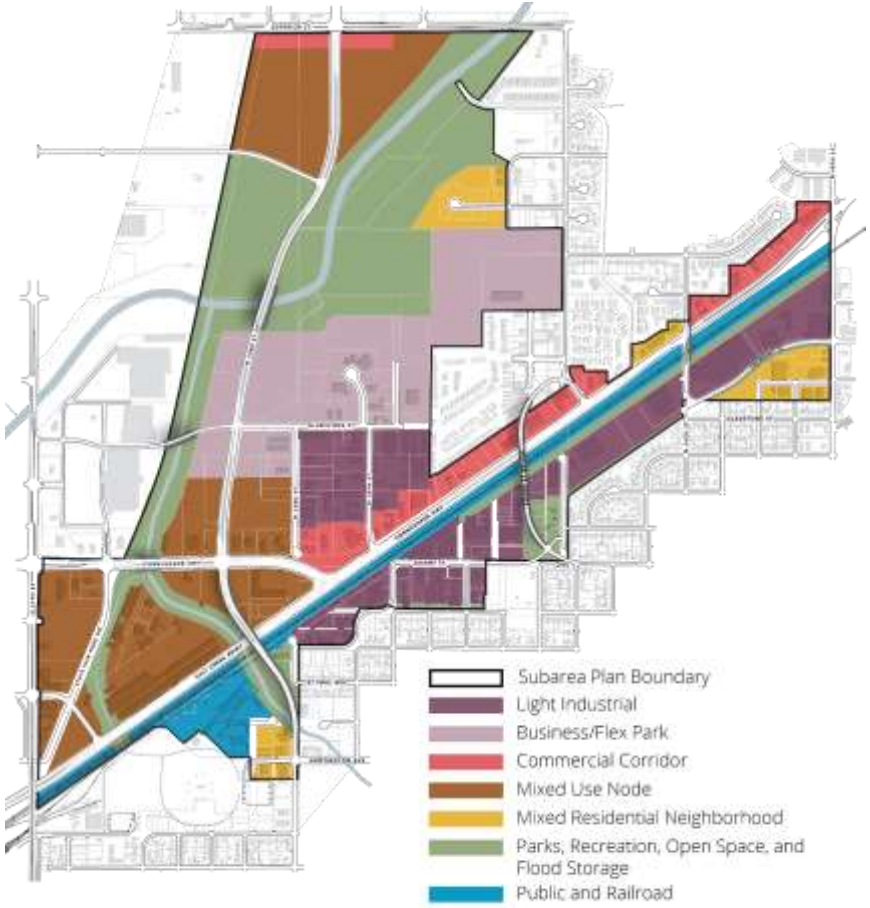
North 33rd & Cornhusker
Subarea Plan

IMPROVING SAFETY FOR
A BETTER TOMORROW

N. 33rd & Cornhusker - Subarea Plan (SAP)

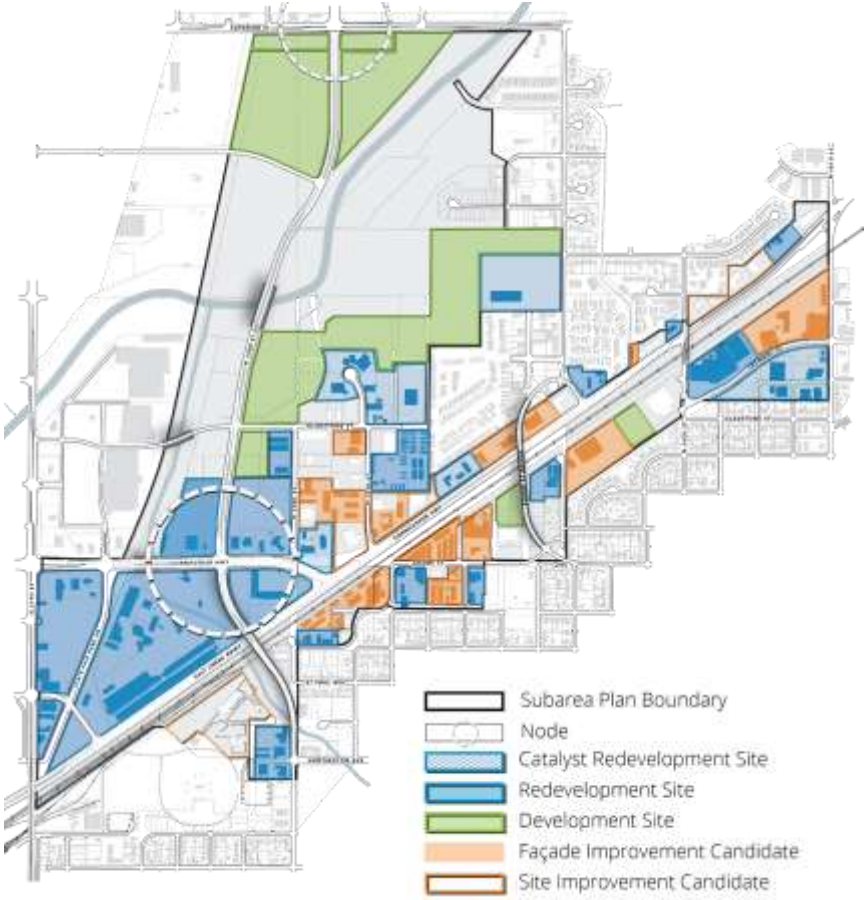
- Outlines the vision for improvement, beautification, and overall revitalization of the subarea.
- The Plan includes:
  - An analysis of the subarea's existing physical, regulatory, demographic, and economic conditions
  - Short and long-term recommendations regarding land use, development and redevelopment, transportation and utility infrastructure, mobility, economic sustainability, and aesthetic enhancements

Subarea Plan – Land Use and Zoning Plan



- **Adopt a future land use plan.**
- **Create a mixed use environment**
- **Range of housing types and sizes.**
- **Prioritize nodal development**
- **Provide access to quality and culturally relevant green spaces**
- **Establish transition zones between differing land uses**
- **Develop, approve, and implement new development guidelines**
- **Conserve the Salt Creek floodplain**

Subarea Plan – Development and Redevelopment Plan



- **Expedite redevelopment and reinvestment at key locations**
- **Promote development of vacant parcels**
- **Capitalize on and promote resources (Salt Creek, Deadmans Run, green space, central location)**
- **Encourage the development of a range of housing types and sizes**
- **Incentive reinvestment within the subarea**

Conceptual Redevelopment Visualization
Southwestern Section of N. 33rd St. and Cornhusker Hwy. Node

Site Features

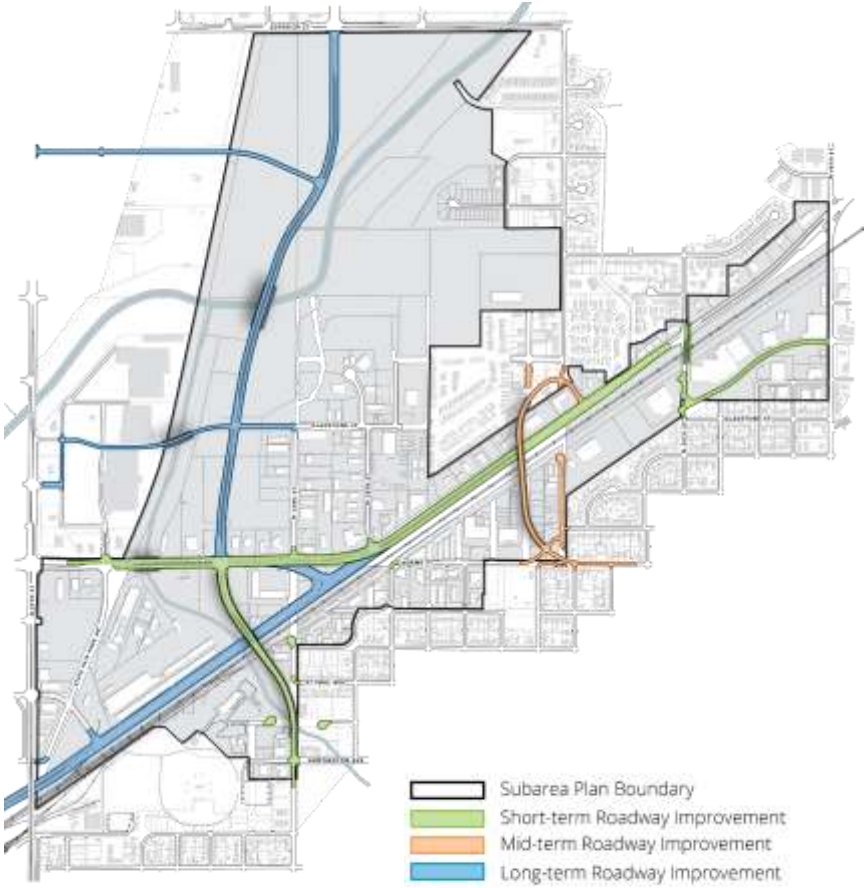
1. Grain elevator adaptive reuse
2. Parking garage
3. Multi-tenant mixed use building
4. Attached medium density residential (townhomes, rowhomes, etc.)
5. Multi-tenant retail and/or restaurant building
6. Single tenant restaurant and/or retail building
7. Parking behind buildings
8. Curbed, native landscaped parking islands
9. Parking lot green space with curb cuts
10. Decorative paving
11. Pedestrian internal pathway
12. Pedestrian external pathway
13. Trail connectivity
14. Central, multipurpose green space
15. Band shell
16. Shallow setback
17. Deadmans Run
18. Deadmans Run buffer
19. Water view
20. Pedestrian bridge over Deadmans Run
21. Dense tree landscaping
22. Perimeter landscaping
23. Minimal access drives

Additional Site Opportunities

1. Building base native landscaping
2. Understory native landscaping
3. Pedestrian gathering/seating area
4. Bicycle racks and/or storage
5. Internal site lighting
6. Elevated façade articulation and transparency
7. Decorative multi-tenant monument sign
8. Right-sized, modern wall sign
9. Playground equipment
10. Bioswale
11. Pervious pavement
12. Green roof
13. Rain barrel
14. Community garden

33rd & Cornhusker

Subarea Plan – Transportation and Mobility Plan



- **Construct the at-grade railroad crossings at North 33rd Street, North 44th Street and Adams Street**
- **Continue North 33rd Street northward to connect to Superior Street**
- **Enhance the transit network**
- **Develop a complete wayfinding system for all user types**
- **Maintain, enhance, and grow the existing bicycle and pedestrian network**
- **Develop access management strategies**

Subarea Plan – Aesthetics and Quality of Life Plan

These recommendations should read alongside the Cornhusker Highway Corridor Enhancement Plan as a unified approach to aesthetic enhancement along Cornhusker Highway and within the subarea.

- **Construct public streetscape improvements**
- **Construct a system of intersection enhancements**
- **Soften the visual impact of the railroad**
- **Integrate attractive plazas, and open spaces throughout the subarea.**
- **Enhance public transit stops at high-traffic areas**

33rd & Cornhusker

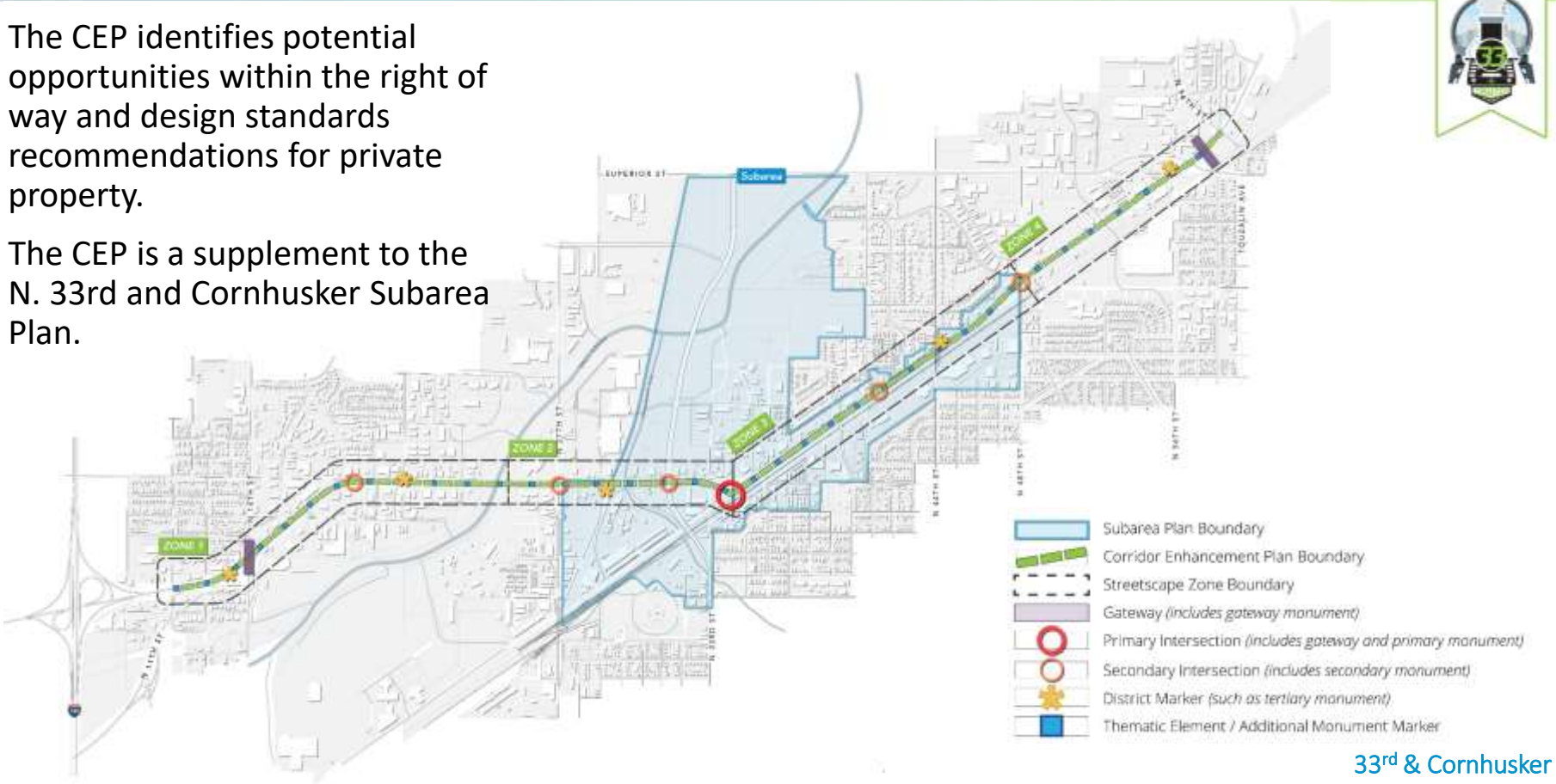
Cornhusker Highway

Corridor Enhancement Plan

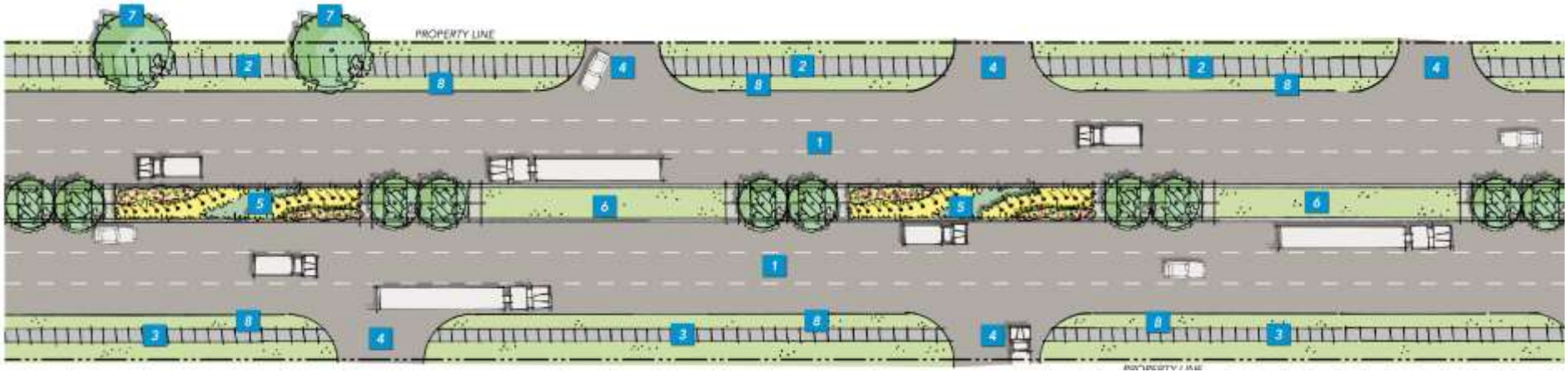
IMPROVING SAFETY FOR
A BETTER TOMORROW

33rd & Cornhusker – Corridor Enhancement Plan (CEP)

- The CEP identifies potential opportunities within the right of way and design standards recommendations for private property.
- The CEP is a supplement to the N. 33rd and Cornhusker Subarea Plan.



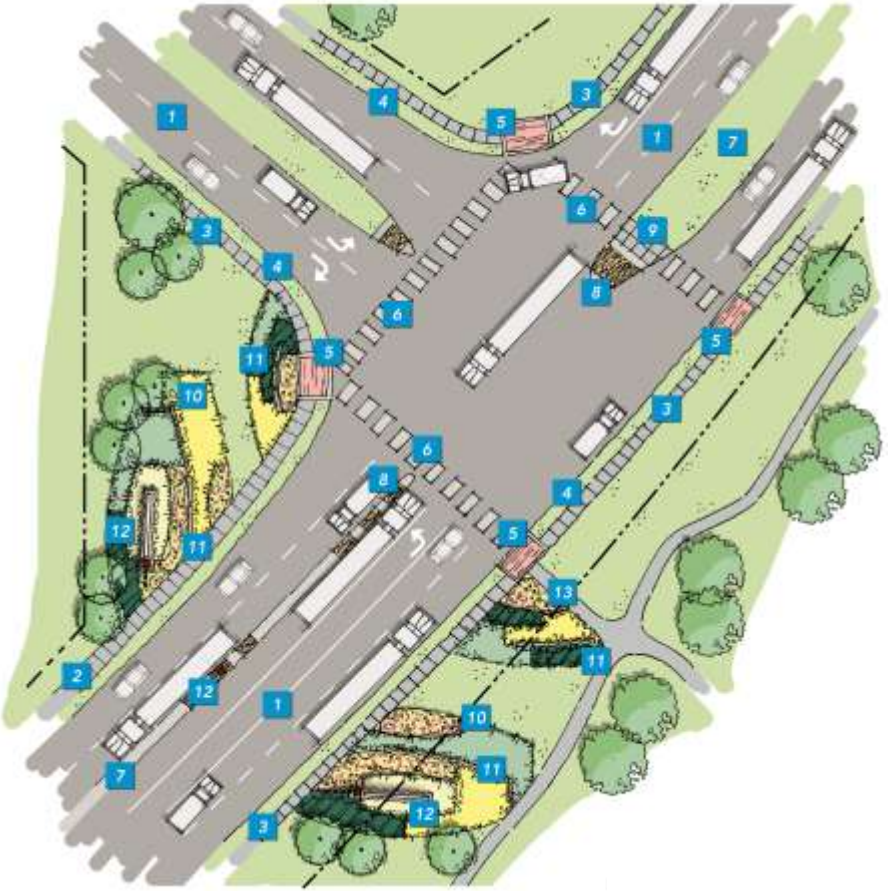
Corridor Enhancement Plan - 4 Zones of ROW Features



NOTE: Street tree location/spacing subject to NDOT review.

1 Traffic Lane
2 Enhanced Pedestrian Facility (8' wide)
3 Standard Sidewalk (5' wide)
4 Access Drive
5 Median with Landscape Enhancements
6 Median with Turf and Trees
7 Street Tree (spaced 80' on center)
8 Parkway/Turf Buffer (6' wide)

Conceptual Intersections – North 56th Street



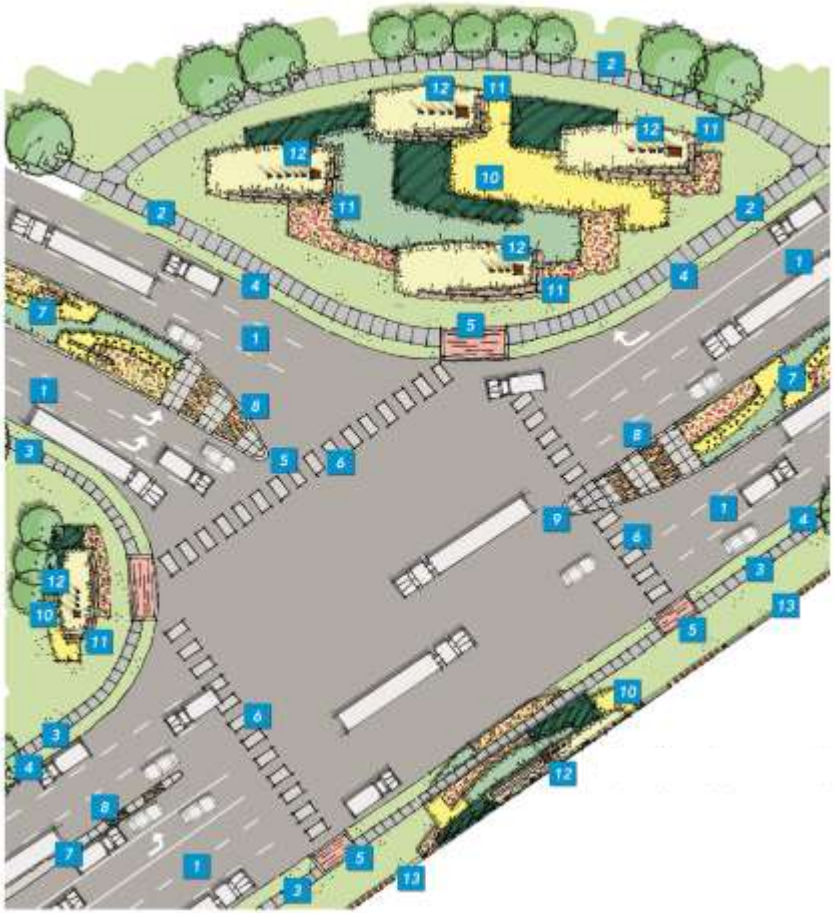
Gateway Intersection Plan Features

- 1 Traffic Lane
- 2 Enhanced Pedestrian Facility (8' wide)
- 3 Standard Sidewalk (5' wide)
- 4 Parkway/Turf Buffer (6' wide)
- 5 Specialty Intersection Treatment (pavers and decorative concrete)
- 6 Crosswalk
- 7 Median
- 8 Rough Limestone Pavers
- 9 Pedestrian Refuge Island
- 10 Gateway Landscape Enhancements
- 11 Stacked Limestone Block Wall
- 12 Gateway Monument
- 13 Connection to Existing Sidewalk/Trail

Sample gateway monument

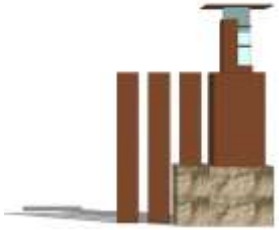
33rd & Cornhusker

Conceptual Intersections – Future Salt Creek Roadway



Primary Intersection Plan Features

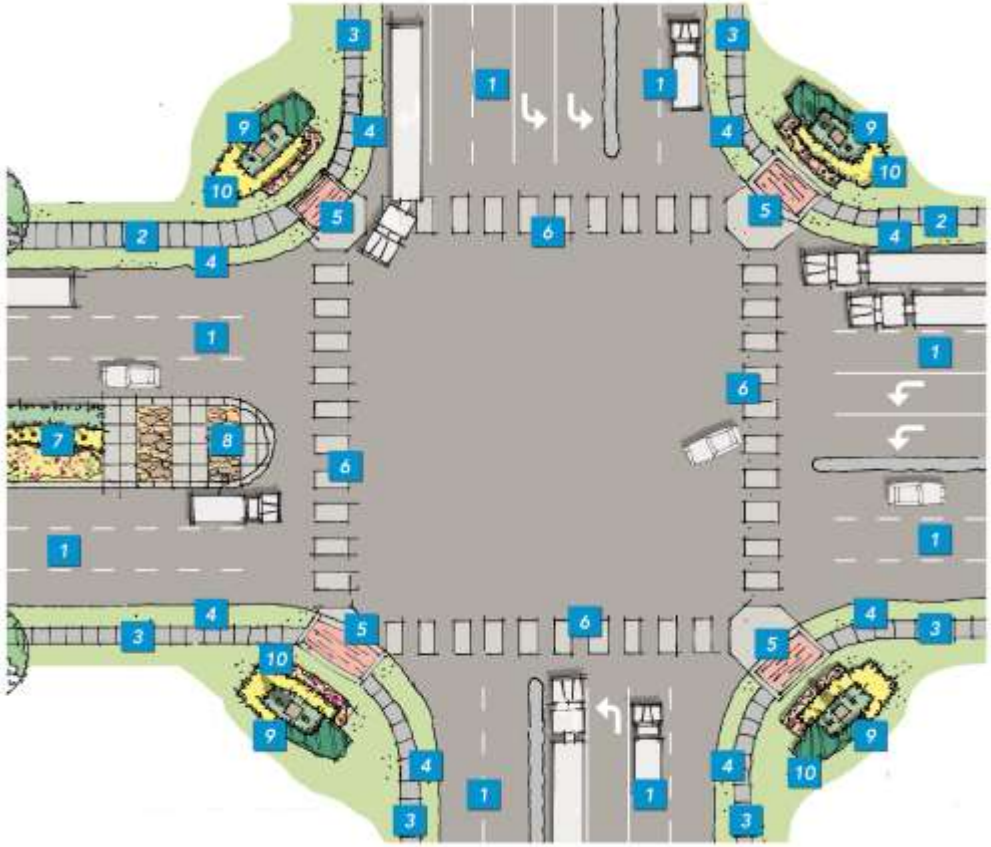
1. Traffic Lane
2. Enhanced Pedestrian Facility (8' wide)
3. Standard Sidewalk (5' wide)
4. Parkway/Turf Buffer (6' wide)
5. Specialty Intersection Treatment (pavers and decorative concrete)
6. Crosswalk
7. Median
8. Rough Limestone Pavers
9. Pedestrian Refuge Island
10. Primary Intersection Landscape Enhancements
11. Stacked Limestone Block Wall
12. Monument Signage/Thematic Elements
13. Wall/ Screen along Railroad Right-of-Way with Thematic Art Element



Sample primary marker

33rd & Cornhusker

Conceptual Intersections – Future North 33rd Street



Secondary Intersection Plan Features

1. Traffic Lane
2. Enhanced Pedestrian Facility (8' wide)
3. Standard Sidewalk (5' wide)
4. Parkway/Turf Buffer (6' wide)
5. Specialty Intersection Treatment (pavers and decorative concrete)
6. Crosswalk
7. Median
8. Rough Limestone Pavers
9. Tertiary Marker (Thematic Element)
10. Secondary Intersection Landscape Enhancements

Sample secondary / tertiary markers

Corridor Enhancement Plan – Pedestrian Network and Amenities

- Sidewalks
  - *5’ minimum; 6’ to 10’ for “enhanced pedestrian facilities”*
  - *ADA accessible*
- Crosswalks
  - *10’ minimum*
  - *ADA accessible connections with curb ramps*
- Pedestrian Refuge Islands
  - *6’ wide minimum, 10’ wide preferred*
- Benches, Bicycle Racks, Trash and Recycling Receptacles
  - *Modern, durable design*
- Planters
  - *Located at pedestrian gathering areas*
  - *Proper irrigation*
- Public Art
  - *Located in high activity and high visibility areas*
  - *Tell the story of the corridor history, present and future*

Corridor Enhancement Plan – Screening & Landscape

- Fencing and Screening
  - *Combined with landscaping where possible*
  - *Perforated or non-perforated corten and concrete panels*
- Street Trees
  - *Need to meet sight triangle regulations*
  - *Acquire additional right-of-way or plant on private property*
- Understory Landscaping
  - *Avoid blocking signage or buildings*
  - *Located around gateway monuments*
  - *Mix of perennials, ornamental grasses, and groundcovers*
  - *Low maintenance, drought tolerant*
- Landscaped Medians
- Turf Buffers
- Landscape Irrigation
  - *Installed within right-of-way turf buffers and medians*

33rd & Cornhusker

Corridor Enhancement Plan – Design Guidelines

- A complete corridor transformation must also include adjacent private property improvements.
- Design guidelines would be clearly communicated with development community to align their plans with design expectations.
- Build upon existing municipal codes to address more detailed design considerations
- Build upon the presented streetscape plan in the CEP to include standards for
  - *Private property building design*
  - *Site design*
  - *Signage design*
- Develop specific guidelines for mixed use node developments as described in the SAP.

Corridor Enhancement Plan – Building Design

- To effectively guide quality building improvements, the following considerations must be included in the design guidelines
  - *Building Setbacks and Orientation*
  - *Facades and Roofs*
  - *Building Transparency*
  - *Entries*
  - *Awnings and Canopies*
  - *Equipment and Utility Screening*
  - *Exterior Building Lighting*
  - *Drive-Throughs*

Corridor Enhancement Plan – Site Design

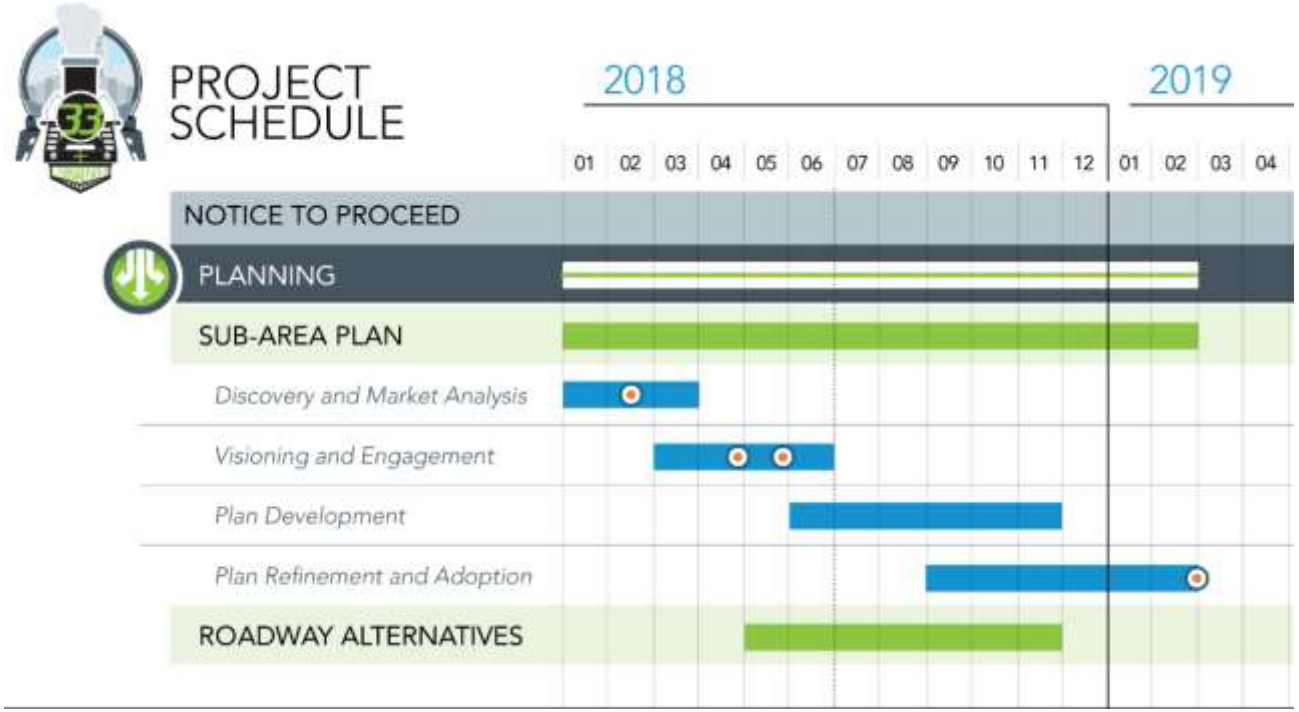
- To effectively guide modern site design, the following considerations must be included
  - *Access, Circulation and Parking Lots*
  - *Site and Parking Lot Edge Landscaping*
  - *Pedestrian Amenities and Site Furnishings*

33rd & Cornhusker

Corridor Enhancement Plan – Signage Design

- To effectively guide meaningful signage improvements, the signage along Cornhusker Highway should be categorized differently than it is in the city's sign regulations.
- The following considerations should be included in the design guidelines
  - *Single Tenant Monument Signs*
  - *Multi-Tenant Monument Signs*
  - *Single Tenant Wall Signs*
  - *Multi-Tenant Wall Signs*

N. 33rd & Cornhusker - Planning Phase



Subarea & Corridor Plan Schedule

Briefings/Presentations (2018)

- *RTSD Board (09/11)*
- *Project Advisory Committee (11/20)*
- *Urban Design Committee (12/4)*
- *Pedestrian/Bicycle Comm. (12/11)*
- *Planning Commission (1/9)*
- *Neighborhood Roundtable (1/14)*

Informational Open House

- *January 17, 2019*
- *Center for People in Need*

Planning Commission

- *January 23, 2019*

MPO Tech & Officials Committees

- *January 31/February 8*

City Council Action

- *February 2019*

N. 33rd & Cornhusker – Next Steps

This timeline graphic illustrates the overall project development tasks through construction and is subject to change based on project priorities or funding constraints.

QUESTIONS?