

2.0 Introduction

StarTran is the primary mobility and fixed route transit provider for the greater Lincoln metro area. StarTran is conducting this Multimodal Transit Transfer Center (MTTC) Feasibility and Concept Design Study to explore improvements to transfer operations for the transit system. Today, the hub of StarTran's operations is centered around an on-street transfer facility located at 11th and N Streets adjacent to the Gold's Building (Figure 2). This location is undersized and does not provide an optimal layout for the safe and efficient transferring of passengers between routes. The Gold's location offers limited passenger amenities that would make waiting for the bus more comfortable, and the site limits future expansion of the transit system due to its size and configuration.

Figure 2: Gold's Transfer Location



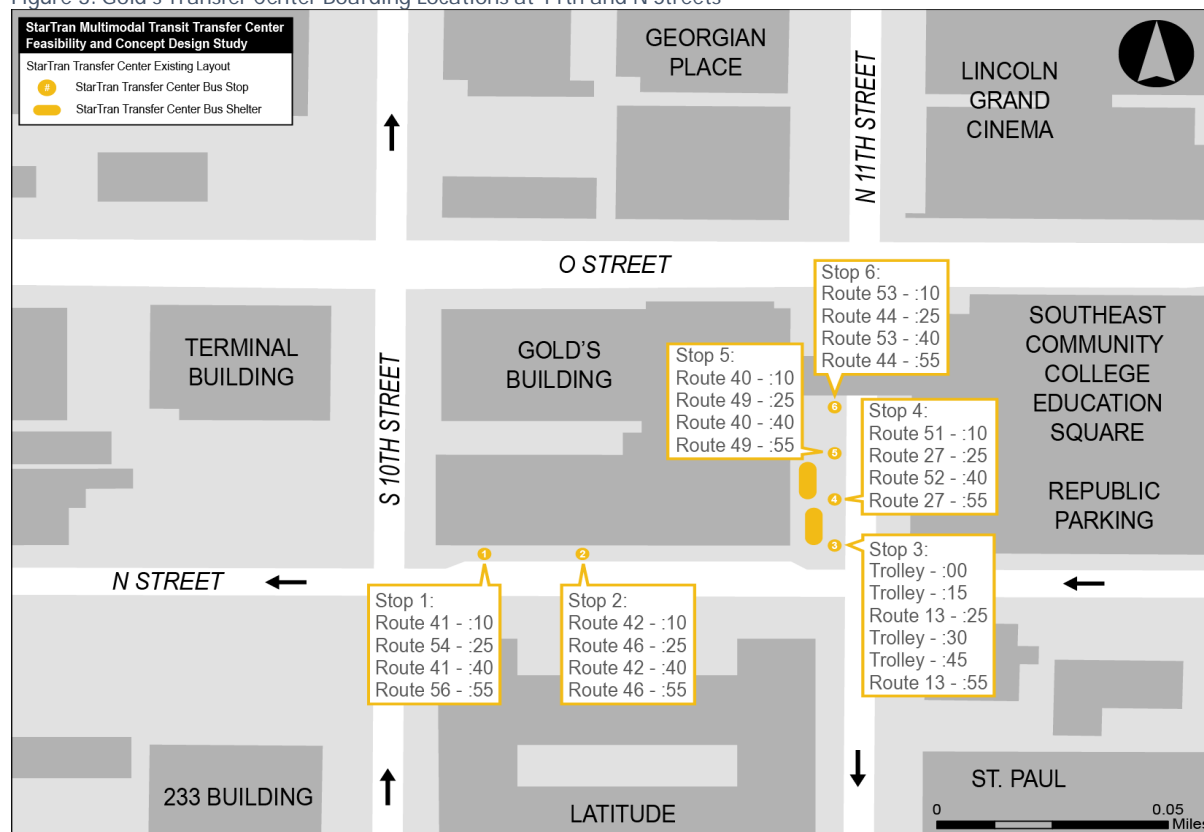
The MTTC Feasibility and Concept Design Study assessed multiple sites in downtown Lincoln to identify a new location for a transfer facility that can best serve StarTran and its riders. The Study collected community input to guide a transparent process to develop a needs-based assessment to inform selection of the site and amenities. A key goal was to improve mobility by integrating multiple transportation modes (buses, bikes, scooters, pedestrians, and others) and to investigate potential economic development opportunities. The Study developed estimated facility costs and reviewed potential impacts to the existing transit system.

2.1 MTTC Purpose and Need

Since the 1970s, StarTran has utilized the exterior of the 'Gold's Building' along the eastern block face of 11th Street and the southern block face of N Street as the primary transfer center for the fixed route transit system. Over time the configuration and available passenger amenities have adjusted. Today along 11th Street there are two enclosed passenger waiting shelters, trash receptacles, and next bus real-time arrival

signage. In 2015 a third enclosed passenger shelter was removed to provide higher visibility to the sidewalk area behind the shelters. Along the 11th Street side of the transfer center there are multiple benches located under an overhang off the building which provides shade and cover from precipitation. There is space for four buses to board and deboard passengers along 11th Street, and two boarding locations along N Street (Figure 3).

Figure 3: Gold's Transfer Center Boarding Locations at 11th and N Streets



StarTran currently has more fixed routes in its system than boarding / deboarding locations at the Gold's transfer location. This has caused StarTran to develop a network schedule that splits its timed, or 'pulse', transfer. Buses arrive at one of the six numbered boarding locations at four times throughout the hour:

- : 10 after
- : 25 after
- : 40 after
- : 55 after

This staggered pulse makes transferring between routes confusing for passengers as well as causing inconvenient additional transfer time to their daily trips.

The Gold's transfer location is limiting to StarTran if new routes are to be added to the transit system in the future. StarTran needs a transit center that can both accommodate current route operation needs and accommodate options for future transit network growth.

Safety and security have become concerns at the Gold's location in recent years causing StarTran to hire off-duty Lincoln Police Department officers to provide security at the transfer facility during the morning

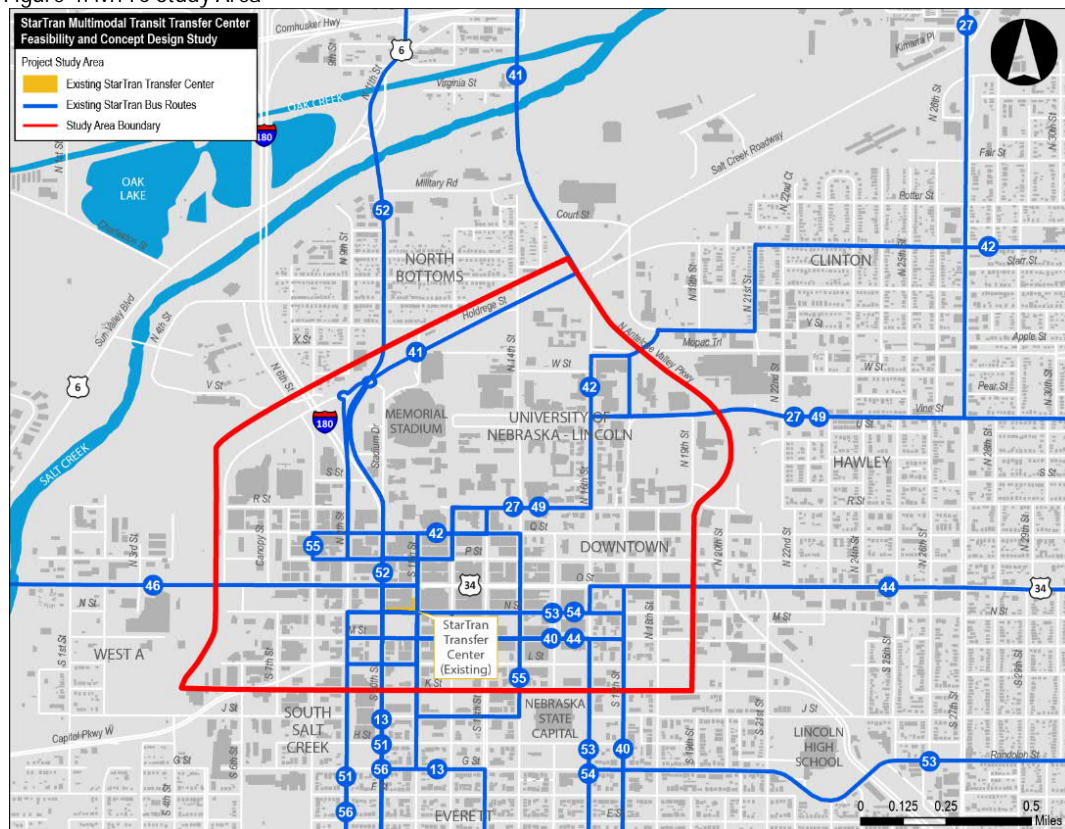
and evening peak periods of the day. The site offers limited lighting in the evenings and constrained visibility from the street with views obstructed from the two enclosed passenger shelters along 11th Street. The presence of on-site police security has helped, but passenger safety and security remain an on-going concern at this location.

The purpose of the MTTC Feasibility and Concept Design Study is to locate and develop detailed plans for a new Downtown transit center that can support StarTran bus operations, provide for future system expansion, improve operational efficiency, reduce transfer waiting times, and improve StarTran customer safety and comfort. The following report details past planning efforts related to the development of a new downtown transit center, assesses peer transit center facilities and lessons learned, identifies a preferred location for the MTTC and develops conceptual layouts that can best address the needs of StarTran and its passengers utilizing the transit system in Lincoln.

2.2 Study Area

The study area for the MTTC Feasibility and Concept Design is focused on Downtown Lincoln and includes the University of Nebraska – Lincoln (UNL) main campus. The study area is bounded by Salt Creek Roadway on the north, Pinnacle Arena Drive on the west, K Street on the south, and Antelope Valley Parkway on the east (Figure 4). Downtown Lincoln is a primary destination for many StarTran riders and also has the greatest concentration of residents and jobs in the greater Lincoln metro area. For transit service to maintain its operational efficiency it was a critical factor that the future transit center remains in this vibrant and busy area to best serve the mobility needs of the community.

Figure 4: MTTC Study Area



2.3 Study Goals

Early in the MTTC Feasibility and Concept Design Study, an Advisory Committee was formed and comprised of transit users, bus operators, key community stakeholders, and City of Lincoln staff to guide the study and serve as a sounding board for transit center concepts and other impactful decisions. At the outset, the Advisory Committee established the direction for the study by defining the MTTC project objective and project goals that would drive the study as it developed.

Project Objective:

Develop a plan and concept for a new Multimodal Transit Transfer Center in Downtown Lincoln that will enhance StarTran passenger experience, improve safety, catalyze new economic development opportunities, attract federal capital funding, and be operational in the next five years.

Project Goals:

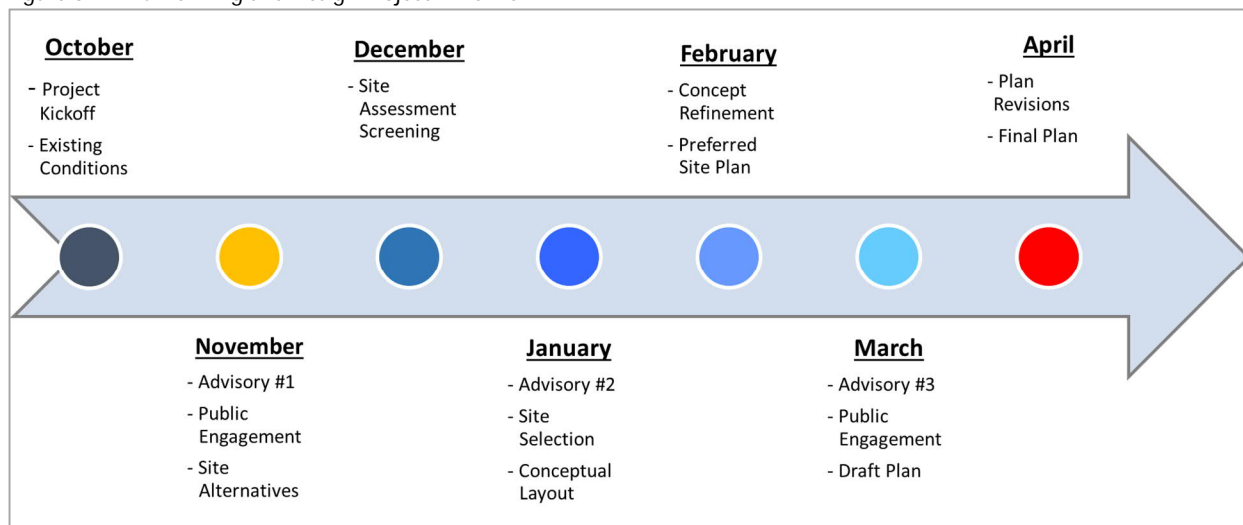
1. MTTC should reflect needs of StarTran passengers, stakeholders, and the greater Lincoln community.
2. The new MTTC facility will be designed with sustainable best practices, and examine opportunities for LEED Certification or include sustainable features.
3. The new MTTC facility should accommodate multiple mobility services that include, but are not limited to buses, pedestrians, cyclists, electric scooters, Transportation Network Companies (i.e. Uber/Lyft), Inter-City Commuter Bus, Bus Rapid Transit, and Autonomous Vehicles.
4. Improve safety, comfort, and convenience for StarTran passengers.
5. MTTC should improve StarTran operational efficiency and reliability.
6. The MTTC feasibility study will investigate opportunities for mixed-use, joint development, or other forms of Transit Oriented Development.
7. The new MTTC should be flexible and adaptable as infrastructure and passenger needs evolve in the coming years.
8. A new MTTC should provide equitable access for users of all ages and abilities to multiple mobility options that will improve availability for opportunities across the City of Lincoln.
9. The MTTC plan should be developed to attract federal capital funds and meet requirements of those funding programs.

The overall objective and goals were used throughout the planning project to set expectations and to develop an understanding of the benefits of the MTTC when successfully been completed.

2.4 Project Timeline

The MTTC study was initiated in October 2019 with scheduled completion in the spring 2020 (Figure 5). The seven-month project was targeted to complete in time to support StarTran and the City of Lincoln with submission of a construction funding grant through the United States Department of Transportation's (USDOT) competitive Better Utilizing Investment to Leverage Development (BUILD) grant program.

Figure 5: MTTC Planning and Design Project Timeline



The MTTC project worked through a process of examining existing conditions for transit in Lincoln and the greater downtown area, identifying multiple location alternatives for the future MTTC, selecting the most appropriate site to build the new transit center, and developing site planning concepts to arrive at a preferred MTTC solution that would achieve the project objective and goals. Throughout the planning study, two opportunities were offered to gather public input on the project and to provide StarTran riders and other stakeholders information on the project. As noted earlier, an Advisory Committee was used to guide the project and that group met three times throughout the project. The details and findings from this MTTC study process are detailed in the pages that follow.

2.5 What is a 'Transit Center'?

Transit Centers may be known by many different names or terminology such as transfer center, mobility hub, depot, metro center, and many others. At the most fundamental level a transit center is a facility that provides for the safe, convenient, and efficient transferring of passengers between transit routes and modes of transit. In the case of Lincoln this would mean providing a centralized location to transfer between all StarTran routes and connecting with bike share, scooters, intercity bus routes, as well as walking to final destinations.

Transit centers are highly context sensitive and come in a wide variety of form and function depending on modes of transit served, passenger volumes, availability of funding, opportunities for joint or adjacent development, and other factors.

Many of the most common functions of transit centers include:

- Facilitate transferring between bus routes off street – provide spaces for buses or other transit modes to allow centralized movement between routes and minimize waiting time.
- Provide protection from elements – offer both indoor and outdoor protection from rain, snow, wind, heat, etc. to make using transit and transferring more comfortable.
- Accommodate seating – provide adequate space to sit and relax while waiting to board a bus or other transit modes to offer comfort and convenience to riders.

- Enable driver relief – provide private space for transit operators to take a break between runs of their routes to help keep them refreshed and alert and to make the job more enjoyable and less stressful.
- Provide maps, wayfinding, and information – provide customers with information about arrival times as well as maps of the surrounding area to enable easy connections to nearby businesses and other services; accomplished through static maps, interactive touch screen kiosks, or television display boards.

Transit centers work to improve passenger and transit system safety by moving transfer activity off street and consolidating pedestrian activity into a controlled area. Security can be enhanced for transit riders through design elements, lighting, cameras, and other features built into the facility design like open lines of sight. Transit centers can also improve ridership by lowering waiting time while transferring between routes and shortening overall travel times. These facilities may also enhance the image and perception of transit systems, which can improve ridership trends and overall customer satisfaction.