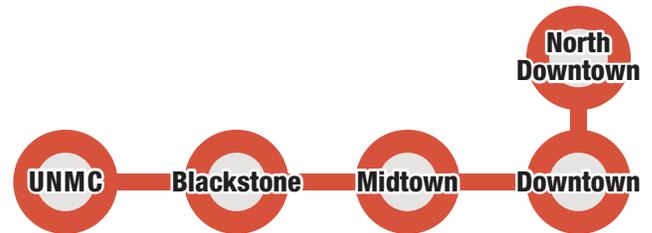




OMAHA

STREETCAR

Advanced Conceptual Engineering



Reasons why cities build streetcar systems

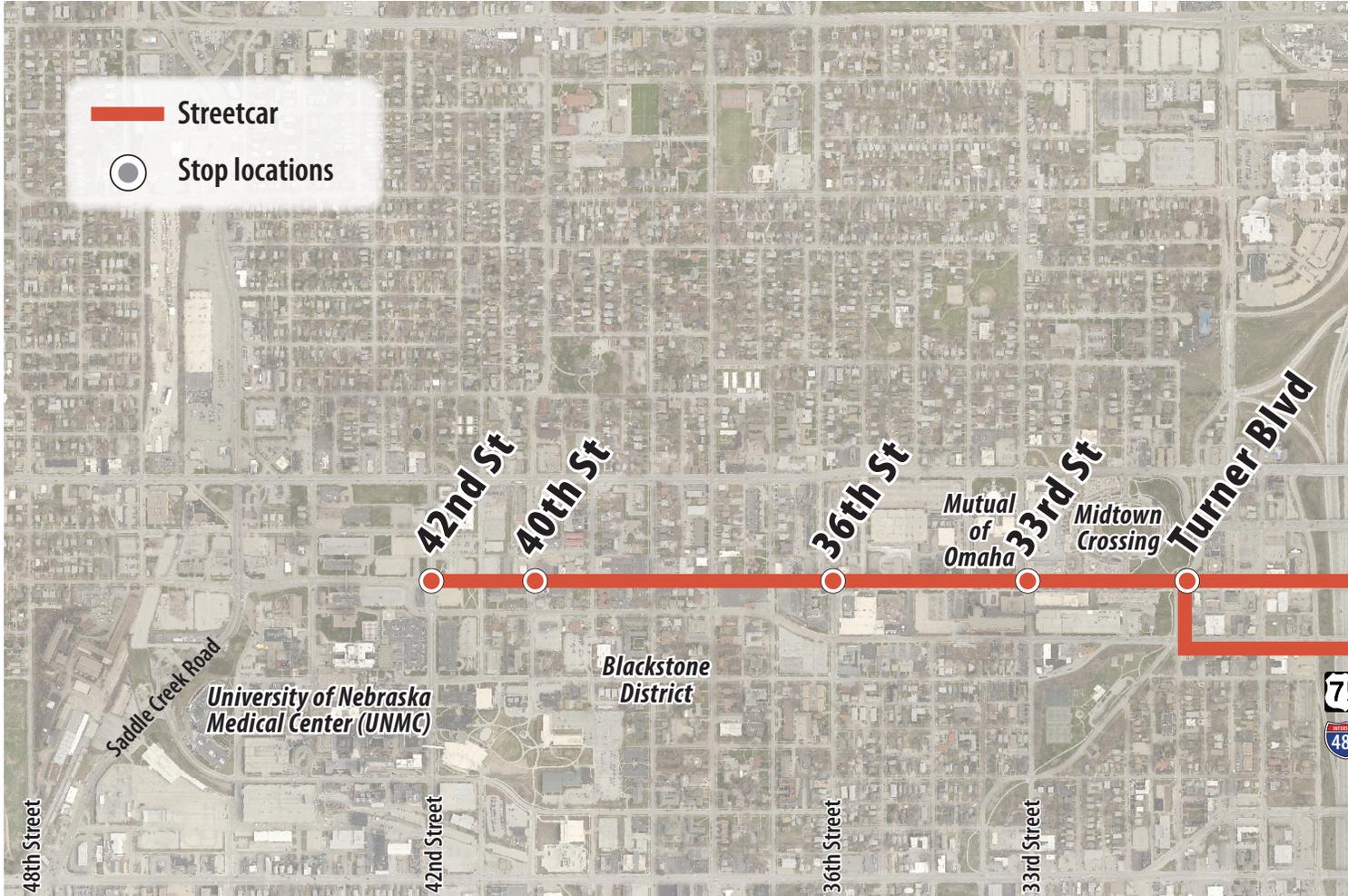
- Improve mobility and support economic development
- Link people to jobs, education, commerce, healthcare, and improve circulation for special events
- Provide frequent service that is easy to understand by residents and visitors alike
- Support a park-once strategy and reduce the need to own a car, thereby freeing up land allocated to surface parking for higher and better uses
- Shift development patterns to maximize the tax base
- Bring people and their destinations closer together

Streetcar is...

An **electric** rail vehicle that operates on tracks
 Vehicles are **65 to 90 feet** in length
150 to 225 passengers per vehicle
Low-floor vehicle with multiple doors
Powered by overhead wire or battery
Operates in mixed traffic or transit lanes
 Serves stops **every 1/4 mile**

Project Basics are...

3 miles (5.5 track miles)
13 stops
10 minute frequency in peak
15–20 minute frequency in off-peak
19 hour service span on weekdays
12–18 hours service span on weekends
5 streetcar vehicles
17–19 minutes travel time from end to end
Integrated into the existing transit system



Project Purpose and Background

The general purpose as outlined in the *Central Omaha Transit Alternatives Analysis (AA)* study is to improve transportation connections for residents, employees, and visitors to employment centers, educational facilities, various services, and areas of interest while serving as a driver for employment growth and economic development. The following studies all concluded that an enhanced transit system was necessary for Downtown and Midtown to reach their full potential:

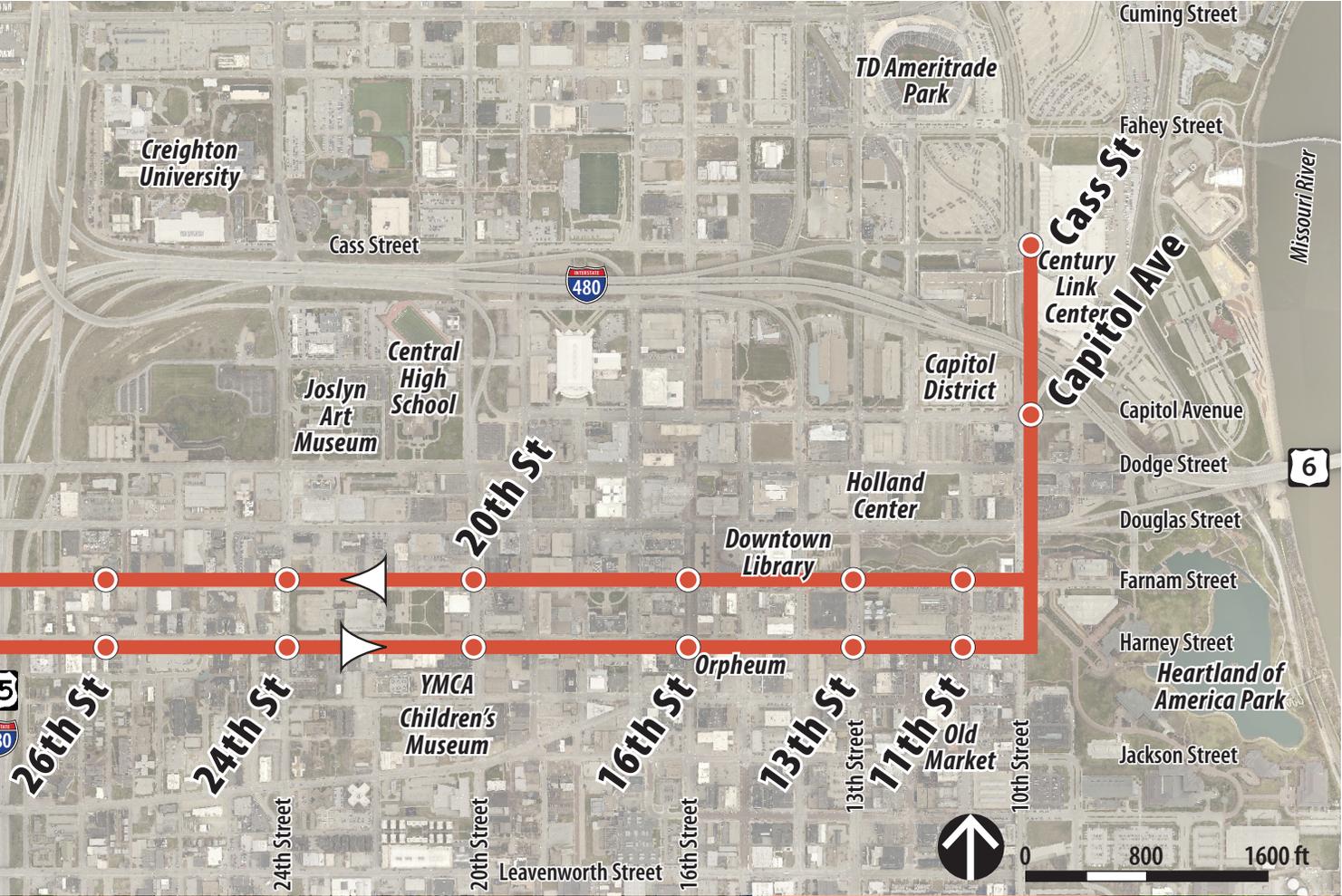
- ❖ *Destination Midtown* (2005)
- ❖ *Downtown Omaha Master Plan* (2009)
- ❖ *Omaha Transportation Element* (2012)

The area evaluated is the highest employment corridor in Omaha but it lacks high-frequency transit service. The area also exhibits an imbalance in parking availability and capacity which has resulted in significant consumption of land in the corridor for

parking which limits office, residential, and commercial development and thus prevents Downtown and Midtown from reaching their full potential and tax base. The AA study outlined the need for bus rapid transit to serve longer transit trips in a more efficient manner along the Dodge Street corridor from 10th Street to Westroads, and the need for a Downtown/Midtown high-frequency transit connector system. The streetcar was identified to address not only the transportation needs, but also a catalyst for higher density growth.

Funding

In 2016, a Financial Assessment was completed that provided information related to funding options for the streetcar. Extensive information was gathered from similar projects throughout the country and localized information to identify and assess 17 funding sources ranging from federal, state, and local funds to corridor-specific revenue capture demonstrating the project is financially feasible. Three combinations were given to illustrate potential funding scenarios, and each



emphasized funding from local business contributions and corridor-specific value capture scenarios. Value capture is a type of public financing that recovers a percentage of the value that public infrastructure (streetcar) generates for private property. The next stage of the project will require a convening of corridor businesses and property owners, representatives of charitable organizations as well as the City of Omaha to determine the best financial package for the project.

Capital Cost

- ❖ \$169.8 million, based on a 2021 completion date
- ❖ Current cost estimate is a conceptual engineering estimate based on site specific conceptual design
- ❖ Includes design, construction, vehicles, right-of-way, utility relocations, and construction oversight
- ❖ Previous cost estimate (\$156 million) was a planning level cost estimate based on peer streetcar systems completed prior to 2014





Kansas City Streetcar

Capital Cost Summary

Item	Cost in 2021 (in thousands of \$)
Guideway and track	22,910
Stops	4,190
Vehicle maintenance facility	16,180
Site work and utilities	36,360
Systems (traction power, traffic control, and communications)	23,520
Construction Subtotal	103,160
Right-of-way	290
Streetcar vehicles	26,460
Project administration, design, and construction management	24,500
Subtotal	154,410
Contingency	15,440
TOTAL	169,850

Capital Cost Comparison (per track mile and route mile)

Project	Cost per track mile in 2021 (in millions of \$)	Cost per route mile in 2021 (in millions of \$)
Omaha	30.9	53.1
Selected projects	28.5–41.4	33.6–53.8

Note: Selected Projects are streetcar projects as compiled in the 2016 Community Streetcar Coalition Draft Cost Comparison Report.

Operating Cost

- ❖ \$7.4 million annually, as identified in Financial Assessment (2016) and inflated from AA study (2014)
- ❖ Planning level estimate developed using National Transit Database (NTD) operating and financial data

Traffic and Parking

- ❖ Minimal impact to traffic and on-street parking
- ❖ A typical stop will replace 3–6 parallel parking spaces
- ❖ Additional parking impacts with conversion of angle parking to parallel parking on north side of Farnam Street in Midtown (to avoid utilities)

Next Steps

- ❖ Funding and Finance Plan
- ❖ Preliminary Engineering
 - ◆ Prepare operating plan
 - ◆ Update ridership estimate
 - ◆ Begin vehicle procurement
 - ◆ Partner with NDOT on I-480 bridge replacements
- ❖ Final Design and Construction

