Kansas City Streetcar



KCITE Luncheon

September 12, 2013

The Kansas City Streetcar Experience

All Aboard…

Early 2011 Initiated Alternative Analysis

End 2011 Alternative Analysis complete

Early 2012 Advanced Conceptual Engineering

Mid 2012 Initiated Environmental Assessment

The Kansas City Streetcar Experience

Picked up Steam…

Mid 2012 Initiated Environmental Assessment

Oct. 2012 Finalized EA & received FONSI

Dec. 2012 Completed ACE

Dec. 2012 TDD vote passed for funding

Jan. 2013 Began final design work

The Kansas City Streetcar Experience

Barreling Along…

July 2013 Begin Utility Relocation

July 2013 VMF Site Confirmed

July 2013 CM/GC Interviews – Selection

August 2013 60% Design Finalized

The Kansas City Streetcar Experience

Full Speed Ahead…

Sept. 2013 TIGER V Grant Awarded

Sept. 2013 Vehicle Manufacturer Announced

January 2014 Begin Track Construction

Summer 2015 Open for Revenue Service



Streetcar IS…

Designed to serve as urban circulator



Typical Urban Circulator

- shorter routes serving downtown & adjoining neighborhoods
- operates in mixed traffic
- more frequent service, smaller vehicles
- quick “on” and “off” the vehicle
- riders take shorter trips





Streetcar is NOT…

NOT Commuter rail or light rail or a metro-rail system

NOT Designed to serve longer trips from suburban area to downtown

Typical Commuter Rail/Light Rail

- Dedicated, exclusive right-of-way
- Longer distances between station stops
- Higher speeds
- Several rail cars in a “train”
- Longer distances served



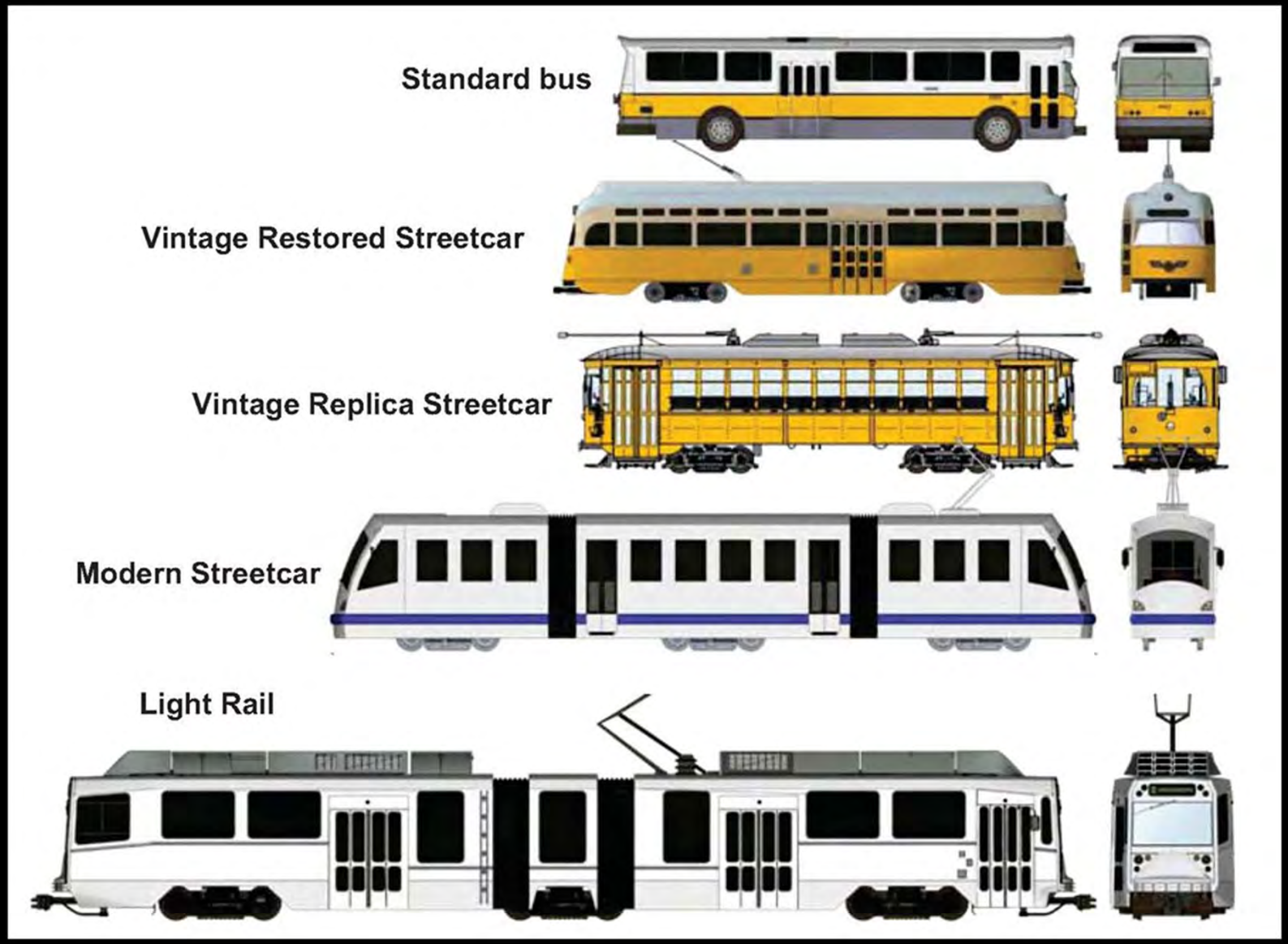
Urban Circulators

Modern Streetcar



- Generally electrically powered
- Fixed guideway (rail); shares traffic lane with autos
- From 110 to 150 passengers

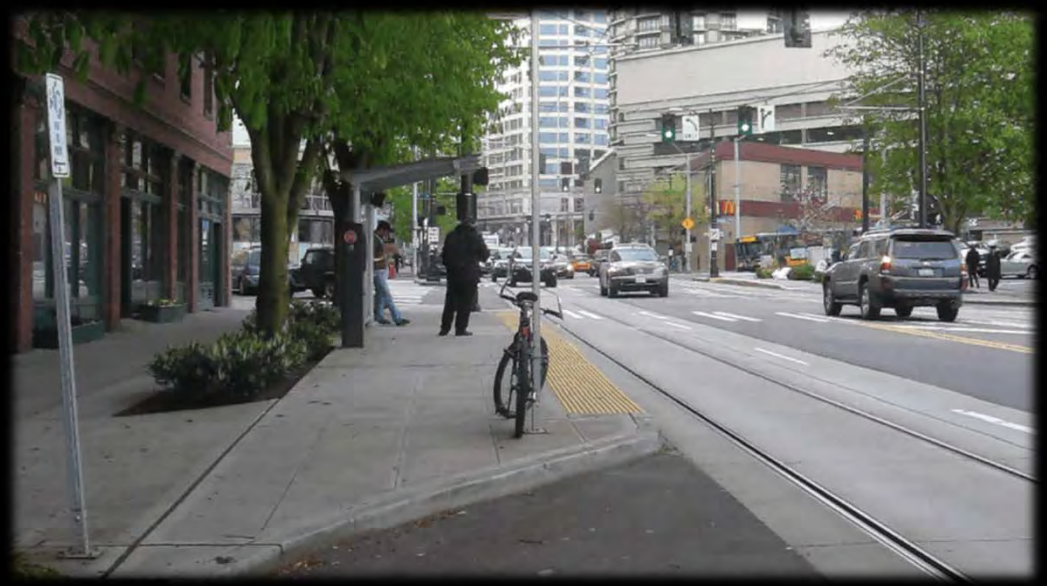
What is a Modern Streetcar?



Colorado Springs Streetcar Feasibility Study

Operating in Mixed Traffic……





Traveling Safely and Efficiently…..





With Minimal Impact on Parking…..





“Walk Extender” or “Pedestrian Accelerator”



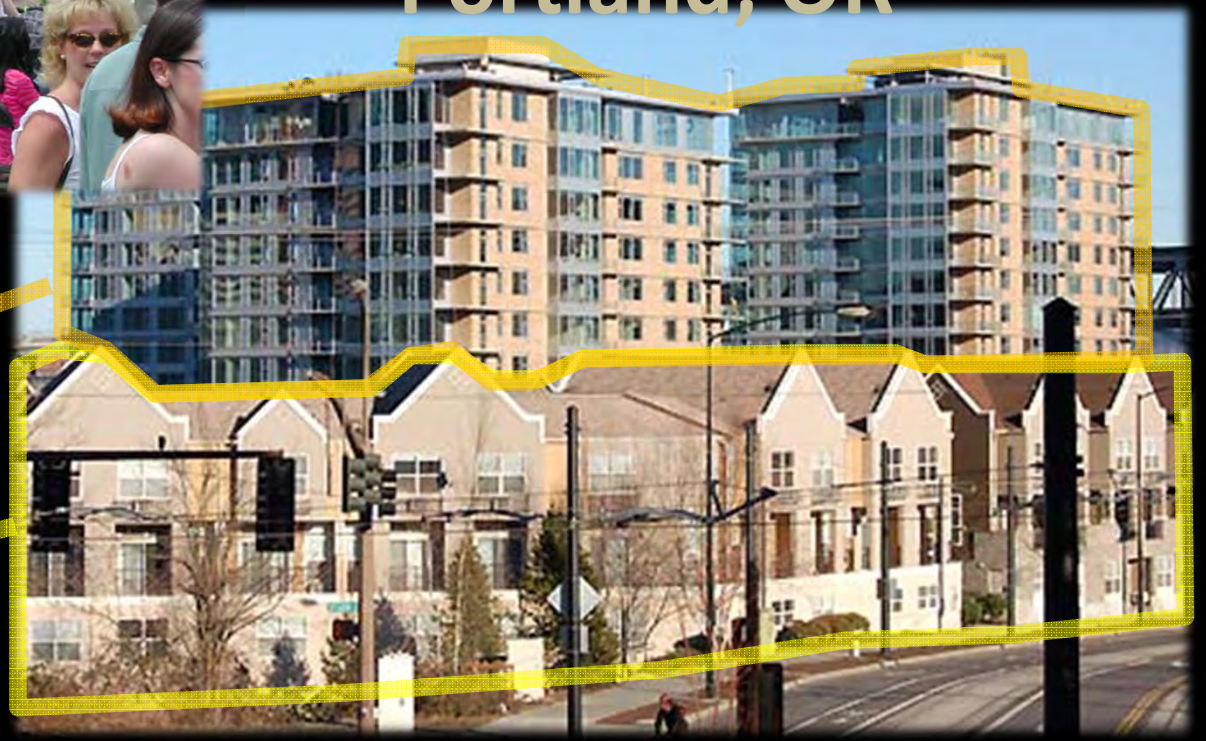
…urban circulator supporting urban livability

Not just a transportation tool…



…an urban economic strategy

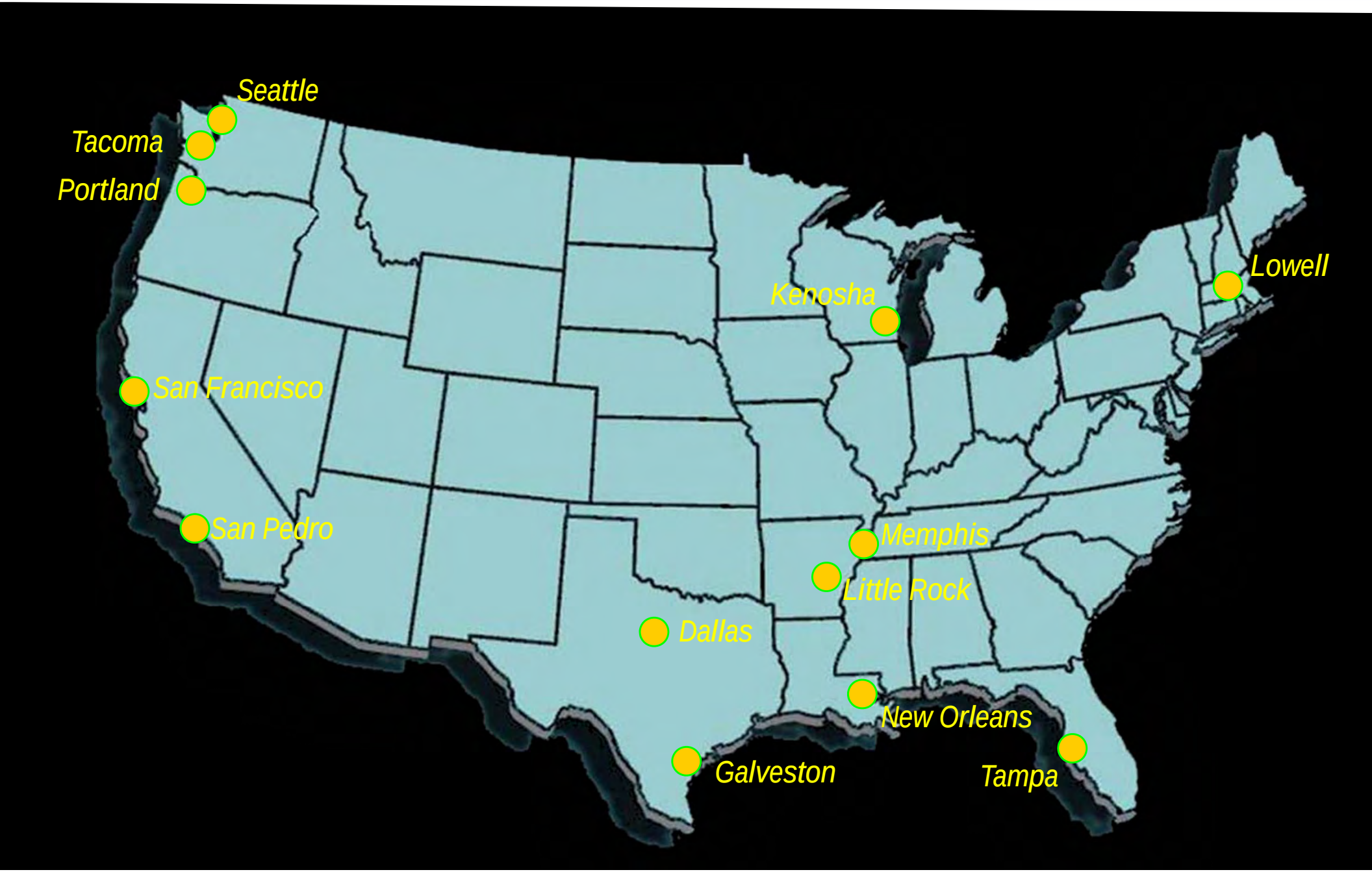
Portland, OR



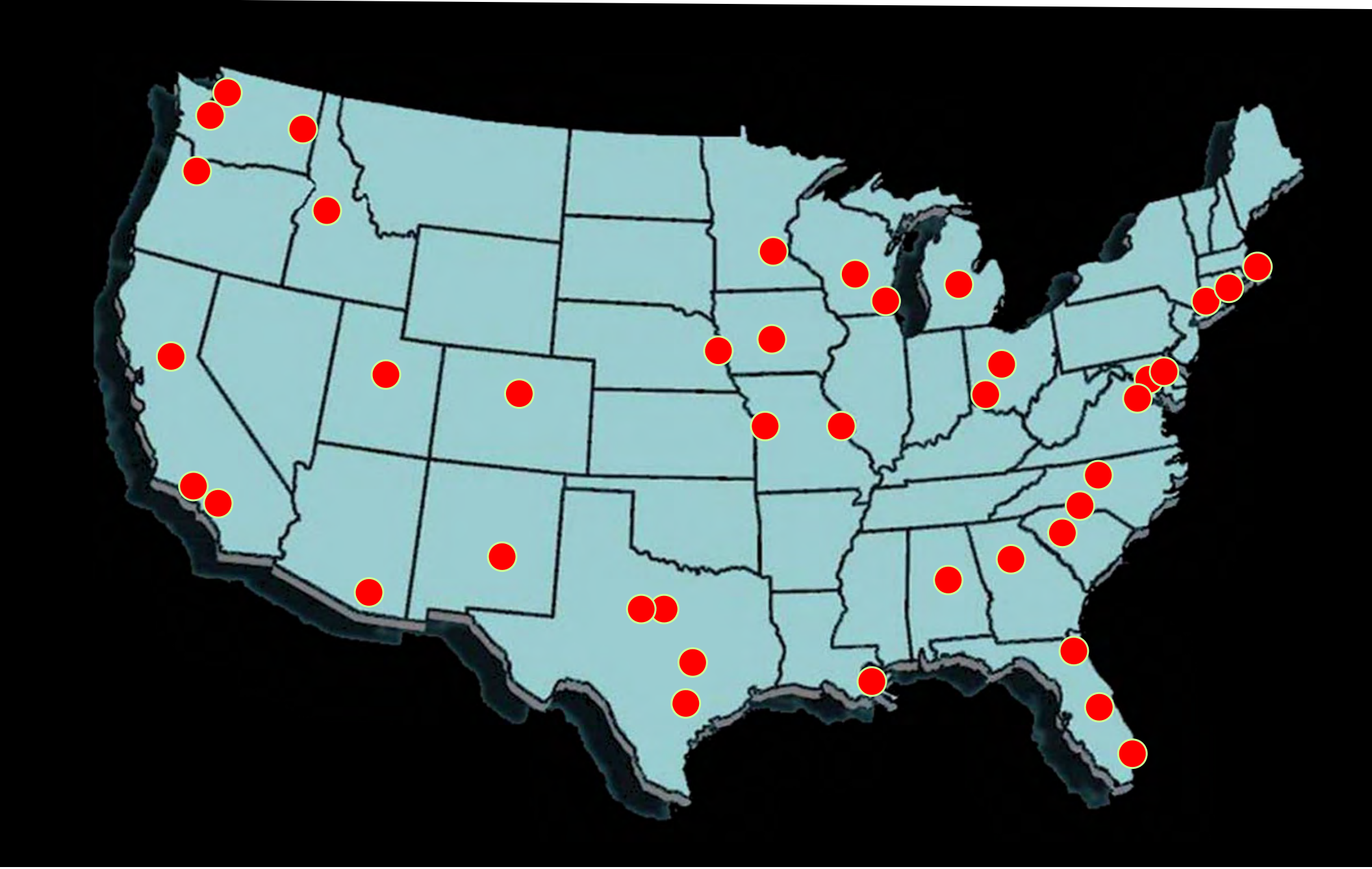
After streetcar

Before streetcar

U.S. Streetcar Systems in Operation (Modern and Vintage)



U.S. Communities Planning Streetcar Systems



Vehicles

















Kansas City Vehicle Options



Kansas City's Streetcar will likely be at the shorter end of the range (67-80 feet long).

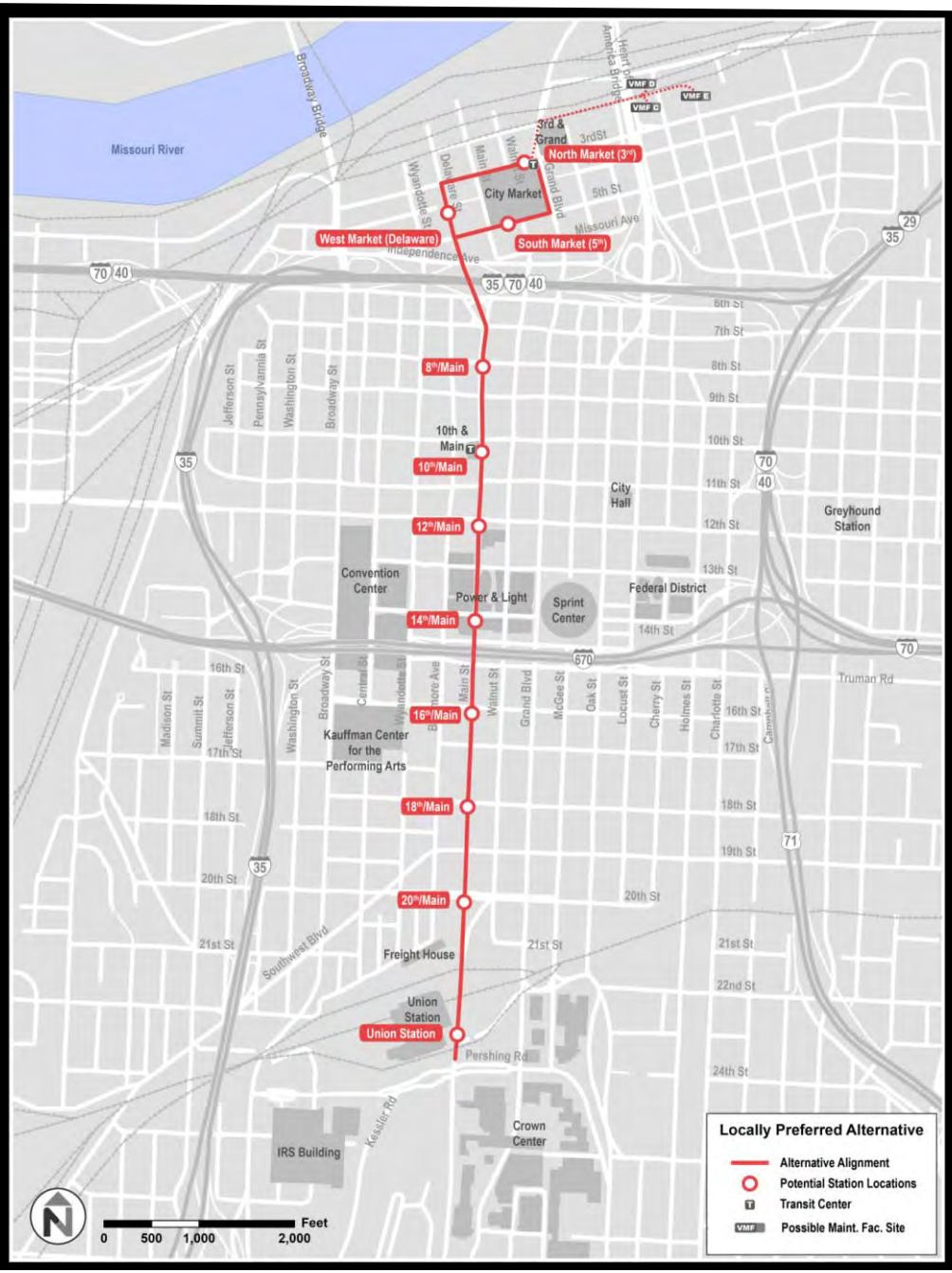
Interior will have a lot of standing room and will be customized to fit our citizen's needs.



Can operate in all weather conditions



Alignment



Streetcar Facts

2 mile corridor

3.9 miles of track

18 Stations

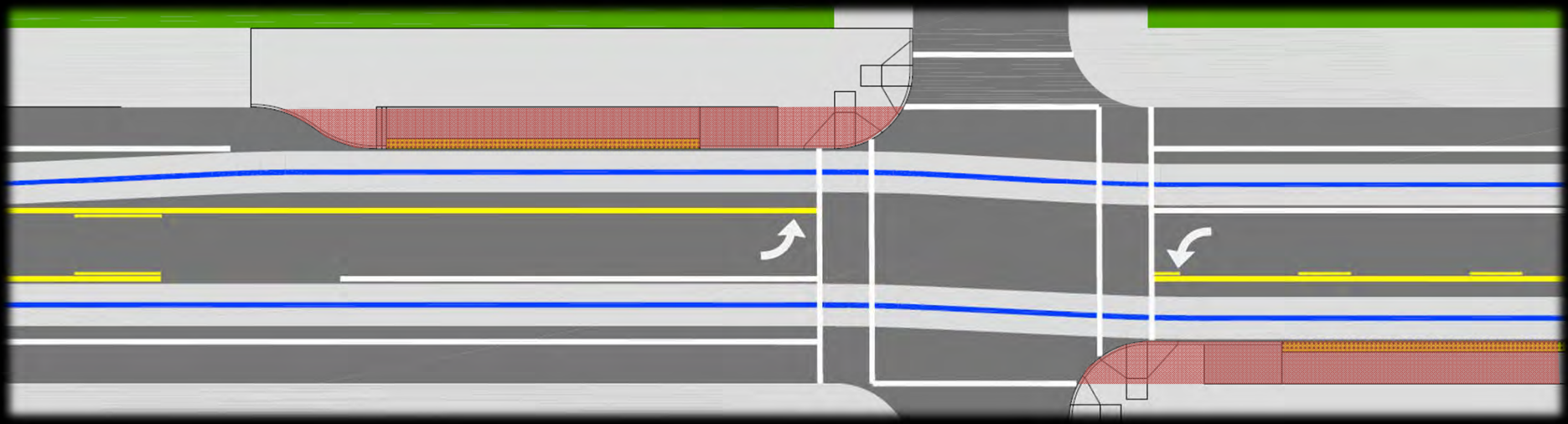
10 minute headways

7-days a week operations

4 Modern Streetcars

Stops





Stops

KC Streetcar Authority Aesthetics Committee approved station design on August 1, 2013



Stops & Stations

Every station platform will be equipped with:

- Station identifier/marker
- Seat wall

*Possibly Shelters





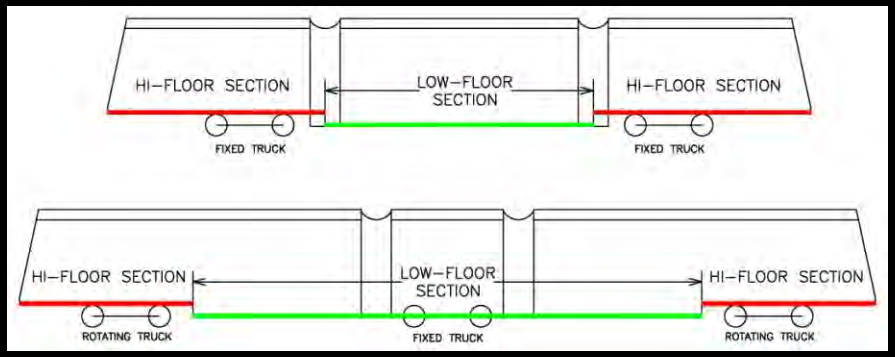
Two Shelter Sizes

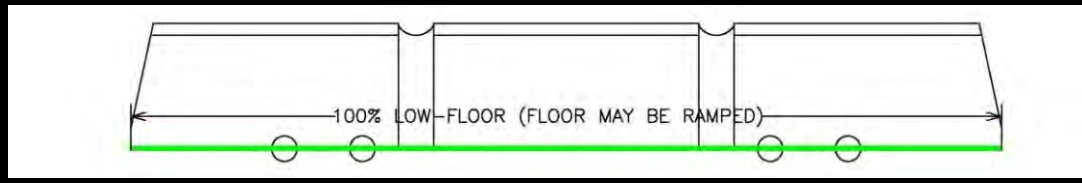
A square shaped frame for the River Market District

Rectangular frame in the Downtown and Crossroads Districts

Stops have level boarding







Parking





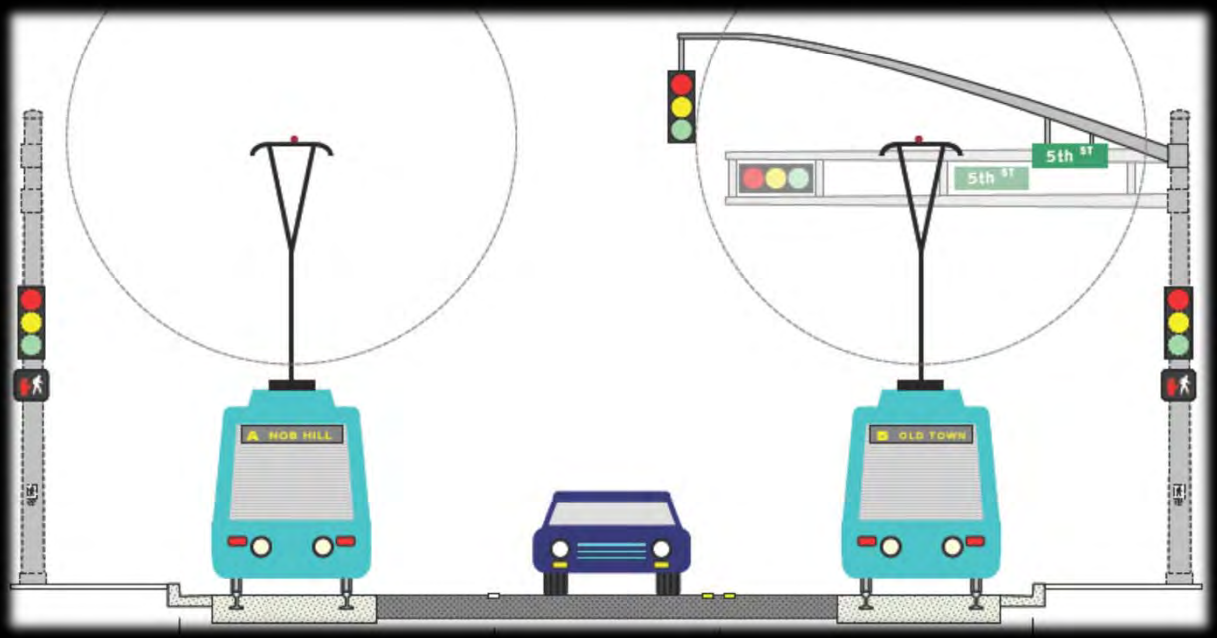




Photo: San Francisco Examiner

Existing Traffic Signals





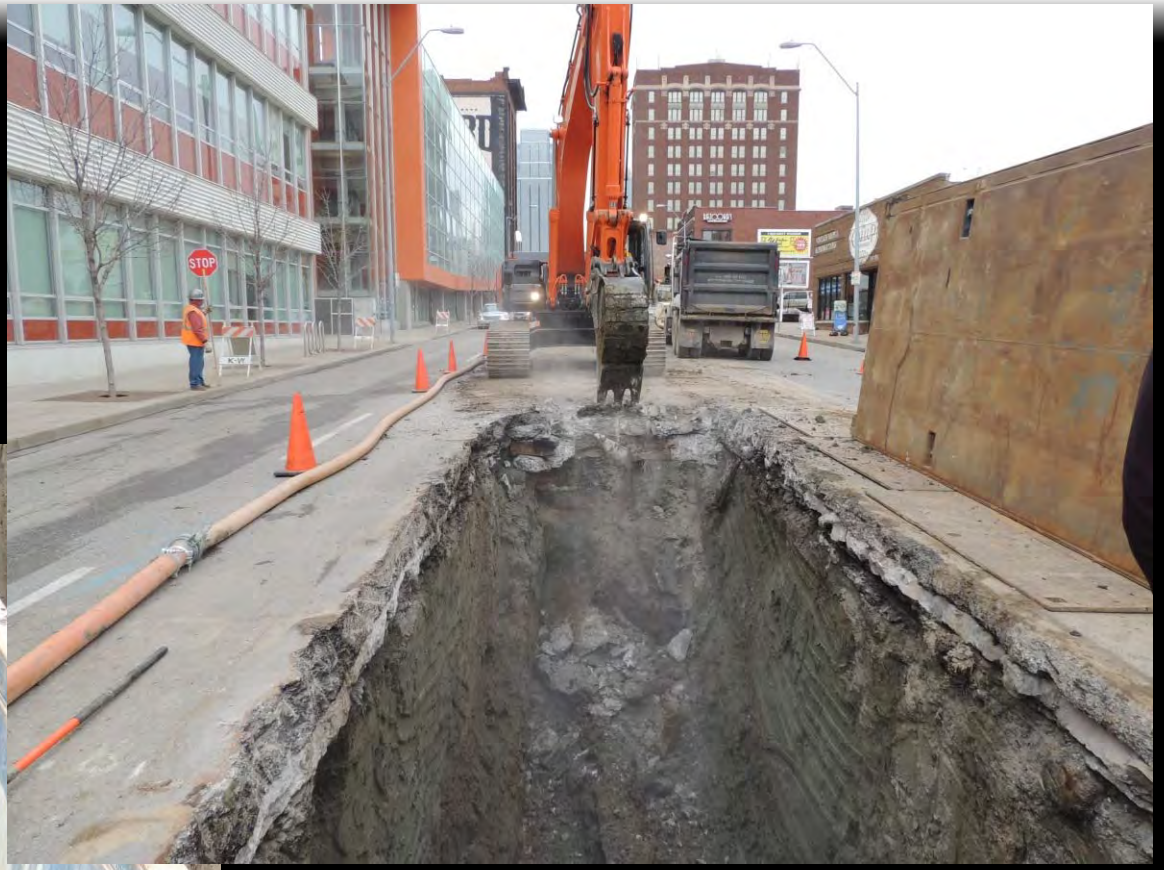
Substations







Utilities





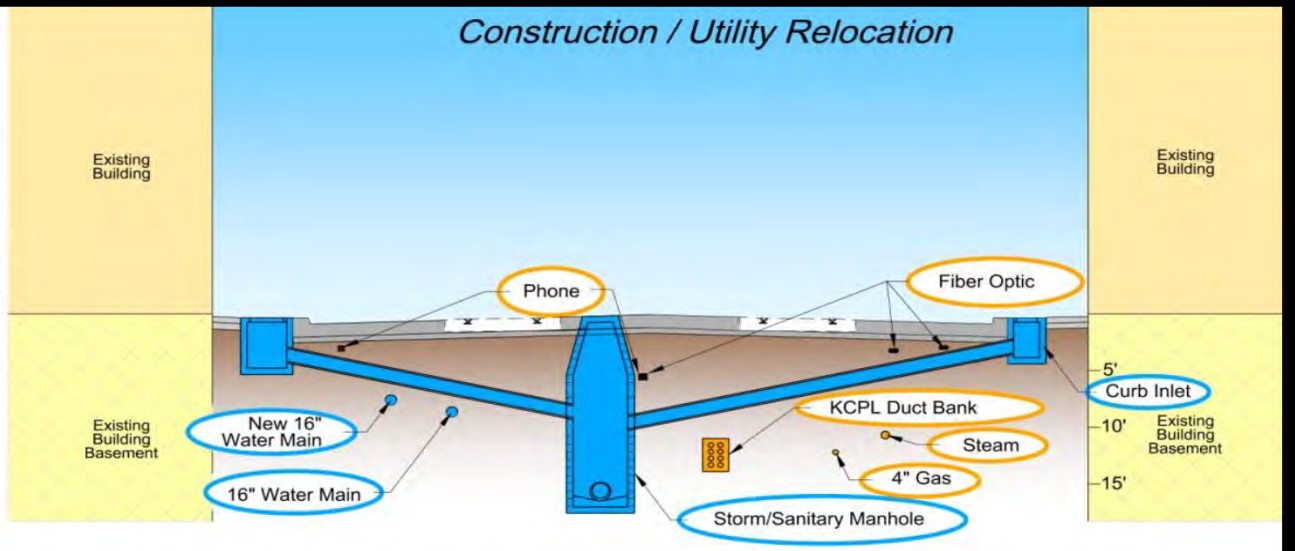
Utilities

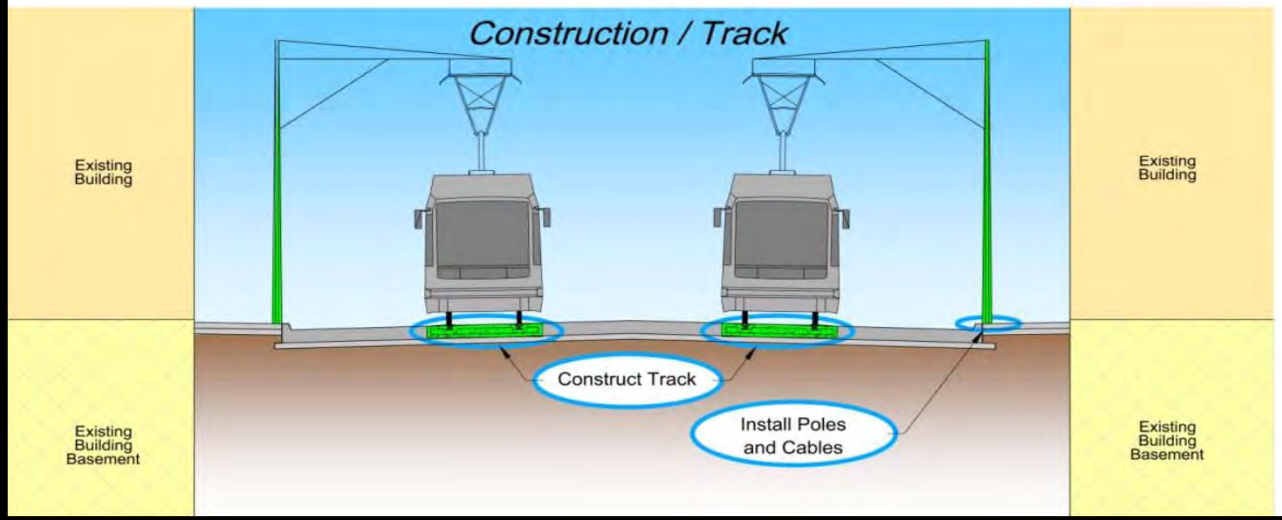
Construction / Utility Relocation

First Underground Utilities Have to Be Moved

1. City utilities (water lines) have to be moved from where future track will be located.
   - Sanitary sewer manholes will be reconstructed and sewer lines will be lined.
   - Storm sewer inlets will be relocated at station stops.
2. Private Utilities(power, fiber, gas, steam, and phone) in conflict will be moved away from where the future track will be located. The City highly encourages the private utilities to move their lines when street segments are closed for city utility relocations. However, the City cannot dictate when private utilities are moved.
3. Street pavement will be repaired after utilities are moved and other improvements made.

Approximate Construction Time: 2 to 8 weeks per 3 block section.





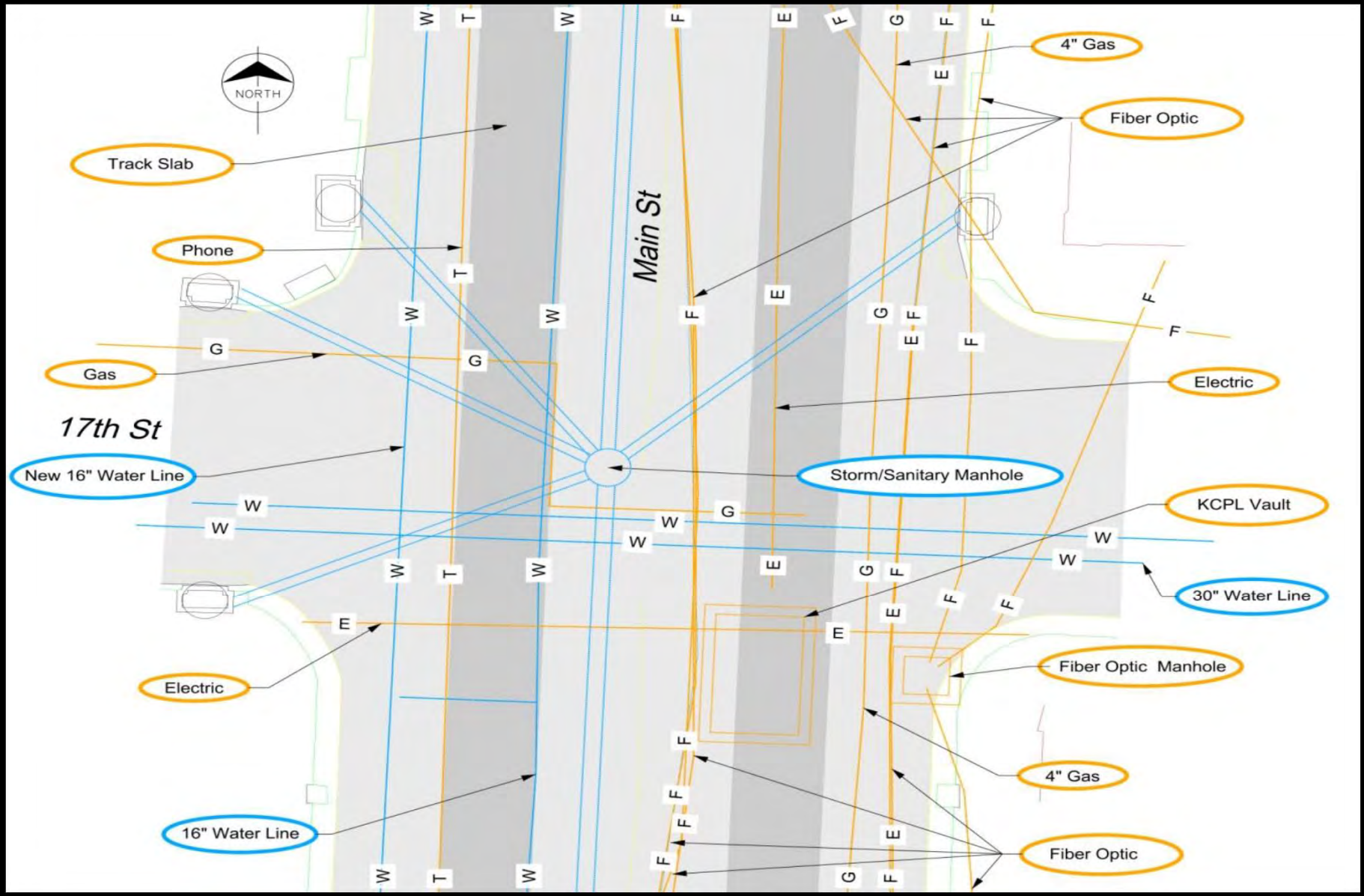
Construction / Track

Then power poles, cables and track will be installed

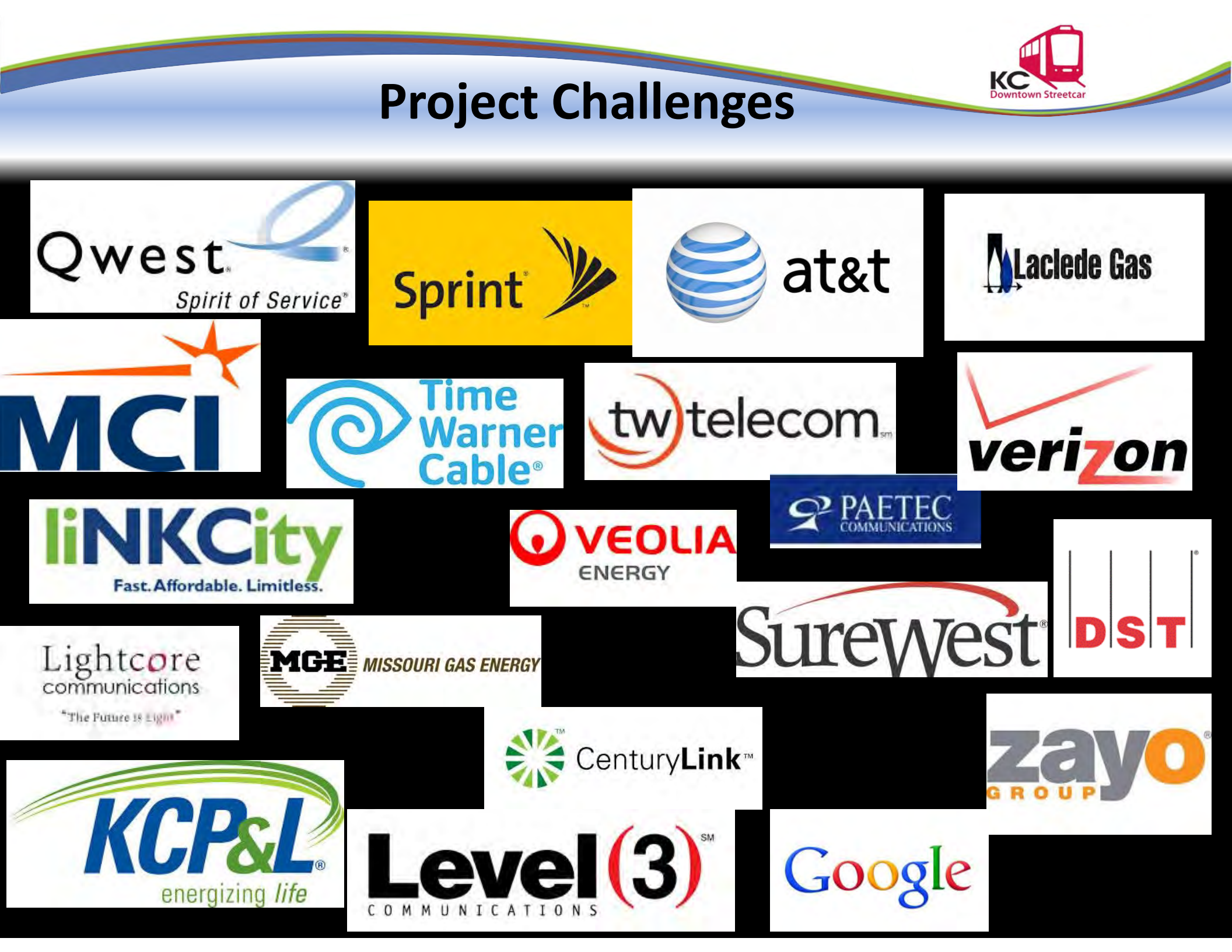
1. The contractor will install power poles and overhead cables to power the streetcars.
2. The contractor will pour slab concrete and then place the rail.

Approximate Construction Time: 3 to 4 additional weeks per block

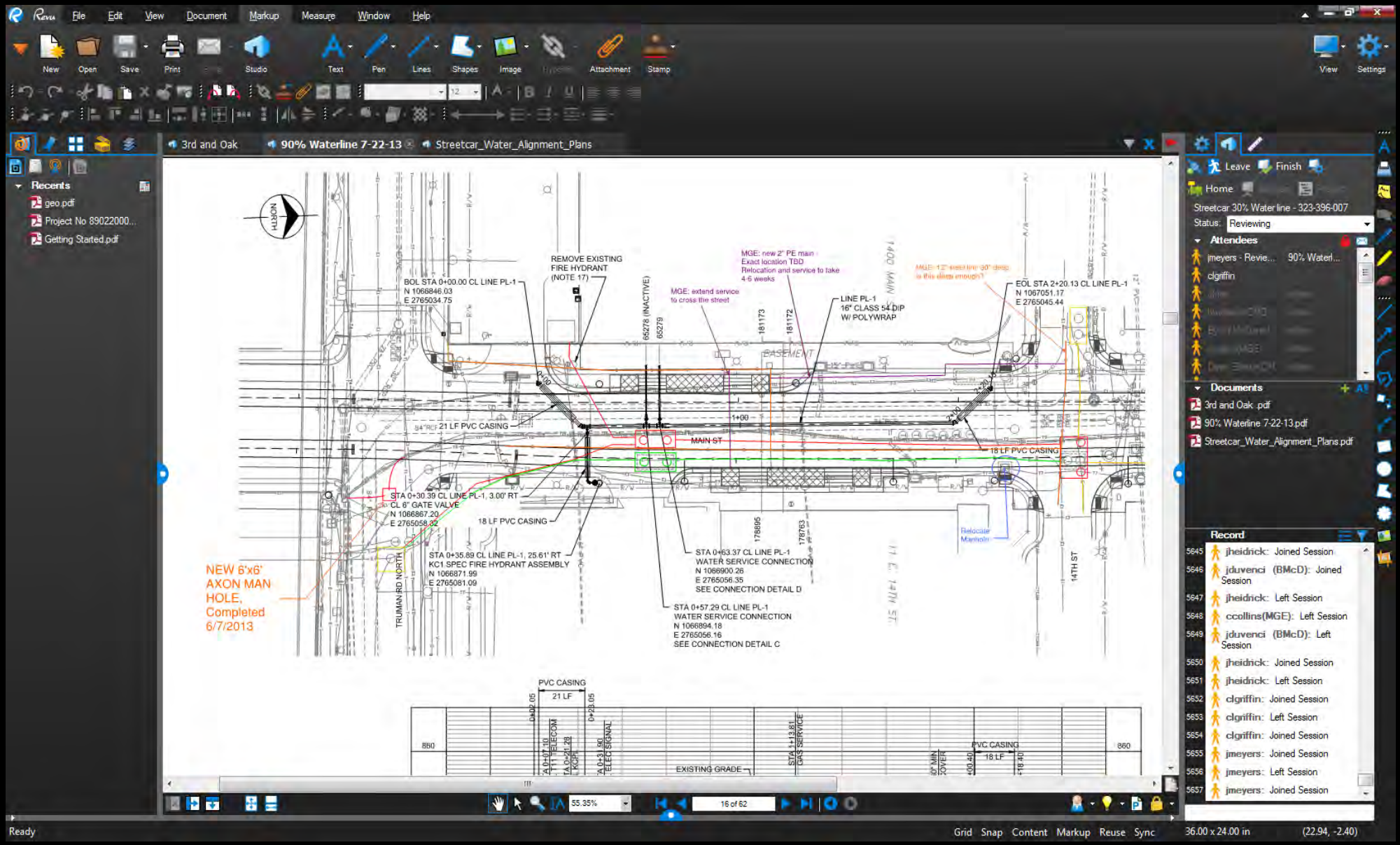
Utilities Downtown Kansas City



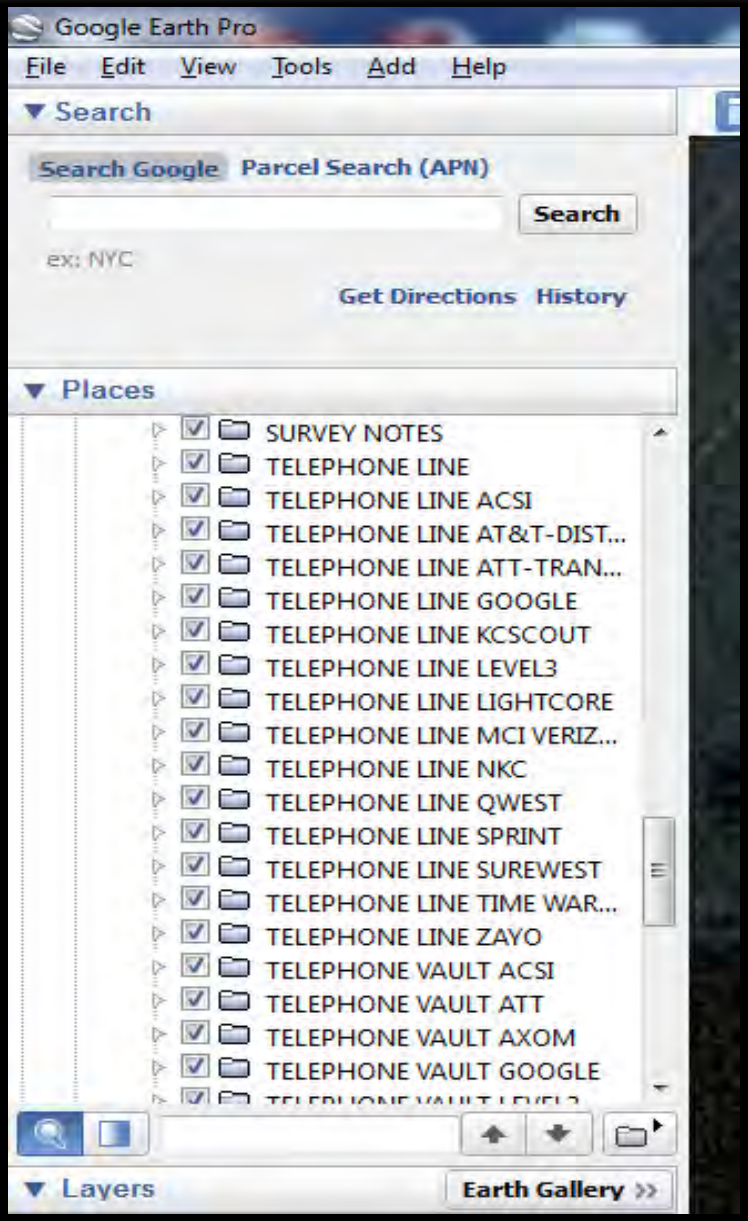
Project Challenges



Our Solutions (Bluebeam)



Our Solutions (Google Earth)

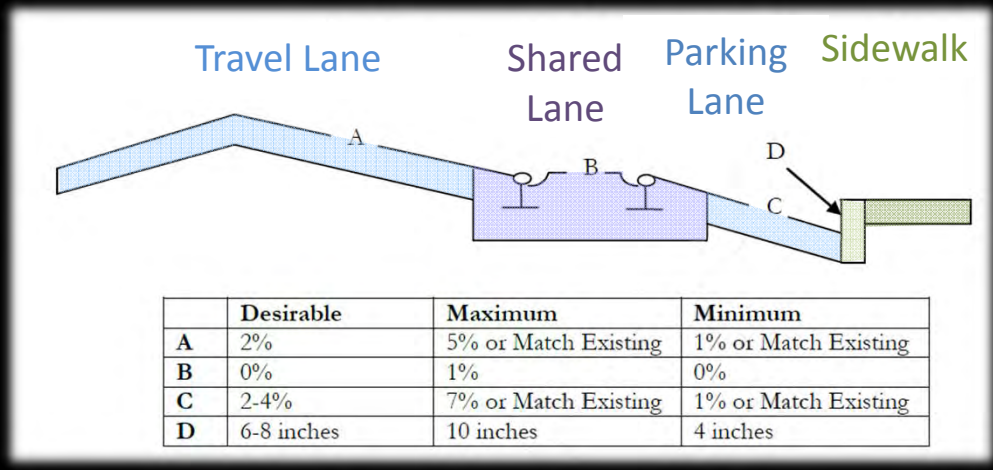




Google Earth and Drive Thru

Track Construction





	Desirable	Maximum	Minimum
A	2%	5% or Match Existing	1% or Match Existing
B	0%	1%	0%
C	2-4%	7% or Match Existing	1% or Match Existing
D	6-8 inches	10 inches	4 inches



Typical Streetcar Rail Types



Block Rail – Mainline Rail for Kansas City



Stop Construction





Vehicle Maintenance Facility

600 E. Third Street



Store and maintain vehicles

3 active vehicles and 1 spare
2 level floor plan
Mechanical Mezzanine



Awards

July 2013- FTA's Outstanding Achievement Award for Excellence in Environmental Document Preparation in the EA Category



September 2013 – $20 million TIGER V Grant

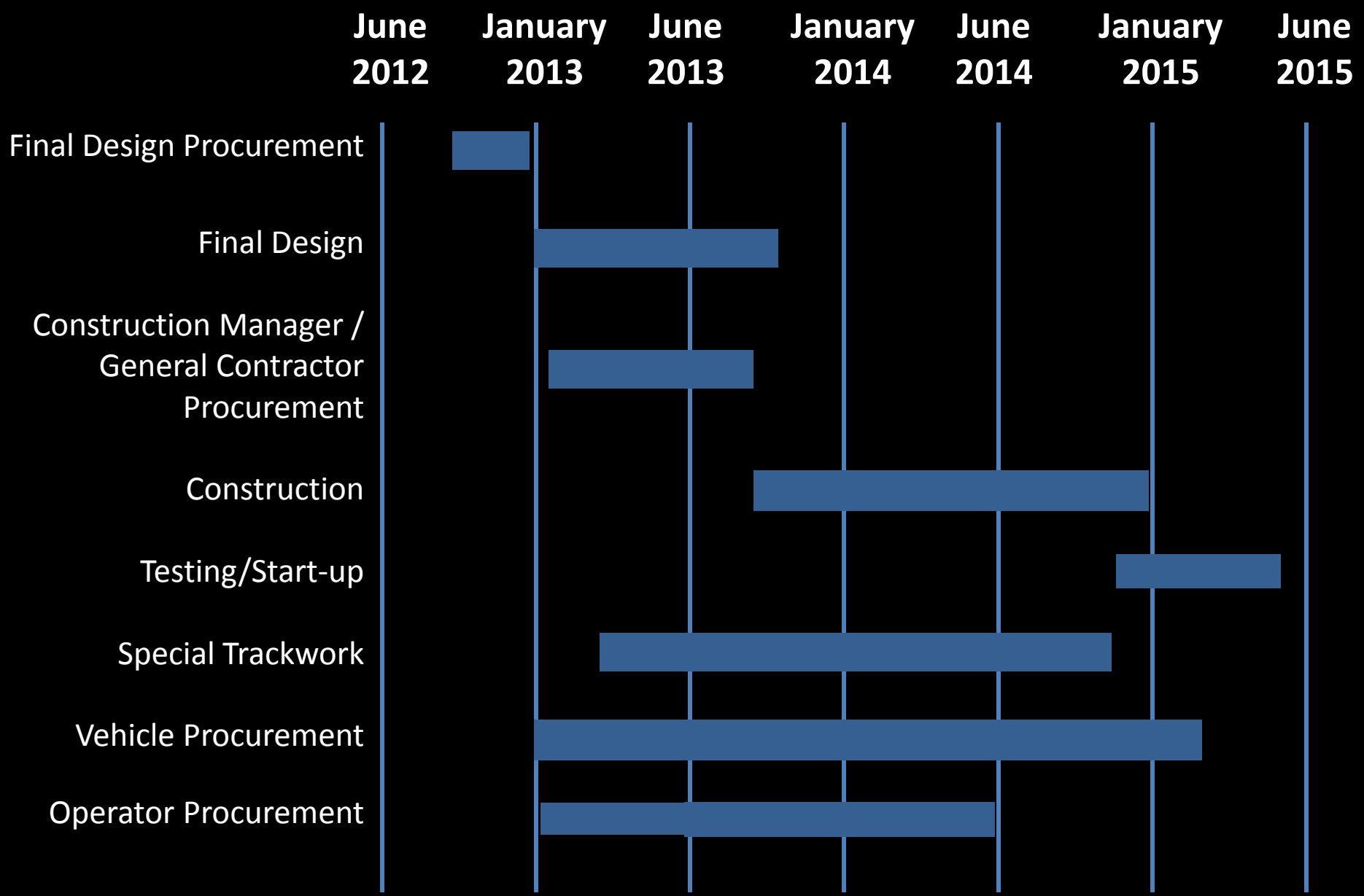


U.S. Secretary of Transportation, Anthony Foxx and U.S. Congressman, Emanuel Cleaver II

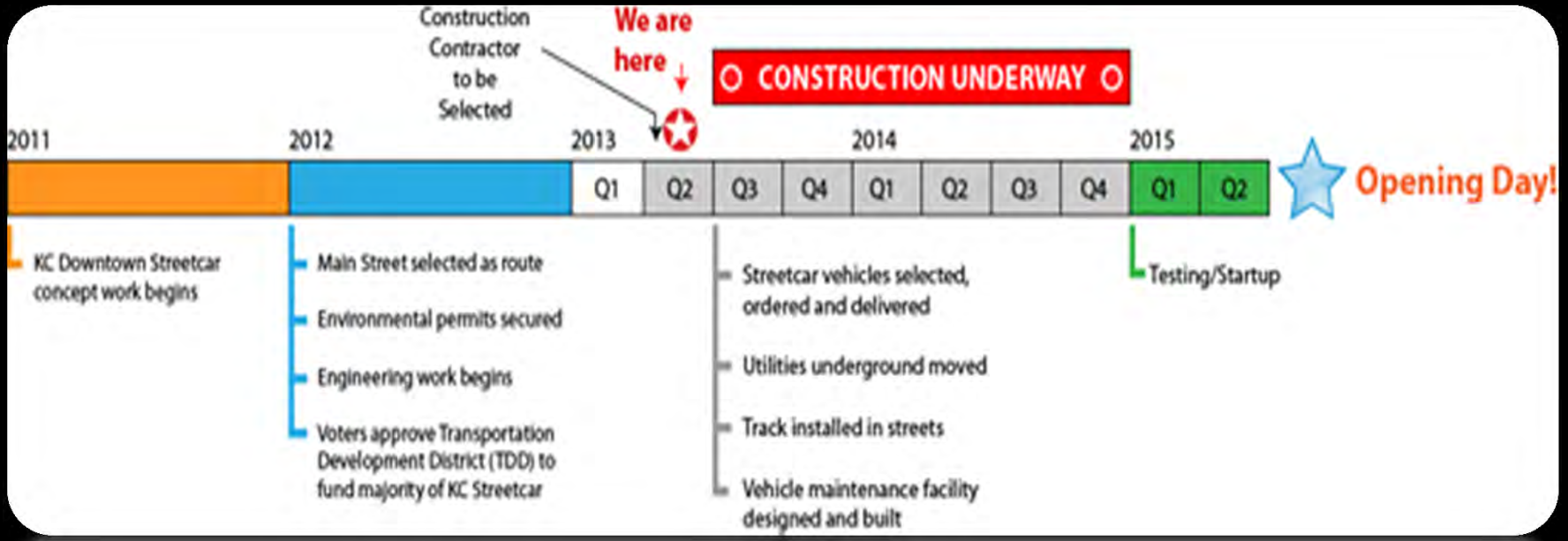
Project Cost Estimate

Guideway & Track Elements	$	11,000,000
Stations, Stops, Terminals	$	2,000,000
Vehicle Maintenance Facilities: Yards, shops and Buildings	$	15,000,000
Sitework and Special Conditions	$	9,000,000
Systems: Power, control and distribution	$	13,000,000
ROW and Land	$	1,000,000
City Utility Relocations	$	6,000,000
Vehicles	$	20,000,000
Professional Services: Design, Project Management, Testing, Inspection	$	16,000,000
Contingency	$	9,000,000
Total	**$**	**102,000,000**

Overall Project Schedule



Construction Timeline



Public Engagement



Webpage and Social Media

www.kcstreetcar.org

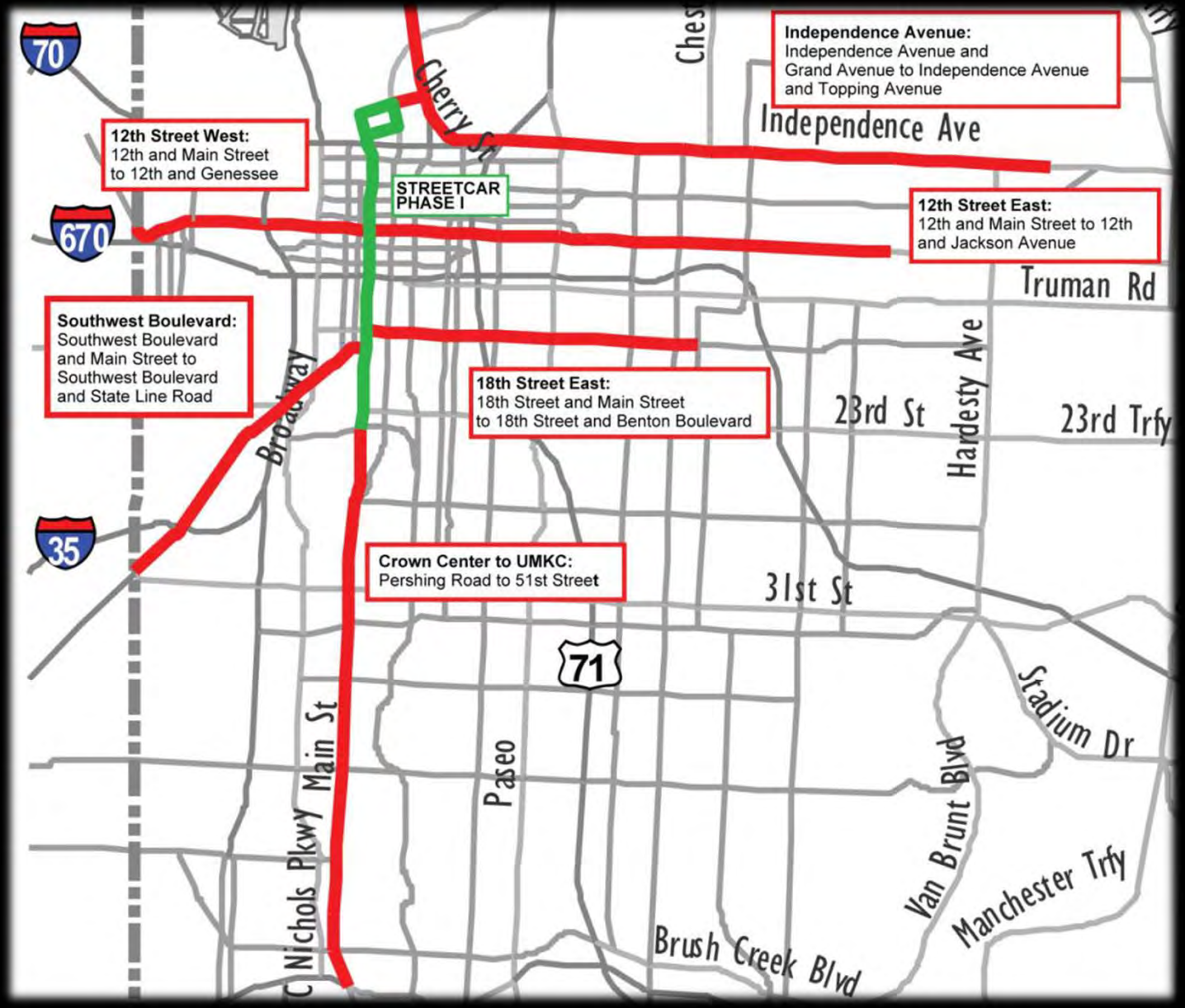
Twitter.com/kcstreetcar

Facebook.com/kcstreetcar

Streetcar Hotline

One-on-one meetings

Potential Future Phases



Thank You!

