

Which Lane?
Developing a Streetcar Extension
“Best Lane” Analysis under Public Scrutiny

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Key Presentation Take-Aways

- Starter line success → heightened public attention to expansions
- Quantitative metrics a defensible starting point for transparent decision-making
- Involving the public in complex technical decisions requires careful, crafted approach



KC's Downtown Starter Line – Route Stats

Length

~2.1 Route-Miles

Stops

16 (6 pairs, 4 one-sided)

Fare

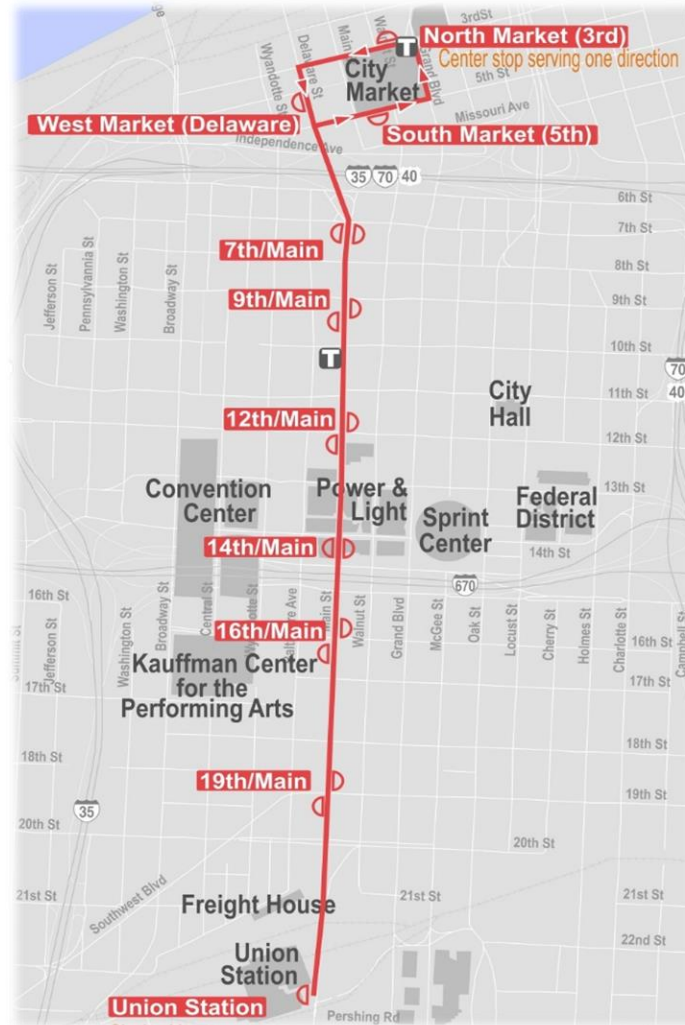
Free

Number of Vehicles

4

Headway

10-15 minutes

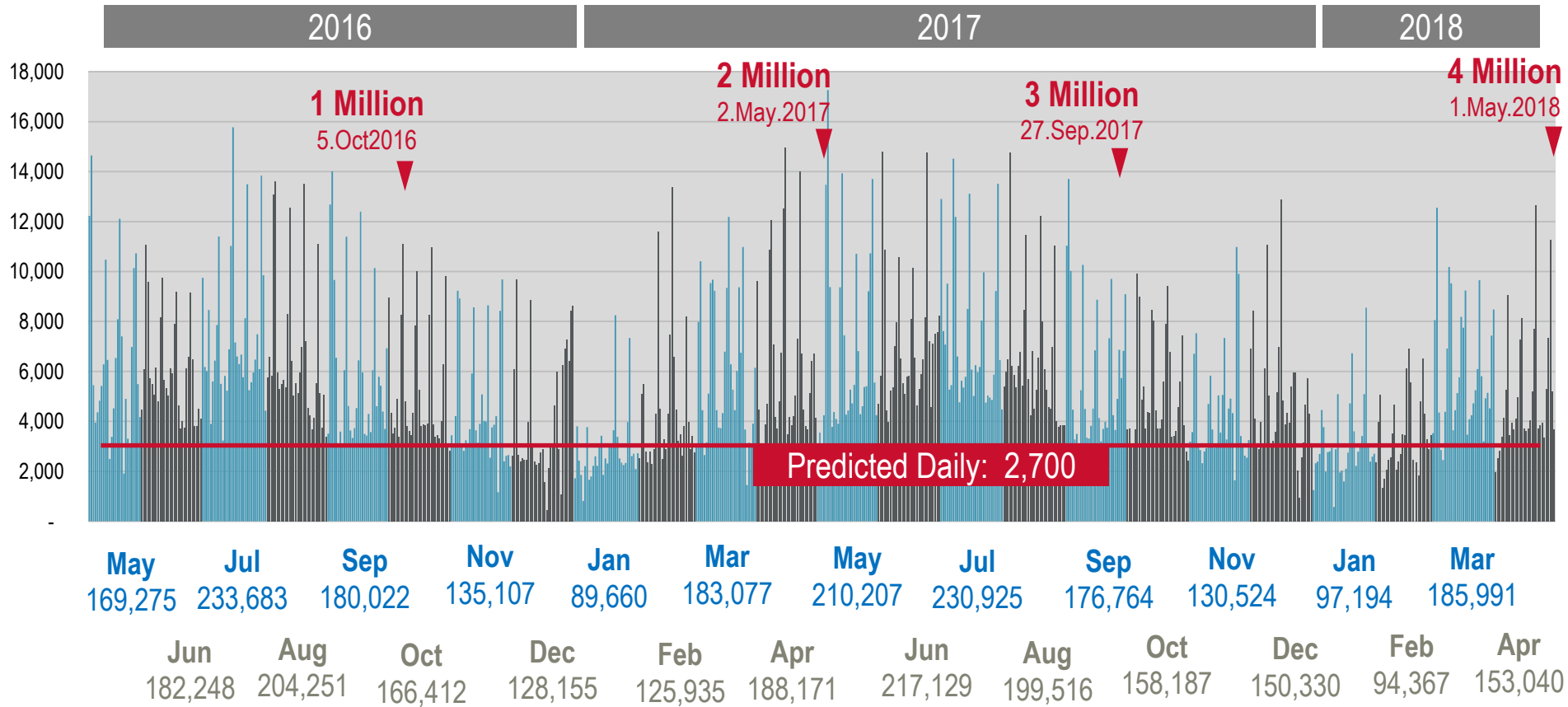


KC's Downtown Starter Line – Route Stats



KC's Downtown Starter Line Success

Daily Ridership



Public Perception Flip

Before Starter Line

What is this? Why would we spend all this money on it?

Can you please move this proposed stop away from my business?

After Starter Line

How soon can the extension open? Which lane will it be in? Where will the stops be?

I want a stop right here.



Trade-offs of Stop/Lane Decisions

1a. DEVELOP STOP LOCATIONS By Intersection



REGIONAL CONNECTIVITY

Does the location serve an existing or future regional transit need (e.g. east-west connection)?



BUS INTEGRATION

Is there a need or desire to have a shared streetcar / bus stop or a nearby transfer?



RIDERSHIP

Does the location have high bus ridership and/or would it have forecasted streetcar ridership?



PEDESTRIAN DEMAND

Does the location serve high-pedestrian demand and/or pedestrian-oriented land uses?



ECONOMIC DEVELOPMENT

Is there an opportunity for (re)development here?



LOCAL EXPRESSED DESIRE

Have Stakeholders and/or the public expressed interest in a stop near this location?



SPACING

Does a stop here provide a reasonable/desirable distance from adjacent stops?



PHYSICAL CAPABILITY

Does the width of the sidewalk and street allow for a stop to physically fit at this location?

1b. DEVELOP BEST-LANE ALTERNATIVES By Segment



PARKING / LOADING

Is there a need for on-street parking and/or loading on one or both sides of the street?



THROUGH LANES

How many vehicular through lanes are needed?



DRIVEWAY ACCESS

Is there a need to access businesses between intersections (especially via left turns)?



INTERSECTION LEFT TURNS

Is there a need to allow left-turns at intersections?



BIKE & TRAIL INTEGRATION

What provisions are needed to integrate the Trolley Track Trail and bicycles?



PEDESTRIAN SPACE

Does the segment allow space for pedestrians and waiting riders (if a stop is planned within the segment)?



UTILITIES

Would utility issues create conflicts with streetcar tracks in a given lane?



CURB STOP NEEDED

Do other factors dictate need for a curb stop (e.g. local development, shared bus stops or system considerations)?



Station-Stops

Station-Stops | Initial Screening Criteria

Desire

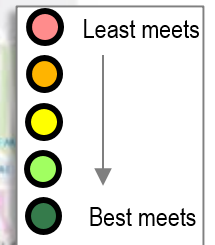
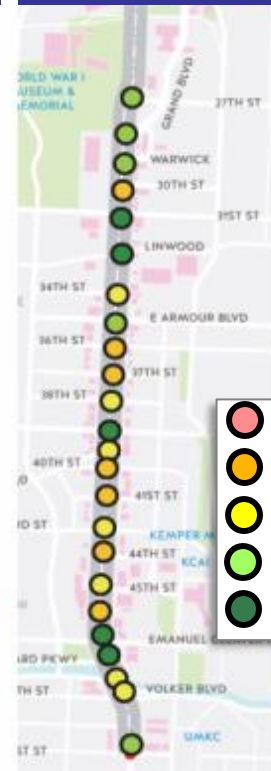
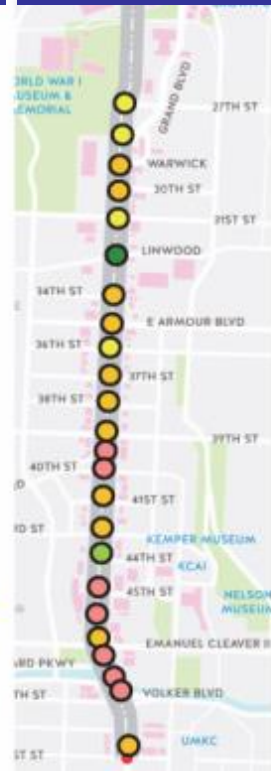
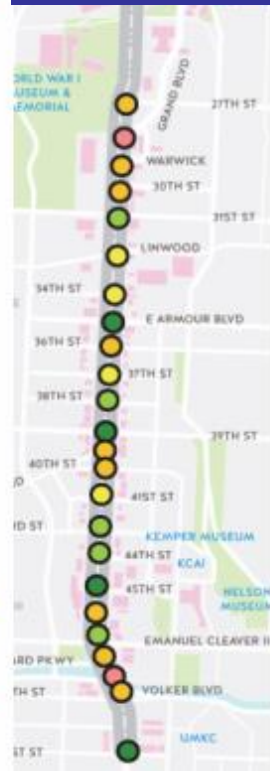
Bus
Integration

Regional
Connectivity

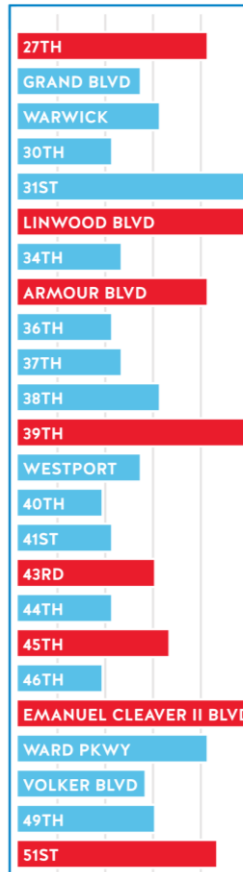
Pedestrian
Demand

Eco Devo
Potential

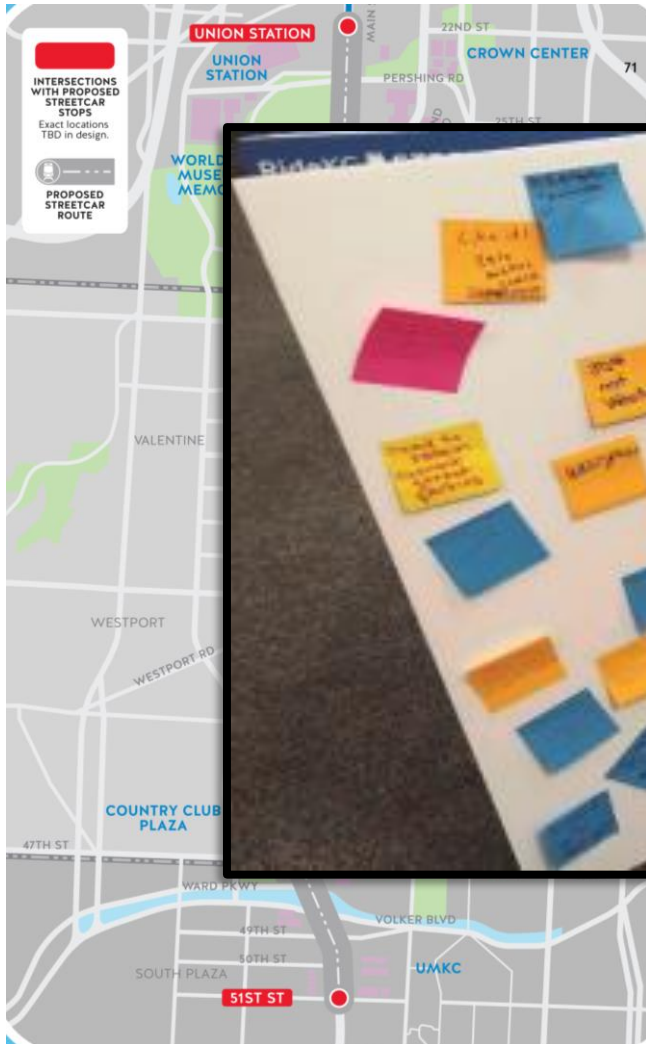
Ridership
Potential



Station-Stops | Initial Screening Results

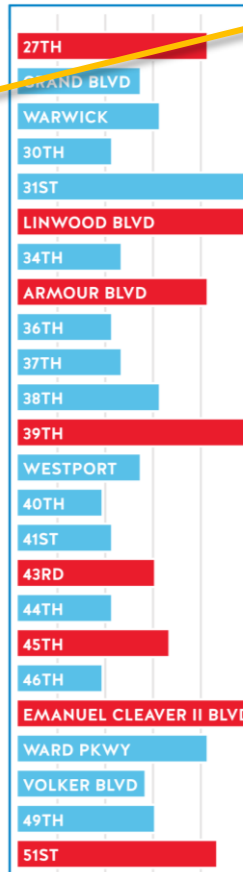


Station-Stops | Initial Screening Results



WARD PKWY
VOLKER BLVD
49TH
51ST

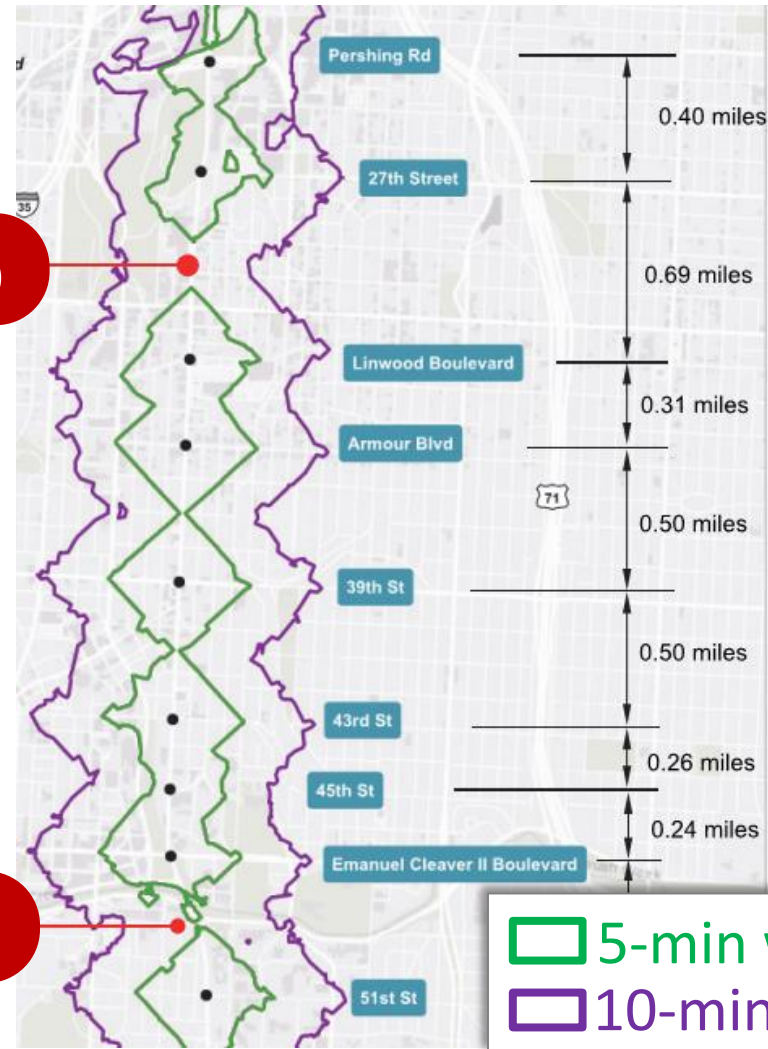
Station-Stops | Initial Screening Results



Public concern about unserved neighborhood



Station-Stops | Refinements



Gap

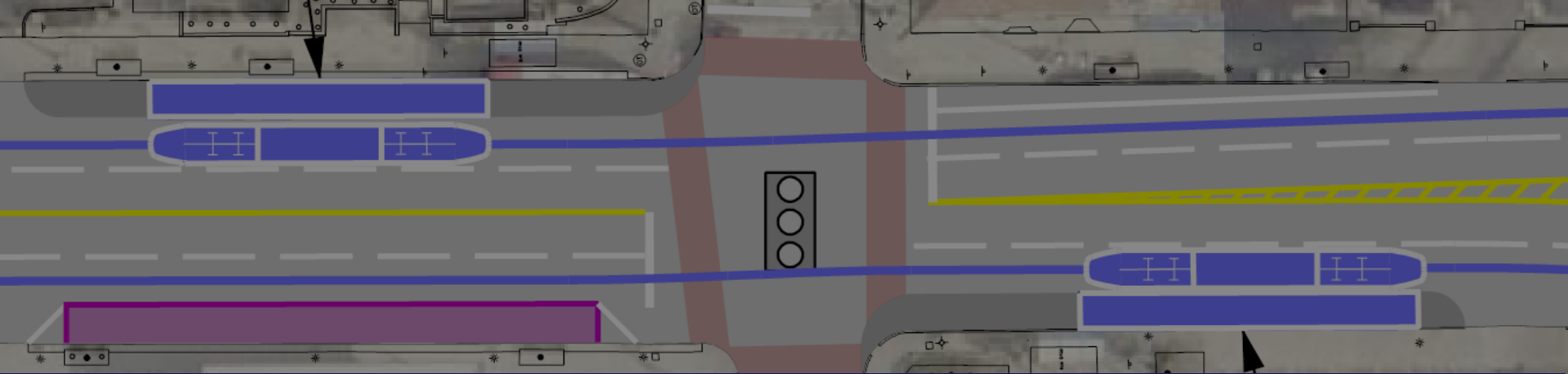
Gap

5-min walk

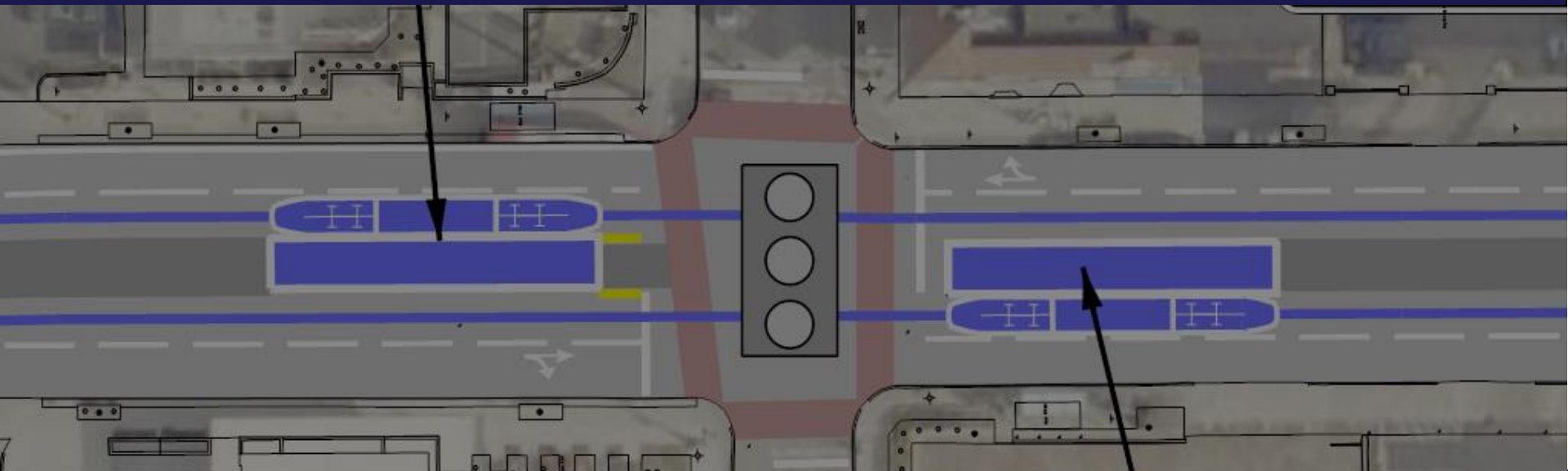
10-min walk

Station-Stops | Refinements





“Best Lane”



Lane Position | Criteria

On-Street
Parking/Loading

Through
Lanes

Driveway
Access

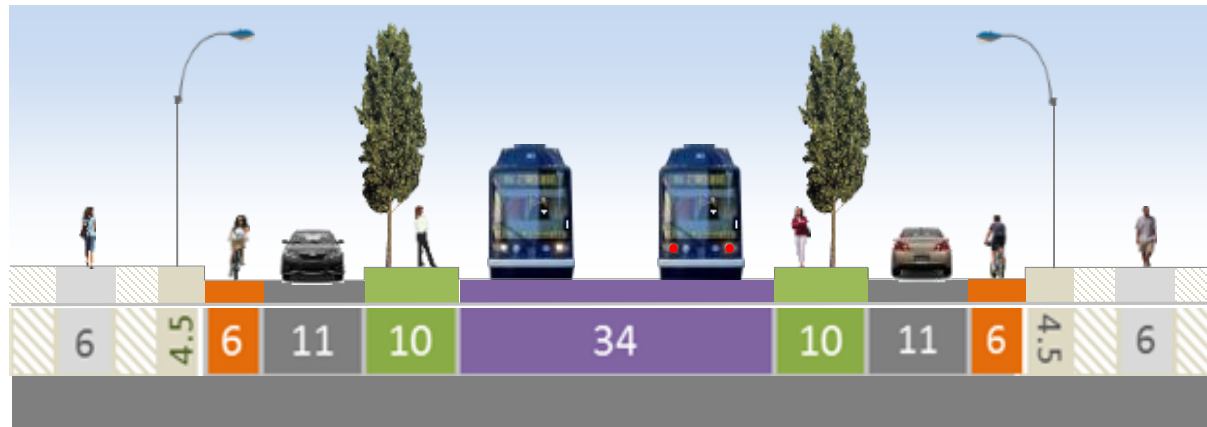
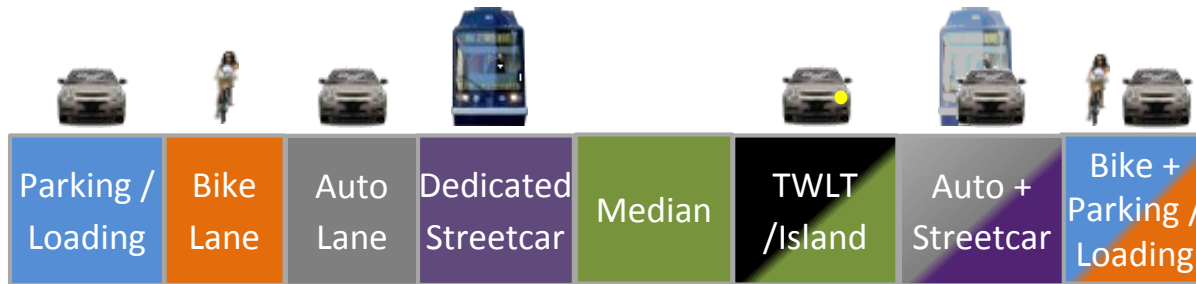
Intersection
Left Turns

Utilities

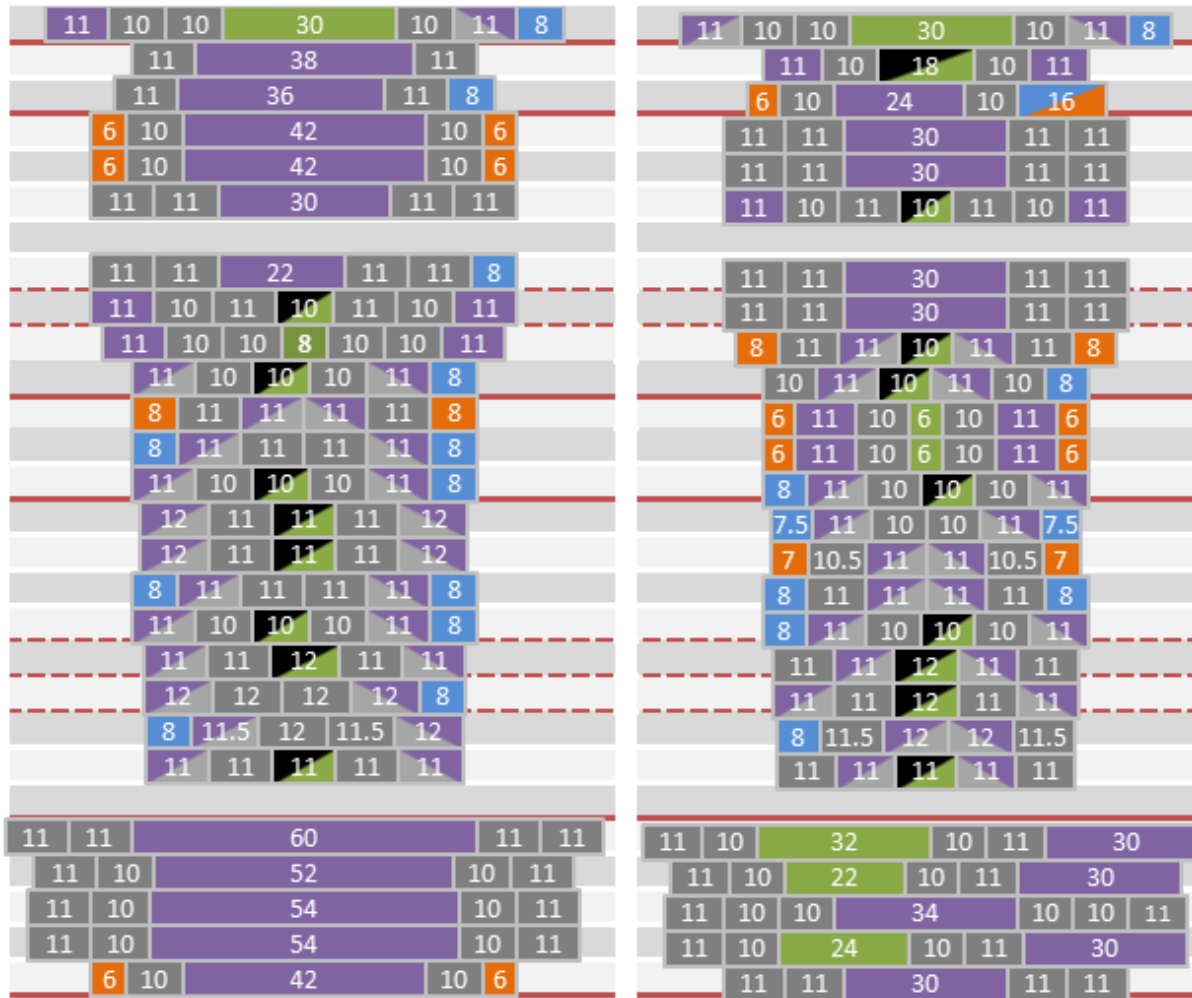
Bike
Needs



Lane Position | Vocabulary



Lane Position | Raw Alternatives



Lane Position | Smoothed Alternatives



Lane Position | Initial Public Materials

Center

INTERSECTIONS WITH STREETCAR STOPS
Exact locations TBD in design

DEDICATED STREETCAR

AUTO LANE

MIXED AUTO & STREETCAR

PARKING, LOADING & TBD

TBD
(Center turn lane, median or platform)



Not to scale. On this map, Main Street has been widened to better show project elements. In general, all changes to Main Street are anticipated to fit between the existing street's curb to curb.

Outside

INTERSECTIONS WITH STREETCAR STOPS
Exact locations TBD in design.

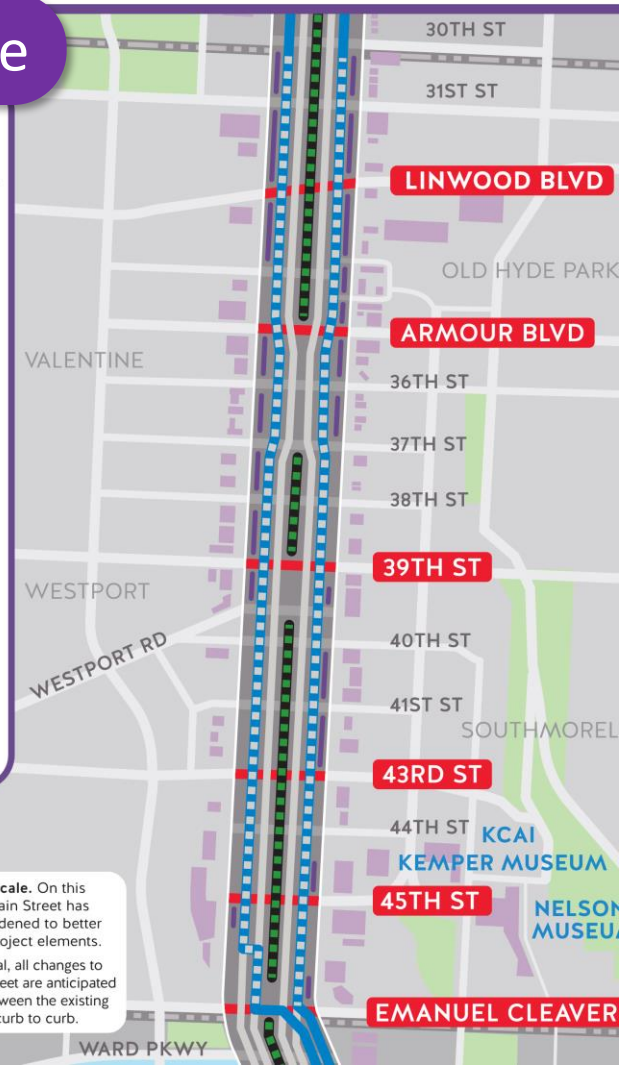
DEDICATED STREETCAR

AUTO LANE

MIXED AUTO & STREETCAR

PARKING, LOADING & TBD

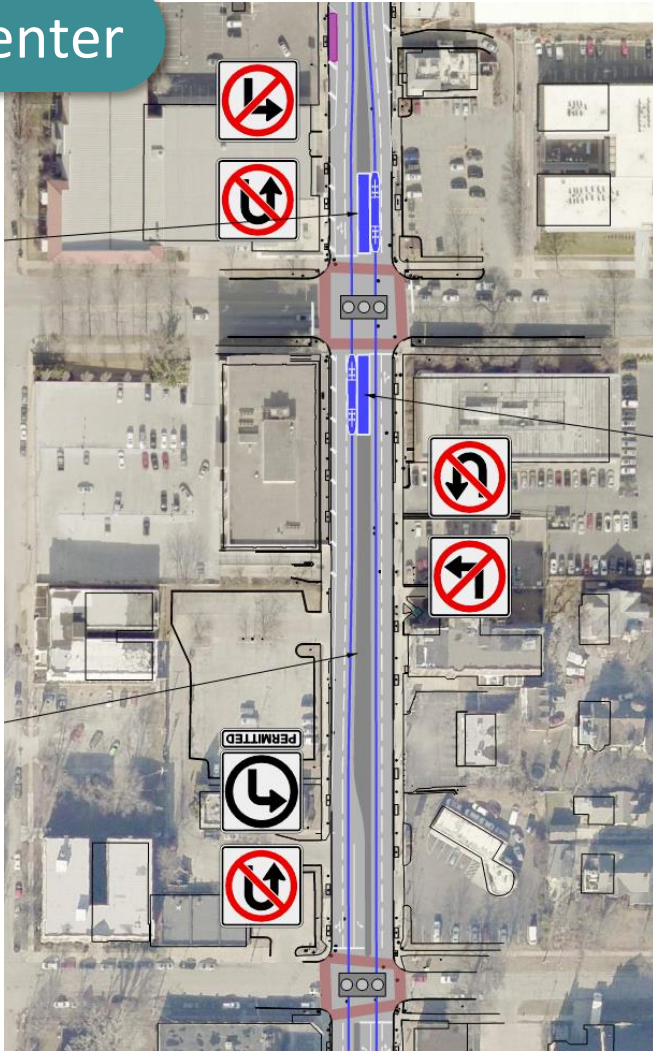
CENTER TURN LANE & TBD



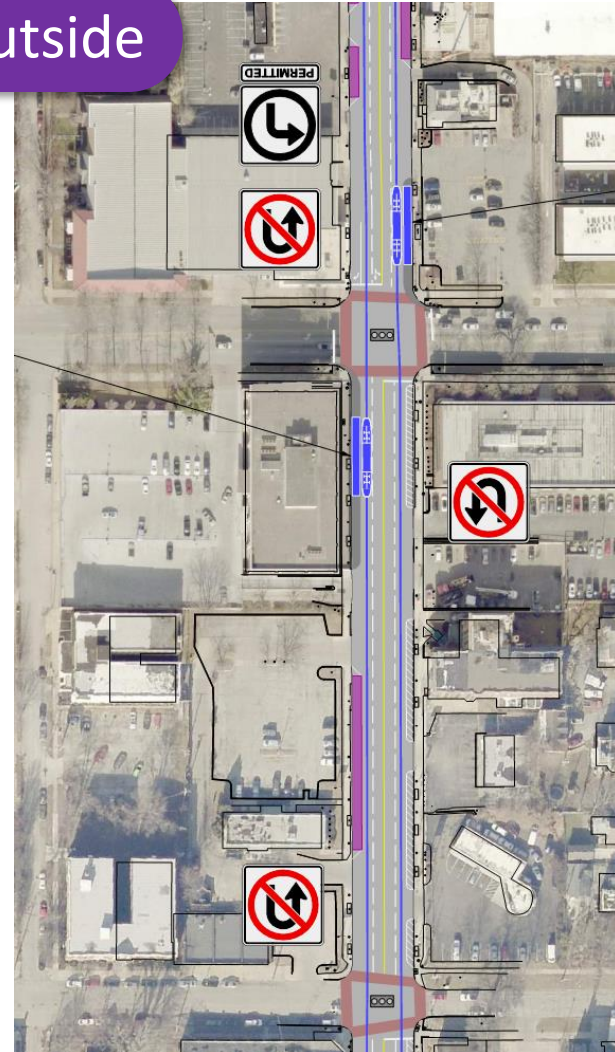
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Lane Position | Refined Public Materials

Center



Outside



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