

Troost Corridor Transit Study

May 23, 2007

Kansas City Area Transportation Authority



Agenda

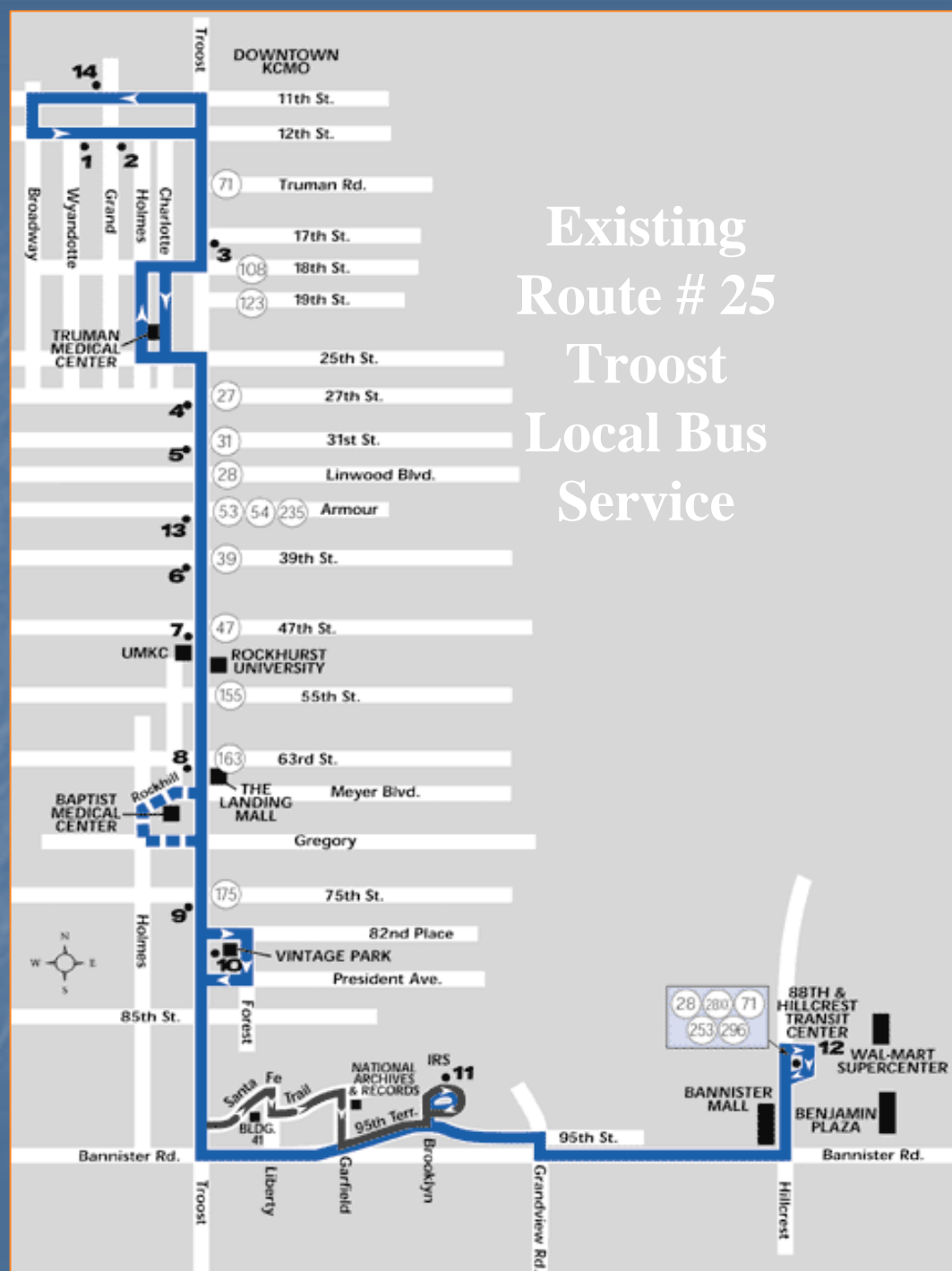
- Welcome
- Troost Corridor Planning Study
 - Public participation
- What is MAX?
- Survey of Troost Riders
- Proposed Transit Improvements
- Next Steps

- Smart Moves
- "Rapid Rider"
Corridors

-

Troost Corridor Today

- Approximately 13 miles
- 60+ Min. Trip
- Daily Transit Ridership 7,800

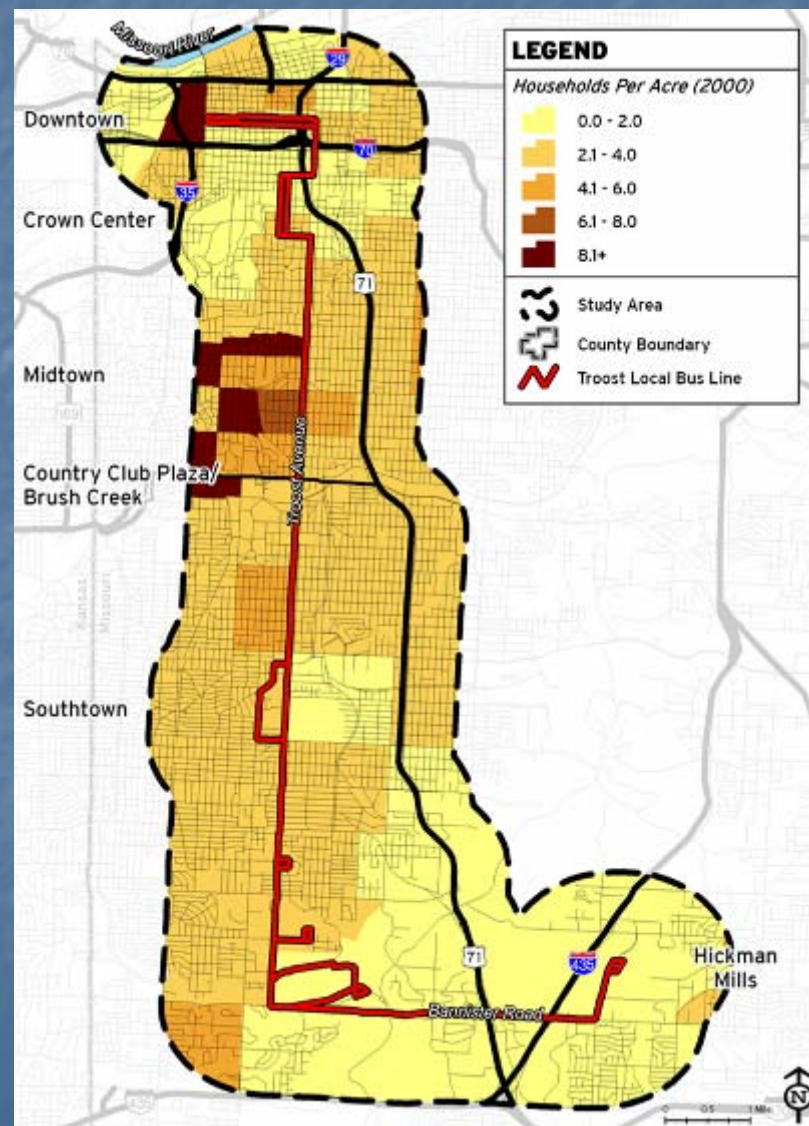
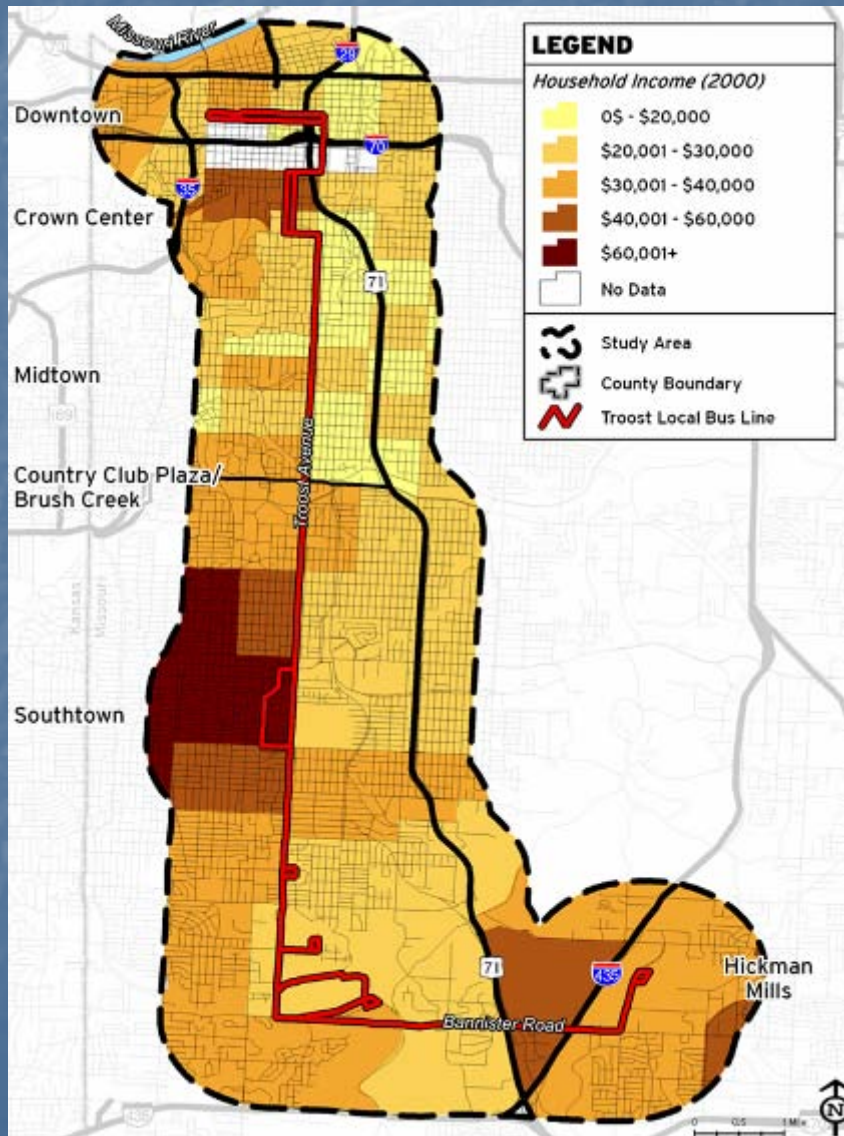




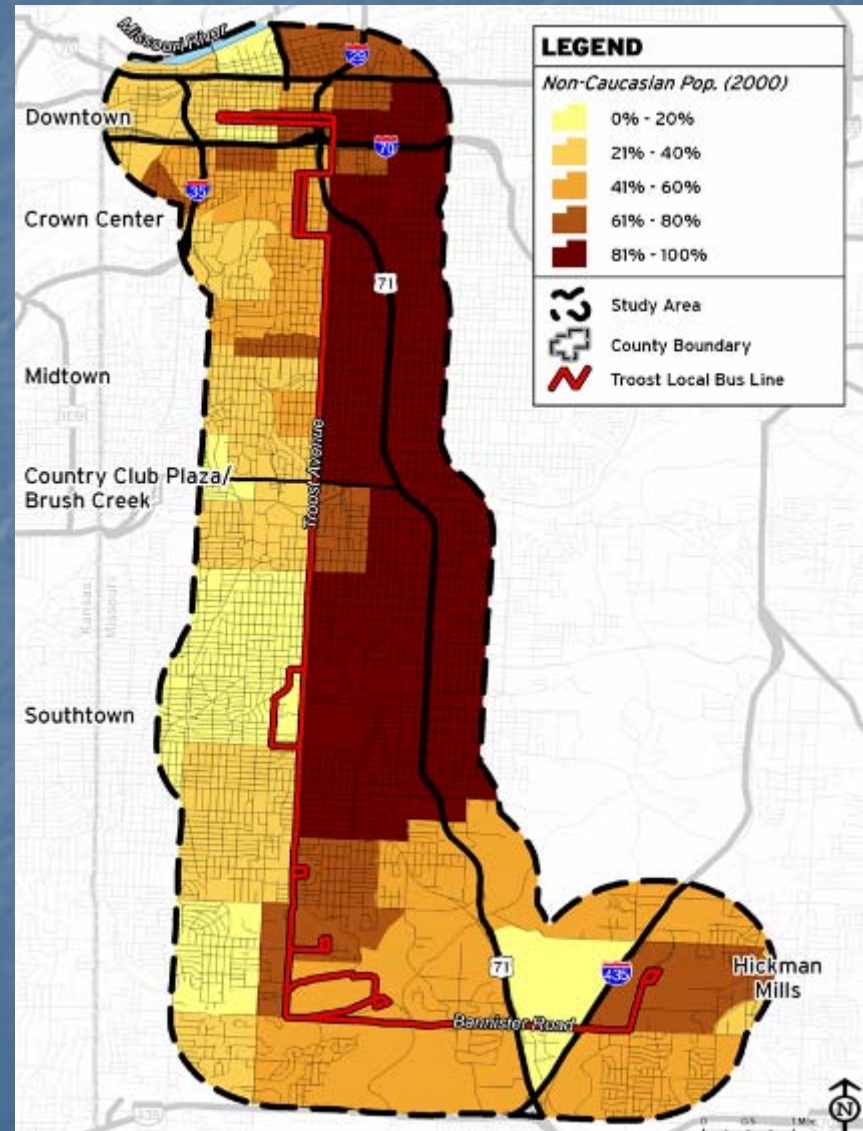
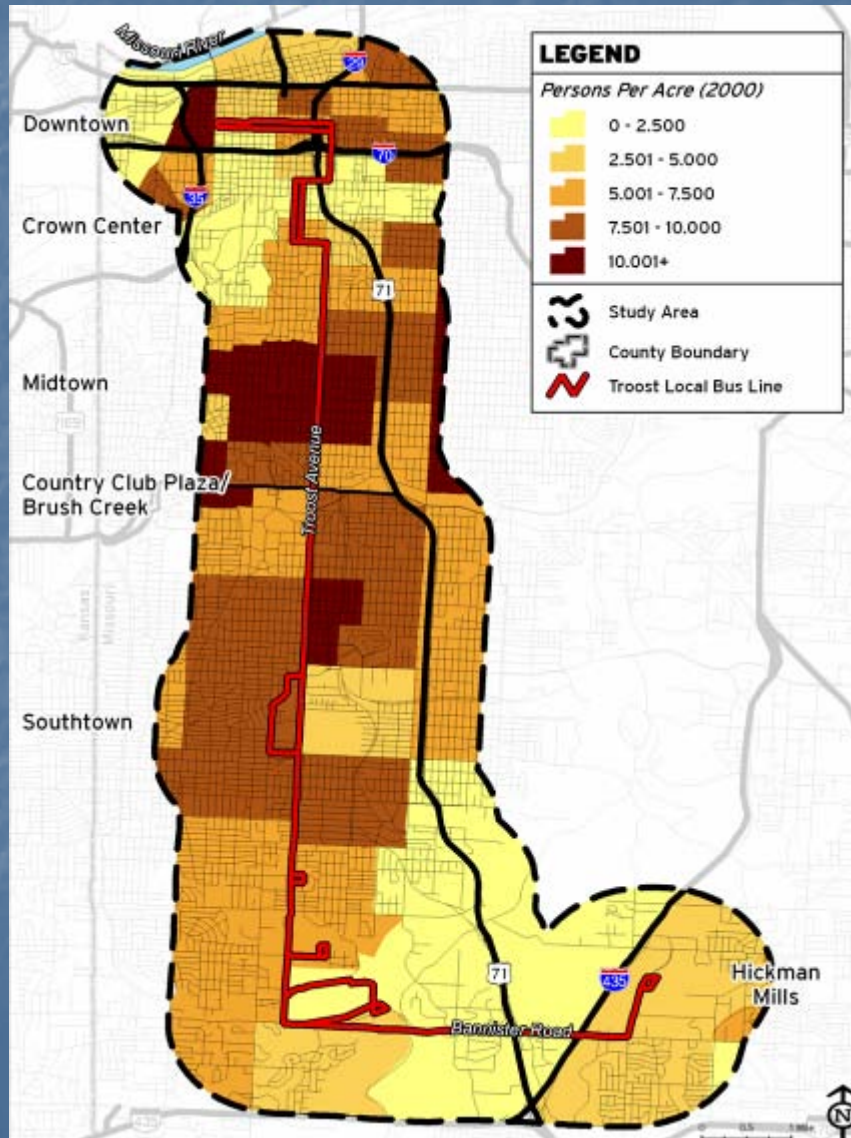
Troost #25 Ridership

- 8,250 people board Route 25 each weekday,
- 4,150 in the southbound direction
- 4,100 in the northbound direction

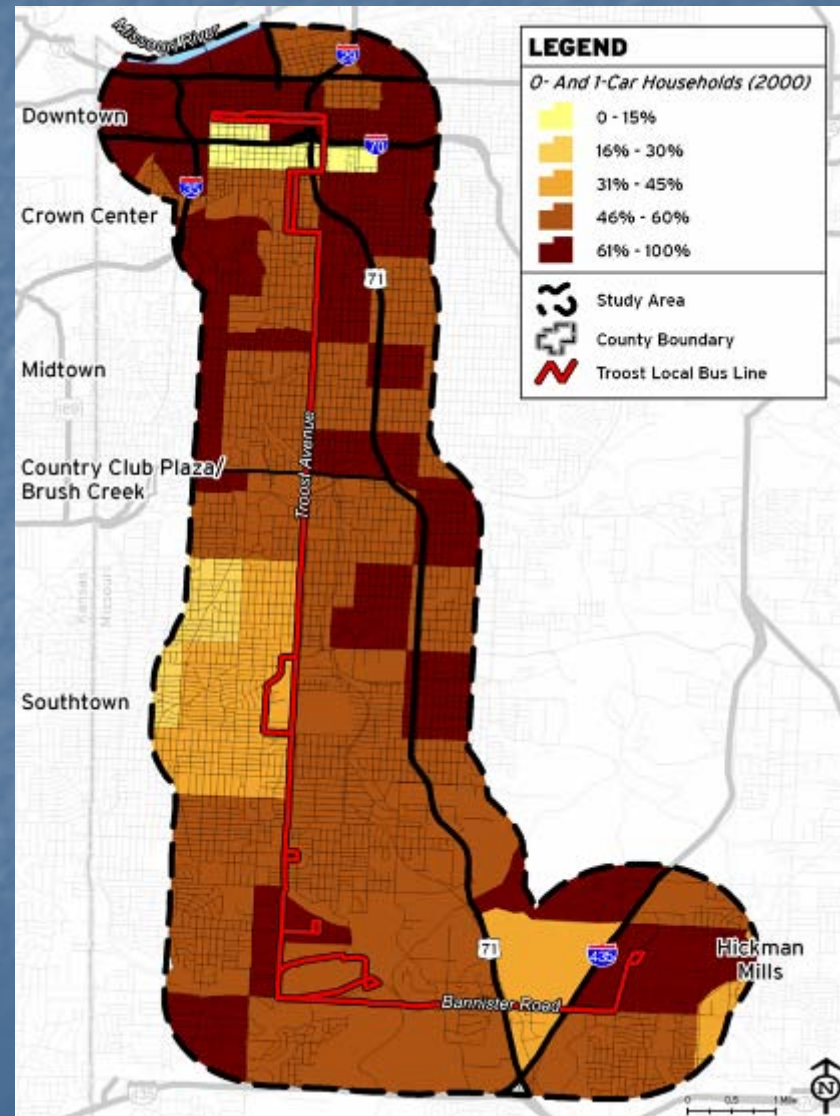
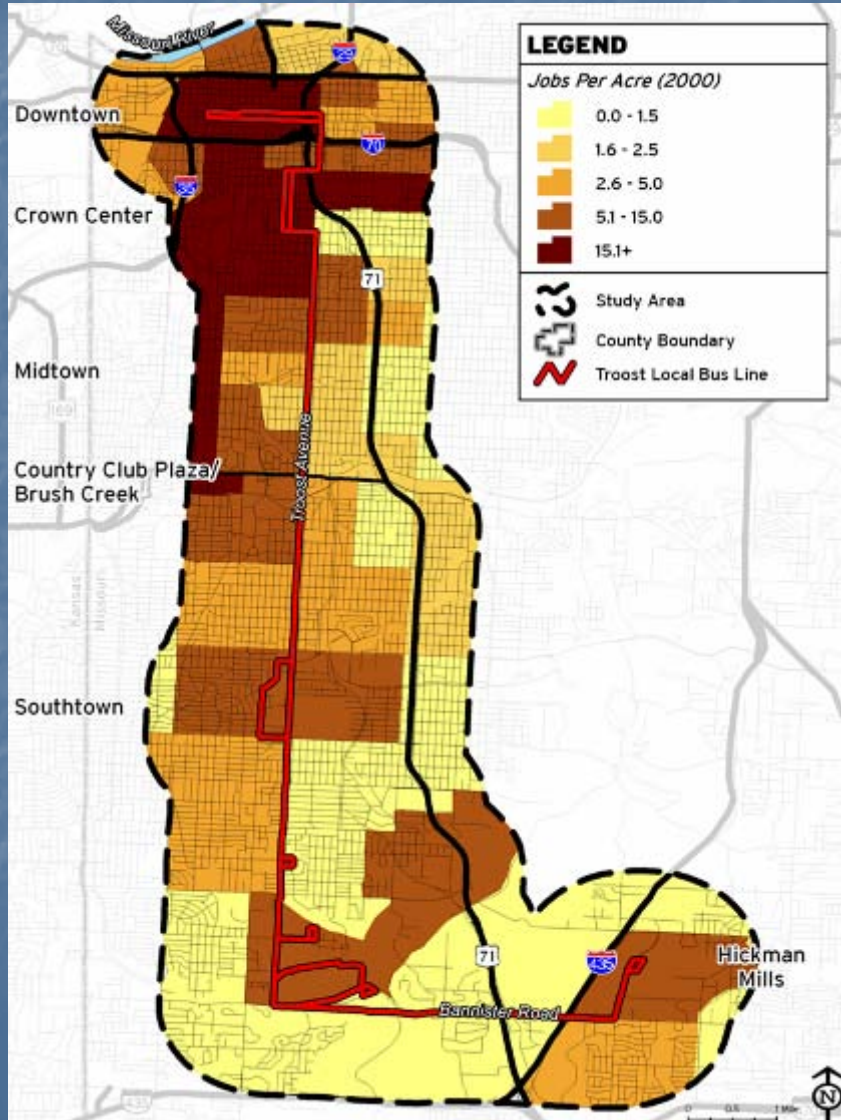
Troost Corridor Households



Troost Corridor Population



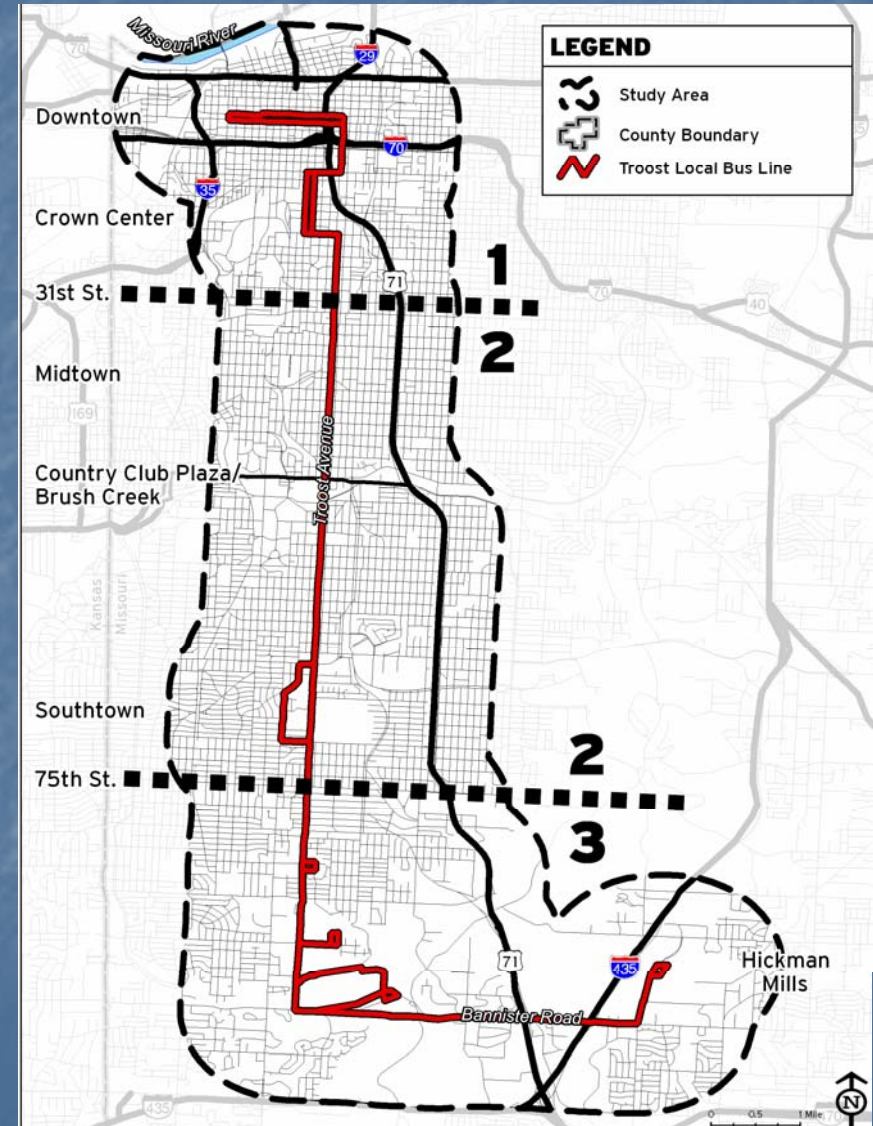
Troost Corridor Employment



Public Engagement



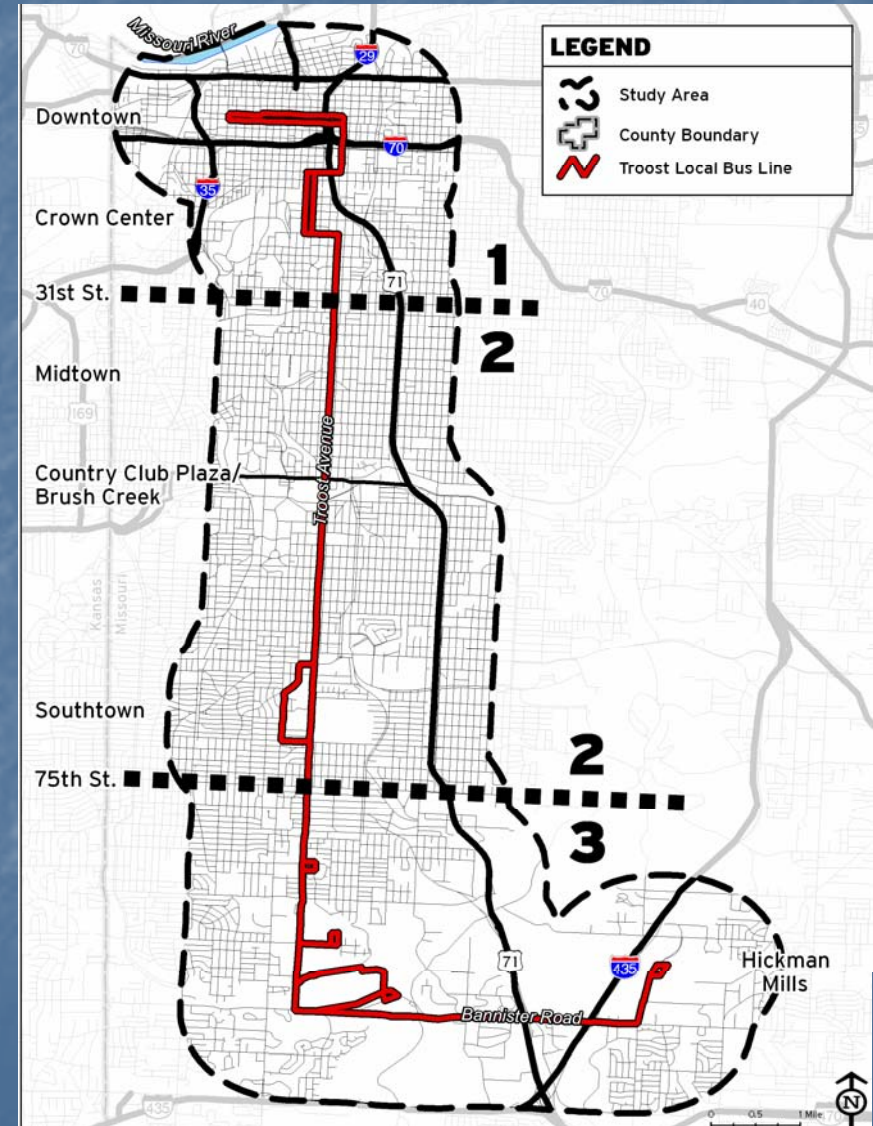
- Advisory Committee
 - Community
 - Public Agencies
- Zone Committee
 - North of 31st
 - 31st to 75th
 - South of 75th
- Public Meetings



Public Engagement



- Committee Roles
 - Identify issues, concerns, opportunities
 - Inform constituencies
 - Assist planning team
 - Attend committee meetings
 - Inform Advisory Group of issues



BRT Project Objectives



- Reduce Travel Time by 20%
- Differentiate from Local Bus
- Operate and Promote Like Rail
 - Stations Rather than Stops
 - Limited Stops / Subway Type Maps
- Passenger Amenities & ITS

Kansas City's MAX

- Street Running BRT (6 Miles)
- Stations Rather Than Stops
 - Limited Number, Enhanced Amenities
- Exclusive Transit Lanes (3.75 Miles)
- ITS Technology
 - Traffic Signal Priority (31 Intersections)
 - Real-Time Signs at All Stations
 - On-Board Station Announcements
- Unique Name & Identity – MAX





MAX Service

- 7 Days A Week
- 4:30 AM to Midnight
- 9-Minute Headways AM & PM Peak
- 15 Minutes Mid-Day, Saturday, Events
- 30 Minutes Nights and Sunday
- Plaza to Downtown: 18 Minutes
 - Previously 24 Minutes



MAX Stations

- Defined Station Limits
 - Street-side and Sidewalk Side
- Generally on Existing ROW
- Far-side of Intersections
- Unique from Local Stops
 - Standard MAX Station Design
- Stations All Named
- Easily Identified Night or Day
- Enhanced Amenities





MAX Vehicles



- BRT Specific Design
- Stylish Low Floor Vehicle
- Unique MAX Paint Scheme
- Wider Doors & Windows
- Traffic Signal Priority Emitter
- Automated Stop Announcements
- On-Board Data Terminal Activates
- TSP & Stop Enunciator Automatically





ITS Technology



- ATA Radio System, GPS & AVL
- Real-Time Arrival Information
 - Signs at Every MAX Station
- Automated Traffic Signal Priority
- Automatic Stop Enunciator
- Automatic Passenger Counters



On-Board Survey



- February 20, 2007
 - Tuesday
 - Good Weather
- Results Collected Throughout Day
- 654 Surveys Collected
- 555 Surveys with Boarding (on) and Alighting (off) Locations



On-Board Survey

- Where are you coming from or going to?
- Trip Characteristics
- Questions about MAX

On-Board Survey



- Where are you coming from or going to?
 - Transferring to the Troost route or transferring after the ride is 68.3%
 - Transfers at both ends is 19.2%
 - Trip To/From Downtown 33.7%
 - Trips To/From Hospital Hill 12.1%

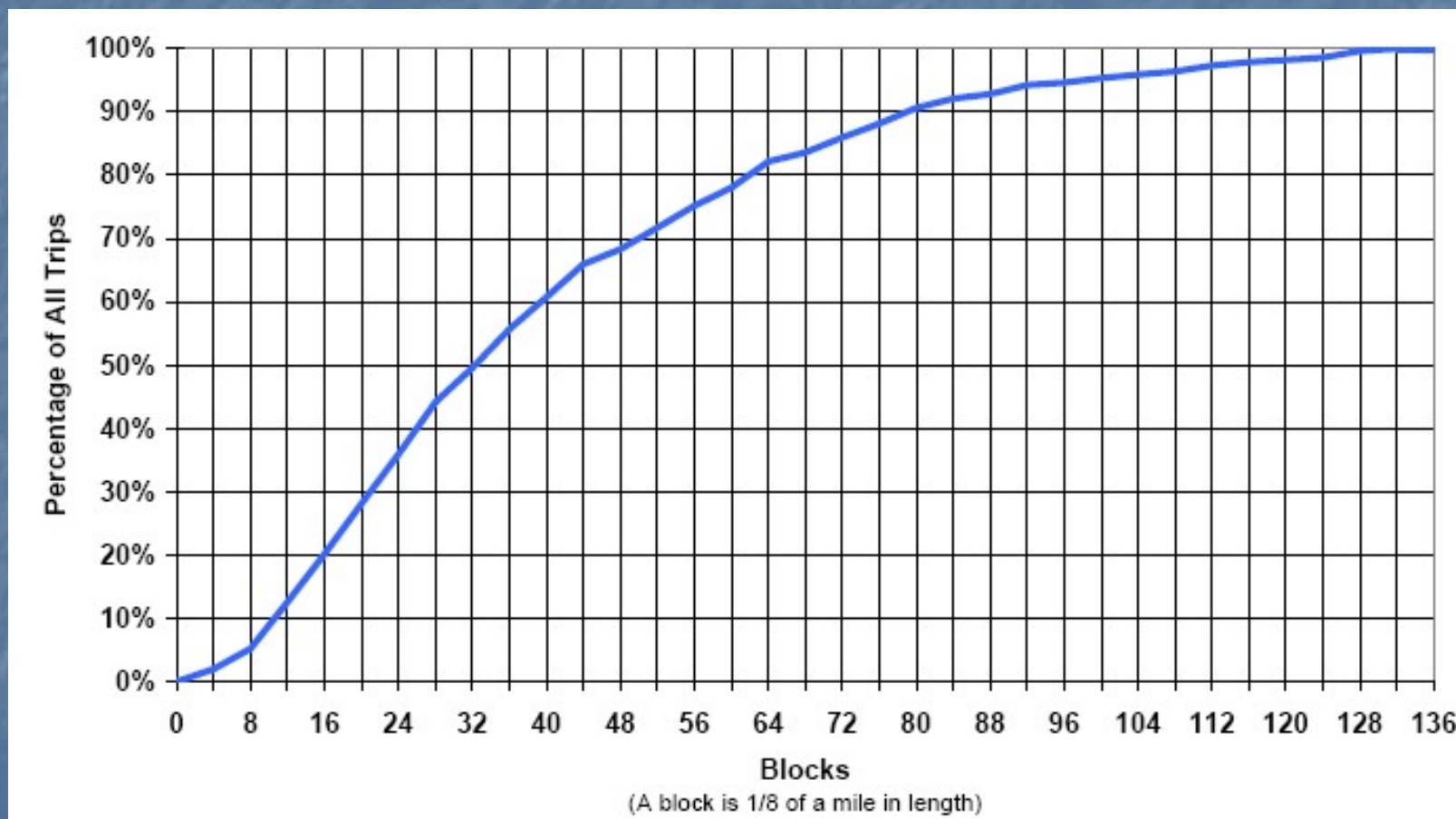


On-Board Survey

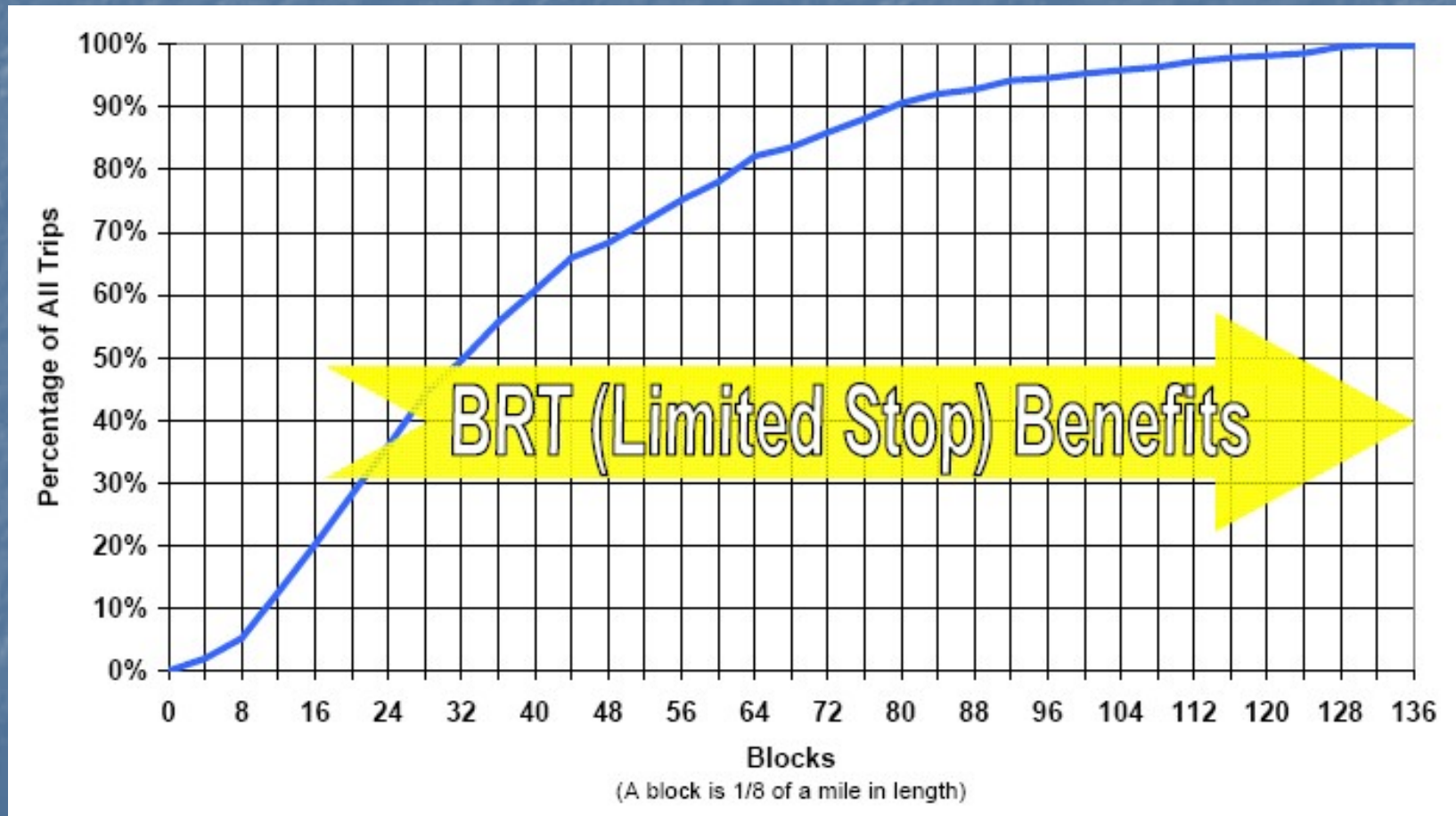
■ Trip Characteristics

- Average trip ranges from 8 to 28 blocks
- Majority using for variety of purposes
 - 36% were going to work

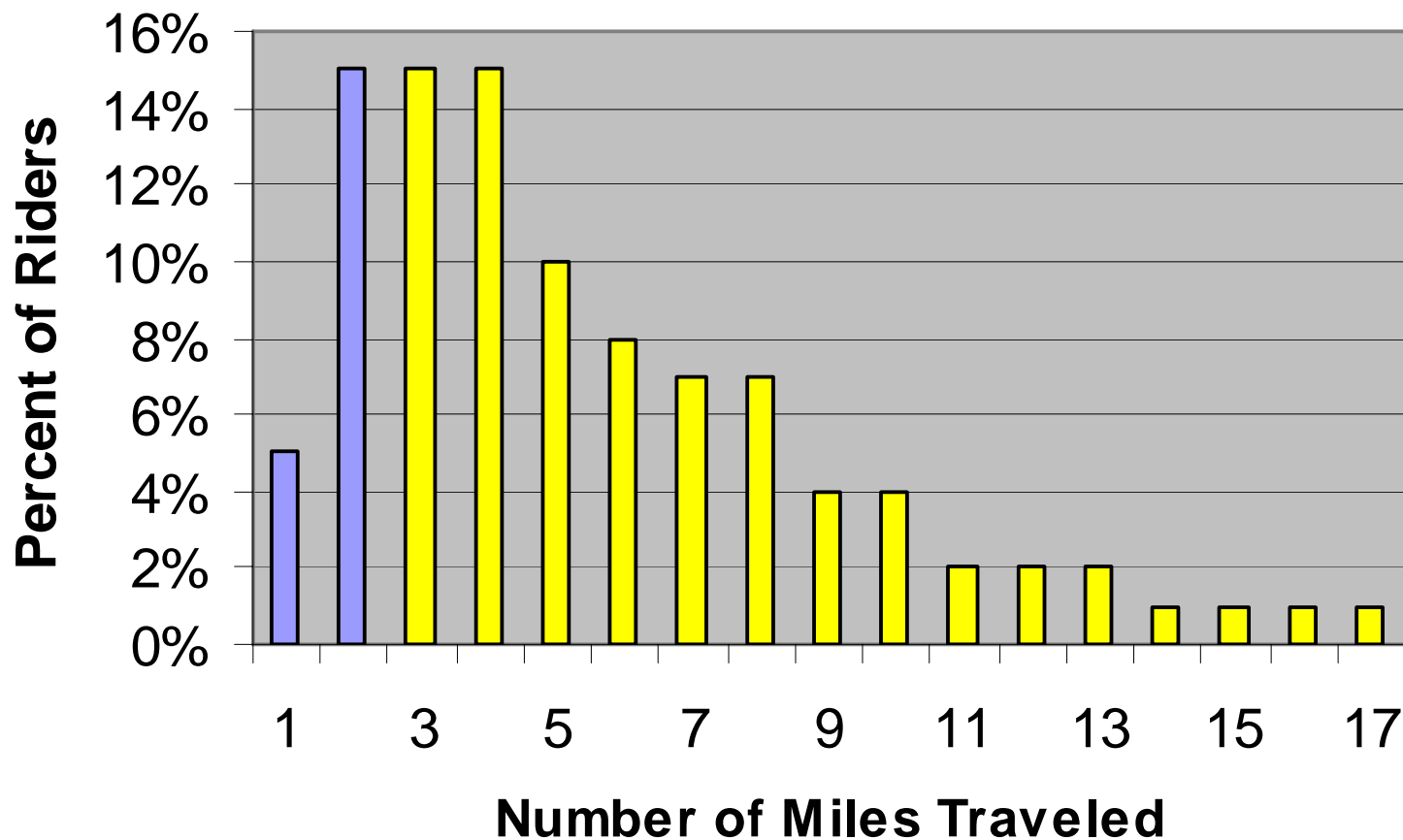
Ridership Characteristics



Ridership Characteristics



Percent of Riders by Distance



On-Board Survey



■ Questions about MAX

- 57% of Troost Riders have used MAX
- 77% of Troost Riders have a good impression of MAX
- 68% Believe that MAX service on Troost would be successful



Route Options

- Option 1—Existing #25 Corridor
- Option 2—Charlotte-Holmes Pair
- Option 3—Grand
- Option 4—Troost Corridor

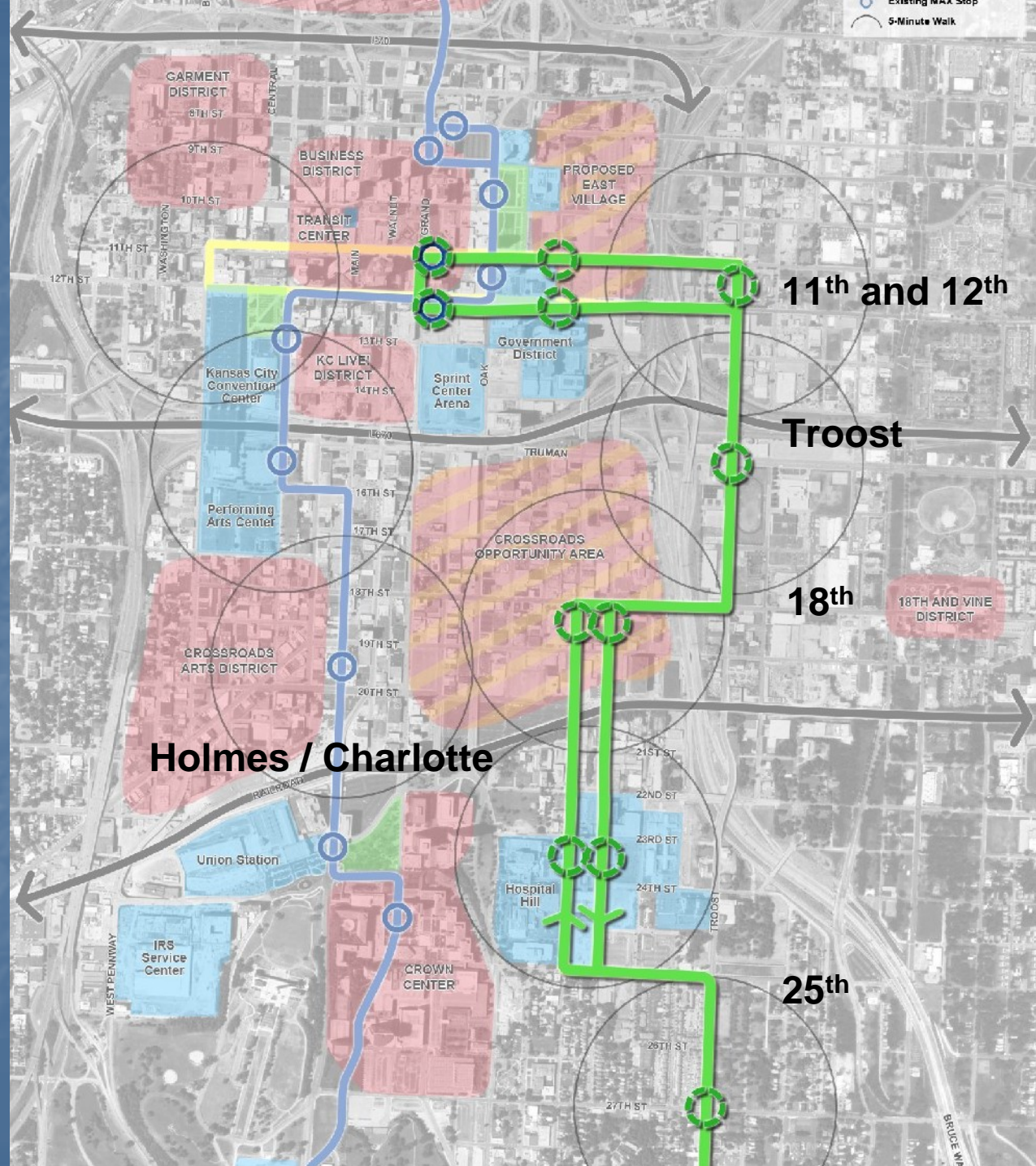


Evaluation Criteria

- Activity on the Street
- Transportation
- Pedestrian Accessibility
- Directness
- Development Opportunities
- Connectivity
- Cost
 - Capital and Operations

Option 1

HNTB



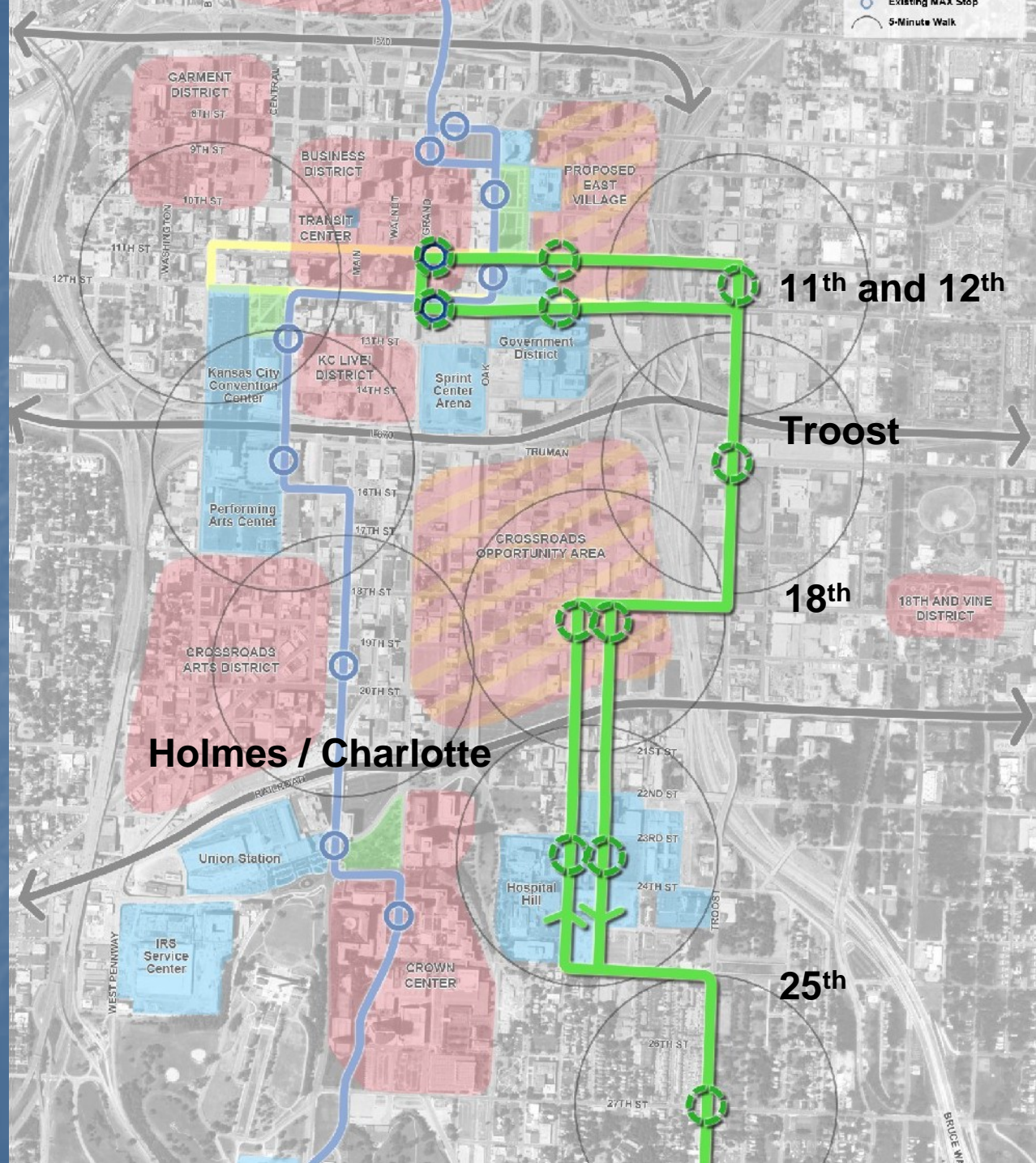


Option 1

- Duplicates existing route 25
- Access to key destinations
 - Government Center
 - Hospital Hill
- Development potential along Troost
 - Limited in short term

Option 2

HNTB



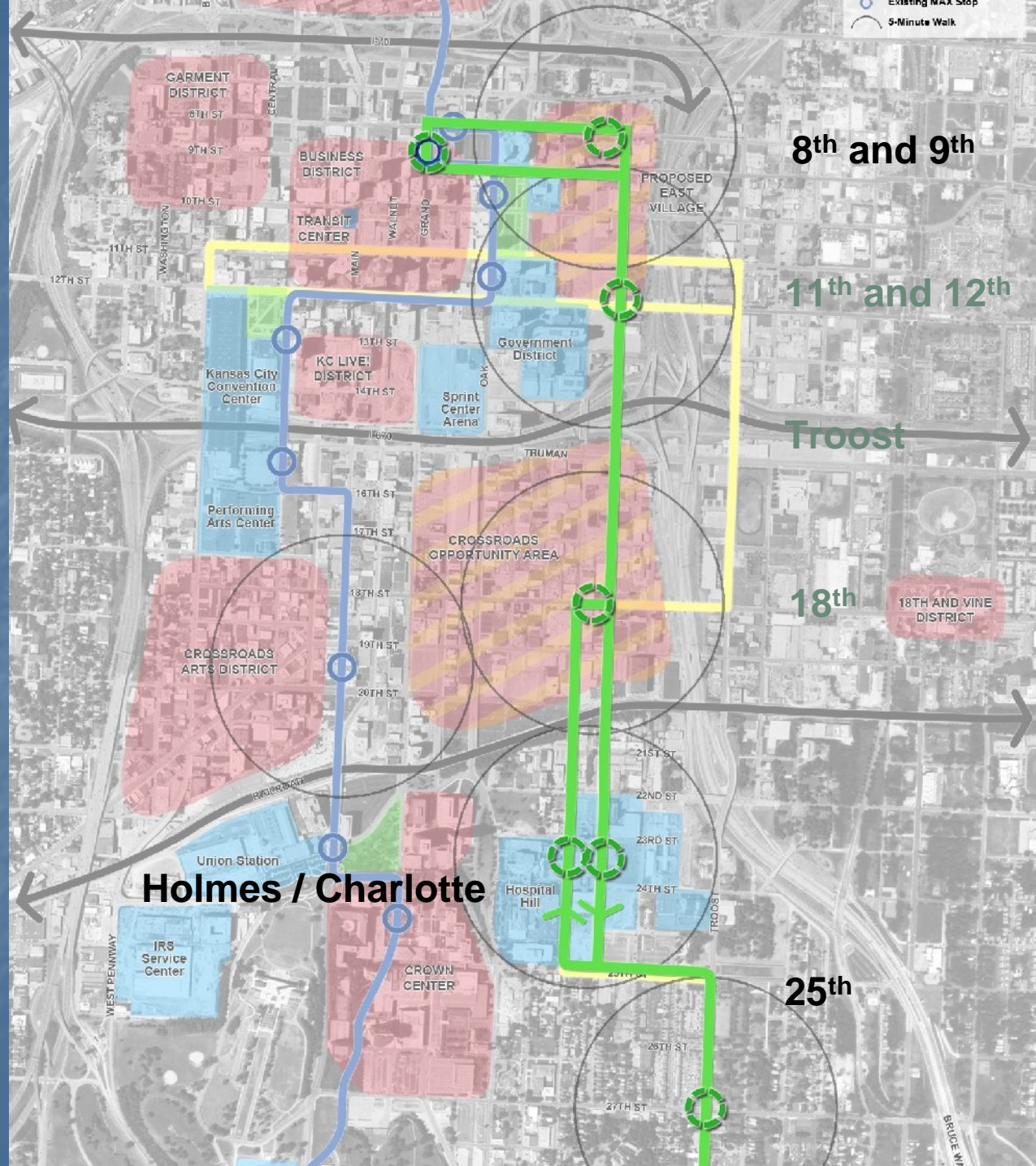


Option 2

- Uses Charlotte to enter downtown
 - Avoids out of direction movements
- Potential development in East Crossroads area is likely
- Connects directly into Government Center and East Village

Option 3

HNTB

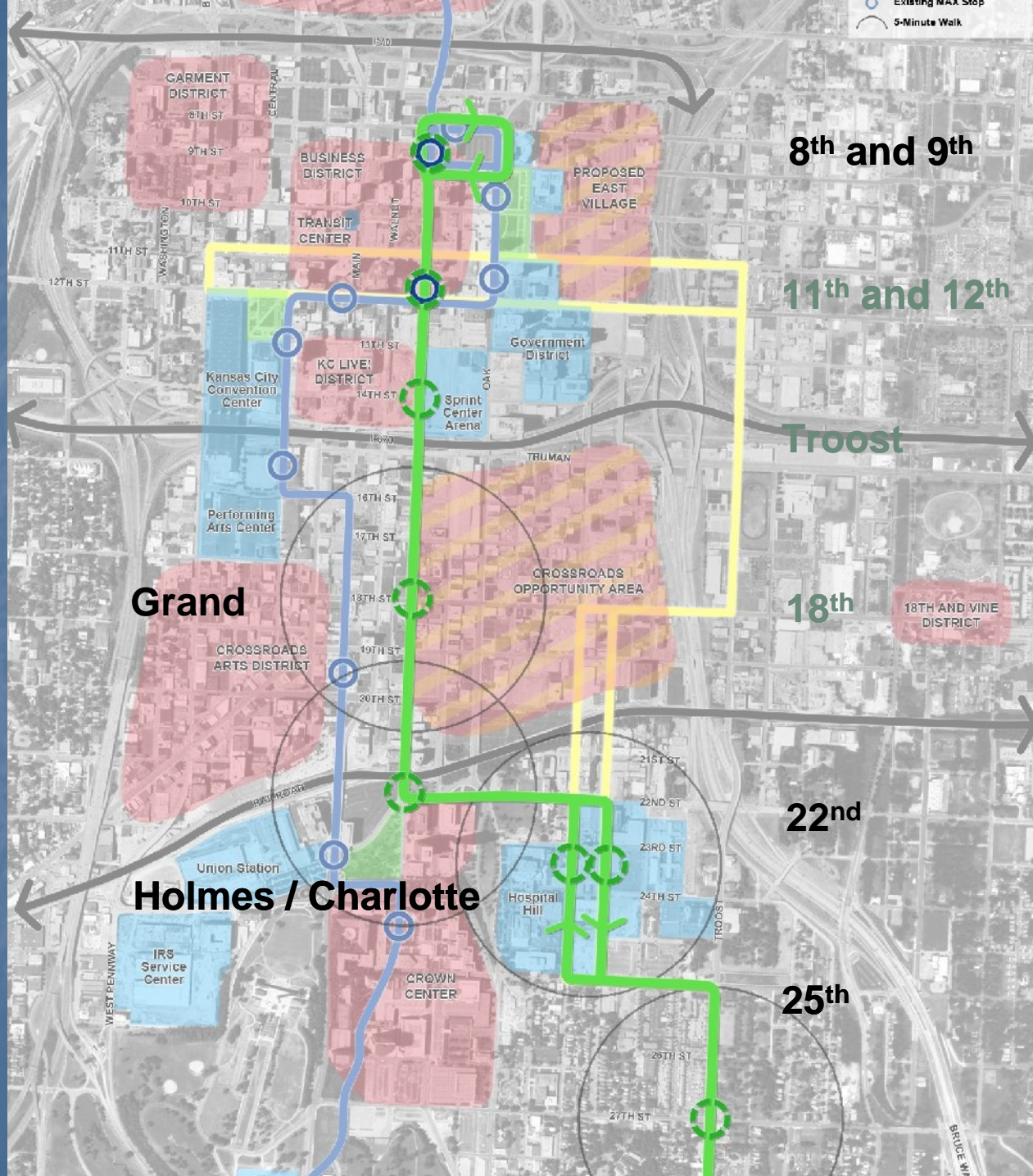




Option 3

- Connects to Crown Center, Sprint Arena and KC Live
 - Grand Boulevard to be closed during prime events
- Limited connection to Government Center and East Village
- Multiple turning movements
- Parallels Main Street MAX route

Option 4





Option 4

- Route runs directly on Troost
 - Connects to Greyhound Bus Depot
- Route is not direct to Hospital Hill
- Development potential is limited along 'bridge' portion of Troost



Evaluation Criteria

- Activity on the Street
- Transportation
- Pedestrian Accessibility
- Directness
- **Development Opportunities**
- **Connectivity**
- Cost
 - Capital and Operations

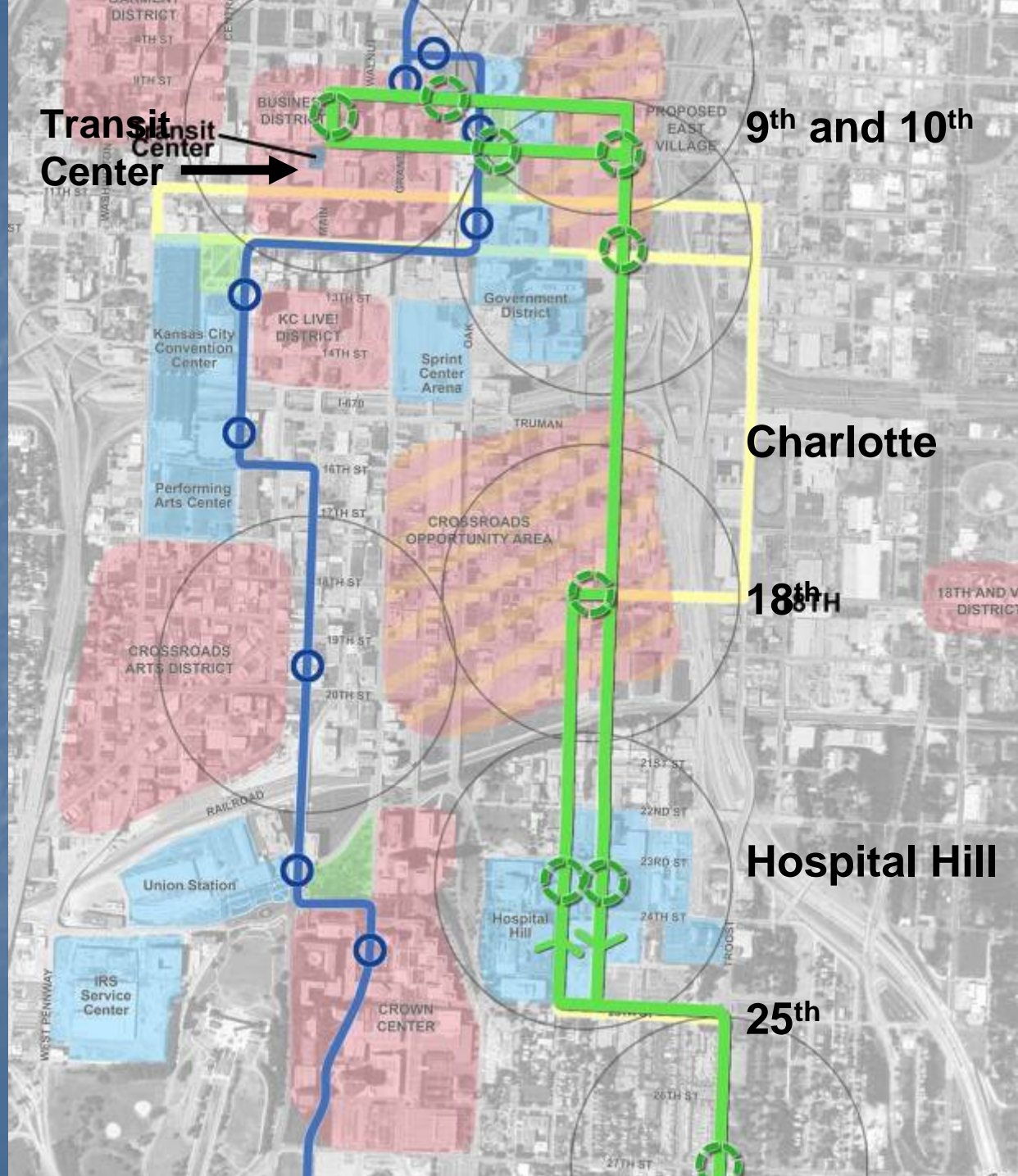


Evaluation Criteria

- Serve additional market for BRT
 - Avoid route duplication
- Connection to 10th and Main Transit Center
 - Based on survey information about number of users who transfer

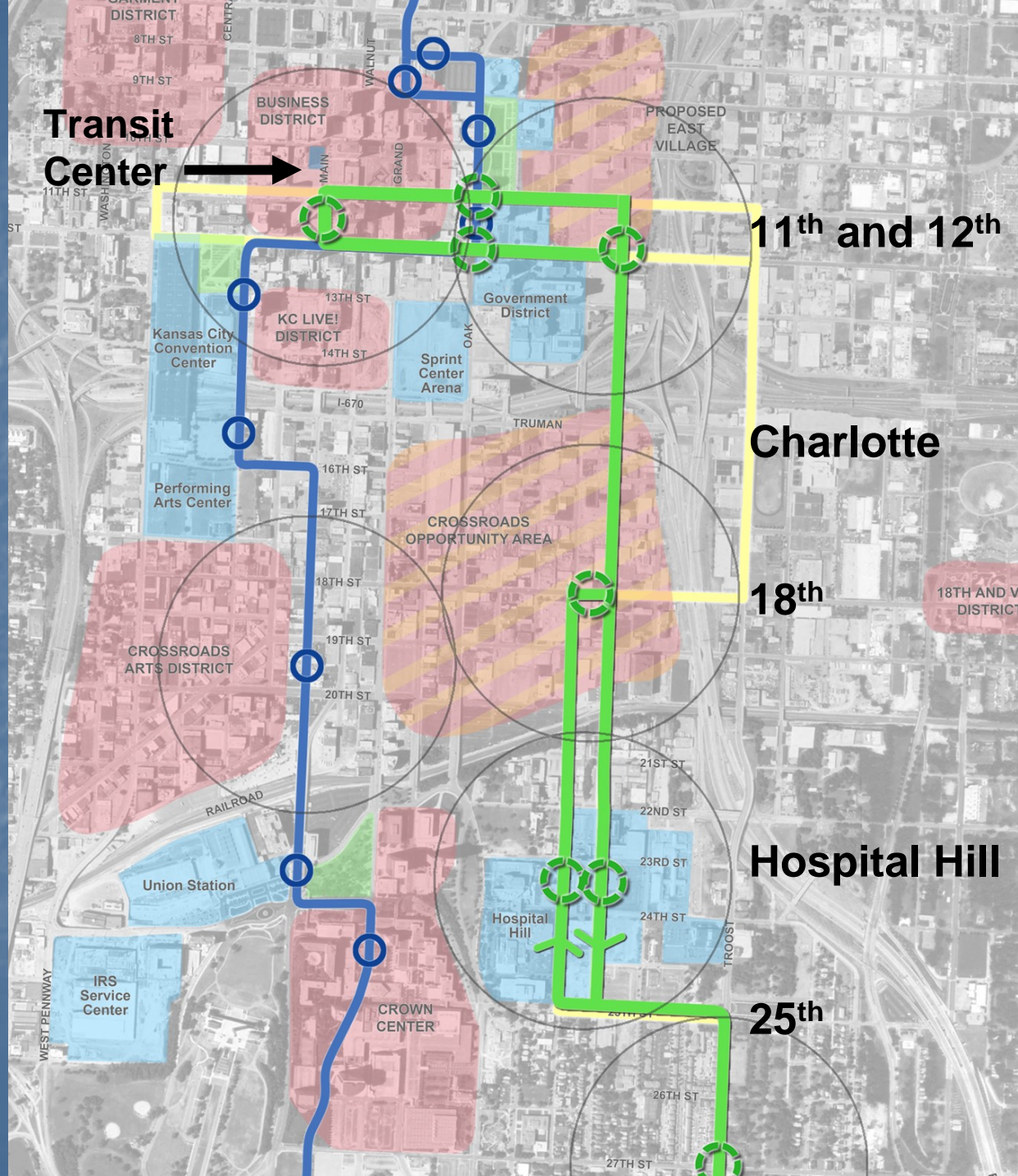
Preferred Option

HNTB



Preferred Option

HNTB



Preferred Route



- Development Opportunities
 - East Crossroads
 - East Village and Government Center
- Connectivity
 - Hospital Hill
 - Government Center
 - East Village
 - Transit Center

Preferred Route



- Minimizes duplication of existing MAX route
- Provides good connection to 10th and Main Transit Center

Southern Terminus



- Four Options Under Consideration
 - 75th Street
 - 82nd Street
 - 85th Street
 - 95th Street
- Provide Park and Ride opportunity
- Site for Driver Comfort Station
- Allow for routes to transfer passengers and layover
- Connect to services offered in Southeast KC
- Visibility



Southern Terminus

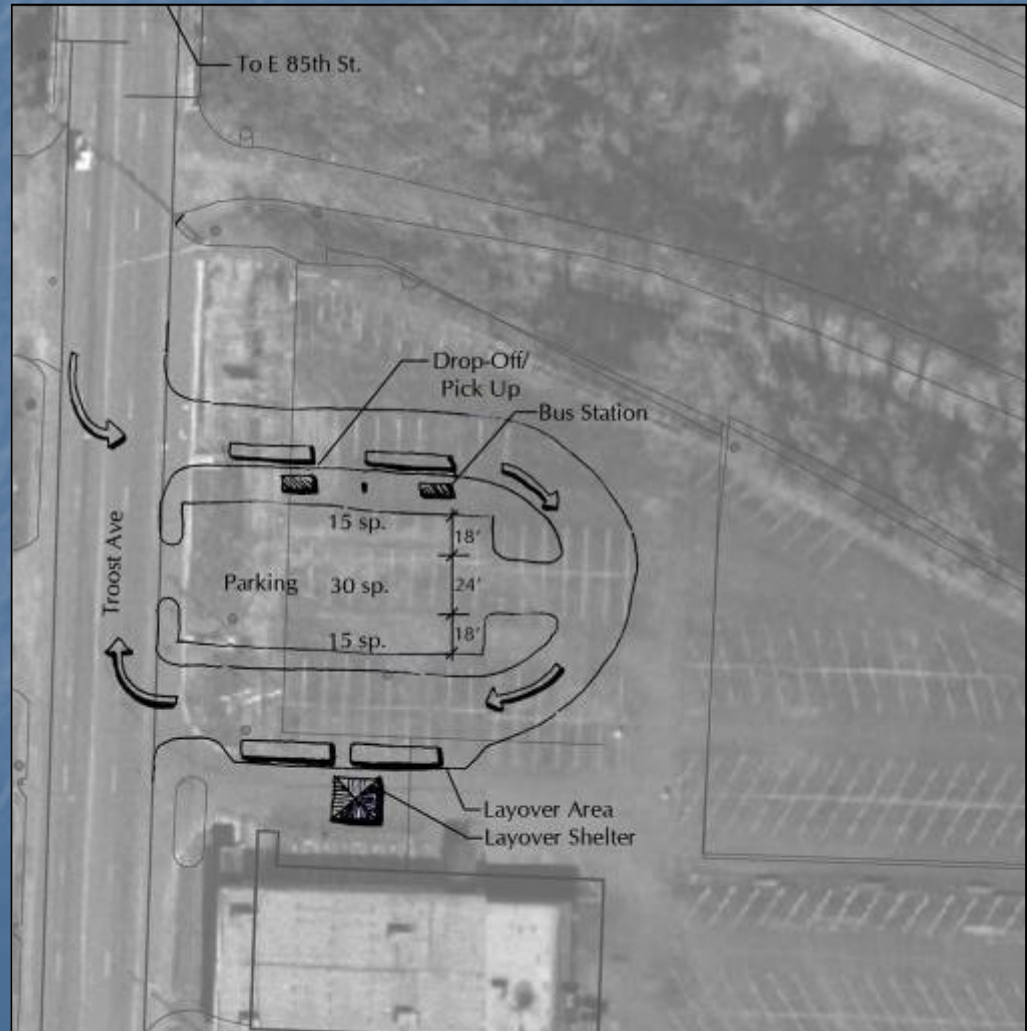
- 85th Street -- Preferred
 - Captures riders at President Gardens
 - Site options for terminus station
 - Park and Ride
 - Off-street platform
 - Comfort station for drivers
 - Connectivity for flex and fixed routes to southeast
 - Trailhead for Trolley Track Trail

Southern Terminus Options



Southern Terminus

Option 4 –South of 85th Street





Riders Served

- Total at Proposed Stop 6,170
54.0% (0 miles)
- Total Within 1 Block of Proposed Stop
8,904 77.9% (1/8 mile)
- Total Within 2 Blocks of Proposed Stop
10,570 92.5% (1/4 mile)
- Total 16th Street to 86th Street
11,429 100.0%



Potential Stop Locations

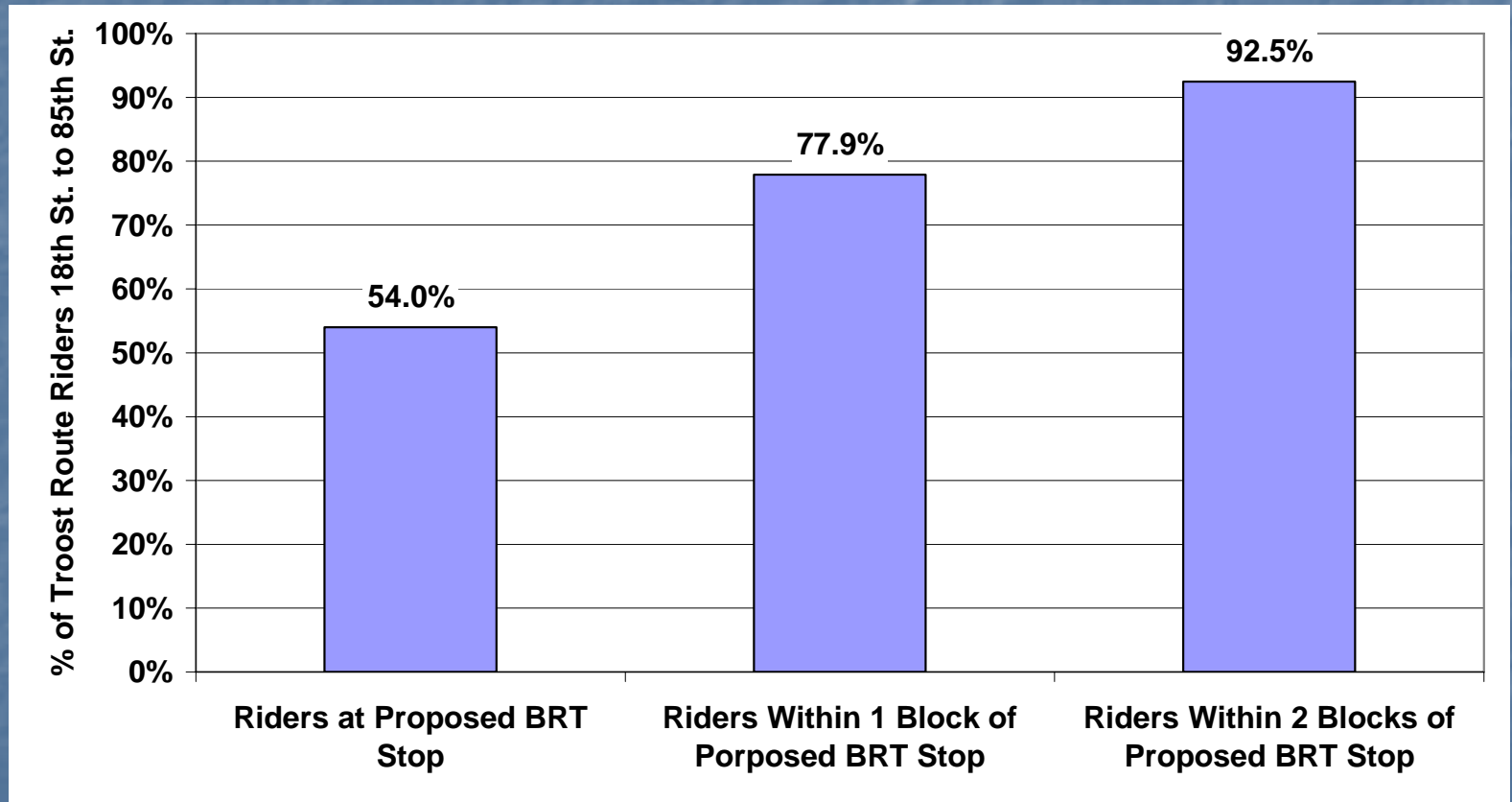
■ Stops

- 12th and Charlotte
- 18th and Charlotte
- 24th and Charlotte
- 27th
- 31st
- Armour
- 39th
- 43rd

■ Stops

- 48th
- 51st
- 55th
- 63rd
- 67th
- 75th
- 81st
- 85th

Riders Served



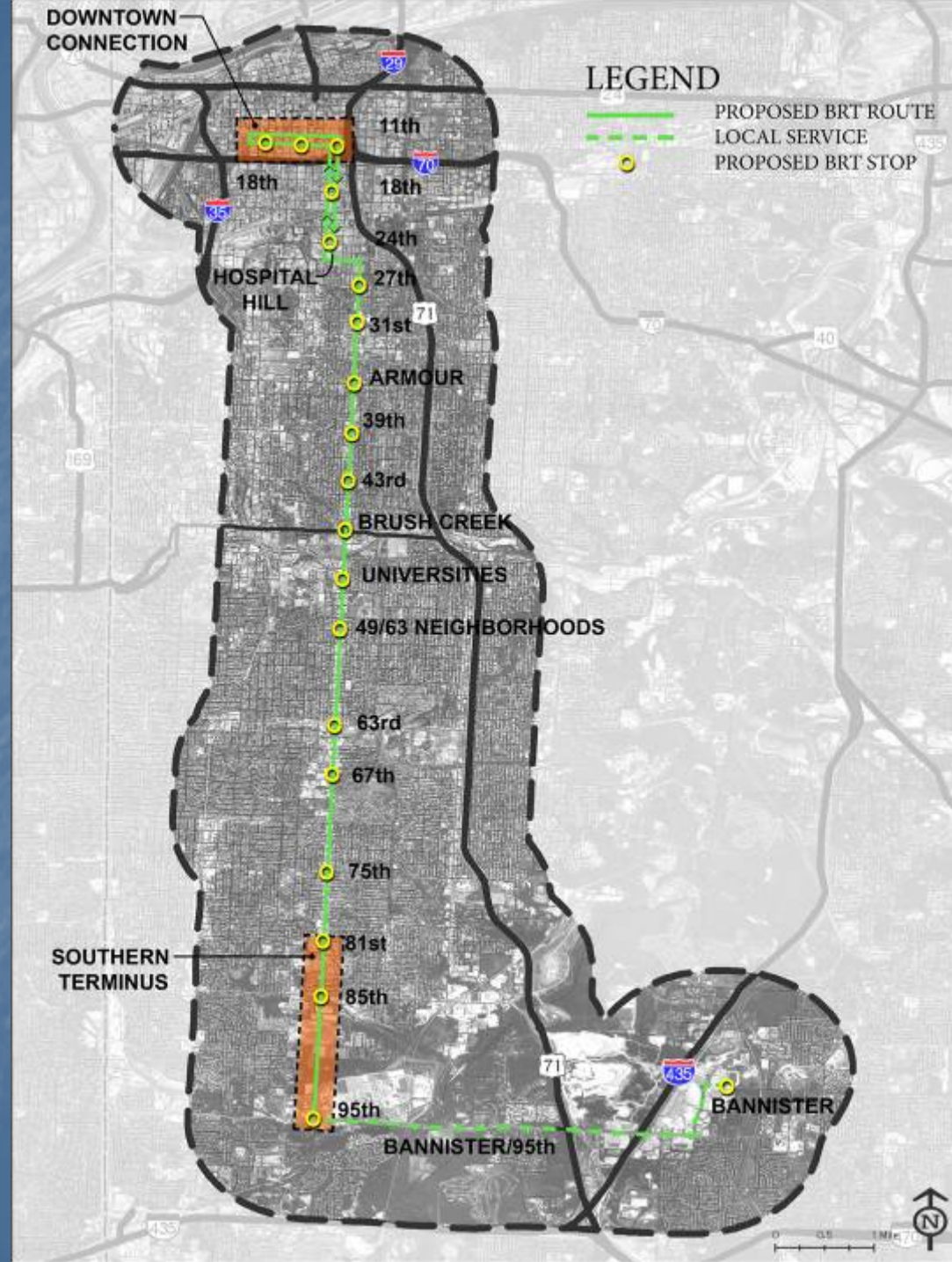


Riders Served

- 80% of all riders on Route 25 are traveling more than two miles

Route

HNTB



Planned Station Amenities



31st and Troost



52nd and Troost





Next Steps

- Complete Alternatives Documentation
- Prepare Environmental Documents
- Begin Final Design 2007-2008
- Construction 2008-2009
- Begin Operations 2009