NELSON NYGAARD

KCATA Comprehensive Service Analysis

Proposed Service Changes

August 24, 2011

KCATA

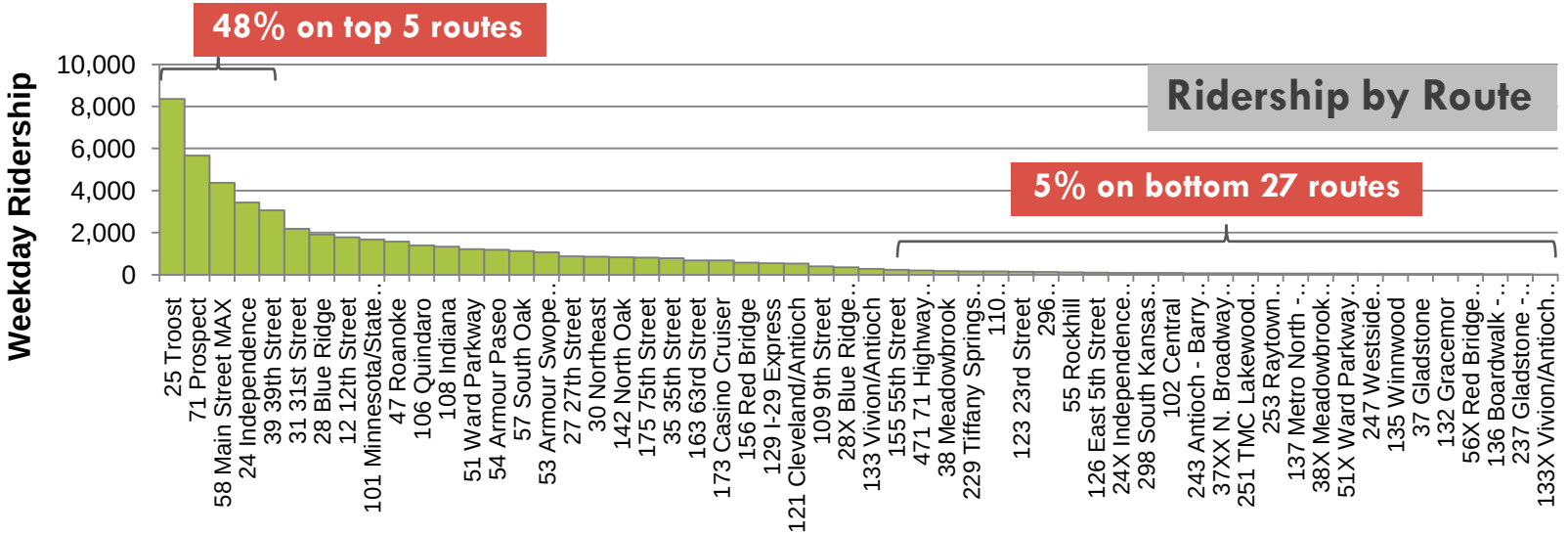
What Are We Doing?

Comprehensive evaluation to determine how to provide better transit within existing resources:

- Assess existing conditions
- Analyze the demand for transit
- Analyze the effectiveness of existing services
- Develop and analyze alternative service scenarios
- Develop recommendations

Why Are We Doing This Now?

- Last comprehensive evaluation was in 1995.
- Kansas City has changed significantly since that time.
- Financial pressures are increasing.
- Some services work very well, some need improvement.
- Need to provide better service with fewer resources.



Goals – More Attractive & Productive Service

- Improve the passenger experience and draw new riders.
- Improve the functionality and performance of the KCATA route system and individual routes.
- Opportunities to improve service on nearly all routes.
  - Make service easier to use.
  - Make service easier to understand
  - Make service more convenient.
  - Make service faster and more direct.
  - Improve efficiencies and productivity.

Critical Baseline Plan Inputs

- Rider preference survey
- Market analysis
- Quantitative data – route level and system level
- Fleet use
- Formal service guidelines and performance measures
- Stakeholder visits
- Rider and public input
- Coordination with Downtown AA Planning efforts

How Effective is Existing Service?

- Systemwide, KCATA's services are generally well matched to demand
- Many opportunities to improve service and productivity
- *Proposals for route changes focused in KCMO*
  - *Some major*
  - *Most minor to moderate*

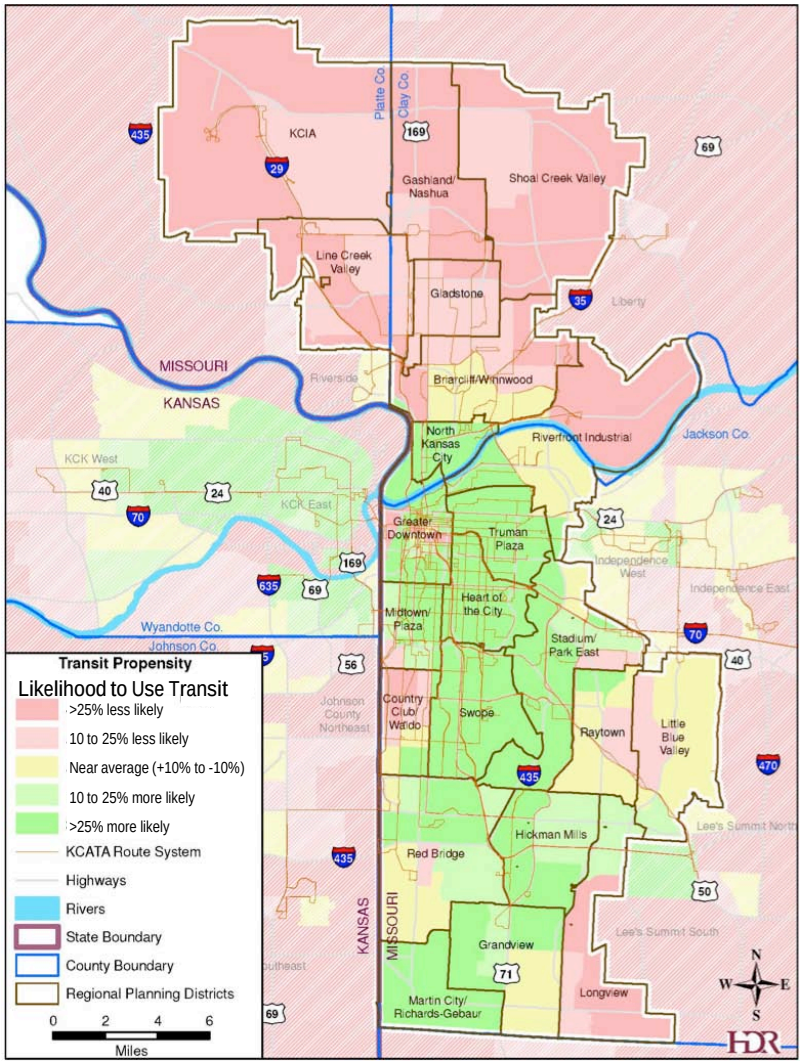
What is the Demand for Transit in KCMO?

Transit demand largely driven by three factors:

1. Population and employment densities
2. Socio-economic characteristics
3. Travel flows

Where is Demand Highest?

- Demand is highest in the core area south of the river
- Demand is lowest in outer neighborhoods:
  - Most of the Northland
  - Eastern neighborhoods
  - Southern neighborhoods



Service Strategies

Service Design

- Develop Key Corridor network
- Realign service to improve reliability and directness
- Expand service to new areas
- Consolidate duplicative services
- Improve express service
- Discontinue some very poorly utilized services

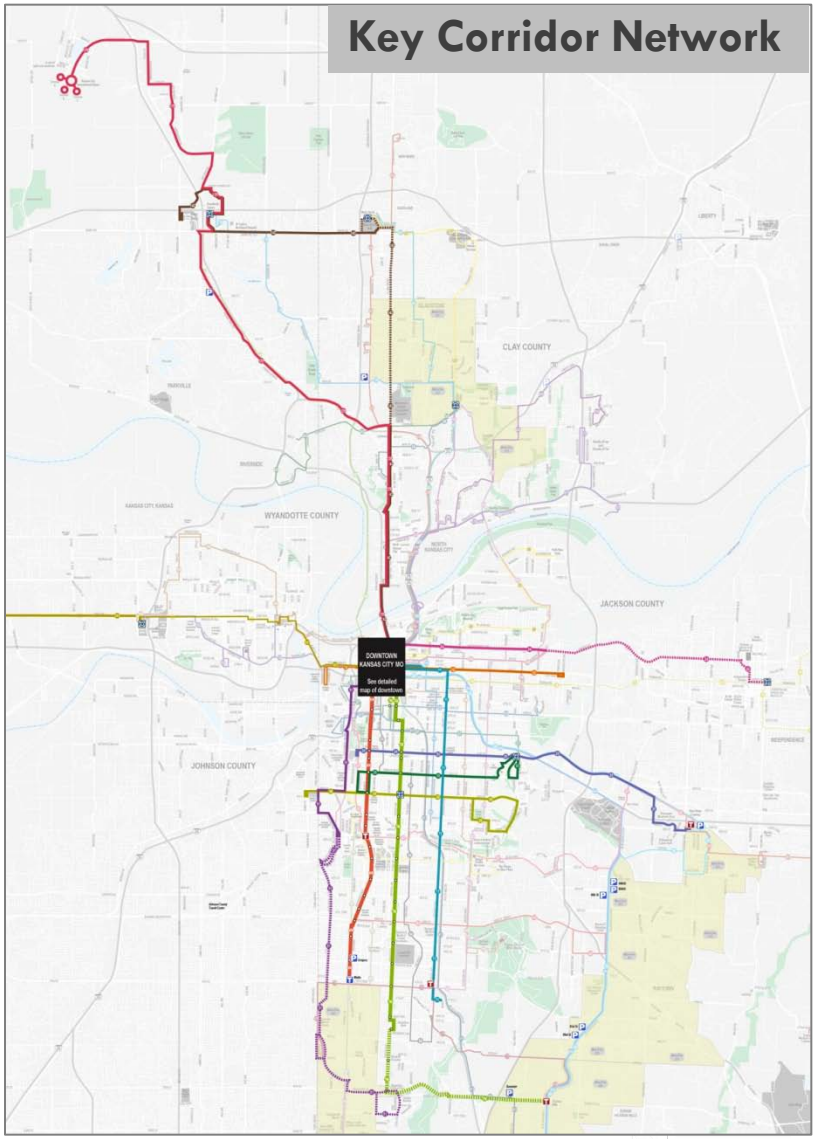
Schedule

- Service frequencies and spans to better match demand
- More consistent schedules
- Scheduled MetroFlex connections

Key Corridor Network

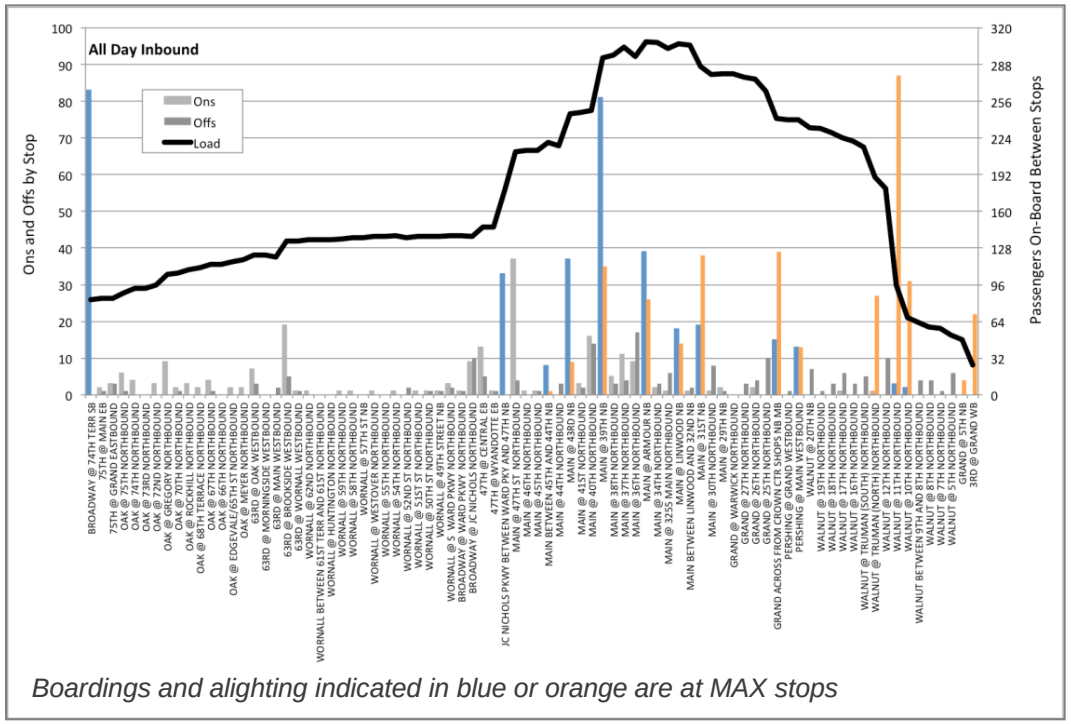
- Major routes around which the the rest of the system would be reconfigured.
- Frequent service from early morning until late night.

Main Street MAX
Troost MAX
12 Truman Road
24 Independence
31 31st Street
39 39th Street
51 Broadway
71 Prospect
101 State Avenue
129 I-29
142 North Oak



More Frequent Main Street MAX Service

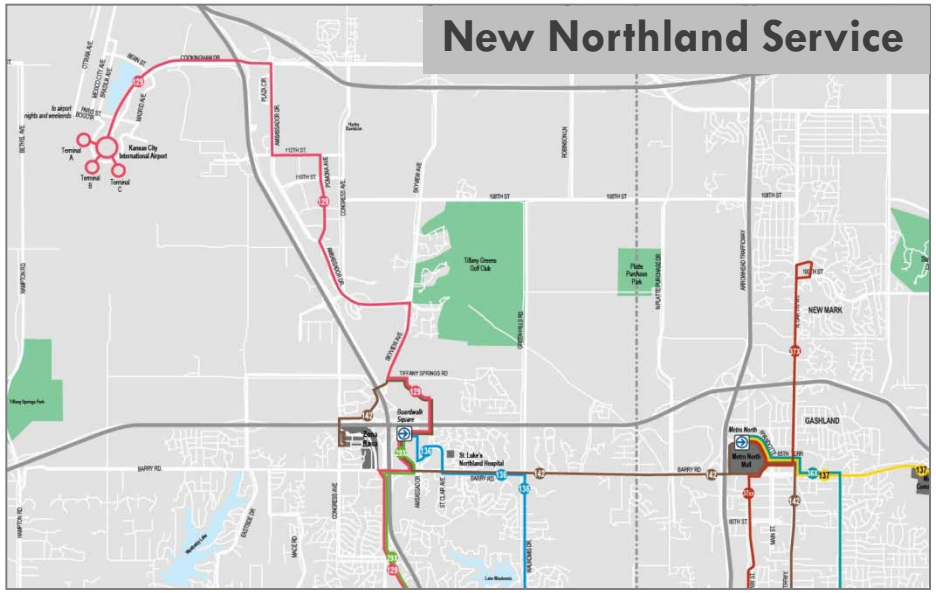
- *Consolidate Route 57 with Main Street MAX to improve Main Street MAX service:*
  - From every 15 minutes to every 10 minutes during the midday
  - From every 30 minutes to every 15 minutes at night



Boardings and alighting indicated in blue or orange are at MAX stops

Expand Service in Underserved Areas

- Northland
  - New Mark
  - Gashland
  - Zona Rosa
  - I-29 Corridor/ Tiffany Springs
- Hickman Mills/ Ruskin Heights
- Westside



Streamline Service

- Service that is simpler, more direct and faster:

EXAMPLES

12 12th Street: *Split into two routes, 12th Street and Truman Road*

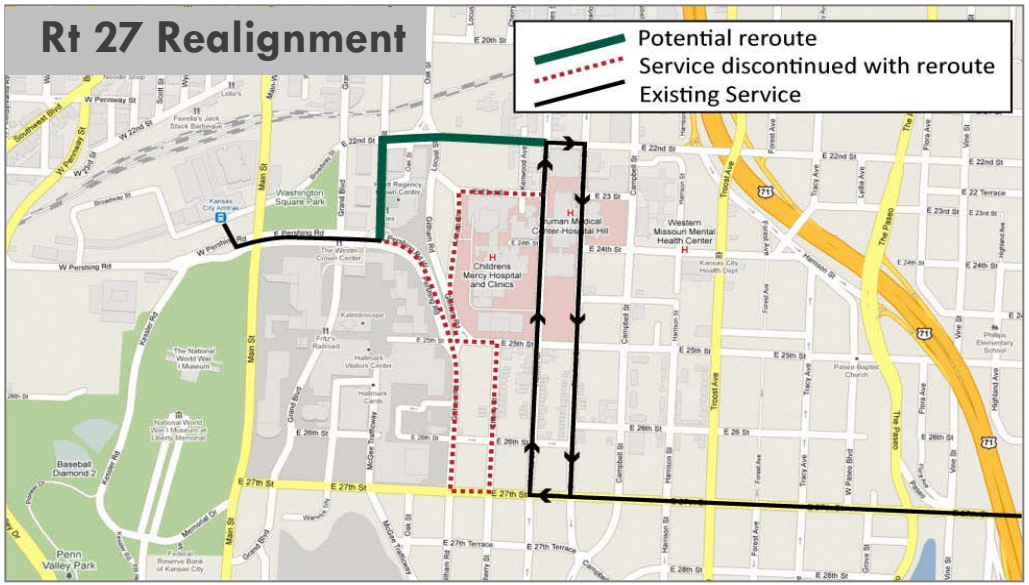
27 27th Street: *Straighten through Hospital Hill and Crown Center*

24 Independence: *Operate via Independence Ave into Independence*

35 35th Street: *Operate via VA Hospital in both directions*

71 Prospect: *Operate all service via Federal District*

173 Casino Cruiser: *Operate via I-29/I-35 and discontinue deviations*

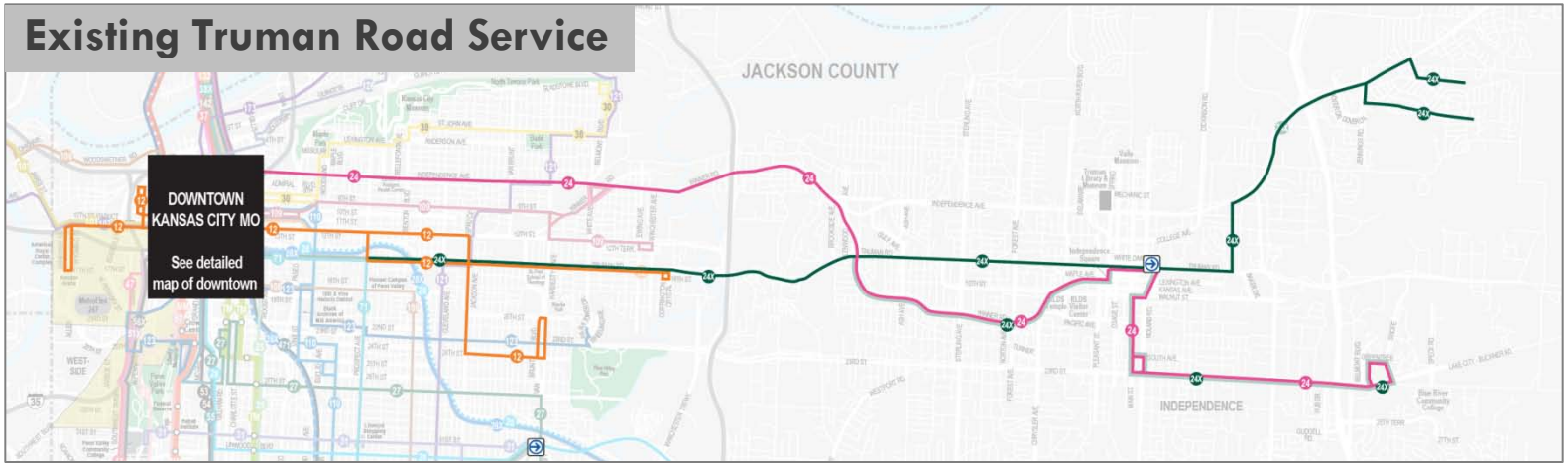


Streamline Service

- Service that is simpler, more direct and faster:

EXAMPLE: TRUMAN ROAD CORRIDOR

- Split Route 12 Truman Road into two routes:
  - 12 12th Street
  - 15 Truman Road
- Adjust mix of short and long trips on Route 24 Independence.
- Replace Route 24X Independence Express with new Route 15 service.



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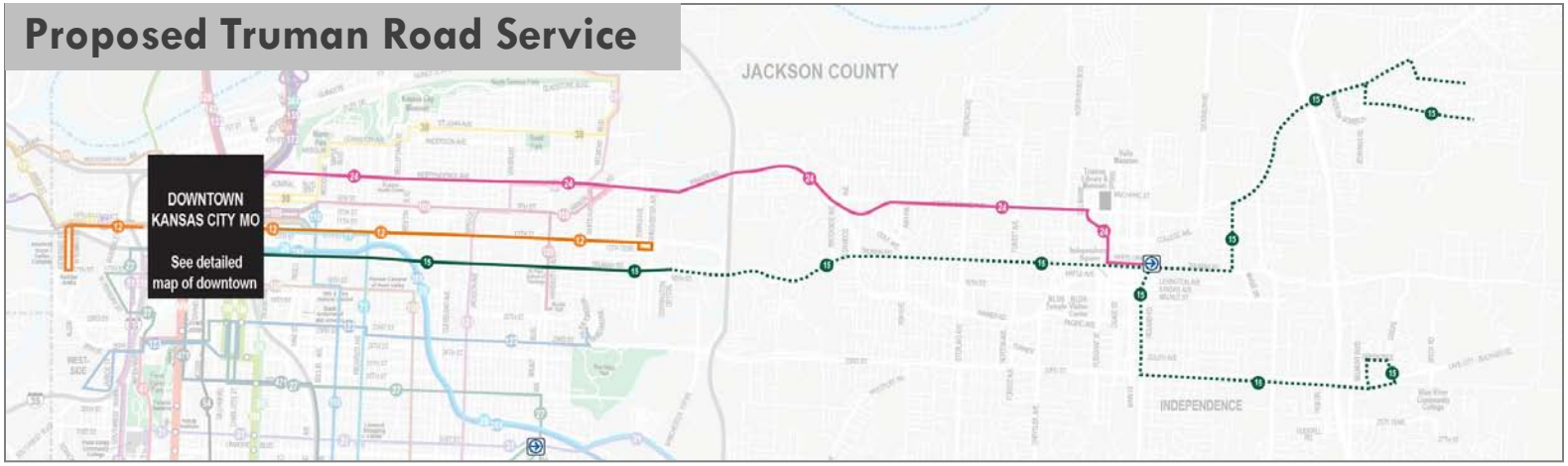
Proposed Truman Road Service



Consolidate Duplicative Services

- Consolidate to both improve service and reduce costs.

EXAMPLES

12 Truman Road
24X Independence
} *Replace with new 15 Truman Road*

37 Gladstone
38X Meadowbrook Express
133 Vivion/Antioch Express:
} *Replace with new 36X North Broadway Express*

51X Ward Parkway Express
56X Red Bridge Express:
} *Combine*

53 Armour-Swope
54 Armour Paseo
108 Indiana:
} *Combine 53 & 54*
Extend Route 108

Main Street MAX
57 South Oak
156 Red Bridge
} *Consolidate inner end of 57 with Main Street MAX*
Consolidate outer end of 57 with 156

Consolidate to Improve Express Service

- Faster and more service through consolidating duplicative routes.

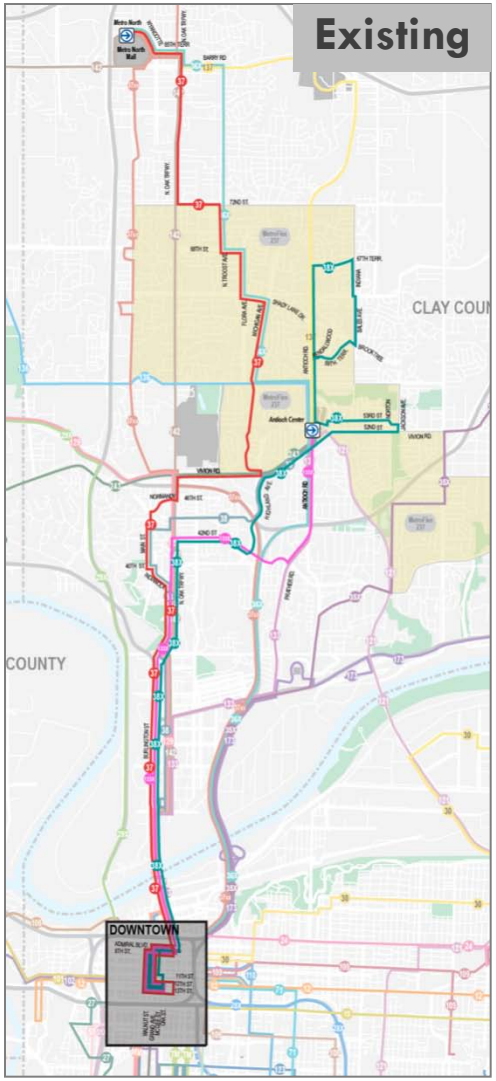
EXAMPLE

Consolidate

- 37 Gladstone
- 38X Meadowbrook Express
- 133X Vivion/Antioch Express

Into new:

- 36X Metro North – Gladstone – Antioch Center – Downtown:
  - *More service on new route than any individual routes.*
  - *Faster service via I-29/I-35.*
  - *Nearly all existing riders served.*
  - *One strong route versus three individual weak routes*



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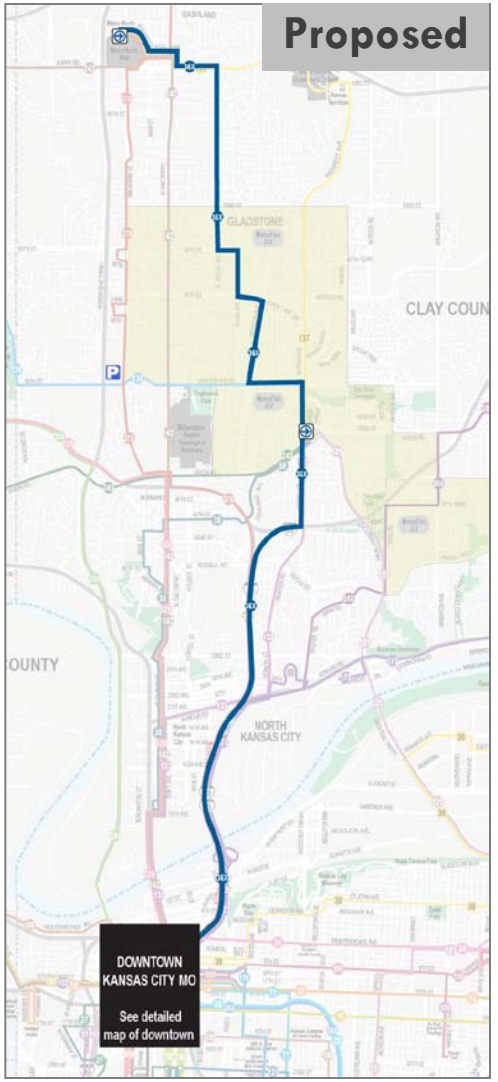
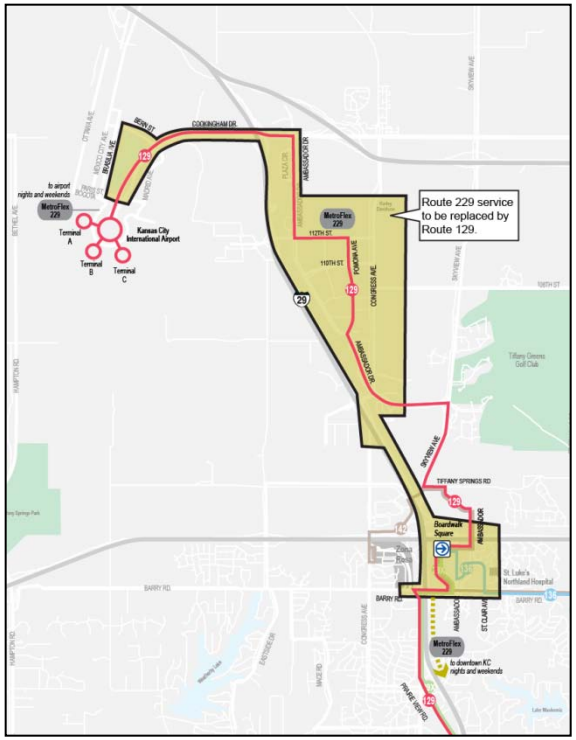


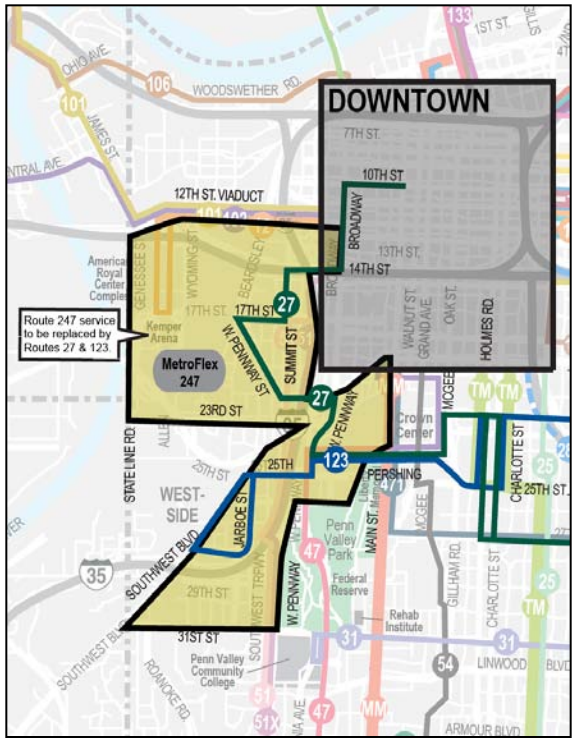
Convert MetroFlex to Fixed-Route

- To provide more consistent service, no reservations, and better integration with rest of system.

229 Tiffany Springs MetroFlex
→ *129 KCI/Prairie View*



247 Westside MetroFlex
→ *27 27th Street & 123 23rd Street*



Discontinue Very Low Ridership Service

- Discontinue services that serve too few passengers:

  EXAMPLES
  55 Rockhill *(120 riders; 13.3 pax/veh hour; Troost MAX option)*
  136 Boardwalk Connector Saturday service *(20 riders; 5.7 pax/vehicle hour)*
  243 Antioch/Barry Road Saturday service *(60 riders; 7.2 pax/vehicle hour)*

- Eliminate low ridership variants:

  EXAMPLES
  129 I-29 Express; Tiffany Springs Variant *(0 riders on unique segment)*
  133 Vivion/Antioch; Iron Road Variant *(6 riders)*

Note: Current system average = 31.7 passengers per revenue vehicle hour

Balance Service Levels with Demand

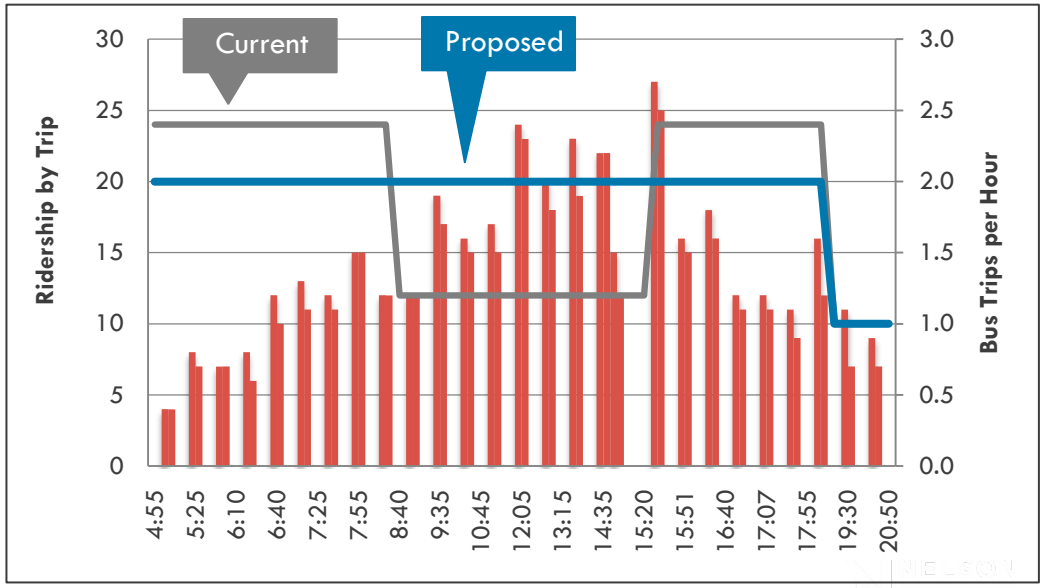
- Based on ridership, some routes provide too infrequent service while others provide too many trips.
- Adjust service levels based on the new service guidelines:

> More frequent service: *21 routes (often accomplished through route consolidation)*
> Less frequent service: *6 routes*
> Service shifted between time periods: *6 routes*

EXAMPLE

Route 35 35th Street

- *Current: Too much service in peaks; too little midday*
- *Proposed: Less service in peaks; more in midday*

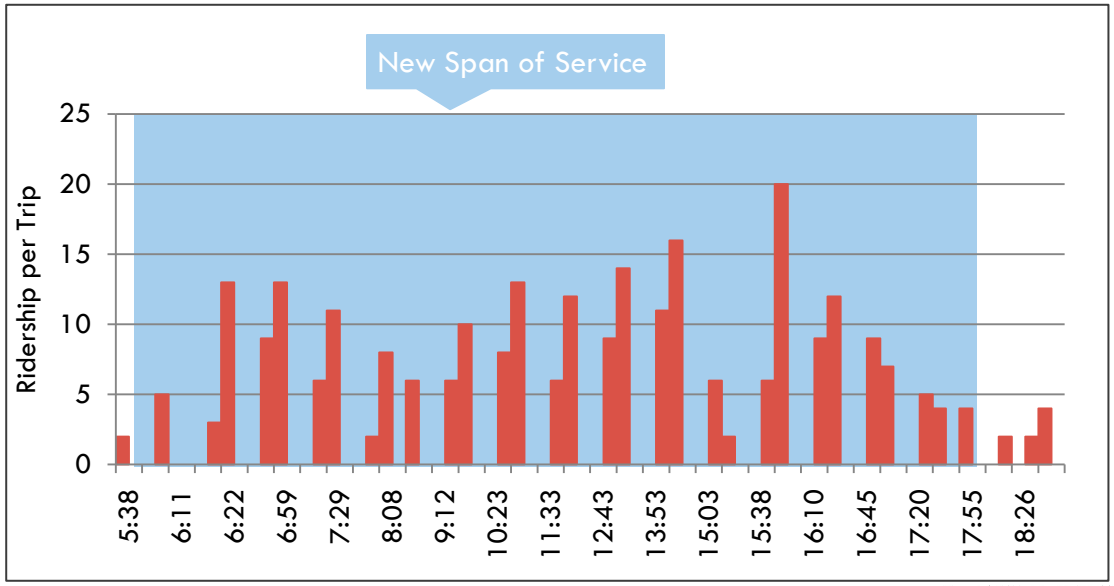


Adjust Spans of Service

- Ridership analysis indicate that....
  - Some routes start too early or too late
  - And, some end too early or too late.
- Adjust start and end times using new service guidelines:

> Longer spans: *11 routes*
> Shorter spans: *20 routes*

EXAMPLE
Route 133
- *Operate service from 6:00 AM to 6:00 PM*



Operate Service More Consistently

- Many routes operate with inconsistent service frequencies.
- Revise schedules to make service easier to remember and more convenient:

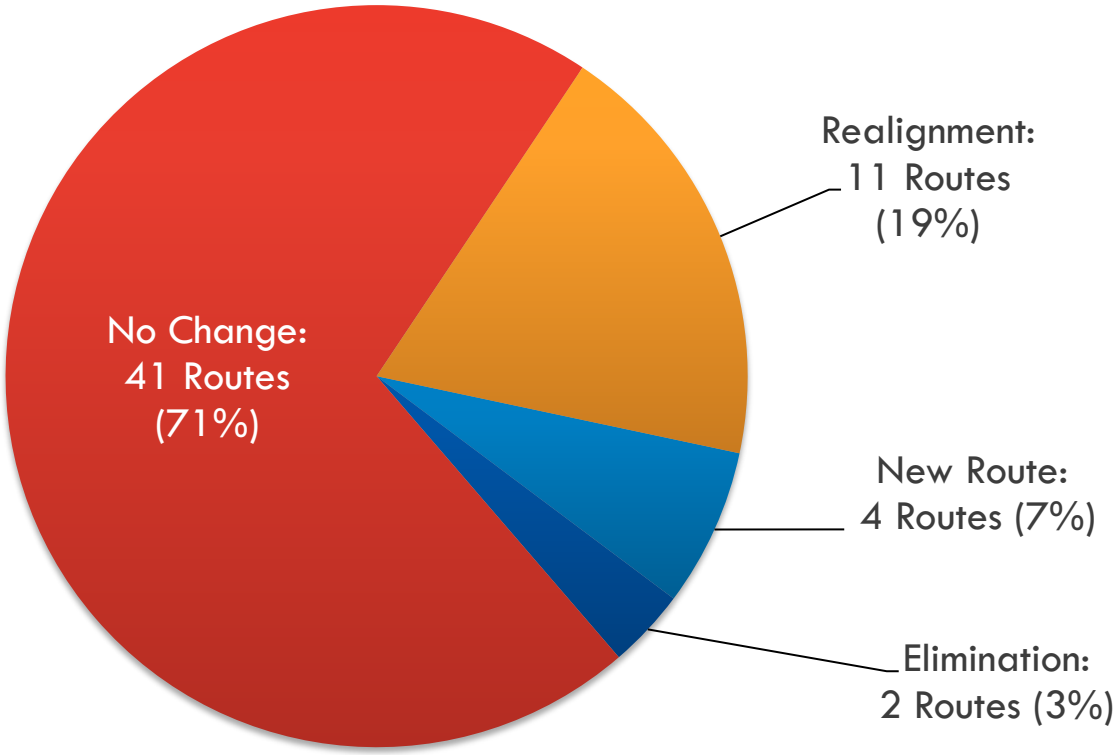
More consistent schedules: *16 routes*

EXAMPLE: Route 47 Roanoke Service Frequencies (in minutes)

	Existing	Proposed
Early AM	20 – 30	30
AM Peak	17 – 45	30
Midday	40 – 45	30
PM Peak	28 – 35	30
Evening	28 – 35	60

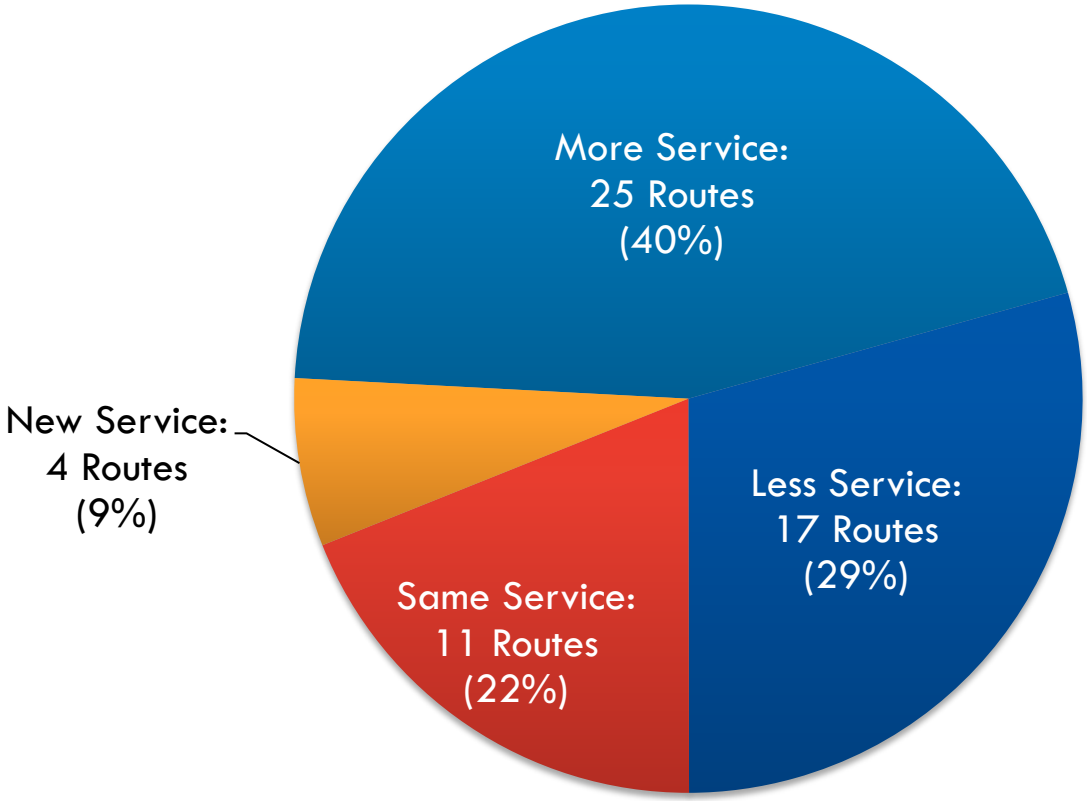
Impacts: Route Design

Route alignments will be impacted as follows...



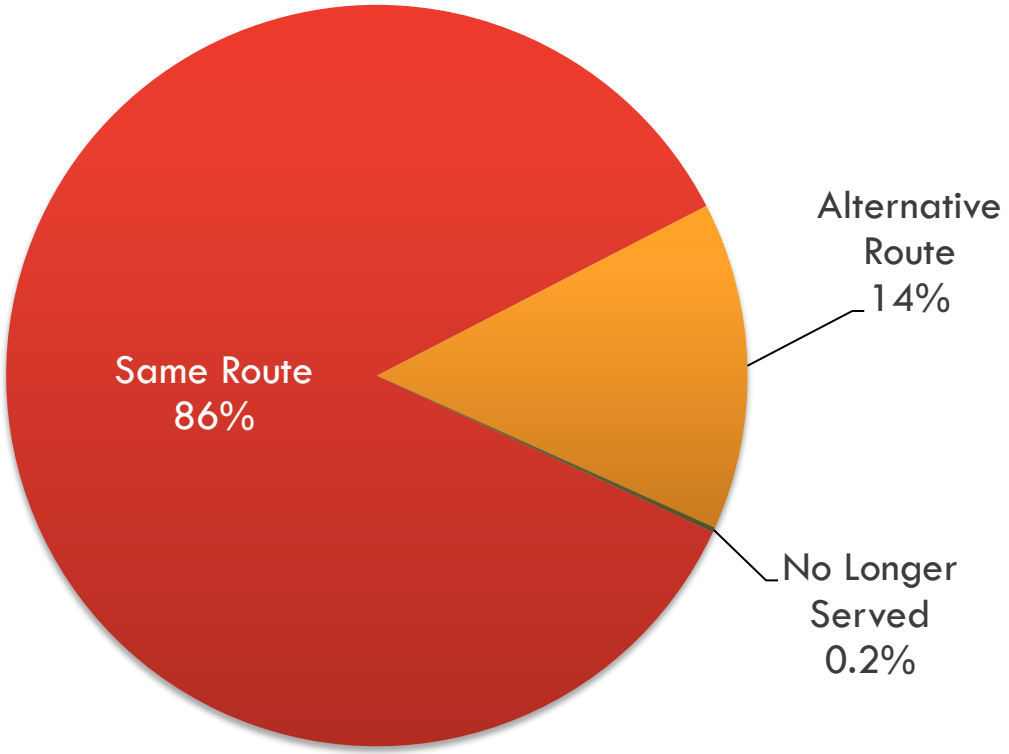
Impacts: Route Trips

As proposed, the number of trips per route includes...



Impacts: Passenger's Route Used

As proposed, current passengers will have access to....



Estimated Impacts

- Provide equal or better service to large majority (>80%) of existing riders.
- Serve virtually all existing riders (99.8%).
- Attract approximately 5-7% more riders.
- Improve productivity, in terms of passengers per vehicle hour, by 15-19%.
- Decrease operating costs per passenger by 10-13%.

Next Steps

Action	Schedule
Solicit public/stakeholder input • Publish Plan on website • Comments by email, mail, recorded phone line • Open Houses in community • Stakeholder visits	September - October
Revise proposals based on public/stakeholder input	Fall 2011
Present final recommendations for Board approval	Fall/Winter 2011
Begin phased implementation	Spring 2012