

Simplified Trips-On-Project Software (STOPS) for Kansas City

presented by
Jeanette Berk, HNTB

Date

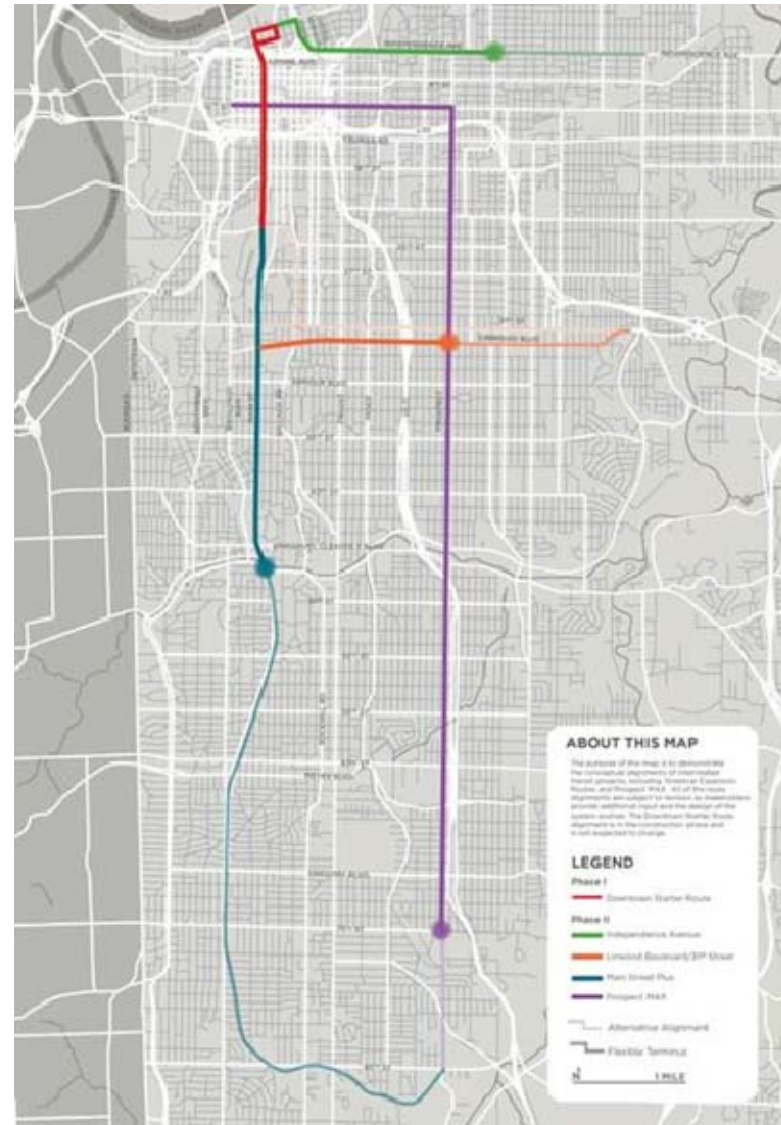
May 5-7, 2015



Introduction of Presentation



- STOPS was used to analyze
 - Existing Streetcar
 - Red
 - New streetcars
 - Blue
 - Green
 - Orange
 - New BRT
 - Purple



Focus of Presentation



- Calibration of STOPS in Kansas City
 - Station Groups = show group to group ridership based on station boarding and alighting
 - District Groups = groups of 1 or more zones used to aggregate travel data for calibration and reporting travel flows

Calibration of Stops in Kansas City

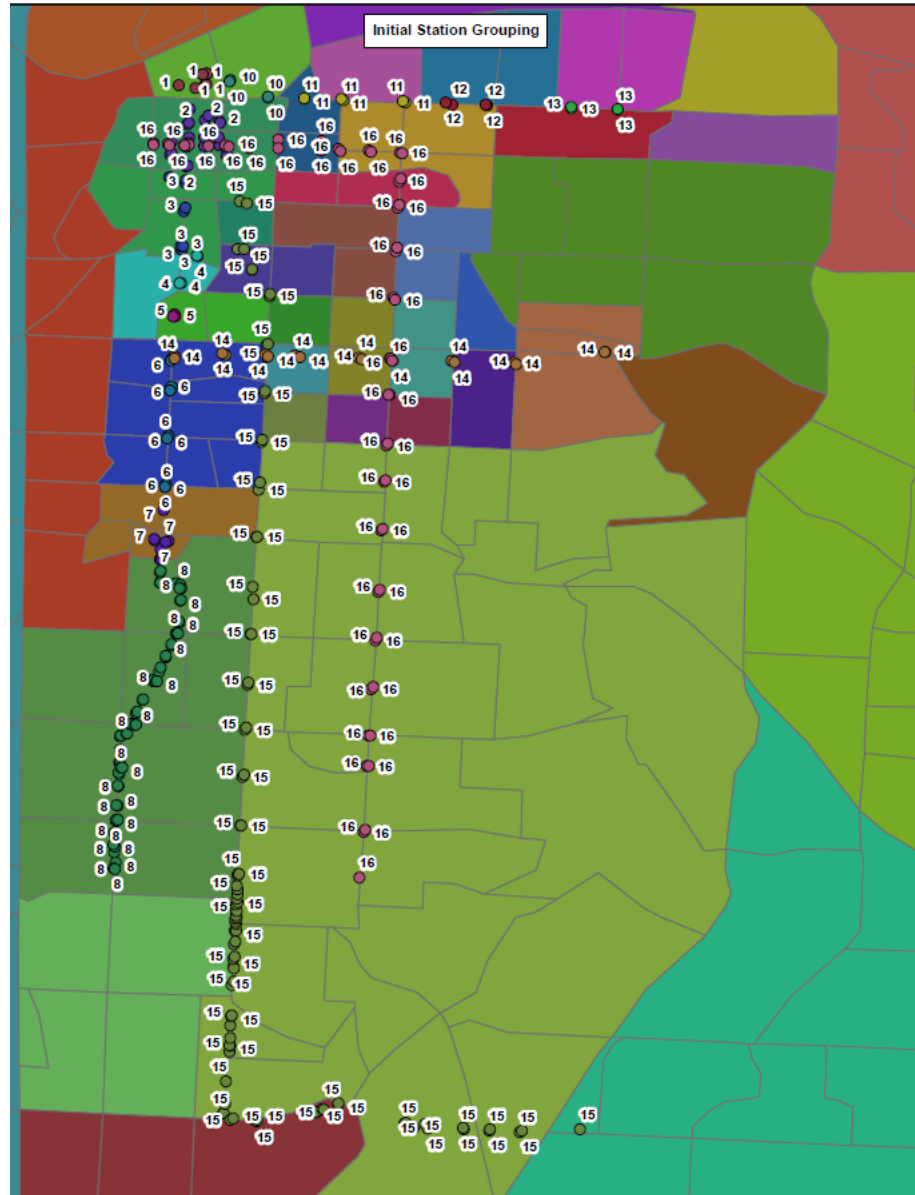


- Define stations and districts for calibration
 - CBD
 - Major groupings of other destinations
 - Balancing act between number of zone groups/districts and market characteristics

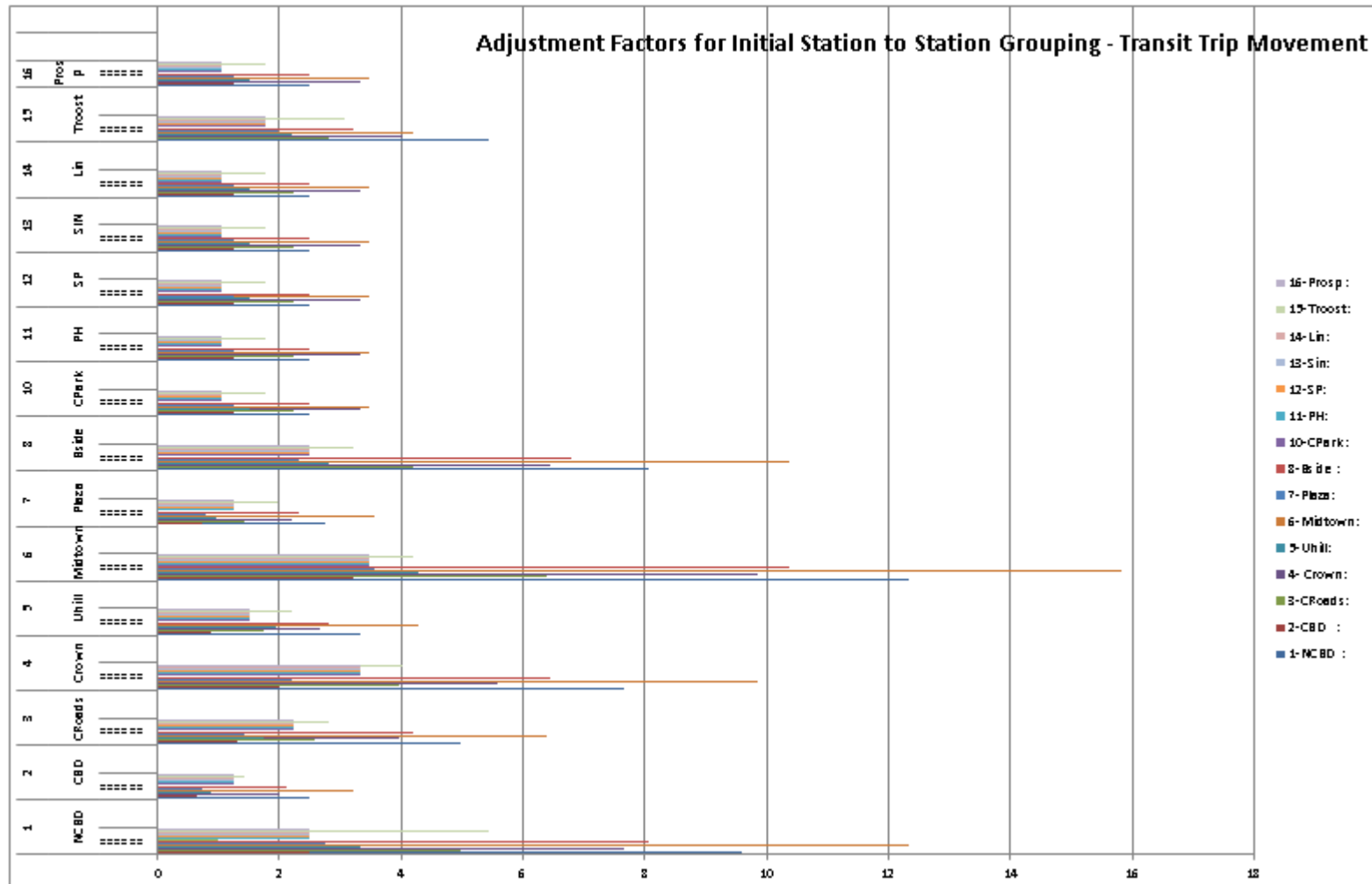
Calibration of Stations



Initial Station Groupings
322 Stations (BRT & Streetcar)
16 Groups



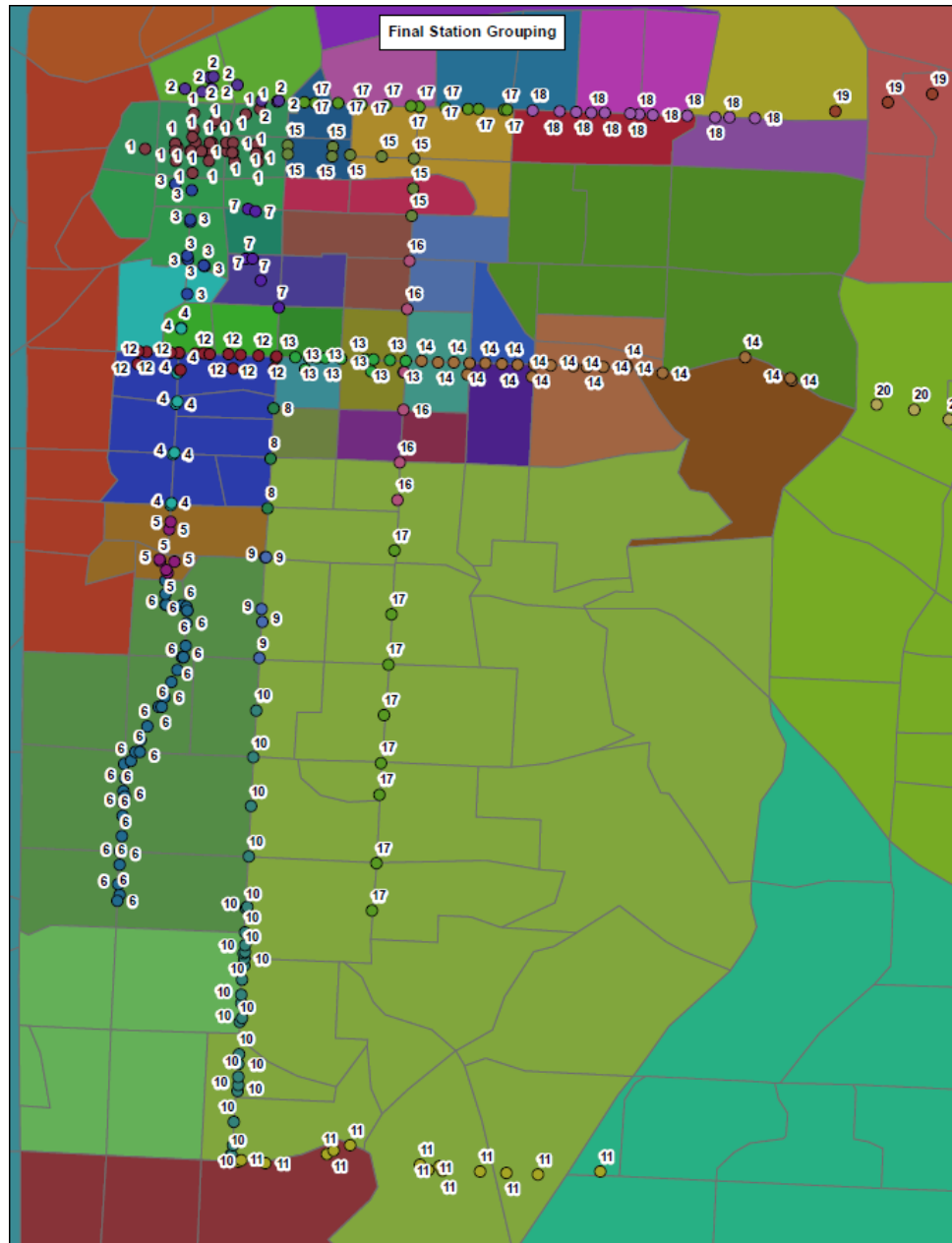
Calibration of Stations



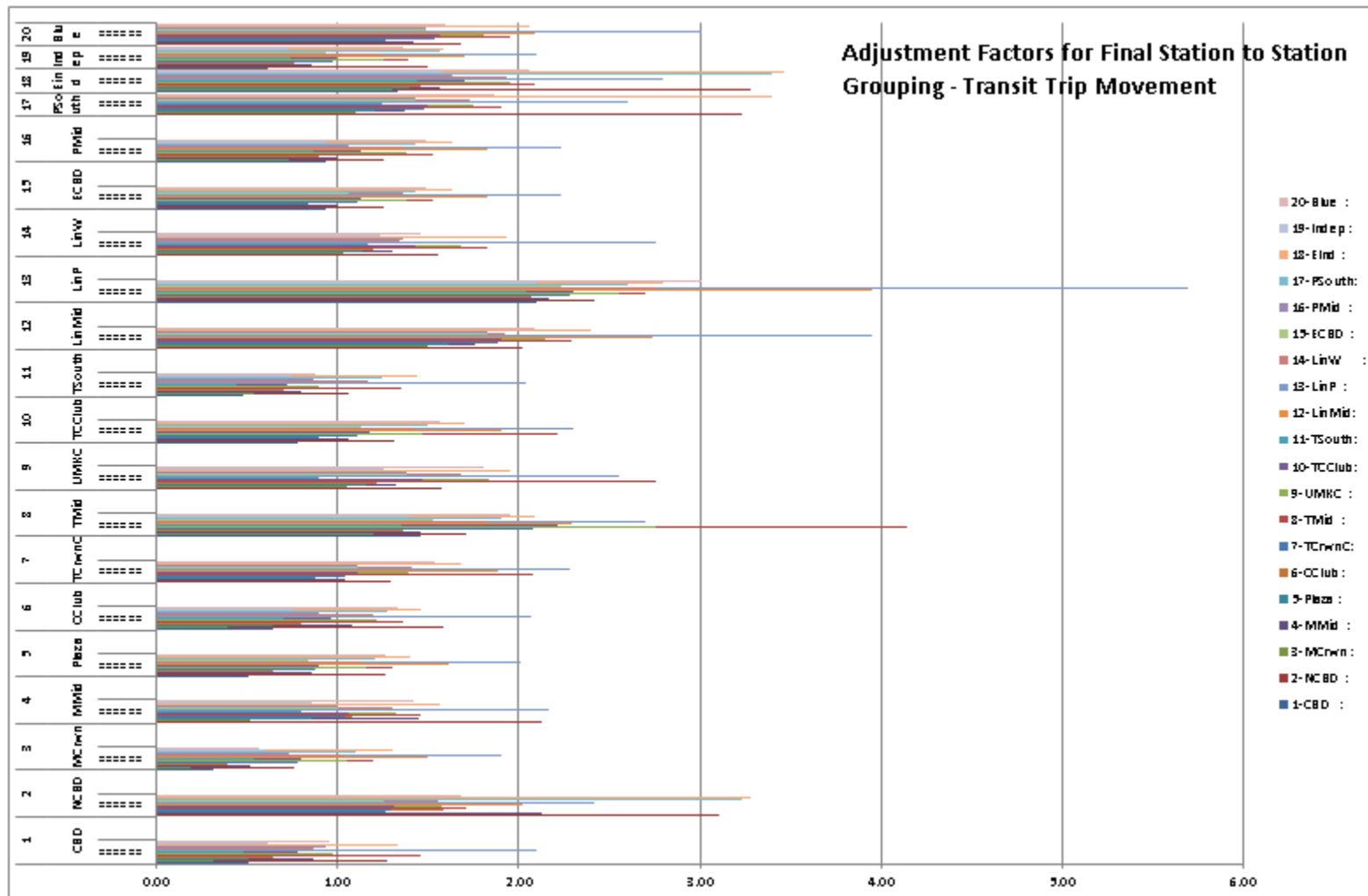
Calibration of Stations



Final Station Groupings
296 Stations (BRT, Streetcar &
Local Bus)
20 Groups



Calibration of Stations



Calibration of Station



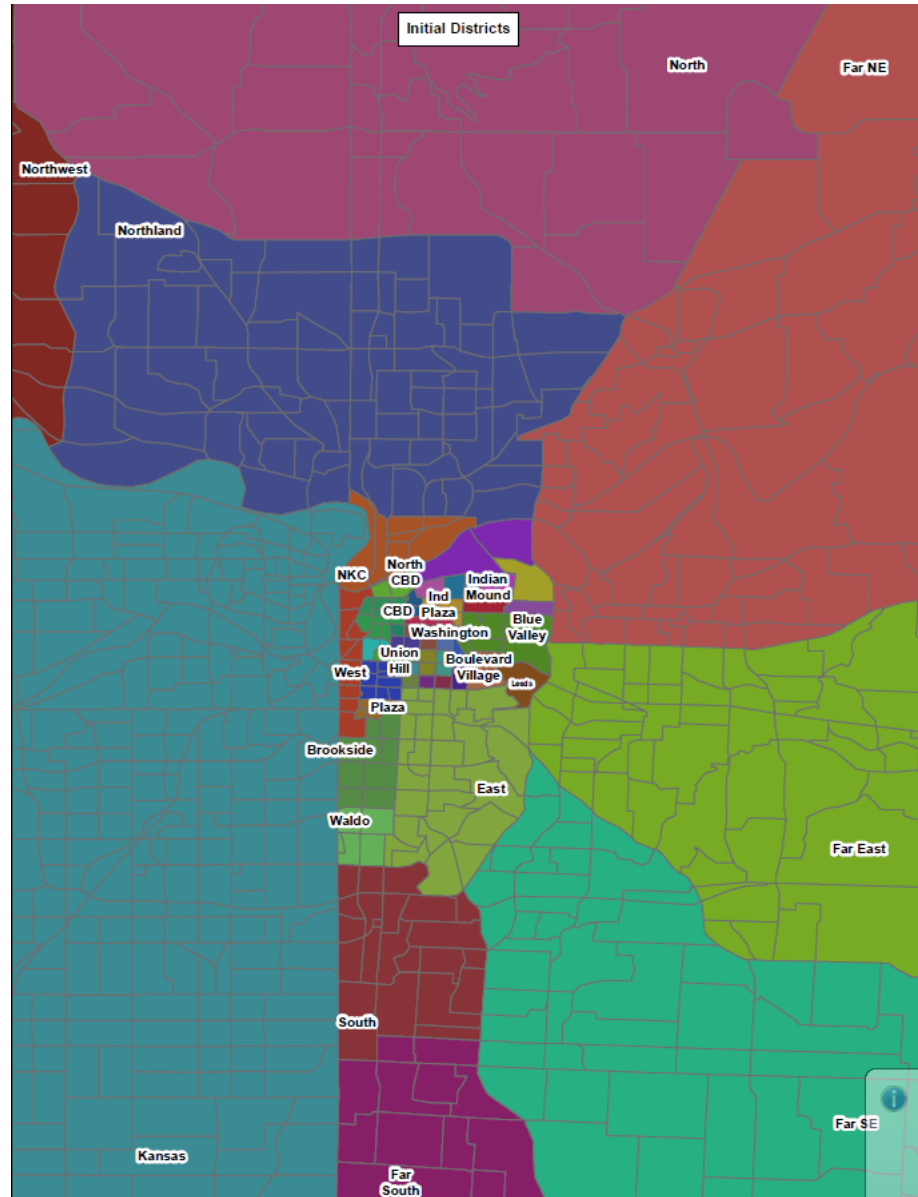
Tips

- Analyze results of ridership boardings by station
- Adjustment factors ideally 1.00
- Add in local bus stops to adjust existing calibration
- Create grouping based on similar land-use characteristics/densities and transit service
- Create grouping based on similar access modes/accessibility to the stations

Calibration of District



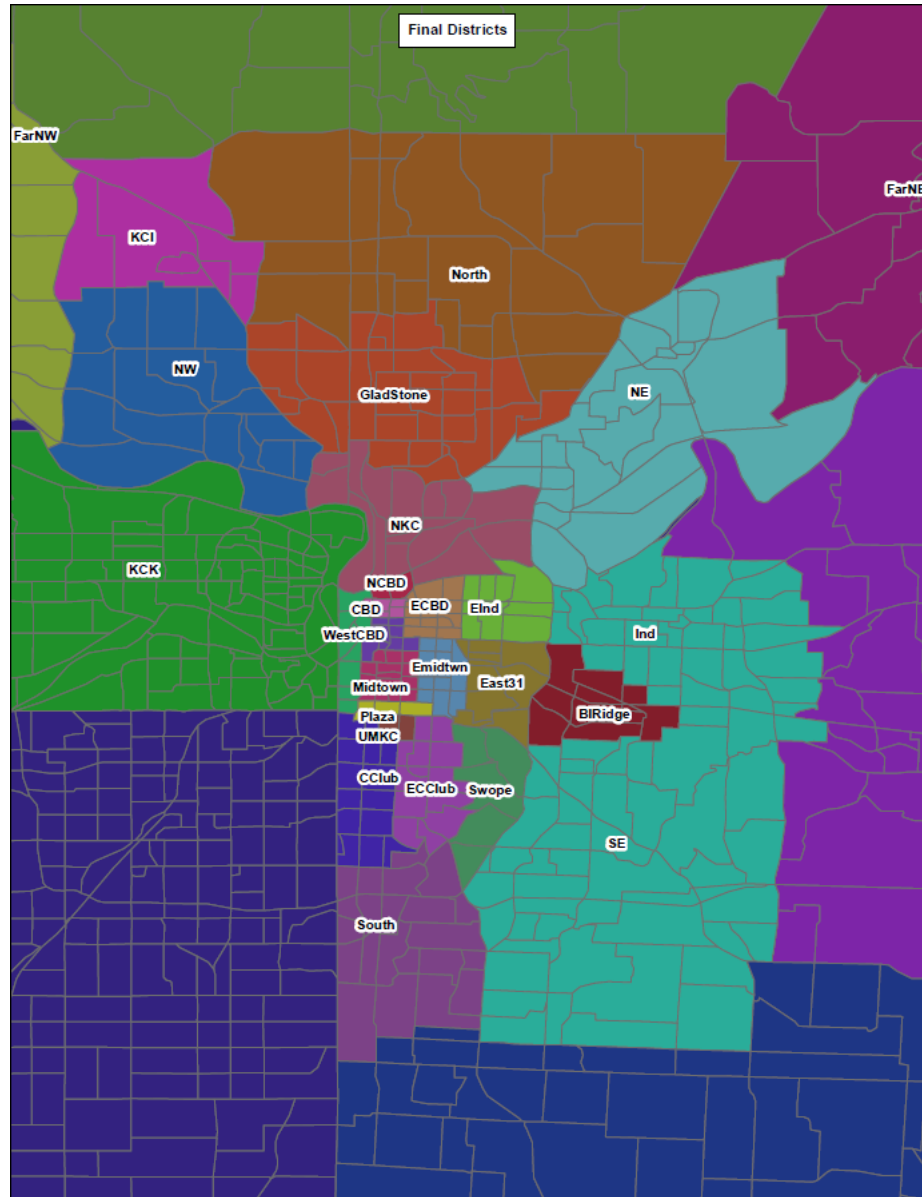
Initial District Groupings
50 Groups



Calibration of Stations



Final District Groupings
30 Groups



Calibration of Districts



Tips

- Focus on project corridor
 - Analyze ridership of the routes
- Base groupings on similar characteristics of the land-uses/market segment
- Districts typically increase in size as you move away from project corridor

Calibration of Districts



Average Weekday Transit Trips on Project Routes

Route ID of Project Mode	Actual Corridor Ridership	Initial Districting	Final Districting
1	5,200	15,228	10,600
2	3,400	9,324	4,100
3	3,400	5,334	3,100
26	6,000	6,256	7,000
4	5,800	4,370	6,300

Calibration of Districts



Acknowledgements and Thanks

- Robert Hosack, HNTB
- Brian Comer, HNTB

