



# Transit Service Best Practices

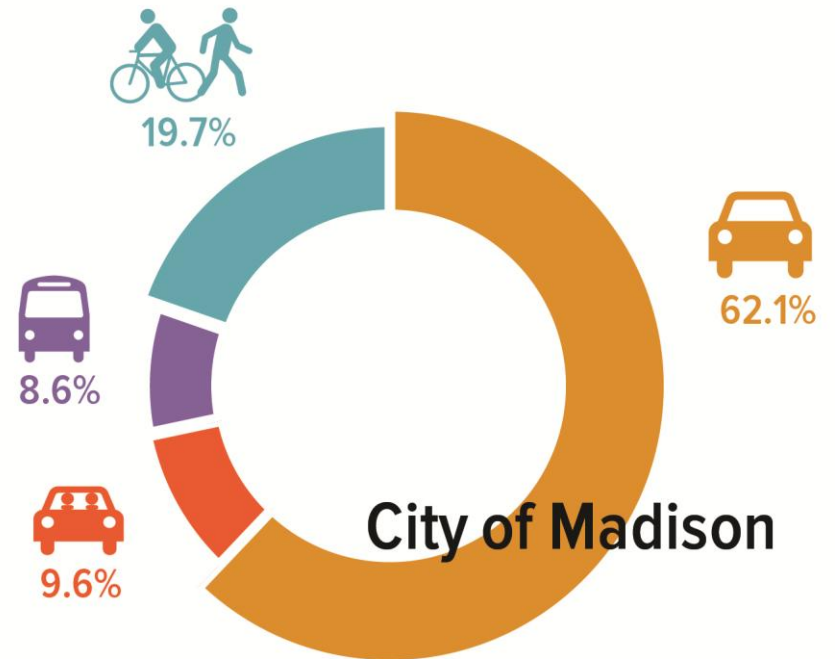
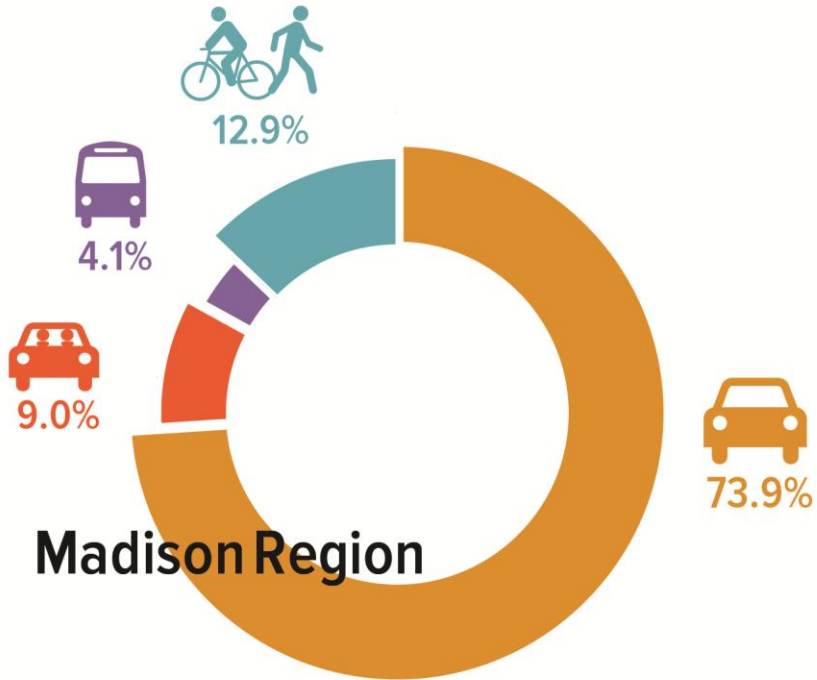
**Presented by:**  
**Paul Moore**

November 20, 2014

# Madison BRT Station Area Development

# Current Mode Share

---



# Growth Scenarios A and B

MADISON



IN MOTION

## Sustainable Madison Transportation Master Plan

### General Scenario Assumptions

100,000 overall increase in population  
80,000 overall increase in employees

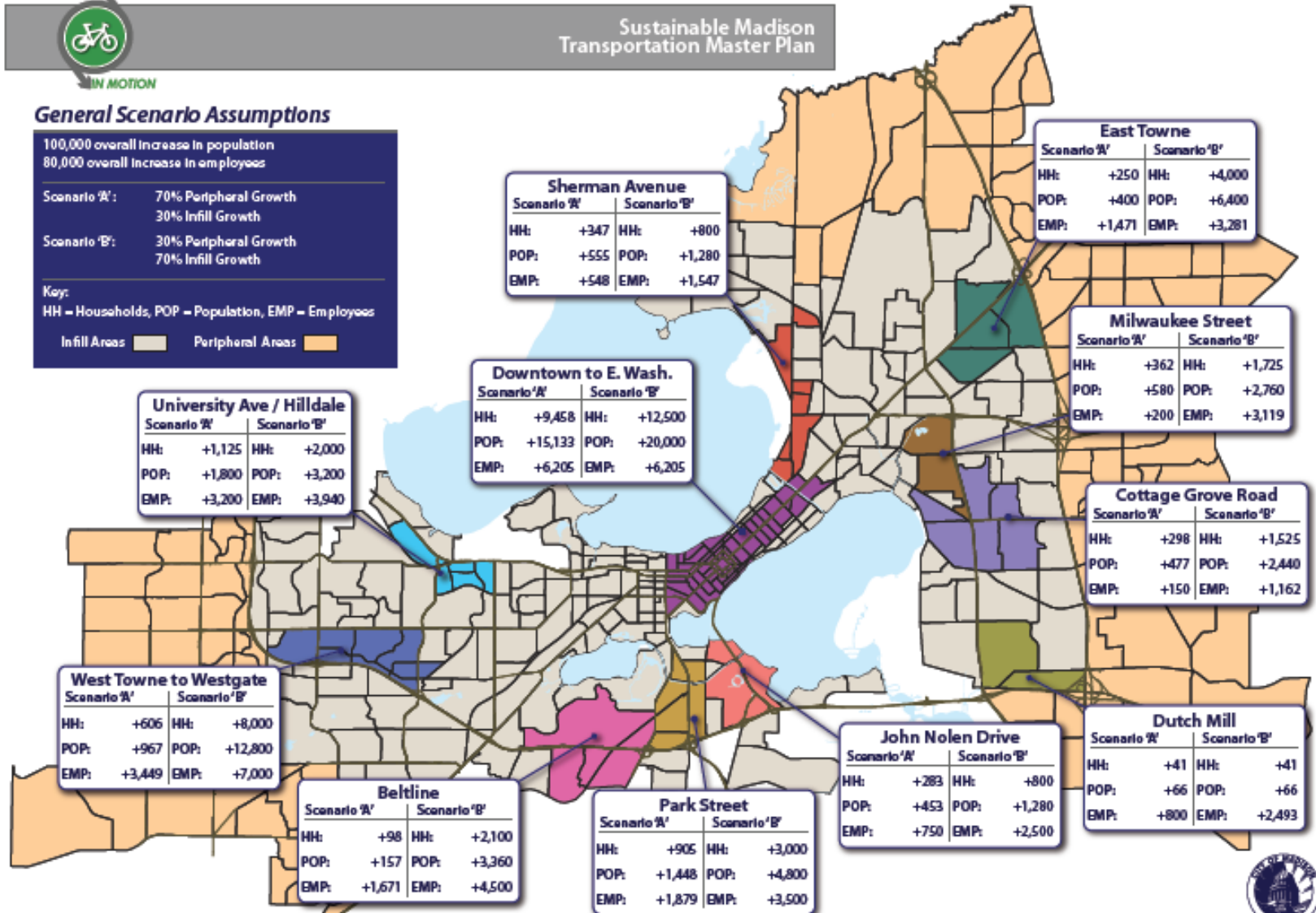
Scenario 'A': 70% Peripheral Growth  
30% Infill Growth

Scenario 'B': 30% Peripheral Growth  
70% Infill Growth

Key:

HH = Households, POP = Population, EMP = Employees

Infill Areas  Peripheral Areas



Sherman Avenue	
Scenario 'A'	Scenario 'B'
HH: +347	HH: +800
POP: +555	POP: +1,280
EMP: +548	EMP: +1,547

East Towne	
Scenario 'A'	Scenario 'B'
HH: +250	HH: +4,000
POP: +400	POP: +6,400
EMP: +1,471	EMP: +3,281

Milwaukee Street	
Scenario 'A'	Scenario 'B'
HH: +362	HH: +1,725
POP: +580	POP: +2,760
EMP: +200	EMP: +3,119

Downtown to E. Wash.	
Scenario 'A'	Scenario 'B'
HH: +9,458	HH: +12,500
POP: +15,133	POP: +20,000
EMP: +6,205	EMP: +6,205

Cottage Grove Road	
Scenario 'A'	Scenario 'B'
HH: +298	HH: +1,525
POP: +477	POP: +2,440
EMP: +150	EMP: +1,162

University Ave / Hilldale	
Scenario 'A'	Scenario 'B'
HH: +1,125	HH: +2,000
POP: +1,800	POP: +3,200
EMP: +3,200	EMP: +3,940

West Towne to Westgate	
Scenario 'A'	Scenario 'B'
HH: +606	HH: +8,000
POP: +967	POP: +12,800
EMP: +3,449	EMP: +7,000

Beltline	
Scenario 'A'	Scenario 'B'
HH: +98	HH: +2,100
POP: +157	POP: +3,360
EMP: +1,671	EMP: +4,500

Park Street	
Scenario 'A'	Scenario 'B'
HH: +905	HH: +3,000
POP: +1,448	POP: +4,800
EMP: +1,879	EMP: +3,500

John Nolen Drive	
Scenario 'A'	Scenario 'B'
HH: +283	HH: +800
POP: +453	POP: +1,280
EMP: +750	EMP: +2,500

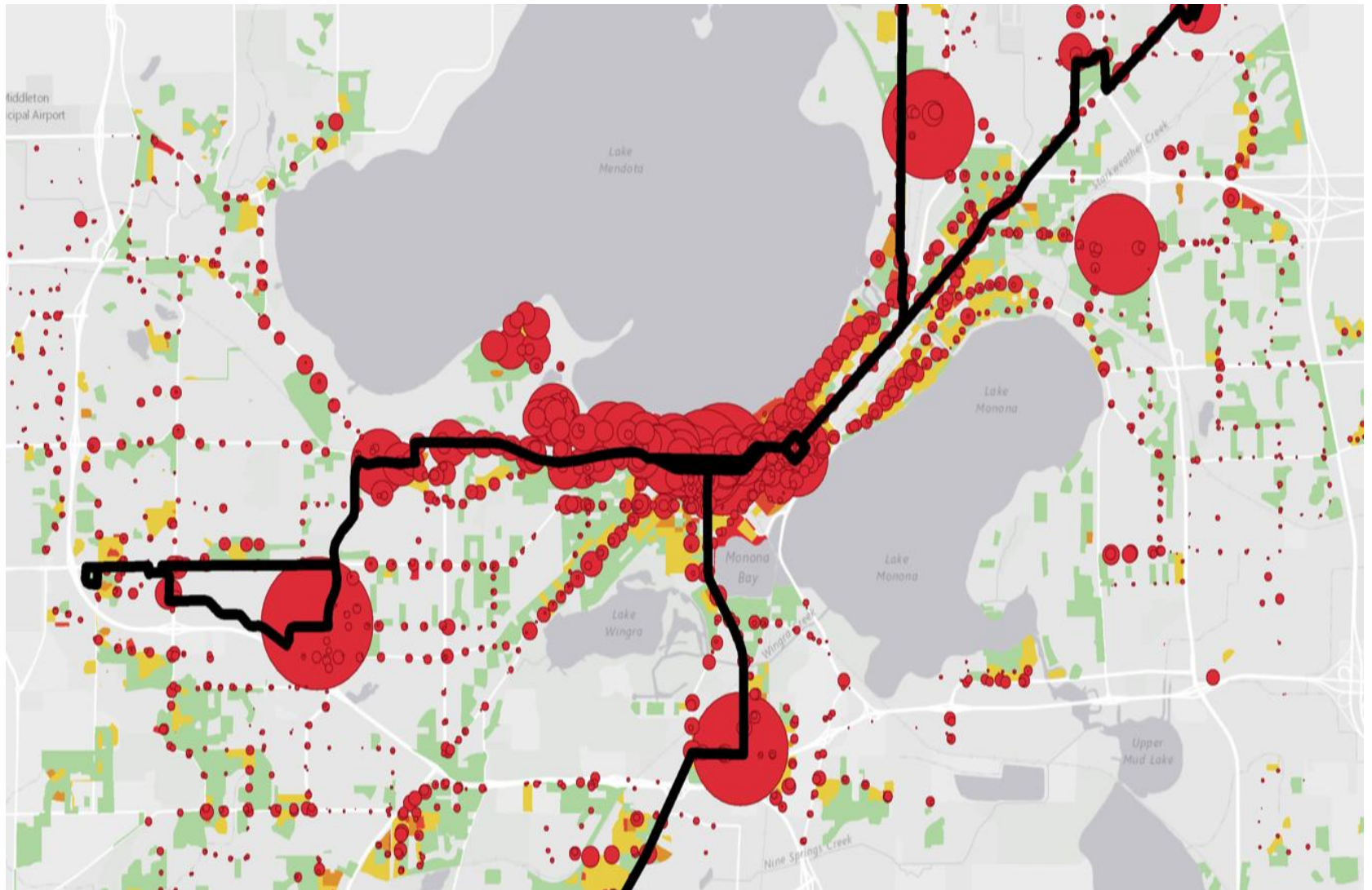
Dutch Mill	
Scenario 'A'	Scenario 'B'
HH: +41	HH: +41
POP: +66	POP: +66
EMP: +800	EMP: +2,493

July 10, 2014



# BRT Plan

---



# Transit Trips and Mode Share

---

- Total Existing Corridor Trips
  - 140,000
  - 13,000 Transit Trips
- Scenario A Trips
  - 190,000 Total Trips
  - 19,000-23,000 Transit Trips (As Much As 12% Mode Share)
- Scenario B Transit Trips
  - 215,000 Total Trips
  - 25,000-32,000 Transit Trips (As Much As 15% Mode Share)
- West Corridor About 1/3 of Ridership

# Transit Support Services

# Transit Support Service Options

---

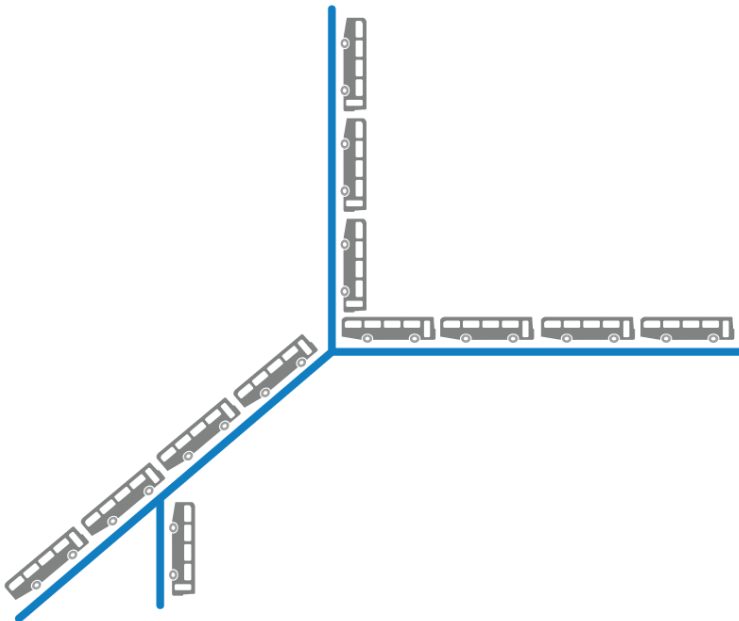
- Feeder Service to Premium Fixed Guideway (BRT)
  - Provides more access to the premium service route
- Circulators/Shuttles
  - Connects downtown destinations and jobs
- Access to Jobs Services



# Funding Policy

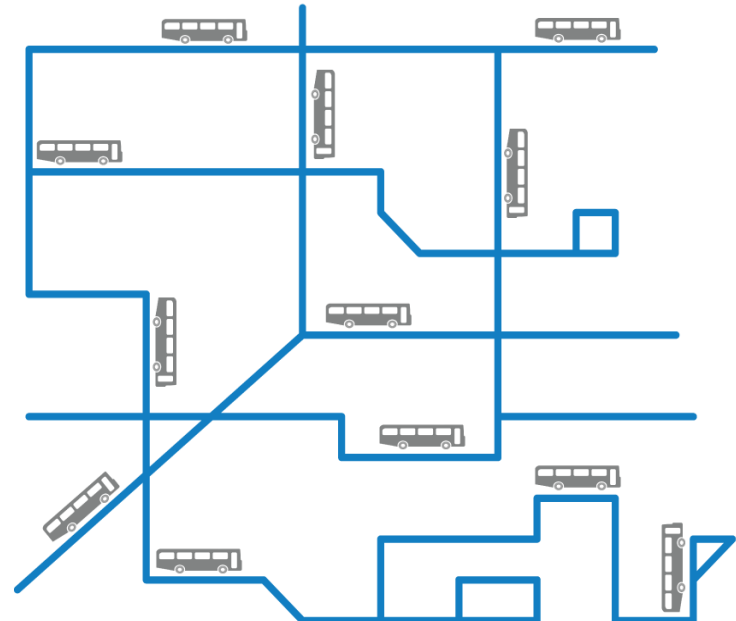


## Productivity Routes



Fewer routes to fewer places  
Service is straight and direct  
Service frequency is higher

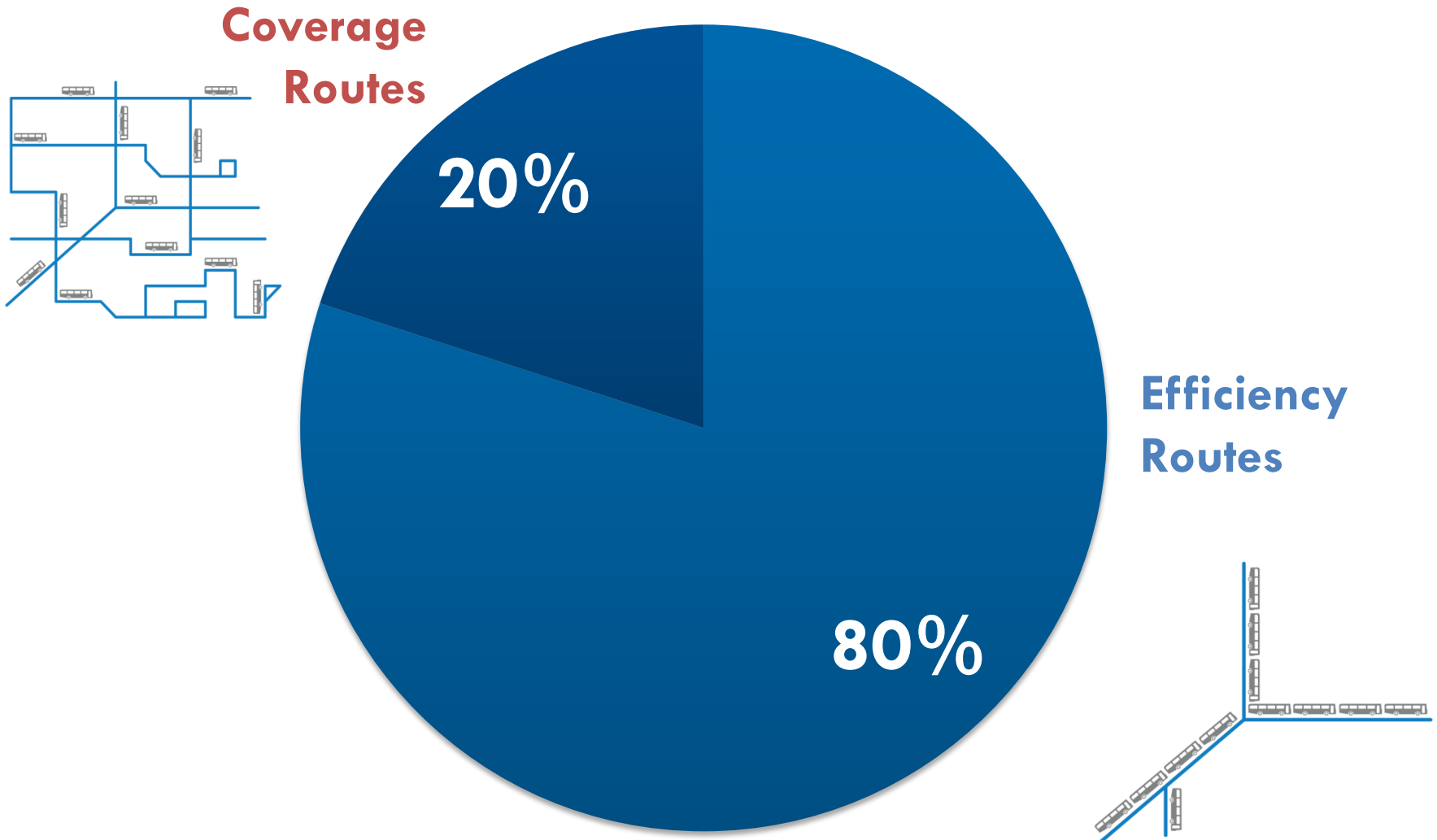
## Coverage Routes



More routes to more places  
Service meanders thru neighborhoods  
Service frequency is lower

# Service Allocation Policy Example

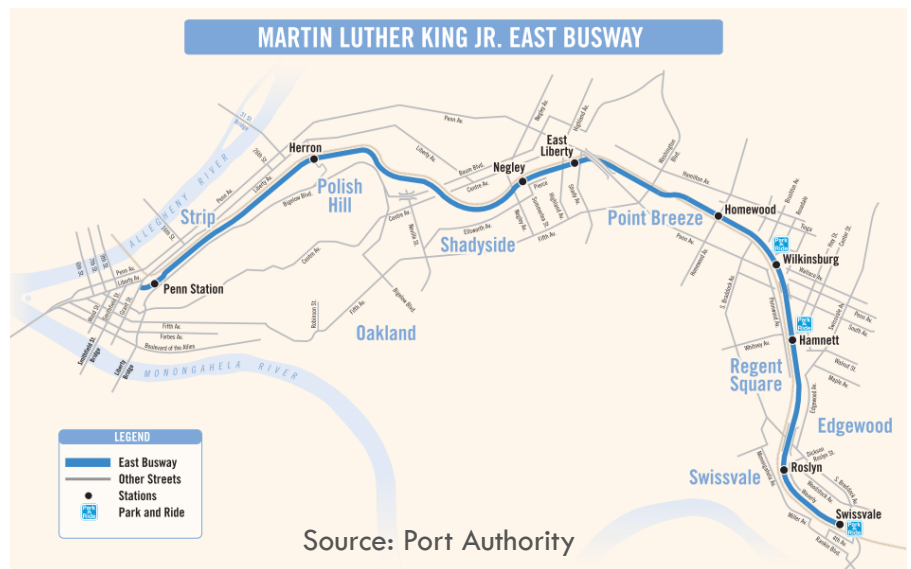
---



# Feeder Service to Premium Fixed Guideway

# Port Authority of Allegheny County – Pittsburgh, PA

- Port Authority Busways serve as dedicated runningways for buses traveling into and out of downtown Pittsburgh
- A significant number of bus routes use the busways, which speed up service
- Within the busways, all routes share the same designated stops – all upgraded stations
- 3 existing busways: East, South, and West



# GCRTA – Cleveland, OH

- The Healthline BRT service runs along Euclid Ave into downtown Cleveland
- Service connects to 4 rail stations, including Tower City/Public Square hub



## HealthLine Stations

THE HEALTHLINE IS SPONSORED BY:  
Cleveland Clinic University Hospitals  
**Euclid Ave.**



# KCATA – Kansas City

- Metro Area Express (MAX) BRT Service runs along the Main Street corridor through downtown Kansas City
- MAX fed by other KCATA services



Source: Nelson\Nygaard



# KCATA – Kansas City

- MetroFlex service provides on-demand buses within specified zones
- These buses can be booked in advance or can be met at scheduled locations (transfer points)
- MetroFlex service offers larger service coverage to lower-density areas that would not be served effectively by fixed-route service
- MetroFlex Route 298 provides last mile connections to the MAX on Main St and Troost Ave



# Downtown Circulators



# CBUS – Columbus, OH

- C-Bus is a circulator that connects downtown destinations and surplus parking in the Arena District
- Service is free and runs every 10-15 minutes
- Funding comes from the Central Ohio Transit Authority (COTA)



Source: Nelson\Nygaard



# Gold Rush - Charlotte, NC

---

- Gold Rush is a circulator that provides E-W connections to light rail (LYNX) and local bus service (CATS), as well as downtown destinations
- Service is free and runs through downtown
- Operates based on a park-once strategy
- Majority of funding comes from private donations (Bank of America, Duke Energy), not from the Charlotte Area Transit System (CATS)



# Gold Rush – Charlotte, NC

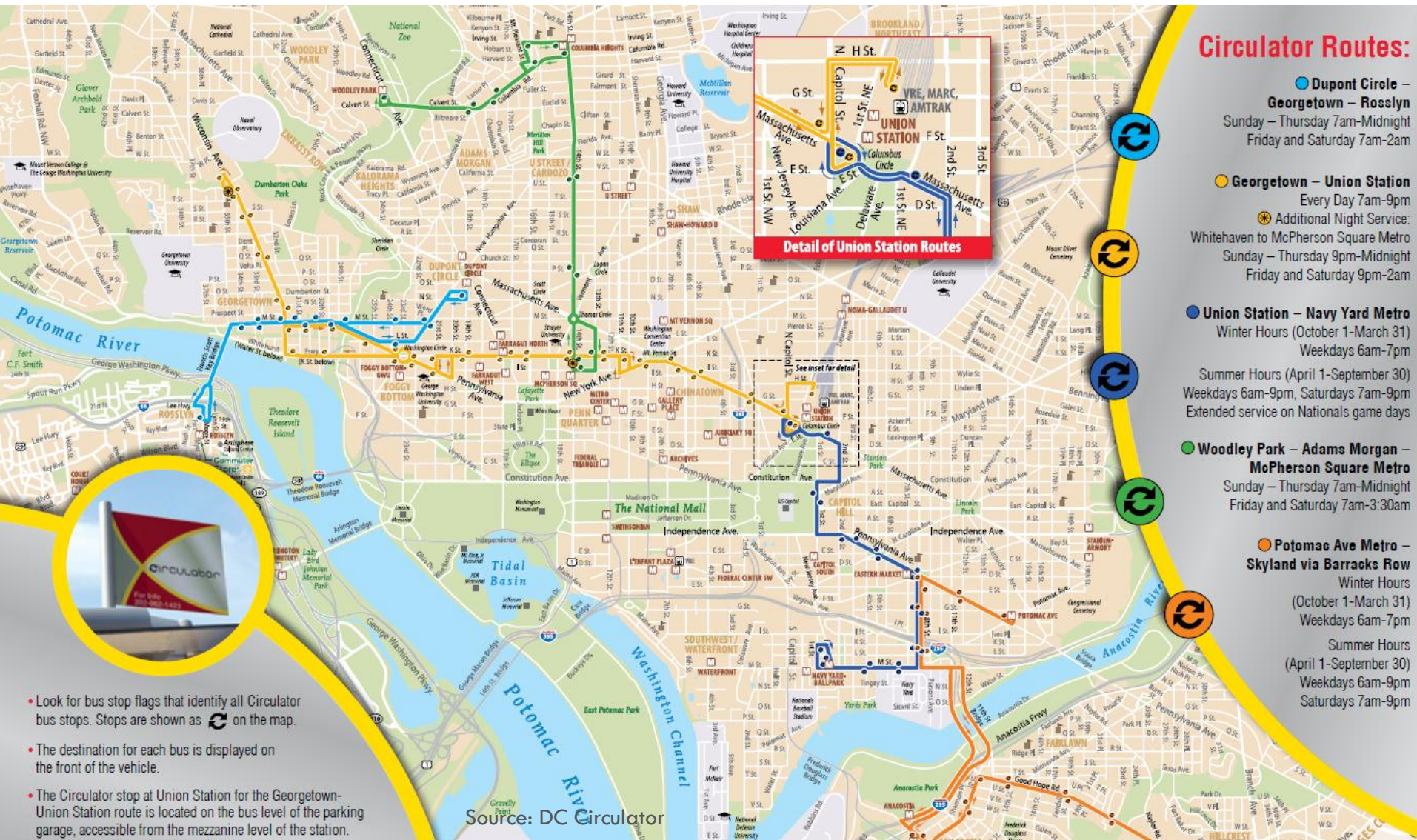


# DC Circulator - Washington, D.C.


- D.C. Circulator was a Downtown Business Improvement District initiative
- It is a product of a public/private partnership between DDOT, WMATA, and DC Surface Transit, Inc
- There is a network of 5 circulator-style routes that provide community service within D.C. for a \$1 fare
- More of a traditional transit service





# DC Circulator - Washington, D.C.



## Circulator Routes:

- Look for bus stop flags that identify all Circulator bus stops. Stops are shown as  on the map.
- The destination for each bus is displayed on the front of the vehicle.
- The Circulator stop at Union Station for the Georgetown-Union Station route is located on the bus level of the parking garage, accessible from the mezzanine level of the station.

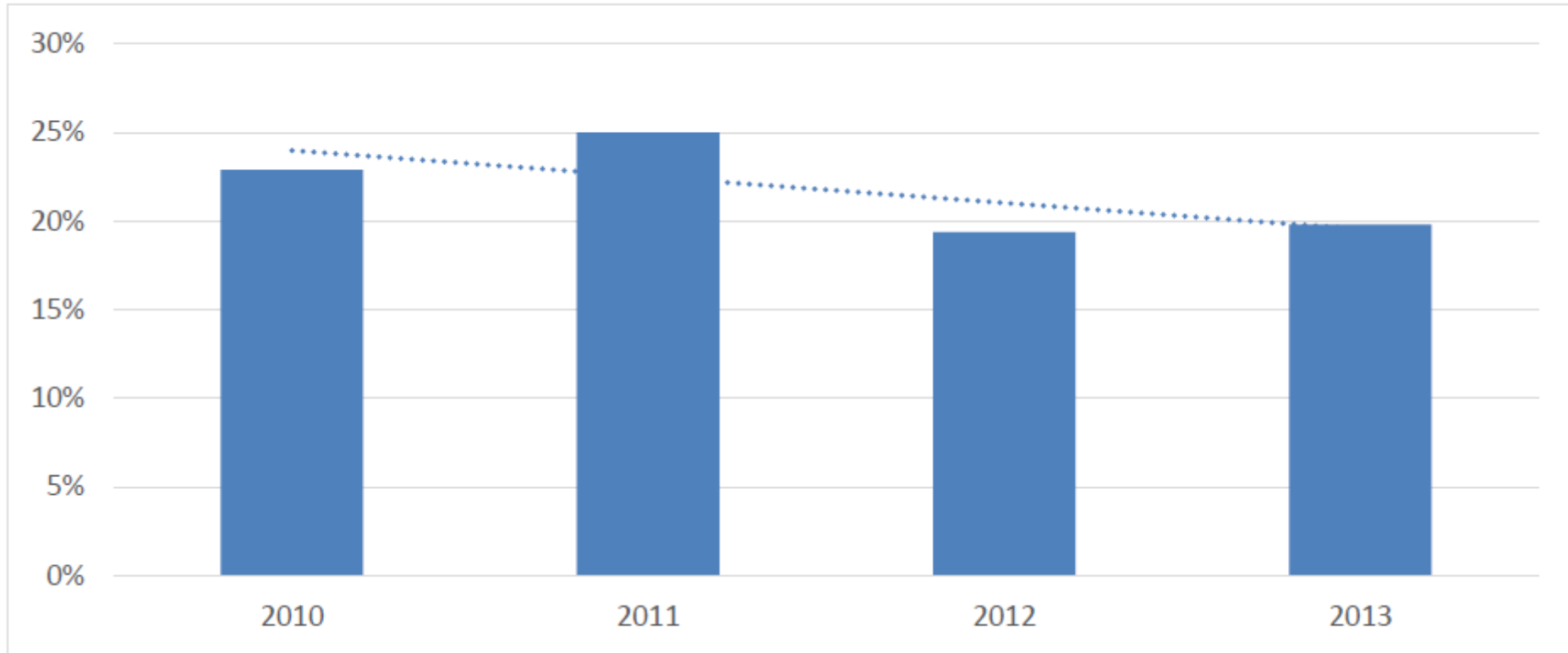
Source: DC Circulator

- 
**Dupont Circle – Georgetown – Rosslyn**  
 Sunday – Thursday 7am-Midnight  
 Friday and Saturday 7am-2am
- 
**Georgetown – Union Station**  
 Every Day 7am-9pm  

 Additional Night Service:  
 Whitehaven to McPerson Square Metro  
 Sunday – Thursday 9pm-Midnight  
 Friday and Saturday 9pm-2am
- 
**Union Station – Navy Yard Metro**  
 Winter Hours (October 1-March 31)  
 Weekdays 6am-7pm  
 Summer Hours (April 1-September 30)  
 Weekdays 6am-9pm, Saturdays 7am-9pm  
 Extended service on Nationals game days
- 
**Woodley Park – Adams Morgan – McPerson Square Metro**  
 Sunday – Thursday 7am-Midnight  
 Friday and Saturday 7am-3:30am
- 
**Potomac Ave Metro – Skyland via Barracks Row**  
 Winter Hours (October 1-March 31)  
 Weekdays 6am-7pm  
 Summer Hours (April 1-September 30)  
 Weekdays 6am-9pm  
 Saturdays 7am-9pm

# Funding

---

**Figure 1: Cost Recovery Ratio by Year**

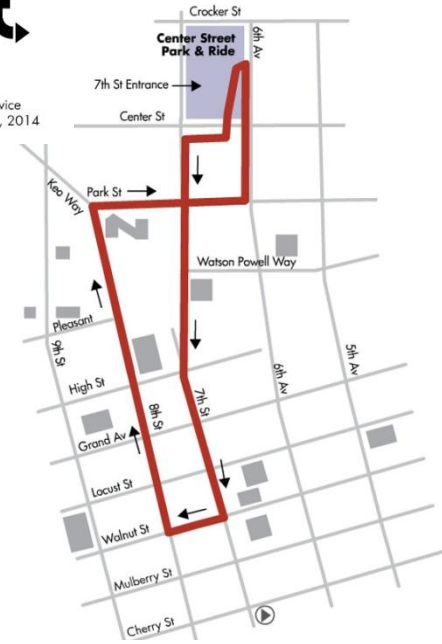


# DART Shuttles - Des Moines, IA

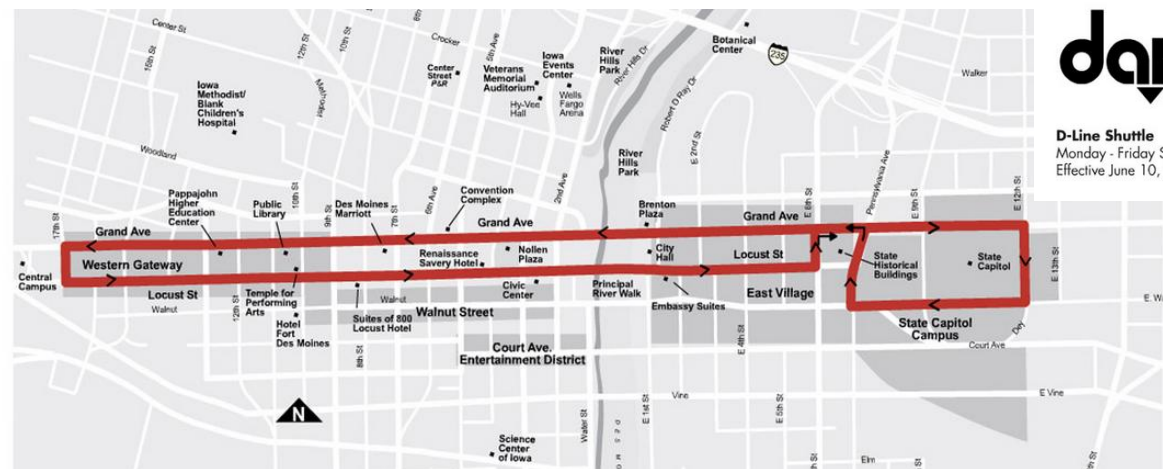
- LINK is a free shuttle operated by the Des Moines Area Regional Transit Authority (DART) that circulates downtown on 7th and 8th Streets and serves the Center Street Park & Ride
- D-Line is a free shuttle running in a loop through downtown along Grand Ave and Locust Street
- The two routes cross in downtown



**The Link**  
Monday – Friday Service  
Effective February 23, 2014

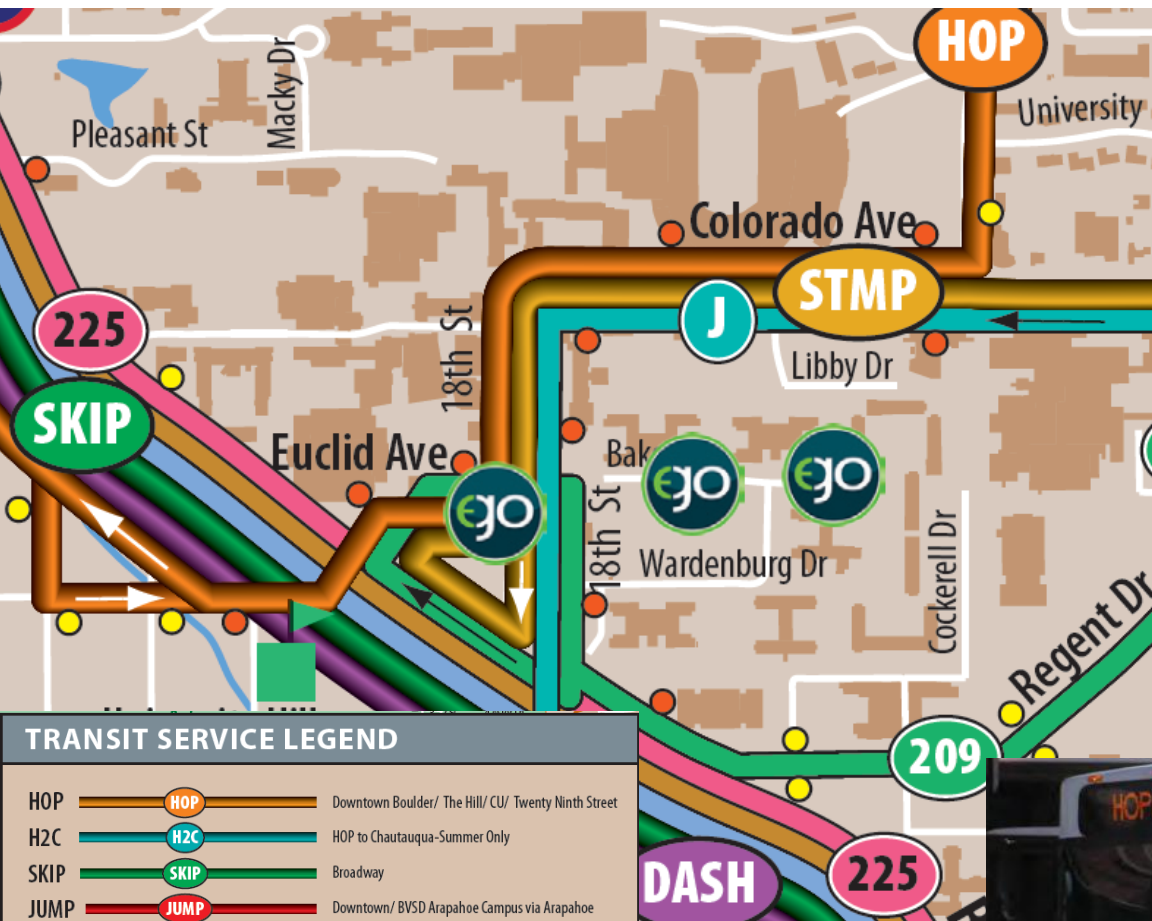


Source: DART



**D-Line Shuttle**  
Monday - Friday Service  
Effective June 10, 2012

# Hop, Skip, Jump... - Boulder, CO



“The community wanted pedestrian-scale buses with big windows so that people on the street and on the bus could actually make eye contact. They wanted perimeter seating on the bus to encourage conversation so that we were actually creating community, not just serving the community.”

– Tracy Winfree, Director of Public Works

TRANSIT SERVICE LEGEND		
HOP		Downtown Boulder/ The Hill/ CU/ Twenty Ninth Street
H2C		HOP to Chautauqua-Summer Only
SKIP		Broadway
JUMP		Downtown/ BVSD Arapahoe Campus via Arapahoe
LONG JUMP		Boulder/ Lafayette via Arapahoe
BOUND		Baseline/ Iris via 30th Street
STAMPEDE		CU Main Campus/ East Campus via Colorado
DASH		Boulder/ Louisville/ Lafayette via S. Boulder Rd
BOLT		Boulder/ Longmont via Diagonal Hwy
CLIMB		Boulder/ Jamestown (operated by VIA)
CLIMB		Boulder/ Gold Hill (operated by VIA)

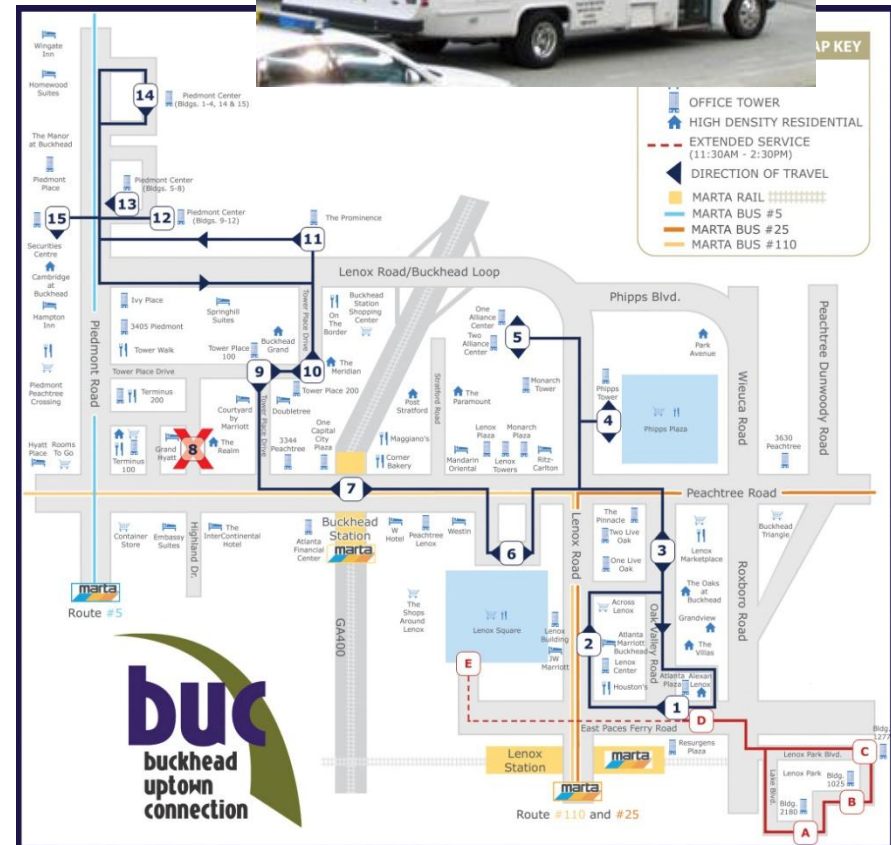




# Access to Jobs

# The Buc – Atlanta, GA

- The Buc is a free shuttle service in the Buckhead business district of Atlanta
- The service connects to two MARTA heavy rail stations, as well as bus stops
- It provides service to major employment centers, office towers, and shopping destinations
- It is funded by the Buckhead Community Improvement District, the Buckhead Area Transportation Management Association, and also receives federal funding



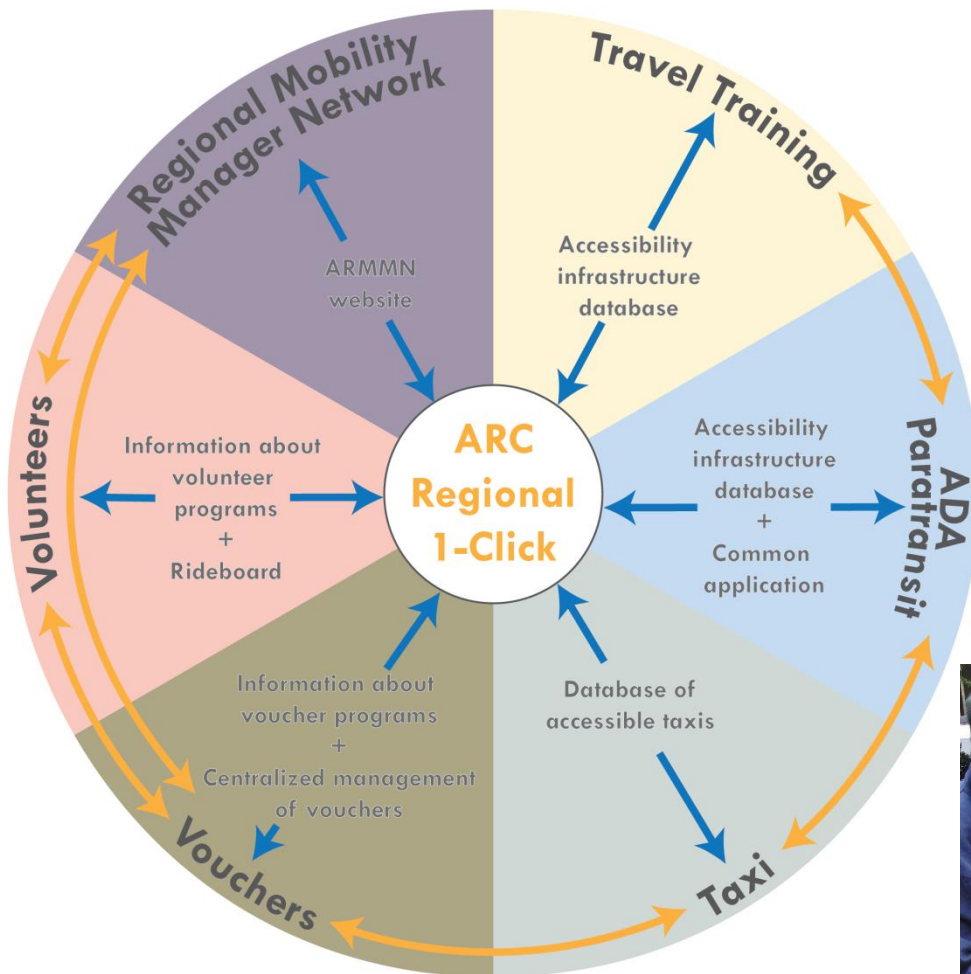
# 128 Business Council – Boston, MA

- The 128 Business Council is the Transportation Management Association (TMA) for the 128 West region (Boston Metro)
- The TMA provides shuttle services along the Route 128 corridor to connect neighborhoods, major employers, and institutions to existing MBTA stations
- There are 7 different shuttle routes connecting into 4 separate transit stations



Source: 128 Business Council

# 1-Click System – Atlanta, GA



# Thank You!



Paul Moore

404.408.7300

[pmoore@nelsonnygaard.com](mailto:pmoore@nelsonnygaard.com)