

Madison Area  
**T ♦ P ♦ B**  
Transportation Planning Board  
A Metropolitan Planning Organization (MPO)



2013-2017



# Transit Development Plan

For the Madison Urban Area

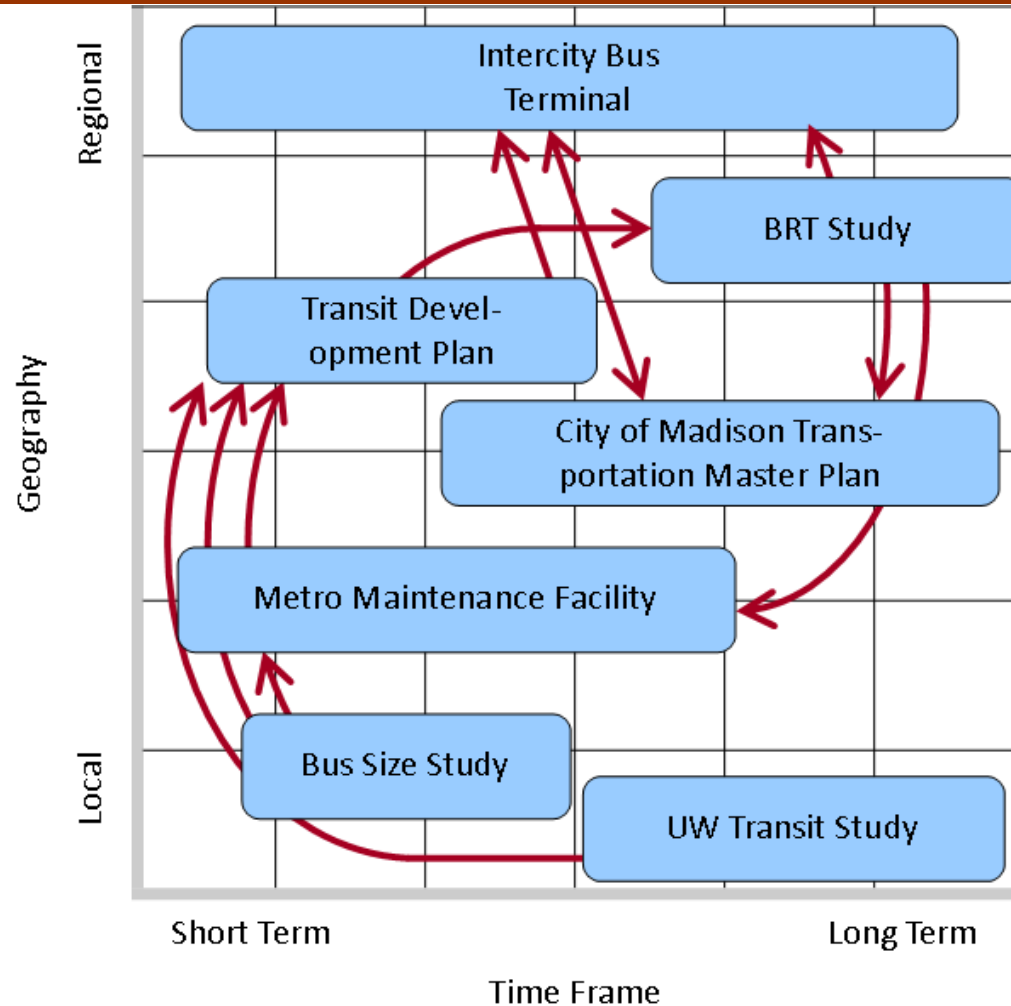
# Background

- Five-year strategic plan (2013 – 2017)
- Developed by MPO in cooperation with Metro Transit
- Intended to guide planning activities, service and facility improvements, and budgets
- Primarily for Metro Transit, but also intended to support other transit providers

# 2013 – 2017 TDP

- Overcrowding
- Route performance guidelines
- Bus Stop Spacing
- Other major transit-related studies
  - Maintenance Facility
  - Bus Rapid Transit
  - Bus Size Study
  - Intercity Bus Terminal
  - City of Madison Transportation Master Plan
  - Others

# Ongoing Transit-Related Studies



# Summary of Current Transit Service

- Metro Transit (City of Madison)
  - Regular Fixed Route (Routes 1-74)
  - Campus Circulators (Routes 80-84)
  - Supplemental School Day Service
  - Metro Paratransit
- Monona Transit
- Sun Prairie Shuttle and Shared-Ride Taxi
- Stoughton Shared-Ride Taxi
- Specialized Transportation Services

# Metro Transit Fixed-Route

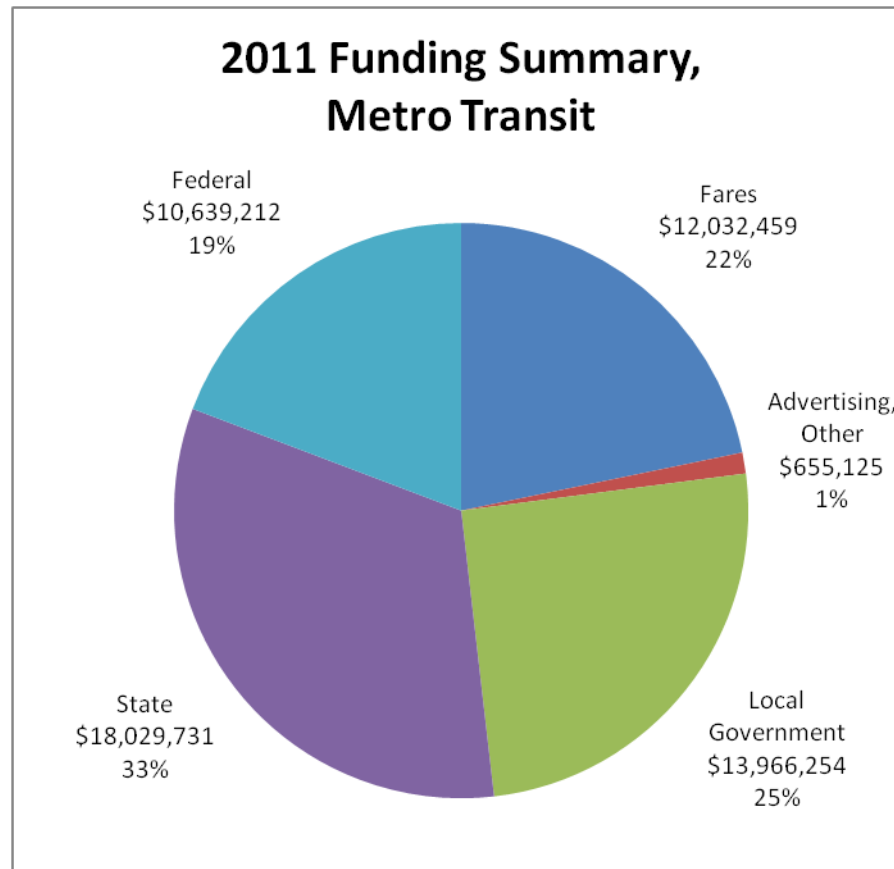
- Core Routes – Medium frequency, all-day, transfer point-to-transfer point
- Peripheral Routes – Low to medium frequency, peripheral areas, often loops
- Commuter Routes – Peak period only
  - Roughly 7-9 a.m., 4-6 p.m.
- Circulator Routes – Medium to high frequency, all-day, shorter routes

# Metro Transit Facilities



2013 – 2017 Transit Development Plan

# Metro Transit Funding

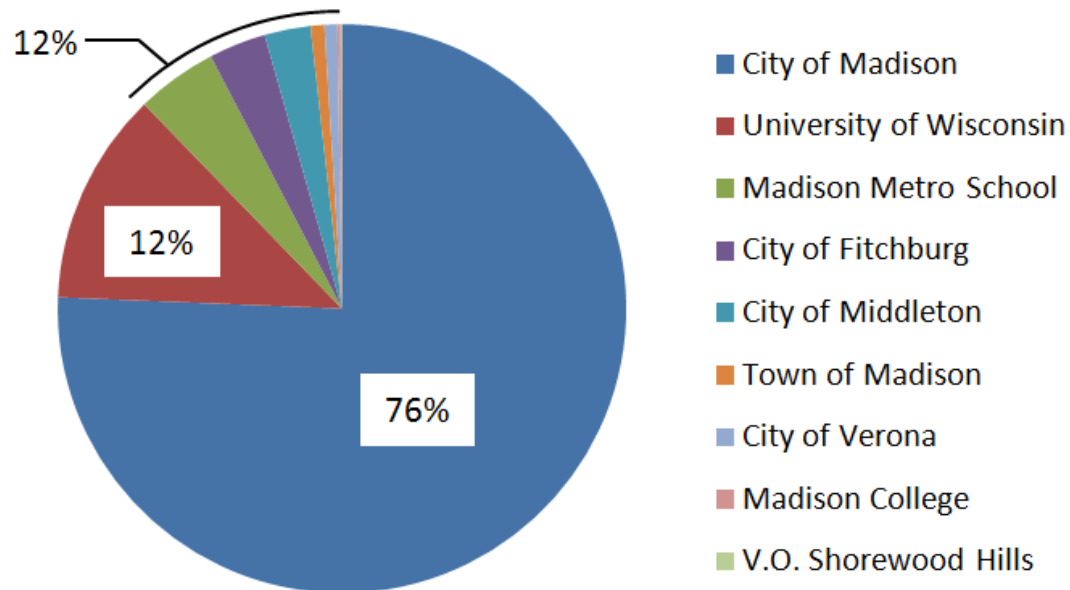


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# Metro Transit Funding

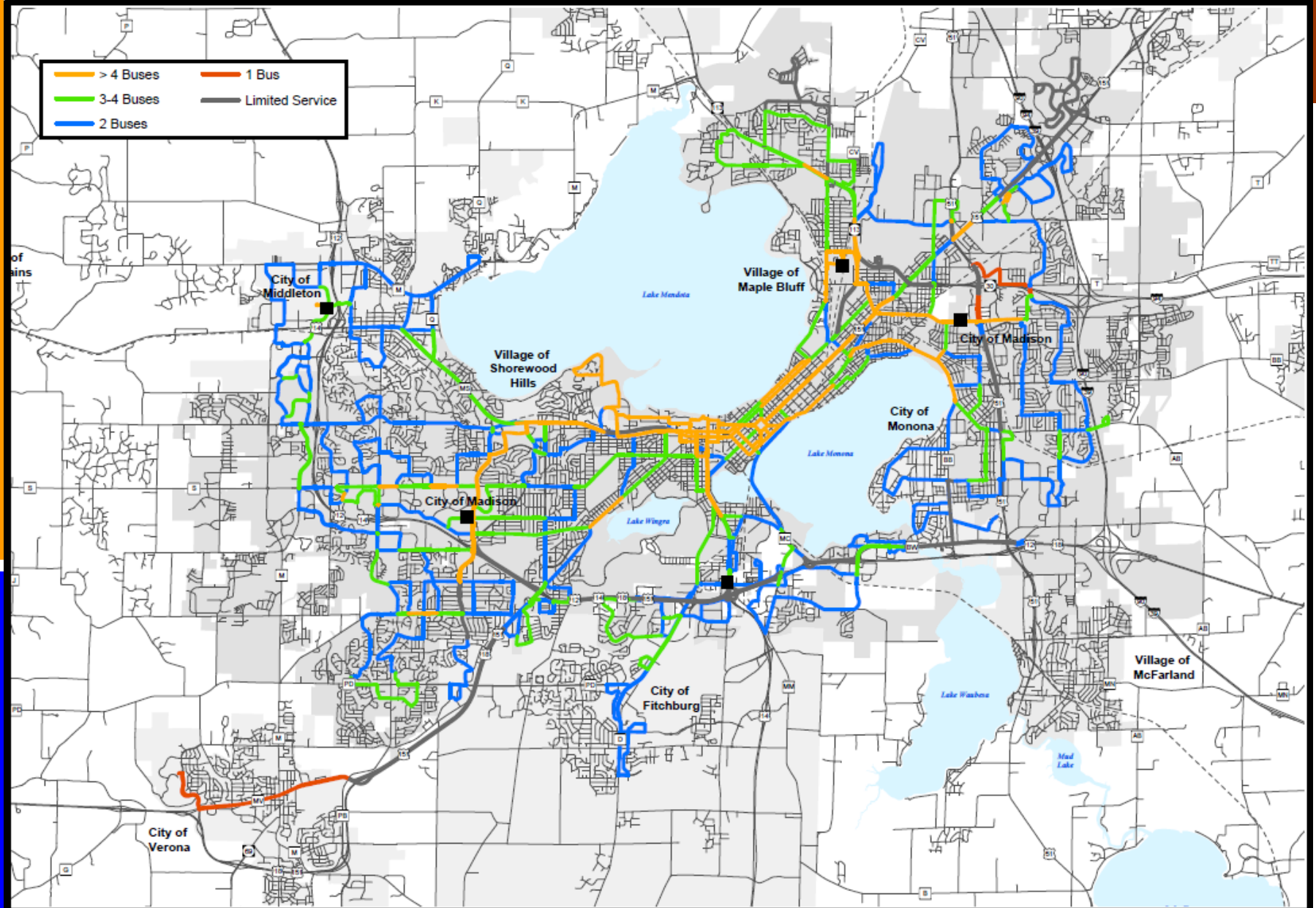
**Metro Transit Partner Share of Net Deficit 2013**



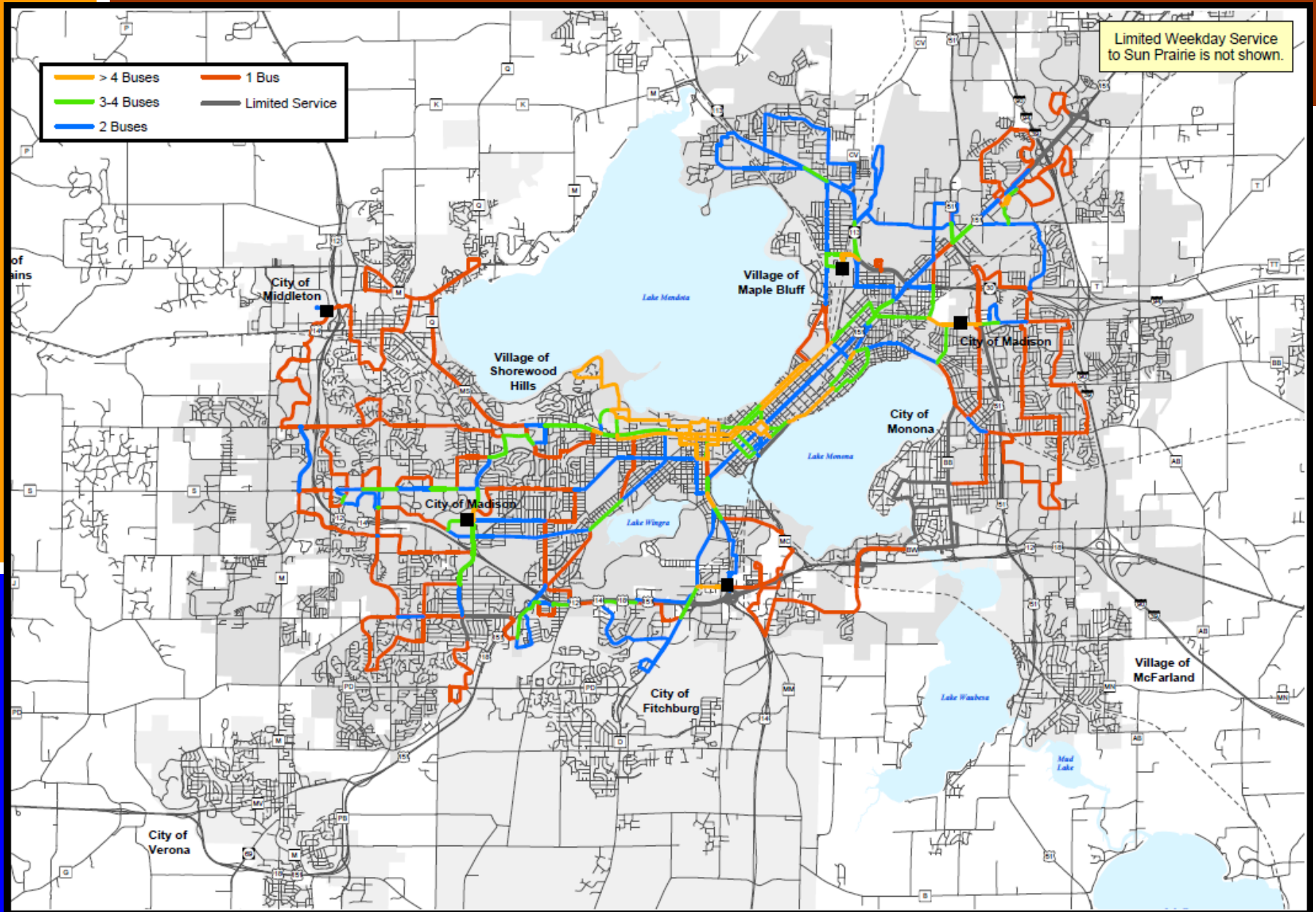
# Farebox Boarding Analysis

- Three-week sample in October, 2011
- Metro Transit Fixed-Route only
  - Does not include Supplemental School Day Service, paratransit, Monona Transit, etc.
- Extra bus hours are not counted, but boardings on extra buses are counted
- Routes through downtown are split into radial sections
  - For example, Route 2-West and 2-North

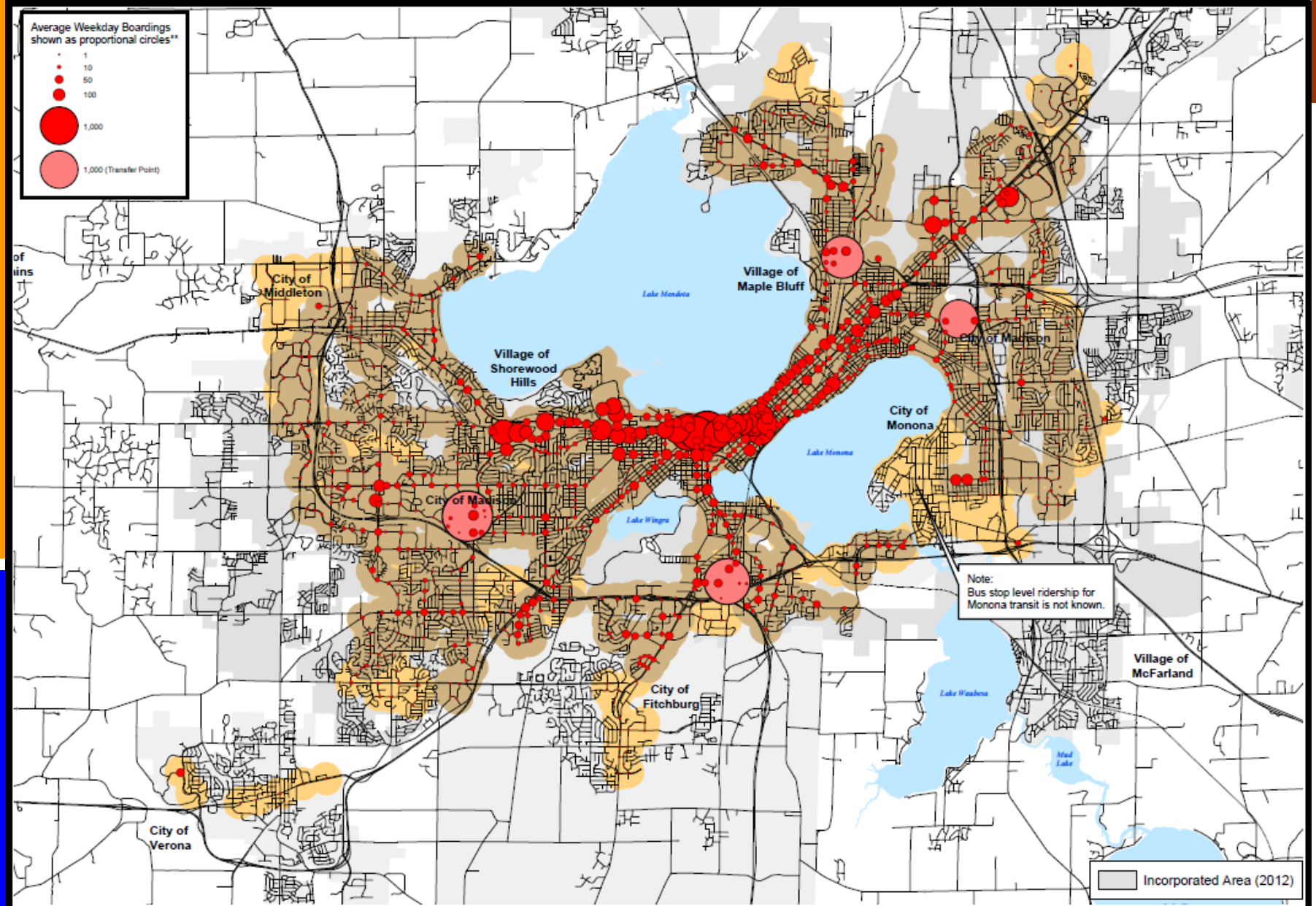
# Peak Period Frequency



# Mid Day Frequency

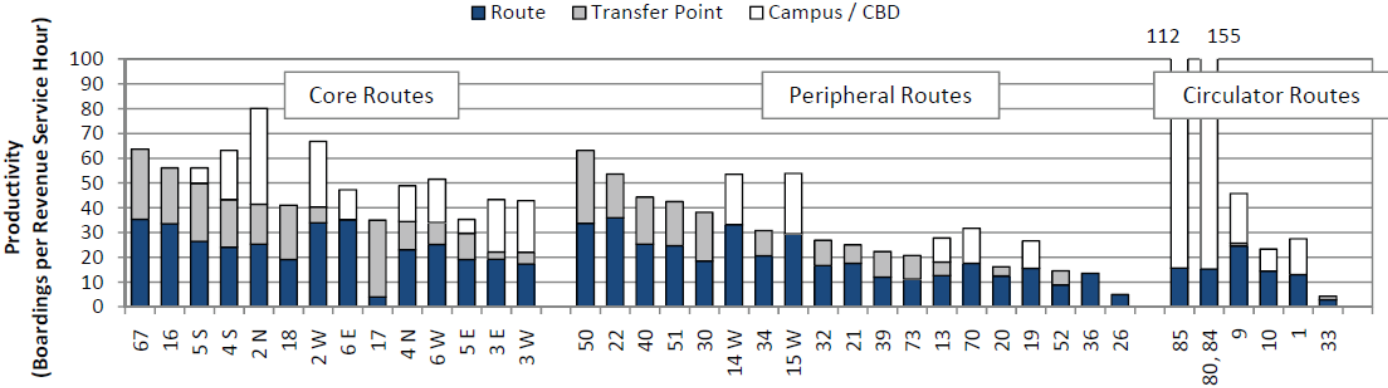


# Service Area and Boardings by Stop

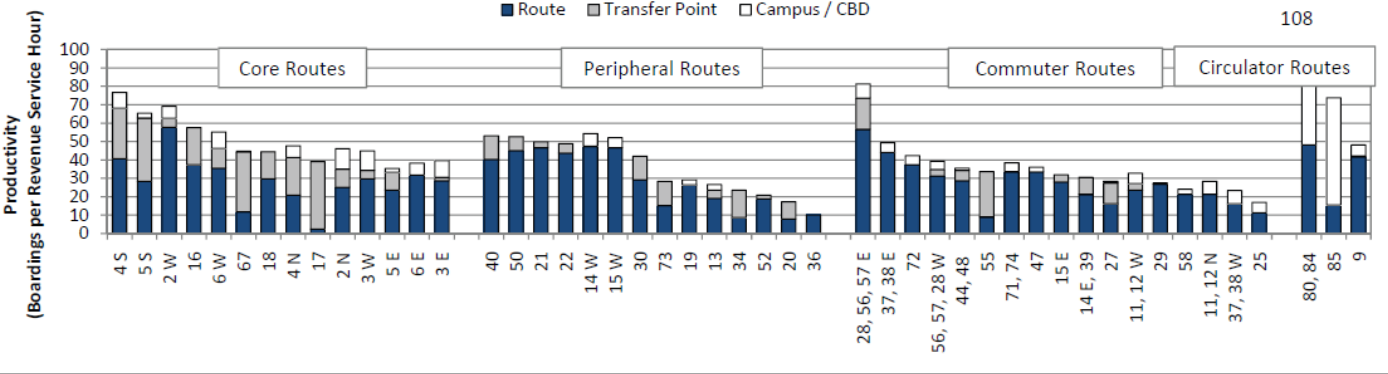


# Route Productivity

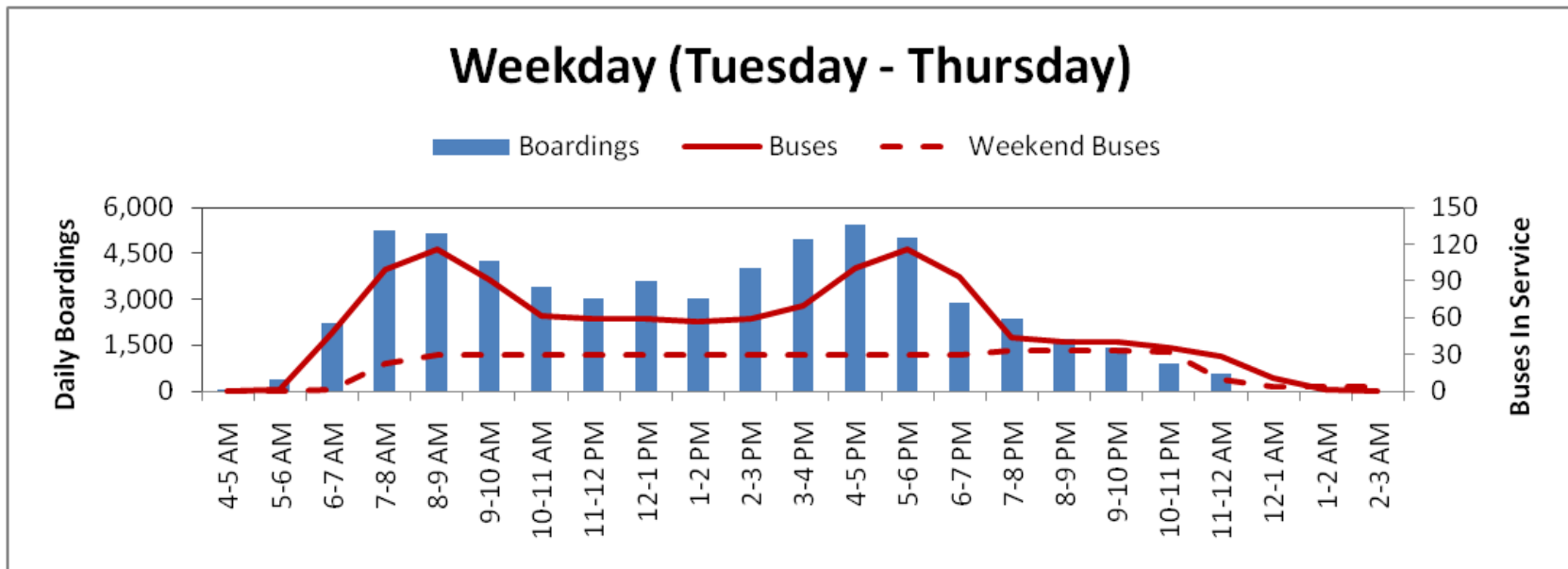
### Weekday Mid-Day Route Productivity by Class (Oct 2011)



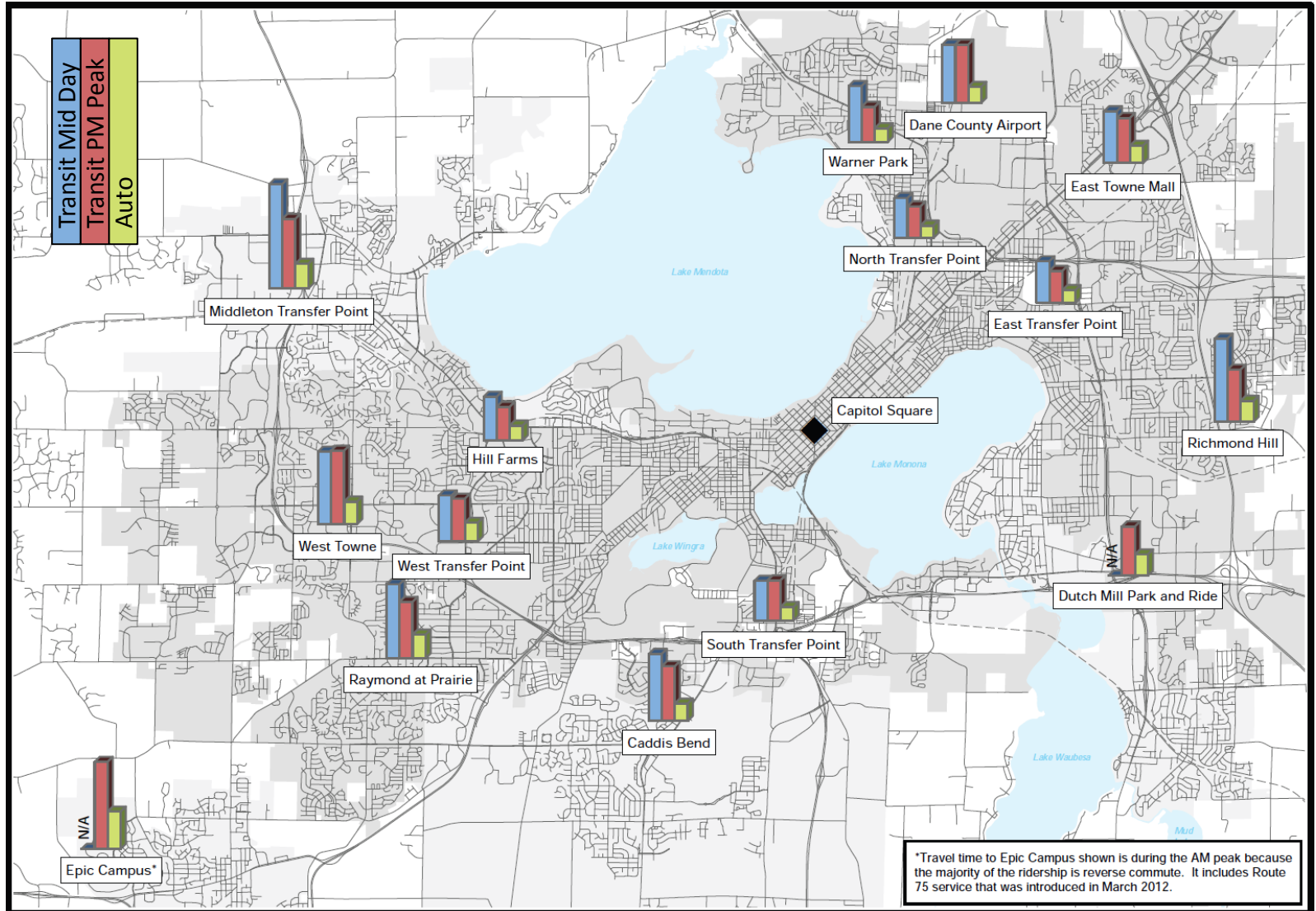
### Weekday AM Peak Route Productivity by Class (Oct 2011)



# Boardings by Time of Day



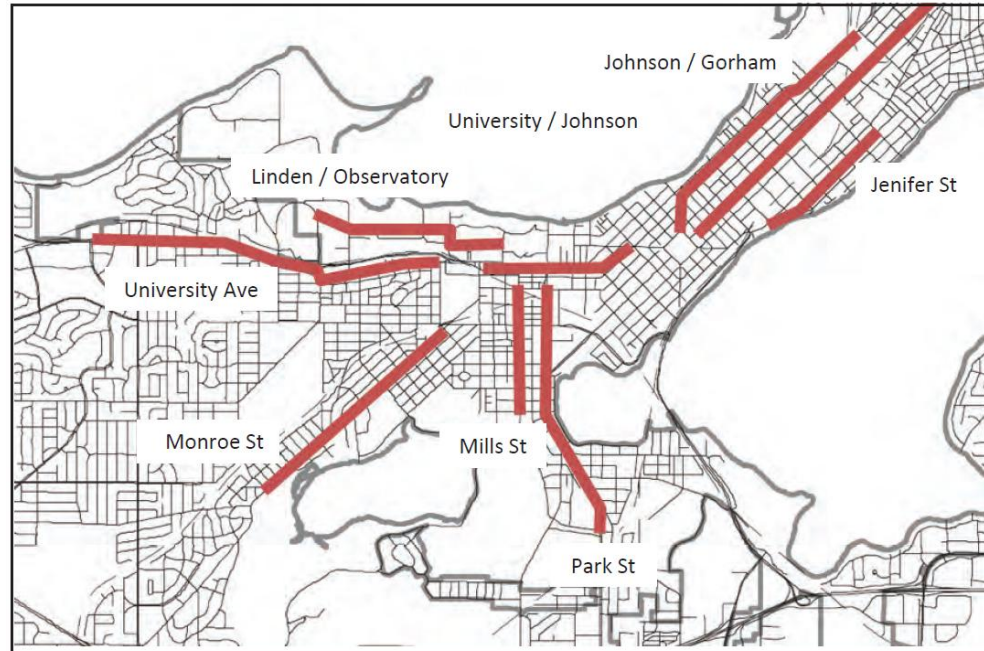
# Travel Times from Capital Square



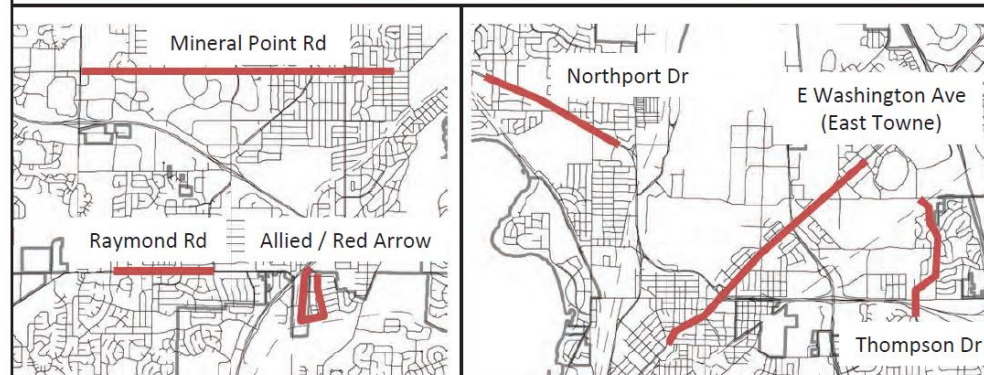


# Bus Stop Spacing Analysis

Central  
Madison

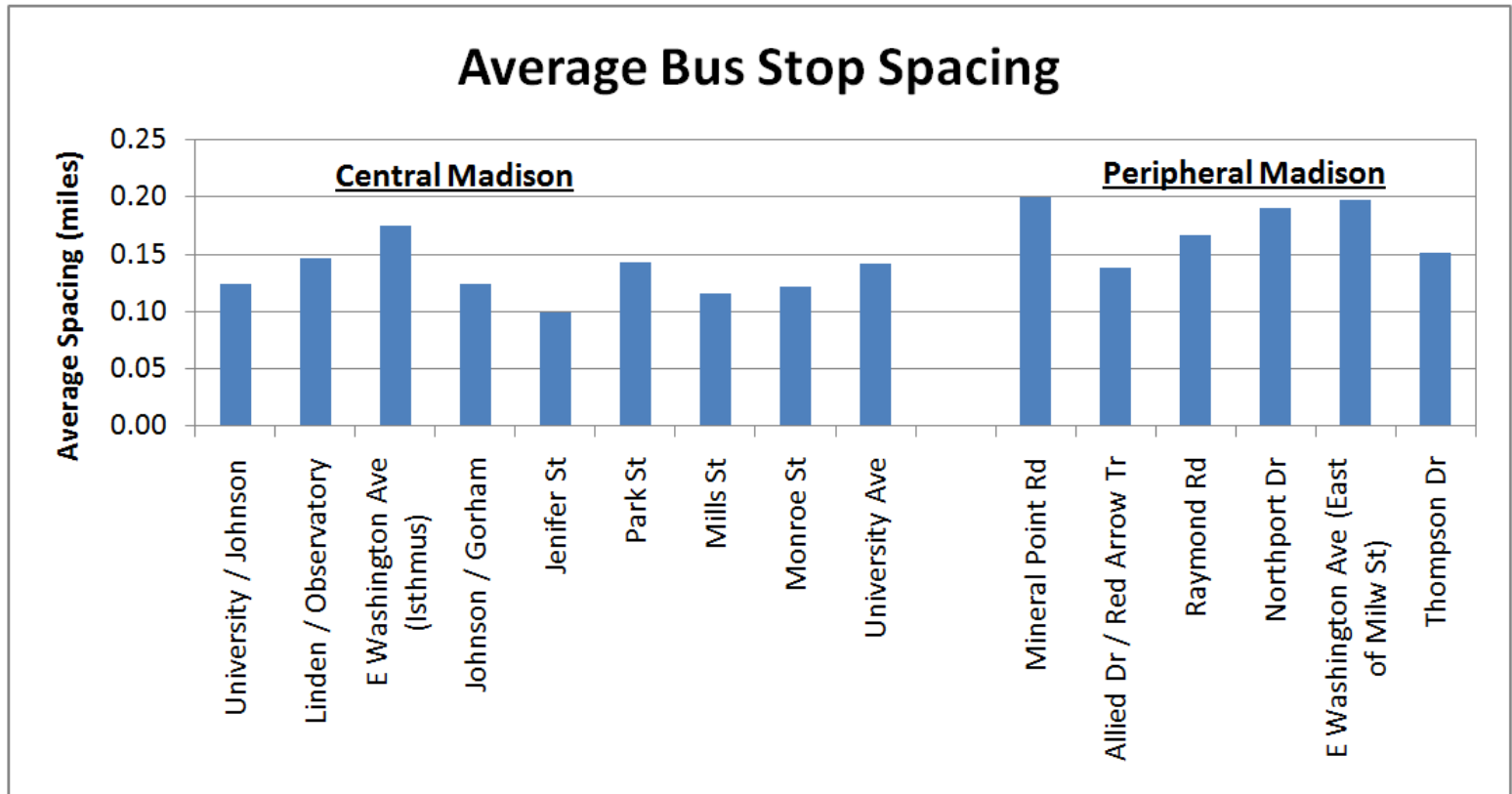


Peripheral  
Madison



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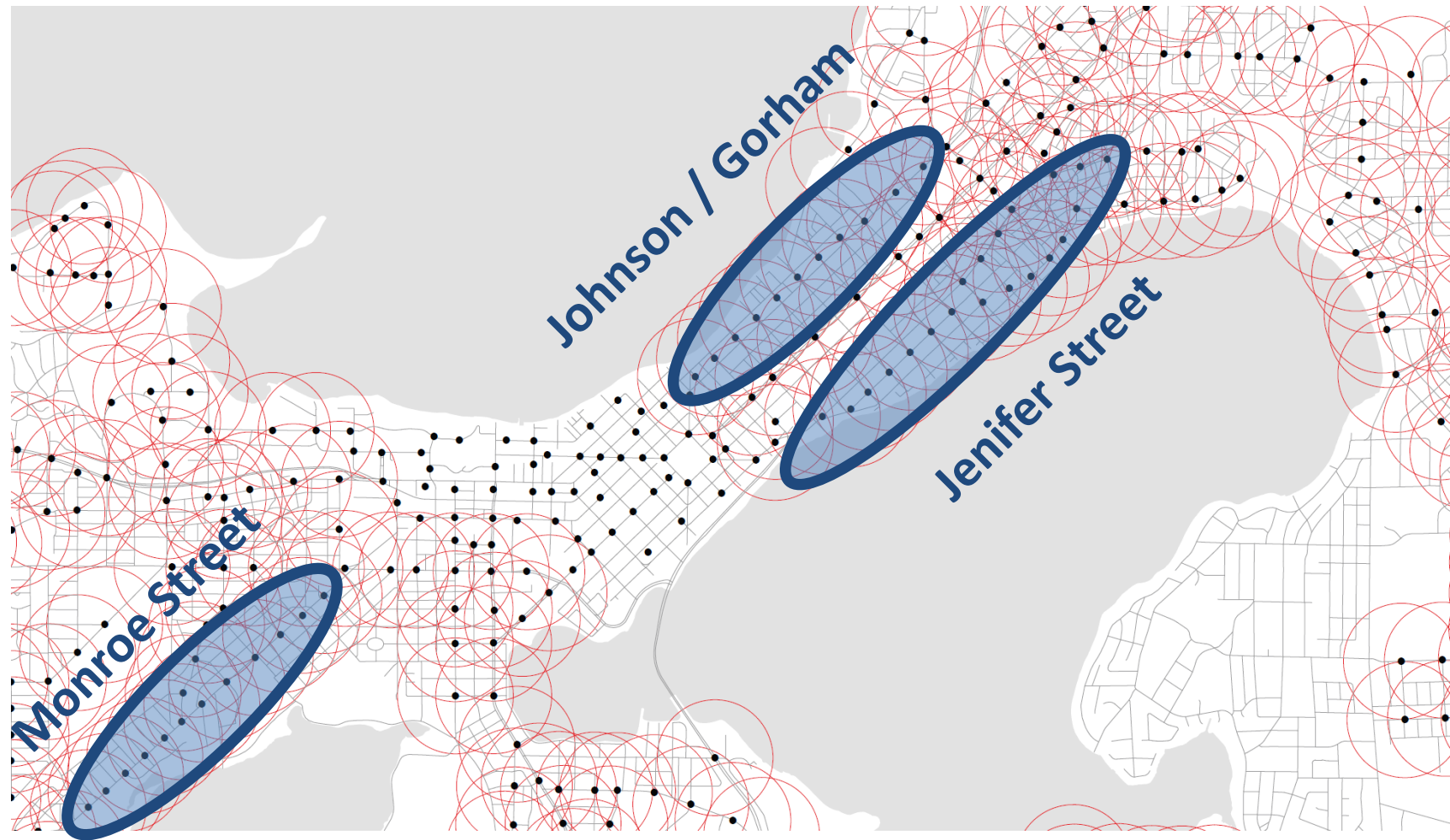
# Bus Stop Spacing Analysis



# TDP Recommendations

- 33 recommendations related to Transit Planning, Facilities, Major Projects, Paratransit, Fleet, Information and Marketing, and Funding, fares, and TDM
- Fixed route service change concepts to be developed if/when funding is available
- Expansion of commuter express service planning

# Bus Stop Consolidation Program



# Bus Stop Consolidation Program

- + Reduced travel time
- + Improved reliability
- + Reduced fuel use and emissions
- + Reduced wear and tear on buses
- + Improved amenities
- Increased walking distance
- Loss of service coverage
- Potential impacts to people with limited mobility

## Trade-off

Access to Transit

Speed + Reliability

# Bus Stop Consolidation Program

- Goal of increasing distance between stops along corridors
  - Bus stops on the Isthmus are every block (660 feet, 8 per mile) or closer
  - Adopts a standard of 990 - 1,320 feet (4-6 per mile)
- Further planning and analysis, looking at each stop, land use, resources
- Extensive outreach, public meetings

# Conceptual Service Change Concepts

- Short, medium, and long-term
  - Improved frequency of core service
  - More direct routing
  - Service extensions
  - Service restructures to more efficiently use resources
- Not all will be implemented, exercise for identifying needs, opening discussion for use of future funds if available
- Utilizes BRT concepts
- Data-driven

# Priority 1 Service Change Concepts

Priority 1 Short-Term (1-3 years)						
Index	Routes	Action	Cost *	Goals	Annual Cost **	Annual Hrs
1-1	2, 3	Eliminate Sherman via (Route 2) and Division via (Route 3). All trips operate via Fordem and Winnebago, respectively.		4	\$0	0
1-2	6, 20	Eliminate Route 6 Hayes via, all trips operate via MATC. Reroute Route 20 via Portage and Hayes.		2, 3, 4, 5, 7, 8, 10	\$0	0
1-3	12	Eliminate routing on Lake Point and Waunona.		2, 8, 10	\$0	0
1-4	27, 29	Eliminate Route 29, extend Route 27 to Dane County Regional Airport and North Towne Center P&R.		2, 4, 7, 8, 10	\$0	0
1-5	14, 15, 25, 27	Establish an express stop pattern on East Washington Avenue from the Capitol Square to Milwaukee Street.		2, 3, 8, 10	\$0	0
1-6	11, 15, 56, 57, 71, 72, 74	Establish an express stop pattern on University Avenue from the UW to Segoe.		2, 3, 8, 10	\$0	0
1-7	2	Improve weekday peak and mid-day service to every 15 minutes between the West Transfer Point and Capitol Square.	\$\$\$ MD	3, 4, 5, 9, 10	\$337,500	4,500
1-8	9, 10, 33	Reduce the number of buses in the mid-day rotation from six to four, restructure to eliminate service west of UW campus, duplicative service on Johnson / Gorham, and Route 33.	-\$ MD	8	-\$225,000	-3,000
1-9	14, 15, West Madison	Extend a new peak-only route to Colony Drive and west Madison, similar to the peak-period Route 14 routing west of Rosa Road. Reroute the peak-period Route 14 to be similar to the mid-day Route 14, and reroute routes 14 and 15 from Sheboygan Avenue to Regent Street and Old Middleton Road, respectively.	\$\$\$ PK	2, 3, 5, 10	\$337,500	4,500
1-10	3, 6, 7	Convert Route 7 to Route 3 on weekends. Reduce Route 6 weekend headways from 60 to 30 minutes.	\$\$\$ WD	1, 2, 3, 4, 6	\$414,000	5,520
1-11	8, 78	Combine routes 8 and 78 into one route from the Capitol Square to Middleton via Bluff. Extend Middleton service to include Sundays.	\$ Sundays	2, 4, 6, 8, 9	\$69,000	920
1-12	11, 12, 39	Extend routes 11 and 12 (peak) and Route 39 (off-peak) to Owl Creek.	\$ PK, WD 0.5 \$ MD, EV	6, 9	\$225,000	3,000
1-13	16	Reduce weekday headways from 60 to 30 minutes throughout the weekday.	1.5 \$ MD, EV	1, 2, 4, 9	\$337,500	4,500
1-14	18, 40	Reroute Route 18 via Coho to the Beltline Highway between the South Transfer Point and Seminol Highway. Restructure Route 40 so that alternating trips are based out of the West Transfer Point.	0.5 \$ PK, MD \$ EV, WD		\$363,000	4,840
1-15	28	Reduce headways from 10-15 minutes to 7.5 minutes during the school year from the NTP to UW.	\$\$\$ PK	2, 3, 5, 8, 10	\$337,500	4,500
1-16	50	Reduce weekday headways from 60 to 30 minutes throughout the weekday.	0.5 \$ MD, EV	1, 2, 4, 8, 9	\$112,500	1,500
<b>Total</b>					<b>\$2,308,500</b>	<b>30,780</b>



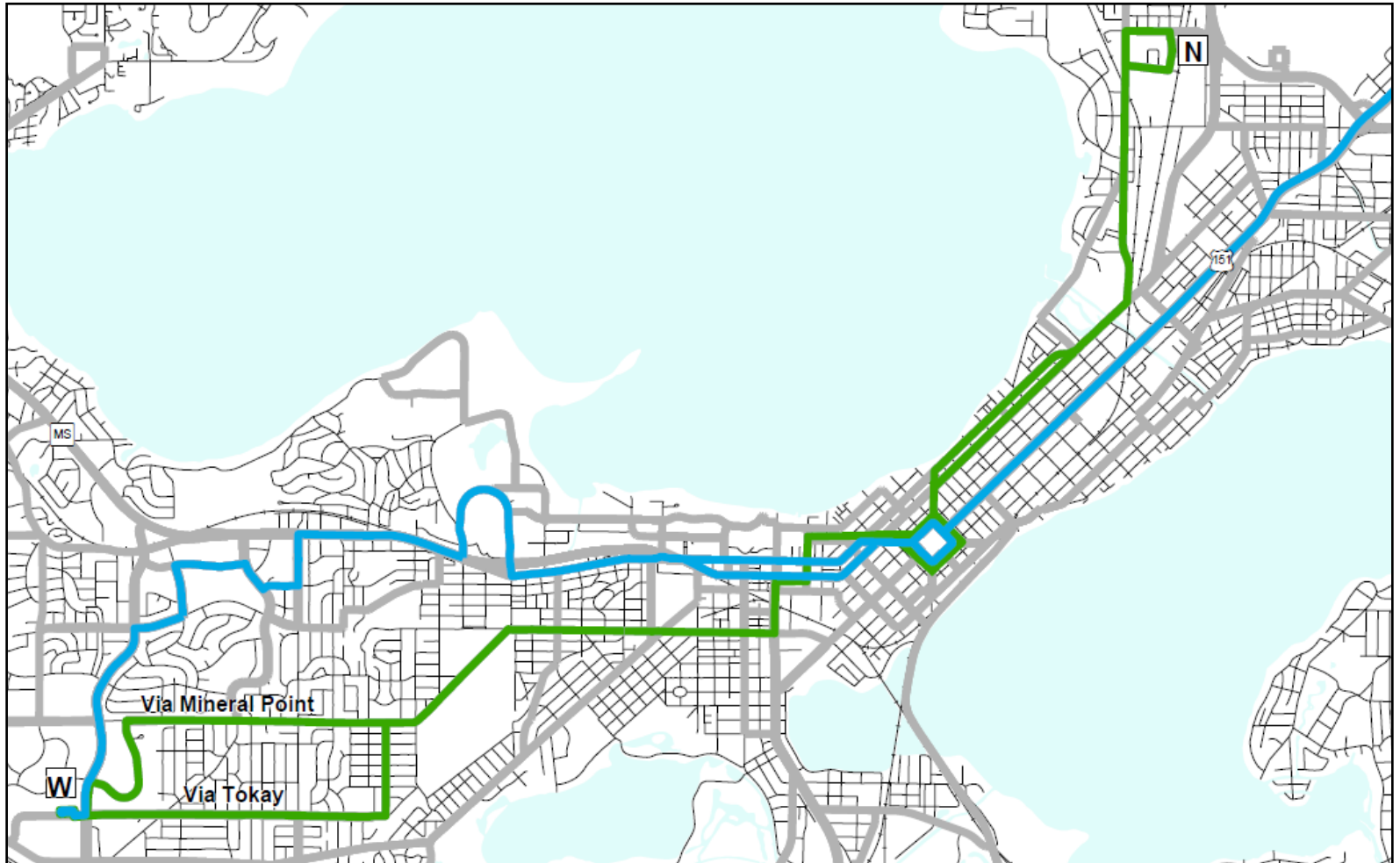
# Priority 2 Service Change Concepts

Priority 2 Medium-Term (3-5 years)						
Index	Routes	Action	Cost *	Goals	Annual Cost **	Annual Hrs
2-1	2, 6	Combine Route 2-West with Route 6-East and reduce weekday headways from 30 to 15 minutes. Combine Route 2-North with Route 6-West.	\$\$ PK \$\$\$\$ MD	2, 4, 5, 7	\$675,000	9,000
2-2	4, 5	Reduce evening and weekend headways from 60 to 30 minutes.	\$\$\$\$ EV, WD	1, 2, 4, 9	\$1,002,000	13,360
2-3	10, 38	Eliminate Oakridge via. Reroute from Jenifer and Broom/Basset to First and East Washington. Extend Route 10 span to include peaks.	\$\$ PK	2, 3, 5, 10	\$225,000	3,000
2-4	52, 55	Reroute from Beltline and Verona Road to Whitney Way, Fitchrona, and Nesbitt. Reduce Headways from 60 to 30 minutes.	\$ PK	1, 5, 7, 8, 9, 10	\$112,500	1,500
2-5	51, 56, 57	Eliminate Route 51 and operate routes 56 and 57 south of the WTP as a two-way loop.	\$ MD, EV, WD	4, 6, 9	\$363,000	4,840
2-6	3, 58	Eliminate Route 58 and reduce Route 3 peak headways from 30 to 15 minutes.	-0.5 \$ PK	4, 8	-\$56,250	-750
2-7	75	Reduce headways from 90 to 30 minutes.	\$\$\$ PK	1, 2, 7, 10	\$337,500	4,500
2-8	Grandview Commons	Restructure routes 14 and 15 east of the ETP to provide service east of I-39/90.	\$ PK	6, 10	\$112,500	1,500
2-9	Fitchburg	Introduce a new peripheral route from the WTP to STP via Red Arrow/Allied, King James, McKee, E Cheryl, and Fish Hatchery.	\$\$ PK, MD, EV \$ WD	6, 7, 9	\$813,000	10,840
2-10	West Madison	Restore a commuter loop route from the UW to Mineral Point Road and Odana.	\$ PK	2, 4, 7	\$112,500	1,500
<b>Total</b>					<b>\$3,696,750</b>	<b>49,290</b>

# Priority 3 Service Change Concepts

Priority 3 Long-Term (New Service as Development and Funding Allows)						
Index	Routes	Action	Cost *	Goals	Annual Cost **	Annual Hrs
3-1	Monona	Provide open-door service on Broadway and Monona Drive. Introduce a via that covers Monona Drive from Nichols/Pflaum to Buckeye		1, 4, 6, 7, 8	\$0	0
3-2	Middleton	Eliminate routes 70 and 78 and operate routes 71 and 72 off peak.	\$\$ MD, EV, WD	2, 4	\$726,000	9,680
3-3	Nine Springs	Extend routes 44 and 48 to E Cheryl and Syene.	\$ PK	6, 7, 10	\$112,500	1,500
3-4	University Research Park Ph 2	Introduce a new peripheral route from the WTP to Pleasant View via Odana and Watts.	\$ - \$\$	2, 6, 7, 10	\$713,250	9,510
3-5	Sprecher East	Extend Route 36 from High Crossing Blvd to the ETP as a two-way route via Crossroads, Lien, Reiner, Sprecher, and Milwaukee Street.	\$\$ PK \$ MD, EV, WD	6, 7	\$588,000	7,840
3-6	Sun Prairie	Extend Route 26 to serve West Sun Prairie interlined with a new route serving East Sun Prairie as a two-way loop replacing the existing shuttle service to/from East Towne.	\$ MD \$\$ EV, WD	2, 4, 6, 7, 9	\$613,500	8,180
<b>Total</b>					<b>\$2,753,250</b>	<b>36,710</b>

# Potential Service Change Concepts

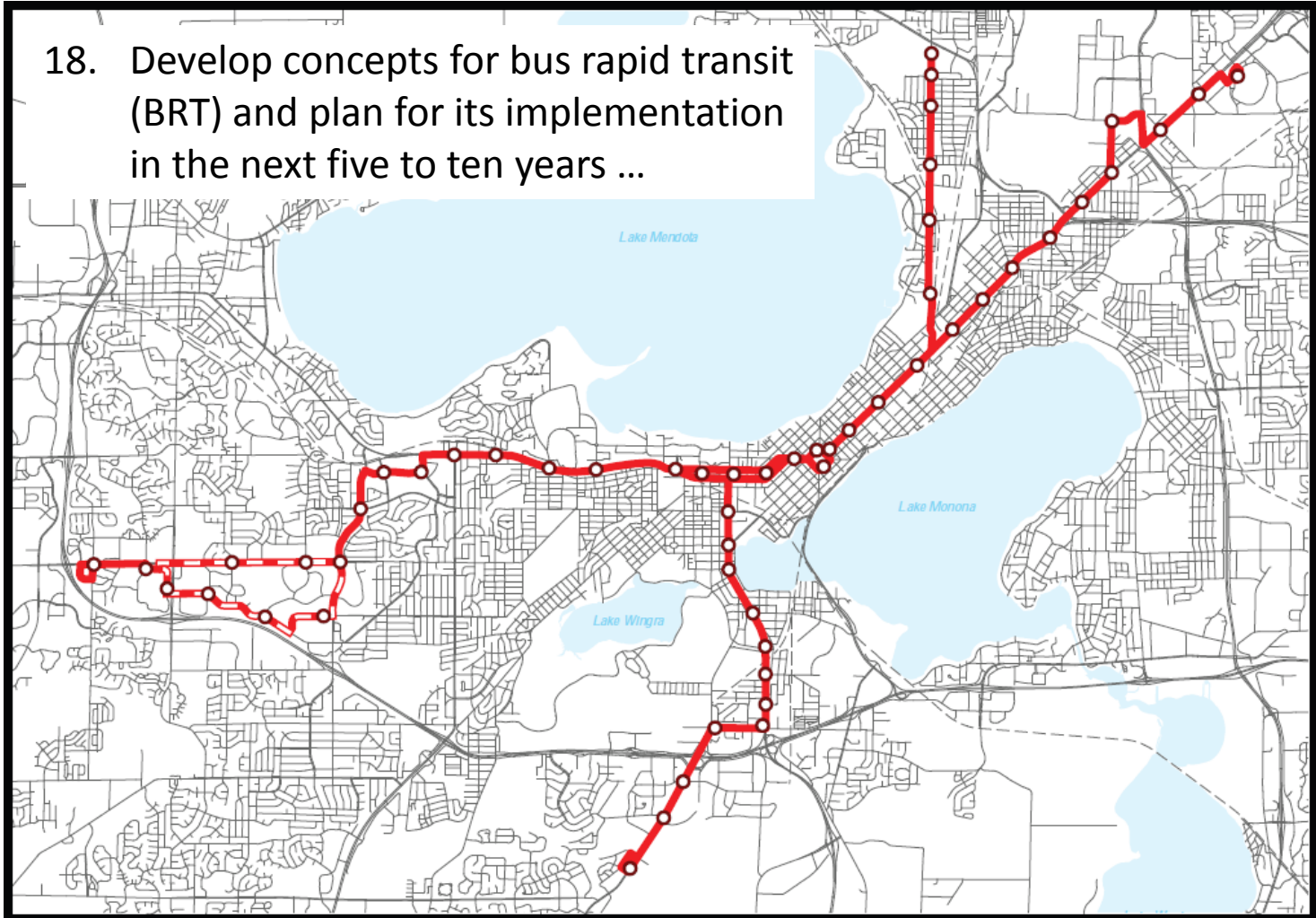


# Other Recommendations

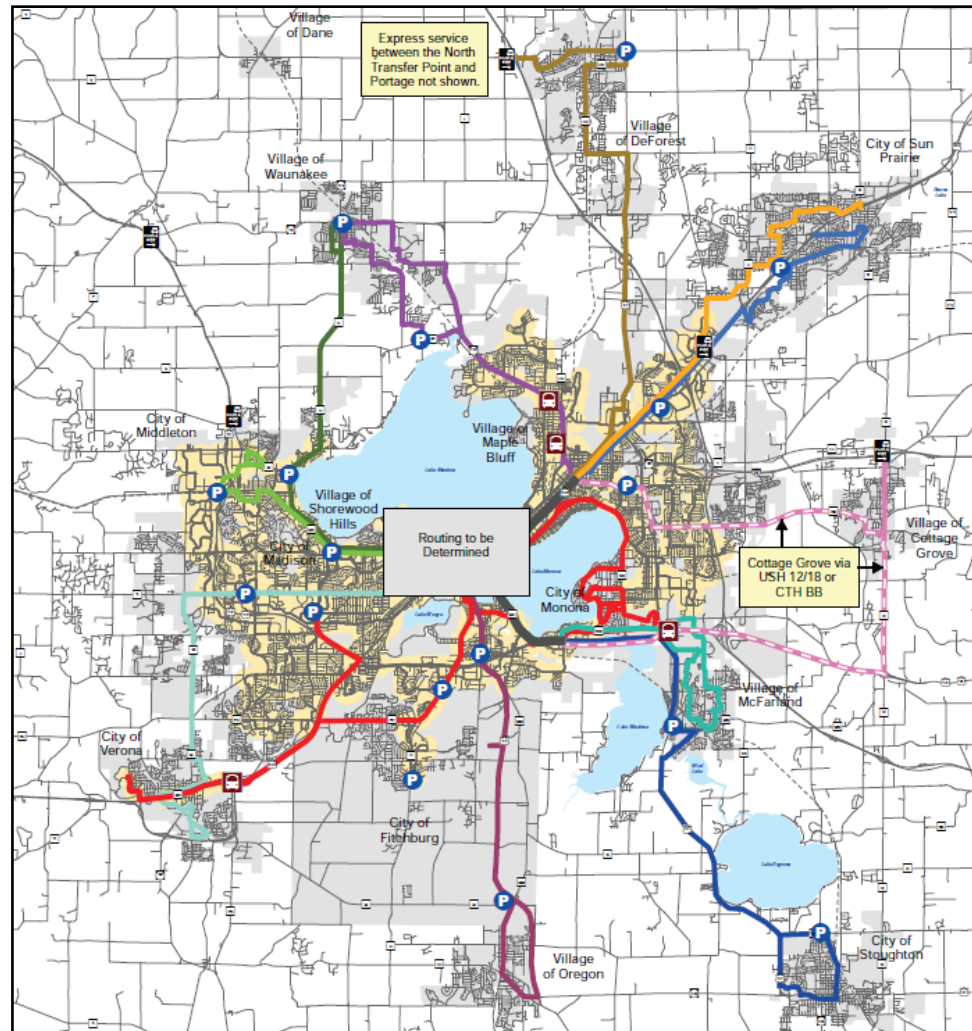
6. Improve transit service performance monitoring
12. Add boarding platforms, shelters, benches, and other passenger facilities
14. Locate a new inter-city bus terminal
17. Expand bus storage capacity
23. Add smaller and larger buses, if appropriate
32. Continue regional efforts to work towards a regional transit authority

# Bus Rapid Transit

18. Develop concepts for bus rapid transit (BRT) and plan for its implementation in the next five to ten years ...

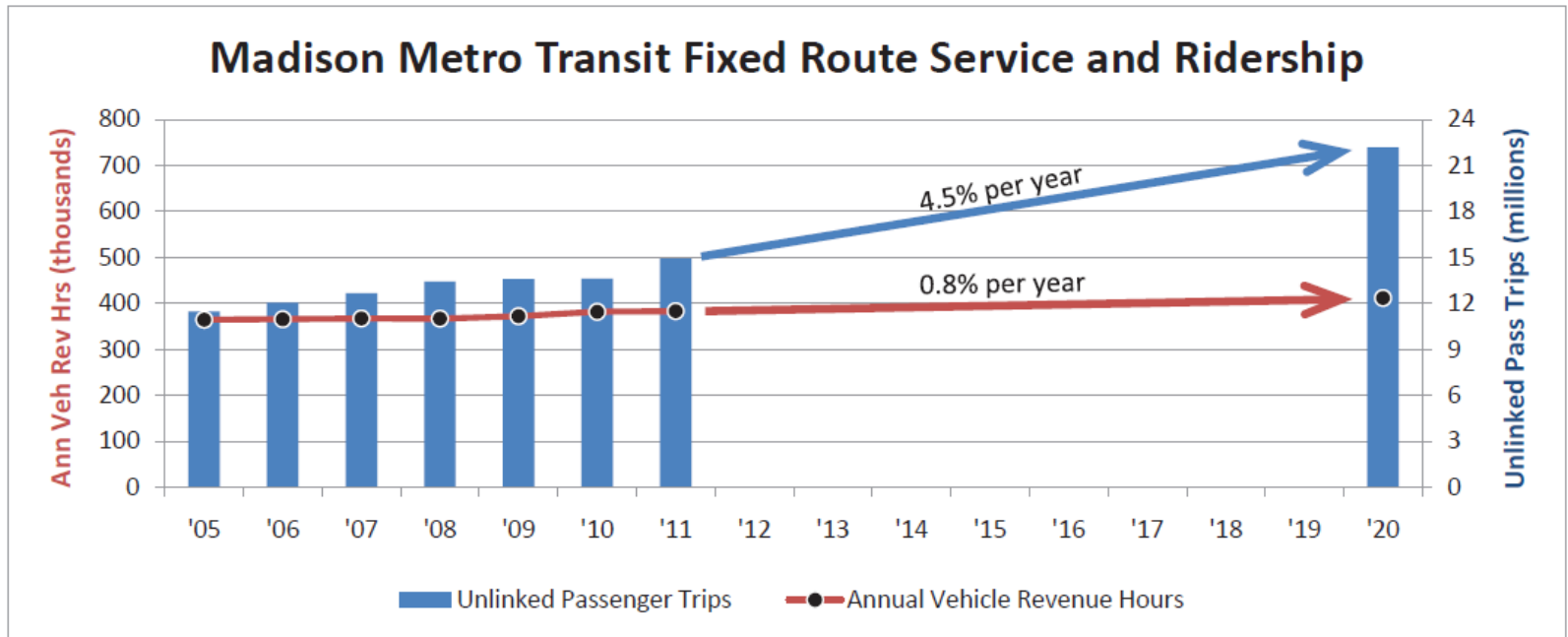


# Commuter Express Service

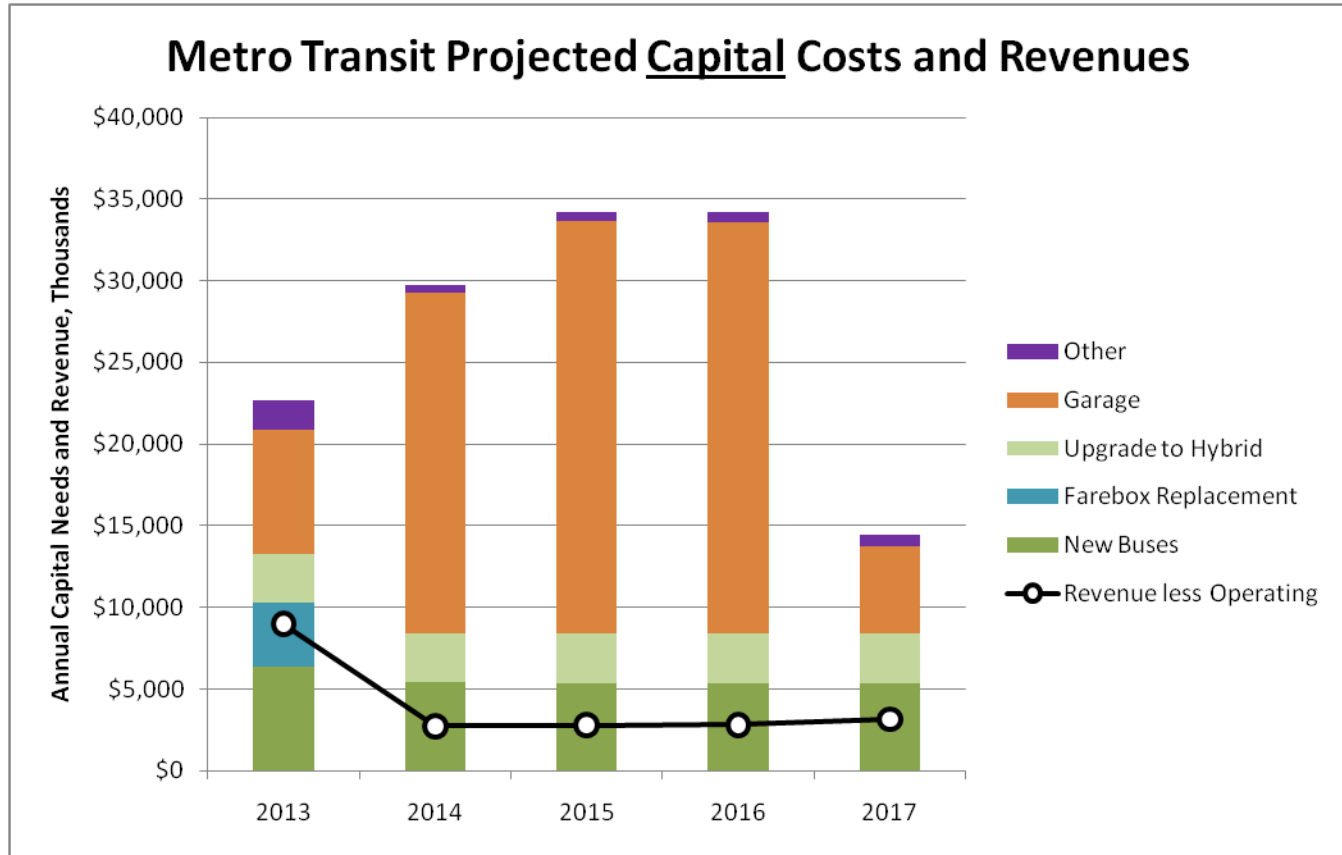


2013 – 2017 Transit Development Plan

# Funding – Operating



# Funding – Capital



2013 – 2017 Transit Development Plan



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