Madison & Anchorage

How to Create a Truly Multi-Modal Transportation System in a Winter City

Mayor Paul R. Soglin

April 5, 2017

Madison & Anchorage:
Two birds of a feather?
3,435 miles or $450 round trip between the two!

MADISON

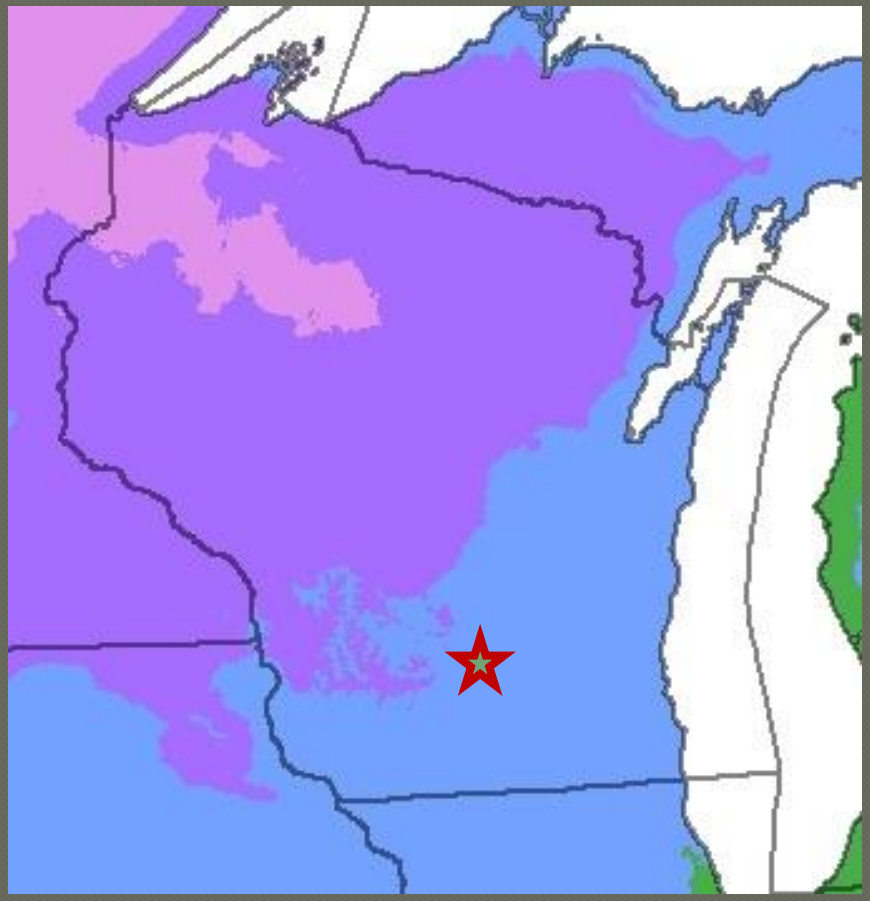
- Population: 243,344 (2013)
- UW Students: 43,300
- Big Wheels of Cheese
- Lots of room for growth and redevelopment??

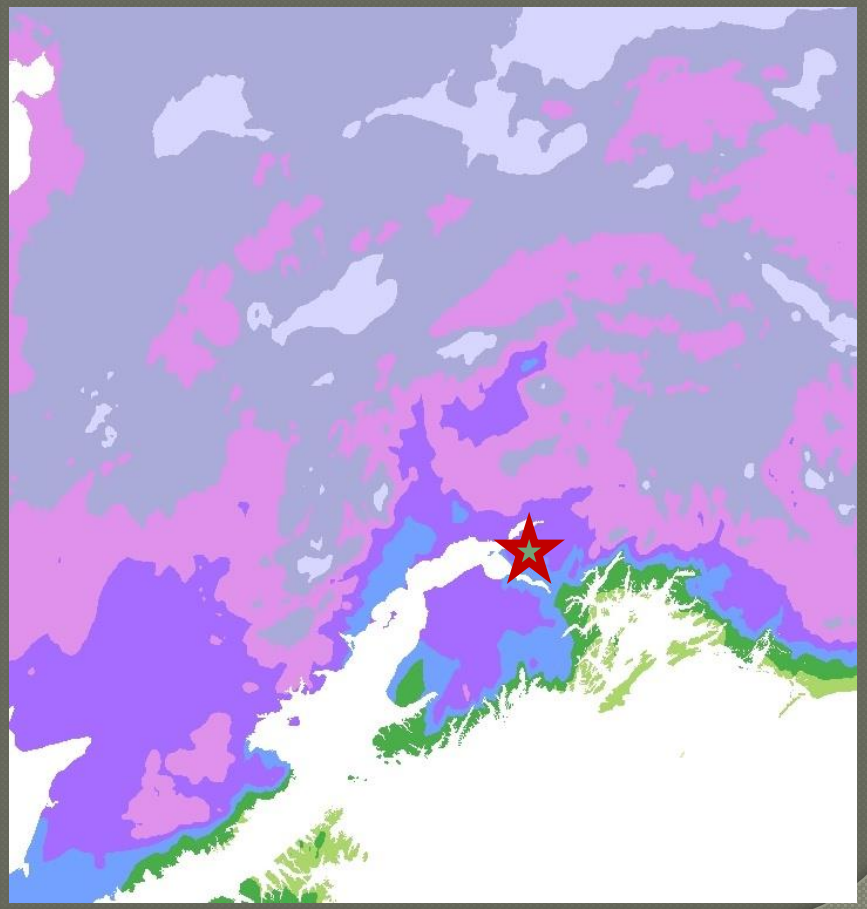
ANCHORAGE

- Population: 300,950 (2013)
- UAA Students: 21,000
- Gigantic vegetables
- Lots of room for growth and redevelopment??

Climate Map Comparison

- Madison: 5a
- Anchorage: 4b

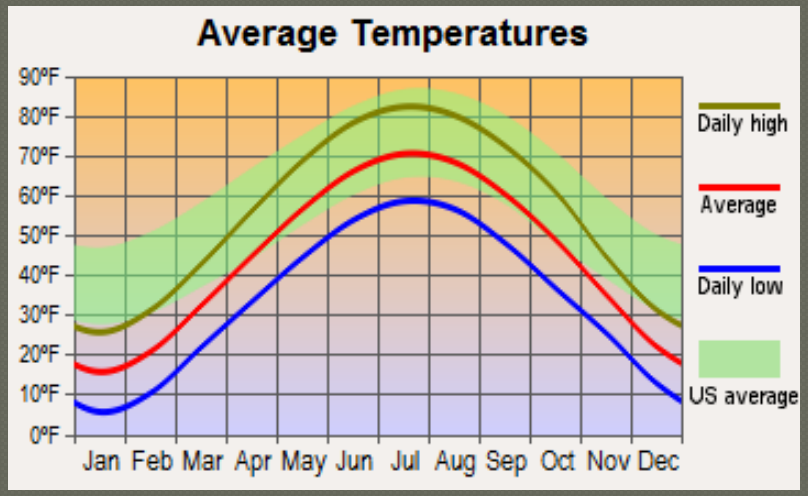




Climate Comparison

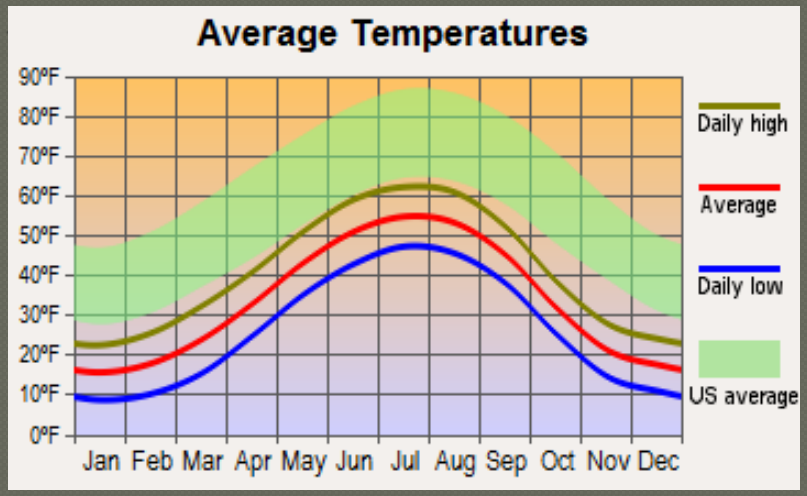
MADISON

- 43” Annual Snowfall



ANCHORAGE

- 75.5” Annual Snowfall



Surface. Parking. Lots. How did we get here?

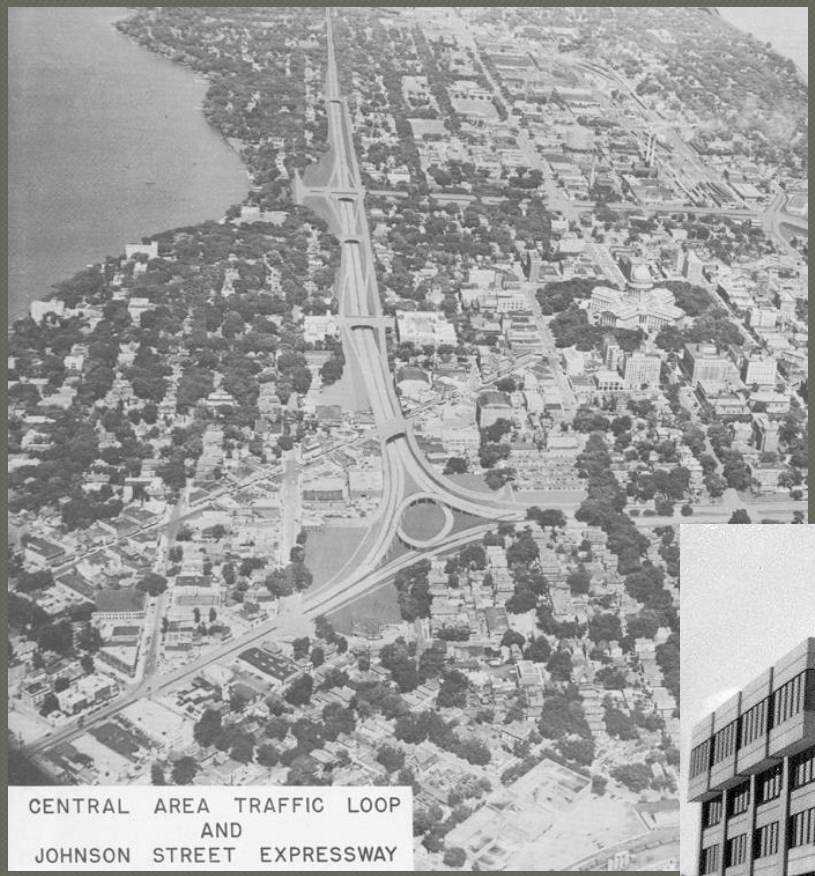
MADISON

- 1960's Urban Renewal

ANCHORAGE

- 1964 Good Friday Earthquake

1960s Urban Renewal In Madison



State Street vs. 4th Avenue

- 1960s State Street

- 2010s State Street

State Street vs. 4th Avenue

- 1960s 4th Avenue

- 2010s 4th Avenue

State Street vs. 4th Avenue

- Madison: Capitol Square Dane County Farmers Market
- Anchorage: Farmers market on 15th Street

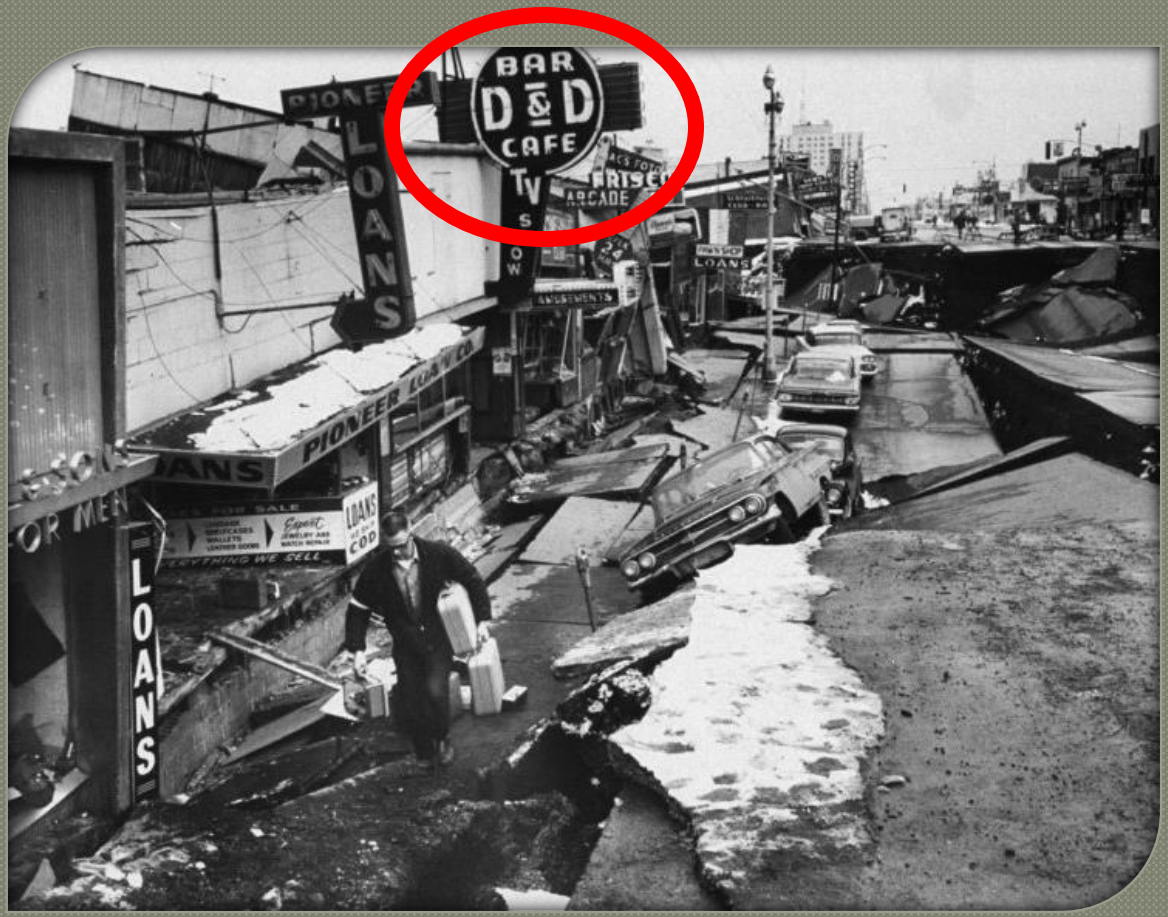
State Street vs. 4th Avenue

- Madison: Festivals

- Anchorage: Festivals

1960 Iditarod

View of 4th Avenue before Earthquake



Good Friday 1964 Earthquake – 4th Avenue

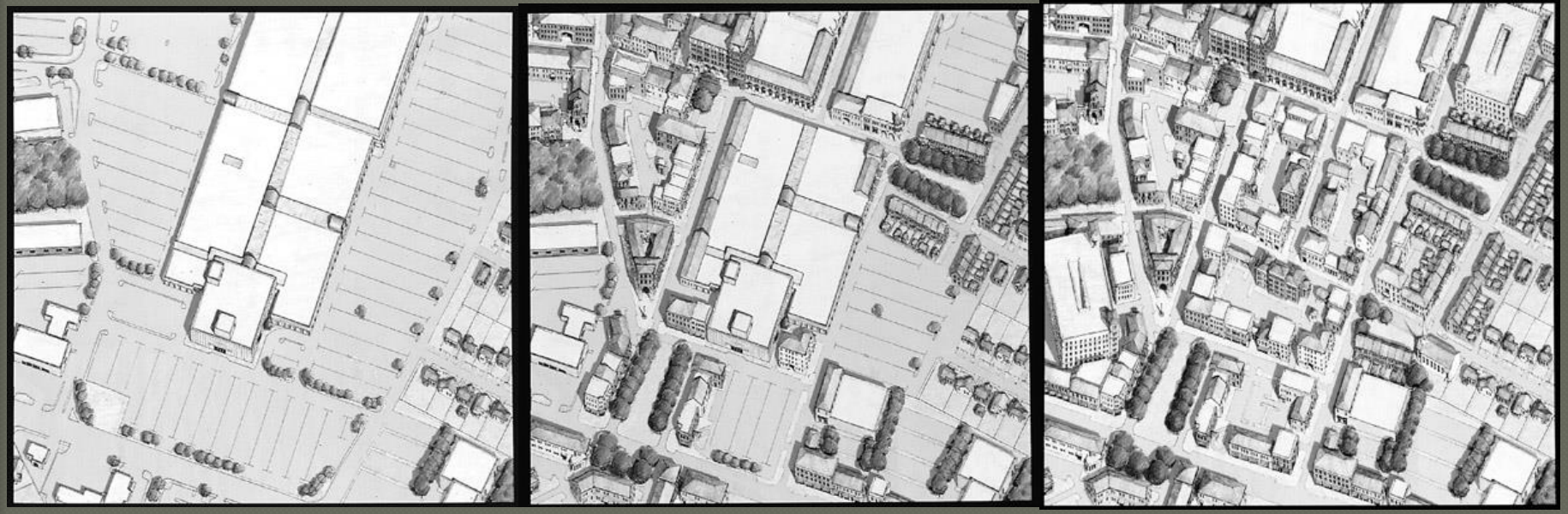
Iditarod on 4th Avenue - today

4th Avenue is immune from surface parking lots due to its importance in Anchorage's tourism, culture and history.

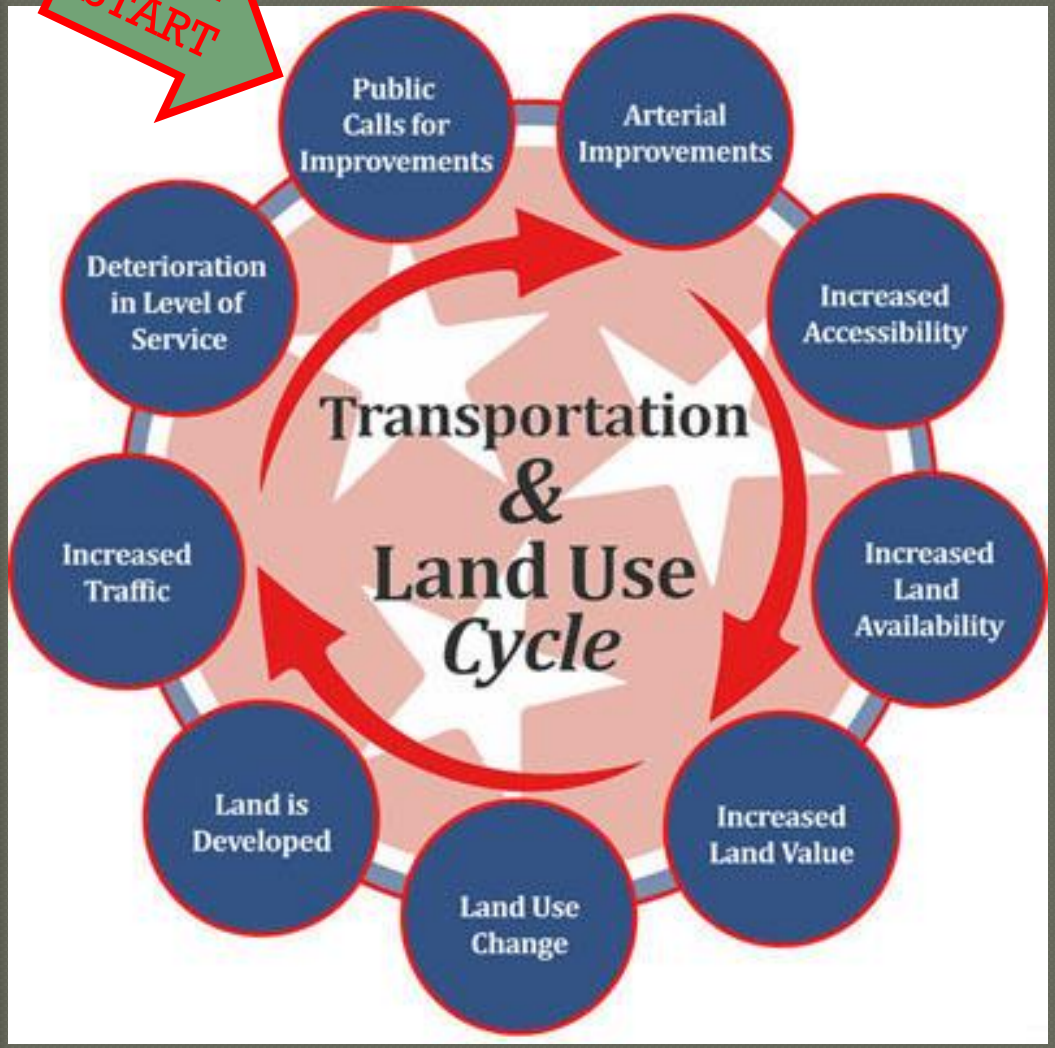
Surface. Parking. Lots.

- How do we go from

This…… To…… This?



Land Use vs. Transportation



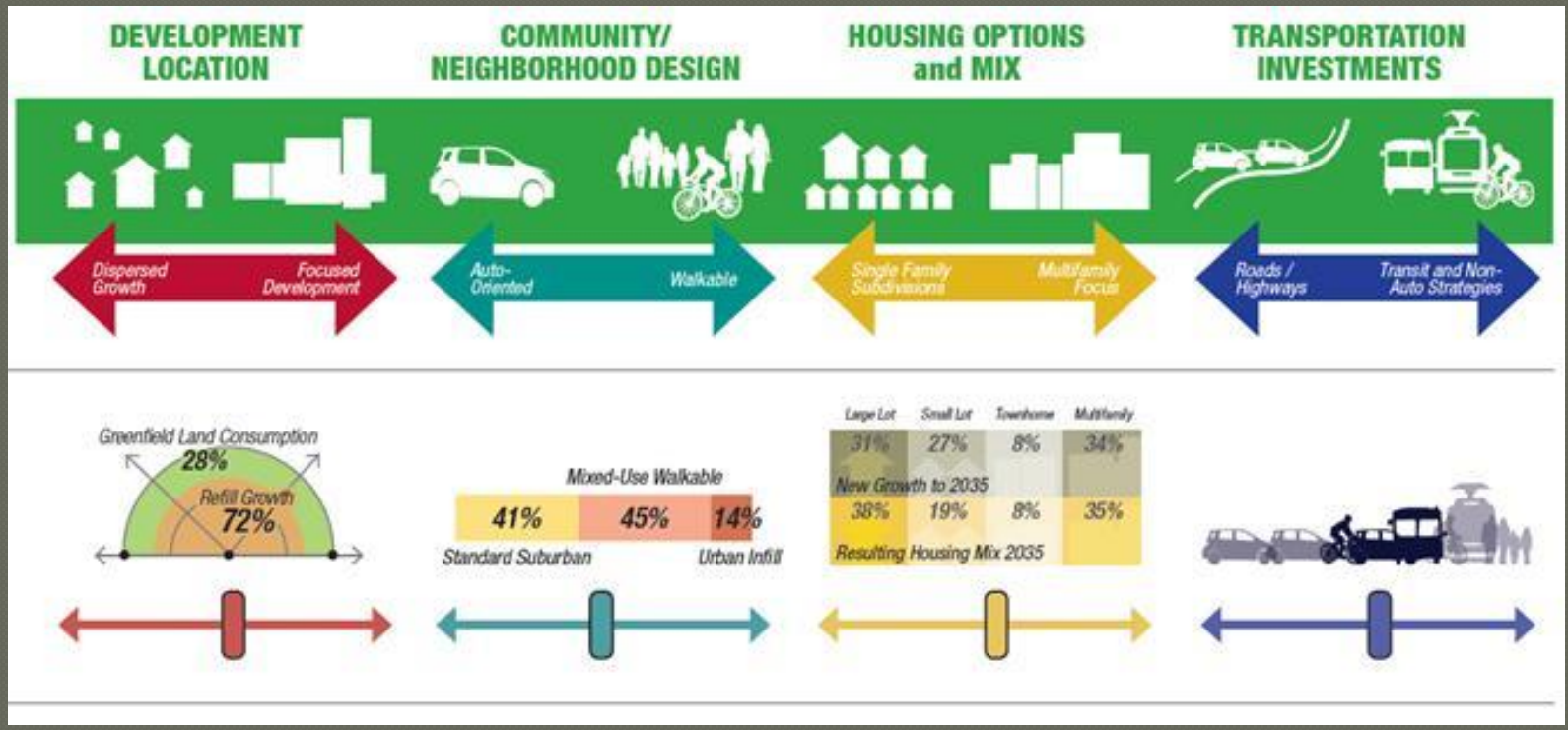
"Old model" Reactive

- Doesn't pay for it self
- Promotes sprawl
- Traffic problems & level of service drives reactive transportation policies
- Doesn't reward innovative thinking

Land Use vs. Transportation

New model - Reflective not reactive!

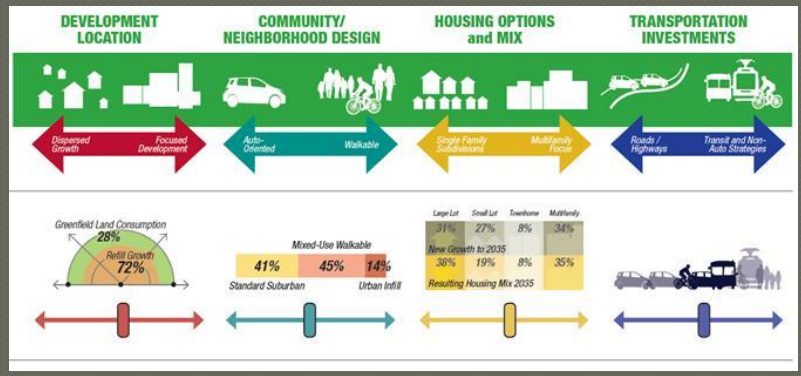
- Transportation policy based on reflecting community priorities & finding balance

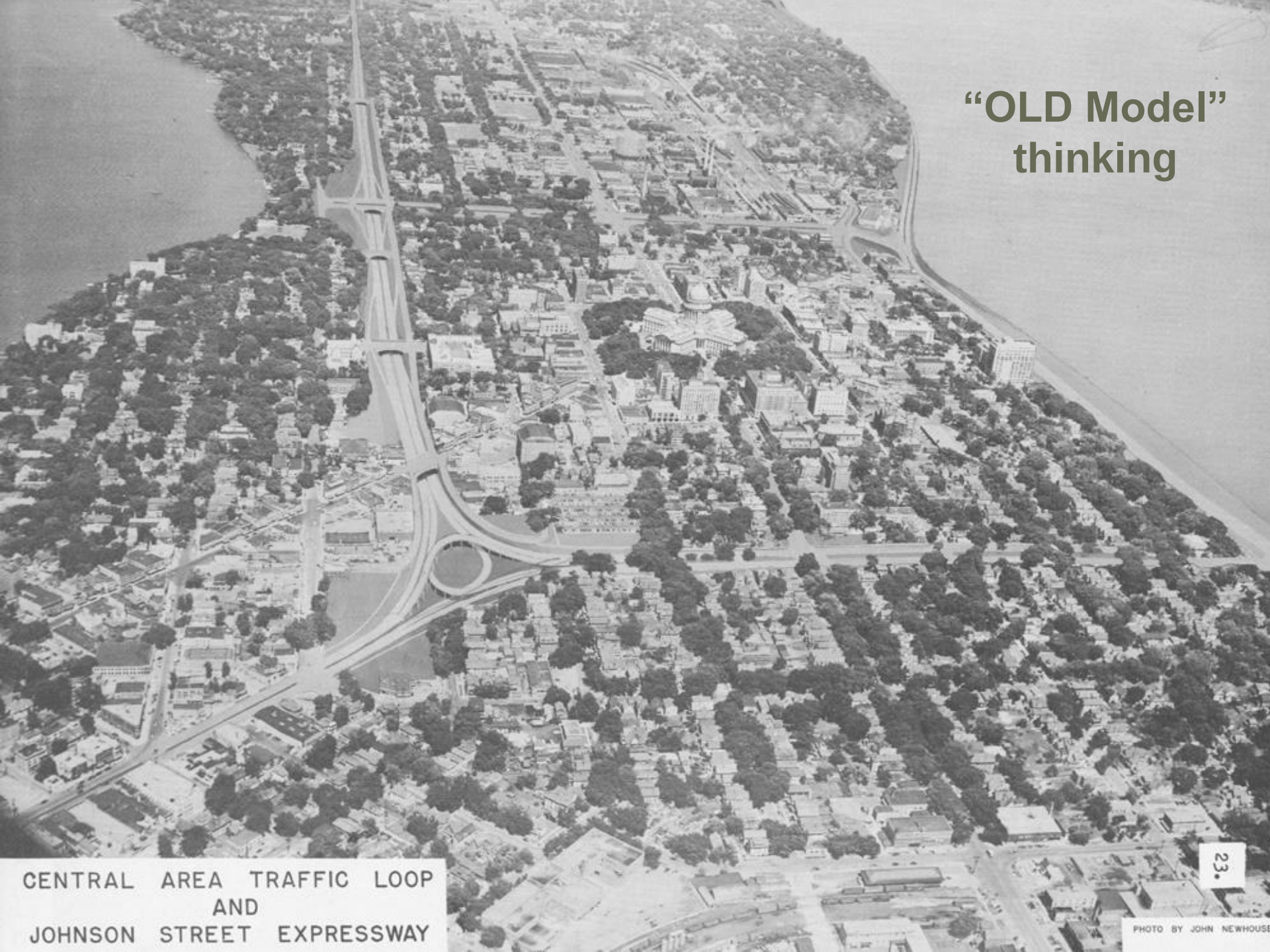


Land Use vs. Transportation

New model - Reflective not reactive!

- Considers benefits of
  - Density/compactness/mixed use,
  - Underground parking
  - Downtown population growth,
  - Demographic changes
  - Strong transit, bicycling and walking conditions/options





"OLD Model" thinking

"OLD Model" thinking

"NEW Model" thinking

Madison's Downtown Data

2000

- People
  - 22,168
- Assessment Value:
  - $613 Million
  - *$860 Million adjusted for inflation*

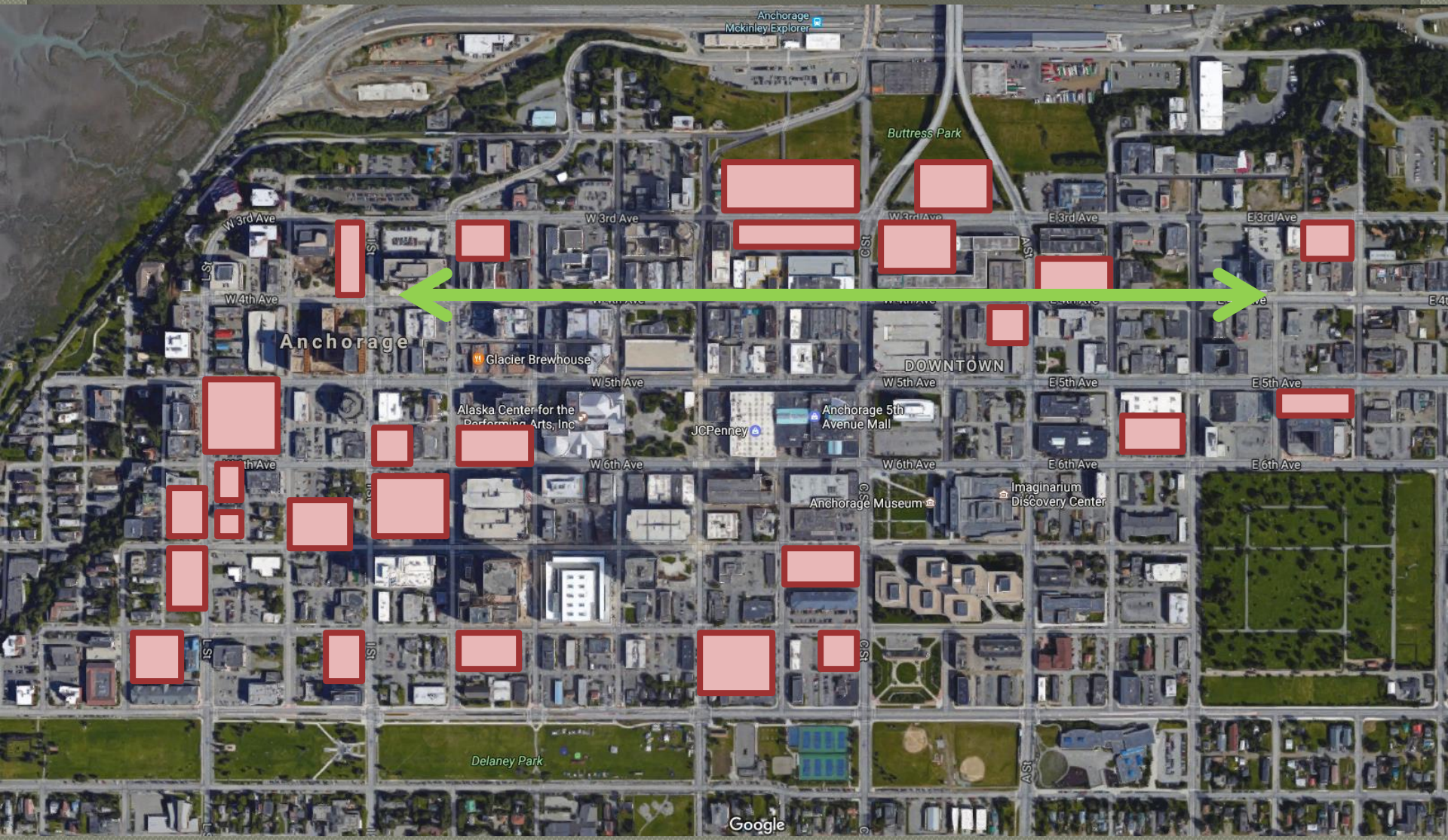
2010

- People
  - 24,009
- Assessment Value:
  - $1.04 Billion
  - *$1.15 Billion adjusted for inflation*

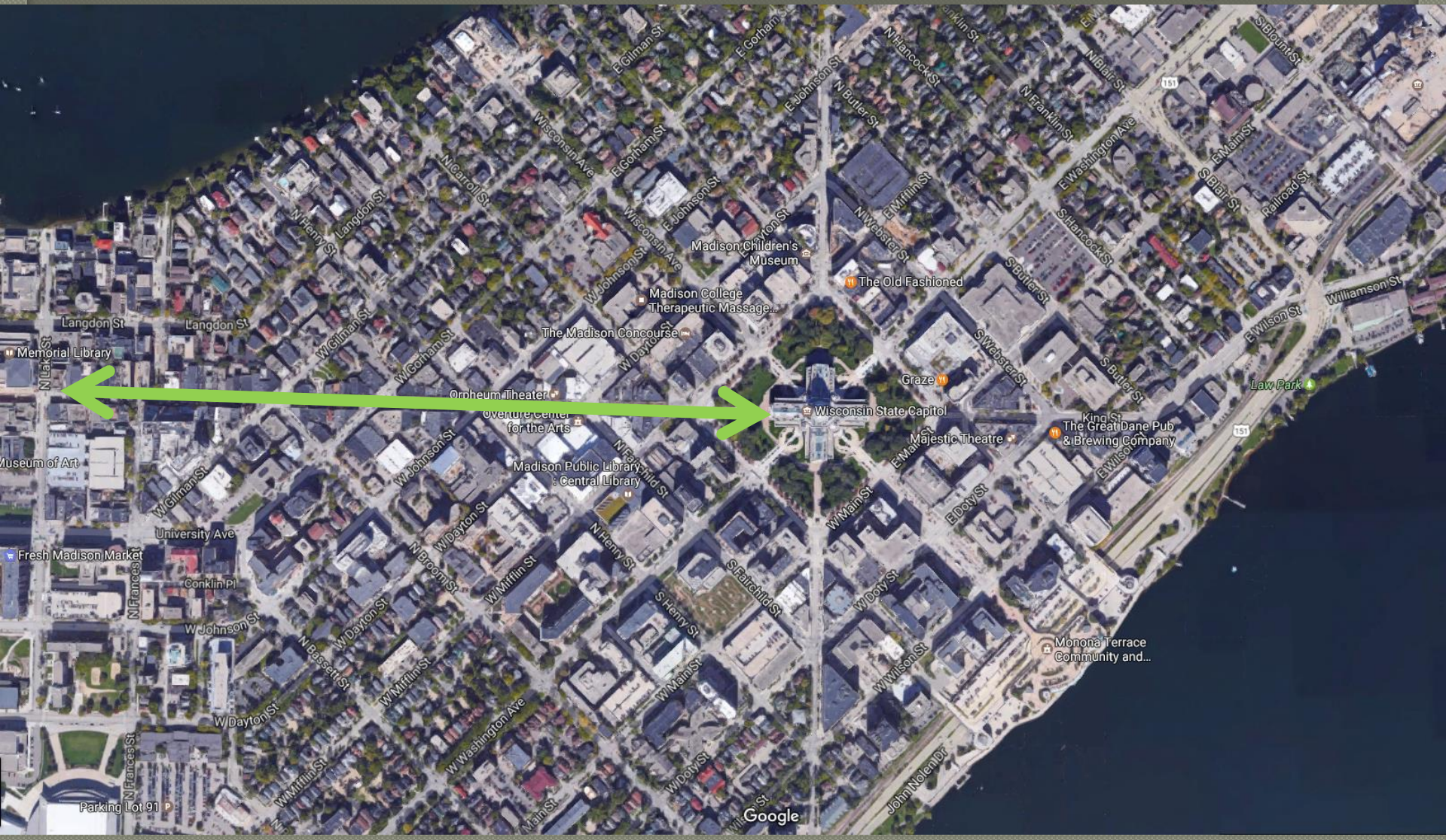
2017

- People
  - 25,600
- Assessment Value:
  - $1.86 Billion

Anchorage Surface Parking Lots



Madison's Redevelopment of Underused Parcels over last 35 years



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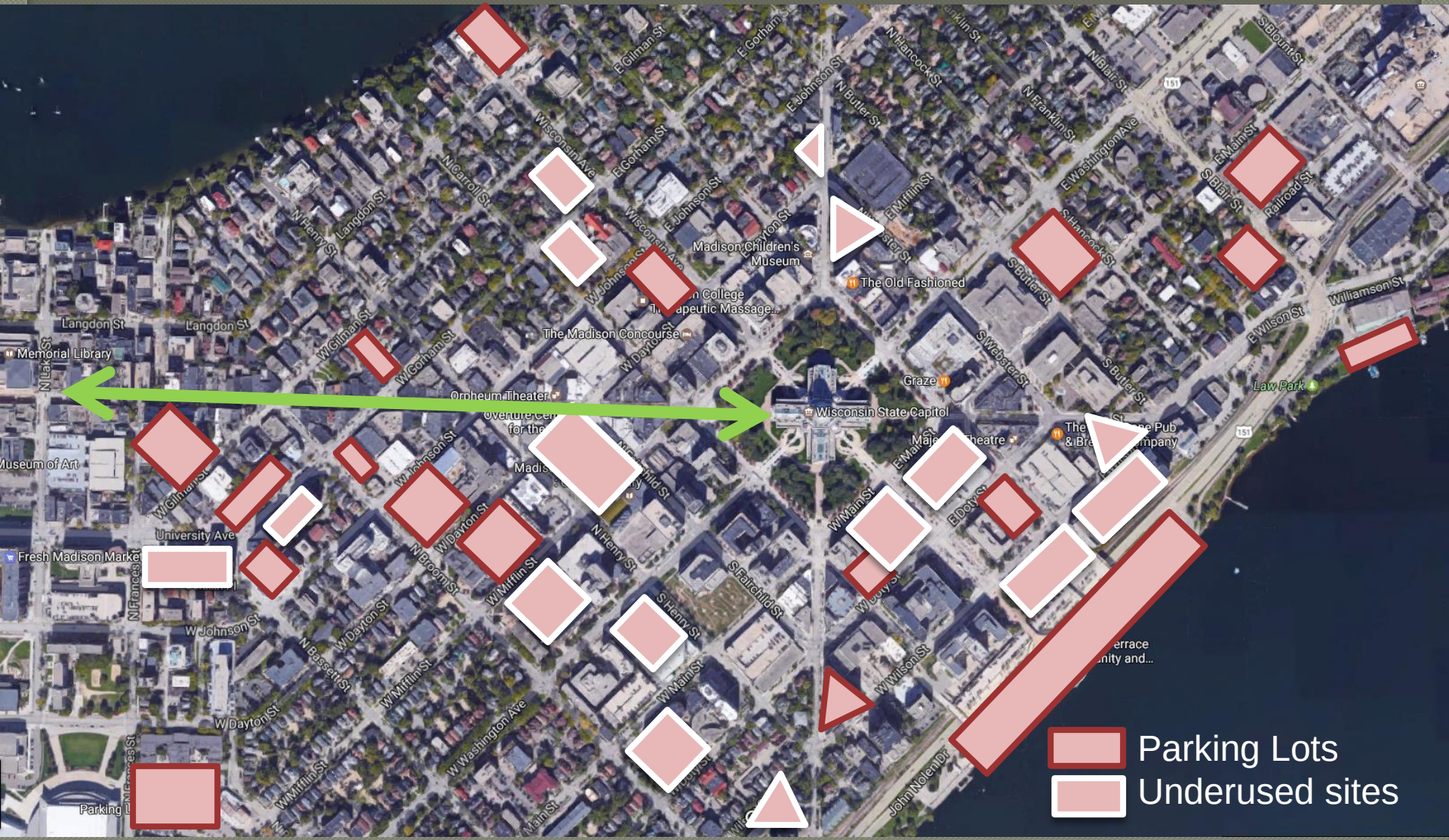
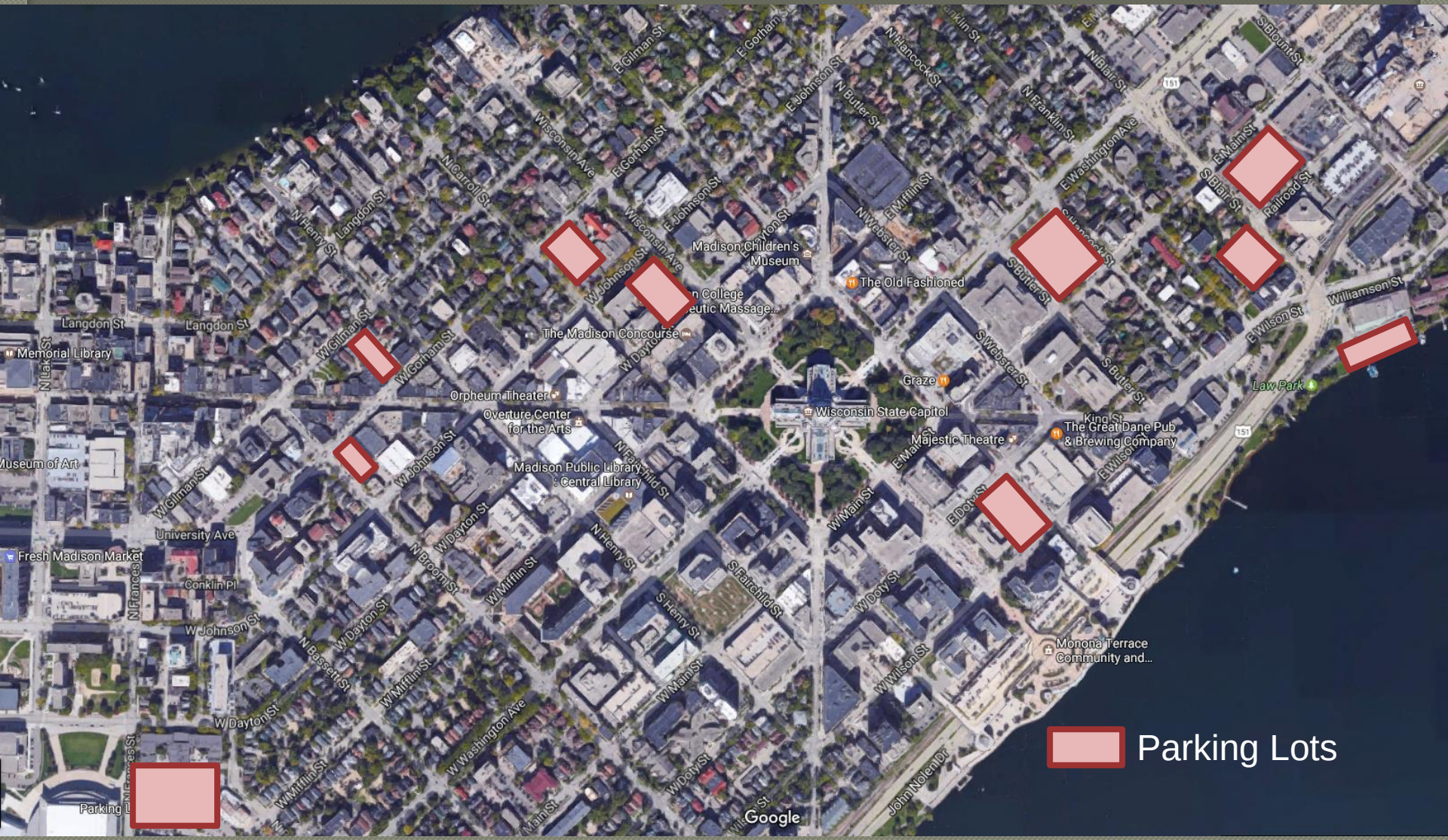
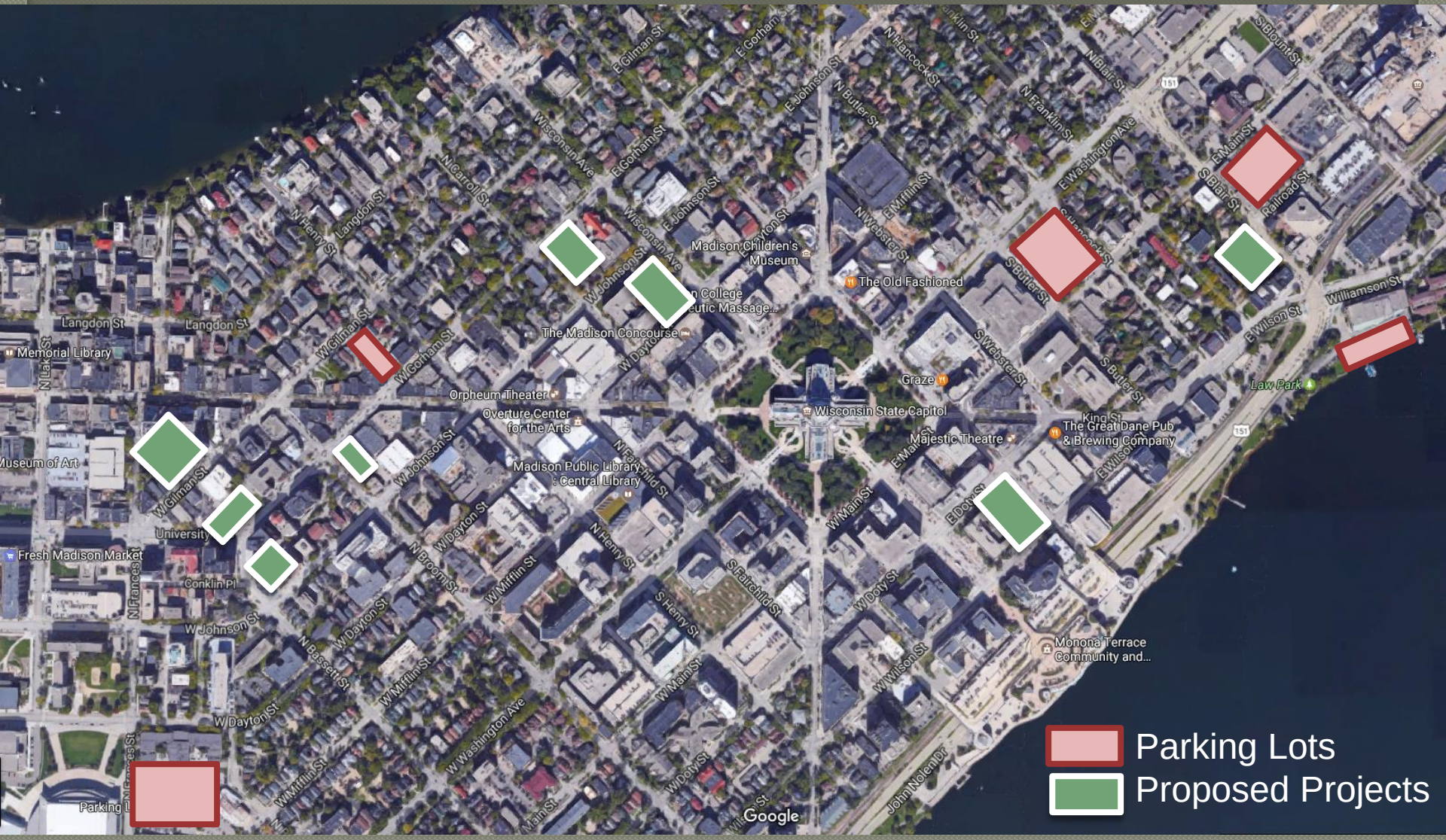


Madison's Redevelopment of Underused Parcels over last 35 years

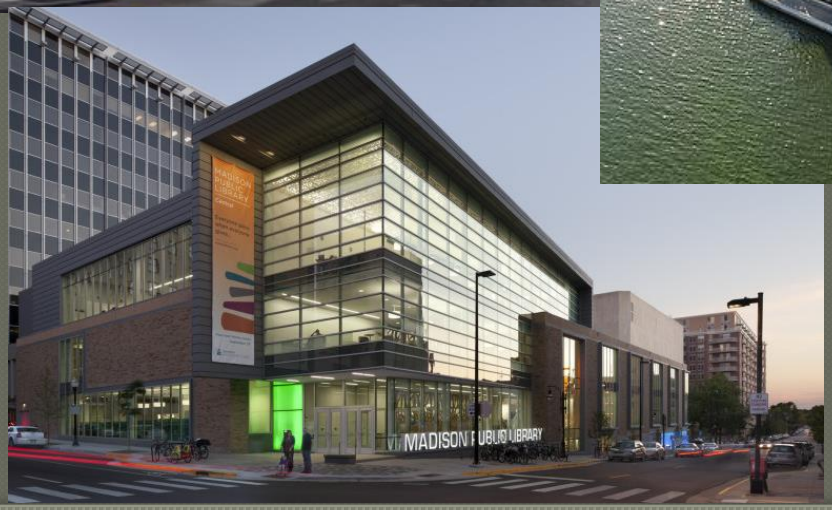
Madison's Current Surface Parking Lots



Madison's Current Surface Parking Lots

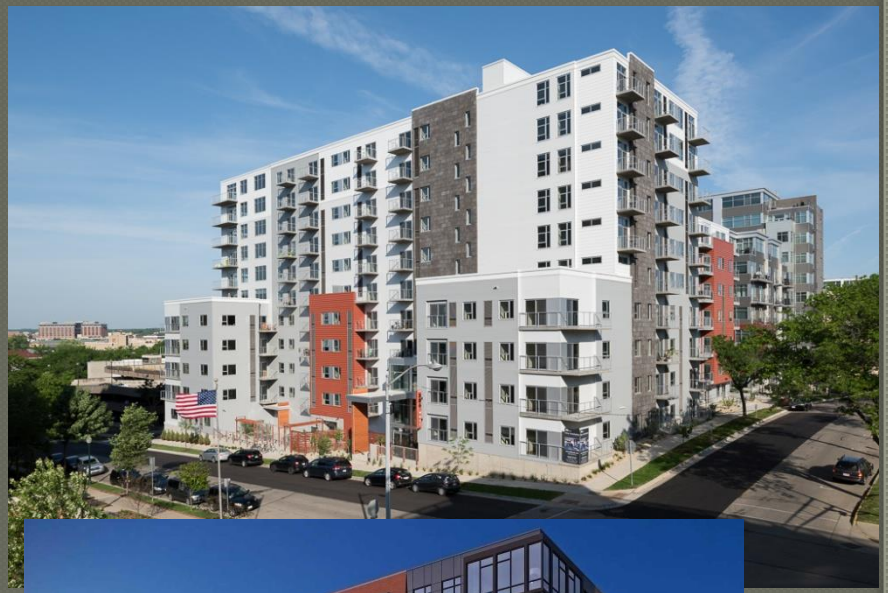


Downtown Redevelopment: Civic

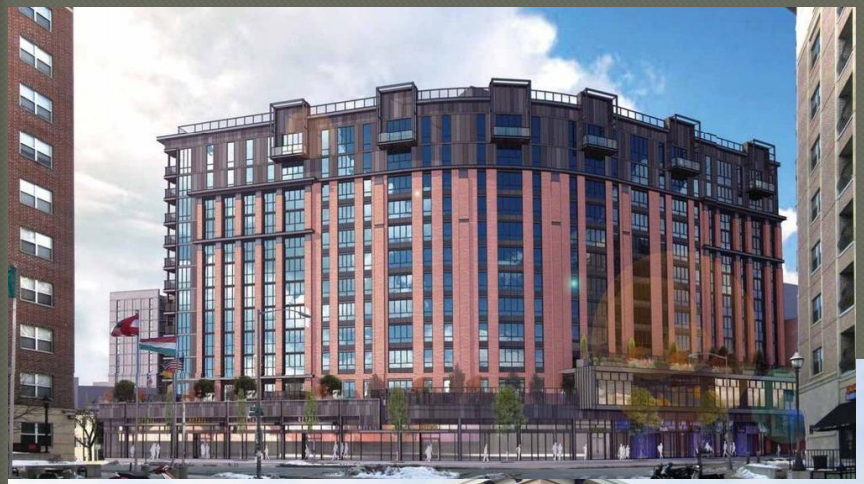


Downtown Redevelopment: Office

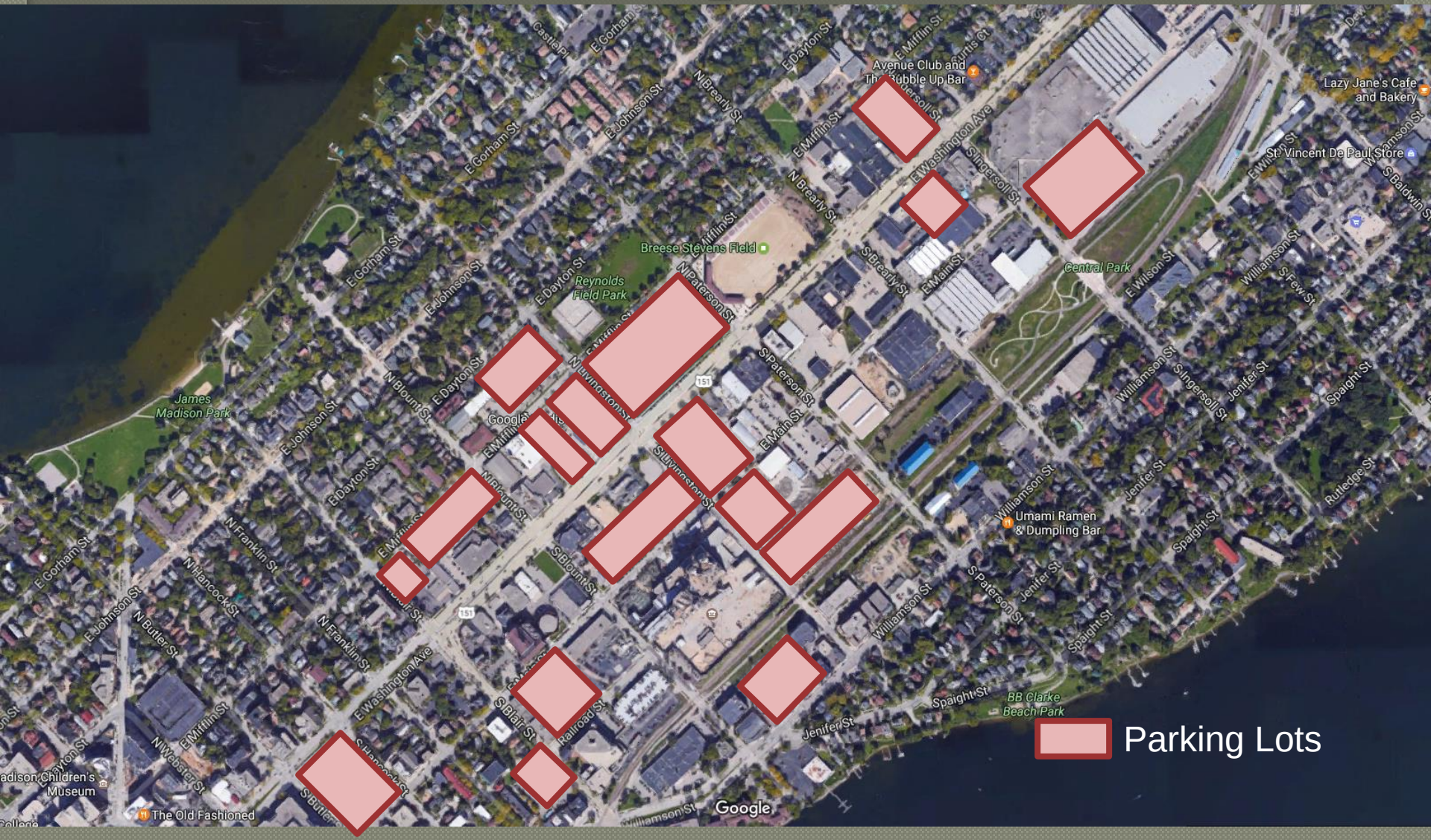
Downtown Redevelopment: Residential



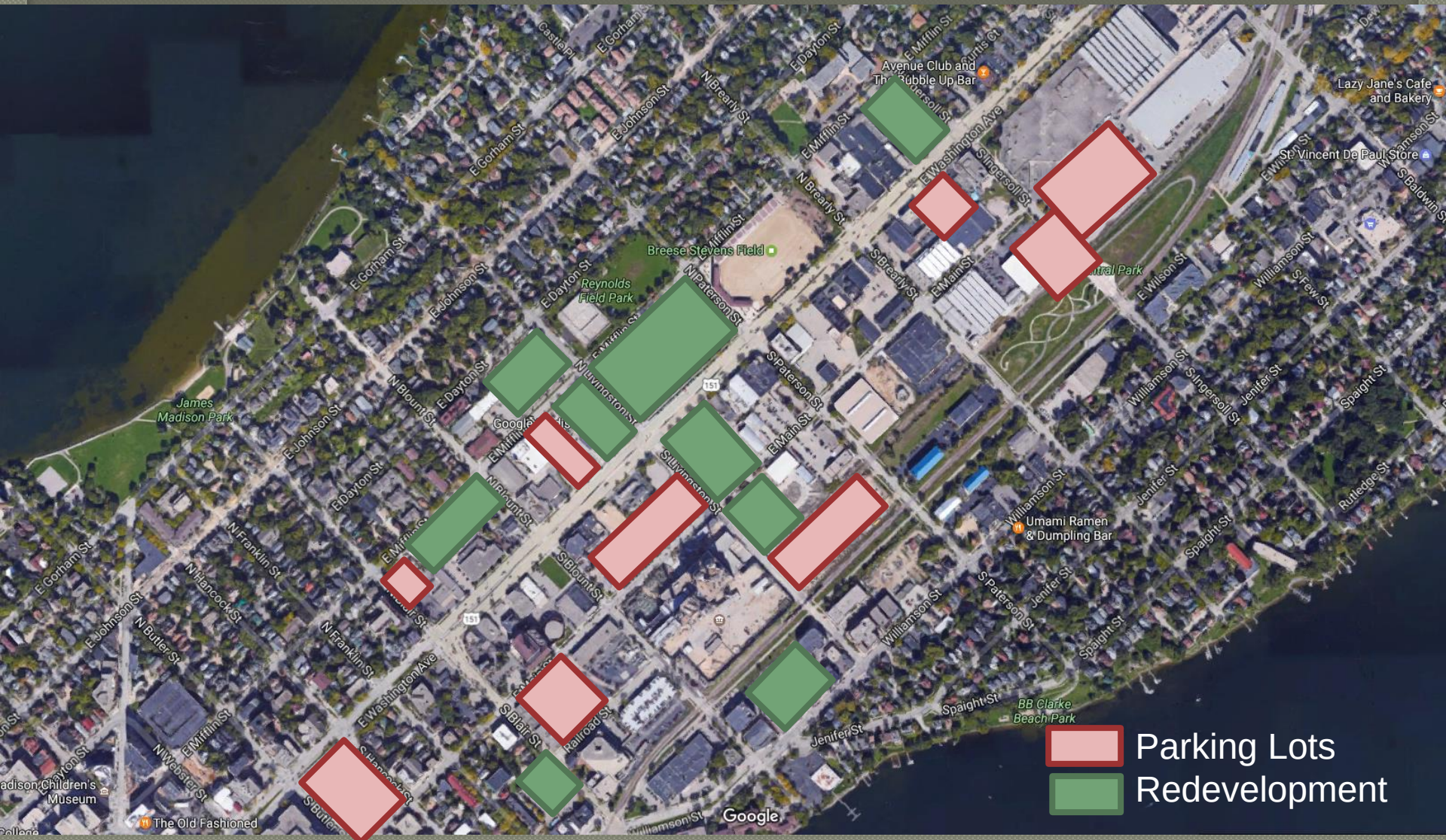
Downtown Redevelopment: Residential



Madison Surface Parking Lots: Capitol East District

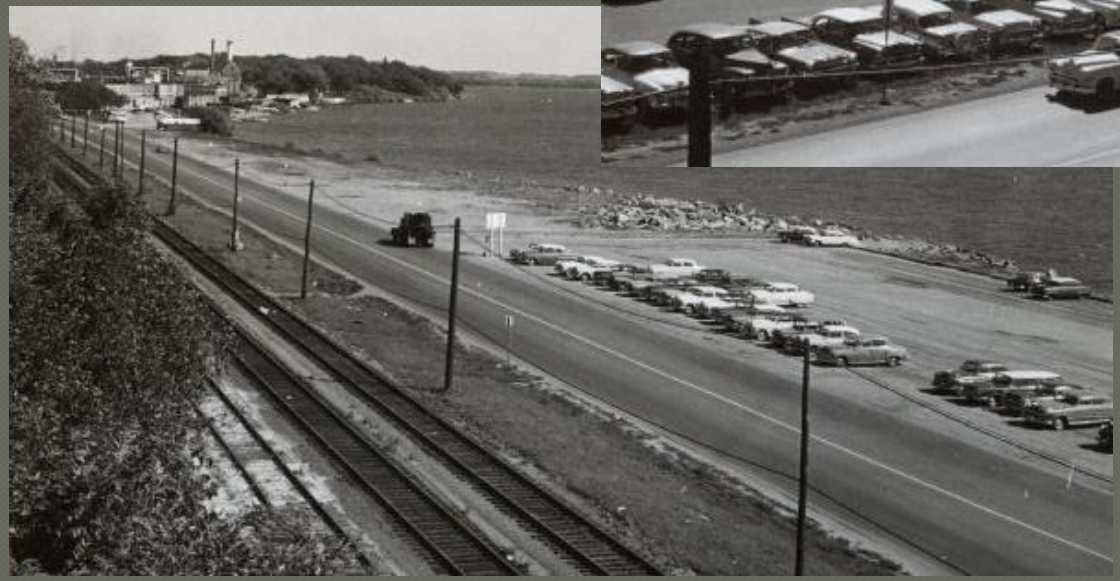


Madison Surface Parking Lots: Capitol East District



Capitol East District Redevelopment

Law Park / John Nolen Drive c1957



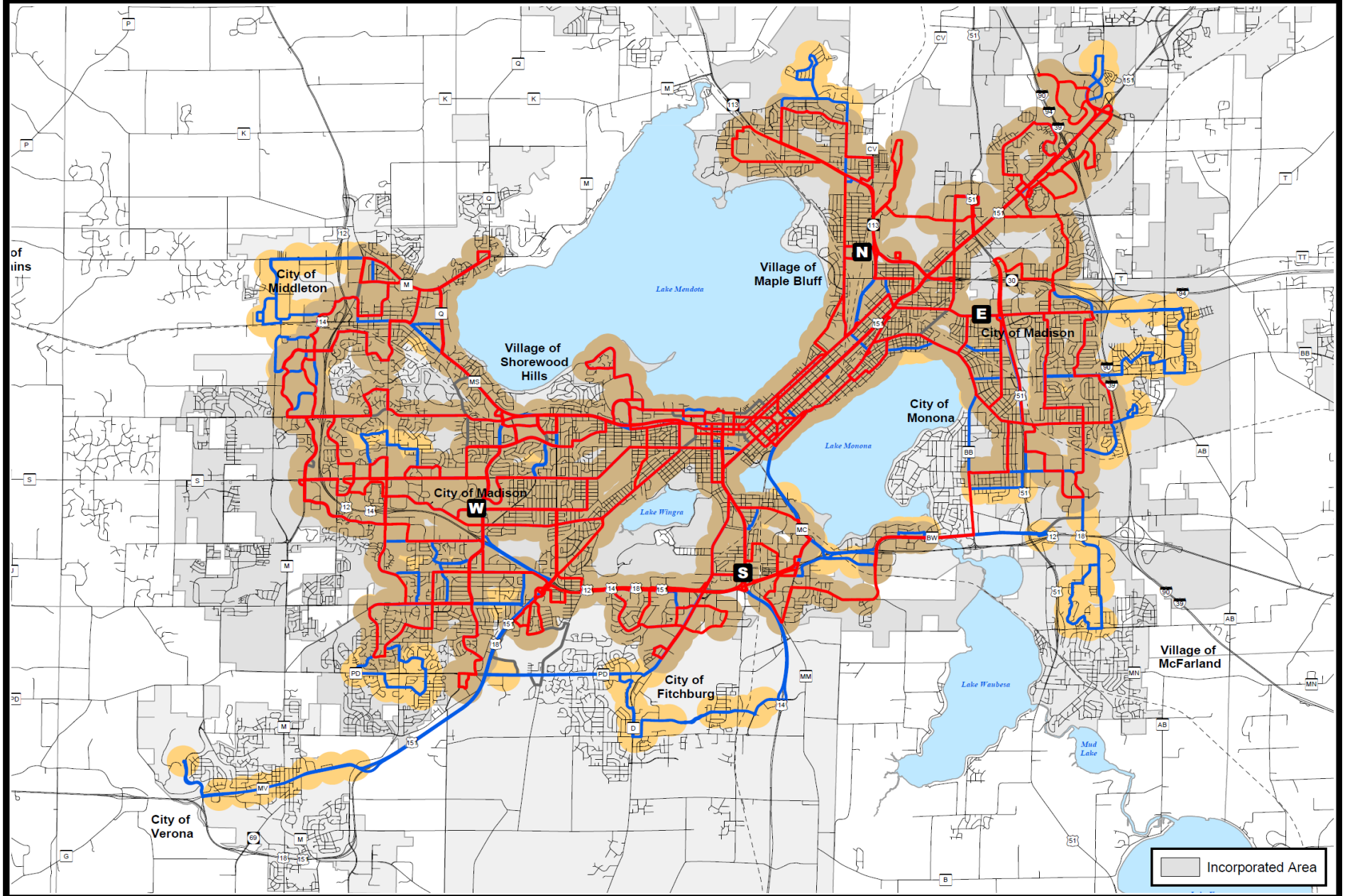
Photos: Wisconsin Historical Society Collection

Monona Terrace Opened in 1997

*Annual Economic Impact from **2007-2014**:*
$41,581,300 or roughly 62% of total construction costs

Metro Transit

- City of Madison Acquired Madison Bus Company in 1970
- Serves Metro Area, 256,000
  (158th nationally)
- 215 buses (67th nationally)
  - 194 diesel, 21 hybrid diesel-electric
- 14,000 annual boardings (70th)



Service Areas Metro Transit and Monona Systems, 8/2016

Source: GTFS data (Metro Transit, 2016).

Weekday Peak and Off-Peak Service Area*

Weekday Peak Service Area Only*

Transfer Point

*1/4 mile buffer of bus stops

Service Generally Throughout the Day

Service Peak Periods Only

Service Limited / Weekends Only

Prepared by staff to the: Madison Area Transportation Planning Board (T•P•B), A Metropolitan Planning Organization (MPO)

Date Revised: 2/27/2017

N

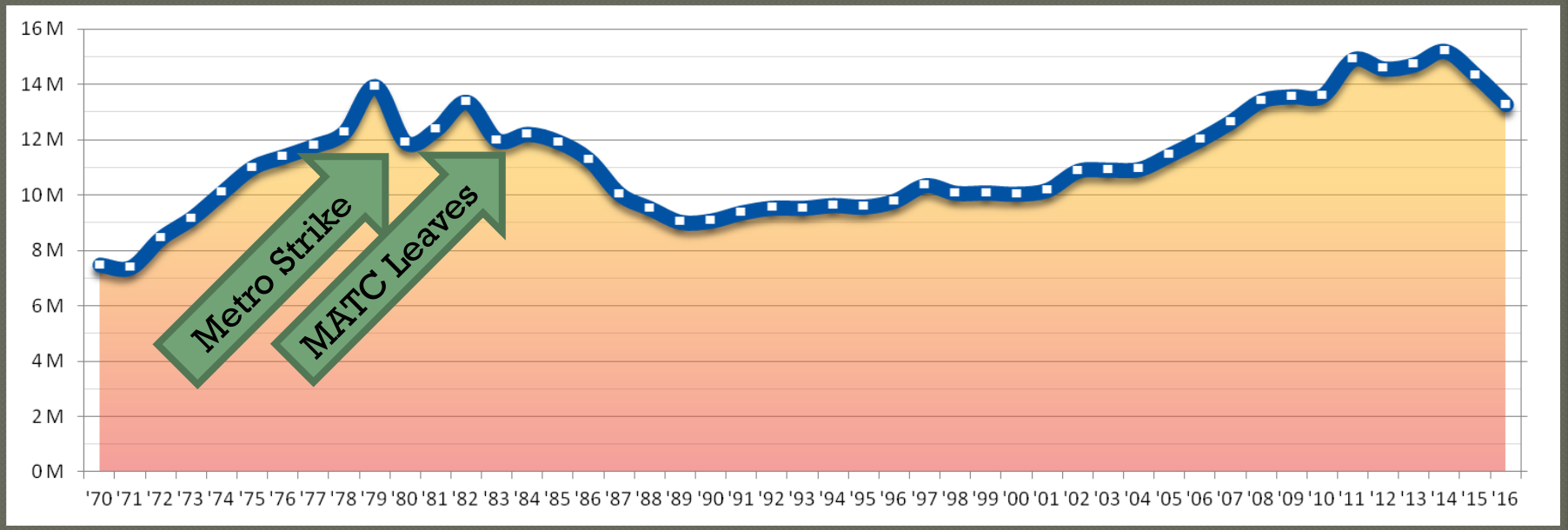
0 1 2 Miles

Author: pldms

Path: C:\Users\memwc\Desktop\a.mxd

Date Printed: 2/27/2017

Historical Ridership



- Steady ridership growth since 1990
- Ridership declines in 2015 and 2016

Ridership per Capita

Top 20 United States Bus Systems with 50 or more Buses
Ranked by Transit Trips Per Capita, 2015

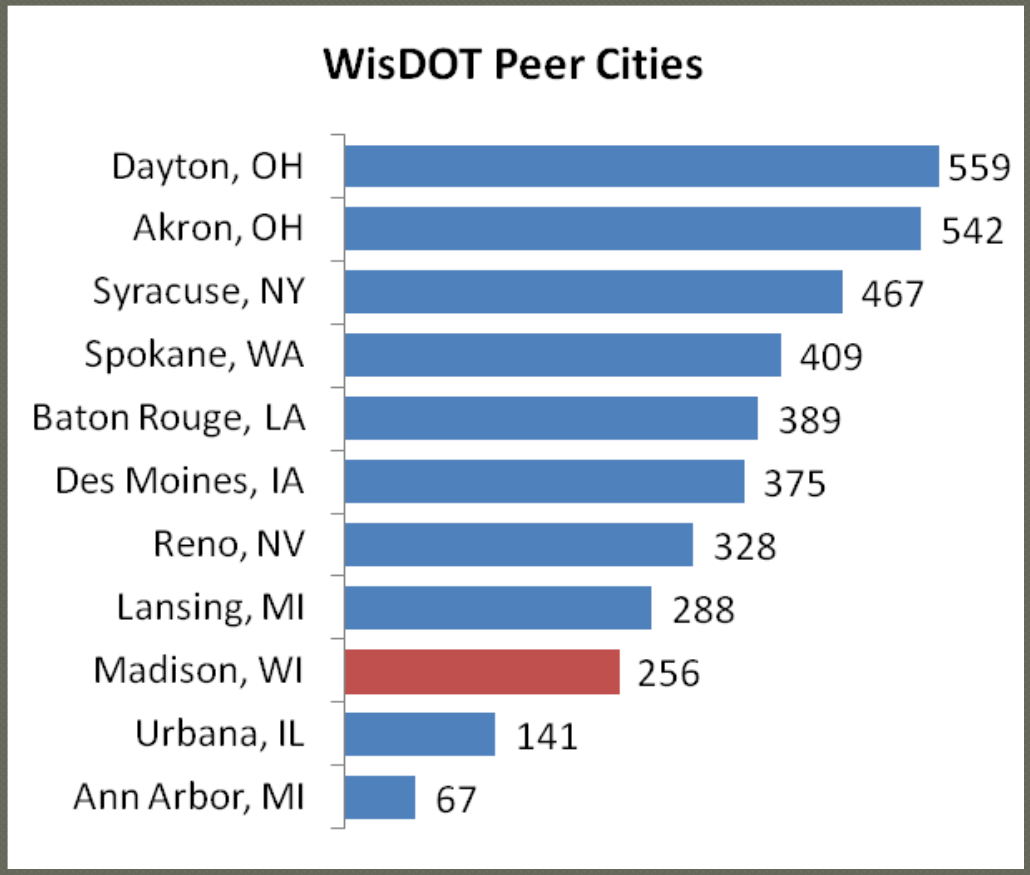
Rank	System Name	Primary City	Buses in Fleet	Service Area (Sq mi)	Service Population	Bus Unlinked Passenger Trips	UPT per Capita
1	CyRide	Ames, IA	111	15	58,100	6,699,351	115.3
2	San Francisco Municipal Railway	San Francisco, CA	525	49	836,620	95,005,347	113.6
3	Univ of Michigan Parking and Transp Services	Ann Arbor, MI	58	12	66,641	7,256,729	108.9
4	University of Georgia Transit System	Athens, GA	68	14	119,648	11,413,231	95.4
5	Champaign-Urbana Mass Transit District	Champaign-Urbana, IL	102	30	141,471	13,391,124	94.7
6	MTA New York City Transit	New York, NY	4,284	321	8,550,405	743,763,755	87.0
7	Chicago Transit Authority	Chicago, IL	2,102	314	3,345,983	274,288,766	82.0
8	Chapel Hill Transit	Chapel Hill, NC	100	62	80,218	6,533,944	81.5
9	City and County of Honolulu DOT Services	Honolulu, HI	523	277	953,207	69,327,213	72.7
10	Centre Area Transportation Authority	State College, PA	72	89	104,360	7,325,851	70.2
11	Gainesville Regional Transit System	Gainesville, FL	128	76	163,990	10,251,248	62.5
12	Blacksburg Transit	Blacksburg, VA	55	28	63,661	3,699,328	58.1
13	**Metro Transit System**	**Madison, WI**	**215**	**72**	**256,150**	**14,358,261**	**56.1**
14	King County Metro	Seattle, WA	1,371	2,134	2,117,125	102,302,980	48.3
15	Metropolitan Atlanta Rapid Transit Authority	Atlanta, GA	647	504	1,373,958	62,868,806	45.8
16	Southeastern Pennsylvania Transportation Auth	Philadelphia, PA	1,531	839	3,797,325	171,287,633	45.1
17	Milwaukee County Transit System	Milwaukee, WI	412	237	956,406	39,313,139	41.1
18	Santa Monica's Big Blue Bus	Santa Monica, CA	188	51	458,506	18,748,868	40.9
19	Tompkins Consolidated Area Transit	Ithaca, NY	53	476	103,617	4,185,394	40.4
20	Tri-Met	Portland, OR	683	534	1,560,803	62,114,041	39.8

Source: National Transit Database

Peer Cities are Larger

Madison has the highest ridership in this group

Service population, thousands



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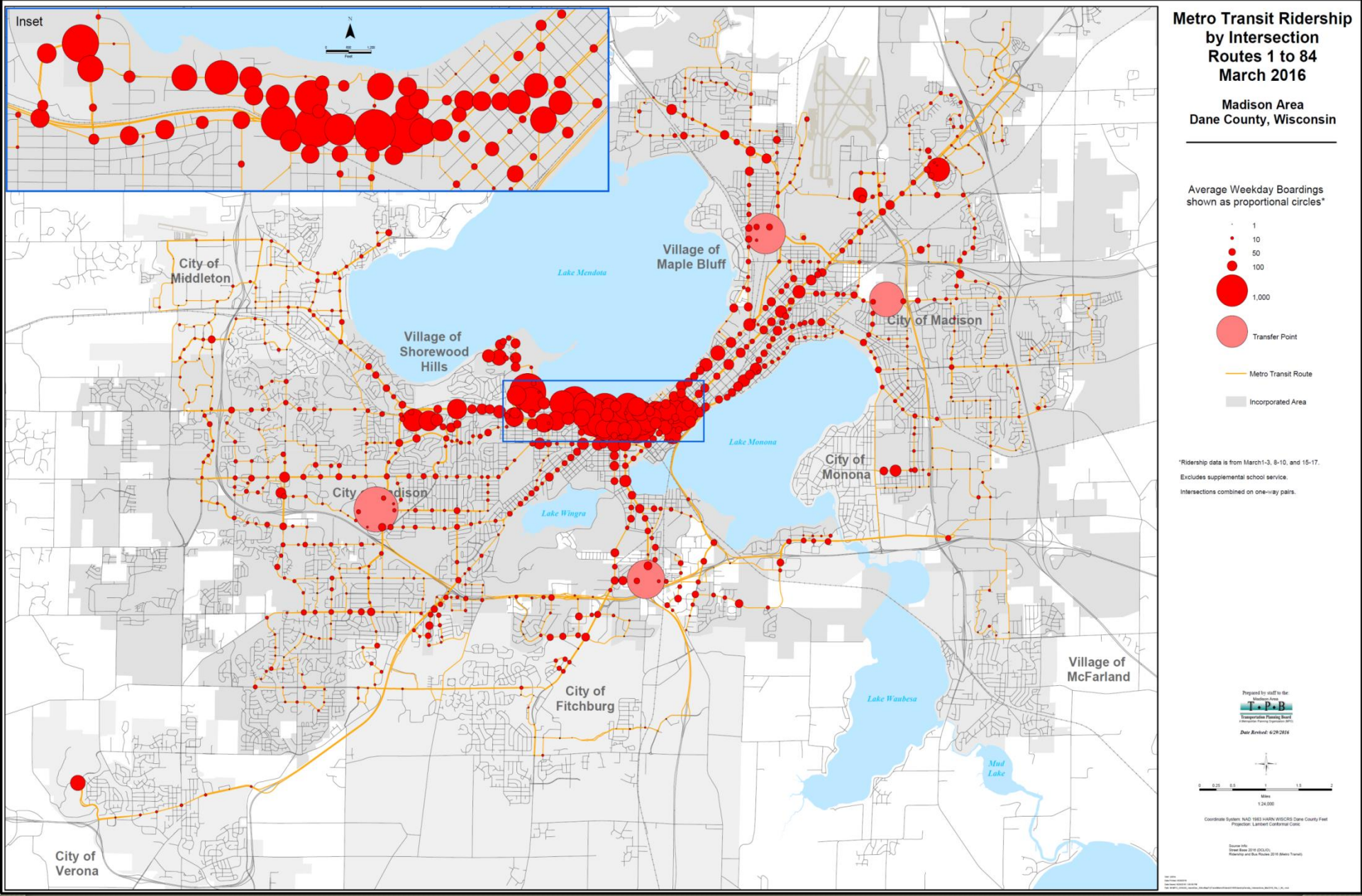
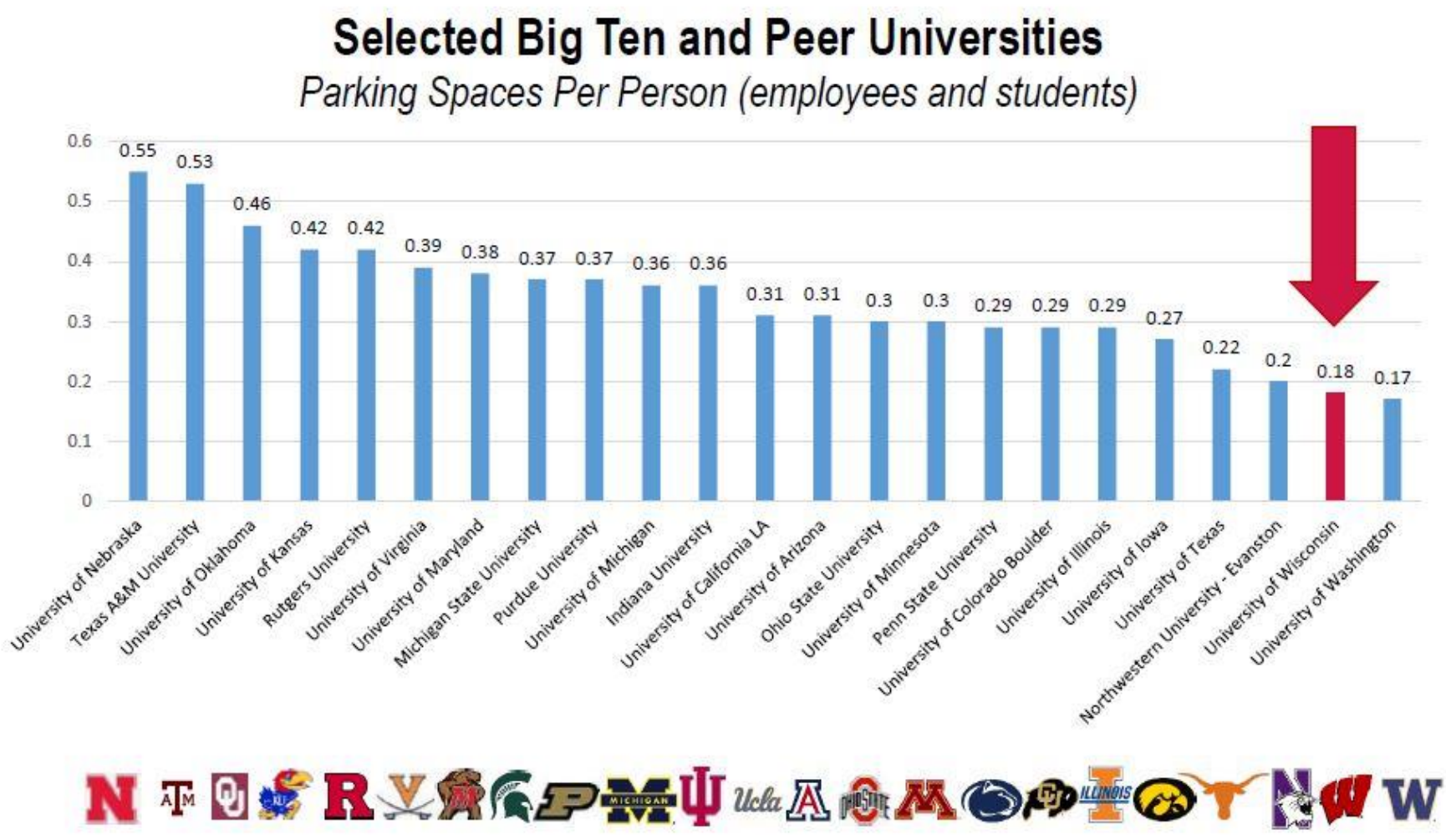

Inset
City of Middleton
Village of Maple Bluff
Lake Mendota
Village of Shorewood Hills
City of Madison
Lake Monona
City of Monona
Lake Wingra
City of Fitchburg
Village of McFarland
Lake Waubesa
Mud Lake
City of Verona
Metro Transit Ridership by Intersection Routes 1 to 84 March 2016
Madison Area Dane County, Wisconsin
Average Weekday Boardings shown as proportional circles*
1
10
50
100
1,000
Transfer Point
Metro Transit Route
Incorporated Area
*Ridership data is from March1-3, 8-10, and 15-17.
Excludes supplemental school service.
Intersections combined on one-way pairs.
Prepared by staff to the Madison Area Transportation Planning Board
Date Revised: 6/29/2016
Miles
1:24,000
Coordinate System: NAD 1983 HARN WISCRS Dane County Feet
Projection: Lambert Conformal Conic
Source Info:
Street Base 2016 (DCLIO)
Ridership and Bus Routes 2016 (Metro Transit)

University Policies Affect our Downtown

"The modern university is a collection of faculty, staff and students held together by a common grievance over parking"

-Clark Kerr (UC-Berkeley, 1960)

University Parking Policies



Source: UW Campus Master Plan (2017)

UW: Strong Parking and TDM Policies

- Restricted Parking
  - Total spaces capped at 13,000 for 43,300 Students and 21,600 Faculty/staff
  - Pricing strategies
- Geographic Restrictions/Land Use Policies
  - Additional building space through densification and conversion of surface parking
  - Limited acquisition of surrounding private development
- Vanpool Program
  - Access to surrounding communities

UW: Strong Parking and TDM Policies

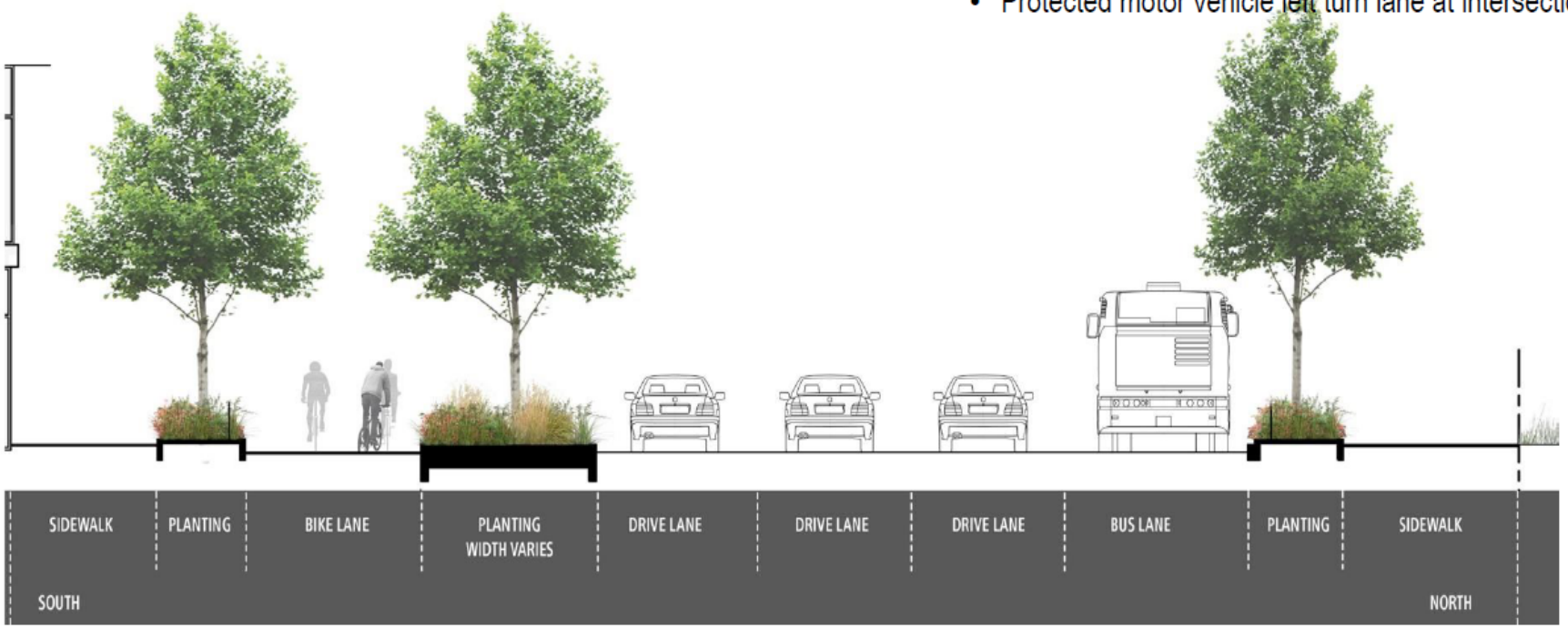
- Bicycle Infrastructure Investments
- Emphasis on Pedestrian Safety and Infrastructure
- Perceived "Free" Metro Transit
  - Students receive Bus Pass as part of tuition/fees
- Deeply Reduced Cost Metro Transit
  - Faculty and Staff
- Education and Support Programs
  - Emergency ride home, promotional/informational campaigns, etc.

University Complete Streets Policy

UNIVERSITY AVENUE

Proposed Section

- Two-way protected bike lane on the south side
- North side transit lane reserved for future Bus Rapid Transit
- Planted median between protected bike lane and motor vehicle traffic
- Protected motor vehicle left turn lane at intersections



Source: UW Campus Master Plan (2017)

University Complete Streets Policy

Source: UW Campus Master Plan (2017)

Key City Parking Policies

Parking Rates

- No discounts for increasing lengths of stay
- No early bird discounts
- On-street parking priced higher than off-street parking
- Rates are set to coax cost sensitive customers to less used facilities
- Long term lease agreements require TDM Plans
- Partner with private sector to share parking as a way to reduce over building, for example hotel parking provided in evening and overnight.

Key City Parking Practices

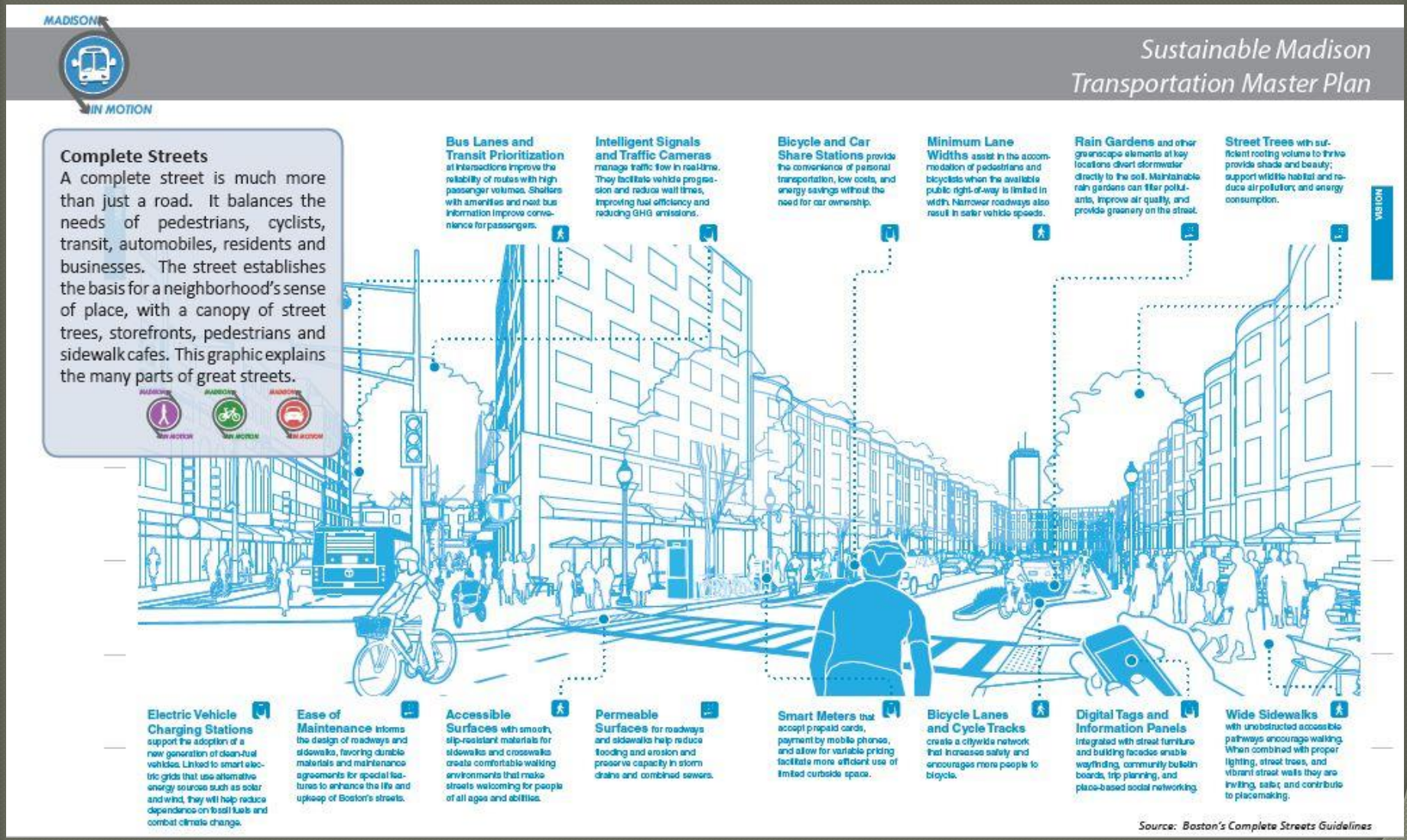
- Real time parking availability is posted on website
- Carpoolers are given first priority for monthly parking permits
- Long term vehicle storage is not allowed
- Pay on entry for special events encourages carpooling

Madison Complete Streets Policy

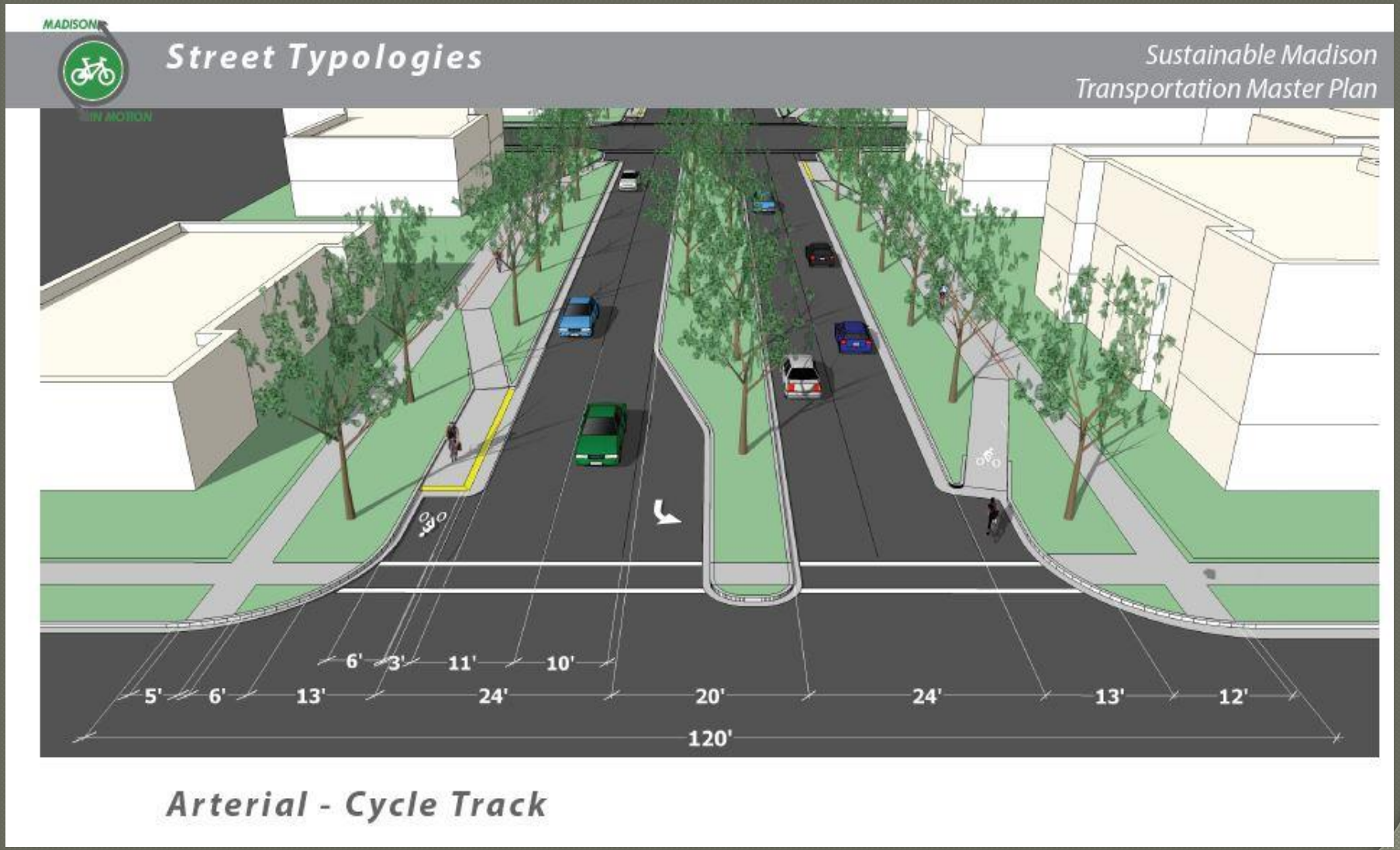
Incorporate Complete Streets Design into Roadways

- Pedestrian refuges, medians, and curb extensions
- Narrow lanes: calm traffic, create space for additional uses, reduce ped crossing distance & exposure to traffic
- Consider "road diets", w/two-way left turn lanes (TWLTLs) ; incl. bicycle and pedestrian accommodations
- Traffic calming tools like traffic circles, speed tables, and speed boards (where appropriate)
- Bicycle facilities for traffic conditions and urban context (shared streets, bike lanes, buffered bike lanes, cycle tracks)
- Exceptions

Madison Complete Streets Policy



Madison Complete Streets Policy



Making a Winter City Bike Friendly

Bicycle Policy Beginnings

City of Madison, Wisconsin

RESOLUTION

directing the Director of Public Works, Director of Transportation and Planning Director to consider bicycle routes as part of all street construction or reconstruction projects.

Presented Nov. 14, 1972

Referred to Plan, BPW, Bicycle Dept. & ... Bicycle Com.

Reported Back Dec. 14, 1972

Adopted ✓

Rules Suspended

Re-Referred to

Placed on File

TRANSPORTATION DEPT.
CITY OF MADISON
RECEIVED
5 1974
AM 7|8|9|10|11|12|1|2|3|4|5|6 PM

RESOLUTION

Resolution No. 24277

File Number 6796-72

Aldermen Forster and Soglin

WHEREAS, bicycles are being used in increasing numbers as a method of transportation, and

WHEREAS, the City of Madison has an approved Long Range Master Plan Bike Route System and is in the process of constructing Phase One of the Bike Route System, and

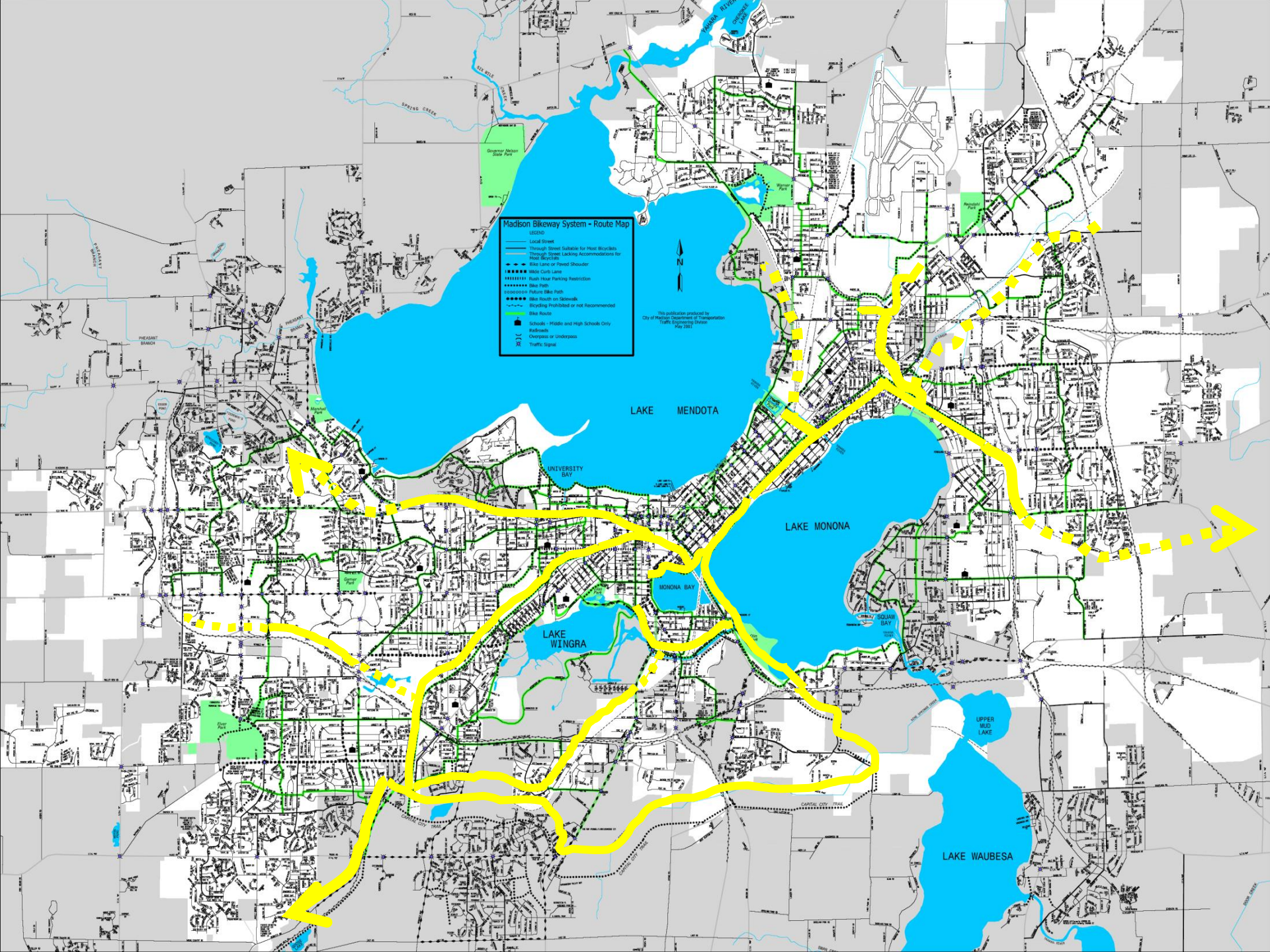
WHEREAS, portions of the Bike Route System are located on streets or sidewalks,

NOW, THEREFORE BE IT RESOLVED that prior to initiation of any future street construction or reconstruction project, the Director of Public Works, Director of Transportation and Planning Director provide recommendations to the appropriate body on the necessity of including any part of the Bike Route System on any of the streets in said project as follows:


MADISON IN MOTION
Transportation Plan
2016
Bicycle Transportation Plan
for the
Madison Metropolitan Area
and Dane County
2015
Prepared by Staff of the Madison Area Transportation Planning Board
A Metropolitan Planning Organization (MPO)
With assistance from Staff of other Agencies







Madison Bikeway System - Route Map
LEGEND
Local Street
Through Street Suitable for Most Bicyclists
Through Street Lacking Accommodations for Most Bicyclists
Bike Lane or Paved Shoulder
Wide Curb Lane
Rush Hour Parking Restriction
Bike Path
Future Bike Path
Bike Route on Sidewalk
Bicycling Prohibited or not Recommended
Bike Route
Schools - Middle and High Schools Only
Railroads
Overpass or Underpass
Traffic Signal
N
This publication produced by
City of Madison Department of Transportation
Traffic Engineering Division
May 2001
LAKE MENDOTA
LAKE MONONA
LAKE WINGRA
LAKE WAUBESA
UNIVERSITY BAY
MONONA BAY
SQUAW BAY
UPPER MUD LAKE
CAPITAL CITY TRAIL
YAHARA RIVER
SPRING CREEK
PHEASANT BRANCH
Governor Nelson State Park
Warner Park
Olbrich Park
Marshall Park
Garner Park
Elver Park

Shared Use Paths – Along Waterfronts

Shared Use Paths – Abandoned Rail Corridor

Shared Use Paths – Active Rail Corridor

Shared Use Paths – Integrated with Development

Shared Use Paths – Neighborhood Connections

Shared Use Paths – Night Lighting

Traffic Calmed Streets

Bicycle Boulevards & Neighborhood Greenways

Access Restrictions for Cars – Bikes Allowed

Arterial Streets – Buffered Bike Lanes

Arterial Streets – Buffered Bike Lanes

Arterial Streets

Arterial Streets – Cycle Track

Contra-Flow Lanes

Sharrows used to indicate shared use of northbound lane

Grade Separation - Underpass

Grade Separation - Overpass

Parking Integrated with Building

Where we have wider concrete terraces we can install multi-space racks with bicycles parked perpendicular to the street

On-Street Bicycle Parking – King Street

Meter rings for bicycle parking are being installed on many meter posts when areas are converted from coin operation to pay by space

America's 20 Coldest Major Cities

By Jon Erdman Published: Jan 9, 2014, 3:06 PM EST

http://www.weather.com/news/weather-winter/20-coldest-large-cities-america-20140107

#3: Madison, Wisc. (Avg. Dec-Feb Temp: 21.6 degrees)

Madison's all-time record low was -37 degrees set on Jan. 30, 1951. On average, subzero cold occurs 17 days each year, while subfreezing temperatures occur 152 days a year, there. (Andy Manis/Getty Images)

- Major paths are a top priority for snow and ice control.
- Goal is to have these cleared by 7:00 AM, Monday through Friday, to facilitate users commute to work and school.
- Snow removal operations for these path starts no later than 4:00 AM M – F.
- Crews are also assigned to clear these paths during the workday to ensure that commuters can safely return home from work and school.
- Weekend snow removal operations typically begin at 7:00 AM, Saturday and Sunday.
- This enables crews to remove snow more efficiently and effectively prior to it becoming packed down by bicycle and pedestrian traffic.
- Salt and sand are used sparingly and only as necessary to melt ice and provide traction.

We started experimenting this year with using salt brine as an anti-icing agent on one of our more heavily used paths.

- Applied 24 – 48 hours prior to snow event
- Pavement temp 16 F + (-9 C +)
- Not recommended if rain/drizzle forecast
- Not recommended if high winds forecast at start of storm
- 40 gallons (151 liters) per lane mile

Photo from SnowEx

One 50 pound (22.7 kg) bag of salt treats
4 miles (6.4 km) of 10 foot (3 m) wide shared use path


05 00
Cyclists today
268
Cyclists this year

King Street District

Photo credit: Capital Times

Growth of State Street Activities

Questions