

TRANSPORTATION RECOMMENDATIONS

- Transportation Demand Management
- Parking Strategy
- Pedestrian, Bicycle, and Roadway Improvements



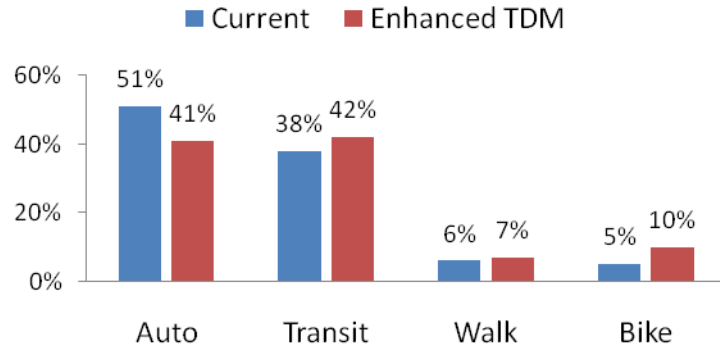
urban design/planning study for
the **central** and **kendall square area**

Current Kendall TDM Measures & Participation

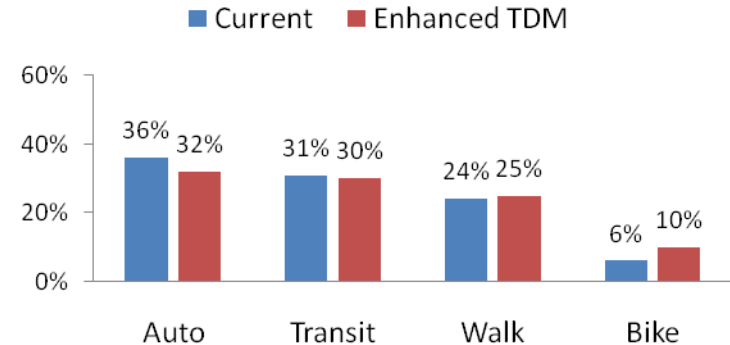
- ✅ Cambridge's PTDM program is a national best practice
- ✅ Cambridge businesses & residences participate in many TDM measures
- ✅ High participation rates in nearly half of all available programs
- ❌ Low participation rates in some of the most effective TDM measures (cost more to support)

Proposed Enhanced TDM Mode Shares by Land Use

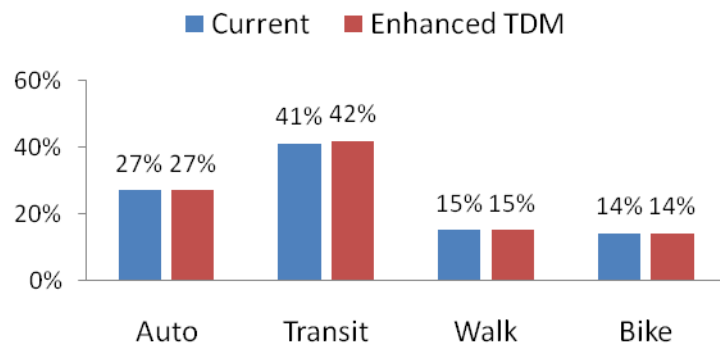
Office and R&D



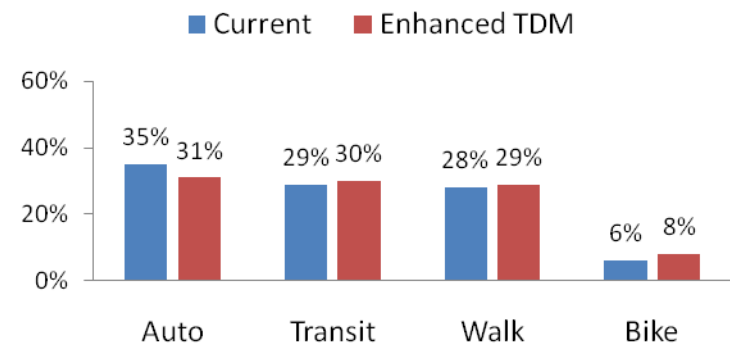
Residential



Academic/Institutional



Retail



Enhanced TDM: Priority Recommendations

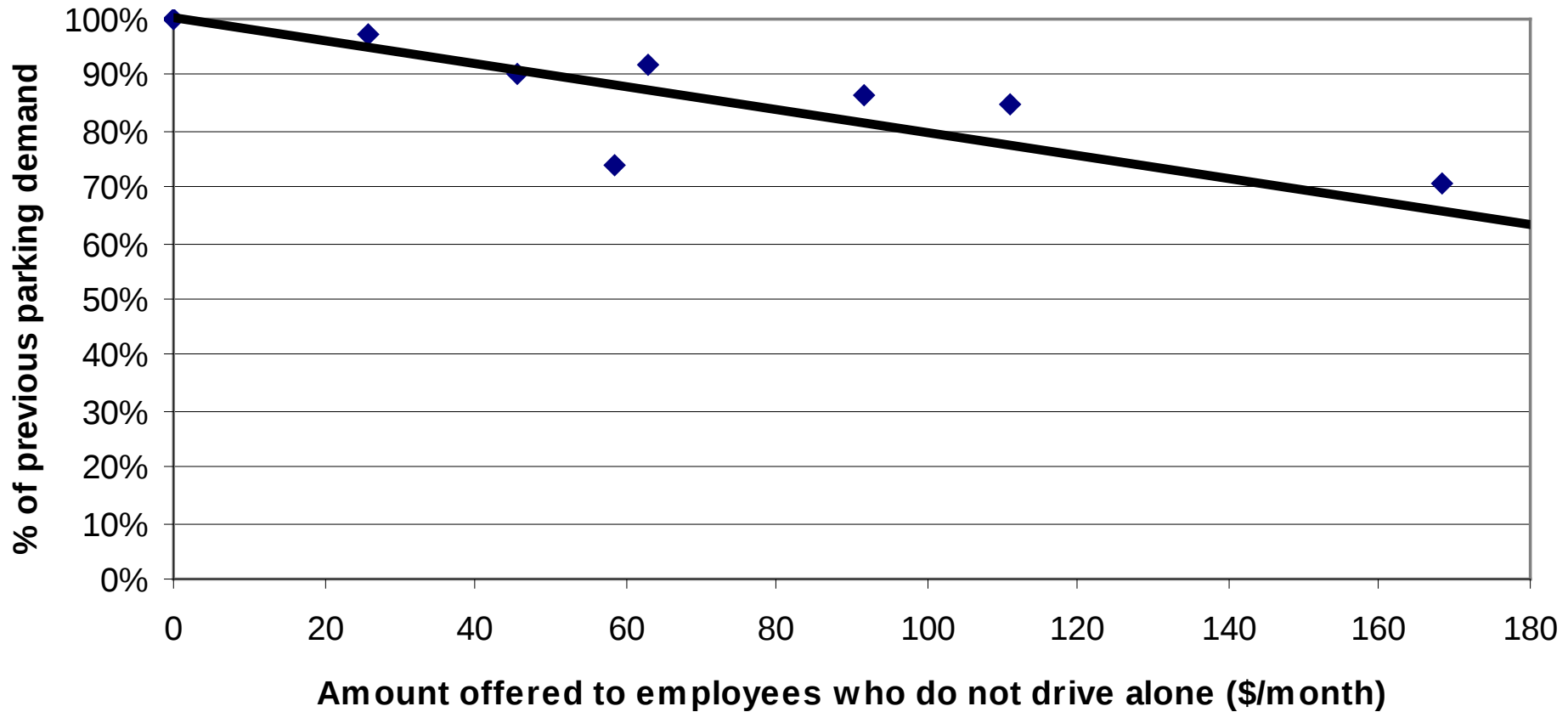
EMPLOYEES

- Appropriate pricing of parking—market rate paid by employee
- Transportation benefit paid to all employees for commute expenses regardless of mode
 - or 100% transit subsidy
 - Future option: Universal Pass
- Free shuttle to Lechmere and North Station
- Excellent bicycle parking and benefits

RESIDENTS

- One free bus/subway pass for each adult member of household upon move-in
- Car-share parking space
- Pay annual car-share membership fee for car-free residents

TDM: Parking cash-out reduces demand for driving



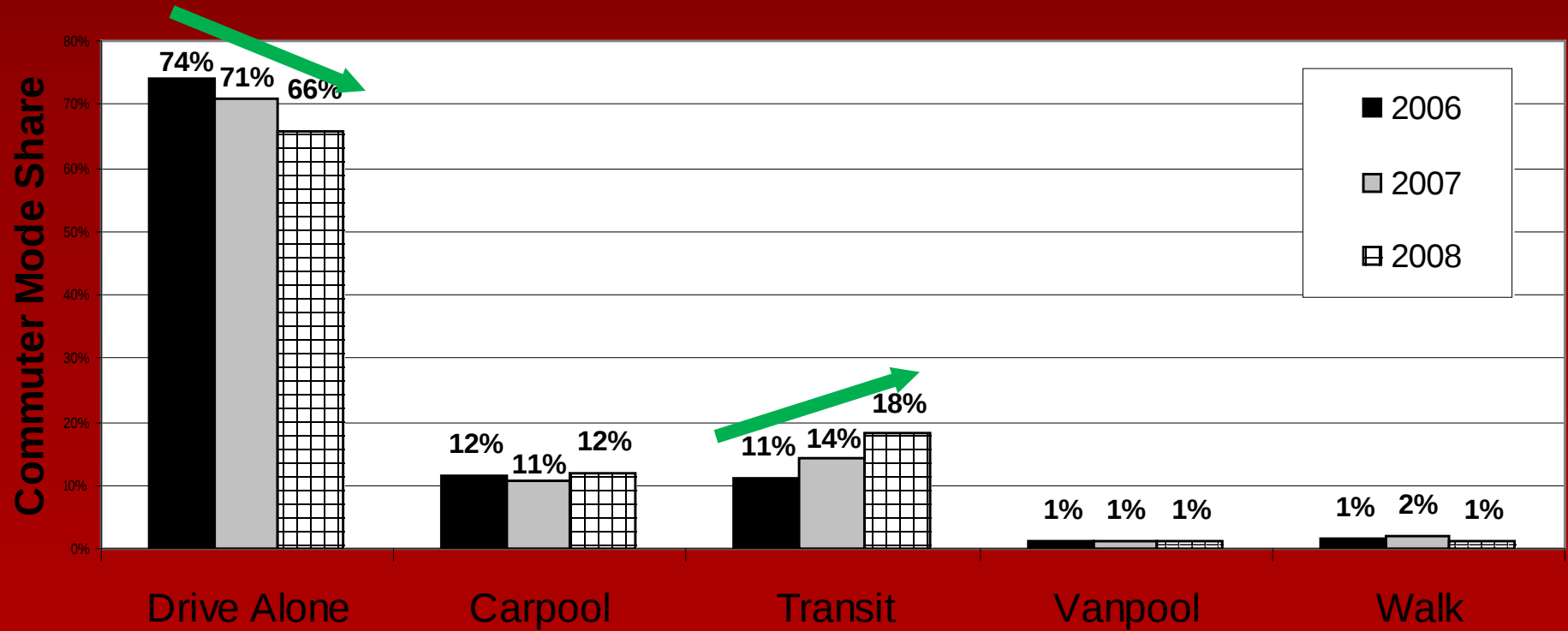
Reduced from Multiple Data Sources

Case Study: Genentech

- 9,500 employees in Silicon Valley
- Needed to reduce parking supply due to expansion plans

Genentech pays \$5 a day to employees who don't drive.

Mode Choice Before & After Parking Cash Out



Genentech Mode Share Change

- Before parking cash-out, the drive-alone rate was 74%
- Two years after implementing parking cash-out, the drive-alone rate is down to 66% - over a 10% drop in mode share
- Transit use has increased
 - 2006 = 11%
 - 2008 = 18%
- Employment continues to grow
- Parking occupancy rates declined 12% in the past 6 months

Parking: If you build it they will come...

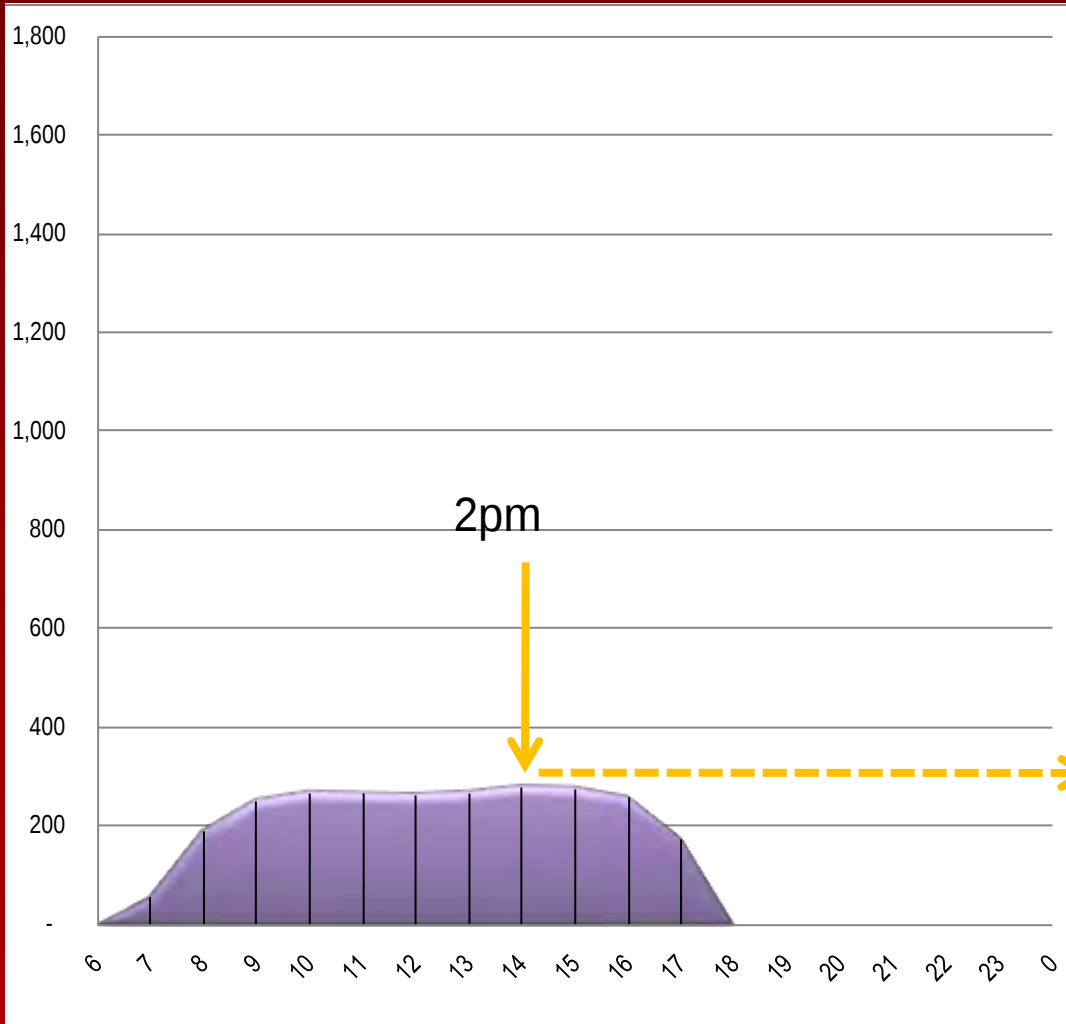
Optimize off-street parking to match parking needs of new development based on the Enhanced TDM Scenario

Off-Street Parking: Proposed Approach

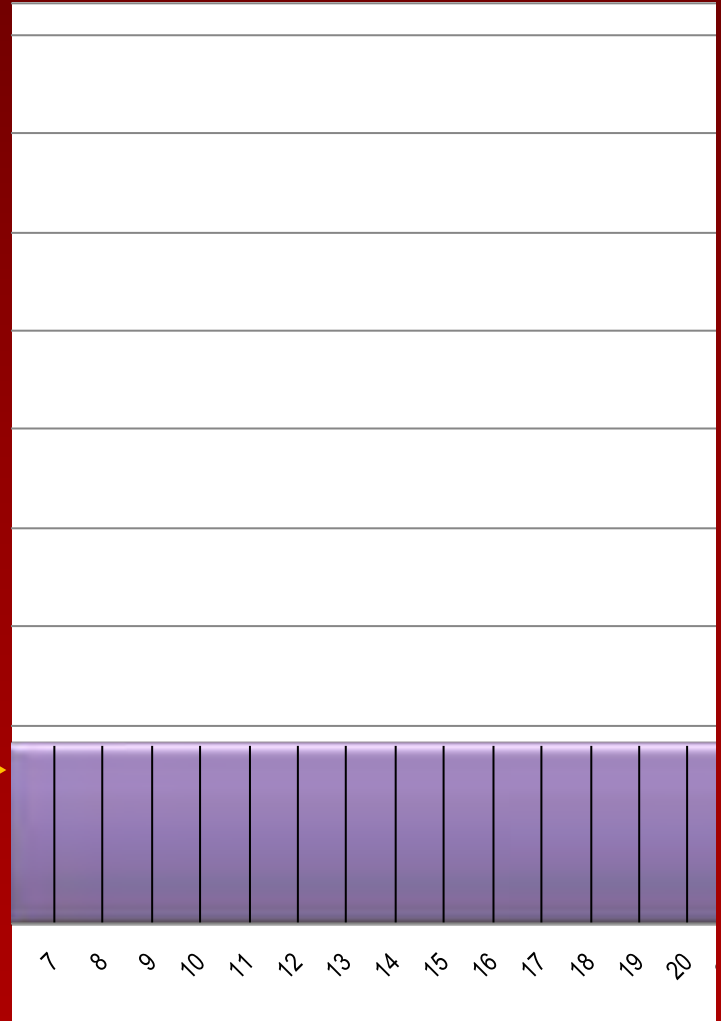
- Defined parking maximums for all uses
- Flexible minimum parking based on analysis and as approved by Planning Board
- Shared Parking Provision

	AUTO PARKING		MIN. BIKE PARKING
Use	Minimum	Maximum	
R&D	Based on analysis	0.8 sp/KSF	10% of person trips
Office		0.9 sp/KSF	
Retail /consumer svc		0.5 sp/KSF	
Residential	0.5 sp/d.unit	0.75 sp/d.unit	2 sp/d.unit

Office (150k SF): Real Demand

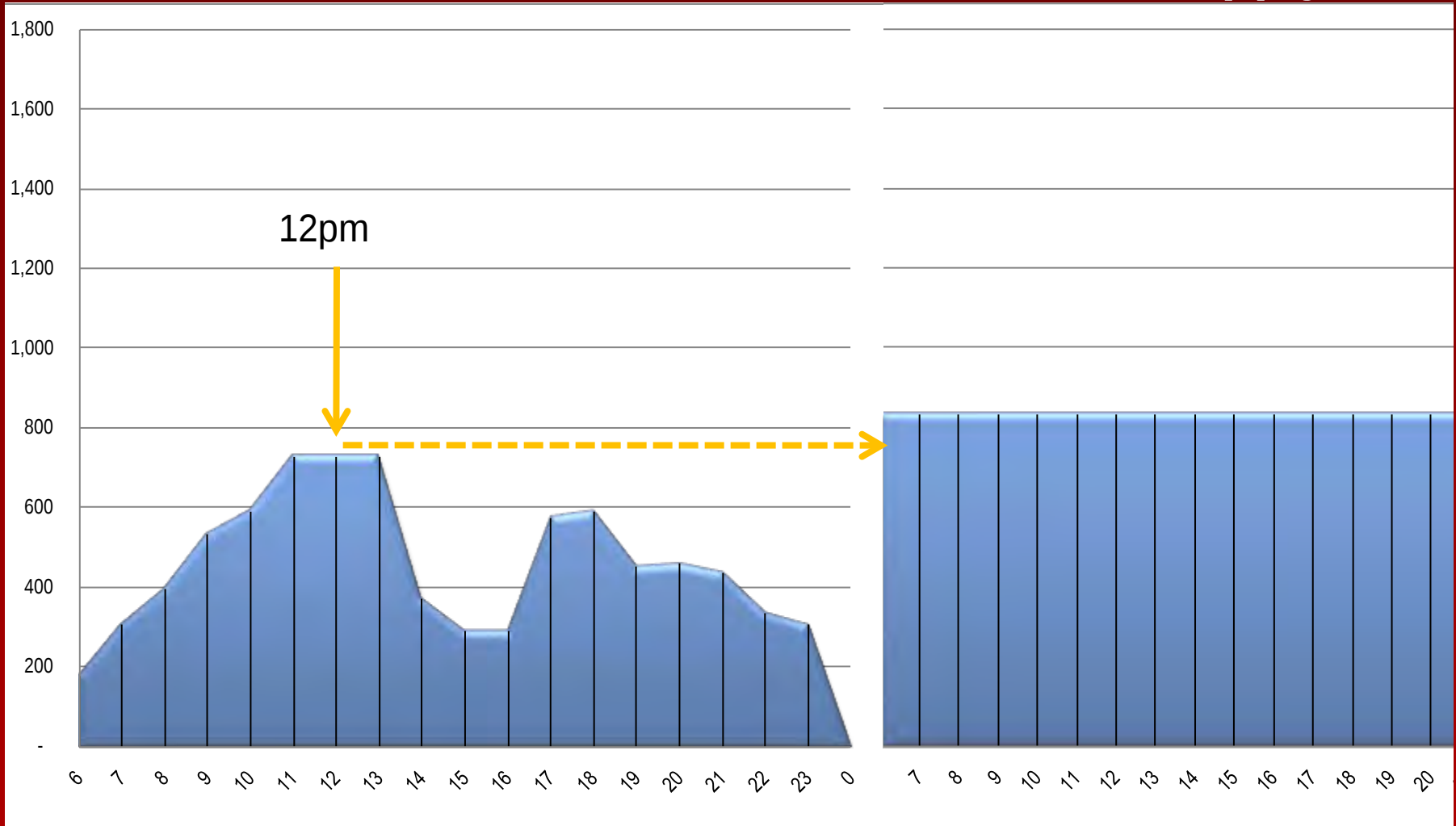


Unshared Supply



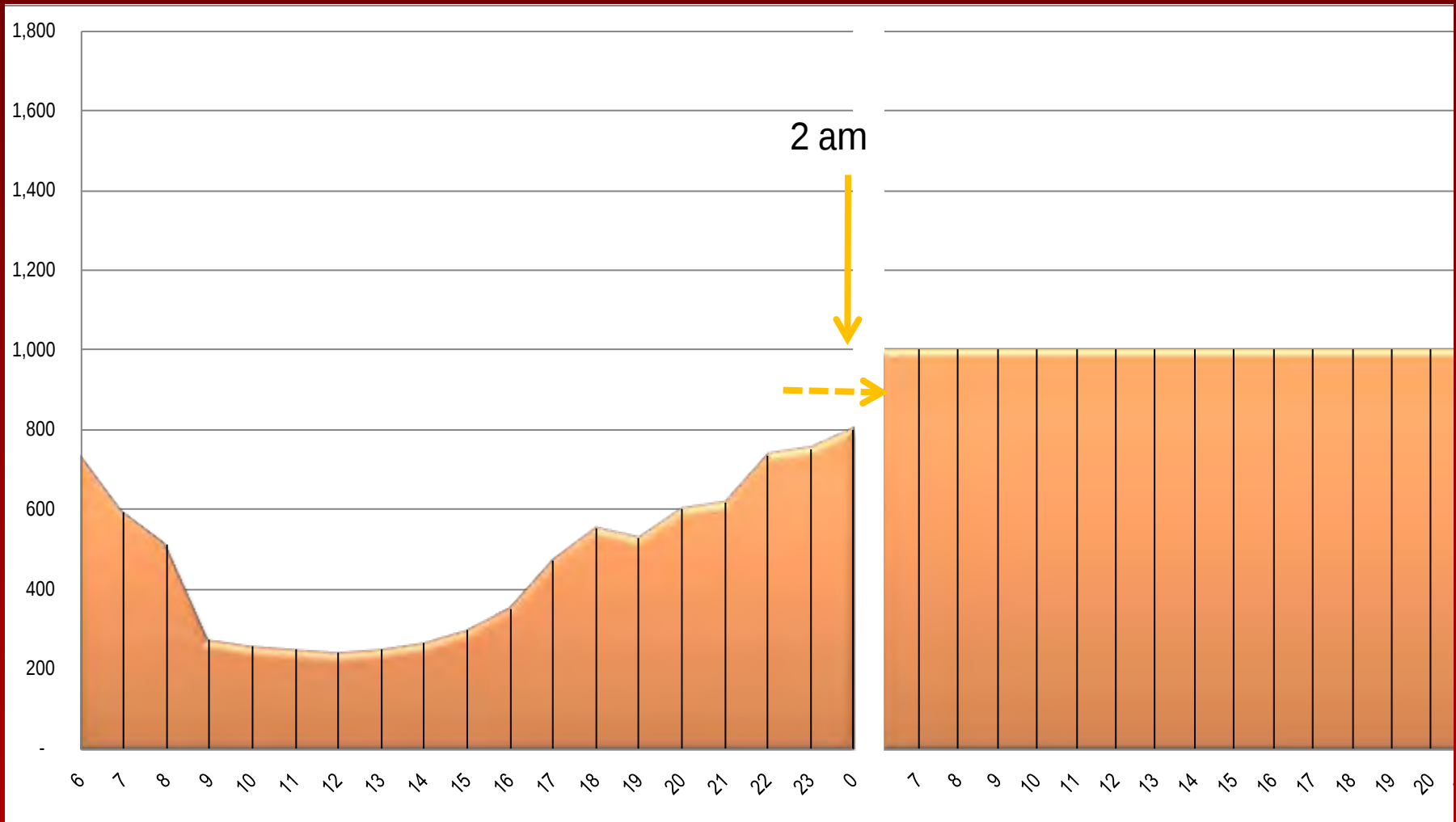
Restaurant (150k SF): **Real Demand**

Unshared Supply

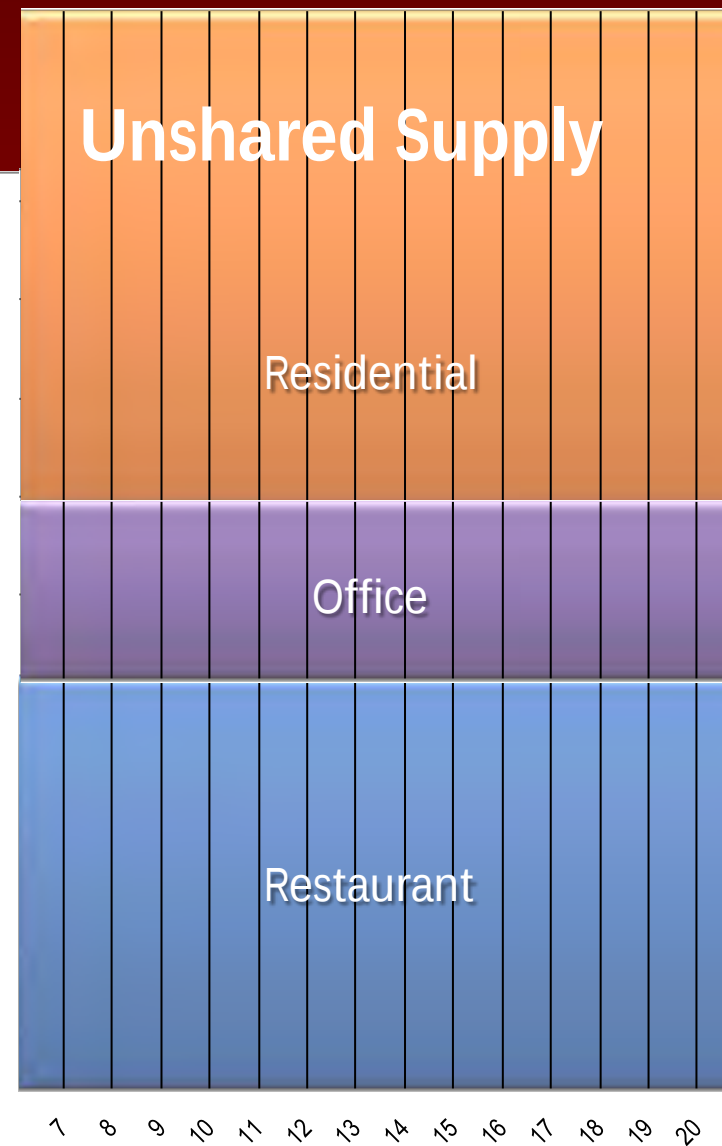
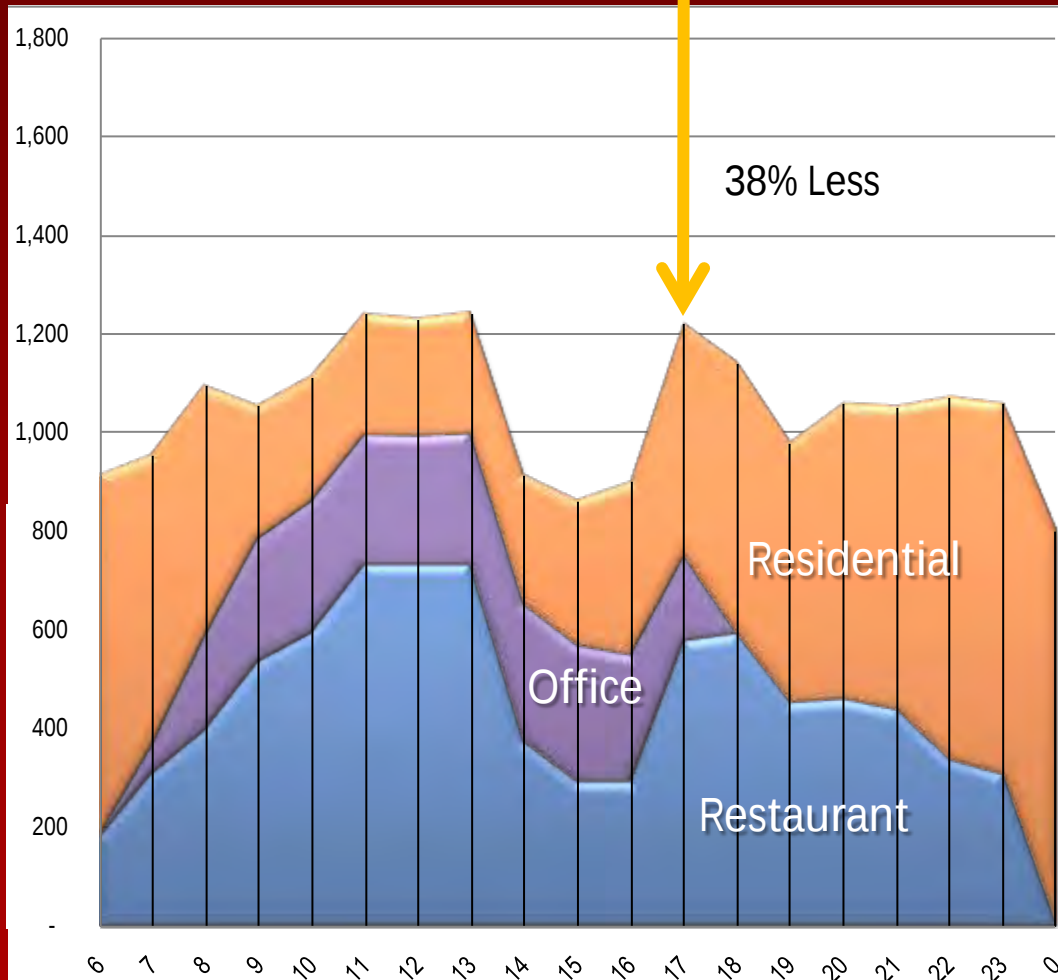


***Residential* (1000 units): Real Demand**

Unshared Supply



Shared Uses: Real Demand



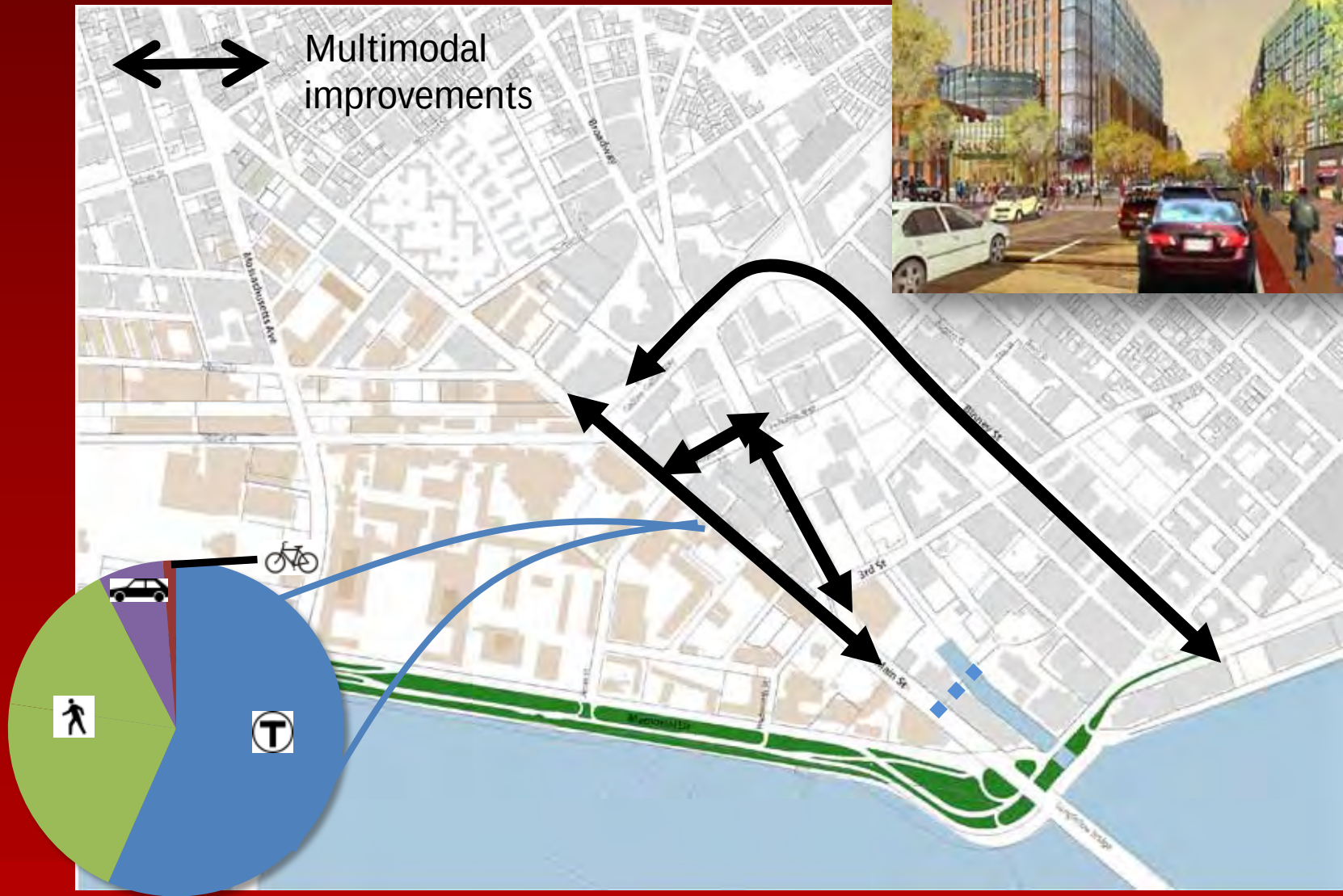
Shared Parking: Proposed Approach

For Mixed Use Developments:

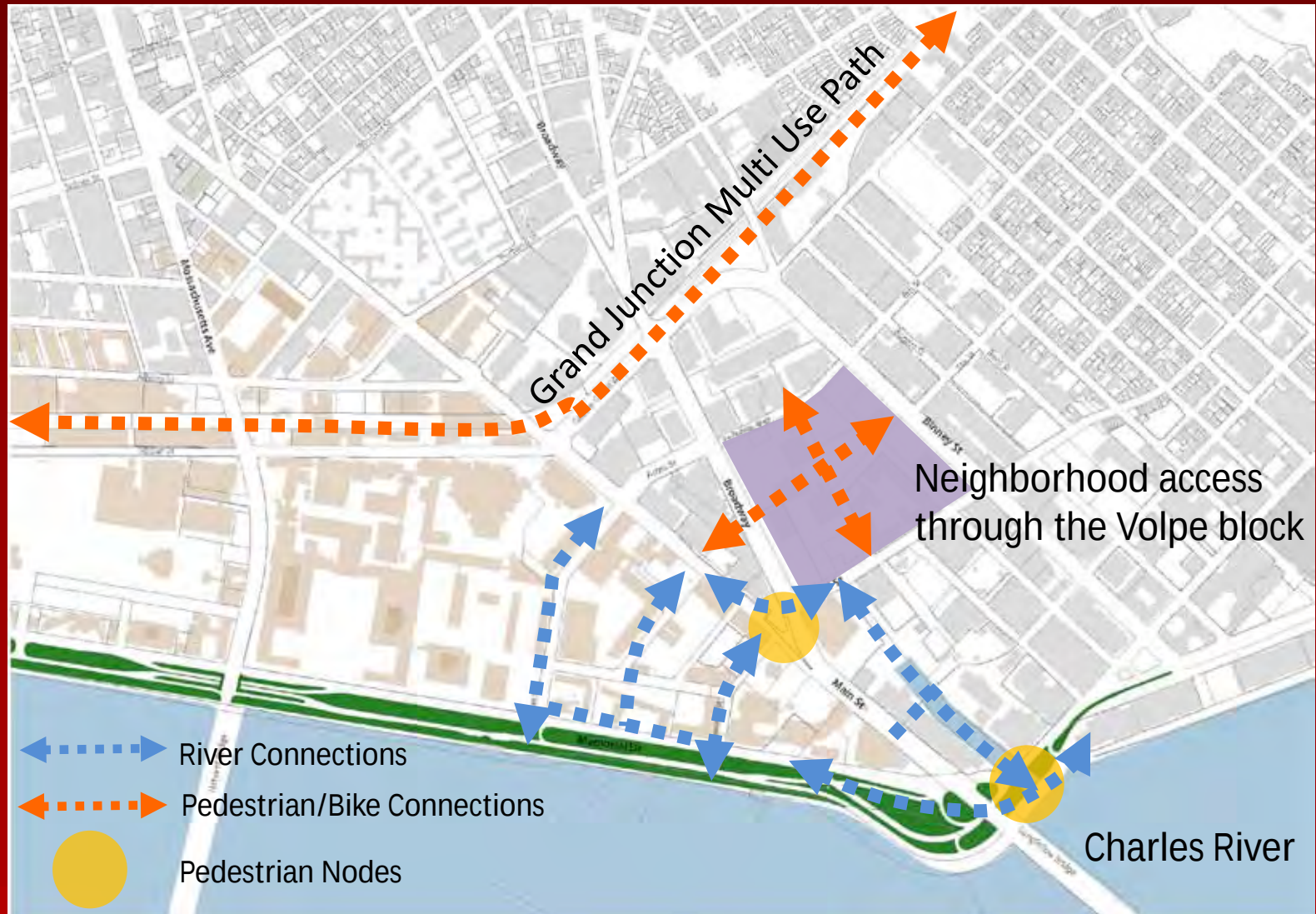
Require shared parking when peak daytime use is matched with peak nighttime use, such as Office/R&D with Residential

Use	Night	Day
Residential	100%	60%
Office/R&D	10%	100%
Retail/Commercial	Require a shared parking study	
Restaurant		

Complete Streets Concept



Priority Pedestrian and Bicycle Connections



Additional Transportation Recommendations

- Direct auto traffic to use the most appropriate routes within and around the study area roadway network
- Minimize additional traffic on neighborhood streets
 - Maintain Binney St median to protect the neighborhood from cut through commuter trips
 - Support First St extension to O'Brien Hwy as part of North Point and Green Line Extension work

Additional Transportation Recommendations

- Manage vehicular traffic from future development

District-wide

- Broadway & Third: Avoid sending new vehicle trips from new developments through this intersection whenever possible

Development South of Main St

- Use Amherst St. for primary vehicle access not Main St
- Coordinate the role of the privately owned streets (Hayward, Carlton, Dock, Deacon) with public streets so they work together to support the needs of the area
- Discourage cut through traffic between Wadsworth and Ames

Development on Volpe block

- Provide vehicular access off both Binney and Broadway
- Binney access should be right in and right out with no break in the median
- Broadway access has to be coordinated with the midblock pedestrian crossing
- Vehicular access off Third St should be designed to minimize impact on the neighborhood and on the intersection of Broadway and Third

Additional Transportation Recommendations

- Create safe pedestrian crossings throughout the Study Area
 - Between Third St and Longfellow Bridge - Explore ways to reduce speeding by vehicles coming off Longfellow bridge and the possibility of creating a safe pedestrian crossing
- Complete the Grand Junction multi-use path starting with the segment from Main to Broadway
- Create bike share stations at key areas including Lechmere, Galleria, 3rd St, MIT, etc.
- Provide a bike station to serve bicycle commuters
- Develop a wayfinding and signage strategy for the Kendall Square area
- Create street addresses for all buildings

Discussion



urban design/planning study for
the **central** and **kendall square area**