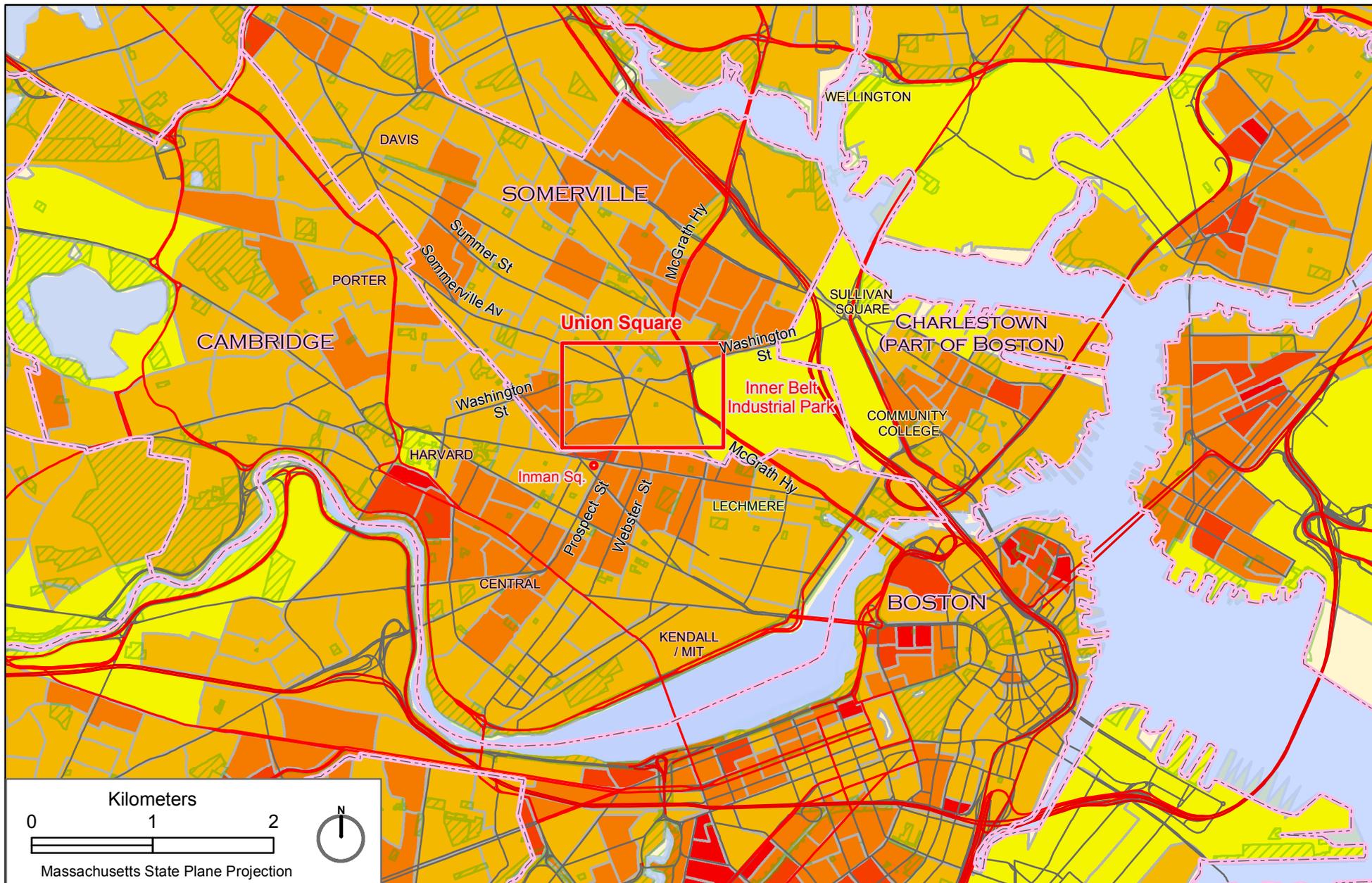


## Union Square and the Green Line Extension

Just over 2 kilometers from downtown Boston and Harvard University, Union Square is a vibrant commercial center not yet served by rapid transit. The Massachusetts Executive Office of Transportation is under a federal order to extend the Green Line Trolley system through Somerville by 2014. This extension will follow the existing Lowell Line on the commuter rail and will include a spur to Union Square along the Fitchburg Line. New transit access has a potential to enliven Union Square and the Inner Belt Industrial park, located just to the east.

### Sources:

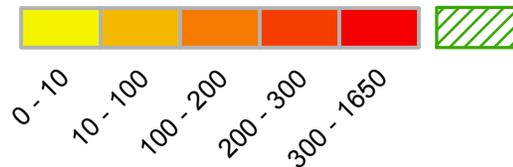
Map: Paul Cote; Fundamentals of GIS Assignment 1; September 2009  
 Roads: Massachusetts Executive Office of Transportation, 2007  
 MBTA System: Massachusetts Executive Office of Transportation, 2006  
 Proposed GreenLine Extension and Stops from



## 2000 Population Density

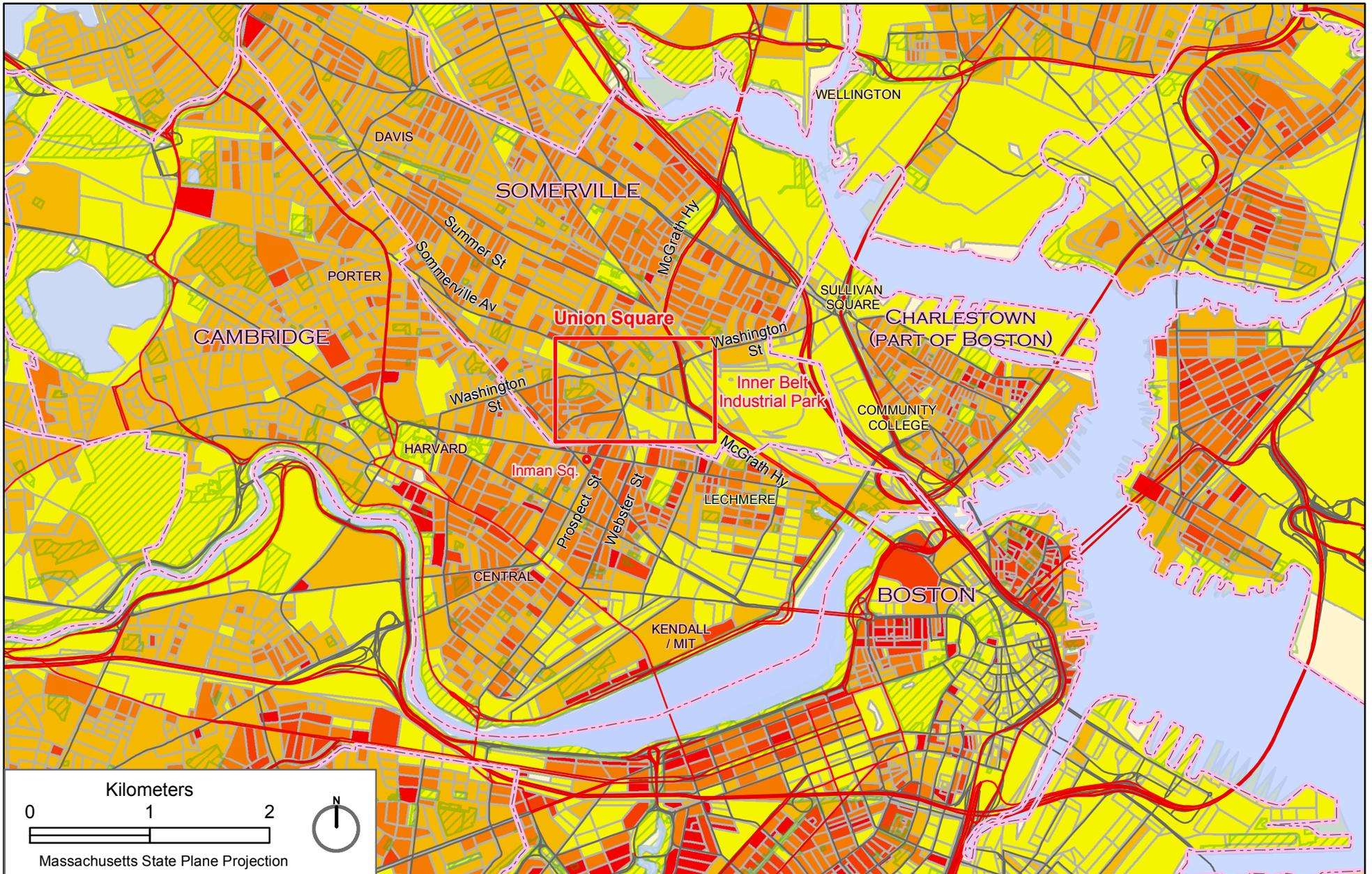
At a blockgroup level of aggregation, union square does not appear to be a particularly densely populated place. This pattern may not be entirely accurate, since most blockgroups include large areas of open space, industrial, commercial and institutional uses. If we think of the benefits of open space as being most valuable within a distance of 200 meters, the granularity of this data will not support the study of this question, since blockgroups are much larger than 200 meters. We can see, however, that there is a higher population density area in northeast somerville that includes virtually no parks.

### People per Hectare (Blockgroup) Parks



### Sources:

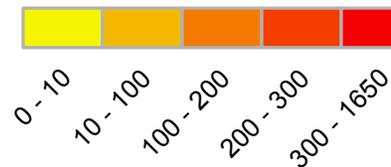
Map: Paul Cote; Fundamentals of GIS Assignment 1; September 2009  
 Blockgroup Population Density: US Census Bureau, 2000 via Geolytics.  
 Openspace: MassGIS Openspace Layer, 2007



## 2000 Population Density

The 2009 Census, aggregated at a block level, reveals a much more diverse pattern of population density than is revealed at the blockgroup level. The block level of aggregation is the finest that the census offers. This data should allow us to measure a 200 meter relationship between densely populated areas and open spaces. Yet it is difficult to make conclusions from a simple visual analysis.

### People per Hectare (Block)

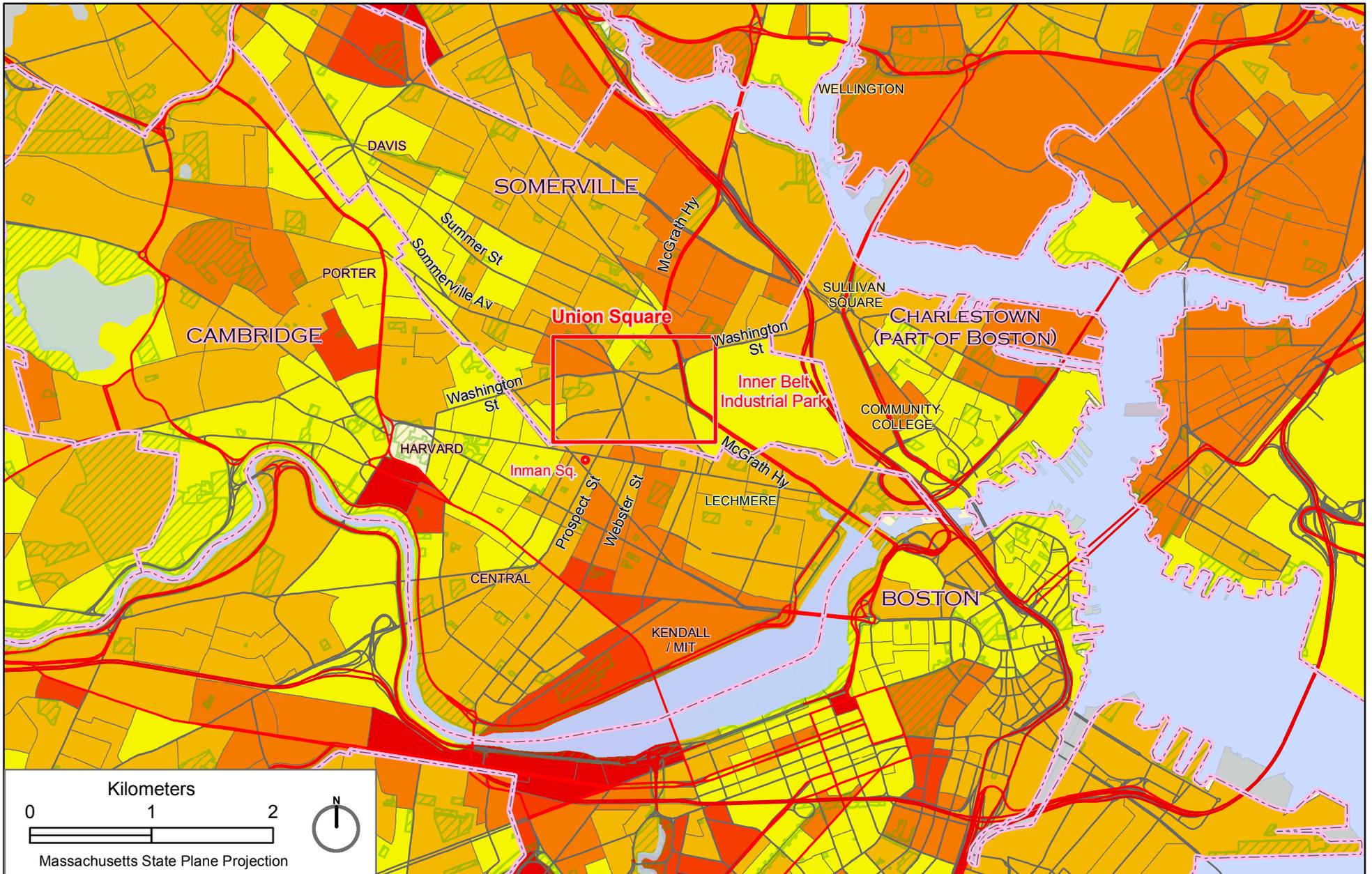


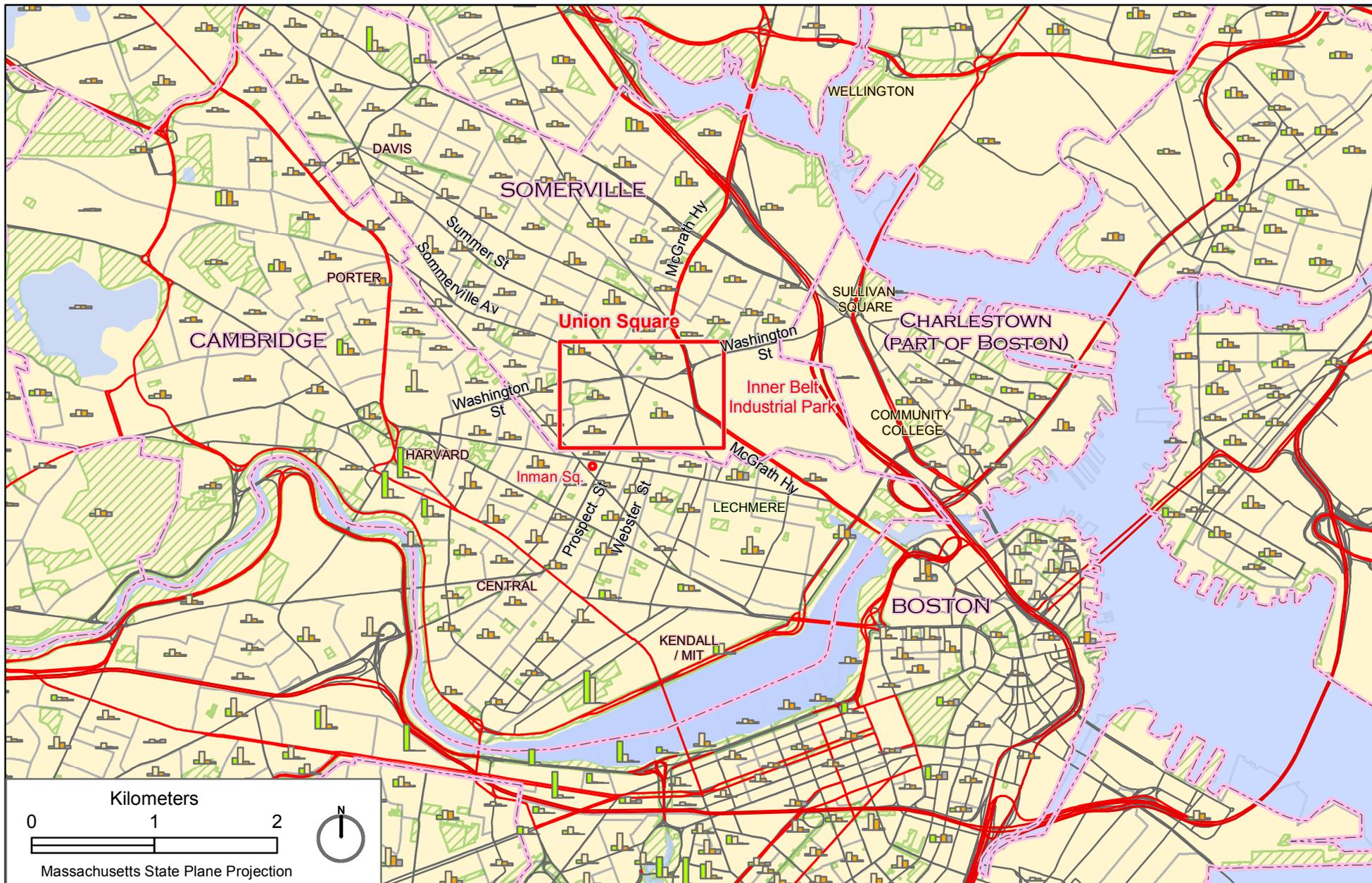
### Parks



Sources:

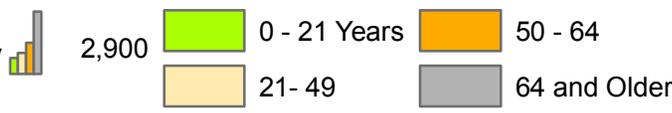
Map: Paul Cote; Fundamentals of GIS Assignment 1; September 2009  
 Block Population Density: US Census Bureau, 2000 via Geolytics.  
 Parks: MassGIS Openspace Layer, 2007. Any protected Openspace is considered a park.



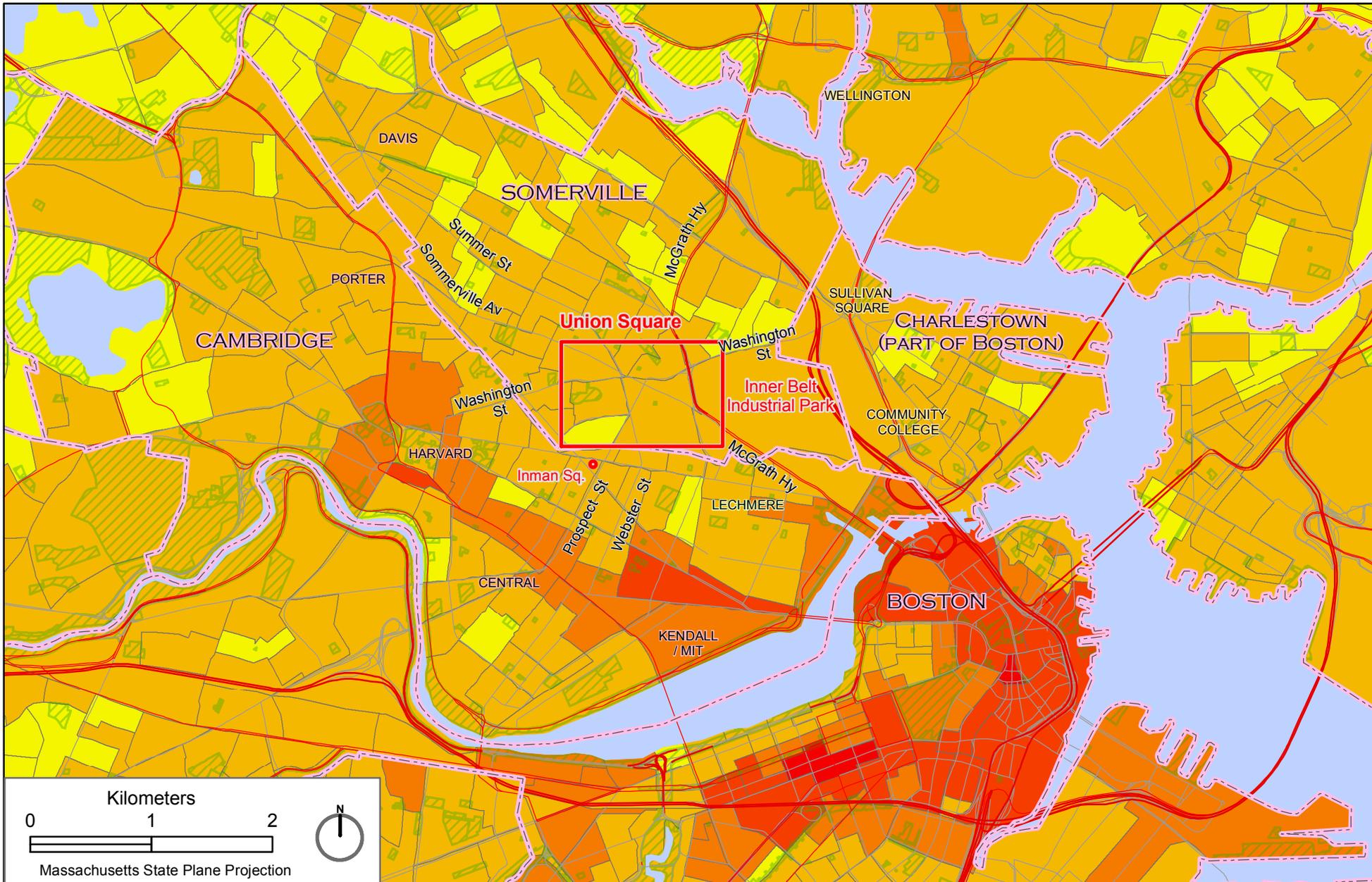


## 2000 Age Distribution

On this map of 2000 Census of population age data, the height of a bar represents the count of people in one of four age categories for each blockgroup. We can see many blockgroups that in 2000 were distinguished by having more minors (especially near universities.) Other blockgroups where early career people make up the majority (for example in Union Square, but more strikingly in Allston and Brighton.) Fewer blockgroups show a majority of late career and senior citizens.



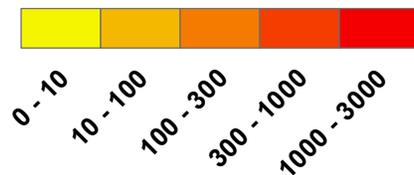
Sources:  
 Map: Paul Cote; Fundamentals of GIS Assignment 2; September 2009  
 Blockgroup Age Distribution: US Census Bureau, 2000 via ESRI 2007  
 Openspace: MassGIS Openspace Layer, 2007



## 2000 Employment Density

Union Square is not one of the chief employment centers of the Boston / Cambridge / Somerville area. 2000 census data imputed from the 15% household sample of the Long Form recipients, aggregated to the blockgroup indicates that the employment density of blockgroups making up union square is less than 100 employees per hectare. The city of Somerville has hopes that the Inner Belt Industrial Park, located to the East of Union Square may eventually become a regional employment center, similar to Kendall Square.

### Employees per Hectare (Blockgroup) Parks



### Sources:

Map: Paul Cote; Fundamentals of GIS Assignment 1; September 2009  
 Employment Data, Bureau of Transportation Statistics Census Transportation Planning Package, 2000, Aggregated to Blockgroups  
 Openspace: MassGIS Openspace Layer, 2007