

7. RESIDENT PARKING

Boston has the benefit of vibrant residential neighborhoods located in close proximity to employment centers and transit stations. This fact has helped Boston gain its reputation as a livable city with residents that regularly travel on foot or by transit. However, residents in these neighborhoods also face two types of parking challenges. First is the competition for on-street parking from outside commuters and visitors. The second challenge is the steadily growing auto ownership levels among Boston residents that fills limited spaces with more autos every year in the city’s neighborhoods.

These two parking demands translate into a general lack of parking in most of Boston’s neighborhoods. With fewer spaces available, illegal parking becomes more problematic. Visitors, service providers such as home health care companies, and contractors often double park in these neighborhoods. These conditions reduce the quality of life of the residential neighborhoods and in the worst case can compromise public safety by reducing response times for emergency vehicles on the narrow congested streets of the city’s older neighborhoods.

The Use of Resident Permit Parking

BTD, like other U.S. cities, has used a Resident Permit Parking (RPP) program to address the competition for spaces in residential neighborhoods by vehicles from outside the neighborhood. The City’s program designates on-street parking spaces in the residential neighborhoods indicated in Figure 27 for “Resident Parking Only.” Residents obtain permits from BTD and manually affix the permits to their vehicles.

The regulations have evolved from their original emphasis on 24-hour RPP restrictions. For example, the recently implemented program in Charlestown restricts parking during the day, when commuters use the MBTA Orange Line stations. This program leaves nighttime parking unregulated, facilitating visitor parking in the neighborhood.

- The RPP program was originally instituted in downtown neighborhoods, such as Beacon Hill and Back Bay, to manage commuter traffic and to support the use of transit and alternative modes.
- Later programs in the Fenway, Mission Hill and Allston/Brighton addressed the use of streets by employees and hospital visitors.
- Programs were also developed near MBTA stations in Dorchester, South Boston, Jamaica Plain, Charlestown, and Roslindale to reduce parking by transit commuters on local streets.

GOALS

Today, resident parking in Boston relies on the use of City streets. Management of both parking supply and demand is needed to address the parking shortfall experienced in many neighborhoods and to enhance the quality of life and accessibility of these neighborhoods. The goals of the programs are to:

- Protect residential neighborhoods from parking intrusion by commuters and other non-residents.
- Reduce future demands for on-street parking in new residential projects.
- Reduce auto ownership through carsharing programs and increased use of alternative, non-auto modes.

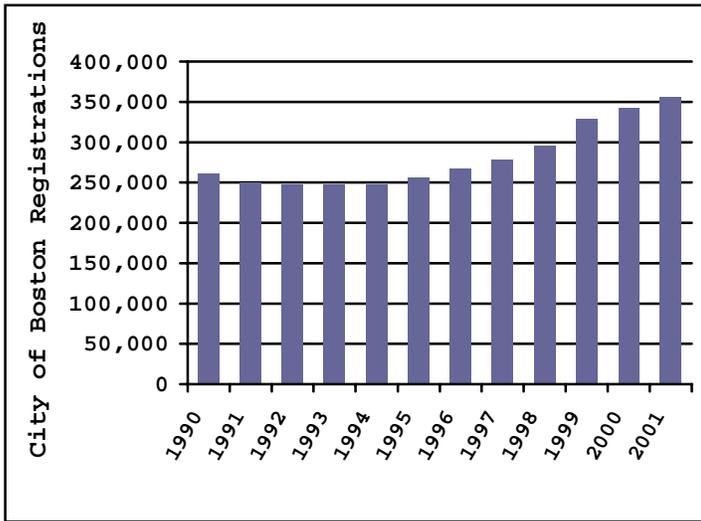
RPP PROGRAMS IN OTHER U.S. CITIES

RPP programs are in effect in Massachusetts cities and other municipalities throughout the U.S. Like Boston, these municipalities share the goal of seeking to reduce parking demand by vehicles from outside the neighborhood or RPP area.

The implementation of the program varies. In general, these programs grew in response to specific needs of a community and, as a result, regulations and requirements differ among locations. Some areas provide visitor passes, while other areas provide designated visitor spaces. Nominal fees are charged in cities while many others provide the permits free of charge. All include proof-of-residency requirements to obtain a permit.

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Figure 28
Growth in Auto Ownership



Auto ownership in Boston increased 36% between 1990 and 2001. Nearly all of the growth occurred since 1995. (Source: BTB)

RPP INITIATION AND EXPANSION

BTB receives requests to expand existing RPP programs or initiate a program in a neighborhood. The RPP Program is initiated in neighborhoods at the request of the community. BTB will follow up with community meetings to explain the program in detail and to present a plan designed with that particular neighborhood's needs and goals in mind. Following the meetings, neighborhood organizers must circulate petitions, provided by BTB, and garner signatures in support of the program from 51 percent of the residents in the affected area.

Sometimes due to a lack of consensus between business needs for customer parking and resident needs petitions may not be accepted. Inquiries for the implementation of the RPP Program are directed to

Director of Community Affairs
Residents Permit Parking Program
Boston Transportation Department
Boston City Hall, Room 721
Boston, MA 02201

Although the types of regulations have evolved since the inception of the program, the RPP program is currently not structured to address the growing demand for parking among city residents. Today, there are over 350,000 autos registered in Boston, a 44% increase since 1994. RPP programs in many neighborhoods have little opportunity to add new on-street spaces, particularly in neighborhoods with a high density of vehicles. The lack of off-street parking alternatives in some of these neighborhoods makes the problem worse.

Auto Ownership Levels

Auto ownership is on the increase nationwide. In Boston, the resurgence of the local economy and the growing trend of multi-vehicle households has put pressure on already overburdened streets. Figure 28, which is based on vehicle registration data, illustrates that vehicle auto ownership in Boston grew by 36% between 1990 and 2001. The most significant increase occurred after 1994, coinciding with a period of strong economic growth. During this period, Boston saw a resurgence in residential and commercial development, and a transformation of its housing stock as new residents, many enjoying high income levels, moved into the city. Almost 2,000 new condominium units were created in the 1990s, many replacing rental properties in Charlestown and downtown Boston.

Figure 29 illustrates that average vehicle ownership per household varies by neighborhood. The analysis used data from the 1990 U.S. Census. (This data will not be available until 2002 from the 2000 U.S. Census.) Auto ownership per household is highest in auto-dependent neighborhoods like West Roxbury or Hyde Park. These neighborhoods are less dense than the downtown neighborhoods that are transit- and walk-oriented. Many homes in these neighborhoods have driveways, garages or sufficient curb parking to accommodate multiple vehicles.

Auto ownership per household is lowest in downtown neighborhoods where transit and walking are good options to auto use and parking is less convenient. Some neighborhoods outside the downtown like Roxbury and parts of Dorchester also have lower auto ownership levels. The residents in these neighborhoods rely more on public transportation.

In contrast, as illustrated in Figure 30, the number of autos owned *per square mile* is higher in downtown neighborhoods and other dense residential areas like Allston/Brighton, resulting in higher on-street parking demands. The population density of these neighborhoods offsets the lower auto ownership rates. The auto-oriented neighborhoods of the city have a lower density of vehicles per square mile because population density is lower in these neighborhoods. With the exception of enclaves of multifamily neighborhoods or locations near transit or business area, parking availability is less of a concern in these areas.

Parking Demand on RPP Streets

The on-street RPP parking supply has remained relatively fixed over the last 10 years— in many cases since the inception of the RPP program. Table 16 indicates that the number of RPP permits issued has grown in many neighborhoods since 1990. BTD issued 65,830

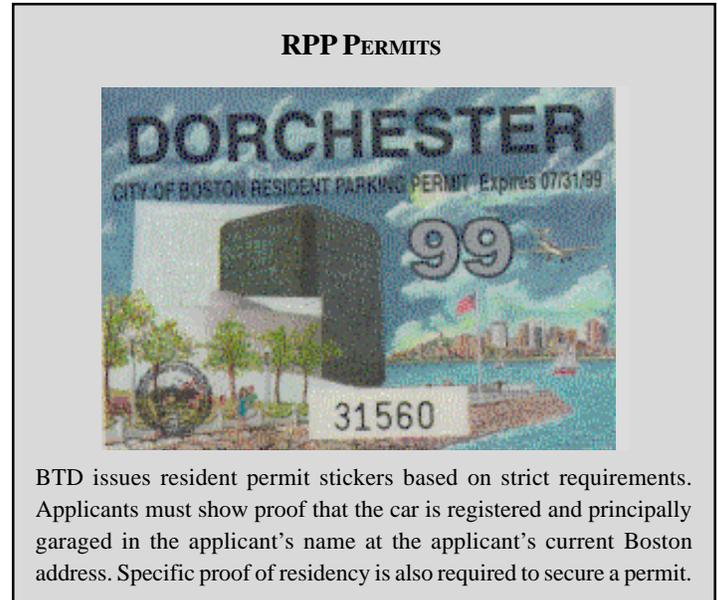


Table 16 – Comparison of RPP Permits Issued in 1990 and 2000 by Neighborhood

NEIGHBORHOOD	COVERAGE OF RPP PROGRAM	PERMITS		CHANGE (1990-2000)	
		FY1990 ¹	FY2000 ^{1,2}	PERMITS	PERCENT CHANGE
Allston/Brighton	Streets in specific districts	8,329	15,631	7,302	88%
Back Bay	All or most of neighborhood	5,572	7,086	1,514	27%
Bay Village	All or most of neighborhood	440	537	97	22%
Beacon Hill	All or most of neighborhood	3,602	3,933	331	9%
Charlestown	Streets in specific districts	745	4,235	3,490	468%
Chinatown	All or most of neighborhood	601	750	149	25%
Dorchester	Streets in specific districts	1,546	1,037	-509	-33%
East Boston	Streets in specific districts	5,342	7,216	1,874	35%
Fenway/Kenmore	All or most of neighborhood	3,869	4,678	809	21%
Hyde Park	Specific streets	-	14	14	
Jamaica Plain	Specific streets	1,765	2,606	841	48%
Leather District	All or most of neighborhood	67	169	102	153%
Mission Hill	All or most of neighborhood	1,588	2,002	414	26%
North End	All or most of neighborhood	3,387	4,163	776	23%
Roslindale	Streets in specific districts	-	214	214	
Roxbury	Specific streets	-	258	258	
South Boston	Streets in specific districts	901	1,226	325	36%
South End	All or most of neighborhood	7,101	9,678	2,577	36%
West Roxbury	Specific streets	-	397	397	
TOTAL		44,855	65,830	20,975	47%

Source: City of Boston, Office of Parking Clerk

- Note:
1. Fiscal year 1990 begins July 1, 1989 and ends June 30, 1990; Fiscal year 2000 begins July 1, 1999 and ends June 30, 2000.
 2. 1,253 permits were temporary, rental, motorcycle, or dealer permits were issued in FY2000. These permits were distributed proportionally over each neighborhood for comparative purposes with the FY1990 data.

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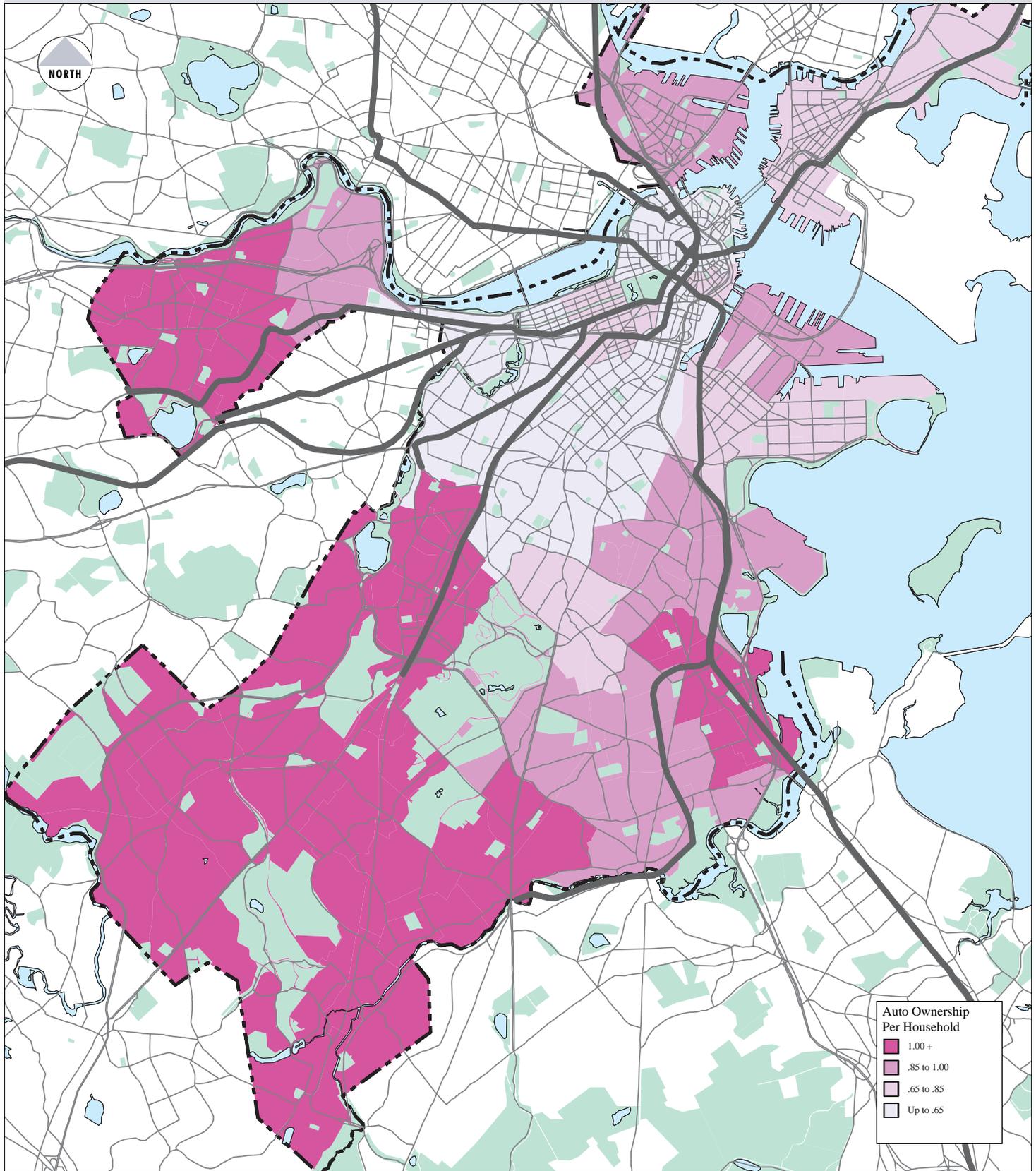


Figure 29:
Auto Ownership Per Household in Boston
Auto ownership per household is highest in neighborhoods further from downtown. These neighborhoods have low density, more driveway space and less pressure for on-street parking.

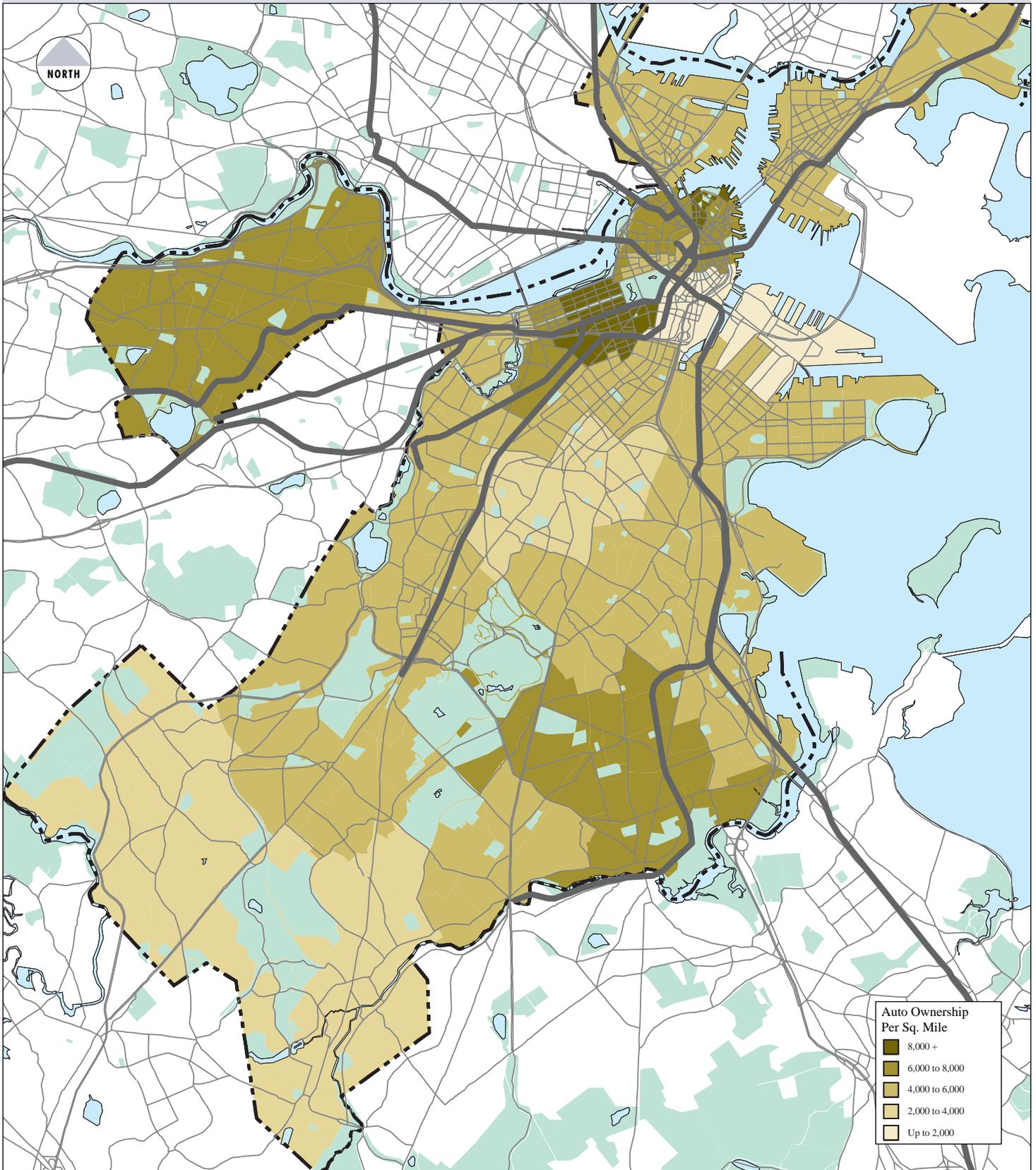
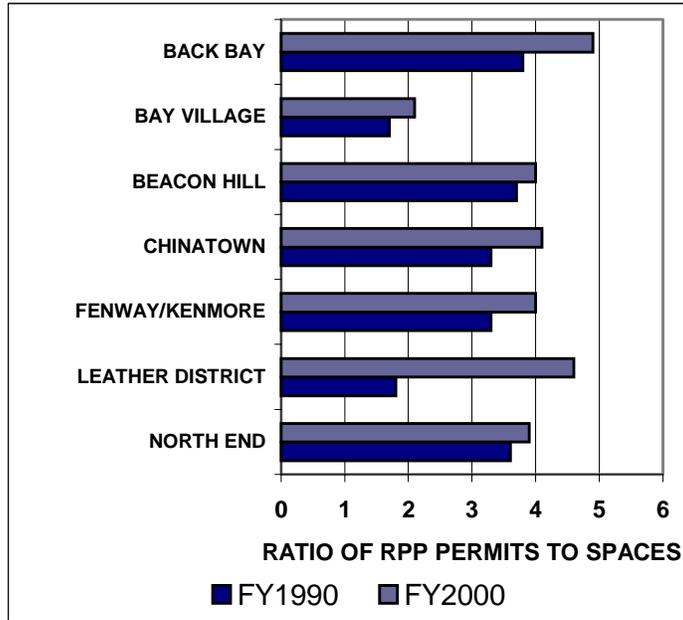


Figure 30:
Auto Ownership Per Square Mile in Boston
Auto ownership per square mile is highest in densely populated neighborhoods in and near downtown putting pressure on street parking.

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Figure 31
Increase in Ratio of RPP Permits to Spaces



The ratio of permits to spaces has increased from 3.5 to 4.1 for neighborhoods near downtown, reflecting the high level of demand for on-street RPP spaces in these neighborhoods.

KEY FINDINGS OF SEATTLE’S “WAY TO GO” PILOT PROGRAM

Seattle has recently undertaken a creative approach to convince people to reduce auto ownership. The families in the program signed an agreement not to use one of their vehicles and to keep a diary of their experiences to provide valuable planning information and insight about the program and people’s travel choices. The families used a variety of modes to meet their travel needs. The results of the “Way to Go” program provided valuable marketing information to encourage residents to re-think their auto ownership patterns and live with one less car. The following are specific findings that were identified by the City of Seattle from the first phase of the program:

- A savings of approximately \$70 a week for most families.
- A reduction of 8,100 vehicle-miles by the 22 families that participated.
- A reduction of 6,500 pounds of CO₂ from the reduction in auto use.

permits in 19 different neighborhoods in fiscal year 2000, an increase of almost 50% over the last 10 years. Expansion of the program to new streets in Allston/Brighton, Charlestown and South Boston account for approximately one-half of the increase in RPP permit issuance. A small percent of the increase is also attributable to the expansion of the program to four new neighborhoods.

More than half of the growth in the RPP program over the last ten years occurred in eleven of the twelve programs that were in existence in 1990. This reflects increased auto ownership, construction of new residential units, and subdivision of houses to condominiums. This has had a significant effect on the older RPP neighborhoods in the Back Bay, Bay Village, Beacon Hill, Chinatown, Fenway/Kenmore, the Leather District and North End.

As illustrated in Figure 31 the increase in the resident parking demand has increased the combined ratio of permits to spaces from 3.5 to 4.1 for the seven neighborhoods in and near the downtown core. Significant increases occurred within each neighborhood. However, the most significant increase occurred in the Leather District, which is one of the smallest programs in the city. The number of permits increased as a result of the influx of residents during the 1990s to the former manufacturing buildings near South Station. Increases of 20 to 30% were experienced in the remaining neighborhoods, which is comparable to the citywide growth in auto ownership. Beacon Hill and the North End saw an increase of 8% in the ratio.

Demand Reduction Approaches

More recently, approaches to reduce auto ownership demand have gained momentum in the U.S. Demand reduction seeks to provide relief by slowing the growth in auto ownership. Pioneered in Europe, car sharing reduces demand by providing motorists with access to a car that can be rented for a short period of time. Individuals join a car-sharing group and reserve vehicles, which are parked in convenient off-street lots and garages. Using Intelligent Transportation Systems technology, the car is programmed to operate only for the individual renting the car. Other efforts include Seattle’s “Way to Go” pilot program that created an agreement with families that were part of the program to voluntarily give up the use of one of their autos for a test period.

Action Plan

Resident Parking Program

Coordinate the Implementation of Car-sharing Programs by Private Vendors

BTD will continue to work with potential vendors interested in providing car-sharing programs, particularly in dense neighborhoods in and around downtown. Car sharing could provide an alternative to auto ownership for some residential markets in dense city neighborhoods, particularly neighborhoods with scarce parking. Car sharing can lead to reduced auto ownership and improved air quality and livability. Reduced parking demand is another potential benefit of car sharing. Efforts are underway to introduce this approach in several U.S. cities, including Boston. Carsharing opportunities should be encouraged as part of new developments.

Investigate the Joint Use of Metered Spaces through Meter Technologies

BTD will investigate options as part of the new Smart Card meters in order to facilitate overnight parking at meters by residents. Consideration should be given to allowing a resident to park at a metered space at night and pay in advance for an hour of parking in the morning.

In downtown neighborhoods, BTD regulates some parking meter spaces for use as resident parking spaces at night. Residents use these spaces and other metered spaces, which are unregulated at night, to meet the growing resident parking demand. Residents must move their cars before 8:00 a.m. when the meter goes into effect, or pay in the morning for parking at the meter.

Strengthen Review Guidelines for New Residential Projects

BTD will incorporate the following guidelines for the review of new residential development projects through the Article 80 zoning process and negotiation of the project's Transportation Access Plan Agreement:

- New residential developments must provide parking sufficient to meet their demand.
- When new residential developments are located in or near RPP neighborhoods, consideration should be given to excluding residents in these developments from participating in the RPP program. These exclusions must be included in the unit deed.
- BTD should continue to leverage joint use of off-street parking in new and existing commercial parking lots and garages for area residents in RPP neighborhoods (e.g., favorable night and weekend rates).

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Investigate New Parking Requirements for Condominium Conversion Projects

BTD will work with the BRA to investigate the use of parking guidelines for condominium conversions. The conversion of rental properties to owner-occupied condominiums is significant if associated auto ownership trends reflect observed U.S. Census data. This data indicates that auto ownership rates for homeowners such as condominium owners are nearly double the auto ownership rates of renters. Consideration should be given to estimating parking rates for rental and condominium units that could be used to calculate the number of new spaces required by smaller projects and the ability to link the conversions of the requested number of new units with the proponent's ability to provide the additional spaces.

Investigate Splitting the Allston/Brighton Program

BTD will investigate splitting the Allston/Brighton program into two separate programs. Allston/Brighton is the largest RPP program with more than 15,000 permits issued in FY 1999. This is almost double the size of next largest program. BTD must conduct a public review prior to implementation, to discuss boundary issues, if it were to proceed with this proposal.

Investigate Charging a Fee for and/or Limiting RPP Permits per Household

Demand is much greater than supply in some RPP neighborhoods. The growth in the number of multi-vehicle households in Boston has contributed to this condition. BTD will continue to monitor the RPP program to determine the need to charge a nominal fee for permits or restrict the number of permits per household. The revenue generated will be used for programs that support efforts to reduce car ownership and use.

Pricing strategies, such as higher fees for multiple stickers are not recommended as tools to manage auto ownership because fees would not affect auto ownership decisions in comparison to the high operating and insurance costs paid by Boston residents.

Develop a GIS Database to Support the RPP Program

BTD should update its database to provide an up-to-date estimate of the number of spaces within each program. BTD should maintain an accurate map of its RPP programs for internal planning purposes and for external public use. Using this information, BTD should estimate the number of permits issued for residents on streets inside smaller RPP neighborhood area programs (e.g., Roslindale, Hyde Park, etc) and for streets outside the neighborhoods, identifying permits by distance (rings) from the program. BTD should use the database as part of its continued effort to monitor the number of permits per household and determine if limits should be implemented in the future.

Investigate a Pilot Program Modeled on Seattle's "Way to Go" Program

BTD will investigate a program to encourage a set of families not to use one of their vehicles. The program should be modeled on Seattle's "Way to Go" pilot program that used a sample of different household types. The program would offer the cash equivalent of the cost to operate the vehicle during the study period. The study period should evaluate a spring/fall timeframe and a winter timeframe to understand weather-related issues. Funding support will be key.