City of Vancouver Parking By-Law - A Recital of Sustainable Parking Policies

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ABSTRACT

Parking policies are an important component of contemporary travel demand management policies. North American parking policies have traditionally been developed as a means of simply accommodating traffic demand, with little or no effort made to identify how such strategies might relate to other urban transportation objectives. These types of policies are also not generally supportive of urban sustainability goals, which seek to reduce reliance on private car usage. However, the City of Vancouver is leading the way in creating parking policies that support environmental sustainability and transportation goals, particularly mode split targets. The City of Vancouver Parking By-Law is a significant factor in supporting the overall Transportation targets that make Vancouver one of the most liveable cities in the world. This has helped Vancouver to achieve its goal of zero growth in automobile traffic entering the city. In fact, Vancouver is one of the few cities in North America where the amount of automobile traffic has actually decreased in the last decade. This paper reviews how the City of Vancouver Parking By-Law has continuously been updated over the last two decades to encourage sustainable modes of transportation and set parking standards that supports targets of reduced auto use. The paper explores the evolution of City of Vancouver policy and Parking By-Law including design changes, incremental updates, emerging transportation modes and economic influences. The City of Vancouver Parking By-Law includes standards for residential and commercial developments for both automobile and bicycle parking. The vehicle parking standard for downtown Vancouver and for some other parts of the City includes not only minimum requirements, but also maximum standards to ensure that the parking spaces are not over provided. The Parking By-Law also includes provisions for disabled parking, car-share spaces and electrical outlets for electric assisted bicycles. This paper presents some case studies where various sustainable modes of transportation were encouraged by requiring provision of car-sharing vehicles more bicycle parking and by applying maximum parking ceilings while reducing minimum parking requirements. There will also be an overview of recent Vancouver Charter changes. These changes allow the City of Vancouver to continue to encourage sustainable modes of transportation by further reducing minimum parking requirements, or in some cases eliminating parking requirements altogether, through payment-in-lieu for required parking spaces . This paper also identifies current initiatives of City staff for future parking policy changes.

The City of Vancouver British Columbia has consistently been ranked as one of the world's most liveable cities. The City's land use planning and transportation system has played a key role in helping Vancouver to achieve this recognition.

Vancouver's Transportation Plan has a well-established transportation hierarchy that places pedestrians first, then cyclists, then transit users, goods movement and, finally, motor vehicles. The City builds transit and cycling infrastructure, greenways and off street paths for pedestrians, to encourage active and sustainable modes of transportation. The use of good urban design and architecture makes it easier and more enjoyable to get around without a car and in particular to walk.

Since the implementation of the Vancouver Transportation Plan in 1997(1), the growth in walking mode share has been significant and beyond expectations. The tremendous growth in walking is largely a result of land use and transportation planning that has focused on creating higher density, walkable neighbourhoods and transportation policies and investments that give priority to pedestrians, cyclists, and transit over the private automobile (1).

VANCOUVER CONTEXT

The City of Vancouver and adjacent municipalities form Canada's third largest metropolitan area. The City of Vancouver has a population of 578,000 within Metro Vancouver's population of 2,117,000 (Census, 2006).



Figure-1

In the 1960's community, Vancouver City Council and political leaders said no to a freeway system through the heart of Vancouver. This had a significant impact on how Vancouver has developed as a city and was key in moving away from car dependency.

Figure-2



PLANS AND POLICIES

Various plans have helped to guide the City of Vancouver's transportation policies; most notable are CityPlan, Central Area Plan and City of Vancouver Transportation Plan 1997.

Vancouver's "CityPlan" (2) and "Central Area Plan" (3) planning policies of the 1990s created the foundation for a city of neighborhoods and compact, mixed-use, highly walkable communities. The highest density neighborhoods are located primarily in and near the City's transit-rich employment areas of the Downtown and the MetroCore. Vancouver has a high overall housing density when compared to other west coast cities and population growth is being accommodated primarily in multi-family type housing.

Vancouver City Planners design community amenities such as parks and schools into new developments to make compact, high density neighborhoods attractive to all residents, especially families with young children. Community planning also places importance on having communities with a diverse population mix and income levels. Major developments are typically required to have at least 20% non-market housing. The City of Vancouver also puts limits on the redevelopment of affordable rental stock in a city where affordability is a critical social and transportation issue. The City of Vancouver and Metro Vancouver are growing in terms of both population and jobs. The City of Vancouver grew by 10% in ten years (5).

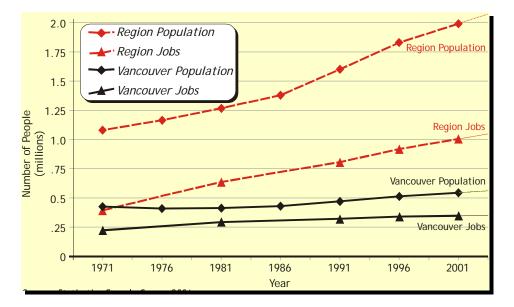


Figure-3

Vancouver City Council adopted the Central Area Plan in 1991. This innovative plan sought to improve the balance between office and transportation capacity. This was achieved by refining the land use in the downtown core. Commercial areas were reduced and residential areas increased. Commercial areas were focused around existing rapid transit centers. Two positive transportation effects were :

- Reduction in the number of trips Downtown
- Increased proximity of the labor force to their place of employment

Following two years of planning and extensive consultation, the City of Vancouver Transportation Plan (4) was created and adopted by Vancouver City Council in 1997. This set the transportation principles and policy for the City of Vancouver and how we would manage growth. The plan is consistent with the principles and policies outlined in the city and regional land use plans. The Transportation Plan also has a sub-plan for the Downtown known as the Downtown Transportation Plan.

The Transportation Plan prioritized the transportation modes in Vancouver.

- 1. Pedestrian
- 2. Bike
- 3. Transit
- 4. Goods Movement
- 5. Vehicles

The Transportation Plan helped set various transportation policies of the city such as:

- Increased construction of pedestrian infrastructure
- Expansion of the City's cycling infrastructure
- More bus, rapid bus, and light rail
- Balance the needs of trucks and neighbourhoods
- No new roads or increase in capacity
- Protect Vancouver's neighbourhoods from vehicle traffic

Table-1 shows the targets set by the 1997 Transportation Plan, for 24 hour trips to and from Vancouver (2)

Figure-4		
Travel Mode	Before Plan (1994)	Target (2021)
Automobile Driver	52%	44%
Automobile Passenger	17%	15%
Transit	14%	23%
Bike	17%	18%
Walk		

Transportation Plan (4) also set directions for parking policies such as:

- Within the Downtown, existing maximum standards on commuter parking are proposed to be maintained, consistent with about one in four people driving a car to get to work. An overall commuter parking ceiling will also be applied, consistent with the maximum number of commuter cars to be accommodated on the road network accessing the Downtown during the peak period, which is about 34,000 vehicles.
- Parking ceilings are proposed to be applied for short-stay parking (4 hours or less). The short term parking level will be managed to ensure there is sufficient parking to meet normal demand. This will ensure businesses and services remain accessible for car drivers, and to avoid creating extra traffic as drivers search for parking spaces. In the longer term, transit service improvements will provide an attractive option, which should allow the supply of short-stay parking to be decreased.
- Residential parking standards will be reviewed as necessary to ensure they
 reflect the lower levels of car ownership of Downtown residents, and the
 objective of promoting transit, cycling and walking as alternatives to cars.
- Parking and unloading of trucks in the Downtown commercial lanes will be reviewed with the intention of improving the essential access to businesses for commercial vehicles.
- Limiting Parking for Central Broadway
- All day parking in temporary parking lots to be restricted in line with Parking Ceiling
- Encourage Employers Downtown to Charge for Employee Parking

• Encourage Car-sharing.

The Parking By-law (6) was first introduced in 1986. Most of the parking policy directions helped changed the Parking By-law as part of City of Vancouver Transportation Plan implementation, some of these changes are:

- Continuous reduction of parking requirements in mixed use communities and encouragement of sustainable transportation modes
- Introduction of Bike Parking Standards
- Car-sharing both for Downtown and for City wide
- Loading Requirements based on Use and Size
- Loading Requirements for Residential uses
- Reduced Parking in lieu of Bike Spaces

SUSTIANABLE APPROACHES OF CITY OF VANCOUVER PARKING BY-LAW

At the time of writing of this report parking standards for Downtown and for rental dwellings are being reviewed.

The functional differences between various existing forms of parking in Vancouver can be categorized as:

Short-Term Parking

Short-term parking refers to parking for retail use, where customers park their vehicles for a limited period. That kind of parking generates many trips and one parking space is utilized several times.

Long-term Parking

Long -term parking refers to parking for employees, who work either in an office, for a retail store or for industry. Most employees park their vehicle for extended period, mostly throughout their work shift. That kind of parking generates relatively less trips and one parking space is usually utilized little more than couple of times a day.

Vehicle storage

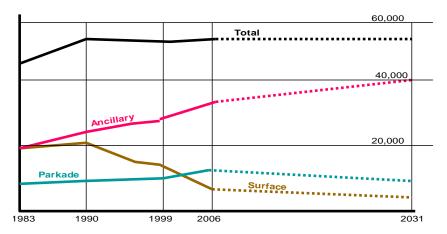
Vehicle storage refers to residential parking; City of Vancouver has proved itself unique by introducing mixed used neighbourhoods throughout the city. Good transit networks, ample biking and walking facilities have substantially discouraged vehicle usage. Various studies by City of Vancouver staff have shown that most residents park their vehicle for extended periods and mostly use them for recreational trips, mostly on weekends. That kind of parking generates few trips and one parking space is utilized a couple of times a week.

Commercial Parking

From a transportation perspective, the amount of parking provided for non-residential uses (destinations) is a very important factor in determining the number of automobile trips. Despite significant commercial and employment growth in the Downtown, the parking supply Downtown is at the same level today as it was in 1990 - approximately 53,700 spaces. This is due to limits on the amount of parking for new buildings and the

loss, over time, of stand alone parking, mostly surface parking lots. The parking supply and make up over the past years is shown in Figure-5.

Figure-5



This zero growth of parking supply is consistent with Council's transportation policy of zero vehicle trip growth and a cap of 34,000 employee parking spaces in the Downtown. Although total trips into and out of Vancouver have increased by 23%, vehicle trips have actually declined by 7% Downtown and 10% overall since the transportation policies were approved in the 1997 Plan. The actual number of employees using their vehicle, and thus needing parking, for work Downtown is less than 34,000. The balance of parking not used is available for visitors, customers, hotel patrons and other non-employee uses, with some always vacant. Minimum non-residential Downtown parking requirements, which are currently under review, once approved, would be one of the lowest in Canada.

Outside of Downtown, vehicles entering to the city have declined by 10% in the last 10 years, transit trips have been increased by 20% by the same period. The amount of parking seen as needed and thus allowed or required under the existing By-law varies somewhat by use and location. The City has different standards for commercial parking, which varies by area dependent on the level of transit access and land use. The requirement are based on mode split targets set by Council that reflect a significant shift from the automobile to transit, walking or cycling. Since the introduction of Parking By-law commercial parking standards have constantly been reduced to encourage sustainable modes of transportation

Residential Parking

The amount of parking required for residential developments has generally been set near the observed demand for the particular form of residential development. This ensures there is not undue overspill from the development.

Council policy is to review residential parking standards to ensure they reflect the lower levels of car ownership of residents, and the objective of promoting transit, cycling and walking as alternatives to cars. Over the past decade, staff have actively reviewed residential parking requirements. Outside of Downtown, the City recently reviewed and significantly reduced the parking requirement for multiple unit buildings. This new parking standard expected that there would be some off-site parking and specifically made no special provision for visitors, who would likely find street parking. Minimum residential Downtown parking requirements, which are currently under review, once approved, would be one of the lowest in Canada.

There were many different parking standards in the city and in Downtown, which were developed for various sub-areas, and even individual buildings. More recent standards, such as the standard for Downtown South, recently reduced citywide standards and recent CD-1 rezonings, were significantly reduced from previous requirements. In some areas of the downtown, older standards remained, which are considerably higher.

As mentioned above though the non-residential parking supply has a strong impact on vehicle trips, yet the amount of parking provided in residential developments does not have the same high correlation with trips. Implementing strong controls on residential parking supply would not necessarily have a great impact on reducing vehicle trip generation as the number of vehicle trips from a residence is primarily determined by land use and density. To illustrate this, there has been a large increase in Downtown residents, with most having access to at least one parking space, and yet internally generated vehicle trips out of Downtown have declined over the past 10 years, consistent with the decline in trips destined to Downtown. Nevertheless, the City should give a reasonable range of options for parking provision to allow developers flexibility to recognize issues of affordability and varying target markets.

One of the concerns about a low residential parking standard is the impacts from residential overspill parking. City has two programs to manage residential parking pressure on street, when severe parking pressures from major parking generators affect a multifamily neighbourhood, a Resident Permit Parking (RPP) system may be considered. Only residents of the RPP area may purchase permits. The alternative for RPP systems for single family neighbourhoods is Resident Only Permit (RPO) system. Residents who park vehicles in RPO zones do not need a permit; however, they must reside in the designated RPO blocks. RPP systems are more restrictive than Residential Parking Only (RPO) systems because vehicles parking in the permit zones must display a valid area permit, a portion of most blocks is left unregulated, or more commonly, governed by time-limited parking signs. Spillover is less of a concern in Downtown as the street areas are already highly used and regulated, and the utility of resident parking that is not in one's residence is much less than it would be for other uses, due to lack of convenience, security concerns and pricing. Reduced parking provision may increase development viability but all of these issues must be balanced when setting a new standard.

Thus, the revised minimum parking standards that are being recommended would simplify the existing residential parking requirements and allow for reduced parking provisions. The proposed standards would lower the downtown standard by up to 70% and the Downtown South standard by more than 50%. The new minimum standard would also be at or below the current heritage area requirements, which apply to non-designated buildings (designated buildings do not have a parking requirement) and it is being proposed that this standard would replace this existing heritage standard.

Since the inception of the Parking By-Law in 1986 parking requirements for multiple dwellings citywide, except Downtown have continuously been lowered. For example from a minimum of one space for a 50m² unit to 0.5 spaces. Reduced parking requirements along with various other planning and transportation initiatives have resulted in encouraging sustainable modes of transportation and mixed used developments. All these initiatives have helped build complete communities, which encourage residents to work, live, shop, play and learn in their own neighborhoods.

Parking for Rental Dwellings

Lower parking standards are being recommended for rental dwellings to improve affordability. Though studies have shown no difference between vehicle ownership for rental and strata dwellings, it is recognized that the cost of providing parking puts a larger financial burden on rental projects. When setting the new standard, staff also had to consider that less parking for residential uses will not necessarily lead to fewer automobile trips and that parking in new buildings is one of the major concerns expressed by residents concerned about parking overspill on to the neighbourhood streets. Nevertheless, the parking standards detailed below balances these concerns and allows staff to analyse the impact of a lower standard during a time limited trial.

The proposed parking standards for rental dwellings outside of Downtown lowers the standard by up to 36% if the development is located within two blocks of two distinct transit routes. These standards offer a further reduction if the development includes provisions for car sharing and transit passes, leading to an overall 53% reduction.

In near future parking standards throughout Downtown both for residential and nonresidential developments are being significantly reduced. However, staff acknowledges that further incentives targeted specifically for rentals would encourage construction of rental projects, as opposed to strata units. Staff is recommending that rental buildings in Downtown be allowed to provide up to six car-sharing spaces and vehicles in comparison to a limit of two car-sharing vehicles and spaces for strata dwellings.

Shared Vehicles for Residential

Supporting shared vehicles is a City policy and is a complement to other sustainable modes of transportation. Shared vehicle companies provide a membership program intended to offer an alternative to car ownership under which persons or entities that become members are permitted to use vehicles from a fleet on an hourly basis. Currently the two organizations in Vancouver offering shared vehicle services are the Cooperative Auto Network (CAN) and Zip Car.

Adam Millard-Ball et al (7) states that shared vehicle programs are very much concentrated in metropolitan cores - more than 90% of members are found in these settings. High density, good pedestrian environment, a mix of land uses and parking pressures all contribute to shared vehicle success. The most obvious benefit is the ability to live without a car - or with just one vehicle. Low vehicle ownership rates are the best predictor of a strong market for a shared vehicle.

With reduced residential parking requirements, it is important to protect future parking resources for shared vehicles. Currently developers are given a parking

incentive of three parking spaces for each shared vehicle parking space and shared vehicle they provide through a shared vehicle organization. To strengthen this provision, the City of Vancouver is planning to require shared vehicle parking spaces as part of the basic parking requirement.

In determining the shared vehicle ratio, staff considered member-vehicle ratios from major cities in Canada and the U.S. and came up with the following approach:

A minimum of 0.01 (100:1) shared vehicle parking spaces per unit. This means that there would be one shared vehicle space for buildings with 50 units and an additional car-sharing parking space for each subsequent 100 residential units. The maximum allowable car sharing space would be 0.02 (50:1) per unit.

Most developers and property managers provide free parking for the shared vehicles that are placed in their complexes, either because it is an amenity to the residents or because it is part of a development agreement for reduced parking. The vehicles are typically located in spaces with high visibility and access, to encourage non-users and to further promote the concept. Most often, the shared vehicles are used not only by tenants, but also by all members of the shared vehicle organization, in order to maximize utilization.

Payment-in-lieu

The Provincial Government has recently amended the Vancouver Charter to allow Vancouver to accept payment-in-lieu for residential parking and to allow the use of funds for sustainable transportation. There is also newly prescribed reporting requirements with regard to payment-in-lieu funds.

The City's current policies generally restrict payment-in-lieu to heritage commercial redevelopments where parking, albeit reduced, is required and cannot be provided. The cost is established as the **net cost** to the City of providing a parking space, after operations, revenues are considered. It is currently set at \$20,200 per space. Once a parking space is assigned (to an existing City parkade) the development is then given the right to rent a space at market rates, and the payment is transferred to the Parking Site Reserve Fund which would have been used to build the space.

For residential use, the utility of an off-site space is much lower than for commercial uses, as convenience and security are large factors. However, with the new ability to use funds for sustainable transportation, staff considered the extension of payment-inlieu to residential developments in the heritage areas HA-1 (Chinatown), HA-2 (Gastown), HA-3 (Yaletown), and the Downtown Official Development Plan area subarea C-2 (Victory Square).

It is has been reviewed that the City create a separate payment-in-lieu reserve fund for the provision of transportation infrastructure that supports walking, bicycling, public transit or other sustainable forms of transportation. It is also being recommended that the fee for residential payment-in-lieu be set the same as for nonresidential.

Parking Relaxations

Currently there are several relaxations available for residential and commercial sites such as relaxation of parking due to undue hardship, relaxation of loading due to undue hardship, and relaxation of bicycle spaces due to undue hardship, mixed-use reductions and relaxations for small car ratios. Some Parking By-law provisions particularly benefit small sites. An amendment to the exemption rules which guarantees a 2-space discount helps small sites where the City's standard 10% exemption would allow a lesser discount. A small restaurant, up to 250 square metres, on a small site , up to 325 square metres or 3500 square feet, has no more than 2 spaces required, when up to 17 spaces would otherwise be required. Unique to C-2 districts zoning is a By-law provision, which is designed to promote mixed-use development; it allows up to 2 parking spaces' worth of residential use to be exempted where provided along with most permitted uses.

Bicycle Parking Requirements:

The City recognizes the importance of bicycles as both a sustainable transportation option and recreational pursuit enjoyed by most people. The City has bylaw requirements to ensure the provision of secured bicycle space in both residential and commercial buildings.

The residential requirements recognize that there is on average more than one bicycle per household, and the commercial requirements recognize that there is a growing number of cyclists using their bicycles for work, shopping and entertainment trips.

Initially bicycle parking requirements were established in 1995 and were based on both the existing and projected needs at that time. These requirements were aimed at improving security, accessibility, and availability of bicycle facilities for commercial and residential buildings. The bicycle requirements were developed as a standard for new buildings to promote cycling ridership throughout the city.

The City requires both Class A and Class B bicycle spaces.

- Class A spaces are meant to be fully secured and weather protected spaces with a requirement for personal locker space and shower facilities for both genders
- Class B spaces are meant for visitor parking and are typically provided in the form of bicycle racks.

Since these by-law changes were introduced, cycling has greatly increased in Vancouver and has more than doubled the number of work trips in the Central Business Area.

Recently several surveys were conducted to review the effectiveness of the bicycle provisions of the Parking Bylaw.

In June and July of 2006, staff reviewed bicycle parking facilities and interviewed managers/staff at a total of 24 commercial and residential developments to check by-

law requirement compliance, compound security, bicycle space demand, and shower and locker convenience. The City surveyed buildings that were occupied within the past five years to ensure they fell under the 1995 bicycle requirements.

In 2007 vehicle and bicycle ownership in 50 multiple residential buildings was reviewed.

A summary of the findings from these surveys is as follows and the detailed reports are available in the Parking Management Branch of Engineering Services

Bicycle Parking for Commercial/office buildings

- Bicycle parking facilities located in surveyed commercial buildings were generally well used.
- Several building provided more parking that the by-law required due to increased need. Specifically noted were the Federal Fisheries building at Burrard and Pender which provides almost 4 times our requirement and had an observed use of twice our requirement, and the BC Cancer building which provided double our requirement with an observed use greater that our requirement.
- Three buildings did not provide required class B parking.
- Bicycle facilities rarely met the bylaw security requirements, and many buildings had thefts in the first year of opening, and then had security revisions most of which were originally required by the bylaw.

Bicycle Parking for Residential buildings

- survey of multiple residential developments confirmed that bicycle ownership is approximately 1.25 spaces per dwelling unit, which is our by-law requirement.
- Most bicycle storage facilities were significantly underused.
- Bicycle storage areas generally did not meet the City's security requirements.
- Many facilities had been retrofitted to improve security.
- People with high priced bikes generally would prefer to not use their current bicycle storage areas due to theft concerns.

As a result, of above mentioned survey, council approved the following bicycle parking standards in 2008 as the minimum requirement

- Minimum of 1.25 Space/Unit
- One space/500m2 for Commercial
- Electric outlets for Every other Bike Parking Space
- Minimum 20% Bike lockers, 50% Horizontal Bike Spaces and Maximum of 30% Vertical Spaces

CASE STUDIES

Southeast False Creek

Policy-makers around the world are struggling with urban transportation and land use management issues. Population growth, decreasing rates of public transit use, and increasing automobile dependence are intensifying stress on the global environment and contributing to global climatic change. Strategies to manage these issues are plentiful and diverse; however, their diversity and lack of proven experience frustrate policy-makers when selecting the most appropriate sustainable transportation strategies.

As a project, SEFC represents an opportunity for designers, policy makers and other community stakeholders to design and develop a community that supports a wide range of accessible and equitable transportation choices that promote more sustainable modes of travel.

To achieve the sustainability goals outlined in the SEFC Policy Statement, it was determined that the Transportation Study should develop the best and most effective strategies in aiming to 'balance' the transportation system, improve transportation choices, and reduce the environmental, social, and economic costs of an automobile-dependent transport system.



The SEFC Transportation Study is separated into eight key sections, including a forecast of future conditions (to 2021), a traffic impact assessment, a review of sustainable transportation strategies, an analysis of sustainable strategy benefits and impacts, recommendations on street and parking standards, and a monitoring and evaluation program. It also includes a section that reviews alignment concepts for a

proposed streetcar line that will ultimately link Vancouver's popular Granville Island shopping precinct with Downtown Vancouver.

Some of the highlights from a parking perspective are:

- Reduced Minimum and Maximum Parking Standards
- Car sharing a Requirement
- Voluntary provision of Electric Outlets for Electric Vehicles

East FraserLands

Since 2003, the City has been engaged in a planning process to develop a complete, high density, green development at East Fraserlands. The land includes 130 acres of industrial land south of Marine Way and east of Kerr Street to Boundary Road. The plan is for a residential community of almost 13,000 people with a commercial centre, parks, a community centre, schools, childcare facilities, a riverfront walk and more.

Figure-7



Transportation will be at the forefront of this complete community. Every home will be within an easy walking distance of a full range of daily transportation services. A full network of pedestrian streets and cycling paths will link all residences with shopping on the 'high street' and public amenities. Plenty of facilities will be available for cyclists. Every home will be within a 5-minute walk of a transit stop. Plans are in place for future rapid rail transit facilities. Traffic calming measures will follow the Dutch-inspired "woonerf" or play street. Reduced parking requirements are being explored, and shared car programs could reduce the need for both vehicles and parking needs.

The Official Development Plan was adopted by City Council in 2006, and East Fraserlands is now subject to a series of rezoning applications. The developer is ParkLane Homes and the current proposal is to build this new community over 25 years.

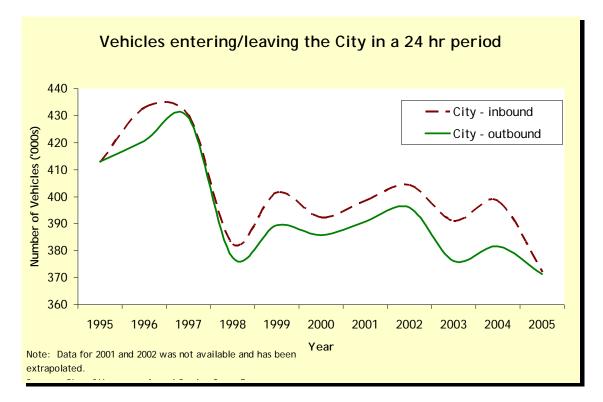
Some of the highlights from a parking perspective are:

- Minimum and Maximum Parking Standards
- Car sharing a Requirement
- Electric outlets for 20% Electric Vehicles

TRANSPORTATION GOALS

Because of the joint efforts of various groups of Transportation Division of City of Vancouver, including Parking Management Branch, the following targets have been achieved.

Figure-8 (8)



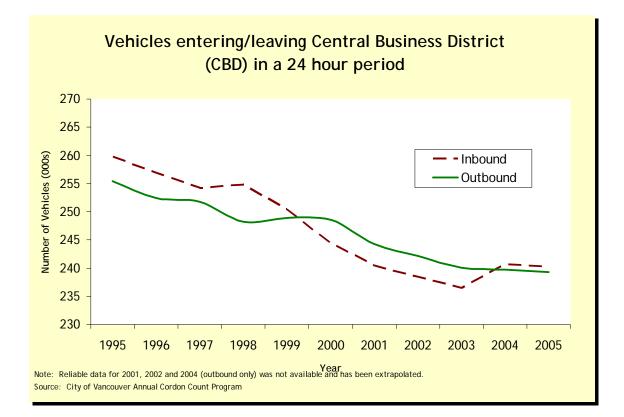


Figure-10 (2)

Travel Mode	Before Plan (1994) 1.6 million trips	Target (2021)	Now (2004) 1.9 million trips
Automobile Driver	52%	44%	50%
Automobile Passenger	17%	15%	12%
Transit	14%	23%	17%
Bike	17%	18%	20%
Walk			

CONCLUSION

Many of the mode share targets that were set for 2021 in the City of Vancouver Transportation Plan, have already been achieved and innovative parking policies have played a vital role. The implementations of the Transportation Plan and parking policies have encouraged, increased active and sustainable transportation modes, and have shown that growth can be accommodated by non-automobile modes. The City of Vancouver has begun looking at land use planning with a more sustainable perspective. The following bold initiatives are being studied for council consideration to further enhance the sutaninability nature of the parking By-law:

- Reduced Parking Standards for Rentals
- Parking discounts if built near Transit
- Parking discounts for car-sharing
- Lower parking requirements in Metro core
- Parking Discounts in-lieu for Sustainable Transportation
- Electric outlets for Electric Vehicles
- Payment-in-lieu for narrow lots
- Payment-in-lieu for Residential

New issues, such as greenhouse gas emissions, are of increasing concern and the City is developing bold and innovative policies to deal with them.

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