

Shaping a Suburban Activity Center Through Transit and Pedestrian Incentives: Bellevue CBD Planning Experience

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Downtown Bellevue is a typical suburban central business district (CBD) and is emerging as one of the major activity centers in the metropolitan Seattle region. With cooperation from transit and other agencies, the City of Bellevue took several actions related to land use and transportation in recent years. In essence, the City's goal is to direct the anticipated growth to create a people-oriented urban activity center through transit, pedestrian, and other incentives. Actions taken on parking management, the pedestrian mall, the transit center, and the incentive transit service agreement will have significant impacts on the intensity of activity and the pattern of development in the Bellevue CBD. The City has adopted land use regulations necessary to transform the suburban automobile-oriented center into an urban activity center designed for people. However, land use regulations alone will not be enough to achieve this goal. If land use regulations are closely coordinated with transportation elements, such as those described here, the impacts would be much greater. The experiences gained during the Bellevue CBD planning process are valuable to others who are working in similar circumstances in other parts of the nation if planners and decision-makers hope to transform a suburban automobile-oriented CBD into a people-oriented activity center.

The City of Bellevue was a suburban bedroom community of 6000 residents when it was incorporated in 1953. Until the mid-1970s, employment of Bellevue residents was oriented toward downtown Seattle and other employment centers outside the City. The community had been centered around a community-scale shopping center, known as Bellevue Square, which was built in the mid-1940s. In the mid-1970s the Bellevue Square area had grown into Bellevue's central business district (CBD). Today, the City of Bellevue is the fourth largest city in the State of Washington. It has a population of 75 000 and an employed population of 42 000.

The Bellevue CBD is located in the Seattle metropolitan area (see Figure 1). It covers 430 acres and serves as the regional center for communities east of Lake Washington. As of 1981, the Bellevue CBD contained about 2.2 million ft² of office space and 1.4 million ft² of retail space; it employed about 12 000 people.

The layout of the Bellevue CBD is similar to many suburban activity centers designed around the automobile. Arterial streets are wide with large setback distances from sidewalks. Office buildings are widely dispersed. This land use and street configuration make pedestrian travel very difficult. Currently, only 1-2 percent of the people who travel to the Bellevue CBD take transit. In Seattle, more than 27 percent of the downtown-bound travelers take transit during the day (1). Some of the reasons why transit is not well used to and from the Bellevue CBD follow:

1. The CBD is basically designed to accommodate a large number of automobiles. Office buildings are fairly evenly spread throughout the CBD and are separated from each other by large parking lots.
2. Due to city parking requirements, an excess of parking exists. The average actual parking supply rate for offices was 4.4 spaces/1000 ft² in 1980. In 1980, a total of 15 000 parking spaces were provided for retail and office uses, compared with a level of employment in the CBD of about 12 000.
3. Most parking needs are satisfied by privately

Figure 1. Bellevue vicinity map.



owned off-street parking spaces. Parking charges are rarely imposed on users.

4. The regional transit agency (Municipality of Metropolitan Seattle-Metro) provides service based on a radial system oriented to downtown Seattle from outlying communities. Seattle-bound commuters are picked up at several park-and-ride lots. For a large number of people traveling to the Bellevue CBD, transit is not convenient or frequent enough to be competitive with the automobile.

5. Wide arterials and streets, the presence of a large number of automobiles, and a lack of pedestrian amenities discourage pedestrian activity in the CBD. One city study indicates that 25 percent of CBD traffic was generated by cars driving from one parking lot to another.

In the mid-1970s, Bellevue's civic leaders recognized the large growth potential of the CBD due to its central location among the communities on the east side of Lake Washington and its accessibility to other activity centers in the region. It was also realized that the increasing traffic congestion caused by cars containing only one occupant and the large amounts of parking needed to accommodate them would impede Bellevue's development potential (2).

In order to resolve some of these transportation and land use issues, the City initiated the CBD Action Plan study in 1978. This study pointed out to the City's policymakers that the parking supply requirements and level of traffic congestion in the CBD would soon become critical factors limiting future CBD development growth potential. The only perceived short-term solution to these problems was felt to be the expansion of the use of high-occupancy vehicles--transit and carpools (3).

This paper describes innovative actions that have been taken by the City in the last few years; it focuses on transportation issues such as parking, transit service, and pedestrian circulation. I believe that by using transit incentives, the Bellevue CBD can be transformed from a suburban-automobile-oriented center to a diversified urban activity center. Changes in land use elements and transportation elements could play key roles in shaping the future of the Bellevue CBD.

LAND USE ACTIONS

In 1979, the CBD Action Plan established the goals and policies applicable to the CBD. The land use concept, referred to as the CBD Land Use Diagram, was adopted. The reasons for the development of the Land Use Diagram were (a) to strengthen the existing retail core, (b) to establish an intensive office core area so that transit service could be provided more effectively and pedestrian activity could be encouraged between the Retail Focus and Office Focus areas, (c) to provide for scaled-down development intensity and building height at the periphery of the CBD, (d) to encourage urban residential development in the CBD, and (e) to preserve special areas such as "Old Bellevue."

In 1981, based on the CBD Action Plan, the City adopted amendments to the existing land use code that were specifically aimed at the CBD. The CBD Land Use Code established new dimensional requirements relating to building height, site coverage, and building setbacks. Floor area ratios were established as the method for determining development intensity. The CBD Land Use Code also established the Floor Area Ratio (FAR) Amenity Incentive System. This system provides a bonus in exchange for the inclusion of one or more of the amenities that the CBD Action Plan policies have identified as necessary to achieve the desired character of the

city center. Eligible amenities include pedestrian-attracting retail frontage, plazas, pedestrian ways, street arcades, urban residential use, underground parking, internal pedestrian arcades, marquees, common community space, rooftop recreation areas, public meeting rooms, pedestrian skyways, and art or landscape features.

In order to implement the adopted Land Use Diagram, new zoning districts were established. CBD Office District 1 (CBD-0-1) is centrally located in the CBD and intended for the most intense business, financial, and specialized retail activities. Permitted FAR ranges from 5 to 8. Building height can range up to 200 ft without participating in a bonus system, and up to 300 ft if the developer takes advantage of the bonus program. The CBD Office District 2 (CBD-0-2) is basically the same as CBD-0-1, though with reduced intensity.

The CBD Multiple Use District (CBD-MU) is an area in which a wide range of retail activity, low-intensity office use, CBD support services, and residential uses is permitted. The CBD-MU zoning allows FAR ranges from 0.5 to 3 for office use and from 2 to 5 for residential use. The maximum height limitation for office is 100 ft and 200 ft for residential use.

The CBD Residential District (CBD-R) is an area in which high-density urban residential uses would be encouraged. The highest residential density allowed in the City is permitted in this district. Building height can range up to 200 ft with incentives above 150 ft allowed for participation in the amenity incentive system.

In addition to the new zoning districts, a CBD Core Design District has been established in the CBD Land Use Code. The purposes of the district are to provide specific development guidelines and to assure a high level of attractiveness, urbanity, design quality, and coordination of development within the most-intensive and visible portion of the CBD. A set of design guidelines has also been established for the following major design issues: (a) major pedestrian corridor, (b) transit center, (c) high-occupancy-vehicle routes, (d) pedestrian connections, (e) connector bicycle facilities, (f) major public open spaces, (g) minor publicly accessible spaces, and (h) view preservation corridor.

PEDESTRIAN MALL

Given Bellevue's suburban layout and its automobile-orientation, Metro and the City recognized a special need to analyze and evaluate transit alternatives specifically retrofitted to a suburban infrastructure. The transit alternatives evaluated included a CBD circulator, a transit mall, and a fixed-guideway people mover system. The Metro study concluded that the only viable downtown transit alternative would be a small scale downtown circulator system. The Bellevue CBD lacked a significant concentration of activity and had too much free parking for Metro to be able to provide effective transit service. However, the Metro consultant recommended a transit mall as a long-term alternative, which would be used as a catalyst to create a concentration of activity favorable to supporting a higher level of transit service. A plan to create a pedestrian mall in the Bellevue CBD evolved from the transit mall concept.

The CBD community leaders thought that it would be a good idea to have an automobile-free mall linking the centers of the retail and office core areas in the east-west direction. They were doubtful that the mixing of pedestrians and transit on a mall would be operable. There were basically three arguments that led to the exclusion of transit in the mall corridor:

1. Corridor width--The transit-pedestrian mall would have to have had a corridor 60-100 ft wide. Such a wide mall would consume too much expensive privately owned land. Considering the approximately 2.3 million ft² of total retail and a total employment force of about 24 000 forecast for 1990, the 60- to 100-ft-wide, 1500-ft-long mall would not fill with enough people to create an urban atmosphere. Community leaders insisted that the width of the mall should not exceed 40 ft.

2. Retail center--The expansion of the retail center called Bellevue Square Shopping Center, which was under way, was planned to add 600 000 ft² of retail by 1982 in addition to the existing 400 000 ft². It was doubtful that there would be an additional retail market large enough to fill the retail spaces that would be needed by the construction of the mall. The presence of an attractive retail facade along the transit mall was viewed as essential to its viability.

3. Focus--The Bellevue CBD needs a focal point for transit service to strengthen development of an office concentration. A transit mall might not be effective in achieving this objective. The establishment of a transit center in the vicinity of the pedestrian mall would be more desirable in a relatively small activity center like the Bellevue CBD.

After extensive discussions and some disagreement between the CBD community leaders and the City, it was decided that the individual property owners who owned land within 300 ft from the center of the pedestrian mall alignment would construct the mall when development of property along the mall took place. Under this arrangement, the pedestrian mall will be phased in over the years and appropriate activity levels would be assured in conjunction with adjacent development. Therefore, the completion date cannot be specifically set at this time, but the City is confident that the pedestrian mall will be developed because the properties along the mall are owned by only a few people, and most of them have expressed desires to redevelop their properties in the near future.

The adopted CBD Land Use Code defines the framework of the pedestrian corridor design. It also requires the property owners to submit a Pedestrian Corridor Design Plan to the City in order to assure continuity of the mall design as it is built.

TRANSIT CENTER

The plan to establish a transit center in the Bellevue CBD was formulated from basically two directions. As mentioned above, the Bellevue CBD needs a transit focal point, and such a point should be located in the center of the office core area. It was viewed that effective transit service and a coordinated transit facility such as a transit center would be a necessity in order to support the growth anticipated during the 1980s. In concert with Bellevue's planning efforts, Metro was developing its comprehensive plan for the 1980s called the Transit 1990 Plan (1).

When the 1980 plan was formulated in 1972, the year Metro was organized, its main objective was to increase transit ridership by focusing on service to downtown Seattle. This objective led to the establishment of a number of park-and-ride lots in the outlying areas. Although communities such as Bellevue had emerged as major activity centers, they had little service oriented to their centers. One of the recommendations that emerged from the Transit 1990 Plan effort was that Metro should expand transit service aggressively to capture transit demand oriented to outlying activity centers.

New transit networks with various combinations of local routes, park-and-ride lots, regional and community transit centers, freeway express stops, and regional express routes were analyzed. As a result, Metro adopted a plan that included four regional transit centers--one of which was the Bellevue Transit Center. The Transit 1990 Plan was finally adopted by the Metro Council in June 1981.

City staff felt that the proposed transit center concept could be implemented by using on-street facilities as a temporary solution, while planning for a permanent off-street facility. City and Metro staff quickly agreed on the location of this interim transit center. It was logical to place it on a street that had a relatively small traffic volume, was accessible to both the retail and office core areas, and was close to the proposed pedestrian mall corridor. It was determined that the center must be able to accommodate at least eight buses simultaneously in order to operate it in a "timed-transfer" manner, and that eight buses would come together every half-hour and exchange passengers during off-peak hours. The total cost of the on-street interim transit center was estimated at about \$90 000--most of which was for a traffic signal for pedestrians crossing the busy street.

The property owners in the vicinity of the interim transit center were at first reluctant to accept the interim transit center because of perceived traffic disruptions. In addition, the timed-transfer concept was new to them. It took almost six months to convince them that the transit center would bring few negative impacts and that positive impacts would largely offset the negative ones. The transit agency summarized impacts to transit service from a regional perspective if the interim transit center were not implemented as follows.

1. The transit center enables Metro to combine several relatively weak transit markets into one strong one. The center would serve riders destined to the Bellevue CBD, but it would also enable people to conveniently reach other major destinations by serving as a transit "gateway".

2. One of the lessons of the Bel-Hop experiment was that transit cannot effectively serve a specialized, select market when there is no existing ridership base. (Note that Bel-Hop was a CBD circulator initiated by Metro as a result of a citizen's task force recommendation and was discontinued in 1980 after one year of service due to lack of measurable ridership.) On an incremental basis, new Bellevue routes are started that add even more passengers to existing routes, thus strengthening the system as a whole.

3. Without this "twin-gunned" approach to reaching satisfactory ridership levels, Metro cannot justify additional transit routes serving downtown Bellevue for several years. During this time, office and retail growth in the CBD will continue to be largely supported by increased private automobile use.

The life of the interim transit center was set at four years. The interim transit center began its operation in January 1982, and the scope of work for the permanent transit center plan and the environmental impact statement are being formulated. The permanent transit center in the Bellevue CBD is scheduled to be operational in 1985.

PARKING MANAGEMENT

Parking is a particularly complex and sensitive issue in suburban communities. The amount of parking required has a definite impact on the ultimate rate

of return on investment for retail or office space. From a developer's viewpoint, parking in a suburban environment is a necessity because it offers door-to-door convenience to those persons traveling to an activity by automobile and enhances the attractiveness of the activity to its clients. From the City's viewpoint, the provision of adequate off-street parking minimizes potential impacts of automobile congestion on surrounding residential communities. Parking that is well planned and managed is an influential factor in the public's perception of the quality of development and CBD environment as a whole.

After various parking management tactics were reviewed, it became obvious that some of the tactics described by DiRenzo and others (4) were not directly applicable to the local situation. The following three concepts were adopted as the framework of the Bellevue parking management programs:

1. Excessive parking supply should be reduced through land use regulations, particularly for office use.
2. Flexibility in parking requirements should be offered to encourage the private sector to provide alternative modes of transportation, such as the use of transit, carpool, vanpool, and bicycle.
3. The private sector should be responsible for providing parking.

It had been recognized that the parking supply in the CBD was much greater than the demand that artificially depressed parking prices to near zero. Because the excessive parking supply was viewed as a major element that encouraged automobile use, it was felt that a gradual reduction of the parking supply was extremely important to establish a balanced multimodal orientation. General policies were translated into a land use code and the City Council adopted the following programs:

1. Minimum parking requirements were drastically lowered. Prior to the adoption of the new code, for example, an office building that had less than 100 000 ft² was required to provide 5 parking spaces/1000 ft². An office building that had more than 100 000 ft² was required to provide 3.3 spaces/1000 ft². These minimum requirements were reduced to 2 spaces/1000 ft².
2. Maximum parking requirements were established. The previous Land Use Code did not include any upper limits on parking spaces to be provided. The City Council has adopted maximum requirements slightly lower than the present level of estimated demand. For example, the maximum for office use was set at 3 spaces/1000 ft², whereas City staff felt that the demand was about 3.3 spaces.
3. A scheduled reduction of the maximum and minimum requirements was adopted for office development. The maximum and minimum requirements were to be reduced by 0.3 space/1000 ft² every two years. This policy was aimed at gradually reducing the availability of parking spaces, while accelerating programs designed to encourage the use of transit and high-occupancy vehicles.
4. A developer could propose parking construction at less than the minimum required amount, up to 50 percent of the minimum, provided he or she implemented programs to encourage the use of alternative modes such as transit and carpools.

METRO/BELLEVUE TRANSIT INCENTIVE SERVICE AGREEMENT

Prior to taking action to reduce minimum parking requirements and to impose maximum parking supply ratios, the City needed some commitment from Metro

to increase local transit service. On the other hand, a citizens' task force reviewing the Metro Transit 1990 Plan concluded that any of the transit alternatives examined would not be viable, unless (a) employment density in the CBD reached a much higher level, e.g., 50 employees/acre; (b) the City's parking policy was changed to encourage transit use by the commuter; and (c) a pedestrian environment was also established, including construction of a pedestrian mall. The transit agency was, in a way, reluctant to make a strong commitment as long as the existing automobile-oriented land use practices and the environment that were not conducive to transit continued. Under these circumstances, both jurisdictions recognized the need to enter into a formal agreement to satisfy the demands of both agencies simultaneously.

The concept to form such a transit service agreement was first presented to the Bellevue City Council in December 1979. The Council adopted a resolution approving "a statement of parameters and principles for the development of an agreement between the City and the Municipality (Metro) by which a numerical relationship would be established between employment density, and parking ratios and transit service improvements over and above a baseline level of service." The resolution also authorized the City administration to negotiate an agreement with Metro.

Baseline Level of Service

The most sensitive issue discussed during the negotiation process that took place between the City and Metro during 1980 was how to define a baseline level of service. The City administration requested that Metro define the future level of baseline service before the level of incentive service was determined, because transit service programmed under the agreement would be additional service beyond the baseline level that Bellevue was entitled to receive under normal circumstances. Bellevue staff could thereby be assured that the transit service provided under the agreement would actually be allocated from a service category other than the one that provided the regular service planned for the Bellevue CBD.

The issue of baseline service was important and complex for both agencies. Both sides wanted to maintain their flexibility within the agreement. For example, Metro did not want to make a commitment to transit service beyond that that their budget allowed. The City did not want to be locked into a baseline level that was less than a regional "fair-share" level.

Originally, it was intended that an agreement be formulated that would last through this decade. But since Metro and Bellevue could not agree to a baseline level of service for the long term, i.e., more than two years, the original idea to formulate a 10-year agreement was abandoned. This deadlock situation was finally broken with the decision that the term of the agreement should be relatively short and that a baseline level of service should be defined by Metro in a two-year implementation plan. The City could expect that planned service changes in a two-year plan would be implemented regardless of the new agreement. Finally, it was agreed that the Transit Incentive Service Agreement would be a two-year agreement, with the option to continue or discontinue the agreement if it did not perform as planned after two years.

Summary of Incentive Transit Agreement

Metro decided that they could set aside 10 000 bus hours for the Metro-Bellevue Transit Incentive

Agreement. This decision was based on the adoption of Metro's Transit 1990 Plan by the Metro Council. The Transit 1990 Plan set up guidelines for providing a network of service oriented to major activity centers outside of downtown Seattle. It also contained the following policy objective: "Develop and enter into cooperative agreements where actions by local jurisdictions, such as parking restrictions and increased population/employment density, can be matched by increased levels of transit service."

The next task was to select parameters that could be easily quantified. In accordance with the "agreement to agree" and Metro's adopted policy, parking and employment densities were considered the most important parameters influencing the creation of a transit environment in the Bellevue CBD. Because it was difficult to change the existing land use pattern, emphasis was placed on influencing future development. A decision was then made to "reward" increased employment density and to limit the supply of parking associated with new or expanded development.

The next issue was whether the selected parameters should be applied uniformly throughout the CBD or only to designated areas within the CBD. The City's and Metro's goal was to establish a focal office area, referred to as the "core," within the CBD. Therefore, a decision was made to provide a larger incentive or bonus to the CBD core area than to other areas outside the core.

Metro and Bellevue agreed to allocate the 10 000 bus hours as follows:

Area	Hours
CBD (core) employment density growth	3 000
CBD (whole) employment density	2 000
CBD (core) new parking supplies	3 000
CBD (whole) new parking supplies	2 000
Two-year total	10 000

An increase in employment density or the limitation of the parking supply in the core area could be used to "claim" additional bus hours from both the core and whole CBD categories. On the other hand, if employment density growth or limitation of the parking supply occurred outside the core, it could only be used to claim hours under the whole CBD formula. Therefore, more bus hours would be earned if employment growth occurred and if new parking supply was limited in the core area rather than outside the core.

The last issue needed to reach an agreement was how to establish relations between the allocated bus hours and the selected parameters: employment density and parking. Metro and Bellevue staff agreed on the following points regarding employment density:

1. The minimum level of employment growth for which Metro should "reward" hours was to be based on the Puget Sound Council of Governments' (PSCOG) forecast. (PSCOG is the regional planning agency in the Seattle Metropolitan area.) The reason given was that the PSCOG's forecasts were much lower than Bellevue's own projections. It was on the PSCOG's forecasts that the 1990 transit comprehensive plan was developed.

2. If CBD and core employment reached the higher forecast projected by the City of Bellevue Planning Department, Metro would commit to two-thirds of the total hours allocated in each category. If employment densities increased by 25 percent above Bellevue's own forecasts, the balance of the incentive hours would become available.

Bellevue had been concerned with PSCOG's forecast

because it did not assume a high level of growth in the Bellevue CBD. Thus, the City of Bellevue Planning Department produced its own more realistic forecast. Figures 2 and 3 show the relation that was accepted by Metro and Bellevue between transit service and employment density growth for the core area and the whole CBD, respectively.

The City could claim incentive service hours based on conditions at the end of each year or at the end of the two-year period. As shown in Figures 2 and 3, Bellevue could claim additional transit service if core employment density increased by more than 4 employees/acre in 1 year or 8 employees/acre in 2 years, and/or CBD employment density, including the core area, increased by 1 employee/acre in 1 year or 2 employees/acre in 2 years.

The relations between incentive transit service and parking supply were similarly established. In this case, Metro wanted to reward actions geared toward limiting future parking supplies. Instead of using absolute numbers of parking spaces, it was decided to use parking supply ratios, i.e., parking spaces per 1000 ft² of new development, to match with transit service.

Through the Transit Incentive Agreement, Metro wanted to reinforce the intent of the new CBD parking code. Metro and Bellevue staff together assumed that the level of the maximum parking requirement was close to existing demand. Therefore, most development proposals in the next few years probably would be designed in accordance with the maximum re-

Figure 2. Incentive hours earned relative to whole CBD employment density growth.

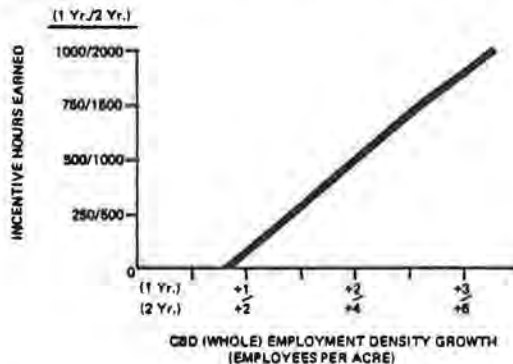


Figure 3. Incentive hours earned relative to car CBD employment density growth.

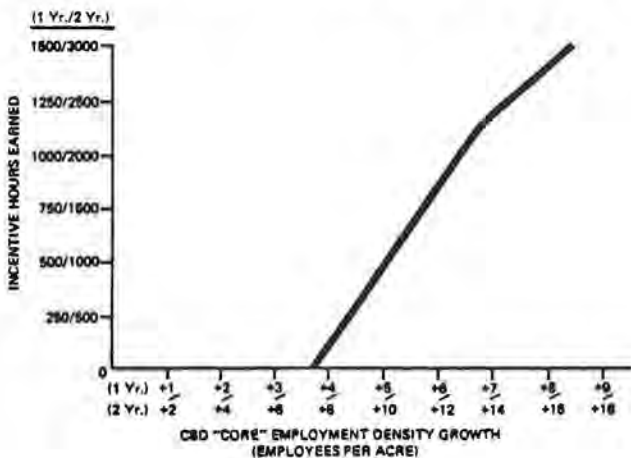


Figure 4. Incentive hours earned relative to car CBD parking changes.

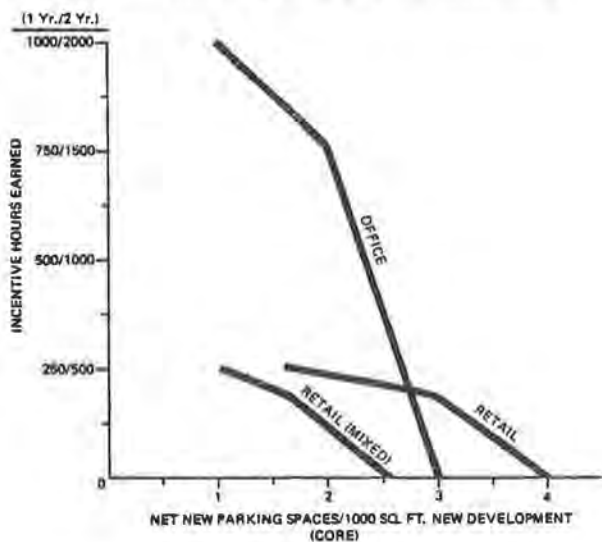
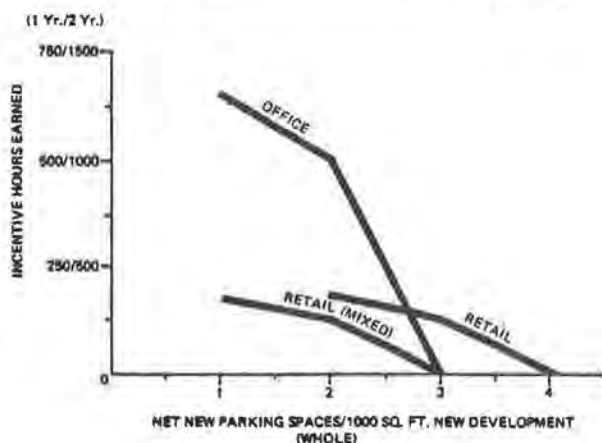


Figure 5. Incentive hours earned relative to whole CBD parking changes.



quirement, i.e., 3.0 spaces/1000 ft² of office. Both agencies agreed that Bellevue should be rewarded with additional transit service if development proposals included parking spaces at less than the maximum requirement level, i.e., the existing level of demand.

If the parking supply associated with the new office buildings, for example, averages 2.5 spaces/1000 ft² in the core area at the end of two years, the City could claim an additional 750 h of transit service as shown in Figure 4. Similarly, if new office parking supply averages 2.5 spaces/1000 ft² throughout the CBD, the City will receive an additional 500 h (see Figure 5). The total would be an additional 1250 h of transit service.

SUMMARY

Downtown Bellevue is emerging as one of the major activity centers in the metropolitan Seattle region. With cooperation from transit and other agencies, the City of Bellevue took several actions related to land use and transportation in the recent years. The City's goal is, in essence, to direct the anticipated growth to create a people-oriented urban activity center through transportation, pedestrian, and other incentives. The actions taken on parking management, the pedestrian mall, a transit center, and the incentive transit service agreement will have significant impacts on the intensity of activity and the pattern of development in the Bellevue CBD. The City has adopted land use regulations necessary to transform the suburban automobile-oriented center into an urban activity center designed for people. However, land use regulations alone will not be enough to achieve this goal. If land use regulations are closely coordinated with transportation elements such as those described here, the impacts would be much greater.

Since the City has set a framework for the development of the Bellevue CBD, the next task is to monitor changes in land use patterns and transportation-related data such as transit mode split and automobile occupancy.

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