

THE CITY OF NEW YORK OFFICE OF THE MAYOR NEW YORK, N.Y. 10007

Technical Memorandum for the East River Science Park

CEQR Number 01DME004M TM001

Modification of Programming for the Bellevue Psychiatric Building and Designation of the East River Science Park Site as an Expansion Site of the Chinatown Empire Zone

I. INTRODUCTION

The Mayor's Office for Economic Development and Finance (now the Office of the Deputy Mayor for Economic Development) issued a Notice of Completion for the East River Science Park (ERSP) Final Environmental Impact Statement (FEIS) on November 9, 2001. Subsequent to the approval of the ERSP project in 2001, the project changed slightly and new information was obtained. The Psychiatric Building was removed from the project and it was determined to be eligible for listing on the State/National Register of Historic Places. The remainder of the ERSP project did not change in any material aspect with the exception that the project would proceed in two phases, rather than three. Additionally, it is now proposed that the Chinatown Empire Zone (EZ) be expanded to include the site of the ERSP. Compared to the reuse of the Psychiatric Building described in the FEIS, a change in reuse if that building is also being proposed. The purpose of this technical memorandum is to determine whether the proposed changes to the reuse of the former Bellevue Psychiatric Building ("Psychiatric Building") as compared with the reuse program identified and analyzed in the 2001 East River Science Park Final Environmental Impact Statement (FEIS) and the designation of the ERSP as an EZ would result in any significant adverse environmental impacts. This technical memorandum also examines background conditions updated to 2012 and uses that updated information to determine if there would be any impacts from the modified Psychiatric Building redevelopment not previously disclosed in the FEIS.

The modified program for the Psychiatric Building differs from the initial projected development of the Psychiatric Building component of the ERSP project analyzed in the FEIS that include a change from staff housing, laboratory space, daycare, and conference center uses, to hotel, medical office, conference center, and retail uses. A detailed description of the proposed modified Psychiatric Building redevelopment, which is expected to be completed by 2012, is provided in the Project Description below.

This technical memorandum uses City Environmental Quality Review (CEQR) guidelines and thresholds to determine whether the proposed changes would result in significant adverse

environmental impacts not previously disclosed in the 2001 FEIS. As described in the New York State Department of Environmental Conservation SEQRA regulations, 6 NYCRR Sections 617.9(a)(7)(i)(a), (b), and (c), and the 2001 CEQR Technical Manual, the lead agency may require the preparation of a supplemental EIS if there are significant adverse impacts not addressed or inadequately addressed in the EIS that arise from changes proposed for the project, newly discovered information, or a change in circumstances related to the project. This technical memorandum was prepared to assess the need for further environmental review and finds that there would be no additional significant adverse impacts in any of the CEQR technical areas analyzed in the 2001 East River Science Park FEIS as a result of the modified development planned for the Psychiatric Building, the designation of the ERSP as an EZ, changes in background conditions or newly discovered information. Further, although the Psychiatric Building was determined to be eligible for listing on the State and National Registers of Historic Places subsequent to the completion of the FEIS, close coordination with the New York State Office of Parks, Recreation and Historic Preservation (the State Historic Preservation Office -OPRHP) and resulting commitments in the project to protect and restore the historic nature of the building ensure that there would be no significant adverse impact to this historic resource.

II. PROJECT DESCRIPTION

The New York City Economic Development Corporation (NYCEDC) and the New York City Health and Hospitals Corporation (HHC) propose to facilitate the redevelopment of the former Psychiatric Building at Bellevue Hospital Center. As stated above, the reuse of the Psychiatric Building with a different set of proposed uses was previously approved as one component of an earlier version of the ERSP project, which is now under construction.

The Psychiatric Building is located on an approximately 82,000-square foot parcel at 500 First Avenue, between East 29th Street and East 30th Street (Block 962, Lot 97) in the Kips Bay neighborhood of Manhattan. The modified proposed project would entail close coordination with SHPO in designing the reuse of the partially vacant building for hotel, conference center, medical office, and retail uses. Based on a Reasonable Worst Case Development Scenario (RWCDS), the proposed redevelopment would include approximately 240,000 square feet (sf) of hotel space (approximately 450 rooms); a 45,000 sf Conference Center; 53,420 sf of retail space including a restaurant and a fitness club/gymnasium; 60,000 sf of medical office space, and 55,000 sf of parking below grade. A total of 453,420 sf of nonresidential, mixed-use development is envisioned as part of the project.

Analysis of the modified proposal for the Psychiatric Building has been performed for the expected Build Year, or completion of construction and occupancy for the former Bellevue Psychiatric Building redevelopment project site, of 2012, and includes the impacts of other projects that would affect conditions in the study area, irrespective of implementation of the proposed project.

Background and Site History

Built in 1931, the Psychiatric Building is a nine-story, 398,420-square foot, red brick, limestone and granite structure built in the shape of the letter "H." The building was designed by Charles

B. Meyers in an Italian Renaissance style similar to the neighboring buildings on the Bellevue Hospital campus, many of which were designed by McKim, Mead and White.

Since the early 1980s, the New York City Department of Homeless Services (NYCDHS) has operated the building as a shelter for homeless men and an intake center for the shelter system. Independent of these proposed actions, NYCDHS is in the process of closing the shelter facility and relocating the intake center to another NYCDHS facility.

The current modified proposal for the Psychiatric Building is the result of an RFP that was issued by NYCEDC and HHC in March 2008. The goals of the development project as specified in the RFP were to: establish a reliable revenue source for Bellevue Hospital; support local medical-related institutions with hotel and conference space; preserve the Psychiatric Building; and achieve a LEED® Silver rated project. A hotel and conference use was suggested in the RFP because studies showed that these uses were the most financially beneficial and physically feasible, given the reuse constraints of the building. The hotel and conference center use would also complement the hospitals, research institutions and other medical-related uses along First Avenue. Several proposals were received in response to the RFP; the RWCDS evaluated in this technical memorandum comprises common elements of these proposals.

The current modified proposal for the Psychiatric Building alters the proposal for the building's reuse and renovation as initially described in the November 2001 ERSP FEIS. This earlier proposal received ULURP approval from the City Council on December 19, 2001. Pursuant to CEQR, the Mayor's Office for Economic Development and Finance was the lead agency responsible for conducting the environmental review and determining whether the proposed action would have significant impacts on public health and the environment. After considering the FEIS, the Office of the Deputy Mayor for Economic Development and Rebuilding (formerly the Mayor's Office for Economic Development and Finance and currently the Office of the Deputy Mayor for Economic Development) adopted the Statement of Findings on May 17, 2007.

During the period between the 2001 approval of the ERSP project and the 2007 Statement of Findings, with the exception of taking the Psychiatric Building out of the ERSP project and the determination of its eligibility for listing in the State and National Registers of Historic Places, neither the ERSP project nor its context changed in any material respect. However, the initially selected developer withdrew from the project in 2004. NYCEDC consequently released a second RFP for the ERSP in November 2004 to designate a new developer and a new developer was designated in August 2005. No substantial change has occurred in the use or site plan of the approved ERSP project. However, as indicated in the 2007 Statement of Findings, the phasing of the project differs, with the overall project now proposed in two phases instead of three. The overall program for the ERSP project includes 872,000 sf of bioscience space, approximately 61,000 sf of open space, and 720 parking spaces. The ULURP-approved site plan requires that the buildings and open space be constructed atop a raised platform to enhance views of the East River, provide passive open space and enhance the Bellevue Hospital campus. The currently defined second phase of the ERSP project (the Option Parcel, located south of East 30th Street to the east of the Psychiatric Building) is expected to be completed following the 2012 Build Year. The first phase of the ERSP project (the East and West Towers) is under construction and is expected to be completed by 2012, along with associated site improvements, including portions of the pedestrian plaza.

The renovation of the Psychiatric Building that was described and evaluated in the ERSP FEIS included adaptive reuse of the building only. As described in the FEIS, the previously approved program for the Psychiatric Building included approximately 220 units of staff housing in the east wing of the building, 115,000 sf of clinical research and practice space in the west wing of the building, a 9,000-square foot conference center in the center wing, and a 10,000-square foot child care center on the lower level (total of 353,000 gross square feet (gsf).

Description of the Modified Proposal for the Psychiatric Building

The modified proposed development scenario totals 453,420 gsf of floor area as follows, based on a RWCDS for the site. As stated above, the RWCDS is based on developer proposals that were received in response to the March 2008 RFP.

• Hotel: 240,000 gsf (approximately 450 rooms)

Conference Center: 45,000 gsfRetail/Restaurant/Gym: 53,420 gsf

• Medical Office: 60,000 gsf

Parking: 55,000 gsf

The redeveloped Psychiatric Building would be adjacent to the ERSP – a biotechnology center located between East 28th and East 29th Streets, east of First Avenue. The first phase of the ERSP project, approximately 600,000 sf in two towers, is currently under construction. The second phase of the project includes a tower on the parcel just east of the Psychiatric Building (the Option parcel), but the construction start date has not yet been determined. When complete, ERSP would contain 872,000 sf of bioscience space.

As part of the ERSP project, a raised pedestrian plaza would extend east from First Avenue, and would physically connect the Psychiatric Building's southern edge with the ERSP. The plaza would contain a cul de sac with turn-around above the bed of East 29th Street and, continuing east, it would contain landscaping, passive seating areas, a food kiosk, and opportunities for waterfront viewing. The plaza would also contain a glass enclosed Wintergarden between the two ERSP towers. Because of the grade change that slopes downward to the East River from First Avenue, some of first floor of the Psychiatric Building would be below the level of the plaza, requiring light wells for windows of the Psychiatric Building. Consultation with the OPRHP would occur prior to altering the exterior of the building. Parking for Bellevue Hospital and the ERSP would be located under the raised plaza.

Parking for the Psychiatric Building is proposed to be located below the building, possibly through valet service. Vehicle drop-off would be located at the midblock on East 30th Street. East 30th Street is an eastbound street and would remain so under the proposed project, except between First Avenue and the midblock hotel drop-off area, where there would also be a westbound lane so cars could turn around and exit at First Avenue. Building entry design treatments may include a port cochere on First Avenue, where a courtyard now exists.

The Psychiatric Building contains 11 WPA-era murals and it is expected that the some of the murals would be restored, particularly in the public areas, such as the lobbies. None of the murals are currently visible, having been covered by paint or plaster decades ago. The City's

Public Design Commission has jurisdiction over mural restoration and it is expected that the designated developer would work with the Design Commission to implement a mural restoration program.

For the proposed retail component, a mix of retail, restaurant and gymnasium/sports club uses are proposed. These would primarily face First Avenue, with the gym and medical offices located in the basement. A utility easement in favor of the ERSP property extends into the Psychiatric Building to allow for utility connections.

Table 1 below shows the changes in the project program compared to the program for the Psychiatric Building analyzed in the 2001 FEIS.

Table 1
Psychiatric Building Program – 2001 FEIS vs. 2008 Proposed Modified Redevelopment

Land Use	Development Program Analyzed in 2001 FEIS for Projected Reuse	Current Redevelopment Program	Net Difference
Staff Housing	220 Units	0.	(-220 units)
Laboratory	115,000 sf	0	(-115,000 sf)
Community Facility	10,000 sf	0	(-10,000 sf)
(Child Care)			
Conference Center	9,000 sf	45,000 sf	36,000 sf
Hotel	0	240,000 sf (450 rooms)	240,000 sf (450 rooms)
Medical Office	0	60,000 sf	60,000 sf
Retail	0	53,420 sf	53,420 sf
Parking	_ 0	55,000 sf	55,000 sf

An additional modification is the designation of the East River Science Park as part of the existing Chinatown/Lower East Side Empire Zone (EZ) (see Figure 1). The EZ program is a certification program through which businesses that create jobs or make investments in a geographically designated area are made eligible for a variety of New York State tax credits and benefits. Under the current rules, businesses in the program must be certified as eligible and if qualified may operate with a substantially reduced tax burden for up to ten years. The New York City Department of Small Businesses is applying to Empire State Development Corporation, on behalf of the City, for approval of the proposed designation, pursuant to EZ regulations allowing such changes. The proposed action also requires City legislation to formally complete the City's request to re-designate the EZ. The Chinatown/Lower East Side EZ is governed by a local administrative board, constituted in accordance with applicable state regulations, and managed by the Renaissance Economic Development Corporation, which is the local administrator for this EZ.

Required Approvals and Review Procedures

-SENSON

The following discretionary public approvals are anticipated for the Psychiatric Building redevelopment:

• Site disposition - through HHC's process (HHC Act, Section 7385 (6)), which requires a public hearing by the HHC Board and a City Council vote.

• Empire Zone expansion - requires City Council and Mayoral enactment of a local law creating an EZ on the site, and Empire State Development Corporation approval.

In addition, redevelopment of the Psychiatric Building will be done in accordance with the following:

- Historic Preservation MOA a Memorandum of Agreement (MOA) on the building signed by OPRHP, the City of New York and HHC was entered into as a condition of securing Federal funds for the ERSP project. Close coordination with the OPRHP, which has already commenced, shall continue through project design, especially because the use of Historic Tax Credits is anticipated.
- NYC Design Commission -The NYC Design Commission will review and approve mural restoration efforts.

Purpose and Need

The Psychiatric Building is located in the midst of a major medical service and research corridor along First Avenue from approximately East 16th Street (Beth Israel Medical Center) to the East 60s (Memorial Sloan-Kettering Cancer Center, Weill Cornell Medical Center) to the East 90s (Mount Sinai Medical Center). New development to be undertaken as part of the ERSP would support the medical and scientific research and economic development opportunities available within this corridor. In support of this, the purpose of the modified proposal for the Psychiatric Building is to provide a reliable revenue stream to HHC, specifically Bellevue Hospital, and create much needed hotel and conference center space catering to the surrounding medical and life science-related communities. The disposition would occur through a long-term ground lease. The revenue stream established through the ground lease would specifically help support the operations of Bellevue Hospital.

The Psychiatric Building redevelopment would maintain the architectural integrity of the Psychiatric Building with façade restoration and would occur pursuant to a Memorandum of Agreement with the OPRHP that ensures that redevelopment of this State and National Register of Historic Places-eligible building would include appropriate measures to avoid or minimize any adverse effects to the integrity or appearance of the Psychiatric Building.

The proposed redevelopment is expected to achieve a Leadership in Energy and Environmental Design ("LEED") rating of at least Silver. The project would also maximize employment opportunities for the City's local and disadvantaged residents through participation in the Targeted Hiring and Workforce Development Program ("THWDP"). The proposed action also advances the City's economic development goals by supporting hospitals and other medical facilities along the First Avenue corridor with a complimentary use, and through job creation.

The purpose of the proposed EZ designation is to address the economic needs of this designated geographic area, including redevelopment of sites suitable for development that are currently underutilized. The proposed designation of the East River Science Park as part of the EZ would provide a variety of financial incentives and benefits for companies seeking to locate on the site that would maintain or increase employment and invest in their businesses.

III. ANALYSES

Land Use, Zoning, and Public Policy

The 2001 ERSP FEIS indicated that the ERSP, which included the renovation of the Psychiatric Building as part of that previously approved project, would not substantially change land use in the surrounding area and would not result in significant adverse land use impacts. The previously proposed uses for the Psychiatric Building were described as being consistent with the medical-oriented facilities on the Bellevue campus, as well as with adjacent sites that also encompass biomedical and life sciences uses.

The modified proposal for the Psychiatric Building with hotel, medical office, retail and conference center uses that is the subject of this technical memorandum would alter area land uses to a greater extent than the previous proposal, although the revised uses still would be compatible with, and supportive of, the adjacent medical and life science-related institutional and mixed-use development. No significant adverse land use impacts would be expected. In addition, the expansion of the Empire Zone to the ERSP site would not have an impact on Land Use.

Land Use

Land use conditions within the ERSP FEIS study area were updated for this technical memorandum through consultation with the New York City Department of City Planning (DCP) and field surveys conducted in October 2008 to account for updated existing conditions and the status of development projects anticipated for completion through 2012 (see Figure 1). There have been no changes to the land use of the project site, which continues to be occupied by a nine-story, 398,420-square-foot, former Psychiatric Building associated with Bellevue Hospital Center.

Since the certification of the 2001 ERSP FEIS, the institutional no-build projects listed in the 2001 FEIS have been completed and the two southerly towers of the ERSP project are now in construction. In addition, there are two residential projects within the ¼-mile radius study area that are expected to be completed by 2012, including a 12-story apartment building at 305 East 33rd Street and two nine-story residential buildings on East 25th Street. The 12-story building located at 305 East 33rd Street, between First and Second Avenues would contain 130 dwelling units. The project is currently under construction and has a build year of 2010. The proposed two nine-story infill residential buildings located on East 25th Street, between First and Second Avenues, would contain 33 and 57 dwelling units, respectively. The proposed modified project has a build year of 2012.

Despite these proposed developments, however, the essential land use patterns within the project study area have remained similar to those detailed in the 2001 FEIS. Similar to the project analyzed in the 2001 FEIS for the ERSP and the former Psychiatric Building, the proposed modified project would include renovation of the existing Psychiatric Building and an adaptive reuse of the building. Although the newly proposed commercial use of the former Psychiatric Building (including approximately 240,000 gsf of hotel space with approximately 450 rooms, 45,000 gsf of conference space, 55,000 gsf of retail space including a restaurant and a fitness club/gymnasium, 40,000 gsf of medical office space, and 55,000 gsf of parking below grade)

would differ from the previously analyzed mixed-use development that included 220 units of staff housing, 115,000 gsf of laboratory space, 9,000 gsf of conference space and a 10,000 gsf child care center, the new uses proposed would be compatible with existing and anticipated future uses in the study area. The area in the immediate vicinity of the former Psychiatric Building is expected to continue to exhibit a mix of institutional, residential, and mixed uses. Therefore, the proposed new use of the former Psychiatric Building would not result in any significant adverse impacts on land use, and would not alter the findings of the 2001 FEIS.

Zoning and Public Policy

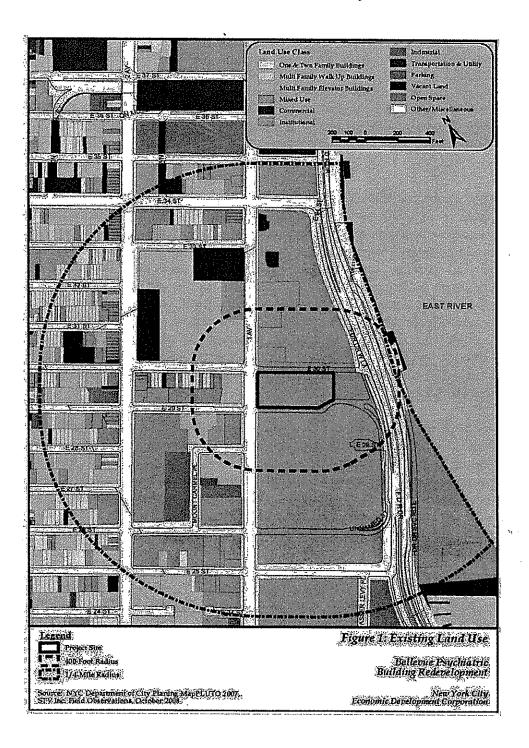
The project site is located in a C6-2 zoning district. The disposition approval obtained through the 2001 ULURP approvals for the ERSP restricted C6-2 uses on the site to: Use Groups 3 and 4 (hospital related uses); Use Group 6A (neighborhood retail), which was limited to not more than 5 percent of the total new floor area; and Use Group 6B (office), which was allowed on a limited and temporary basis only. However, the ERSP project stalled and the Psychiatric Building was never disposed pursuant to that approval. The NYC Department of City Planning has subsequently confirmed that the use restrictions do not apply since the disposition mechanism has changed. The Psychiatric Building would be conveyed through HHC's disposition authority (HHC Act, Section 7385 (6)) and thus the redevelopment of the Psychiatric Building for hotel, office and retail uses would be as-of-right under current zoning.

As indicated in the Project Description section above, designation of the ERSP as part of the existing Chinatown/Lower East Side Empire Zone (EZ) is also proposed. The EZ program is a certification program through which businesses that create jobs or make investments in a geographically designated area are made eligible for a variety of New York State tax credits and benefits. The New York City Department of Small Businesses is applying to the Empire State Development Corporation, on behalf of the City, for approval of the proposed designation, pursuant to EZ regulations allowing such changes. The proposed action also requires City legislation to formally complete the City's request to re-designate the EZ. Extending the Chinatown/Lower East Side EZ would support the stated need of economic development and foster the growth of biotechnology enterprises in New York City and would not alter the findings of the 2001 FEIS related to public policy.

Public policy relevant to the Psychiatric Building redevelopment in the form of a comprehensive plan for Manhattan Community Board 6 has been introduced since the 2001 ERSP EIS. The plan, entitled 197-a Plan for Eastern Section of Community District 6 Borough of Manhattan and approved in March 2008,, focuses on the waterfront and open space. 197-a Plan policies that are relevant to the Psychiatric Building and its vicinity include creating attractive open spaces and continuing north-south pedestrian circulation within the ERSP site, making improvements related to views and access through the campus between the waterfront and First Avenue; maintaining the existing street wall character along avenues; preserving the historic character and campus setting of Bellevue Hospital; considering landmark status for the Psychiatric Building; improving the East River Esplanade between 23rd Street and 42nd Street; and exploring FDR reconstruction opportunities related to creation of a decked park.

The modified proposal for the Psychiatric Building would not conflict with any of the applicable policies of the 197-a Plan for Manhattan Community District 6. It would enhance the future adjacent open space on the ERSP site and would preserve waterfront views. It would also

protect the historic features of the Psychiatric Building, the street wall along First Avenue, as well as the historic character of the Bellevue Hospital campus. Therefore, the modified proposal would not result in any significant adverse impacts to previously existing or updated public policies related to the project site and its land use study area.



Socioeconomic Conditions

The 2001 FEIS for the ERSP project identified no significant adverse socioeconomic impacts associated with that previously approved project that included the reuse of the Psychiatric Building. Because the modified proposal for the Psychiatric Building site includes an increment over the previously proposed project of nearly 300,000 gsf of commercial use and 36,000 gsf of conference center space, a socioeconomic screening analysis has been conducted for this technical memorandum according to CEQR Technical Manual methodologies to evaluate the potential for the modified proposal for the Psychiatric Building redevelopment to affect socioeconomic conditions. As described below, the current redevelopment proposal would not be expected to adversely affect the five categories of potential socioeconomic impacts identified in the CEQR Technical Manual. The project is not expected to cause significant direct or indirect residential or business and institutional displacement, or adversely affect specific industries.

According to the CEQR Technical Manual, a residential development of 200 units or less or a commercial development of 200,000 gsf or less would typically not result in socioeconomic impacts, unless it generates socioeconomic conditions that are very different from the prevailing conditions. The currently proposed reuse of the Psychiatric Building for a combination of hotel, medical office, retail and parking use would not include any residential dwelling units. Nonresidential development proposed for the site includes up to 453,420 gsf of hotel, commercial and medical office space, with the largest component comprising a 450-room, 240,000-square foot hotel. The hotel and associated office and commercial space would change the land use on the project site compared to existing conditions (a partially occupied men's shelter and intake center), or future conditions with the previously approved mixed-use development that included 220 units of staff housing, 115,000 gsf of laboratory space, a 9,000 sf conference center and a 10,000 sf child care center.

As indicated in the ERSP FEIS, the previous proposal for the Psychiatric Building would have reused an underutilized city-owned property and would have generated recurring economic activities. By providing a complementary set of uses that would foster the growth of biotechnology enterprises and fulfill the expansion needs of the New York University School of Medicine (NYUSOM), the FEIS indicated that it would have supported the activities of the NYUSOM, refurbished an underutilized building, created significant new biotechnology facilities, and benefitted the economy of the City and State by promoting growth of the biomedical/biotechnical research industry.

The CEQR Technical Manual calls for evaluation of socioeconomic conditions related to both residential conditions and business conditions where an action is expected to create substantial socioeconomic changes. According to the CEQR Technical Manual, a socioeconomic assessment should be conducted if a proposed action may reasonably be expected to create substantial socioeconomic changes within the area affected by the action that would not occur in the absence of the action. Actions that would trigger a CEQR analysis include those with the potential for the following:

• Direct residential displacement - the direct displacement of a residential population so that the socioeconomic profile of the neighborhood would be substantially altered;

- Direct business displacement the direct displacement of substantial numbers of businesses or employees or the direct displacement of a business or institution that is unusually important because: it has a critical social or economic role in the community and would have unusual difficulty in relocating successfully; it is of a type or in a location that makes it the subject of other regulations or publicly adopted plans aimed at its preservation; it serves a population uniquely dependent on its services in its present location; or it is particularly important to neighborhood character;
- Indirect residential and business displacement the introduction of substantial new development that is markedly different from existing uses, development, and activities within the neighborhood. Such an action could lead to indirect displacement. As indicated above, the CEQR Technical Manual additionally states that residential development of 200 units or less or commercial development of 200,000 gsf or less would typically not result in significant socioeconomic impacts; and,
- Adverse Impacts on Specific Industries a significant adverse impact may occur if an
 action would measurably diminish the viability of a specific industry that has substantial
 economic value to the City's economy. An example as cited in the CEQR Technical
 Manual would be new regulations that prohibit or restrict the use of certain processes that
 are critical to specific industries.

The following sections address the potential for these impacts as a result of the modified proposal for the project site.

Direct Residential Displacement

ī.,

The state of the state of

As with the previously approved project, there would be no direct residential displacement. The New York City Department of Homeless Services (NYCDHS) has operated the former Psychiatric Building since 1998 as a shelter for homeless men and an intake center for the shelter system and, independent of the proposed actions, is in the process of closing the shelter facility and relocating the intake center to another NYCDHS facility. The building is expected to be vacant by June 2009. While the demand for staff housing that would have been addressed by the previously proposed project would not be met with the current proposal, no significant adverse socioeconomic impacts as a result of direct residential displacement are expected.

Direct Business Displacement

The Psychiatric Building is currently partially vacant and is expected to be fully vacant by June 2009. No commercial businesses or employees would be displaced by the modified proposed action. The current proposal would result in an increase in employment on the project site compared to the previously proposed project. Laboratory space that would otherwise have been constructed with the previous proposal will not be provided under the current proposal. Therefore, no significant adverse socioeconomic impacts related to direct business displacement are expected.

Indirect Residential Displacement

The CEQR Technical Manual calls for a detailed evaluation of indirect residential displacement in circumstances where a project can lead to indirect changes including the following:

• The addition of substantial new population with different socioeconomic characteristics compared to the size and character of the existing population;

- The direct displacement of uses or properties that have a "blighting" effect on property values in the area;
- The displacement of one or more components of the population that would alter the socioeconomic composition of the study area;
- The introduction of a "critical mass" of non-residential uses such that the surrounding area becomes more attractive as a residential neighborhood; and,
- The introduction of a land use that could have a similar indirect effect if it is large enough or prominent enough or combines with other like uses to create a critical mass large enough to offset positive trends in the study area, to impede efforts to attract investment to the area, or to create a climate for disinvestment.

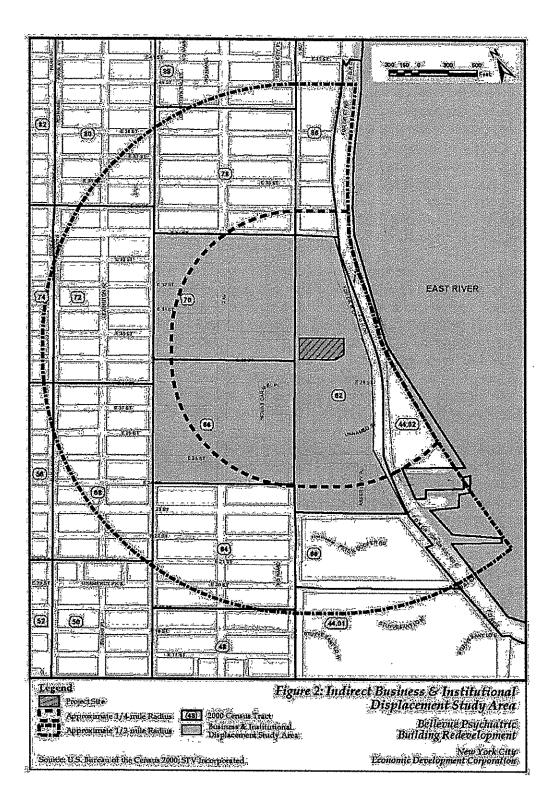
Compared to the previously approved project, the currently proposed project would have the similar effects of utilizing an underutilized property and making the surrounding area more attractive as a residential neighborhood. However, with the newly proposed hotel and retail components, the modified proposal would introduce more intense generators of economic activity than the previously proposed redevelopment of the Psychiatric Building, thereby increasing the likelihood that the project would make the area more attractive as a residential neighborhood and, by extension, potentially increasing rents in the area.

As it relates to the potential for indirect residential displacement, nine census tracts that fall within approximately ½-mile of the project site that comprise the study area for indirect displacement (see Figure 2) do not contain significant concentrations of households that would be considered at risk of secondary displacement. According to the 2000 census, the 34,546 households that reside in this socioeconomic study area had a year 2000 median household income of \$62,524 compared to all households in the borough of Manhattan (\$47,030), and the city as a whole (\$38,293). Census tract 66 that is located directly southwest of the project site and that includes portions of Second Avenue had the lowest household incomes of the nine study area census tracts (\$44,914). Field surveys indicate that housing conditions in this area are mixed, with some older four-story mixed-use buildings present facing Second Avenue that may contain fewer than six units, leaving them unprotected by rent regulation. However, this census tract contains only five percent of the study area's total households.

The area in general has experienced extensive new development of market rate housing and the relatively small amount of potential secondary displacement pressure generated by the modified proposal would not be expected to substantially accelerate trends related to rising land values and rents. Therefore, the limited indirect residential displacement pressure that might be generated by the modified proposal for reuse of the former Psychiatric Building would not be expected to result in significant adverse impacts from indirect residential displacement.

Indirect Business and Institutional Displacement

As with the analysis of indirect residential displacement, the preliminary assessment for indirect business and institutional displacement focuses on the issue of whether an action would increase property values, and thus rents, throughout the study area, making it difficult for some categories of businesses to remain in the area. An action can lead to such indirect changes if:



- It introduces enough of a new economic activity to alter existing economic patterns;
- It adds to the concentration of a particular sector of the local economy enough to alter or accelerate an ongoing trend to alter existing patterns;
- It displaces uses or properties that have had a "blighting" effect on commercial property values in the area, leading to rises in commercial rents;
- It directly displaces uses of any type that directly support businesses in the project area or bring people to the area that form a customer base for local businesses;
- It directly or indirectly replaces residents, workers, or visitors who form the customer base of existing businesses in the project area; or,
- It introduces a land use that could have a similar indirect effect, through the lowering of property values if it is large enough or prominent enough or combines with other like uses to create a critical mass large enough to offset positive trends in the study area, to impede efforts to attract investment to the area, or to create a climate for disinvestment.

With regard to the more intensive economic activity associated with hotel and retail use currently proposed for the former Psychiatric Building compared to the previously approved project, the new proposed action would introduce a new economic activity (hotel and convention center space) that may potentially alter existing economic patterns to some degree. It would introduce commercial development to the east side of the First Avenue medical corridor that now contains institutional uses with biomedical science research facilities under construction. Additional visitors to the area that would require support services such as restaurants and services would increase the intensity of economic activity in the area in general compared to the previous proposal for the project site with its mix of predominantly staff housing and laboratory space.

However, these new uses would be integrated into the fabric of the existing Bellevue campus and would for the most part occupy space that is now underutilized. The new uses would also largely be oriented towards staff of, and visitors to, the First Avenue medical corridor and would support the ongoing increase in biomedical science activities within the ERSP. The change in study area economic activity would mostly be expected to affect the immediately surrounding blocks in terms of the character of the area. For smaller area businesses that generally might be more vulnerable to pressures from rent increases, such as smaller service-related establishments and eating and drinking establishments on Second Avenue, the moderate increment of additional commercial use compared to the previously proposed action would not likely be large enough to increase area commercial rents to a degree that would substantially change the character of the area. This info is based on the proposed size of the development in relation to surrounding socioeconomic conditions as assessed in an October 2008 field survey, and on information on prevailing economic trends provided by NYC Department of City Planning and the 2001 ERSP FEIS. Recent data on hotel trends was provided by the NYC Economic Development Corporation.

A field survey of businesses within approximately ½-mile of the project site was undertaken in October 2008 to inventory existing conditions. The most prevalent business types found within this study area are eating establishments (16 percent), institutions/community facilities (14.6 percent), medical offices (9.7 percent), and food stores (9.7 percent). In addition, there are a significant number of tailors and laundries, and personal and beauty care establishments. The eating establishments in the area generally are smaller non-chain restaurants, diners, and take-out pizza or ethnic food establishments, housed in mixed-use (residential and commercial) buildings.

There is a high concentration of bars on Second Avenue in particular. Conditions of storefronts vary although there are many newer establishments catering to more upscale markets. Nearly 40 percent of the commercial uses, especially eating and drinking establishments and food stores, are found along Second Avenue. In contrast, First Avenue is dominated by institutional and community facility uses centered around NYU Medical Center.

The newly proposed uses for the Psychiatric Building are expected to facilitate new economic growth in the study area, and bring more intensive economic activity to the immediate First Avenue vicinity. While these changes in economic conditions could result in some limited indirect business displacement of smaller, lower margin storefronts that are more susceptible to rent increases as a result of increasing land values, the new program of redevelopment would not result in significant adverse indirect business and institutional displacement impacts within the study area. Potential increases in land values in this area would not be expected to be of a magnitude that would cause significant adverse indirect business displacement that would change the nature of economic activity in the area or the area's neighborhood character.

The development of the proposed hotel in the context of the larger surrounding section of the East Side of Manhattan in which the study area is located would continue an ongoing development trend, with other hotels currently proposed on East 44th Street between Second Avenue and Third Avenue, on East 43rd Street between Second and Third Avenue, and at Madison Avenue and East 33rd Street. As of September 2008, the Manhattan hotel occupancy rate was 85.7 percent, down from 86.7 percent in September 2007, although the average daily hotel room rate of \$381 represented an 8.6 percent increase from September 2007. The proposed hotel would also meet demand for lodgings in this far eastern area of lower Midtown that is currently underserved by hotel facilities, and that contains numerous large institutions that draw visitors that otherwise would not have convenient nearby access to hotel accommodations.

Adverse Effects on Specific Industries

The change in proposed use of the former Psychiatric Building would not be expected to result in significant impacts on clusters of specific industries, specifically the medical and life science industries, within the study area. The First Avenue Medical Corridor would benefit from the addition of hotel accommodations to support its workers and visitors. Substantial reductions in employment or negative effects on the economic viability of local industries or categories of businesses would not be expected.

Empire Zone

17

The Empire Zone (EZ) Program is proposed to be extended to the ERSP as part of the revised proposed action for the ERSP. Empire Zones are designated areas of New York State that offer tax benefits and incentives to encourage economic development, business investment, and job creation. The goal of the program is to create jobs and stimulate private investment in new or existing businesses in order to alleviate problems in impoverished areas of the State. To receive certain benefits, a business needs only to reside within the boundaries of a zone. All Empire Zone certified businesses may be eligible for wage tax credits, investment tax credits, zone capital credits and NYS sales tax refunds.

and the second

¹ "Economic Snapshot," New York City Economic Development Corporation, November 2008.

The establishment of the Empire Zone on the ERSP would have beneficial economic effects of stimulating job creation, expanding the range and scope of economic activity in the area, enhancing capital opportunities of local businesses and institutions, and improving the quality of life for residents, workers, and visitors. This aspect of the proposed project would help to establish the already proposed mix of uses in the area to where the zone would be expanded and would enhance the economic vitality of the uses described and evaluated in the ERSP FEIS, as well those in the modified proposal for the Psychiatric Building redevelopment. As with the other elements of the modified proposal, the extension of the Empire Zone to the ERSP would not be expected to result in significant adverse socioeconomic effects and is expected to strengthen economic conditions in the area.

Community Facilities

No significant adverse impacts to community facilities were identified in the ERSP as a result of the previously approved project. The FEIS evaluation of community facility impacts was limited to Police and Fire, and impacts on Bellevue Hospital.

With regard to the demand for community facilities, as stated in the CEQR Technical Manual, the demand for community services generally stems from the introduction of new residents to an area. Since no residential units are proposed under the modified proposal for the Psychiatric Building, no further analysis of effects on the demand for community facilities is warranted.

While the existing and historic community facility use of the Psychiatric Building would change to commercial use with the modified proposal, the existing men's shelter that occupies the Psychiatric Building will be relocated by mid-2009 irrespective of the modified proposal for the Psychiatric Building. Therefore, no direct impacts to, or displacement of, community facilities uses would occur. New York University School of Medicine facilities such as staff housing, staff practice and research space that had been proposed for the Psychiatric Building under the previously approved project, and that would have directly served and enhanced the community facility functions of the overall Bellevue campus, are no longer proposed. This change in the reuse program, however, would not be expected to result in significant adverse impacts to community facilities as other research and laboratory uses are currently under construction as part of the ERSP project. The currently proposed hotel, medical office space and increased conference center space would also complement and enhance the existing and future uses at Bellevue Hospital. The expansion of the Empire Zone to the ERSP site would not have an impact on Community Facilities.

Open Space

The ERSP FEIS indicated that the approved project would not result in any significant adverse impacts to open space resources. With no proposed staff housing, the modified proposal for the Psychiatric Building would not generate residential demand for open space, and therefore no further analysis of potential indirect effects to open space related to the addition of a new residential population is warranted.

The modified proposal would, however, increase worker population with its mix of hotel, office and retail uses compared to the laboratory space and staff housing previously proposed. An

evaluation of potential indirect open space impacts related to worker population was therefore conducted for this technical memorandum pursuant to the methodologies of the CEQR Technical Manual.

The evaluation assessed the effects of the change in use program, and the increase in future worker population on the Psychiatric Building project site compared to that of the previously approved project. Updated area conditions were also considered, including newly planned residential developments in the study area identified for completion by 2012. These developments were identified through consultation with the New York City Department of City Planning in November 2008, and included: a proposed 12-story apartment building with 130 dwelling units that would generate 221 residents and five workers; and, two nine-story residential buildings with a total of 90 dwelling units that would generate 153 residents and four workers. With the projects previously identified in the ERSP FEIS, there would be 1,351 new residents and 2,257 new workers in the ¼-mile study area. The change in the phasing and timing of the ERSP project was also considered in the updated open space analysis.

Table 2 shows that in the future with the proposed project, the active open space ratio would increase, but the passive open space ratio would decrease. This decrease is less than five percent however, and according to the CEQR Technical Manual does not represent a substantial change from 2006 No Build Conditions as described in the 2001 FEIS. Therefore, the open space conditions in the ¼-mile study would not be substantially changed by the modified proposal. No significant adverse impacts to open space resources would result.

The expansion of the Empire Zone to the ERSP site would not have an effect on open space resources in the study area.

Table 2: Adequacy of Open Spaces in the Non-residential Study Area

Non-Residential Study Area (1/4-Mile)	2001 FEIS		Updated Conditions				
	200631		2012 No- Build				
	2006 No- Build Condition	2006 Build Condition *	Condition **	2012 Build Condition ***			
Study Area Population							
Residents	21,834	22,134	23,432	23058			
Workers	18,101	20,364	20,585	21306			
Total User Population	39,935	42,498	44,017	44,364			
Open Space Acreage							
Total	11.467	12.454	12.518	12.518			
Active	3.587	3.587	3.587	3.587			
Passive	7.88	8.867	8.928	8.928			
Open Space Ratios							
Active (Residents)	0.0898	0.0844	0.1531	0.1556			
Passive (Workers)	0.4353	0.4354	0.4337	0.4190			
Combined Passive (Residents and Workers)	0.1973	0.2086	0.2028				
Percentage Change in Ratios (Build	to No-Build)			······································			
Active (Residents)	-6.03%		1.62%				
Passive (Workers)	0.02%		-3.38%				
Combined Passive (Residents and Workers)	5.74%		-0.78%				

^{*} The 2006 Build Condition in the 2001 FEIS includes two phases of East River Science Park Development, respectively in 2004 and 2006.

CHELON HORSEL

Shadows

The ERSP FEIS included a shadow analysis for the overall ERSP project that considered shadows for four representative days of the year and concluded that there would be no significant shadow impacts from the previously proposed ERSP project shadow increments. The FEIS further found that increases in shadows cast on the East River Esplanade for a short duration in the afternoon from September to March would not significantly alter the character of that open space. No shadow increment would have been added by the previous Psychiatric Building proposal, which did not include building additions. Similarly, the current proposal for the Psychiatric Building does not contemplate a building addition and, therefore, based on a shadow screening conducted for this technical memorandum, no significant adverse shadow impacts are expected by the modified proposal.

^{**} The proposed construction program analyzed in the 2001 FEIS (2006 Build Condition) is used as the basis for the Psychiatric Building development 2012 No-Build Condition, though the 2012 No-Build Condition relies on 2000 Census data (in place of the 1990 Census data used in the FEIS) and excludes the Biotech II development, which will not be finished by 2012.

^{***} The updated 2012 Build Condition only changes the use of the Psychiatric Building with respect to the FEIS (adding 981 employees per the new program subject to this technical memorandum in place of 260 employees previously considered in the FEIS); this 2012 Build Condition is compared to the 2012 No-Build Condition with a net increase of 721 workers and net decrease of 374 residents.

The expansion of the Empire Zone to the ERSP site would not have an effect on shadows.

Historic and Archaeological Resources

No significant adverse impacts to historic or archaeological resources were identified in the 2001 FEIS for the ERSP project. Subsequently, the Psychiatric Building was subject to a MOA among OPRHP, HHC and the City of New York. The MOA requires, among other things, consultation with OPRHP prior to altering the interior or the exterior of the Psychiatric Building (see Appendix A – Agency Correspondence).

With regard to archaeological resources, the ERSP FEIS indicated that there does not appear to be any discrete land area of any size within the project site that has not been repeatedly built upon since the founding of the Bellevue Hospital complex. Utility connections, steam tunnels, catch basins, and storage tanks have also been repeatedly installed and abandoned throughout the complex. Any former yards -- which at one time could have maintained archaeological resources relating to industrial activities -- and residential structures, were subsequently disturbed. It was concluded that the project site has no potential for prehistoric or historical period archaeological resources, and no further consideration for archaeological resources is warranted (see Appendix A. Agency Correspondence). Therefore, as with the previously approved project, the current proposed modified redevelopment of the Psychiatric Building would not have any significant adverse effects on archaeological resources.

No significant adverse impacts to historic resources were identified in the FEIS, which indicated that the restoration of the Psychiatric Building and the sympathetic adaptive reuse of the building were considered a significant positive impact on historic resources. With regard to other ERSP development, the FEIS indicated that while the new buildings would alter the context of the potential and designated historic resources, the design and use of materials would be simple, but compatible with the more elaborate design of the existing Psychiatric Building and R & S Building.

As construction of ERSP's West Tower would occur within approximately 40 feet of the Psychiatric Building, construction would follow the requirements of New York City Department of Buildings Technical Policy and Procedure Notice (TPPN) #10/88, concerning procedures for avoidance of damage to historic structures from adjacent construction. This policy and the procedure notice were developed by the Department of Buildings for construction near historic landmarks to avoid potential adverse impacts during construction.

The Psychiatric Building has been determined to be eligible for listing in the State and National Registers of Historic Places. In a Resource Evaluation for the Psychiatric Building prepared by the OPRHP in 2007, the building is identified as being eligible for inclusion in the National Register based on Criterion A (properties associated with events that have made significant contribution to the broad patterns of our history) and Criterion C (properties that embody the distinctive characterizing of a type, period or method of construction; or represent the work of a master; or possess high artistic values; or represent a significant and distinguishable entity whose components may lack individual distinction). In its Resource Evaluation, OPRHP described the building's Italian Renaissance architectural features, including its contributing perimeter fence.

According to OPRHP, the Psychiatric Building, along with the other historic structures on the Bellevue campus (R & S Building, Administration Building, and C & D Building), is architecturally significant as an example of urban institutional design, and meets Criterion A in the areas of social history and health for its association with Bellevue Hospital, which is reported to be the oldest municipal hospital in North America.

The proposed combination of hotel, medical office, retail and parking use in the renovated Psychiatric Building would occur in close coordination with SHPO and pursuant to the MOA that is intended to ensure that construction, alteration, remodeling, demolition or other modifications to the structure or setting would maintain the building's relationship to Bellevue's historic buildings, and preservation of the gathering rooms (such as the auditorium and the lobbies) would be undertaken to the extent possible.

With the provisions of the MOA in place, consultation with OPRHP would occur, especially since the use of Historic Tax Credits is anticipated for this project. Given the MOA's safeguards against inappropriate redevelopment of the building and the fact that the project would primarily entail reuse of the building with some changes to the ground floor of the building for the addition of storefronts, no significant adverse impacts to the Psychiatric Building or its surrounding context would be anticipated.

The inclusion of medical office space and the close physical interface with the ERSP project would maintain an association with the Bellevue campus. By providing accommodations for staff and visitors, the hotel would also support ongoing biomedical research functions on the Bellevue campus. Upgrading of the building and the activation of its surrounding streetscape with ground floor retail would be expected to enhance access of the public to this historic resource and improve its visual conditions. To avoid construction period impacts on this historic resource, construction would follow the requirements laid out in TPPN #10/88. Therefore, no significant adverse impacts to historic resources are anticipated. The expansion of the Empire Zone to the ERSP site also would have no effect on historic or archaeological resources.

Urban Design and Visual Resources

The 2001 ERSP FEIS did not identify any significant adverse urban design or visual resources impacts from the Psychiatric Building renovation and reuse or the larger ERSP project. The FEIS notes that the Psychiatric Building is a richly decorated brick and stone building that is the only visual resource on the ERSP project site, but that the FDR Drive, the parking beneath it, and the Waterside complex obscure most views to and from the East River and the Esplanade. It further notes that there are few significant view corridors to the nearby waterfront in the study area, due to superblocks and the FDR Drive, and that waterfront views eastward along East 29th Street and East 30th Street to the elevated FDR roadway and above are limited to a sliver of the East River and the opposite waterfronts of Greenpoint, Brooklyn, and Hunters Point, Queens, with the Waterside residential complex, the NYU Hospital Center/NYUSOM and Bellevue Hospital Center blocking views to the river from other east-west streets in the study area for urban design and visual resources.

The ERSP FEIS indicated that the effects of the previously approved Psychiatric Building renovation and reuse would comprise a major improvement to the character of First Avenue, and

that the restoration of the façade, as well as full utilization of the building, would considerably improve its character as a visual resource.

With respect to urban design conditions of the larger ERSP site and study area, the FEIS stated that the proposed 220-foot and 280-foot tall towers of the ERSP project would be visible from First Avenue and would have a more imposing presence on the eastern portions of the ERSP project site and its low-rise uses, but that their height would be consistent with other tall buildings in the area. It stated that more distant views of the Psychiatric Building from the FDR Drive, the East River and the East River Esplanade were expected to be largely blocked by the new ERSP high rise towers. With the construction of the Option Parcel tower on hold, the Psychiatric Building would continue to be visible from the FDR Drive and distant areas to the east, including the East River Esplanade.

Under the modified proposal for the Psychiatric Building, even with the greater visibility compared to the previously approved project of the building from the east in 2012 as a result of the delay in construction of the Option Parcel tower, views from areas to the east including the East River Esplanade would not be significantly affected. The Psychiatric Building redevelopment project would not block visual access to the waterfront and is expected to enhance the East River Esplanade by providing a nearby hotel facility whose patrons would likely take advantage of this waterfront amenity, increasing pedestrian activity on and leading to the waterfront.

The urban design and visual resources screening analysis that was conducted for this technical memorandum pursuant to CEQR Technical Manual guidelines for the modified proposal for the Psychiatric Building confirmed the ERSP FEIS' conclusions of no significant adverse impact on block shapes, streetscape conditions, and building uses, shapes and forms in the study area. Updated photographs of the Psychiatric Building and its surrounding areas are shown in Figure 3. The screening analysis indicated that the change in use from primarily staff housing and laboratory use to primarily hotel/conference center, medical office and retail use would bring an increase in activity to the site and its surrounding streetscape compared to future conditions in 2012 with the previously approved project. Hotel lobby and façade treatments would be expected to differ from building entrance and façade treatments otherwise expected without the modified proposal. With the modified uses and design, there would be a more inviting and publicly oriented treatment of the First Avenue courtyard. Streetscape features of the current proposal may include a port cochere entrance on First Avenue, with payers and circulation area replacing some of the existing landscaping features within the First Avenue courtyard. With the addition of ground floor shops with transparent storefronts and the round-the-clock use associated with a hotel, First Avenue in this location would have a more active appearance. improving the streetscape. On East 29th Street, the proposed cul de sac and pedestrian plaza associated with the ERSP project would face windows of hotel rooms or medical offices, with an active use of the East 29th Street courtyard enhancing the attractiveness of that space both day and night. As with the previously approved project, the pedestrian plaza on East 29th Street would provide the key interface between the Psychiatric Building redevelopment and the ERSP project.

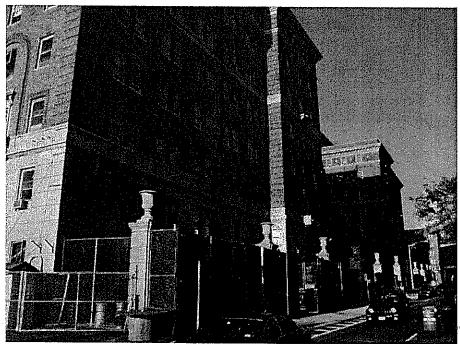
Figure 3. Views of Project Site and Study Area



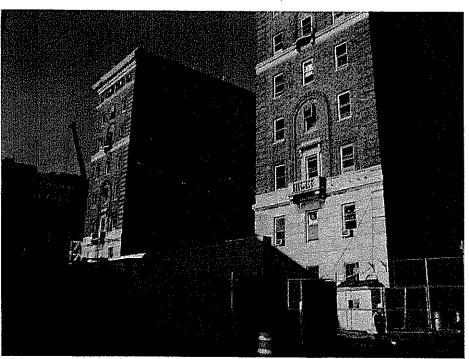
(1) Psychiatric Building Viewed from First Avenue.



(2) Psychiatric Building with NYU Medical Center and Office of the Chief Medical Examiner to the north.



(4) Psychiatric Building viewed looking southwest on East 30th Street.



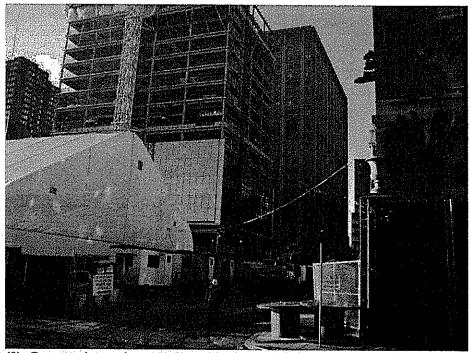
(5) Eastern courtyard of Psychiatric Building.



(6) Southern façade of Psychiatric Building and East 29th Street construction.



(7) Kips Bay Towers viewed looking West from First Avenue and East 30th Street.

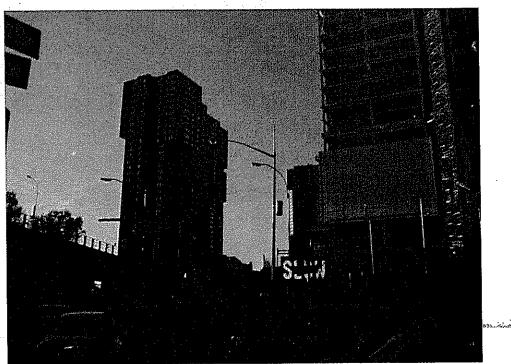


(8) Construction to the rear of Psychiatric Building viewed looking southeast from East 30th Street and northeast corner of Psychiatric Building.



(9) FDR Drive and view toward waterfront from East 30th Street.

AND THE



(10) East River Science Park construction to the rear of Psychiatric Building viewed looking southeast from East 30th Street and FDR Drive.



(11) First Avenue Medical Corridor viewed looking northeast from East 26th Street.

A minor change in the configuration of vehicular access on East 30th Street is currently proposed. East 30th Street is an eastbound street and would remain so under the proposed project, but with the proposal to be two-way between the midblock hotel drop-off area and First Avenue so that cars can turn around and exit at First Avenue.

Reuse of the project site for a hotel and other nonresidential development would benefit urban design conditions in the urban design study area by providing a complementary use to the surrounding buildings in this existing medical corridor, through greater activation of the block face along First Avenue than previously proposed. By providing support services and modern accommodations for visitors to the existing and planned medical and research facilities, the modified proposal would introduce synergies that would make the entire First Avenue corridor within the study area a more attractive environment to work in, as well as to visit, for its state-of-the art facilities. Hotel visitors would also likely take advantage of recreational amenities such as the planned ERSP pedestrian plaza.

Building bulk and massing as viewed from the most prominent First Avenue frontage of the Psychiatric Building would be unchanged from the previously approved project. The visual conditions along First Avenue would improve and activate with the opening of the existing courtyard as a secondary entrance to the proposed hotel. The East 30th Street courtyard would serve as the primary vehicular drop-off point, with garage access from East 30th Street at the location of a newly built roadway that would provide access to the ERSP garage.

The modified proposal for the Psychiatric Building is not expected to have significant adverse impacts on visual resources in the study area. Existing notable views of the historic buildings of the Bellevue campus would not be obstructed by the proposed action. Views toward the waterfront down East 30th Street, currently blocked by the FDR Drive, would not be otherwise changed.

The former Psychiatric Building itself would be largely unaltered although the primary visual effects would be the rehabilitation of its facades. The adaptive reuse of the building would include new fenestration at ground floor level along the First Avenue frontage. As indicated above, any modifications would blend with the building's Italian Renaissance style architecture, and would continue previous basic rehabilitation and modernization efforts on the Psychiatric Building site and the Bellevue campus. These have included the refurbishment of the Psychiatric Building's eastern courtyard building portion, with modern vertically configured windows that respect that rhythm of the building's fenestration above, and sensitive repair of the easternmost wall of the building with matching colors and materials.

The restoration and sympathetic reuse that is currently proposed is expected to have a significant positive impact on this visual resource. While the change in use is not expected to significantly alter the character of the surrounding area's streets, it should be noted that OPRHP indicated in a 2006 Resource Evaluation for the Psychiatric Building that its association with Bellevue Hospital qualifies the building as meeting Criterion A for Inclusion in the National Register ("Association with events that have made significant contribution to the broad patterns of our history"). The current redevelopment plan would maintain a close physical interface with the ERSP and the remainder of the Bellevue campus, and part of the redevelopment program would include medical office space. As a result of the currently proposed redevelopment of the Psychiatric

Building, the ERSP plaza that is now under construction on East 29th Street would face a more active building façade to the north, and would benefit from an increase in pedestrians generated by the hotel, conference center and other uses proposed for the Psychiatric Building. The expansion of the Empire Zone to the ERSP site would not have an effect on Open Space.

Neighborhood Character

The ERSP FEIS concluded that the previously proposed project would not have significant adverse effects on neighborhood character, or the various elements that together define neighborhood character. It indicated that with uses consistent with the medical-oriented facilities in the study area, land use would not be significantly impacted. The restoration and adaptive reuse of the Psychiatric Building would contribute positively to the character of the area. With regard to urban design, it concluded that although the previously proposed ERSP project would alter the urban design of the project area by introducing new, tall buildings of contemporary design, the expected design and use of materials were expected to be compatible with the more elaborate design and use of the area's existing historic buildings. The FEIS stated that all traffic impacts could be mitigated through signal timing changes. Noise levels were expected to change from the "marginally acceptable" to the "marginally unacceptable" category, although mechanical equipment such as heating, ventilation, and air conditioning (HVAC) and elevator motors would have sufficient noise reduction devices pursuant to applicable regulations and standards. The FEIS indicated that measures would be undertaken to mitigate any noise impacts.

While the modified proposal would have differing effects on the elements that together comprise neighborhood character, no significant adverse impacts have been identified related to land use, socioeconomic conditions, urban design and visual conditions, traffic and parking, noise, or historic resources. The modified proposal, while introducing commercial uses, would still be complementary from a land use perspective. The hotel would support visitors and patients of the Bellevue Hospital campus and ERSP. Medical office use would be consistent with surrounding uses on the campus. Urban design would be enhanced with the restoration of the Psychiatric Building's façade. The proposed modifications to the reuse of the Bellevue Psychiatric Building would result in significant traffic impacts at two study area intersections, which were not previously identified in the ERSP FEIS. However, these impacts could be mitigated through signal timing changes.

An assessment of potential noise impacts of the modified proposal indicate mobile source-related noise impacts would not occur. The CEQR Technical Manual has set noise attenuation requirements for buildings based on anticipated exterior noise levels. These recommended noise attenuation values are designed to provide an interior noise level of 45 dBA or lower. As the area noise levels are primarily the result of vehicular movement; the anticipated insignificant increase in traffic noise levels from project-related vehicles, as well as the agreement between noise monitoring conducted for this technical memorandum and the 2001 ERSP FEIS, indicate that the attenuation requirements for the proposed project would not change from the those determined for the 2001 ERSP FEIS. As a result, required L₁₀ attenuation would not be greater than 35dB for any of the building facades of the modified development. The only source of project-related stationary noise would be from internal and external mechanical equipment required for the modified development (such as elevator motors). This equipment would be fitted with the

required noise reduction devices to comply with applicable NYC noise regulations and standards.

Because the proposed reuse of the Psychiatric Building would add a complementary set of uses to this portion of the Bellevue campus and would physically upgrade an underutilized historic resource, effects of the reuse would be expected to be beneficial to neighborhood character. The proposed hotel would enliven the First Avenue streetscape and ground floor retail would similarly activate the immediately surrounding sidewalks in this area. Therefore, conclusions of the ERSP FEIS related to neighborhood character would still be applicable to the modified proposal. No significant adverse neighborhood character impacts are anticipated due to the reuse of the Psychiatric Building or the expansion of the Empire Zone to the ERSP site.

Natural Resources

No significant adverse impacts related to natural resources would occur as a result of the modified proposal for the Psychiatric Building or due to the expansion of the Empire Zone to the ERSP site. As defined in the CEQR Technical Manual, a natural resource is a plant, animal species or any area capable of providing habitat for plant and animal species. Any area capable of functioning to support environmental systems and maintain the City's environmental balance may also be considered a natural resource. Such resources include surface and groundwater, soils, drainage systems, wetlands, dunes, beaches, grasslands, woodlands, landscaped areas, gardens, parks and built structures used by wildlife.

The project site is urbanized and has been completely developed and disturbed, does not contain natural features of significance, nor is it located immediately adjacent to any natural resources. No habitat for rare, threatened or endangered species exists within the project site. A letter dated November 17, 2008 was received from the New York State Department of Environmental Conservation (NYSDEC), Division of Fish, Wildlife and Marine Resources stating that the project site has no known occurrences of rare or state-listed animals and plants, significant natural communities, or other significant habitats maintained in the New York Natural Heritage Program databases (see Appendix A. Agency Correspondence).

Floodplains are defined as areas low enough in elevation to hold flood waters during significant storm events. Regulated floodplains are defined by the Federal Emergency Management Agency (FEMA) and include areas that flood during storms that have a one percent chance of occurring in any given year, which is equivalent to the likelihood of a storm occurring once every 100 years (100-year storm). FEMA also maps the 500-year floodplain but these areas are not regulated. At the local level, New York City's Local Law 33 of 1988 regulates construction in the 100-year floodplain and requires that habitable structures be flood-proof or elevated above the 100-year floodplain. The project site is not located in a 100-year or a 500-year floodplain. FEMA's Flood Insurance Rate Map for the project site indicates that the boundary of the 100-year floodplain Zone AE is adjacent to the northeastern and southeastern corners of the Psychiatric Building project site. Nevertheless, the proposed action would not result in significant adverse impacts related to the floodplain.

As described by the CEQR Technical Manual, all of New York City's coastal resources are considered important and are protected by the New York State Department of State (NYSDOS)

Coastal Management Program. In addition, New York City has a Local Waterfront Revitalization Plan (LWRP) that guides utilization and development of the city's shoreline. As the project site is located within New York City's coastal zone boundary as outlined by the New York City Department of City Planning (DCP), an analysis of the consistency of the proposed action with the applicable coastal zone policies is included in the LWRP section of this technical memorandum.

Since no significant natural resources exist on the project site, the modified proposed action would not result in significant impacts on natural resources. The project site is totally devoid of natural resources and is already occupied by an existing building and paved areas. The modified redevelopment is not expected to have any significant impacts on natural resources, including ground water, floodplains, coastal resources, wildlife, wetlands, uplands, built resources, and significant, sensitive, or designated resources.

Hazardous Materials

The ERSP FEIS addressed the potential for the presence of hazardous materials resulting from the overall ERSP project and included descriptions of the findings of a Phase I Environmental Site Assessment (ESA) for the overall ERSP project. The ESA recommended appropriate precautions to avoid adverse environmental impacts from contaminants including removal of hazardous materials in compliance with all applicable regulations to ensure that no adverse hazardous materials impacts would occur to this area as a result of the previously proposed actions. A Health and Safety Plan (HASP) for recommended Phase II investigations was prepared and approved by the DEP, but was not immediately implemented due to the temporary morgue activities at Bellevue related to the events of September 11, 2001.

With regard to the Psychiatric Building, the Phase I ESA described in the ERSP FEIS indicated the presence of asbestos and lead-based paint (LBP), which could potentially be released into the air during renovation or demolition. The FEIS also described the potential for hazards associated with the future use of materials in the proposed laboratories, including hazardous chemicals, biohazards, and radioactive materials.²

Additional analyses of conditions of the Psychiatric Building have been conducted since the ERSP FEIS. An Environmental Site Assessment of the Bellevue Psychiatric Hospital site (Psychiatric Building) was completed by AKRF, Inc. in March 2008. The assessment identified potential environmental concerns associated with the site resulting from its past or current uses as well as similar uses on neighboring properties. This ESA revealed the following recognized environmental conditions on or near the Psychiatric Building.

- Two 55-gallon drums were observed in the basement, one empty and one sealed with unknown contents. No signs of staining or leaking were observed in the area around the drums.
- Asbestos-containing materials (ACMs) were determined to be present within the building in a May 2007 asbestos investigation. ACMs were detected in many components,

² AKRF Inc., East River Science Park Final Environmental Impact Statement, November 2001.

³ AKRF Inc., Phase I Environmental Site Assessment for the Bellevue Hospital Site, March 2008.

255.

including the following: cementitious pipe insulation and joint insulation, vinyl floor tiles and floor coverings, plaster, suspended ceiling tiles, window caulking and roofing materials. The suspect materials were observed to be in generally good condition; however, localized and significantly damaged areas were noted.

- Lead-based paint was determined to be present within the building by a May 2007 lead paint investigation. Lead-based paint was detected in many of the surfaces, including walls, ceilings, doors, door components, window components, and radiators throughout the building. Paint was generally in good condition in occupied spaces, such as the dorm rooms, dorm halls, office areas, and recreation rooms at the site. However, painted surfaces in the unoccupied areas were observed to be in poor condition. The damaged areas were extensive and had resulted in the accumulation of paint chips along the floors and other surfaces.
- Fluorescent lights and electrical transformers may include components containing polychlorinated biphenyls (PCBs) and/or mercury.
- Numerous documented spills have occurred at the south-adjacent Bellevue Hospital
 complex and at other adjacent properties. Spills include tank test failures and soil
 contaminated with petroleum products. Due to their proximity to the subject site and the
 tidal influence of the East River, these adjacent spills may affect soil and groundwater
 beneath the project site.

The ESA recommended that the contents of the sealed 55-gallon drum observed in the basement be determined and the drum and that its contents be disposed of in accordance with applicable regulations.

Due to the proximity of adjacent documented spills and historic adjacent auto repair facilities and garages, a subsurface (Phase II) investigation, including the advancement of soil borings and groundwater monitor wells, was recommended. Several activities were identified, including:

- Soil and groundwater samples should be collected from the borings/monitor wells to characterize soil and groundwater quality beneath the study site.
- Prior to any renovation or interior demolition activities, a comprehensive asbestos survey should be conducted throughout the building to identify all visual and hidden ACMs. Destructive techniques should be utilized, including probes into walls to access hidden asbestos-containing materials and the removal of floor tiles to access multiple layers of flooring and/or cores through roofing. ACMs should be removed by a licensed abatement contractor in accordance with all applicable federal state and local regulations.
- Any renovation activities with the potential to disturb lead-based paint must be performed in accordance with the applicable Occupational Safety and Health Administration regulation (OSHA 29 CFR 1926.62 Lead Exposure in Construction).
- Unless there is labeling or test data that indicate that fluorescent light fixtures do not
 contain mercury and/or PCBs, disposal, if required, should be performed in accordance
 with applicable federal, state, and local regulations and guidelines, according to the ESA.

The ESA recommended that if soil disturbance is required for site development activities, excavated soil should be managed in accordance with all applicable regulations. Soil intended for off-site disposal should be tested in accordance with the requirements of the intended receiving facility. Transportation of material leaving the site for off-site disposal must be in

accordance with federal, state and local requirements covering licensing of haulers and trucks, placarding, truck routes, manifesting, etc. If dewatering is necessary for any future development, discharges to the municipal sewer system must meet DEP criteria for effluent to municipal sewers, in accordance with the DEP Bureau of Wastewater Treatment' (BWT) Wastewater Quality Control Permit. Discharge water may need pretreatment to meet these criteria, according to the ESA.⁴

With adherence to the recommendations of the 2001 ERSP FEIS with regard to hazardous materials on the overall ERSP site, including the findings of its described ESA, as well as the recommendations of the 2008 ESA for the Psychiatric Building, conclusions of the FEIS are expected to be applicable to the modified proposal. With the implementation of measures described in the FEIS, no adverse impacts related to hazardous materials are expected to occur as a result of the demolition and construction activities for the proposed ERSP, or as part of its operations. Any potential additional excavation for a 55,000 gsf parking garage beneath the Psychiatric Building site or other new site disturbance, would be expected to adhere to these same measures and would similarly comply with applicable rules and regulations. Therefore, no significant adverse impacts are anticipated with the modified proposal for the Psychiatric Building, especially since there will be no laboratory uses. Additionally, the expansion of the Empire Zone to the ERSP site would not have an impact on the presence of hazardous materials or any required clean up or remediation.

Waterfront Revitalization

The project site for the former Psychiatric Building, as well as surrounding areas to the east of First Avenue within a 400-foot radius study area, are located within New York City's Coastal Zone, as defined by the New York City Department of City Planning (DCP). This section examines the proposed action's consistency with the policies of the New York State Coastal Zone Commission as well as New York City's Local Waterfront Revitalization Program (LWRP; see Appendix B) and compares its consistency to that of the previously approved Psychiatric Building reuse and redevelopment as described in the ERSP FEIS. The proposed modified redevelopment of the Psychiatric Building and the expansion of the Empire Zone to the ERSP site would not alter the findings of the 2001 FEIS related to waterfront revitalization and consistency with coastal zone policies and would therefore not result in significant adverse impacts to waterfront revitalization or the City's ten LWRP policies.

The federal Coastal Zone Management Act (CZMA) of 1972 was enacted to support and protect the distinctive character of New York City's waterfront and to set forth standard policies for reviewing proposed development projects along coastlines and/or proposed policy changes that would affect the Coastal Zone. The New York City Waterfront Revitalization Program (WRP) is the City's principal Coastal Zone management tool. The ten policies of the new LWRP are designed to more effectively realize the City's waterfront planning goals for those areas within the Coastal Zone, addressing the following issues: (1) residential and commercial redevelopment, (2) water-dependent and industrial uses, (3) commercial and recreational boating, (4) coastal ecological systems, (5) water quality, (6) flooding and erosion, (7) solid

⁴ Ibid.

waste and hazardous substances, (8) public access, (9) scenic resources, and (10) historical and cultural resources. The policies in the City's WRP include the following:

- Support and facilitate residential and commercial redevelopment in appropriate coastal zone areas;
- Support water-dependent and industrial uses in New York City coastal areas that are well suited to their continued operation;
- Promote use of New York City's waterways for commercial and recreational boating and water-dependent transportation centers;
- Protect and restore the quality and function of ecological systems within the New York City coastal area;
- Minimize loss of life, structures, and natural resources caused by flooding and erosion;
- Minimize environmental degradation from solid waste and hazardous substances:
- Provide public access to and along New York City's coastal waters;
- Protect scenic resources that contribute to the visual quality of New York City; and,
- Protect, preserve, and enhance resources significant to the historical, archaeological, and cultural legacy of the New York City coastal area.

The ERSP FEIS described existing conditions within the Coastal Zone area and Goastal Zone area conditions without the proposed action and with the proposed action, and evaluated the proposed action's consistency with the LWRP, which are a set of policies for development and use of the waterfront, listed above, that provide a framework for evaluating discretionary actions in the Coastal Zone. The following section compares the consistency of the modified proposal for the Psychiatric Building with the LWRP policy consistency of the previously approved Psychiatric Building redevelopment

Consistency with the LWRP Policies

Since there would be no effect on LWRP policies from the expansion of the EZ to the ERSP site, this section focuses the LWRP analysis on the modified proposal for the Psychiatric Building.

Policy 1: Support and facilitate commercial and residential development in areas well-suited to such development.

Policy 1.1: Encourage commercial and residential redevelopment in appropriate coastal zone areas. The ERSP FEIS indicated that the previously proposed reuse of the Psychiatric Building would complement the existing facilities in the area and strengthen the medical-related resources that characterize the First Avenue corridor. The project site is also appropriate for the modified proposal for the Psychiatric Building since the revised redevelopment would also support existing institutional uses along the First Avenue Medical corridor with needed accommodations (hotel space) and additional services for out-of-town professionals, patients and visitors. The presence of the elevated FDR Drive that physically separates the site from the East River precludes the use of the project site for water dependant uses. Therefore, the modified proposal would be consistent with this policy.

Policy 1.2: Encourage non-industrial development that enlivens the waterfront and attracts the

- Carlotte - Charles

public. As with the previous proposal for the Psychiatric Building, the modified non-industrial program of reuse would draw visitors to the Coastal Zone area, enlivening the pedestrian plaza now in construction adjacent to the south along East 29th Street. The currently proposed mixed-use hotel development would improve the streetscape through the revitalization of the former Psychiatric Building and would bring increased activity to the waterfront vicinity, similar to the previously approved reuse of the building for primarily staff housing and laboratory space, and would be consistent with this policy.

Policy 1.3: Encourage redevelopment in the coastal area where public facilities and infrastructure are adequate or will be developed. Area public facilities and infrastructure indicated in the ERSP FEIS as being adequate to serve the former proposal for the Psychiatric Building would similarly be adequate to service the modified redevelopment proposal.

With regard to community facilities such as elementary schools, libraries, and publicly funded daycare centers, demand for these services would be reduced or eliminated with the modified proposal, which -- unlike the previously approved project -- would not add residential population.

- Policy 2: Support water-dependent and industrial uses in New York City coastal areas that are well-suited to their continued operation.
- Policy 2.1: Promote water-dependent and industrial uses in Significant Maritime and Industrial Areas. As indicated in the ERSP FEIS, the project site is not located within a Significant Maritime and Industrial Area; therefore, this policy does not apply.
- Policy 2.2: Encourage working waterfront uses at appropriate sites outside the Significant Maritime and Industrial Areas. As indicated in the ERSP FEIS, the proposed project site is not located along the waterfront and is separated from the waterfront by a public esplanade and the elevated FDR Drive with service roads below. Therefore, the project site is not a suitable location for working waterfront uses.
- Policy 2.3: Provide infrastructure improvements necessary to support working waterfront uses. The project site is separated from the East River by the elevated FDR Drive and its service roads, and thus it is not an appropriate site for working waterfront uses.
- Policy 3: Promote use of New York City's waterways for commercial and recreational boating and water-dependent transportation centers.

None of the three policies related to New York City's working waterways are applicable to either the former or current proposal for reuse of the Psychiatric Building.

Policy 4: Protect and restore the quality and function of ecological systems within the New York City coastal area.

Policies 4.1 and 4.2 are not applicable to the either the former or current proposal for reuse of the Psychiatric Building because there will be no disturbance within the New York City coastal area as a result of this project.

With regard to Policy 4.3 (protect vulnerable plant, fish, and wildlife species, and rare ecological communities; and design and develop land and water uses to maximize their integration or compatibility with the identified ecological community), there are no vulnerable plant, fish, or wildlife species, or rare ecological communities on the project site. A letter dated November 17, 2008 from the New York State Department of Environmental Conservation (NYSDEC), Division of Fish, Wildlife and Marine Resources provided current confirmation that the project site has no known occurrences of rare or state-listed animals and plants, significant natural communities, or other significant habitats maintained in the New York Natural Heritage Program databases. Therefore, none of the above mentioned would be adversely affected as a result of either the former or current proposal for reuse of the Psychiatric Building.

Policy 4.4: Maintain and protect living aquatic resources. Neither the previously approved proposal nor the current modified proposal for the Psychiatric Building would have an effect on living aquatic resources. The project site is separated from the East River by the elevated FDR Drive and its service roads.

Policy 5: Protect and improve water quality in the New York City coastal area.

With no significant increases in impervious surfaces or excavation compared to the previous proposal for the Psychiatric Building, the modified proposal, as with the previously approved project, is not expected to increase impacts from direct or indirect discharges to waterbodies (Policy 5.1), impacts from non-point source pollution (Policy 5.2), or impacts to East River water quality impacts from erosion or placing of fill, or impacts to the quality or quantity of groundwater, streams, and sources of water for wetlands (Policy 5.4). As with the previously approved project, if dewatering is required, it would be done in conformance with New York City Department of Environmental Protection's (DEP's) regulations.

Policy 6: Minimize the loss of life, structures, and natural resources caused by flooding and erosion.

Policy 6.1: Minimize losses from flooding and erosion by employing non-structural and structural management measures appropriate to the condition and use of the property to be protected and the surrounding area. Similar to the previously approved project, the modified proposal for the Psychiatric Building would not alter any features of the shoreline or any structural or on-structural flood or erosion control measures. The Psychiatric Building site is already mostly paved. As the minor additional amount of paved surface on the project site from the modified proposal would be minimal -- such as from a potential vehicular drop off driveway facing First Avenue where an existing courtyard is now partly landscaped -- the proposed project would not increase flood hazards on or adjacent to the project site.

As with the previously approved project, Policy 6.2 related to directing public funding for flood prevention or erosion control measures to those locations where the investment will yield significant public benefit, and Policy 6.3 related to protection and preservation of non-renewable sources of sand for beach nourishment, are not applicable to the modified proposal.

Policy 7: Minimize environmental degradation from solid waste and hazardous substances.

Similar to the previously approved project, the modified proposal would also be consistent with Policy 7.1 related to management of solid waste material, hazardous wastes, toxic pollutants, and substances hazardous to the environment to protect public health, control pollution, and prevent degradation of coastal ecosystems. Development would occur in an area that is currently served by the City of New York Department of Sanitation (DSNY) residential trash and recycling pickups as well as private carters. Private carters would be responsible for the handling and disposal of commercial solid waste in a manner that would protect coastal resources. Any toxic or hazardous waste encountered during construction would be handled in accordance with DEP, US Occupational Safety and Health Administration (OSHA) and US Environmental Protection Agency (EPA) requirements. Potential impacts during construction and development activities would be avoided by implementing a Construction Health and Safety Plan (CHASP).

A Phase I Environmental Site Assessment (ESA) for the Psychiatric Building prepared by AKRF, Inc. in March 2008 recommended that the contents of a sealed 55-gallon drum observed in the basement should be determined. The drum and its contents should be disposed of in accordance with applicable disposal regulations. Due to the proximity of adjacent documented spills and historic adjacent auto repair facilities and garages, a Subsurface (Phase II) Subsurface Investigation, including the advancement of soil borings and groundwater monitor wells, should be conducted, according to the ESA. Soil and groundwater samples should be collected from the borings/monitor wells to characterize soil and groundwater quality beneath the study site. Prior to any renovation or demolition activities, a comprehensive asbestos survey should be conducted throughout the building to identify all visual and hidden ACMs. Any renovation activities with the potential to disturb lead-based paint must be performed in accordance with the applicable Occupational Safety and Health Administration regulation (OSHA 29 CFR 1926.62 - Lead Unless there is labeling or test data that indicate that fluorescent Exposure in Construction). light fixtures do not contain mercury and/or PCBs, disposal, if required, should be performed in accordance with applicable federal, state, and local regulations and guidelines.

If soil disturbance is required for site development activities, excavated soil should be managed in accordance with all applicable regulations. Soil intended for off-site disposal should be tested in accordance with the requirements of the intended receiving facility. Transportation of material leaving the site for off-site disposal must be in accordance with federal, state and local requirements covering licensing of haulers and trucks, placarding, truck routes, manifesting, etc. If dewatering will be necessary for any future development, discharges to the municipal sewer system must meet DEP criteria for effluent to municipal sewers, in accordance with the DEP Bureau of Wastewater Treatment (BWT) Wastewater Quality Control Permit. Discharge water may need pretreatment to meet these criteria. Thus, environmental degradation from solid waste and hazardous substances will be minimized or avoided with the implementation of this project.

Policy 7.2: Prevent and remediate discharge of petroleum products. See Policy 7.1 above.

Policy 7.3: Transport solid waste and hazardous substances and site solid and hazardous waste facilities in a manner that minimizes potential degradation of coastal resources. See Policy 7.1 above.

Policy 8: Provide public access to and along New York City's coastal waters.

No additional impacts to existing physical, visual, and recreational access to the waterfront would result from the modified proposal compared to the previously approved project (Policy 8.1). The modified proposal for the Psychiatric Building would not affect existing or proposed public access (Policy 8.2), visual access to waters, coastal land and open space (Policy 8.3), open space and recreation (Policy 8.4) or open space and recreation on publicly owned land (Policy 8.5).

Policy 9: Protect scenic resources that contribute to the visual quality of the New York City coastal area.

Similar to the previously proposed project, the modified proposal for the Psychiatric Building would not have an effect on visual quality associated with New York City's urban context and the historic and working waterfront (Policy 9.1).

With regard to Policy 9.2 (protect scenic values associated with natural resources), the area is not located within a Special Natural Area District, a Special Natural Wildlife Area, or a Recognized Ecological Complex. Given the intervening presence of the FDR Drive and its parking and service roads below, the scenic value of the East River would not be affected by the modified proposal or the previously approved project. Therefore, both the previously approved project and the modified proposal would be consistent with this policy.

Policy 10: Protect, preserve, and enhance resources significant to the historical, archaeological, and cultural legacy of the New York City coastal area.

Policy 10.1: Retain and preserve designated historic resources and enhance resources significant to the coastal culture of New York City. Similar to the previously approved project, the effect of the modified proposal would comprise a major improvement to the character of First Avenue in the vicinity of several historic resources on the Bellevue campus. The restoration of the façade on the Psychiatric Building site, as well as full utilization of the building, would considerably improve the Psychiatric Building's character as a visual resource. The project would maintain the architectural integrity of the Psychiatric Building with façade restoration and complementary new design features, all in accordance with SHPO guidelines. The redevelopment would maintain the building's exterior and complement its historic architecture.

The redevelopment would occur pursuant to a Memorandum of Agreement (MOA) among OPRHP, HHC and the City of New York regarding the Psychiatric Building that ensures that redevelopment of this State and National Register of Historic Places-eligible building includes appropriate measures to avoid or minimize any adverse effects to the integrity or appearance of the Psychiatric Building. Therefore, the proposed action would be consistent with this policy.

Policy 10.2: Protect and preserve archaeological resources and artifacts. The ERSP FEIS indicated that the project site has no potential for historical period archaeological resources and that no significant adverse archaeological effects were anticipated as a result of that previously approved project. No increase in effects on archaeological resources would be anticipated with the modified proposal. Therefore, both the previously approved project and the modified proposal would be consistent with this policy.

Infrastructure

erin Section

As described in the 2001 ERSP FEIS, the anticipated demand for the renovated Psychiatric Building as a result of that previously approved project would total 86,760 gallons per day (gpd) of water, with an anticipated air-conditioning rate of 0.10 gpd/sf. This projected level of water usage was determined not to overburden the City's ability to provide water; no significant adverse impacts to the water supply were projected.

Given the size of New York City's water supply system and the City's commitment to maintaining adequate water supply and pressure, few actions have the potential to cause a significant impact on the water supply system. Therefore, only very large developments or actions having exceptionally large water demands (e.g., more than one million gallons per day) or those at the farthest reaches of the water supply system would warrant a detailed water supply and/or water pressure assessment. Similarly, only unusual actions with very large wastewater flows could have potential impacts on wastewater treatment. The proposed project is not such a project.

As a result of the currently proposed project with revised uses for the Psychiatric Building, anticipated water demand is expected to reach 167,000 gpd for water and 43,850 gpd for air conditioning, which would result in a net increase in total water demand of approximately 210,850 gpd (see following table).

The estimated total water consumption resulting from the proposed modified development of the Psychiatric Building would be well below the general threshold of one million gpd. Therefore, the modified proposal would not result in significant adverse impacts on water supply.

-Next page is Page 39 -

La la children et recen

Table 3
Psychiatric Building Redevelopment Water Demand: 2001 ERSP FEIS vs. 2008 Modified

Psychiatric Building	Use	Size (gsf)	Domestic Use (gpd)	Air Conditioning (gpd)	Total Water Demand (gpd)
2001 EIS	Clinical Research and	115,000	13,800	11,500	25,300
	Practice				
	Conference Space	9,000	1,080	900	1,980
	Child Care Center	10,000	3,000	1,000	4,000
	220 Staff Housing Units	184,000	33,600	18,400	55,500
	·	(300	1		
*		persons)			
*.	Cellar Level Mechanical	35,000	N/A	3,500	N/A
		Total	51,480	35,300	86,780
2008	Hotel	450 rooms	114,750*	24,000	138,750
Modified		240,000			
Proposal	Conference Center	45,000	7,650	4,500	12,150
	Retail/Restaurant/Gym	53,420	9,350	9,350	18,700
	Medical Office	60,000	15,000	6,000	21,000
	Parking	55,000	N/A	N/A	N/A
	Cellar Level Mechanical	45,000	N/A	4,500	N/A
		Total	146,750	48,350	195,100

Note: Domestic Use and Air Conditioning Rates are based on Table 3L-2 Water Usage and Sewage Generation Rates for Use in Impact Assessment of the CEQR Technical Manual.

The project site is located within the service area of the Newtown Creek Water Pollution Control Plant (WPCP), which discharges treated wastewater flows, or "effluent," into the East River.

The ERSP FEIS estimated that the previously approved project would generate 51,480 gpd of sanitary sewage. As the Newtown Creek WPCP has excess capacity, anticipated sanitary sewage was not expected to overburden the system. The ERSP FEIS indicated that the previously approved project would not result in significant adverse sewer impacts.

Warian to

THE STATE STATE

Anticipated sanitary sewage generation of approximately 146,750 gpd from the currently proposed redevelopment with revised uses for the Psychiatric Building would not cause the Newtown Creek Water Pollution Control Plant (WPCP) to exceed its design capacity or SPDES permit flow limit. Therefore, the currently proposed project with revised uses for the Psychiatric Building, as well as the expansion of the Empire Zone to the ERSP site would not result in any significant adverse sewer impacts.

Solid Waste

-

Solid waste from commercial and manufacturing uses in New York City is collected by private carters and disposed of by commercial transport to carriers to licensed disposal facilities. Commercial solid waste is typically hauled to out-of-city landfills. Residential and municipal solid waste is handled by the New York City Department of Sanitation.

^{*} Assuming two beds per room and annual average occupancy rate of 86% (based on NYCEDC *Economic Snapshot* data from September 2006 to August 2008), 1.7 beds (users) per room is used in calculating domestic water use of the hotel.

The FEIS for the previously approved ERSP project anticipated weekly waste generation from the Psychiatric Building redevelopment of approximately 9,832 pounds (lbs) based upon the presence of 60 retail workers and 658 laboratory workers for the Psychiatric Building. As that projected waste amount would not overburden the City's solid waste disposal capabilities, no significant adverse impacts related to waste disposal were anticipated. In addition, it was determined that the proposed project would comply with the City's recycling program and would be designed to accommodate source separation of solid waste in conformance with City recycling regulations and state solid waste laws. Table 4, below, compares solid waste generation from the previously approved project to the current proposal for the Psychiatric Building.

The currently proposed project with modified uses for the Psychiatric Building would be expected to generate a total of 981 workers and approximately 59,355 lbs of solid waste per week, which includes 576 hotel/concierge workers (43,200 lbs at a rate of 75 lbs/week/employee), 165 retail workers (13,035 lbs at a rate of 79 lbs/week/employee), and 240 medical office workers (3,120 lbs at a rate of 13 lbs/week/employee).

As the Psychiatric Building would be occupied by commercial tenants, its solid waste would be disposed of by commercial haulers. Although the revised use for the Psychiatric Building would generate an increased amount of solid waste compared to the previously approved ERSP project, the amount is typical for a commercial project of this size and would not overburden private carters. Additionally, the expansion of the Empire Zone to the ERSP site has no effect on waste disposal. Therefore, there would be no significant impact related to waste disposal. In addition, the project would comply with the City's recycling program and would be designed to accommodate source separation of solid wastes in conformance with City recycling regulations and state solid waste laws.

-Next page is Page 41 -

Table 4
Solid Waste Generation on Psychiatric Building Site: 2001 ERSP FEIS vs. 2008 Modified
Proposal

	Use	Size (gsf)	Solid Waste Handled by DSNY (lbs/wk)	Solid Waste Handled by Private Carriers (lbs/wk)	Total Solid Waste (lbs/wk)
2001 FEIS	Clinical Research and Practice	115,000 gsf	N/A	N/A	N/A
	Conference Space	9,000 gsf	N/A	N/A	N/A
	Child Care Center	10,000 gsf	N/A	N/A	N/A
	220 Staff Housing Units	184,000 gsf	N/A	N/A	N/A
		Total	` .		9,832
2008 Modified	Hotel	450 rooms 240,000 gsf	0	43,200	43,200
Proposal	Conference Center	45,000 gsf	0	Included in hotel calculation	Included in hotel calculation
	Retail/Restaurant/Gym	53,420 gsf	0	13.035	13,035
•	Medical Office	60,000 gsf	0	3,120	3,120
	Parking	55,000 gsf	0	0	0
		Total		59,355	59,355

Note: Expected Solid Waste Generational Rates are based on Table 3M-1 Solid Waste Generational Rates for Use in Impact Assessment of the CEQR Technical Manual.

Energy

The ERSP FEIS concluded that the amount of anticipated energy use for the previously approved redevelopment of the Psychiatric Building would not result in any significant additional load for local power companies and would not result in any adverse impacts.

For the currently proposed project with modified uses for the Psychiatric Building, electricity and possibly gas and steam would be used to provide heating, cooling and lighting to the project site. Consolidated Edison (Con Ed) supplies electricity, steam and natural gas to Manhattan including the project area. Various grades of petroleum fuel oils from commercial suppliers could also be used for heating. Energy consumption from the proposed project, estimated at 54,218,500,000 BTU's per year, is not expected to result in significant load for Con Ed and would not result in any adverse impacts. (Estimated BTUs are based on the Energy Use Index Averages, Table 3N-1 of the CEQR Technical Manual.)

The proposed project would comply with the New York State Energy Conservation Code guidelines. This code governs performance requirements of heating, ventilation and air conditioning systems as well as the exterior building envelope. The code, pursuant to Article II of the Energy Law of the State of New York, promulgated on January 1, 1979 and updated in 2007, requires that new and recycled buildings (both public and private) be designed to insure adequate thermal resistance to heat loss and infiltration.

The New York State Energy Conservation Code provides requirements for the design and selection of mechanical, electrical and illumination systems. In compliance with the code, the

basic designs would incorporate all energy conservation measures including meeting the code's requirement related to energy efficient and combined thermal transmittance.

The building design would follow guidelines using the United States Green Building Council LEED® rating system in conformity with Executive Order 111 (EO 111). The proposed redevelopment is expected to achieve a LEED® rating of at least Silver and to comply with Local Law 86. The expansion of the Empire Zone to the ERSP site would not have an impact on Energy.

Traffic and Parking

Because the proposed modified development would include different uses for the Psychiatric Building than were previously considered in the ERSP FEIS, a new traffic and parking study has been prepared to determine whether the revised program would alter the previous findings and/or result in any additional impacts related to traffic and parking.

The ERSP FEIS determined that the previously proposed project would result in mitigatable traffic impacts at five intersections where significant traffic impacts would be expected during the AM, MD, and PM peak hours. These include eastbound 30th Street at First and Second avenues, eastbound 34th Street at Second Avenue, westbound 34th Street at the Queens Midtown Tunnel entrance, and westbound 29th Street at First Avenue. Based on the recent vehicle count data and revised traffic analyses presented in the Technical Memorandum, these intersections would no longer experience significant impacts during the AM and PM peak hours. The midday peak hour was not analyzed in the new traffic study. There were no parking impacts from the previously proposed project.

As indicated in the current traffic study conducted for this technical memorandum, the modified proposed project would result in traffic impacts at two intersections that were not indicated as being significantly impacted in the ERSP FEIS (FDR Drive service road/34th Street and Second Avenue/34th Street). However, as with the previously proposed project, all traffic impacts would be fully mitigated through changes in signal timing.

The general conclusion presented in the ERSP FEIS and indicated in the updated study for the modified proposal is that no unmitigatable impacts would result from the proposed reuse of the Psychiatric Building. Parking demand created by the proposed reuse of the Psychiatric Building would be offset by the number of parking spaces introduced by the project and, because the site is located within the Manhattan Central Business District (south of 61st Street), the inability of the proposed action to accommodate projected future parking demands would be considered a parking shortfall per CEQR guidelines and would not be deemed a significant impact.

The traffic analysis conducted for this technical memorandum is summarized below.

Existing Traffic Conditions

Overall, the existing traffic volumes in the area are fairly balanced between the AM and PM peak hours. The highest traffic volumes are carried along Second Avenue, ranging from 1,850 to 2,620 vehicles per hour (vph) during the peak hours. First Avenue supports lower traffic volumes, typically between 1,465 and 1,930 vph. Southbound FDR Drive service road traffic

volumes are up to 1,275 vph approaching the 34th Street intersection, and are reduced to between 435 to 545 vph at 23rd Street during the AM and PM peak hours, respectively. The northbound FDR Drive service road and eastbound 34th Street carry similar traffic volumes, ranging from 640 to 865 vph during both peak hours. The remaining roadways in the area process up to 650 vph per direction during the AM and PM peak hours.

Each of the intersections comprising the traffic study area was analyzed in terms of its capacity to accommodate existing traffic volumes as defined by the resulting levels of service (LOS). Most movements at the study intersections operate at acceptable levels of service with overall operations at LOS mid-D or better during both the AM and PM peak analysis hours. The following movements and overall intersection operations, however, are at poor levels of service.

- At its intersection with FDR Drive service road, the eastbound 23rd Street approach operates at LOS E, and the northbound FDR Drive service road approach operates at LOS beyond mid-D during the AM peak hour. During the PM peak hour, the left-turn movements from eastbound 23rd Street and the northbound FDR Drive service road operate at LOS beyond mid-D. The southbound FDR Drive service road's through/right-turn shared movement operates at LOS E. The overall intersection functions slightly over the threshold for LOS mid-D during both peak hours.
- Westbound 23rd Street at First Avenue operates at LOS F, and the overall intersection functions at just beyond LOS mid-D during the PM peak hour.
- At its intersection with Second Avenue, westbound 23rd Street's through movement operates at a LOS beyond mid-D during the AM, and its left-turn movement operates at LOS F during the AM and PM peak hours.
- At its intersection with the FDR Drive service road, eastbound 34th Street's left- and right-turn movements operate at LOS E during the AM peak hour, and at LOS F and beyond mid-D, respectively, during the PM peak hour. Northbound FDR Drive service road's left-turn movement functions at LOS E, and the southbound FDR Drive service road approach as well as the overall intersection operate at beyond LOS mid-D during both peak hours.
- Eastbound 34th Street at First Avenue functions at LOS E during the PM peak hour.
- At Second Avenue, eastbound 34th Street operates at LOS E during the AM and PM peak hours, and westbound 34th Street's left-turn movement operates at beyond LOS mid-D during the AM peak hour.

2012 Future Traffic Conditions without the Proposed Modifications

Overall, background project-generated traffic combined with the overall background growth in the study area would result in traffic volume increases of 45 to 120 vehicles during each peak hour. In general, most intersections would experience a two-to-three-percent increase over existing traffic volumes.

The projected increase in traffic volumes by 2012 would result in an increase in delay at the study intersections; however, most movements would continue to operate at the same LOS as outlined in the Existing Conditions section with the following exceptions (see Table 8):

- Southbound FDR Drive service road's through/right-turn movement at 23rd Street would deteriorate from LOS E to F during the PM peak hour.
- At East 34th Street, the northbound FDR Drive service road's left-turn movement would deteriorate from LOS E to F during the PM peak hour. The southbound FDR Drive

service road approach during the AM peak hour and the overall intersection during the both peak hours would deteriorate from LOS D to E.

Probable Traffic Impacts of the Proposed Modifications

The analysis of future conditions with the project (e.g., the future Build condition) requires determination of the numbers of trips by travel mode expected to be generated by the proposed redevelopment of the Psychiatric Building, the assignment of these vehicle trips to the street network approaching the site, and the determination of projected levels of service at the critical locations analyzed.

The proposed reuse of the Psychiatric Building would consist of a combination of land uses including a 240,000-square foot hotel (approximately 450 rooms), a 45,000-square foot conference center, a combined 55,000-square foot retail/restaurant/gym use, a 60,000-square foot medical office, and 55,000-square foot accessory parking garage. For trip generation purposes, retail/restaurant/gym use was considered to be composed of 25,000 gsf of restaurant, 25,000 gsf of health club, and 5,000 gsf of retail space. Also, it was assumed that the conference center would be used primarily by the hotel and/or the medical community in the surrounding area, and would not itself be a generator of additional trips to the project area. This is the same approach used in the FEIS, which included a conference center land use, but the conference center was assumed to not be a generator of additional trips to the area, as it would be used primarily by NYU and Bellevue staff (see page 13-18 of the FEIS). This technical memo used the same assumptions to be consistent with the FEIS.

The trip generation rates and assumptions are summarized in Table 5. Using these factors, the Psychiatric Building reuse would generate a total of 1,017 and 1,215 person trips, which yield 273 and 185 vehicle trips during the AM and PM peak hours, respectively (see Tables 6 and 7).

The determination of the net 2012 Build traffic volumes involved the removal of vehicular trips included in the No Build conditions associated with the previously approved reuse program of the Psychiatric Building (including staff housing, clinical research and practice space, a conference center, and a child-care center) and the addition of the vehicle trips generated by the proposed reuse program discussed above. It was calculated, based on the trip generation rates used in the FEIS, that the previously approved reuse would generate 20 and 16 vehicle trips during the AM and PM peak hours, respectively. These trips were removed from the traffic annetwork according to the FEIS trip assignments.

Overall, in 2012, the Psychiatric Building reuse program would result in traffic volume increments at the study area intersections of approximately ten to 160 vehicles during the AM and five to 100 vehicles during the PM peak hour. First Avenue traffic volumes through the study area can be expected to increase by 50 to 80 vehicles during the AM peak hour and by 20 to 35 vehicles during the PM peak hour, corresponding to between one and four percent increases compared to No Build traffic volumes. Second Avenue traffic volumes would increase by 20 to 35 vehicles (one percent increase) at its intersections with 29th and 34th streets, and by 40 to 80 vehicles (three percent increase) at 23rd and 30th streets during the peak hours. Eastbound 30th Street would experience an increase of 50 to 60 vehicles at Second Avenue, representing the highest percent increase in the area (up to nine percent at Second Avenue). The total 2012 Build traffic volumes are presented in the full Traffic Study (see Appendix C).

The level-of-service analyses for the Build condition indicated that significant traffic impacts would be expected at two of the study intersections not previously indicated in the ERSP FEIS as being significantly impacted.

- At its intersection with the FDR Drive service road, eastbound 34th Street's left-turn movement would deteriorate within LOS E and F during the AM and PM peak hours, respectively, by incurring approximately five seconds of additional delay per vehicle. The southbound FDR Drive service road would incur eight seconds of additional delay, and the overall intersection would incur four seconds of additional delay within LOS E during the AM peak hour.
- Westbound 34th Street's left-turn movement at Second Avenue would deteriorate from LOS D to E during the AM peak hour by incurring approximately nine seconds of delay per vehicle.

Proposed Mitigation Measures

As mentioned above, the proposed modifications to the reuse of the Bellevue Psychiatric Building would result in significant traffic impacts at two study area intersections that were not previously identified in the ERSP FEIS. However, these impacts could be mitigated as follows.

- At the intersection of the FDR Drive service road and 34th Street, the impacts could be mitigated during the AM peak hour by adding a leading seven-second signal phase for eastbound 34th Street followed by a 19-second east/westbound 34th Street phase, shifting one second from the red time to the green time for the northbound FDR Drive service road leading phase, and increasing the north/southbound FDR Drive service road phase by one second. Similarly, the impacts could be mitigated by adding a leading six-second signal phase for eastbound 34th Street and reducing the east/westbound 34th Street phase to 16 seconds during the PM peak hour.
- Westbound 34th Street's left-turn movement at Second Avenue could be improved by shifting one second of green time from Second Avenue to the westbound 34th Street phase.

With these mitigation measures in place, the significant adverse impacts of the proposed project at the above-mentioned intersections would be eliminated (see Table 8). The conclusion of the ERSP FEIS that the previously approved project would not result in significant adverse traffic impacts that can not be mitigated would also apply to the current modified proposal. The expansion of the Empire Zone to the ERSP site would not affect Traffic and Parking.

- Next page is Page 46 -

Table 5: Former Bellevue Psychiatric Building Reuse Trip Generation Factors

Y CONTINU	Medic	al Office	Hot	al	Local l	Datail	Health	Chib	Resta	urant
Land Use	Employees	Patients/Visitors	٠	100	41.54		<u>_</u>	9		
Size/Units	240 employees	60,000 gsf	450 го	oms	5,000) gsf	25,00	0 gsf	25,00	0 gsf
		a s	(2)		. (2	,	(5	, 1	. (7	· ·
	(1) 2.0	⁽²⁾ 33.6	(3)		154		44			3.0
Trip Generation	per employee	per 1,000 sf	per ro			000 sf	per 1,0			000 sf
w _k	per empreyes	, por 1,000 or	Politi		F,		¥			
Temporal Distribution		(2)	· (3)	1	. (2	D .	-	n		3)
AM	48.0%	20.0%	6.6	%	1.0)%		3%.		0%
PM	48.0%	5.0%	7.7.	%	10.	0%	13.	2%	7.	7%
34 3-10-114-			(4)		. (, I		ກ .		9)
Modal Splits Auto	13.0%	25.0%		% .)%		0%		0%
Taxi	2.0%	25.0%	17.5	4)%)%		0%
Subway	42.0%	29.0%	24.2		1	0%		0%		.0%
Commuter Rail	11.0%	11.0%	0.0)%		0%		0%
Bus	14.0%	0.0%	3.1		3.0)%	6.0	0%	3.	0%
Walk	18.0%	10.0%	46.1		79.	0%	57.	.0%	- 79.	.0%
		. · (2)	. (3)		(2)	C	5)		10)
Directional Distribution	In Out	In Out	⊸In	Out		Out	· In	Out		Out
AM	95% 5%.	58% 42%	41%	59%	50%	50%	41%	59%	52%	48%
PM	15% 85%	20% 80%	59%	41%	50%	50% -	75%	25%	61%	39%
Vehicle Occupancy		. (2)	(3)	. (2)	. ((5)	-	(7)
Auto	1.20	1.65	1.6	55	1.	65	1.	.40	1.	.65
Taxi	1,40	1.40	1.4	10 .	1.	40	1.	40	1.	40
		(2)	(3)		(2)		(5)	ļ	(9)
Truck Trip Generation		0.2	0.0)6	0.	.35	0.	.19		.35
	per	1,000 sf	per 1,	000 sf	per 1,	,000 sf	per 1	,000 sf	per 1	,000 sf
AM	,	9.6%	12.	2%	7.	7%	6.	0%	7.	.7%
PM	•	1.0%	0.0			0%		0%		.0%
1 YAT				- -	·	- ,				
AM/PM	In	Out	In	Out	In	Out	In	Out	In	Out
AM/PM	50%	50%	50%	50%	50%	50%	50%	50%	50%	50%

Notes:

(1) Assumed one trip in and one trip out per employee

(2) First Avenue Properties FSEIS (2008)

(3) East 125th Street Development FEIS (2008)
(4) No. 7 Subway Extension—Hudson Yards Rezoning and Development Program FGEIS (2003)

(5) 770 Eleventh Average Mixed-Use Development Rezoning DEIS (2008)

(6) 2000 Census for New York County Tract 62 journey-to-work data (7) Pushkarev & Zupan, Urban Space for Pedestrians (1975)

(8) CEQR Technical Manual (2001)

(9) Modal split and truck trip generation for the restaurant use was based on the data for local retail due to lack of available information in New York City

(10) Based on data for Land Use 932 (High-Turnover Sit-Down Restaurant) from ITE Trip Generation, 7th Edition

Table 6: Former Bellevue Psychiatric Building Reuse Person Trips by Mode

Land Use	Ατ	ıto	Ta	ixi	Sub	way	R	ail	В	us	W	alk	To	tal
Mild OSC	In	Out	In	Out	In	Out	In	Out	In	Out	In	Out	In	Out
				AM	PEA]	КНО	UR							
Medical Office														
Employees	28	1	4	0	92	5	24	1	31	2	39	2	219	12
Patients/Visitors	58	42	58	42	68	49	26	19	0	0	23	17	234	169
Hotel	10	15	20	29	28	40	0	0	4	5	53	76	114	165
Local Retail	0	0	0	. 0	1	1	0	0	0	0	3	3	4	4
Health Club	3	4	0	0	5	7	0	0	1 ·	· 2	13	18	22	32
Restaurant	0	0	0	0	3	3	0	0	1	1	18	16	22	21
Total	101	64	84	72	196	104	50	20	36	9	149	132	616	402
PM PEAK HOUR														
Medical Office														
Employees	4	25	1	4	15	82	4	22	5	27	6	35	35	196
Patients/Visitors	5	20	5	. 20	6	23	2	9	0	0	2	8	-20	81
Hotel	17	12	34	23	47	32	0	. 0	6	4	89	62	192	134
Local Retail	1	1	1	1	5	5 ·	0	0	1	1	30	30	39	39
Health Club	15	5	1	0	24	8	0	0	7	2	63	21	111	37
Restaurant	4	3	4	3	28	18	0	0	6	4	160	103	203	130
Total	47	66	45	51	125	170	6	30	25	39	351	259	599	615

Table 7: Former Bellevue Psychiatric Building Reuse Vehicle Trips by Type

Pe	ak Hour	Αı	ıto		ıxi		ivery	To	tal
L	,	In	Out	In	Out	Ĭñ	Out	In	Out
	AM	67	39	81	81	3	2	151	122
	PM	32	47	53	53	. 0	0	85	100
	Total	99	86	134	134	3	2	236	222

Technical Memorandum for the East River Science Park FEIS CEQR Number 01DME004M TM001

Table 8: 2012 No Build, Build, and Mitigated Build Traffic Conditions

				f			ľ			:	
		_	No Build			Build	1	Min	Mitigated Build		
INTERSECTION & APPROACH	Mvt.	A/C	Control Delay	TOS	V/C	Control Delay	ros	N/C	Control Delay	LOS	Mitigation Measures
AM Peak 2444 Street and FID Drive Service Read											
34th Street EB	Def(L)	0.92	70.9	<u> </u>	0.95	76.0	ы	0.81	49.3	Д	- Add a seven-second leading signal phase
	T	0.01	25.8	ပ	0.01	25.8	ပ	0.01	26.6	ပ	for EB 34th Street.
	X	1.04	71.5	ш	1.8 20	71.5	ш	1.04	71.5	Э	- Reduce EB/WB 34th Street phase to 19
WB	ĹŢ	90.0	26.3	ນ	90'0.	26.3	ပ	0.10	33.2	ပ	seconds
	<u> </u>	90.0	26.4	Ü	90'0	26.4	ပ	0.11	33,4	၁	- Shift one second from the red time to the
FDR Drive Service Road NB		1.00	62.1	щ	1.00	62.4	ш	96.0	49.5	Q	green time of the NB FDR Drive service
	TR	0.29	7.7	٧	0.29	7.7	∢	0.28	7.2	¥	road phase.
RS	LTR	1.02	55.5	ш	1.05	63.5	щ	1.02	22.0	Ω	- Add one second to the NB/SB FDR Drive
Overall Intersection	· •		55.5	벋		29.7	田		51.8	Ω	service road phase.
	å . ,.		٠	:							
34th Street and Second Avenue		-						;	1 10	ı	
34th Street EB	Ĕ.	1.05	9.77	Ħ	1.05	78.5	ш	1.05	78.5	Ŧ	- Shift one second of green time from
WB	Def(L)	0.70	46.8	Ω	0.81	55.5	ъ ъ	92.0	50.1	D	Second Avenue to WB 34th Street.
	H	0.41	17.6	В	0.42	17.8	щ	0.41	16.9	Д	
Second Averue SB	ב	0.48	16.2	æ	0.48	16.2	М	0.49	17.3	ф	
	LTR	0.88	21.8	ပ	0.89	22.1	ပ	0.91	24.3	Ö	
Overall Intersection			33.1	ت		33.9	υ		35.0	ပ	
PM Peak											
34th Street and FDR Drive Service Road	· . —										
34th Street		1.13	124.3	ſΞί	1.14	129.0	ĹΤ·	0.98	74.7	щ	- Add a six-second leading signal phase for
	[0.01	25.8	ပ	0.01	25.8	ပ	0.01	25.8	ပ	EB 34th Street
	R	0.97	54.7	Д	0.97	54.7	Д	0.97	54.7	Ω	- Reduce EB/WB 34th Street phase to 16
WB	<u> </u>	0.02	25.8	ပ	0.02	25.8	ပ	0.03	30.6	ບ	seconds.
	×	0.02	25.9	ပ	0.02	25.9	ပ	0.02	30.7	ວ	
FDR Drive Service Road NB	H	1.08	82.2	щ	1.08	82.3	[2,	1.08	82.3	ഥ	
	Ħ	0.23	3.6	Ą	0.23	3.6	⋖	0.23	3.6	¥	·
SB	LTR	1.02	50.2	D	1.03	51.6	n D	1.03	51.6	Α,	
Overall Intersection	- :		60.3	田		9.19	闰		55.6	闰	

Transit and Pedestrians

Because the proposed modified development would include different uses than were previously considered in the ERSP FEIS, a new transit and pedestrian study has been prepared to determine whether the revised program would alter the previous findings and/or result in any additional impacts. The FEIS determined that no significant adverse impacts to transit or pedestrians would result from the previously proposed development; likewise, no significant adverse impacts to transit or pedestrians would result from the modified proposal for reuse and redevelopment of the Psychiatric Building.

Additional bus trips induced by the Psychiatric Building redevelopment would be distributed among seven bus lines and would not cause any significant transit impacts. While there would also be an increase in the number of subway riders (300 project-generated subway trips), they would be distributed in a manner set forth in the FEIS and would not result in significant adverse impacts. Increases in pedestrian volumes are expected to be heavy, but would not result in significant adverse impacts to pedestrian operations. (See trip generation rates and assumptions summarized in Table 5 above.)

The proposed reuse of the Psychiatric Building would result in 46 and 64 bus trips during the weekday AM and PM peak hours, respectively, and would generate a combined total of 115 bus trips during the AM and 100 trips during the PM peak hour — both below the CEQR Technical Manual threshold of 200 peak hour riders for triggering significant impacts. These trips would be distributed to the seven bus lines serving the area; therefore, the proposed project would not result in any significant impacts to bus operations during the peak hours.

Further, the project would also result in approximately 300 new subway trips during each peak hour, requiring a more detailed analysis of transit conditions to determine the potential for significant impacts. In accordance with the ERSP FEIS, since the IRT Lexington line's 33rd Street station has higher ridership levels than its 28th Street station, project-generated subway trips were assigned to the 33rd Street station for a more conservative assessment of the impacts of the project on subway operations. The 300 project-generated subway trips were assigned to the various station elements at the 33rd Street station based on percentages derived from the ERSP FEIS. It was determined that the station elements would experience an incremental increase of nine to 33 pedestrians during the peak 15-minutes of the AM peak hour compared to the pedestrian volumes cited in the FEIS. This increase in pedestrian volumes would not alter the findings of the FEIS (e.g., that the proposed Psychiatric Building reuse would not result in any significant impacts to the subway operations).

In terms of actual station usage information, the FEIS indicated that the 33rd Street station is used by approximately 26,000 persons per day. More recent data posted by NYCT indicates that this same station is now used by about 31,900 persons per day, which represents an increase of 22.7 percent over the 2001-2008 period (about three percent per year).

No new transit counts were collected as part of the new study. Therefore, previous data, including subway person-trip assignments, were used as the basis for the transit analyses. Additional pedestrian counts were not anticipated to be needed for this project.

Pedestrian conditions were qualitatively assessed for this project given the area's unique surrounding characteristics. As cited in the ERSP FEIS, the Bellevue Hospital, ERSP and NYU Hospital campuses would be partially linked and thus some pedestrian circulation would occur away from First Avenue. As such, very little impact would be realized at the street level elements (sidewalks and crosswalks). Therefore, increases in pedestrian traffic to the surrounding street system are expected to be small, with no significant impacts to pedestrian operations during weekday peak periods likely. No significant transit or pedestrian impacts are anticipated from the modified proposal or the expansion of the Empire Zone to the ERSP site.

Air Quality

Because the proposed modified development for the Psychiatric Building would include different uses that were not previously considered in the ERSP FEIS, air quality and noise assessments were conducted to determine whether the revised program would alter the previous findings and/or result in any additional impacts related to air quality or noise. The general conclusion presented in the ERSP FEIS and indicated in the updated study for the modified proposal is that no unmitigatable air quality or noise impacts would result from the proposed reuse of the Psychiatric Building.

Potential impacts from the redevelopment and operation of the proposed project could result in both mobile and stationary source air quality impacts. Mobile source impacts would be related to increases in project-induced vehicles at intersections in the vicinity of the proposed project. Pollutants studied for the project include carbon monoxide (CO) and particulate matter smaller than 2.5 microns (PM_{2.5}). Stationary source impacts could result from HVAC emissions emitted from the project. These emissions from both mobile and stationary sources could affect air quality sensitive locations (such as sidewalks, open windows, intake vents) downwind from the emission source.

Mobile Sources

An initial intersection screening procedure described in the CEQR Technical Manual was conducted to determine which of the studied traffic intersections would require detailed analysis for CO. Based on this procedure, it was determined that a detailed assessment of mobile source air quality impacts would be required for two intersections (First Avenue at East 29th Street and First Avenue at East 30th Street). These intersections were selected based on the fact that they would each incur more than 100 project-induced trips in the future build year. The results of the detailed assessment presented in Table 9 show that the 8-hour CO concentrations do not surpass the EPA's National Ambient Air Quality Standards (NAAQS) nor would they result in a contravention of the de minimus criteria contained in the CEQR Technical Manual. Therefore, project-related mobile source impacts from CO would not occur.

- Next page is Page 52 -

Table 9

Build Condition (2012) Predicted 8-Hour CO Concentration (ppm)*

Site #	Receptor Location	He	m Eight- our ntration
		AM	PM
1	29 th Street & 1 st Avenue	3.5	3.7
2	30 th Street & 1 st Avenue	3.5	3.7
* Includis 9 ppr	des background concentration of 2.0 ppm. NAAQS standard n.		

The assessment of mobile source emissions of PM_{2.5} was based on whether the proposed project would induce a significant number of Heavy Duty Diesel Vehicles (HDDV's). As the traffic studies indicated a small number of project induced heavy vehicles, based on screening procedures found in the CEQR Technical Manual it was concluded that project impacts from mobile source emissions of PM_{2.5} would not occur.

Stationary Sources

Potential Impacts from Project Emissions

According to the CEQR Technical Manual, the assessment of stationary sources typically considers information such as building land use, boiler fuel type, stack height and square footage. However, heat and hot water for the proposed project would be generated from the existing HVAC system that is to be upgraded. Since Bellevue Hospital currently utilizes Con Edison steam to provide heat and hot water, no fuel will be burned on site and no assessment of stationary source emissions from those operations is required. In addition, the proposed project would not consist of any uses that would result in toxic emission releases. Therefore, project-related impacts from stationary source emissions are not anticipated.

Potential Impacts on the Proposed Project from Existing Emission Sources

Field reconnaissance has also determined that the neighborhood is overwhelmingly residential and institutional in nature and there are no manufacturing land uses within 400 feet of the project site. In addition, there are no major pollutant sources within 1000 feet of the proposed project site. Therefore, stationary source impacts at the project site are unlikely and no further analysis is required.

Field reconnaissance as well as a study of neighborhood land usage indicates that the area surrounding the project site, although predominantly residential and institutional, includes a mix of commercial, institutional, retail and residential buildings. These emissions sources could impact sensitive project-related air quality receptors. However, the proposed development would not be located within 1000 feet of a large emissions source such as a power generation plant. In addition, stack emission sources from nearby commercial institutional or large scale residential buildings would be located at a higher elevation than the proposed site.

Air toxics are also of concern. However, the proposed project would not be located within 400

feet of manufacturing facilities and the modified development would not be impacted by toxic emissions from nearby medical, chemical or research labs. This conclusion is based on the findings contained in the 2001 ERSP FEIS.

As a result, stationary source impacts at the project site are unlikely and no further analysis of off-site emission sources is required. The expansion of the Empire Zone to the ERSP site would not have an impact on Air Quality.

Noise

Potential project—related noise impacts could result from increases in project-induced vehicles in the vicinity of existing sensitive residential receptors. Since the proposed project has a hotel component, the potential impact that existing noise levels would have on occupants of the proposed hotel must also be studied. The expansion of the Empire Zone to the ERSP site would not have an impact on Noise.

Mobile Sources

Existing Noise Conditions

Existing conditions noise levels were monitored at two locations to update the noise monitoring conducted in the 2001 ERSP EIS. As shown in Table 10, with respect to the NYC CEQR Technical Manual noise exposure standards, Site 1 is in the "marginally unacceptable" category while Site 2 is in the "marginally acceptable" category. These noise level readings indicate a general agreement with those monitored for the 2001 ERSP FEIS.

Table 10
Existing Noise Levels

Site	Location	Time	L_{eq}	$\mathbf{L_i}$	L_{10}	L ₅₀	L_{90}
	First Avenue between E 29th Street	AM	70.9	79.1	74.2	68.1	62.1
1	& E. 30th Street	PM	73.0	84.5	73.4	67.3	60.4
	E 30th Street between 1st Avenue &	AM	66.5	73.0	68.9	64.9	62.8
2	FDR Drive	PM	66.1	74.0	68	64.5	62.8

^{*}Noise monitoring conducted on January 6, 2009.

Mobile Source Assessment

According to the CEQR Technical Manual, a noise impact related to mobile sources would occur if project-induced traffic would more than double the existing traffic. A study of existing and future traffic volumes indicates that there would be no doubling of traffic volumes at any of the studied traffic locations. This finding is in agreement with those of the 2001 ERSP EIS. As a result of this screening procedure, it is anticipated that mobile source-related noise impacts would not occur.

Attenuation Requirements

The CEQR Technical Manual has set noise attenuation requirements for buildings based on anticipated exterior noise levels. These recommended noise attenuation values are designed to provide an interior noise level of 45 dBA or lower. As the area noise levels are primarily the

result of vehicular movement; the anticipated insignificant increase in traffic noise levels from project-related vehicles, as well as the agreement between noise monitoring results of this study and the 2001 ERSP FEIS, indicate that the attenuation requirements for the proposed project would not change from the those determined for the 2001 ERSP FEIS. As a result, required L_{10} attenuation would not be greater than 35dB for any of the building facades of the modified development.

Stationary Sources

The only source of project-related stationary noise would be from internal and external mechanical equipment required for the modified development (such as elevator motors). This equipment would be fitted with the required noise reduction devices to comply with applicable NYC noise regulations and standards.

Construction Impacts

The ERSP FEIS summarized the construction plan and identified potential impacts that could result from construction activities associated with the previously approved ERSP project that included renovation of the Psychiatric Building. Activities involved in the 24-month renovation were to include interior demolition and reconstruction, façade and roof repair and restoration, and replacement of windows and exterior doors. Impacts on the surrounding community from construction of the overall ERSP project were expected to be temporary in duration. construction protection plan for cultural resources, including the Psychiatric Building, pursuant to New York City Department of Buildings Technical Policy and Procedures Notice #10/88 was requested by SHPO as part of their review of the ERSP project, to avoid any significant adverse impacts to the Psychiatric Building. The FEIS indicated that impacts resulting from the presence of hazardous materials would be avoided by the removal of PCB-containing equipment and fixtures, following a Health and Safety Plan for a Phase II investigation to be performed with approval of the DEP, and following applicable Occupational Safety and Health Administration regulations related to lead-based paint, and abating asbestos-containing materials in accordance with City, state and federal regulations. With these procedures in place, no significant adverse impacts were identified as a result of hazardous materials removal.

Construction-related activities resulting from the modified proposal for the Psychiatric Building, as well as the expansion of the Empire Zone to the ERSP, would not have any significant adverse impacts on historic resources, natural resources, infrastructure, traffic, air quality, noise, or hazardous materials conditions. Construction of the project site would begin in 2009 and be completed in 2012 with an overall construction period ranging from approximately 28 to 38 months. The proposed action would be constructed within an existing corridor of hospitals and research institutions along First Avenue, requiring actions to maintain access to surrounding sites, including emergency access, and measures to avoid construction impacts. Construction activities would normally take place Monday through Friday, although the delivery/installation of certain critical equipment could occur on weekend days. Construction staging most likely would occur on the project site itself and may, in some cases, extend within portions of sidewalks, and curb and travel lanes of public streets adjacent to the construction sites. The staging areas would be located on the project site and would include East 29th and East 30th Streets, and the courtyards of the former Psychiatric Building. To safeguard the public and to provide necessary

access to the project site, it is recommended that the sidewalk along the portion of First Avenue adjacent to the project site, between East 30th and East 29th Streets, be covered with a sidewalk scaffold. Any sidewalk or street closures require the approval of the New York City Department of Transportation's Office of Construction Management and Coordination (NYCDOT-OCMC), the entity that ensures that critical arteries are not interrupted, especially during peak travel periods, and that appropriate sidewalk signage and barricading would be in place to ensure pedestrian safety.

Construction of the project would require noise and dust control measures during the construction period. In addition, there would be requirements for street crossing and entrance barriers, protective scaffolding, and strict compliance with all applicable construction safety measures.

Changes to noise levels during construction of the proposed project would include the introduction of noise and vibration from the operation of construction equipment. Based on CEQR Technical Manual standards, however, the noise generated by these activities would not be significant. Small increases in noise levels are expected to be found near a few defined truck routes and the streets in the immediate vicinity of the project site. These increases in noise levels caused by delivery trucks and other construction vehicles would not be significant, however.

Construction noise is regulated by the revised 2005 New York City Noise Code promulgated on July 7, 2007 and by the EPA noise emission standards for construction equipment. These local and federal requirements mandate that certain classifications of construction equipment and motor vehicles meet specified noise emissions standards; that, except under exceptional circumstances, construction activities be limited to weekdays between the hours of 7 AM and 6 PM; and that construction material be handled and transported in such a manner as not to create unnecessary noise. In addition, appropriate low-noise emission level equipment and operational procedures would be used. Compliance with noise control measures would be ensured by directives to the construction contractor.

Public Health

According to the CEQR Technical Manual, an assessment of a proposed project's potential impact on public health should be undertaken if the project would result in significant increases in noise, odors, or air pollutant emissions; if it would produce heavy metals or expose workers, residents, or visitors to hazardous materials resulting from prior contamination of the site; or if it would attract vermin.

The modified proposal for the Psychiatric Building and the expansion of the Empire Zone to the ERSP site would not introduce significant adverse traffic or air quality impacts, or result in significant adverse impacts related to hazardous materials. The proposed project would not be expected to attract vermin and standard pest control measures would be employed to prevent and avoid vermin problems. Construction-related changes to traffic, air, and noise conditions would be temporary and would not result in significant adverse impacts on the surrounding community.

An assessment of public health impacts is ultimately based on the likelihood of public exposure to the various elements that put public health at risk. However, as is described in other sections

of this technical memorandum, no adverse hazardous materials, traffic, air, or noise impacts would occur as a result of the modified proposal. The modified redevelopment proposal would therefore not introduce any factors that place the public at risk, and no significant adverse public health impacts would result.

III. CONCLUSIONS

As described in the analyses above, none of the changes that are proposed to the ERSP project, including a re-programming of the uses in the Bellevue Psychiatric Building and the designation of the ERSP site as an expansion site in the Chinatown Empire Zone, would result in significant adverse environmental impacts that were not previously identified in the FEIS.

Robert R. Kulikowski, Ph.D. Assistant to the Mayor

Date

APPENDIX A

MEMORANDUM of AGREEMENT REGARDING THE PSYCHIATRIC BUILDING AT BELLEVUE HOSPITAL NEW YORK COUNTY, NEW YORK

Between

THE NEW YORK STATE OFFICE OF PARKS, RECREATION, AND HISTORIC PRESERVATION,
THE NEW YORK CITY HEALTH AND HOSPITALS CORPORATION AND THE CITY OF NEW YORK

WHEREAS, The New York City Economic Development Corporation acting on behalf of the New York City Health and Hospitals Corporation ("NYCHHC") asked the New York State Office of Parks, Recreation, and Historic Preservation ("OPRHP") to review a proposal regarding the East River Science Park (the "Project") which is adjacent to a property, the Psychiatric Building, which has been determined eligible for inclusion on the State and National Registers of Historic Places; and

WHEREAS, The City of New York (the "City") is the owner of the land underlying the Psychiatric Building and the NYCHHC is the lessor of such land pursuant to an Agreement dated June 16, 1970 between the City and the NYCHHC; and

WHEREAS, the OPRHP has determined that the new buildings associated with the East River Science Park would tower over the historic Psychiatric Building and that the design of the new building is not in keeping with the OPRHP's guidelines for new construction; and

WHEREAS, the OPRHP has found that an Adverse Effect to the Psychiatric Building would result from the development of the East River Science Park; and

WHEREAS, all prudent and feasible alternatives to the proposal have been explored,

NOW THEREFORE, in accordance with Section 106 of the National Historic Preservation Act of 1966, the OPRHP, the NYCHHC and the City agree that the Project may proceed subject to the Stipulation below.

Stipulation

A. Covenant

The Psychiatric Building is the subject of the attached preservation covenant between the OPRHP, the NYCHHC and the City. Execution of the Covenant by the OPRHP, the

NYCHHC and the City has taken into account the impact of the undertaking on the adjacent historic property.

NEW YORK STATE HISTORIC PRESERVATION OFF	
BY: Ristled Purport TITLE: DSHPO	DATE: <u>6/21/07</u>
TITLE: DSHPO	-
CONCUR:	•
NEW YORK CITY HEALTH AND HOSPITALS CORPO	ORATION
BY:	DATE:
TITLE: PRESIDENT	
-	
THE CITY OF NEW YORK	
BY:	DATE:
100	
TITLE: Ver Haye	
To Mand	· .
Approved as to form	
By Acting Corporation Counsel	

PRESERVATION COVENANT TO BE USED FOR CONVEYANCE OF PSYCHIATRIC BUILDING

- In consideration of the approval of the New York State Office of Parks, Recreation and Historic Preservation (the "OPRHP") of a proposal regarding the East River Science Park which is adjacent to a building, the Psychiatric Building (the "Psychiatric Building"), located on a portion of Tax Lot 100 in Tax Block 962 in the Borough of Manhattan in the City of New York (such portion known as Parcel 1 and being more fully described and depicted in Exhibit A hereto), each of the New York City Health and Hospitals Corporation (the "NYCHHC"), as lessor of the Psychiatric Building pursuant to an Agreement dated June 16, 1970 between The City of New York (the "City"), and the City, as owner of the Psychiatric Building, hereby covenant on behalf of themselves, their heirs, successors, and assigns at all times to notify the OPRHP in writing prior to undertaking any construction, alteration, remodeling, demolition, or other modification to structures or setting that would affect the features of the Psychiatric Building that make the Psychiatric Building eligible for inclusion on the State and National Registers of Historic Places. Such notice shall describe in reasonable detail the proposed undertaking and its expected effect on the integrity or appearance of the Psychiatric Building.
- 2. Within thirty (30) calendar days of receipt of notification provided by the NYCHHC or the City pursuant to paragraph 1 of this covenant, the OPRHP will respond to the sender of the notification (the "Sender")
 - (a) That the Sender may proceed with the proposed undertaking without further historic preservation consultations; or
 - (b) That the Sender must initiate and complete consultation with the OPRHP before the Sender can proceed with the proposed undertaking.

If the OPRHP fails to respond to the Sender's written notice, as described in paragraph 1 of this covenant, within thirty (30) calendar days of the OPRHP's receipt of the same, then the Sender may proceed with the proposed undertaking without further historic preservation consultations with the OPRHP.

3. If the response provided to the Sender by the OPRHP pursuant to paragraph 2 of this covenant requires consultation with that office, then all parties will so consult in good faith to arrive at mutually-agreeable and appropriate measures that the Sender will take to avoid or minimize any adverse effects associated with the proposed undertaking. If the parties are unable to arrive at such mutually-agreeable measures, then the Sender shall undertake mitigation in the form of recordation for the concerned property-in accordance with the standards of the Secretary of the Interior of the United States of America for recordation and any applicable state standards for recordation, or in accordance with such other standards to which the parties may mutually agree--prior to proceeding with the proposed undertaking. Pursuant to this covenant, any mitigation

measures to which the Sender and the OPRHP mutually agree, or any recordation that may be required, shall be carried out solely at the expense of the Sender.

- 4. The OPRHP shall be permitted at all mutually agreeable reasonable times to inspect the Psychiatric Building in order to ascertain its condition and to fulfill its responsibilities hereunder, provided such inspection can be conducted safely.
- 5. In the event that the Psychiatric Building (a) is substantially destroyed by fire or other casualty, or (b) is not totally destroyed by fire or other casualty, but damage thereto is so serious that restoration would be financially impractical in the reasonable judgment of the NYCHHC or the City, this covenant shall terminate on the date of such destruction or casualty. Upon such termination, the NYCHHC and the City shall deliver a duly executed and acknowledged notice of such termination to the OPRHP, and record a duplicate original of said notice in the County of New York County Deed Records. Such notice shall be conclusive evidence in favor of every person dealing with the Psychiatric Building as to the facts set forth therein.
- 6. The failure of the OPRHP to exercise any right or remedy granted under this instrument shall not have the effect of waiving or limiting the exercise of any other right or remedy or the use of such right or remedy at any other time.
- 7. Until terminated pursuant to paragraph 5 or any subsequent agreement or release by OPHRP, the covenant shall be a binding servitude upon the Psychiatric Building and shall be deemed to run with the land. Execution of this covenant shall constitute conclusive evidence that the NYCHHC and the City agree to be bound by the foregoing conditions and restrictions and to perform the obligations herein set forth.

EXHIBIT A

PARCEL 1

BEGINNING at a point on the easterly side of First Avenue (100 feet wide); said point being the corner formed by the intersection of the easterly side of First Avenue with the southerly side of former East 30th Street (60 feet wide), discontinued and closed;

Running thence easterly along said southerly side of former East 30th Street (60 feet wide), discontinued and closed, a distance of 416.74 feet to a point; said line forming an interior angle of 90 degrees 00 minutes 00 seconds with the easterly side of First Avenue;

Running thence southerly through lands now or formerly Bellevue Hospital (tax Lot 100), a distance of 61.14 feet to a point; said line forming an interior angle of 90 degrees 00 minutes 00 seconds with the last-mentioned course;

Running thence easterly through lands now or formerly Bellevue Hospital (tax Lot 100), a distance of 2.98 feet to a point; said line forming an interior angle of 270 degrees 00 minutes 00 seconds with the last-mentioned course;

Running thence southerly through lands now or formerly Bellevue Hospital (tax Lot 100), a distance of 75.00 feet to a point; said line forming an interior angle of 90 degrees 00 minutes 00 seconds with the last-mentioned course;

Running thence westerly through lands now or formerly Bellevue Hospital (tax Lot 100), a distance of 3.08 feet to a point; said line forming an interior angle of 90 degrees 00 minutes 00 seconds with the last-mentioned course;

Running thence southerly through lands now or formerly Bellevue Hospital (tax Lot 100), a distance of 48.42 feet to a point; said line forming an interior angle of 270 degrees 00 minutes 00 seconds with the last-mentioned course;

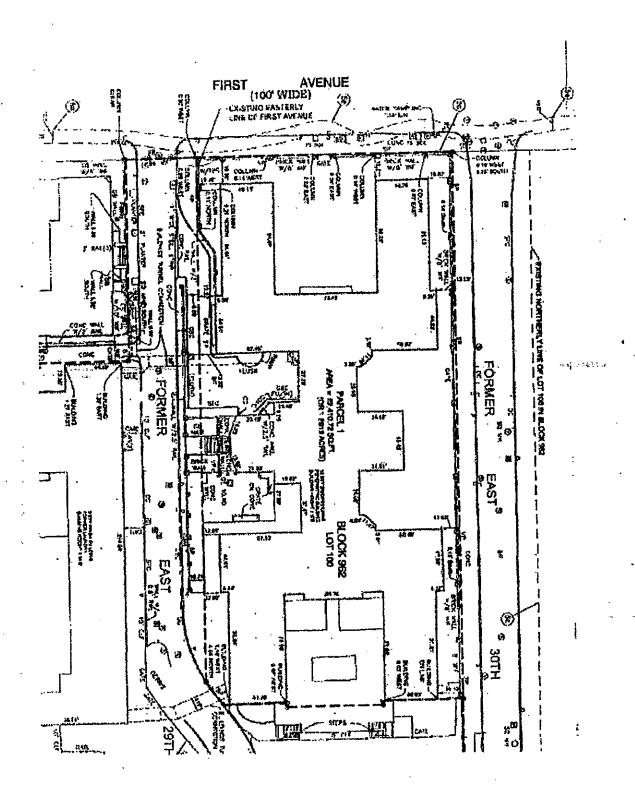
Running thence southwesterly through lands now or formerly Bellevue Hospital (tax Lot 100), a distance or 16.45 feet to a point of curvature; said line forming an interior angle of 128 degrees 27 minutes 29 seconds with the last-mentioned course;

Running thence westerly through lands now or formerly Bellevue Hospital (tax Lot 100) on a curve bearing to the right with a radius of 107.00 feet and a central angle of 02 degrees 56 minutes 57 seconds, an arc distance of 5.51 feet to a point, the radial line of said curve forming an interior angle of 90 degrees 00 minutes 00 seconds with the last-mentioned course;

Running thence westerly through lands now or formerly Bellevue Hospital (tax Lot 100), a distance of 398.90 feet to a point on the easterly side of First Avenue, said line forming an interior angle of 58 degrees 29 minutes 28 seconds with the radial line of the last-mentioned course;

Running thence northerly along the easterly side of First Avenue, a distance of 197.50 feet to the place and point of beginning; said line forming an interior angle 90 degrees 00 minutes 00 seconds with the last-mentioned course;

Containing 82,410.72 square feet or 1.8919 acres.



THE CITY OF NEW YORK LANDMARKS PRESERVATION COMMISSION 100 Old Slip, New York, NY 10005 (212) 487-6800

ENVIRONMENTAL REVIEW

,	DME	//01DME004M	06/27/01
	PROJE	CT NUMBER	DATE RECEIVED
PROJECT	EAS'	TRVR SCIENCE PRK/NYU: EAST RIVER S	SCIENCE PARK/ NYU
	[]	No architectural significance	en e
	[X]	No archaeological significance	
	[]	Designated New York City Landmark or Within Designated	gnated Historic District
	[]	Listed on National Register of Historic Places	
elitare and a second	[X]	Appears to be eligible for National Register Listing as Designation	nd/or New York City Landmark
	[1]	May be archaeologically significant; requesting addit	ional materials
	•		
COMMENTS	Text	of DEIS dated 6/22/01 is acceptable.	,
		$M \cdot Q$.	
	2	Jua Santucci	06/29/01
	SIGN	ATURE CONTROL OF THE	DATE

NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION

Division of Fish, Wildlife & Marine Resources

New York Natural Heritage Program

625 Broadway, Albany, New York 12233-4757

Phone: (518) 402-8935 • FAX: (518) 402-8925



November 17, 2008

Josh Moreinis S T V Incorporated 225 Park Avenue South New York City, NY 10003-1604

Dear Mr. Moreinis:

In response to your recent request, we have reviewed the New York Natural Heritage Program database with respect to an Environmental Assessment for the proposed Redevelopment of the former Bellevue Psychiatric Hospital Building, site as indicated on the map you provided, located at 500 First Avenue, New York City.

We have no records of known occurrences of rare or state-listed animals or plants, significant natural communities, or other significant habitats, on or in the immediate vicinity of your site.

The absence of data does not necessarily mean that rare or state-listed species, natural communities or other significant habitats do not exist on or adjacent to the proposed site. Rather, our files currently do not contain any information which indicates their presence. For most sites, comprehensive field surveys have not been conducted. For these reasons, we cannot provide a definitive statement on t he presence or absence of rare or state-listed species, or of significant natural communities. This information should not be substituted for on-site surveys that may be required for environmental assessment.

Our databases are continually growing as records are added and updated. If this proposed project is still under development one year from now, we recommend that you contact us again were so that we may update this response with the most current information.

This response applies only to known occurrences of rare or state-listed animals and plants, significant natural communities and other significant habitats maintained in the Natural Heritage Data bases. Your project may require additional review or permits; for information regarding other permits that may be required under state law for regulated areas or activities (e.g., regulated wetlands), please contact the appropriate NYS DEC Regional Office, Division of Environmental Permits, at the enclosed address.

Tara Salerno, Information Services

NY Natural Heritage Program

Enc.

Reg. 2, Wildlife Mgr. cc:

APPENDIX B

And a good of the Land			100000	100 miles
Dan 1	-	AUTO	200	1 1 2 2 2
For I	щеш	ar us		11 Y 🐃
6600.000	3000 AS		CONTRACT	
Date	T)	New York and		
TJAIR	RECE	ivea.		3126 (2.2)

WRP no.

NEW YORK CITY WATERFRONT REVITALIZATION PROGRAM Consistency Assessment Form

Proposed actions that are subject to CEQR, ULURP or other local, state or federal discretionary review procedures, and that are within New York City's designated coastal zone, must be reviewed and assessed for their consistency with the <u>New York City Waterfront Revitalization Program (WRP)</u>. The WRP was adopted as a 197-a Plan by the Council of the City of New York on October 13, 1999, and subsequently approved by the New York State Department of State with the concurrence of the United States Department of Commerce pursuant to applicable state and federal law, including the Waterfront Revitalization of Coastal Areas and Inland Waterways Act. As a result of these approvals, state and federal discretionary actions within the city's coastal zone must be consistent to the maximum extent practicable with the WRP policies and the city must be given the opportunity to comment on all state and federal projects within its coastal zone.

This form is intended to assist an applicant in certifying that the proposed activity is consistent with the WRP. It should be completed when the local, state, or federal application is prepared. The completed form and accompanying information will be used by the New York State Department of State, other state agencies or the New York City Department of City Planning in their review of the applicant's certification of consistency.

A	AP	D1 10	٠.	NT
А.	AP	PLIL	-Н	NI

1.	Name: New York City Econo	mic Development Corpo	ration	1 Best Par
2.	Address: 110 William Street			
3.	Telephone: (212) 312-3718	Fax: (212) 312-3989	E-mail: rbelsky@nycedc.com	
4.	Project site owner: City of New	York NYC Health and Ho	spitals Corp.	

B. PROPOSED ACTIVITY

1. Brief description of activity:

The project would redevelop the Psychiatric Building on the Bellevue Hospital campus located on East 29th and First Avenue in Manhattan, for hotel, medical office, conference center, and retail use. The Psychiatric Building is currently partially vacant and partially occupied by a men's homeless shelter operated by the NYC Department of Homeless Services. The project also includes the expansion of the Chinatown Empire Zone ("EZ") to cover the adjacent East River Science Park ("ERSP") site.

2. Purpose of activity:

The project will restore an landmark-eligible building (determined eligible for listing on the State and National Registers by the NYS Office of Parks, Recreation and Historic Preservation) and provide a complimentary use along the First Avenue medical corridor. The EZ expansion will enable certain benefits for the ERSP project.

3. Location of activity: (street address/borough or site description):

The Psychiatric Building is located on an approximately 82,000 square foot parcel at 500 First Avenue, between East 29th and East 30th Streets in the Kips Bay neighborhood of Manhattan. ERSP is located between East 28th and East 29th Streets, from First Avenue to the FDR service road.

Territoria de Constantina de la Constantina del Constantina de la Constantina de la

	posed Activity Cont'd		
1.	If a federal or state permit or license was issued or is required for the proposed activity, identify the type(s), the authorizing agency and provide the application or permit number(s), if known: N/A	e permit	
5.	Is federal or state funding being used to finance the project? If so, please identify the funding sour It is expected that the project will receive historic preservation tax credits.	ce(s).	
i.	Will the proposed project require the preparation of an environmental impact statement? Yes No ✓ If yes, identify Lead Agency:	•	
•	Identify city discretionary actions, such as a zoning amendment or adoption of an urban renewal proposed project.	olan, req	uired.
-	 Site disposition, through HHC's process (HHC Act, Section 7385 (6) Empire Zone Expansion, which requires City Council approval 		
	and the street of the street o		
(COASTAL ASSESSMENT		
	cation Questions:	Yes	No
	cation Questions: Is the project site on the waterfront or at the water's edge?	Yes	No _√
١.		Yes	No ✓
1. 2. 3.	Is the project site on the waterfront or at the water's edge?	Yes	
1. 2. 3. sho	Is the project site on the waterfront or at the water's edge? Does the proposed project require a waterfront site? Would the action result in a physical alteration to a waterfront site, including land along the	Yes	No No
1. 2. 3. Sho	Is the project site on the waterfront or at the water's edge? Does the proposed project require a waterfront site? Would the action result in a physical alteration to a waterfront site, including land along the preline, land underwater, or coastal waters?		√ √ No
11. 2. 3. Sho	Is the project site on the waterfront or at the water's edge? Does the proposed project require a waterfront site? Would the action result in a physical alteration to a waterfront site, including land along the oreline, land underwater, or coastal waters? Iicy Questions e following questions represent, in a broad sense, the policies of the WRP. Numbers in tentheses after each question indicate the policy or policies addressed by the question. The new sterfront Revitalization Program offers detailed explanations of the policies, including criteria for insistency determinations.		√ √ No
1. 2. 3. Sho	Is the project site on the waterfront or at the water's edge? Does the proposed project require a waterfront site? Would the action result in a physical alteration to a waterfront site, including land along the oreline, land underwater, or coastal waters? Iticy Questions Iticy Questions It following questions represent, in a broad sense, the policies of the WRP. Numbers in rentheses after each question indicate the policy or policies addressed by the question. The new sterfront Revitalization Program offers detailed explanations of the policies, including criteria for insistency determinations. The recommendation of the policies of the proposed activity on the relevant policies or standards.		No No
The Solution Charles Ex	Is the project site on the waterfront or at the water's edge? Does the proposed project require a waterfront site? Would the action result in a physical alteration to a waterfront site, including land along the oreline, land underwater, or coastal waters? Ilicy Questions e following questions represent, in a broad sense, the policies of the WRP. Numbers in rentheses after each question indicate the policy or policies addressed by the question. The new sterfront Revitalization Program offers detailed explanations of the policies, including criteria for insistency determinations. eck either "Yes" or "No" for each of the following questions. For all "yes" responses, provide an achment assessing the effects of the proposed activity on the relevant policies or standards, plain how the action would be consistent with the goals of those policies and standards. Will the proposed project result in revitalization or redevelopment of a deteriorated or under-used		√ √ No

	Policy Questions cont'd	Yes	No
_	7. Will the proposed activity require provision of new public services or infrastructure in undeveloped or sparsely populated sections of the coastal area? (1.3)	·	✓
	8. Is the action located in one of the designated Significant Maritime and Industrial Areas (SMIA): South Bronx, Newtown Creek, Brooklyn Navy Yard, Red Hook, Sunset Park, or Staten Island? (2)	•	✓
	9. Are there any waterfront structures, such as piers, docks, bulkheads or wharves, located on the project sites? (2)		✓
	10. Would the action involve the siting or construction of a facility essential to the generation or transmission of energy, or a natural gas facility, or would it develop new energy resources? (2.1)		✓
	11. Does the action involve the siting of a working waterfront use outside of a SMIA? (2.2)		
	12. Does the proposed project involve infrastructure improvement, such as construction or repair of piers, docks, or bulkheads? (2.3, 3.2)		✓
	13. Would the action involve mining, dredging, or dredge disposal, or placement of dredged or fill materials in coastal waters? (2.3, 3.1, 4, 5.3, 6.3)		✓
	14. Would the action be located in a commercial or recreational boating center, such as City Island, Sheepshead Bay or Great Kills or an area devoted to water-dependent transportation? (3)		√
	15. Would the proposed project have an adverse effect upon the land or water uses within a commercial or recreation boating center or water-dependent transportation center? (3.1)		<u>√</u>
	16. Would the proposed project create any conflicts between commercial and recreational boating? (3.2)		✓
	17. Does the proposed project involve any boating activity that would have an impact on the aquatic environment or surrounding land and water uses? (3.3)	<u></u>	✓
	18. Is the action located in one of the designated Special Natural Waterfront Areas (SNWA): Long Island Sound- East River, Jamaica Bay, or Northwest Staten Island? (4 and 9.2)		√
	19. Is the project site in or adjacent to a Significant Coastal Fish and Wildlife Habitat? (4.1)		
	20. Is the site located within or adjacent to a Recognized Ecological Complex: South Shore of Staten Island or Riverdale Natural Area District? (4.1and 9.2)	-	
	21. Would the action involve any activity in or near a tidal or freshwater wetland? (4.2)		
	22. Does the project site contain a rare ecological community or would the proposed project affect a vulnerable plant, fish, or wildlife species? (4.3)		
	23. Would the action have any effects on commercial or recreational use of fish resources? (4.4)	March Company	
	24. Would the proposed project in any way affect the water quality classification of nearby waters or be unable to be consistent with that classification? (5)		<u>√</u>
	25. Would the action result in any direct or indirect discharges, including toxins, hazardous substances, or other pollutants, effluent, or waste, into any waterbody? (5.1)		
	26. Would the action result in the draining of stormwater runoff or sewer overflows into coastal waters? (5.1)		
	27. Will any activity associated with the project generate nonpoint source pollution? (5.2)		<
	28. Would the action cause violations of the National or State air quality standards? (5.2)		1

	Policy Questions cont'd	Yes	No
•	29. Would the action result in significant amounts of acid rain precursors (nitrates and sulfates)? (5.2C)		√
	30. Will the project involve the excavation or placing of fill in or near navigable waters, marshes, estuaries, tidal marshes or other wetlands? (5.3)		√
	31. Would the proposed action have any effects on surface or ground water supplies? (5.4)		√
	32. Would the action result in any activities within a federally designated flood hazard area or state-designated erosion hazards area? (6)		. 🗸
	33. Would the action result in any construction activities that would lead to erosion? (6)		<u>√</u>
	34. Would the action involve construction or reconstruction of a flood or erosion control structure? (6.1)		√
	35. Would the action involve any new or increased activity on or near any beach, dune, barrier island, or bluff? (6.1)		· 🗸
	36. Does the proposed project involve use of public funds for flood prevention or erosion control? (6.2)		✓
	37. Would the proposed project affect a non-renewable source of sand? (6.3)		✓
	38. Would the action result in shipping, handling, or storing of solid wastes, hazardous materials, or other pollutants? (7)		√
	39. Would the action affect any sites that have been used as landfills? (7.1)		✓
	40. Would the action result in development of a site that may contain contamination or that has a history of underground fuel tanks, oil spills, or other form or petroleum product use or storage? (7.2)		√
	41. Will the proposed activity result in any transport, storage, treatment, or disposal of solid wastes or hazardous materials, or the siting of a solid or hazardous waste facility? (7.3)		✓
	42. Would the action result in a reduction of existing or required access to or along coastal waters, public access areas, or public parks or open spaces? (8)		✓
	43. Will the proposed project affect or be located in, on, or adjacent to any federal, state, or city park or other land in public ownership protected for open space preservation? (8)		✓
• يغور	44. Would the action result in the provision of open space without provision for its maintenance? (8.1)		
£4.	45. Would the action result in any development along the shoreline but NOT include new water- enhanced or water-dependent recreational space? (8.2)		
	46. Will the proposed project impede visual access to coastal lands, waters and open space? (8.3)		✓
	47. Does the proposed project involve publicly owned or acquired land that could accommodate waterfront open space or recreation? (8.4)		_ ✓
	48. Does the project site involve lands or waters held in public trust by the state or city? (8.5)		
	49. Would the action affect natural or built resources that contribute to the scenic quality of a coastal area? (9)		✓
	50. Does the site currently include elements that degrade the area's scenic quality or block views to the water? (9.1)		-

Policy Questions cont'd			Yes
51. Would the proposed acticultural resources? (10)	on have a significant adverse in	mpact on historic, archeological, or	· .
on the National or State Reg	y affect or be located in, on, or pister of Historic Places, or des	r adjacent to an historic resource listed ignated as a landmark by the City of	ſ
New York? (10)			
D. CERTIFICATION			
Revitalization Program, pursu	ant to the New York State Coa	y is consistent with New York City's Wate astal Management Program. If this certific certification can be made, complete this s	cation cann
"The proposed activity complies with New York State's Coastal Management Program as expressed in New York City's approved Local Waterfront Revitalization Program, pursuant to New York State's Coastal Management Program, and will be conducted in a manner consistent with such program."			
Applicant/Agent Name: Rach	el Belsky, Vice President, I	NYC Economic Development Corp	
Address: 110 William Stree			
Address		Telephone_ (212) 312-37	18
Applicant/Agent Signature:		Date:	
•			
	•		
			•
	,		
1. Section Commence		Jan Jan John John William of Andrewski	•
Sign of Silver Silver Marketine Silver		gan gan series s	
Sign of Silver Silver Marketine Silver			
Sign of Silver Control of Silver Silv			

APPENDIX C

Appendix C-1

Turning Movement Count Summaries

Former Bellevue Psych Building Redevelopment

FILE NAME:

TMC Summary.xis

LOCATION:

East 23rd Street and First Avenue

TIME PERIOD: COUNT DATE: AM Peak Period

WEATHER/PAVEMENT: PRINT TIME:

Wednesday, October 29, 2008

Cloudy / Drizzle 12/15/08

03:19 PM

TIME PERIOD	VEHICLE CLASS.	INPUT "1" AT START	F	irst Avent (NB)	ve	F	irst Aveni (SB)	/8	Eas	t 23rd Sta (EB)	reef	Ëa:	t 23rd Sta (WB)	reet	15-MIN.	HOURLY	HIGHEST
PERIOD	CLASS.	OF PEAK	Ĺ	Т	R	L	т	R	, L =	• т	R	Ł.	Т	R	VOLUME	VOLUME	VOLUME
7:00	Auto		34	155	7	0	0	0	19	63	0	0	41	15	541		
to	Truck		18	29	9	0	0	0	3	4	0	0	39	9	1		
7:15	Bus		7	9	7	0	. 0	0	10	15	0	0	40	8	1		
7:15	Auto		72	213	9	0	0	0	-20	97	0	0	90	30	758		
to	Truck		19	9	10	0	0	0	7	1	0	0 .	45	12	1		
7:30	Bus		12	10	12	0	0	0	4	16	-0	0	55	15	1		
7:30	Auto		85	232	12	0	0	0 -	25	101	0	0	131	32	895		**
to	Truck		21	9	11	0	0	0	6	11	0	0	55	15			ļ
7:45	Bus		15 -	35	14	0	. 0	0	. 5	12	0	. 0	49	19			!
7:45	Auto	1	77	264	15	0	0	0	26	104	0	0	157	37	955		į
to	Truck		22	15	14	0	; 0	0	5	1	0	0	61	19			
8:00	Bus		17	12	17	0 .	. 0	0	2	13	.0	0	53	24		3,149	Ĭ
8:00	Auto		87	258	15	0.	0	0	29	98	0	0	159	31	956		
to	Truck		23	10	14	0	0	0	2	` 3	0	0	63	21			1
8:15	Bus		14	11	17	. 0.	0.	. 0 .	2	27	0	0	51	21		3,564	
8:15	Auto		91	261	21	0	0	, 0	28	102	0	0 '	162	27	980		
to	Truck		25	, 12	17	. 0	0	0	3	4	0	0	52	24			ł
8:30	Bus		19	14	18`	. 0	0	0	1	28	0	0	. 49	22	1	3,786	
8:30	Auto		72	264	14	0	0	0	26	99	0	0	147	21	908		
to	Truck		21	15	13	0	0	0	2	5	0	0	49	19	i		
8:45	Bus		17	16 .	15	0	0	<u> </u>	2	30	0	0	_ 44	17	<u> </u>	3,799	
8:45	Auto		69	259	19	0	0	0	24	98	0	0	147	19	887		
to 9:00	Truck Bus		21 11	14 17	17 16	0	0	0	3	4	0	0	46	16			
	i Dus iour Volun	o (DUV)	485	1,152	190	0	0	0	128	28	0	0	41	17		3,731	<u> </u>
		· •	403	 	190	<u> </u>			128	514	U	0	1,047	283	3,799		
	V (by appr		•	1,827		ļ	0 -			642			1,330	· · · · · · · · · · · · · · · · · · ·			
	Hour Facto	• •		0.96			#DIV/0!			0.97			0.95				
	Total Auto	s		1,439			0			512			741		1		
•	Total Truci	(\$		201			0		İ	25			308		1		
	Total Buse	5		187		İ	0			105			281				
	% Auto			78.8%			#DIV/01			79.8%			55.7%		1		
%	Heavy Veh	icles		21.2%			#DIV/01			20.2%		1	44.3%				
	rucks & Bu												7 7.072				

PROJECT: FILE NAME: Former Bellevue Psych Building Redevelopment

LE NAME: TMC Summary.xls

East 23rd Street and First Avenue

LOCATION: TIME PERIOD:

PM Peak Period

COUNT DATE: WEATHER/PAVEMENT:

Wednesday, October 29, 2008 Cloudy / Drizzle

PRINT TIME:

12/15/08 03:19 PM

TIME	VEHICLE	INPUT "1" AT START	F	irst Avenu (NB)	e	F	rst Avenu (SB)	ie .	Eas	t 23rd Str (EB)	eet	Eas	t 23rd Str (WB)	reet	15-MIN. VOLUME	HOURLY	HIGHEST HOURLY
PERIOD	CLASS.	OF PEAK	L	T	R	L	τ	R	L	τ	R	L,	T	R	VOLUME	VOLUME	VOLUME
4:00	Auto		28	216	31	0	0	0	13	103	0	0	96	29	645		
to	Truck		4	14	6	0	0	0	5	5	0	0	15	12		ł	
4:15	Bus	1	8	8	15	0	0	0	0	14	0	. 0	12	11		Į	1
4:15	Auto		21	218	27	0	0	0	12	198	0	0	121 ·	22	765		
to	Truck		6	13	12	0	0	0	6	4	0	0	16	14	L	j	
4:30	Bus	l j	9	9 -	16	0	0	0 .	1	15	0	0	10	15	<u> </u>	4	
4:30	Auto		24	238	24	0	0	0	19	113	0	0	132	24	721		
to	Truck		8	4	13	0	, 0	0	4	5	0	0	7	17	1		İ
4:45	Bus		14	9	17	0	0	0	3	15	0	0	15	16	<u> </u>	4	l
4:45	Auto		32	240	29	0	0	0	20	. 94	0	0	127	25	708		
to	Truck		12	7	8	0	0	0	3	6	0	0	6	18			İ
5:00	Bus		12	10	_10	0	-0	0	5	14	0	0	16	14		2,839	1
5:00	Auto	1	27	242	21	0	0	0	21	96	0	0	121	21	656		
to	Truck		5	8	9	0	0	0	2	5	0	. 0	6	9			
5:15	Bus		10	9	14	0	0	0	1.	12	-0	0	11	6	<u> </u>	2,850	1
5:15	Auto		38	255	12	0 "] 0 .	0	34	95	0	0	117	22	698	1	1
to	Truck		7	₃ 10	10	0	.,0	0,	0	2	0	0	_ 13	10	100	.	. 1
5:30	Bus		6	8	20	0	. 0	0	1	15	0	0	17	. 6		2,783	
5:30	Auto		31	279	17	0	0	0	28	¨89	0	0	107	21	672	1	
to	Truck		6	2	9	0	0	0	1 1	1	0	0	11	8	1		ļ.
5:45	Bus		5	- 8	11	0	0	0	0	16	0	0	15	7		2,734	1
5:45	Auto		57	251	11	0	0	0	29	- 93	0	0	105	40	734	1	
to	Truck		10	8	5	0	0	0	1 1	7	0	0	15	7		2,760	
6:00	Bus	ļ	7	11	6	0	0	0	0	16	0	0	34	21	 	2,760	
Peak	Hour Volu	me (PHV)	209	1,091	145	0	0	0	118	447	0	0	572	178	2,760	_	
PH	V (by app	roach)	1	1,445		·	0			565			750		_		
Peak	Hour Fact	or (PHF)		0.98			#DIV/01			0.96		l	0.84				
_	Total Aut	os		1,241		<u> </u>	0			485			554		1		•
1	Total True		1	89		1	0		1	19			79				
				115		l	0			61			117				
<u> </u>	Total Bus		 	85.9%		 	#DIV/0!		 	85,8%		 	73.9%		Ħ		
	% Auto		1			1					(26.1%				
	Heavy Ve			14.1%			#DIV/01		1	14.2%	`	1	20.176		1		
0	Frucks & B	uses)	<u> </u>									1					

Former Bellevue Psych Building Redevelopment

FILE NAME: LOCATION:

TMC Summary.xls

TIME PERIOD:

East 29th Street and First Avenue

COUNT DATE:

AM Peak Period

WEATHER/PAVEMENT:

Wednesday, October 29, 2008

PRINT TIME:

Cloudy / Drizzle 12/15/08

03:19 PM

TIME PERIOD	VEHICLE	INPUT "1" AT START	F	irst Avent (NB)	16	F	irst Avenu (SB)	78	Ea	st 29th St (EB)	reet	Ea	st 29th Str (WB)	eef	15-MIN.	HOURLY	HIGHEST HOURLY
PERIOD	CLASS.	OF PEAK	L	T	R	L	т	R	L	т	R	L	T	R	VOLUME	VOLUME	VOLUME
7:00	Auto		49	251	0	0	0	0	0	0	0	0	0	0	328	 	
to	Truck		0	20	0	0	0	0	0	. 0	0	0	0	0]
7:15	Bus		2	6	_0	0	0	0.	0	0	0	0	0	. 0			
7:15	Auto		61	351	0	. 0	0	0	0	0	0	0	0	0	458	١,	
to	Truck		3 '	23	0	0	0	0	0.	0	0	0	0	0	,		
7:30	Bus		1	19	0	0	0	0	0	0	. 0	0	0 .	.0 -			l .
7:30	Auto		55	326	0	0	0	0	0	0	0	0	0	0	416	1	
to	Truck		, 1	20	0	0	0	0	0	0	0	0	0	0	ı		
7:45	Bus		4	10	0	0	0	0	0	0	- 0	0	0	0	l		
7:45	Auto	1	78	362	0	0	0	0	0	0	0	0	0	0	489		
to	Truck		3	27	0	0	0	0	0	0	0	0	1	0	ı		
8:00	Bus		2	16	0	.0	0	0	0	0	0	0	0	0	ı	1,691	
8:00	Auto		96	423	0	0	0	0	0	0	0	0	0	0	576		
to	Truck		3	32	0	0	0	0	0	0	0	0	0	1	l		
8:15	Bus		4	17	0	0	0	0	0	0	0	0	0	0	!	1,939	
8:15	Auto		59	333	0	0 -	0	0	0	0	0	0	0	0	449	1	
, to	Truck		2	32	0	0	0	0	0	0	. 0	0	0	0	ì		
·±8:30	Bus		. 3	_20_	0	0	0	0	0	0	0	0	0	0	1.3	1,930	f.
8:30	Auto	,	71	377	0	0	0	0	0	0	0	0	0	.0	499	1	-
to	Truck		2	29	0	0	0	0	0	0	0	0.	0	0		ŀ	
8:45	Bus		. 3	17	0	0	0	0	0	0	0	0	0	0	<u> L</u>	2,013	
8;45	Auto		67	331	0	0	0	0	0	0	0	0	0	0	447	1	
to	Truck		4	29	0	0	0	0	0	0	0	0	0	0	į.		
9:00	Bus	l.	, 1	15	0	0	0	0	0	0	0	0	0	0	<u> </u>	1,971	
Peak !	lour Volun	ne (PHV)	326	1,685	0	0	0	0	0	0	0	0	1	1	2,013		
PH\	/ (by appr	oach)		2,011		į .	0			0.			2			•	
Peak	Hour Facto	or (PHF)		0.87			#DIV/0!			#DIV/01			0.50		1		•
•	Total Auto	s		1,799			0			0		ì	0		1		
	Total Truci	ks		130			0			0		ļ	2				
	Total Buse	95		82			0			ò			0				•
	% Auto			89.5%		 	#DIV/0!			#DIV/0!	-	ļ	0.0%	-	1		
94.	Heavy Veh			10.5%			#DIV/0!			#DIV/0!			100.0%				
	rucks & Bu			10.070		1	#DIVIU!			#DIVIO!			100.0%				
	ucks & Bu	(898)							L] .			J		

Former Bellevue Psych Building Redevelopment

FILE NAME: LOCATION:

TMC Summary.xls East 29th Street and First Avenue

TIME PERIOD: COUNT DATE: PM Peak Period Wednesday, October 29, 2008

WEATHER/PAVEMENT:

Cloudy / Drizzle 12/15/08 03:19 PM

PRINT TIME:

TIME	VEHICLE	INPUT "1" AT START	F	irst Avenu (NB)	e	F	rst Avenu (SB)	e	Eas	t 29th Str (EB)	eet	Eas	st 29th Str (WB)	reet	15-MIN.	HOURLY	HIGHEST HOURLY
PERIOD	CLASS.	OF PEAK	L	т	R	L.	Т	R	· L	T	R	, L	т	R	VOLUME	VOLUME	VOLUME
4:00	Auto	 	53	326	0	0	0	0	0	0	0	0	0	0	432		
to	Truck	1 1	6	34	0	0	0	0	0	0	0	0	0	0	i		
4:15	Bus		2	11	0	0	0	0	0	0	0	0	0	0			
4:15	Auto		52	372	0	0	0	0	0	0	0	0	0	0	478		
to	Truck	l	4	35	0	0	0	0	0	. 0	0	0	0	0		1	ŀ
4:30	Bus	1 1	1	14	0	0.	.0	0	0 .	0	0_	0	0	0			
4:30	Auto		64	354	0	0	0	Q	0	0	0	0	0	D	456	ł	
to	Truck		3	19	0	. 0	0	0	0	0	0	0	0	0		ļ	
4:45	Bus		1:	15	0	0	0	0	0	0	0	0	0	0			
4:45	Auto		43	365	0	0	0	0	0	0	0	-0	0	0	448		
to	Truck		1	21	0	0	0	0	0	0	0	0	0	0	1		
5:00	Bus		1	17	0	0	0	0	- 0	0	0	0	0	0		1,814	
5:00	Auto	1	45	334	0	0	0	0	-0	0	0	0	0	0	402		İ
to	Truck		1	7	٠ 0	0	0	0	0	0	0	0	0	0		4.704	
5:15	Bus_		3	12	0 .	0	0	0	0	0	0	0	0	0	1	1,784	
5:15	Auto	1	59	334	0	0	0	0 .	0	0	0	0	0	0	434		1
to	Truck		1	20	. 0	0	0	0	0	0	0	0	. 0	0		1740	
5:30	Bus		1	19	0	0	0	0	0	0	0	0	0	0	413	1,740	i
5:30	Auto	1	56	336	0	0	. 0	0	0	0	0	0	0	0 1	413	1	1
to	Truck	l .	1	9	0	0	0	0	0	0	0	0	0	0		1,697	i .
5:45	Bus		3	8	0	0	0	0	0	0	0	0	0	0	417	1,097	
5:45	Auto	!	54	331	0	0	0	0	0	0	0	0	0	1 0	417		1
to	Truck	1	1	13	0	0	0	0	0	0	0	0	0	0		1,666	
6:00	Bus	J	2	16	0	0	0			· · · · ·	-	-			1	1,000	
Peak	Hour Volu	me (PHV)	227	1,439	0	0	0	0	<u> </u>	0	0	0	0	0	1,666		
PH	V (by app	roach)		1,666			0		<u> </u>	0			0		4		
Peak	Hour Fact	or (PHF)	i	0.96		ļ <u> </u>	#DIV/01			#DIV/0I			#DIV/0!		4	•	
	Total Aut	os		1,549			0			0		ĺ	0				
	Total True	cks	ł	53			0		İ	0			0				
1	Total Bus	105	1	64			0			. 0		1	0		1		
	% Auto		1	93.0%		1	#DIV/0!		1	#D1V/01			#DIV/01	1	1		
 %	Heavy Ve			7.0%			#DIV/01			#DIV/0!	-		#DIV/0	1			
	Trucks & 8					l						1			┛		

Former Bellevue Psych Building Redevelopment

FILE NAME:

LOCATION:

TMC Summary.xls
East 30th Street and First Avenue

TIME PERIOD:

AM Peak Period

COUNT DATE: WEATHER/PAVEMENT: Wednesday, October 29, 2008 Cloudy / Drizzle 12/15/08

PRINT TIME:

03:19 PM

TIME	VEHICLE	INPUT "1" AT START	F	irst Aveni (NB)	ue	F	irst Avenu (SB)	iė	Eas	st 30th Str (EB)	eet	Ea	st 30th St	reet	15-MIN.	HOURLY	HIGHEST
PERIOD .	CLASS.	OF PEAK	L	T	R	L	Т	R	L	т	R	L	τ	R	VOLUME	VOLUME	VOLUME
7:00	Auto		. 0	0	28	0	0	0	94	0	0	0	0	0	131		
to	Truck		0	0	3	0	0	0	. 4	0	0	0	0	O			•
7:15	Bus		0	0	0	0	0	0	. 2	0	0	0	0	0	1		
7:15	Auto	·	0	. 0	23	[0	0	0	70	0	0	0	0	0	102		· · ·
to	Truck		. 0	0	3	0	0.	0	4	0	0	0	0	0	1		
7:30	Bus		0	0	1	0	0	0	1	0	0	0	0	0	1		
7:30	Auto		O	0	32	0 ^	0	0	92	0	0	0	0	0	131	ye=	
to	Truck		0	0	0 .	0	0	0	2	0	0	0	0	0			
7:45	Bus		0	0	0	0	0	0	5	0	0	0	0	0			
7:45	Auto	1	0	0	24	0	0	0	98	0	0	0	0	0	126	1	
to	Truck		0	0	0	0	0	0	2	0	0	0	0	0			
8:00	Bus		0	0	1 1	0	0	0.	1.	0	0	0	0	0	į	490	
8:00	Auto		0	0	35	0	0	0	86	0	0	0	0	0	123	}	
to	Truck		0	0	, 0	0	0	0	1	0	0	0	0	0			
8:15	Bus		0	0	0	0	0	0	1	. 0	0	.0	0	0		482	
8:15	Auto		0	0	28	0	0	0	97	0	0	0	0	0	136	1	
to	Truck		0	0	3	0	0	0	4	0	0	0	0	0	,		
8:30 `	Bus		0	.0	0 '	. 0	0	0,	4	0	0:::	0	· 0	0	i i	516	***
[#] 8:30	Auto		0	0 .	30	0	0	0	85	0	0	0	0	0	124		
to	Truck		0	0	4	0	0	0	3	0	0	0	0	0			T .
8:45	Bus		0	0	0	0	0	0	2	0	0	0	0	0	1	509	
8:45	Auto		0	0	26	0	0	0	74	0	0	0	0	0	108		
to	Truck		0	0	2	0	0	0	4	0	0 .	0	0	0	1	Į.	
9:00	Bus		0	0	2	0	0	0	0	0	0	0	0	0	<u> </u>	491	
	lour Volun		٥	0	125	0	0	0	384	0	0	0	0	.0	509		
PH	/ (by appr	oach)		125			0		٠.	384			0				
Peak	Hour Facto	or (PHF)		0.89			#DIV/0!			0,91			#DIV/0!				
	Total Auto	s		117			0			366			0		1		
	Total Truc	ks		7			0			10		ŀ	0				
	Total Buse	es		1			0		ŀ	8		•	0				
	% Auto			93.6%			#DIV/01			95.3%		 	#DIV/0!		1		
%	Heavy Veh	icles		6.4%			#DIV/0!			4.7%			#DIV/01		1		
	rucks & Bu						.,5,1,0;			7.7 70			WINDIANO:		i		
						<u> </u>						<u></u>			J		

Former Bellevue Psych Building Redevelopment

FILE NAME: TMC Summary.xls

LOCATION: TIME PERIOD:

East 30th Street and First Avenue

COUNT DATE:

PM Peak Period Wednesday, October 29, 2008

WEATHER/PAVEMENT: PRINT TIME:

Cloudy / Drizzle 12/15/08 03:19 PM

TIME	VEHICLE	INPUT "1"	F	irst Avenu (NB)	e	Fl	rst Avenu (SB)	0	Eas	t 30th Str (EB)	eet	Eas	st 30th Str (WB)	eet	15-MIN.	HOURLY	HIGHEST HOURLY
PERIOD	CLASS.	OF PEAK	L	т	R	L	Т	R	L	т	R .	_ L	Ŧ	R	VOLUME	VOLUME	VOLUME
4:00	Auto		0	0	24	0	0	0	102	0	0	0	0	0	136		
to	Truck	1	ō	0	5	0	0	0	2	0	0	0	0	0			
4:15	Bus	l I	0	0 _	1	0	0	0	2	0	0	0	0	0			
4:15	Auto		0	0	26	0	0	0	100	0	0.	0	0	0	128		
to	Truck	ĺ	0	0	0	0	0	0	2	0	0	0	0	0	1	!	
4:30	Bus		0	0.	0	. 0	0	0	0	0	0	0	0	0	400		- 1 - c
4:30	Auto	- "	0	0	16	0	0	0	89	0	0	0	0	0 .	109		
to	Truck	l !	0	0	1	0	0	0	1 1	0	0	0	0 -	0	1		ľ
4;45	Bus		0	0	0	0	0	0	2	0	0	0	0	0	132	1	1
4:45	Auto	1	0	0	30	0	-0	0	96	0	0	0	0	0	132		
to	Truck	!	0	0	1	0	0.	0	5	0	0	0	0	0		505	
5:00	Bus	 	0_	0	0	0	0	0	81	0	0	0	0	0	104	1 333	
5:00	Auto	1	0	0	21	0	0	١٥	1	l ŏ		0	0	Ö	1 .04		
to	Truck	1 1	0	0	1 0	0	١	0	0	ő	ő	lő	ŏ	ŏ		473	
5:15	Bus		0	0	18	0	0	0	99	0	0	0	0	0	120	1	
5:15	Auto		0	0	0	ő	٥	0	2	١٠	0:	ō	0	0			
to 5:30	Truck Bus		0	0	ō	ŏ	l. ő	ا م	1.	ا ه ا	0	. 0	0	0		465	
5:30	Auto		0	0	12	0	0	0	81	0	0	0	0	0	96	1	
to	Truck		0	0	3	ŏ	0	0	0	0	0	0	0	0		Į.	1
5:45	Bus		0-	o	0	0	0	0	0	0	0	0	0	0		452	1
5:45	Auto		0	0	14	0	0	0	66	0	0	0	0	0	81		
to	Truck	ľ	. 0	0	0	0	0	0	0	0	0	0	0	0	1		
6:00	Bus		0	0	0	0	0	0	1	0	0	0	0	0	 	401	
Peak	Hour Volu	me (PHV)	0	0	69	. 0	0	0	332	. 0	0	0	0	0	401		
PH	V (by app	roach)		69			0			332			0		_		
Peak	Hour Fact	or (PHF)		0.78			#D1V/01		<u> </u>	0.81	-		#DIV/0!		_		
	Total Aut	os		65			0			327			0				•
	Total True	iks.		4			0			3			0				
	Total Bus	:05		0		1	0			2			0				
	% Auto		<u> </u>	94.2%			#DIV/0!			98.5%			#DIV/01		1		
9/	Heavy Ve			5.8%			#DIV/01			1.5%			#DIV/0!				
	rucks & B		1			i									╛		

Former Bellevue Psych Building Redevelopment

FILE NAME: LOCATION:

TMC Summary.xls
East 34th Street and First Avenue

TIME PERIOD: COUNT DATE: AM Peak Period

WEATHER/PAVEMENT:

Wednesday, October 29, 2008 Cloudy / Drizzle 12/15/08

PRINT TIME:

03:19 PM

TIME	VEHICLE	INPUT "1" AT START	F	irst Avent (NB)	ve	F	irst Avend	ie	Ea	st 34th Str (EB)	eet	Eas	st 34th St	reet	15-MIN.	HOURLY	HIGHEST
PERIOD	CLASS.	OF PEAK	L	Ţ	R	L	Т	R	L	T	R ·	L	τ	R	VOLUME	VOLUME	VOLUME
7:00	Auto		12	178	38	0	0	0	22	206	0	0	65	26	605	<u> </u>	
to	Truck	i	4	5	1	0	0	0	3	6	0	0	2	2			
7:15	Bus		1	14	4	0	. 0	0	0	10	0	0	5	1]	
7:15	Auto		16	235	37	. 0	0	0	25	151	0	0	78	35	639	1	
to	Truck		2	9	2	0	-0	0	1 1	1	0	0	1	1] ,	
7:30	Bus		3	19	2	0	0	0	1	9	0	0	7	4.]	
7:30	Auto	*** - ***	21	249	50	0	0	Ō	19	183	0	0	87	24 "	~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~		
to	Truck	1	1	14	1	0	- 0	0	1 1	5	0	0	2	1			
7:45	Bus		2	18	. 2	0	0	0	1	10	o i	0	7	1			
7:45	Auto	1	25	278	45	0	0	0	29	139	0	0	102	32	725	1 .	
to	Truck		3	21	2	0	0	0	2	3	0	0	1	1			
8:00	Bus		4	16	2	0	0	0	0	14	0	0	4	2	1	2,668	
8:00	Auto		18	244	53	0	0	0	25	169	0	0	111	53	751	1	
to	Truck		6	20	1	0	0	0	1	4	0	0	4	0	l		
8:15	Bus		1	18	1	0	0	0	1 1	14	0	0	7	0	1	2,814	
8:15	Auto		32	286	53	0	0	0	19	133	0	0 .	116	34	743	1	
to	Truck		2	. 21	2	0	0	0	1	2	0	0	2 .	0		l	
÷8:30	Bus		1	21	2	0	' 0	0	0	9	0	0	7	0	7	2,918	in fir
8:30	- Auto	1	27	234	56	0	0	0	18	105	0	0	100	24	648	ľ	-
to	Truck		2	23	1	0	0	0	2	5	0	0	0	1	1 .	ł	
8:45	Bus		2	23	2	0	0	0	1	13	0	0	8	1		2,867	
8:45	Auto		^ 24	244	34	0	0	0	18	141	0	0	94	17	651	1	
to	Truck		7	20	1	0	0	0	4	2	0 .	0	2	0			
9:00	Bus	<u> </u>	3	22	2	. 0	0	0	1	8	0	0	7	0		2,793	
Peak H	iour Volun	ne (PHV)	123	1,205	220	. 0	0	0	99	610	0	0	462	148	2,867		
PHV	/ (by аррг	oach)		1,548			0		ļ	709			610			_	
Peak l	Hour Facto	or (PHF)		0.92		!	#DIV/01			0.83			0.87		1		
	Total Auto	93		1,351			0			637			572		1		
	Total Truc	ks		104			. 0		1	20			9		1		
	Total Busi	28		93			0		l	52			29		İ		
	% Auto			87.3%		 	#DIV/01			89.8%		-	93.8%	· · · · - ·	1		
% I	Heavy Veh			12.7%		ļ	#DIV/01			10.2%			6.2%				
	rucks & Bu			.2 70						10.2/0			U.Z./B			47	

Former Bellevue Psych Building Redevelopment

FILE NAME:

LOCATION:

TMC Summary.xls
East 34th Street and First Avenue

PM Peak Period TIME PERIOD:

COUNT DATE: WEATHER/PAVEMENT: PRINT TIME:

Wednesday, October 29, 2008 Cloudy / Drizzle 12/15/08

03:19 PM

TIME		INPUT "1" AT START	F	irst Avenu (NB)	e .	F	irst Avenu (SB)	e ·	Eas	t 34th Str (EB)	eet	Eas	t 34th Str (WB)	eet .	15-MIN. VOLUME	HOURLY	HIGHEST HOURLY
PERIOD	CLASS.	OF PEAK	L	Т	R	L	Т	R	L	T	R	L	T	R	VOLUME	VOLUME	VOLUME
4:00	Auto		36	304	65	0	0	0	48	120	.0	0	100	25	773		
to	Truck	ĺ	0	21	2	0	0	0	1	0	0	0	1	2			1
4:15	Bus		3	19	3	.0	0	0	2	12	0	0	8	1	<u> </u>		
4:15	Auto	_	31	271	62	0	0	0	39	110	0	0	88	24	736		
to	Truck		0	24	0	0	0	.0	3	14	0	. 0	1	0			
4:30	Bus		1	19	3	0	. 0	0	17	17	0	0	· 10	2		ļ	nan da impaga na na
4:30	Auto		26	284	62	0	.0	0	35	144	0	0	94	23	735	1	_
to	Truck	l	3	10	0	0	0	0	1	3	0	0	0	0		Į.	
4:45	Bus		1	22	2	0	0	0	2	11	0	0	8	4		4	
4:45	Auto	·	26	263	50	0	0	0	46	122	0	0	115	25	703		
to	Truck		2	12	2	0	0	0	1	1	0	0	2	0	1		
5:00	Bus		4	12	2	0	0	0	1 1	10	0	0	5	2	 	2,947	Ì
5:00	Auto	1	27	299	63	0	. 0	0	21	134	0	0	104	29	728	'	1
to	Truck		0	9	0	0	0	0	0	0	0	0	1	1	1	0.000	
5:15	Bus		_1_	14 .	2	0	0	0	1_1_	13	0	0	. 8	1	 	2,902	
5:15	Auto		35	301	54	0	0	0	21	120	0	0	101	15	720	1	1
to	Truck		1	15	1	O .	0 (0	1	. 2	0	0	4	0	1	0.000	
5:30	Bus		. 2	25	2	0	0	0	1	5	0	0	13	1 22	703	2,886	1
5:30	Auto		24	284	50	0	0	0	21	145	0	0	96	29	703		!
to	Truck		3	6	0	0	0	0	1 1	2	0	0	1	0	1	2,854	
5:45	Bus		1	12	2	0	0	0	0	15	0	0	10	27	664	2,054	
5:45	Auto	-	34	275	35	0	0	0	25	130	0	0	97		004	1	1
to	Truck		1	10	1	0	0	0	0	5	0	0	1 5	1 1		2,815	
6:00	Bus		2	13	1	0	0	0	92	571	0	0	441	106	0.045	2,010	1
	Hour Volum	•	131	1,263	211	0		<u> </u>	92	L		ļ <u> </u>	547	1 100	2,815	J	
	V (by appr		٠	1,605		ļ	0		 	663		 			4		
Peak	Hour Facto	or (PHF)		0.92		<u> </u>	#DIV/0!		<u> </u>	0.90			0.95		4		
	Total Auto	s	l	1,481			. 0			617			498		· ·		4
	Total Truck	ks		47			0		ł	6			9				
	Total Buse	95		77		1	0			40			40		_		
	% Auto			92.3%			#DIV/01			93.1%			91.0%				
%	Heavy Veh			7.7%		1	#DIV/0!		Į.	6.9%			9.0%				
	Trucks & Bu			,		1			ĺ						_i		

Former Bellevue Psych Building Redevelopment

FILE NAME:

TMC Summary.xls

LOCATION:

East 23rd Street and Second Avenue AM Peak Period

TIME PERIOD:

COUNT DATE: WEATHER/PAVEMENT: Wednesday, October 29, 2008

Cloudy / Drizzle 12/15/08

PRINT TIME:

03:19 PM

TIME	VEHICLE	INPUT "1" AT START	Se	cond Ave (NB)	nuei	Se	cond Aver (SB)	ue	Ea	st 23rd Str (EB)	eet	Eas	st 23rd Str (WB)	reet	15-MIN.	HOURLY	HIGHEST
PERIOD	CLASS.	OF PEAK	L	T	R	L	τ	R	L	т	R	L,	T	R	VOLUME	VOLUME	VOLUME
7:00	Auto		0	0	0	40	290	30	0	71	42	27	45	0	684	· · ·	
to	Truck		0	0	0	9	42	8	0	11	13	1	7	0	1		
7:15	Bus		0	0	0	10	9	2	0	12	2	0	13	0			
7:15	Auto		0	0	0	41	312	60	0 .	67	40	38	- 59	0	789	1 4	
to	Truck	•	٥.	0	0	4	54	11	0	10	24	5	, 5	0	Į] .	
7:30	Bus		0	. 0	0	9	14	1	0	13	4	1	17	0	<u></u>		
7:30	Auto	TOWN TOWN	0	0	0	43	352	56	0	74	31	37 -	- 77	0	805	, ,	
to	Truck		, 0	0	0	11	45	3	0	11	8	0	6	.0	1		
7:45	Bus		0	0	0	11	9	1	0	· 15	2	0	13	0		ļ	1
7:45	Auto	1 .	0	0	0	54	341	52	0	78	36	50	58	0	826	Ì	ľ
to	Truck		0	0	0	5	57	4	0	12	8	2	6	0	1	Ì	
8:00	Bus		• 0	0	0	15	13	1	0	14	1	0	19	0		3,104	
8:00	Auto		0	0	0	49	343	47	0	85	39	42	77	0	855		
to	Truck		0	0	0	6	54	8	0	16	8	3	11	0	1	1	ŀ
8:15	Bus		0	0	0	14	12	3	0	14	0	1	23	0		3,275	
8:15	Auto		0	0	0	27	287	30	- 0	93	48	39	68	O,	767	1	
to	Truck		0	0	.0	6	67	6	0	21	13	10	3	0	1	,	
8:30	Bus		: 0	0	. '0	3	8 : :	<u>' 2</u>	0	18	2	0	16	0	. 11.	3,253	
₹8:30	Auto		0	. 0	0 '	23	248	50	0	57	22	36 '	91	0	691		
to	Truck		0	0	0	12	51	3	0	20	7	4	5	0		l	
8:45	Bus		. 0	0	0	13	12	2	0	15	0	0	20	0		3,139	
8:45	Auto	i	0	0	0	25	175	27 .	0	60	23	45	57	0	585		
to	Truck		0	0	0	16	52	8	0	19	10	7	11	0			
9:00	Bus		. 0	0	0	6	10	4	0	9	2	1	18	0	 	2,898	<u> </u>
	łour Volum	• •	0	0	0	227	1,493	208	0	443	184	187	397	0	3,139	j	
PH	/ (by appr	oach)		.0	•		1,928			627			584		_		
Peak	Hour Facto	r (PHF)		#DIV/01			0.89		ı	0.80			0.93	_			
	Total Auto	8		0		i .	1,551			458			461				
	Total Trucks	ks		0			279			105		l	44				
	Total Buse	5		0			98			64			79				
	% Auto			#DIV/0!			80.4%			73.0%	-	 	78.9%		┥		
% .	Heavy Veh	icles		#DIV/0!			19.6%			27.0%			21.1%		1		
	rucks & Bu			4D14101			19.078		1	21.0%			21.170				
	ucka a Di	363)				L			<u> </u>						_i		

PROJECT: FILE NAME: Former Bellevue Psych Building Redevelopment

TMC Summary.xis

LOCATION:

East 23rd Street and Second Avenue

TIME PERIOD: COUNT DATE: PM Peak Period

WEATHER/PAVEMENT: PRINT TIME: Wednesday, October 29, 2008 Cloudy / Drizzle

12/15/08

12/15/08 03:19 PM

TIME	VEHICLE	INPUT "1" AT START	Se	cond Aver	านอ	Sec	ond Aver	iue	Eas	t 23rd Str (EB)	reet !	Eas	t 23rd Str (WB)	eet	15-MIN. VOLUME	HOURLY VOLUME	HIGHEST HOURLY
PERIOD	CLASS.	OF PEAK	- L	T	R	L	т	R	L.	т	.R	L	Τ:	R	VOLUME	VOLUME	VOLUME
4:00	Auto		0	0	0	59	336	29	0	72	26	28	- 62	0	696		
to	Truck		0	0	0	2	32	5	0	6	. 7	0	0	0			
4:15	Bus		0	0	0	1	11	0	0	13	0	0	7 .	0			!
4:15	Auto		0	0	0	77	382	28	0	81	31 .	36	86	0	813]
to	Truck		0	0	0	6	36	1 1	0	6	7	1	0	0			ļ I
. 4:30	Bus		0	0	0	3	9	2	0	14	1	0	6	0			
4:30	Auto		0	0	0	77	314	30	0 -	83	23	52	75	0	737		1
to	Truck		0	0	0	4	27	3	0	4	1 1	0	1	0			
4:45	Bus		0	0	0	2	12	4	0	15	0	0	10	0		ł	
4:45	Auto		. 0	0	0	96	367	43	0	85	28	66	59	0	835		
to	Truck		0	0	0	12	28	2	0	4	2	0	2	0	'l	3,081	1
5:00	Bus		0	0	0	4	11	0	0	15	. 0	0	11	0	200	3,081	
5:00	Auto	1 1	0	0	0	130	352	53	. 0	59	19	51	81	0	822		Ì
to	Truck		0	0	0	2	26	1	0	7	1	2	1	0	1	3,207	1
5;15	Bus		0	0	0	5	2	2	0_	20 88	21	0 56	70	0	829	3,207	
5:15	Auto	1	0	0	0	67	408	58	0 1	1			1	١٥	029		l .
to	Truck		0	0	,0	2	19 🖫	3	0	4	1	0	7	0	1	3,223	!
5:30	Bus		0	0	0	4	5	,3	0	12 75	38	48	80	0	811	3,220-	1 '
5:30	Auto		0	0	0	63	390	43	0	4	36	0	2	١٥	l "''		
to	Truck	i	0	0	0.	5	32	2	0	1 12	6	0	9	Ö	ļ	3,297	l
5:45	Bus		0	0	0	94	6 394	38	.0	78	30	51	97	0	857	5,23	1
5:45	Auto		0	0	0	3	22	0	١٥	4	3	0	0	١٥	00,	1	
to	Truck	l .	0	0	0	5	13	3	lő	17	0	ő	5	١ŏ	1	3,319	
6:00	Bus	4-44-5		 	0		1,669	206	0	377	115	208	361	0	2012	1	
Peak	Hour Volu	me (PHV)	0	0	0	383	<u></u>	200	- ا		110	200		L	3,319	J	
PH	V (by app	roach)		0			2,258		<u> </u>	492			569		4		
Peak	Hour Fact	or (PHF)		#DIV/01		<u> </u>	0.99	•		0.93			0.93		1		
	Total Aut	os		0			2,090		ļ	408			534				
1	Total True	ks		0			117		1	23			6				
	Total Bus			0			51			61		1	29		1		
	% Auto		 	#DIV/0!		!	92.6%		┢	82.9%			93.8%	-	7		
.				#DIV/0!		1	7.4%			17.1%			6.2%				
1	Heavy Ve Frucks & B			#1714/03		1	, . 70			17.170			U70				
	TUCKE & B	n292)													_		

Former Bellevue Psych Building Redevelopment

FILE NAME: LOCATION:

TMC Summary.xls

East 29th Street and Second Avenue

TIME PERIOD:

AM Peak Period

COUNT DATE: WEATHER/PAVEMENT: Wednesday, October 29, 2008 Cloudy / Drizzle

PRINT TIME:

12/15/08 03:19 PM

TIME	VEHICLE	INPUT "1" AT START	Se	cond Avei (NB)	nue	Sec	cond Ave	7U 0	Eas	st 29th St (EB)	reet	Eas	st 29th St	reef	15-MIN.	HOURLY	HIGHEST
PERIOD	CLASS.	OF PEAK	L	т	R	L	Т	R	L	т	R	L	Т	R	VOLUME	VOLUME	VOLUME
7:00	Auto		0	0	0	0	0	37	0	0	0	14	0	0	65		
to	Truck		0	0	0	0	0	9	0	0	0	0	0	0			
7:15	Bus		0	0	0	0	0	1	0	0	0 -	4	0	0			
7:15	Auto		0	0 1	0	0	0	24	0	0	0	15	0	0	48		
to	Truck	!	0	0	0	0	0.	. 3	0	0	0	1	0	0			
7:30	Bus		0	0	0.	0	0	1	0	- 0	0	4	0	0	1		
7:30	Auto		0	0	0	0	0	14	. 0,	0	0=	10 -	0	0 .	31	1	l``
to	Truck		0	0	0	0	0	0	0	0	0	0	0	0	l		
7:45	Bus		0	0	0	0	0	2	0	0	0	. 5	0	0	1		
7:45	Auto	1	0	0	0	0	0	21	0	0	0	17	0	0	49		
to	Truck		0	0	0	0	0	. 7	0	0	0	1	0	0			
8:00	Bus		. 0	0	0	0	0	0	0	. 0	0	3	0	. 0		193	ļ
8:00	Auto .		0	0	0	0	0	32	0	0	0	30	0	0	80	}	
to	Truck		0	0	0	0	0	5	0	0	0	5	0	0		;	ļ
8:15	Bus		0	0	0	0	0	2	0	0	0	6	. 0	0		208	-
8:15	Auto		0	0	0	0	0	24	. 0	0	0	23	0	0	56		-
to	Truck	,	. 0	0	0	. 0	0	5	0	0	0	. 0	0	,O			`
- <u>-</u> .8:30	Bus .		0	0	. 0	' 0	0	1	0	0	0	3	0 '	0		216	
8:30	Auto		0	0	0	0	0	45	0	0	0	24	0	0 '	81	1 .	٦.
to	Truck		0	0	0	0	0	6	0	0	0	0	0	0	1	,	.=
8:45	Bus		0	0	0	0	0	2	0	0	0	. 4	0	0	!	266	
8:45	Auto		0	0	0	0	0	50	0	0	0	14	0	0	68		
to 9:00	Truck Bus		0	0	0	0	0	1	0	0	0	1	0	0	1		ŀ
		I				 	0.	. 0	0	0	0	2	_ 0	0	ļ	285	<u> </u>
	lour Volun		0	0	0	0	0	150	0	0	0	116	0	0	266	÷	
	V (by appr			0			150		<u> </u>	0		ļ	116				
	Hour Facto	•	_	#DIV/0!			0.71			#DIV/0!			0.71		1	**	
	Total Auto)S		0			122			0			94		1		
	Total Truc	ks		0			23			0			6		İ		
•	Total Bus	9\$		0			5			0			16				
	% Auto			#DIV/0!			81.3%			#DIV/01			81.0%		1		
%	Heavy Veh	icles		#DIV/0!]	18.7%			#DIV/0!			19.0%				
(T)	rucks & Bu	ises)				1			l						1		

Former Bellevue Psych Building Redevelopment

PROJECT: FILE NAME: LOCATION:

TMC Summary.xls

TIME PERIOD:

East 29th Street and Second Avenue PM Peak Period

COUNT DATE:

Wednesday, October 29, 2008

WEATHER/PAVEMENT: PRINT TIME:

Cloudy / Drizzle 12/15/08

03:19 PM

TIME	VEHICLE	INPUT "1" AT START	Sec	ond Aver	nue	Sec	ond Aver	lue	Eas	t 29th Str (EB)	eet	Eas	t 29th Str (WB)	eet	15-MIN.	HOURLY	HIGHEST HOURLY
PERIOD	CLASS.	OF PEAK	L	Т	R	L.	T	R	, L	T	. R	L	τ.	R	VOLUME	AOFÁWE	VOLUME
4:00	Auto	-	0	0	0	0	0	45	0	0	o	23	0	0	77		
to	Truck		0	0	0	0	0	3	0	0	0	. 4	0	0 -		1	
4:15	Bus		· 0	0	0	0	0	1	0	0	0	1	0	0	ļ <u>:</u>	Į	
4:15	Auto		0	0	0	0	0	28	0	0	0	14	0	0 .	50		
to	Truck	ŀ	0	.0	0	0	0	2	0	0	0	0	0	O O	1		
4:30	Bus		0	0	0	. 0	0	. 5	0	0	. 0	_1	0	0		1	
4:30	Auto	42 175	0	0	0	0	0	31	0	0	0	19	0	0	58		i
to	Truck	1	0	0	0	0	0	4	0	0	0	0	.0	0	1		٠.
4:45	Bus		0	0	0	0	. 0	2	0	0	0	2	. 0	0	<u> </u>	1	
4:45	Auto	31	0	0	0	-0	0	40	0	0	0	9	0	0	57		ļ
to	Truck		0	0	0	: 0	0	4	0	0	0	0	0	0	•	040	· ·
5:00	Bus		0	0	0	0	0	3	0_	0	0	1	0	0	 	242	
5:00	Auto	1	0	0	0	0	0	43	0 1	0	0	16	0	0	64		
to	Truck		0	0	0	Ò	0	3	0	0	0	0	0	0	1	229	
5:15	Bus		0	0	0	0	0 .	0	0	0	0	2	0	0	 	1 229	
5:15	Auto	1	0	0	0	0.	0	50	0	0	0	14	0	0	68	1	į
to	Truck		,0	0	0	0	0	3 ;	0	0	0	0	0	0	a.	247	1
5:30	Bus		0	0	0	0	0	0.	0_	0	0	1	. 0	0	63		· .
5:30	Auto		0	Ö	0	0	0	46	0	0	0	14	0	0	1 65	1	
to	Truck	l	0	0	0	0	0	1 1	0	0	0	0	0	0	İ	252	
5:45	Bus		0	0	0	0	0	1	0	0	0	16	0	0	64	+ 25 <u>2</u>	1
5:45	Auto		0	0	0	0	0	43	0	0	- 0	10	0	l ö	1 ~	1	
to	Truck	1	0	0	0	0	0	0	0	0	0	2	0	l ŏ		259	
6:00	Bus	<u> </u>	0	0	0	0	0	193	0	0	0	66	0	0	259		
	Hour Volu		0	0	<u> </u>	 	193	193	 " -		1 0		66		259	J	
	V (by app					 			 	#DIV/0!		-	0.92		┨		
Peak	Hour Fact	_ 	<u> </u>	#DIV/0!			0.91		ļ			 			-		
	Total Aut	os		0			182		1	0			60				
	Total Truc	cks		0		ļ .	10			0		1	0				
	Total Bus	08	<u> </u>	0		ļ <u> </u>	1	•		0		ļ	6		4		
	% Auto	· · · · · · · · · · · · · · · · · · ·		#DIV/0!			94.3%			#DIV/01		1	90.9%				
%	Heavy Ve	hicles		#DIV/0!			5.7%			#DIV/0!		1	9.1%				
l d	Trucks & B	uses)				<u> </u>			<u> </u>								

Former Believue Psych Building Redevelopment TMC Summary.xis

FILE NAME: LOCATION:

TIME PERIOD:

East 30th Street and Second Avenue

COUNT DATE:
WEATHER/PAVEMENT:

AM Peak Period Wednesday, October 29, 2008

PRINT TIME:

Cloudy / Drizzle 12/15/08

03:19 PM

TIME PERIOD	VEHICLE CLASS.	INPUT "1" AT START	Se	cond Ave	nue	Se	cond Avei (SB)	ive	Ea	st 30th Str (EB)	eet	Ea	st 30th St (WB)	reet	15-MIN,	HOURLY	HIGHEST
PERIOD	CLASS.	OF PEAK	L	Т	R	L	Т	R	L	T	R	L	Т	R	VOLUME	VOLUME	VOLUME
7:00	Auto		. 0	0	0	85	392	0	0	64	38	0	0	0	657		
to	Truck		0	0	0	2	47	0	0	3	. 1	0	0	0	1		
7:15	Bus		0	0	0	4	20	0	0	1	0	0	0 .	0			
7:15	Auto		0	0	0	61	452	0	0	52	24	0	0	0	671		
to	Truck		0	0	0	5	48	0	0	0	2	0	0	0			
7:30	Bus		0	0	0	2	_24	0	0	0	1	0	0	0			
7:30 ·	Auto	,	0	0	0	76	498	~°0	0	48	40 -	Ů,	0	0	767	•	**
to	Truck		O	0	0	1	52	0	0	2	1	0	0	0	1		[
7:45	Bus		0	0	0	10	36	0	0	1	2	0	. 0	0	<u>.l</u>		•
7:45	Auto	1	0	0	0	82	502	0	0	70	26	O	0	0	783		ľ
to	Truck		0	0	0	5	52	0	0	1	1	0	0	0	1		Ì
8:00	Bus		0	0	0	2	39	0	0	1	. 2	0	0	0		2,878	
8:00	Auto		0	0	0	79	493	0	0 .	49	15	0	0	0	728		
to	Truck		0	0	0	4	53	0	0	1	2	0	0	0	1		
8:15	Bus		0	. 0	. 0	2	26	0	0	_ 3	1	0	0	0		. 2,949	
8:15	Auto		0	0	0 .	86	445	0	0	46	20	0	0	0	718		
to	Truck		0	0	0	12	69	0	0	1	4	0,	0	0	1 .		
8:30	Bus		0	. 0	0.	. 6	26	0	0	2	1	0	0	0		2,996	
8:30	Auto		0	0	0	87	400	. 0	0	60	17	0	0	0	647		-
to	Truck		0	0	0	2	44	0	0	1	2	0	0	0	1		
8:45	Bus		. 0	0	0	4	22	0 .	0	8	0	0	0	0	1	2,876	
8:45	Auto		0	0	0	103	434	0	0	48	24	0	0	0	703		
to	Truck		0	0	0	9	57	0	0	0	2	0	0	0			
9:00	Bus	L	0	0	0	3	21	0	0	1	1	0	0	0		2,796	
Peak H	lour Volum	ne (PHV)	0	0	0	371	2,171	0	0	243	91	0	0	0	2,876		
PHV	(by appr	oach)		0			2,542		<u> </u>	334			0	_			
Peak l	Hour Facto	or (PHF)		#DIV/0t		L_	0.93			0.83			#DIV/0!				
	Total Auto)S		0			2,174			303			0		1		
	Total Truci	ks		0		ļ	241			13			0				
	Total Buse	s		0			127			18			0		1		
	% Auto		,	#DIV/01		_	85.5%	-	-	90.7%		 	#DIV/0!		1		
% !	Heavy Veh	icles		#DIV/01		1	14.5%			9.3%			#DIV/01				
	ucks & Bu									5.070			#514101		1		

Former Bellevue Psych Building Redevelopment

FILE NAME:

TMC Summary.xls

LOCATION:

East 30th Street and Second Avenue

TIME PERIOD: COUNT DATE: PM Peak Period Wednesday, October 29, 2008

WEATHER/PAVEMENT:

Cloudy / Drizzle 12/15/08

PRINT TIME:

03:19 PM

TIME	VEHICLE	INPUT "1" AT START	Sec	cond Aver	100	Sec	ond Aver	ine	Eas	t 30th Str (EB)	eet	Ea	st 30th Str (WB)	eef	15-MIN. VOLUME	HOURLY	HIGHEST HOURLY
PERIOD	CLASS.	OF PEAK	L	т	R.	L	τ	R	L	т	R	L	т	R	VOLUME	VOLUME	VOLUME
4:00	Auto		. 0	0	0	99	368	0	0 .	68	38	0	0	0	619		
to	Truck		0	0	0	2	11	0	0	1	2	0	0	0			
4:15	Bus		0	0	0.	3	25	0	0	2	0	0	0	0		4	i
4:15	Auto		0	0	0	107	360	0	0	67	26 .	0	0	O	618		
to	Truck		0	0	0	2	24	0	. 0	0	1 1	0	0	0			1
4:30	Bus		0	.0	0	3	27	0	0	1	0	0	0	0		4	
4:30	Auto		0	0	0	105	330	0 .	0	58	34	0	0	0	589	1	l
to	Truck		0	0	0	2	26	0	0	0	1	. 0	0	0	1	Į.	1
4:45	Bus		0	0	0	5	23	0	0	1	4	0	0	0	 	┨	
4:45	Auto		0	0	. 0	98	401	0	.0	55	31	0	0 :	0	640		
to	Truck		0	0	0	3	19	0	0	5	1 . 1	0	0	0		1	
5:00	Bus		0	0	0	2	25	0	0	<u> </u>	0	0	0	0	 	2,466	
5:00	Auto	1	. 0	0	0	86	427	Ö	0	61	30	0	0	0	636		
to	Truck		0	0	0	1	15	0	0] 1	2	0	0	0 .	i		Ì
5:15	Bus		0	0	0	1	11	0	0	0_	1	0	0	0		2,483	
5:15	Auto		0	0	0	73	448	0	. 0	54	31	0	0	0	646		
to	Truck	l	, O	,, 0	,0	4	10	,0	0	0	1 1	0	O	0	. 1	0.544	l .
5:30	Bus		0 .	0	0	3.	. 20	0	0	1	1	0	-s. O	0		2,511	
5:30	Auto		0	0	0	82	496	0	0.	47	30	0	0	0	691		1
to	Truck		0	0	0	1	10	0	0 .	2	1	0	0	0	1 .	0.640	ŀ
5:45	Bus		0	0	0	2	19	0	0	1	0	0	0	0	701	2,613	
5;45	Auto		0	0	0	85	496	0	0	52	31	0	0	0	701	1	1
to	Truck		0	0	0	1	15	0	0	1	0	0	0	0	1	2,674	
6:00	Bus	<u> </u>	0	0	0	2	16	0	0	0	2	0	+	 	 	2,074	l
Peak	Hour Volu	ne (PHV)	0	0	,0	. 341	1,983	0	0	220	130	0	0	0	2,674	_	
PH	V (by app	roach)		0			2,324		<u> </u>	350		ļ	0		_		
Peak	Hour Fact	or (PHF)		#DIV/0!			0.94			0.92		<u> </u>	#DIV/0!		4		
_	Total Aut	os		0	_		2,193		'	336			0				
	Total Truc	:ks	•	0			57			8			0				
	Total Bus	:03	1	0			74			6		1	0		1		
	% Auto		<u> </u>	#DIV/01		 	94.4%			96.0%			#DIV/01				
%	Heavy Vel			#DIV/0!			5.6%			4.0%			#DIV/0!				
1	rucks & B		<u> </u>									<u> </u>			_		

Former Bellevue Psych Building Redevelopment

FILE NAME:

TMC Summary.xls
East 34th Street and Second Avenue

LOCATION: TIME PERIOD:

AM Peak Period

COUNT DATE: WEATHER/PAVEMENT: Wednesday, October 29, 2008 Cloudy / Drizzle 12/15/08

PRINT TIME:

03:19 PM

TIME PERIOD	VEHICLE	INPUT "1" AT START	Se	cond Ave	nue	Se	cond Avei (SB)	iue	Ea	st 34th Str (EB)	eet	Ea	st 34th Str (WB)	reet	15-MIN,	HOURLY	HIGHEST
PERIOD	CLASS.	OF PEAK	L	т	R	L	т	R	L	τ	R	l.	Т	R	VOLUME	VOLUME	VOLUME
7:00	Auto		0	0	0	79	680	18	0	227	54	33	26	0	1,255	· · · · · ·	
to	Truck		0	0	0	10	59	2	0	18	8	1	1	0			
7:15	Bus		. 0	0	0	4	20	8	0	3	1	1	2 ·	0	'		,
7:15	Auto		0	0	0	86	668	13	0	268	57	38	36	0	1,318]	
to	Truck		, 0	· 0	0	11	61	4	0	20	7	. 2	1	0		`	
7:30	Bus		0	0	. 0	5	22	. 10	0	. 5	. 0	0	4	0			
7:30	Auto		0	0	0 0 1	114	772	6	` 0	242	· 41	21	34	0	1,357	•	100 100 100
to	Truck		0	0	0	6	45	1	0	9	6	1	1	0	,		
7:45	Bus		0	0	. 0	6	25	14	0	7	2	1	3	0	<u> </u>		
7:45	Auto	1	0	0	0	77	787	9	0	248	48	39	47	0	1,466		
to	Truck		0	0	0	5	105	2	0	12	12	0	1	0		İ	
8:00	Bus		0	0 .	0	9	25	19	0	14	4	0	3	0		5,396	
8:00	Auto		0	0	0	55	749	1	0	260	44	41	33	0	1,410	•	,
to	Truck		0	0	0	4	95	2	0	18	10	2	3	0		İ	
8:15	Bus		0	0	0	12	31	17	0	18	- 8	. 1	6	0		5,551	
8:15	Auto		0	0	0	89	734	2	0	191	39	50	34	0	1,385		i
to	Truck	1 1	0	0	0	8	149	1	0	29	4	2	0	0	l		
8:30_	Bus		.0	0	0	12	9	`19	0	7 ,	2	1	. 3	0	 	5,618	
8:30	Auto		0	0	0	124	791	0	0	251	44	33	41	0	1,620	· .	1
to	Truck		0	0	0	9	220	0	0	24	7	1	1	0			1 .
8:45	Bus		0	0	0	12	22	16	0	15	3	2	4	0		5,881	
8:45	Auto		0	0	0	99	701	0	0	233	35	32	52	0	1,414		
to 9:00	Truck Bus		0	0	0	7 11	165 19	0 19	0	17 - 9	4 2	2	3	0			
				 									3	0		5,829	<u> </u>
	Hour Volun		0	0	0	416	3,717	· 88	0	1,087	225	172	176	0	5,881		
	V (by appr			0			4,221		<u> </u>	1,312			348		1		
Peak	Hour Facto	or (PHF)		#DIV/0!	,		88.0			0.92			0.97		<u> </u>		
	Total Auto	s		.0			3,418			1,125		1	318		1		
	Total Truc	ks		0			600			116		Į	10				
	Total Buse	98		0			203			71		Ì	20				
	% Auto			#DIV/0I			81.0%			85.7%	-	Ī	91.4%		1		
%	Heavy Veh	icies		#DIV/01			19.0%			14.3%			8.6%				
(Ті	rucks & Bu	ises)				<u> </u>			1				_				

Former Bellevue Psych Building Redevelopment

FILE NAME: LOCATION:

TMC Summary.xls
East 34th Street and Second Avenue

PM Peak Period

TIME PERIOD: COUNT DATE:

Wednesday, October 29, 2008 Cloudy / Drizzle 12/15/08 03:19 PM

WEATHER/PAVEMENT: PRINT TIME:

	VEHICLE	INPUT "1" AT START	Sec	ond Aver	านย	Sec	cond Aver (SB)	iue	Ea	st 34th Str (EB)	eet	Eas	t 34th Str (WB)	eet	15-MIN. VOLUME	HOURLY	HIGHEST HOURLY
PERIOD	CLASS.	OF PEAK	L	Ŧ	R	L.	т	R	L	τ ⋅	R	L	T	R-	VOLUME	VOLUME	VOLUME
4:00	Auto		0	0	0	59	592	· 18	0	. 197	42	31	55	0	1,094		
to	Truck		0	0	0	9	31	1	0	8	5	0	3	0	l		
4:15	Bus		0	0	0	11	21	2	0	6	1	0	2	0	ļ		
4:15	Auto		0	0	0	75	520	24	0	212	30	34	55	0	1,045		
to	Truck		0	.0	.0 .	3	30	2	. 0	6	8	1	1	0	i		
4:30	Bus		0	0	0	9	23	3	0	3	2	1 ·	. 3	0	ļ		1
4:30	Auto		0	0	0	81	536	19	0	220	34	41	50	0	1,084	1	
to	Truck		0	0	0	3	33	3	0	7	7	. 2	1	0	Į.		ŀ
4:45	Bus		0	0	0	-11	20	7	0	3	3	0	3	0	ļ <u></u>	4	
4:45	Auto		0	0	0	77	524	- 17	0	230	24	42	63	0	1,073		
to	Truck		0	0	0	10	34	1	0	5.	3	3	3	0	•		
5:00	Bus		0	0	0	4	22	3	0	4	2	0	2	0	<u> </u>	4,296	
5:00	Auto	1	0	0	0	86	686	18	0	122	30	33	40	0	1,086	İ	
to	Truck	1	0	0	0	9	26	5	0	4	2	1	1	0	1	1	1
5:15	Bus		0	0_	0	2	10	5	0	3	1	0	2	0	1 000	4,288	
5:15	Auto		0	0	0	75	671	16	0	105	24	33	52	0	1,039] "	l
to	Truck		0	.0	0	8	20	2	0	2 ,	. 1	, 1 _T ,	1.17	0	•	1.000	!
5:30	Bus		-0	0	-0	2	14	6	0		.1	0	3	0.	4 000	4,282	1.
5:30	Auto		0	0	.0	91	683	23	0	131	20	36	43	0	1,098	1	
to	Truck	i	. 0	0	0	2	14	1 1	0	19	0	1	2	0	1	4,296	İ
5:45	Bus		0	0	0	7	14	3	0	5	0	0	3 47	0	1,013	4,290	1
5:45	Auto		0	0	0	81	653	19	0	110	17	34	1 1	0	1,013		
to	Truck		0	0	0	3	12 15	1 2	0	9	0	0	'2	١،		4,236	ŀ
6:00	Bus		0_	0	0	370	2,818	101	0	515	96	139	197	- 0	4.000	4,250	<u></u> .
	Hour Volur		0	0		3/0	<u> </u>	101	- -		90	138	336		4,236	J	
	V (by app			0		<u> </u>	3,289		 	611		-			-		
Peak	Hour Fact	or (PHF)		#DIV/0!		<u> </u>	0.97		<u> </u>	0.87		<u> </u>	0.93		4		
	Total Aut	os		0		3,102		į.	559		1	318		1			
	Total Truc	iks		0		1	103			37			8		1		
	Total Bus	es		0			84			15		<u></u>	10				
	% Auto			#DIV/0!		94.3%			91.5%			94.6%		1			
%			1	#DIV/0!			5.7%			8.5%		1	5.4%		1		
	% Heavy Vehicles (Trucks & Buses)																

Former Sellevue Psych Building Redevelopment

FILE NAME:

TMC Summary.xls

LOCATION:

East 23rd Street and FDR Drive Service Road / Avenue C

TIME PERIOD:

AM Peak Period

COUNT DATE:

Wednesday, October 29, 2008

WEATHER/PAVEMENT:

Cloudy / Drizzle 12/15/08

PRINT TIME:

03:19 PM

TIME	VEHICLE	INPUT "1" AT START		FDR Drive (NB)	9		FDR Drive (SB))	Eas	st 23rd Sti (EB)	eet	Ea	st 23rd Sta (WB)	reet	15-MIN,	HOURLY	HIGHEST
PERIOD	CLASS.	OF PEAK	L	Т	R	L	Т	R	Т	R	R-1	Ł	Т	R	VOLUME	VOLUME	VOLUME
7:00	Auto		0	0	0	8	56	28	84	32	10	4	51	0	312		
to	Truck		0	. 0	0	0	0	1	5	0	0	0	0	0	1		
7:15	Bus		0	.0	0	2	1	0	3	. 11	0	0	16	0			
7:15	Auto		0	0	0	4	62	24	69	38	13	0	34	0	292		
to	Truck		0	0	0	0	0	1	3	2	0	0	1	0			
7:30	Bus		. 0	. 0	0 -	0	9	. ,0	2	16	0	0.	14	0	ŀ		
7:30	Auto		0	0 ~	· · · ' ' ' ' ' ' ' ' ' ' ' ' ' ' ' ' '	16	63	42	88	38	10	2	55	0	361	·	
to	Truck		0	0	0 1	0	0 '	1	1	3	0	0	1	0			
7:45	Bus		0	0	0	0	7	0	3	18	0	0	13	0	1_		
7:45	Auto	1	0	0	0	12	59	19	85	21	13	2	55	0	336		
to	Truck		0	. 0	0	2	0	1 1	16	2	0	0	1	. 0	l	i	
8:00	Bus		0	0	0	1	15	. 0	1	14	0	0	17	0	<u> </u>	1,301	
8:00	Auto		0	0	0	29	62	15	88	42.	22	2	41	0	350]	
to	Truck		0	0	0	. 0	0	1	3	3	0	0	1	0	1		
8:15	Bus		0	0	0	0	. 6	. 0	2	14	0	0	19	0		1,339	
8:15	Auto		0	0	0	35	47	20	76	32	15	5	57	0	339	1	
to	Truck		O	. 0	0	0	1	0	4	2	0	0	4	0	1	1	
8:30	Bus		0	0	0	0	12	0	6	9	0	0	1.14	0	1	1,386	* - ·
8:30	Auto		0	0	. 0	- 22	57	29	84	45	22	3	45	Ö	361		
to	Truck		0	0	0	1	2	0	4	2	1	0	4	0	1		ŀ
8:45	Bus		0	.0	0	0	7	0	7	10	0	0	16	0		1,386	ŀ
8:45	Auto		0	0	0	10	61	39	53	31	7	2	49	0	291	}	i
to	Truck		0	0	0	0	3	2	2	3	0	1	2	0			ļ
9:00	Bus		0	0	0	0	4	0	2	10	0	0	10	0		1,341	
Peak H	lour Volun	ne (PHV)	. 0	0	0	102	268	85	376	196	73	12	274	0	1,386		
PHV	/ (by appr	oach)		0			455			645		<u> </u>	286				
Peak i	Hour Facto	or (PHF)		#DIV/0!			0.96			0.92			0.89		1		
	Total Auto	3		0			406			545			210		1		
	Total Truc	ks		0			8			37			10		1		
	Total Buse	95		0			41			63		1	. 66				
	% Auto			#DIV/0!			89.2%			84.5%			73,4%		1		
% !	Heavy Veh	icles		#DIV/0!		,	10.8%			15.5%			26.6%				
	rucks & Bu																

PROJECT: FILE NAME: Former Bellevue Psych Building Redevelopment

LE NAME: TMC Summary.xls

East 23rd Street and FDR Drive Service Road / Avenue C

LOCATION: TIME PERIOD:

PM Peak Period

COUNT DATE: WEATHER/PAVEMENT:

Wednesday, October 29, 2008 Cloudy / Drizzle

PRINT TIME:

12/15/08 03:19 PM

TIME	VEHICLE	INPUT "1" AT START		FDR Drive (NB)	1		FDR Drive (SB)	,	Eas	t 23rd Str (EB)	eef	Eas	st 23rd Str (WB)	reet	15-MIN. VOLUME	HOURLY VOLUME	HIGHEST HOURLY	İ
PERIOD	CLASS.	OF PEAK	L	Т	R	L	Т.	R	Т	R	R-1	Ł	Τ.	R	VULUME	VOLUME	VOLUME	
4:00	Auto		0	0	0	20	58	35	111	95	3	6	50	0	415			ì
to	Truck		ō	0	0	0	0	0	1	6	0	0	2	0				L
4:15	Bus	1	0	0	0	0	2	2	6	13	0	0	5	0	<u> </u>	!		ı
4:15	Auto		0	0	0	17	53	38	82	71	5	9	61	0	370			Ł
to	Truck	k l	0	0	0	0	0	0	3	2	0	0	2	0	Ļ			ı
4:30	Bus		. 0	0	0	0	5	11	5	14	0	0	2	0	<u> </u>		J - 2.0 .2.0	L
4:30	Auto		. 0	0	0	16	59	35	112	70	16	9	57	0	411	1	ļ	١
to	Truck		0	0	0	0	0	0	3	3	0	0	3	Ð				l
4:45	Bus		0	0	0	0	1	2	3	16	0	0	6	0	ļ	ļ	l.	ı
4:45	Auto		0	0	0	8	55	35	73	62	6	13	54	0	344		ļ	L
to	Truck		0	0	0	2	0	0 '	1	4	0	0	1	0	1		İ	1
5:00	Bus		0	0	0	0	6	4	1	10	0	0	9	0	<u> </u>	1,540		ı
5:00	Auto	1	0	0	0	17	61	56	79	58	14	9	43	Ó	371			ı
to	Truck		0	0	0	0	1	1	1	2	0	0	1	0		1		ı
5:15	Bus		0	0	0	0	1	2	2	18	0	0	5	0	ļ	1,496		1
5:15	Auto		0	0	0	15	60	49	74	62	12	. 3	64	0	374		Į.	1
. to	Truck		0	0	0	0	0	1 ,	2	2	0	0	1	. 0	1 .			ı
5:30	Bus	·	0	0 .	0	0	3	1	.3	18	0	0	4			1,500		1
5:30	Auto		0	0	0	13	53	42	61 .	62	10	3	53	0	330	1	ļ	ı
to	Truck	ŀ	0	0	0	1	0	0	1	2	0	0	3	0	1	1	1	ı
5:45	Bus		. 0	0	0	0	2	3	<u> </u>	14	0	0	7	0		1,419	1	ļ
5:45	Auto	ļ	0	0	0	15	45	52	79	76	8.	4	48	0	348	ļ ·		1
to	Truck	1	0	0	0	0	1	0	0	1 1	0	0	0	0	ļ	1,423	1	1
6:00	Bus	<u> </u>	0	0	0	0	_1_	0	3	12	0	0	3	_	- -	1,423	1	1
Peak	Hour Volu	me (PHV)	0	0	0	61	228	207	305	327	44	19	232	0	1,423]		
. БН	V (by app	roach)		0		<u> </u>	496		<u> </u>	676			251		_			
Peak	Hour Fact	or (PHF)		#DIV/0!			0.89			0.94			0.87					
	Total Aut	os		0			478			595		-	227			-		
	Total Truc	:ks		0			5			11		1	5					
	Total Bus			0			13			70		ì	19		1			
-	% Auto			#DIV/01		┼	96.4%			88.0%		 	90.4%		1			
.,	•			#DIV/0!			3.6%			12.0%			9.6%					
	Heavy Vel Trucks & B			#D1V/U!		1	J.U /4			12.070		1	0.070					
	I U CAS OLD	4243)							•						⊸	*		

Former Bellevue Psych Building Redevelopment TMC Summary.xis East 34th Street and FDR Drive Service Road AM Peak Period Wednesday, October 29, 2008 Cloudy J Drizzle 12/15/08 03:19 PM

PROJECT:
FILE NAME:
LOCATION:
TIME PERIOD:
COUNT DATE:
WEATHER/PAVEMENT:
PRINT TIME:

TIME PERIOD	VEHICLE CLASS,	INPUT "1" AT START		FDR Drive (NB)	•		FDR (S	Drive B)				th Street B)				th Street VB)		15-MIN.	HOURLY	HIGHEST
PERIOD	CLASS.	OF PEAK	L	Т	· R	L	Т	T-1	R	L.	Т	R	R-1	L.	L-1	Т	R	VOLUME	VOLUME	VOLUME
7:00	Auto		58	21	2	4	93	121	35	47	2	105	28	2	0.	0	2	555		
to	Truck		5	2	0	0	0	0	0	1	0	7	4	0	0	0	0			
7:15	Bus		1.	. 1.	. 0	0	3	2	3	_ 2	0	0	4	0.	0	0	0			
7:15	Auto		66	31	6	2	88	130	50	64	4	108	18 .	1	0	0	0	609		
to	Truck		3	2	0	0	0	0	1 1] 1	0	7	3	0	0	0	0			
7:30 7:30	Bus		7 76	2	0	0	2	6	2	2 .	0	0	3	0.	0	0	0		ļ	
to	Auto			32	3	1	126	186	40	87	1	118	26	0	0	1	1	740		
το 7:45	Bus		5	3	0	. 0	0	7	0	0	0	3	1 1	0	0	0	0	ì ·		
7:45	Auto	1	82	44	2	0	. 2	165	3	3	0	1	3 .	0.	0	0	0			
to	Truck	¦ '	3	2	0	2	152	165	38	53	2	126	19	- 1	.0.	2	T- 0""	735		
8:00	Bus		.3	2	0	0	1 3	6	1 1	0	0	7 2	9	0	0	0	0	1		
8:00	Auto	 	92	61	6	0	135	191	42	68	1 -	101	24	- 0	0	0	 	768	2,639	ľ
to	Truck	i	2	6	ő	ŏ	0	2	2	"		3	2 2	٥	0	0	4	768		
8:15	Bus		3	5	ő	ŏ	1	3	1	2	0	2	7	١٥	١٥	0	0	1	2,852	
8:15	Auto		103	70	0	1	113	167	36	49	1	114	28	- ŭ	ő	1 1	2	729	2,852	
to	Truck		3	5	ò	Ö	0	2	õ	0	Ö	2	8	Ĭ	۱ŏ	ان	ĺô	125		ŀ
8:30	Bus		3	. 3	0	0	1	6	2] ž	ō	ō	7	ŏ	١ŏ	اة	l ŏ		2,972	
8:30	Auto		86	56	. 3	0	118	193	32	72	1	106	18	2	ŏ	6	7	753	2,3.2	l
to	Truck	Ì	2	8	0	0	0	2	0	0	0	5	7	ō		ا و	Ö	''		
8:45	Bus	,	6	4	0	0	2	4	_2	4	0	2	5	0	٥	0	0		2,985	
8:45	Auto		89	67	. 4	0	140	. 175	46	55	. 1	129	. 21	4	0	5	0	. 782	1	٠,٠ ١
to	Truck	· **	-3	7	-0	0	2	4	2	1	0 '	2	-4	0	0	0.	0		'	
9:00	Bus]	5	2	0	0	0	2	. 2	5	0	0	5	0	0	0	0		3,032	
Peak i	tour Volur	ne (PHV)	`389	266	11	3	526	743	156	251	5	470	138	3	. 0	11	13	2,985		
PHV	(by appr	oach)		666		<u>L</u>	1,4	28			86	34 [°]			2	27				
Peak	Hour Fact	or (PHF)		0.89			. 0.9	95			0.	97			0.	45				
	Total Auto	*	605 1,385			-		78	33				27		1					
,	Total Truc	ks	٠	31 11			1	3	В				0		1					
	Total Bus	es		30 32			l		3				0 ,		1					
	% Auto	i	90.8% 97.0%						.6%				IV/0!	_	1					
•∡ :	Heavy Veh							0%				4%				(V/O!				
	ucks & Bt		1	9.2%			3.	. ,u			9.	* /a			#0	14/03				
		 /		· .						<u></u>								J		

Former Bellevue Psych Building Redevelopment

PROJECT:
FILE NAME:
LOCATION:
TIME PERIOD;
COUNT DATE:
WEATHER/PAVEMENT;
PRINT TIME:

Former Believue Psych Building Recevelopmi TMC Summary.xls East 34th Street and FDR Drive Service Road PM Peak Period Wednesday, October 29, 2008 Cloudy / Drizzle 12/15/08

03:19 PM

TIME	VEHICLE	INPUT "1"	,	DR Drive			FDR I	Drive B)				th Street B)			East 34t (W			15-MIN.	HOURLY	HIGHEST HOURLY
PERIOD	CLASS.	AT START OF PEAK	Ł	т	R	L	т	T-1	R	L	Τ,,	R.	R-1	L	L-1	т `	R	VOLUME	VOLUME	VOLUME
4:00	Auto		81	41	3	0	139	166	38	68	· 4	94	5	3	1	1	5	689		
to	Truck		5	1	0	0	0	3	1	0	-0	. 2	4	0	0	0	0			
4:15	Bus	}	4	8	0	0	- 2	0	0	3	0	2 ·	2	0	0	. 0	0	ļ. <u></u>	4	
4:15	Auto		74	43	2	0	147	152	36	87	1	93	6	2	0	3	3	704		ļ
to	Truck		3	4	0	0	0	4	2	0	0	6	2	0	0	0	0	ì]	İ
4:30	Bus		7	5	0	0	5	1	2	_1_	0	2	11	0	0	0	0	681	1	1
4:30	Auto		82	46	1	0	130	148	44	75	1	105	3	1	0	1	1	081	l .	
to	Truck		8	2	0	0	0	D	1	0	0	6	2 6	.0	0	0	0	ļ	1.	Ì
4:45	Bus	·	5	11	0	0	0	0	1_1_	2	0	1		0		0	1	624		
4:45	Auto		94	39	1	0	107	130	40	71	1.	96	6	2	0	3	0	024		1
to	Truck		4	2	0	j 0	0	1	1	0	0	3 2	1 6	0	0	0	ő		2,698	Į.
5:00	. Bux		4	7	0	0	0	0	1		0	105	5	2	0	2	1	680	2,000	
5:00	Auto	1	94	44	0	0	121	160	36	68	0	7	0	0	ő	ا أ	1 6	1 000	1	
to	Truck	i i	3	5	0	0	0	1 0	2	l ů	0	6	5	١،	١٥	l ö	ŏ		2,689	1
5:15	Bus		4	12	0	2	138	157	36	70	1	11B	3	1	0	1	2	701	1 -,	
5:15	Auto		98	39	0	6	130	2	1	0	ò	"	4	Ö	ŏ	l ò	0			
to	Truck		- 6 - 5	1 5	l ö	١ŏ	1	هٔ ا	2	2	٥	l ŏ	5	ŏ	·	ا ا	0	1	2,686	
5:30	Bus	-	83	31	2	 	152	183	36	72	ō	115	8	1	0	3	1	728	7	
5;30	Auto Truck		1	0	0	انا	3	3	0	0	ŏ	2	1	0	0	0	0		1	
to 5:45	Bus		8	6	ŏ	i	1	1	1	2	ō	2	9	0	0	0	B	<u> </u>	2,733	
5:45	Auto	-	95	38	2	1	175	196	44	67	2	113	7.	a :/1-	0	2	1	7/7		•
to	Truck	Į l	1	0	ō	6	0	0	0	1	0	3	1	0	0	0	0			
6:00	Bus	ŀ	5	13	0	0	0	1	2	3	0_	0	3	0	0	0	0		2,886	
	tour Volu	me (PHV)	403	194	5	4	591	704	161	286	4	465	51 .	5	0	8	5	2,886	┛	
PH	/ (by app	roach)		602			1,4	160			<u> </u>	106				18				
Peak	Hour Fact	or (PHF)		0.93			0.	87			0	.95		<u> </u>		.90		┧		
	Total Aut	0\$		527			1,	438			7	755			•	18		1		
	Total Truc	ks ·	ļ	17			•	2				19				0				
	Total Bus	88	<u> </u>	58		L		10				32		<u> </u>		0.		4		
	% Auto	% Auto 87.5%			98	.5%				3.7%				IV/01						
%	% Heavy Vehicles 12.5%				1	.5%			6	.3%			#0)[V/01						
σ	rucks & B	uses)	12.076											1				_		•

Appendix C-2

Automatic Traffic Recorder (ATR) Summaries

LOCATION: First Avenue S/O 28th Street

DIRECTION: NB

START DAY: Monday 10/27/08 START TIME: 12:00 AM

ONE HOUR INTERVAL	MONDAY (10/27/08)	TUESDAY (10/28/08)	WEDNESDAY (10/29/08)	THURSDAY (10/30/08)	FRIDAY (10/31/08)	SATURDAY (11/01/08)	SUNDAY (11/02/08)	AVERAGE TUE-THUR
12:00 AM - 1:00 AM	914	1,014	1,167	1,279	1,523	2,868	2,182	1,153
1:00 AM - 2:00 AM	592	634	736	808	1,194	2,486	2,089	726
2:00 AM - 3:00 AM	419	490	445	601	774	2,625	1,731	512
3:00 AM - 4:00 AM	342	234	307	427	589	2,021	1,460	323
4:00 AM - 5:00 AM	455	295	323	496	549	1,740	1,052	371
5:00 AM - 6:00 AM	706	469	625	699	733	964	665	598
6:00 AM - 7:00 AM	1,319	929	1,339	1,341	1,385	893	516	1,203
7:00 AM - 8:00 AM	2,185	1,390	2,224	2,247	1,972	1,181	677	1,954
8:00 AM - 9:00 AM	1,527	2,169	2,522	2,595	2,416	1,345	970	2,429
9:00 AM - 10:00 AM	2,323	2,083	2,287	1,941	2,218	1,293	936	2,104
10:00 AM - 11:00 AM	2,207	1,976	2,147	1,998	2,109	1,619	959	2,040
11:00 AM - 12:00 PM	1,992	2,027	2,335	2,141	2,004	1,783	1,079	2,168
12:00 PM - 1:00 PM	686	2,040	2,222	2,177	1,952	1,797	1,120	2,146
1:00 PM - 2:00 PM	969	2,057	1,623	2,146	1,904	1,733	1,207	1,942
2:00 PM - 3:00 PM	2,202	2,079	2,281	2,305	2,253	2,289	1,222	2,222
3:00 PM - 4:00 PM	2,132	2,410	1,669	2,463	2,009	1,546	1,361	2,181
4:00 PM - 5:00 PM	2,120	2,043	2,286	2,322	2,022	1,983	1,450	2,217
5:00 PM - 6:00 PM	2,122	2,394	1,730	2,202	2,305	1,823	1,445	2,109
6:00 PM - 7:00 PM	2,255	2,533	2,152	2,046	2,269	1,814	1,543	2,244
7:00 PM - 8:00 PM	1,863	2,178	1,784	2,193	2,479	2,080	1,545	2,052
8:00 PM - 9:00 PM	1,131	2,006	2,002	2,320	2,689	2,047	1,668	2,109
9:00 PM - 10:00 PM	1,613	1,804	1,855	2,133	2,610	2,038	1,532	1,931
10:00 PM - 11:00 PM	1,484	1,193	1,836	2,011	3,027	2,044	1,407	1,680
11:00 PM - 12:00 AM	1,421	1,164	1,753	1,901	2,943	2,320	1,205	1,606
24 HOUR TOTAL	34,979	37,611	39,650	42,792	45,928	V- 44,332	31,021	40,018

LOCATION: Second Avenue S/O 28th Street

DIRECTION: SB

START DAY: Monday 10/27/08

START TIME: 12:00 AM

ONE HOUR INTER	RVAL.	MONDAY (10/27/08)	TUESDAY (10/28/08)	WEDNESDAY (10/29/08)	THURSDAY (10/30/08)	FRIDAY (10/31/08)	SATURDAY (11/01/08)	SUNDAY (11/02/08)	AVERAGE TUE-THUR
12:00 AM - 1:	:00 AM	1,057	897	1,245	1,221	1,321	1,812	1,885	1,121
1:00 AM - 2:	:00 AM	679	623	881	935	1,137	1,699	1,922	813
2:00 AM - 3:	:00 AM	545	414	634	717	979	1,948	1,951	588
3:00 AM - 4:	:00 AM	471	408	533	653	751	2,091	1,676	531
4:00 AM - 5:	:00 AM	602	453	639	619	769	1,818	1,090	570
5:00 AM - 6:	:00 AM	954	902	997	1,027	1,007	1,328	798	975
6:00 AM - 7:	:00 AM	1,692	1,584	1,820	1,706	1,734	1,239	672	1,703
7:00 AM - 8:	:00 AM	2,399	2,360	2,433	2,502	2,279	1,491	783	2,432
8:00 AM - 9:	:00 AM	2,390	2,390	1,590	2,293	2,250	1,745	914	2,091
9:00 AM - 10	00:00 AM	2,128	1,998	1,514	2,051	2,202	1,560	1,271	1,854
10:00 AM - 11	:00 AM	2,122	1,942	1,567	2,152	2,061	1,927	1,452	1,887
11:00 AM - 12	2:00 PM*	2,013	2,025	1,353	2,030	2,013	1,982	1,482	1,803
12:00 PM - 1:	:00 PM	1,982	1,903	1,331	2,099	2,064	2,038	1,622	1,778
1:00 PM - 2:	:00 PM	1,992	1,846	1,355	2,027	2,006	2,053	1,627	1,743
2:00 PM - 3:	:00 PM	1,937	1,935	1,188	1,974	2,180	2,270	1,728	1,699
3:00 PM - 4:	:00 PM	1,931	1,924	1,386	1,926	2,012	2,260	1,781	1,745
4:00 PM - 5:	:00 PM	1,930	1,821.	1,369	1,834	2,102	2,039	1,920	1,675
5:00 PM - 6:	:00 PM	2,096	2,088	1,527	1,951	2,311	2,027	1,950	1,855
6:00 PM - 7:	:00 PM	2,070	2,174	1,824	2,176	2,583	2,304	1,855	2,058
7:00 PM - 8:	:00 PM	1,508	2,201	2,288	2,311	2,675	2,284	2,117	2,267
8:00 PM - 9:	:00 PM	1,428	2,050	2,214	2,155	2,771	2,464	2,076	2,140
9:00 PM - 10):00 PM	1,312	1,741	2,026	2,065	2,210	2,356	2,015	1,944
10:00 PM - 11	1:00 PM	1,279	1,634	1,932	1,850	1,796	2,246	1,798	1,805
11:00 PM - 12	MA 00:2	1,117	1,714	1,413	1,522	1,883	2,120	1,537	1,550
24 HOUR TOTA	AL	37,634	39,027	35,059	41,796	45,096	47,101	37,922 4	38,627

LOCATION: 23rd Street W/O First Avenue DIRECTION: EB START DAY: Monday 10/27/08 START TIME: 12:00 AM

ONE HOUR INTERVAL	MONDAY (10/27/08)	TUESDAY (10/28/08)	WEDNESDAY (10/29/08)	THURSDAY (10/30/08)	FRIDAY (10/31/08)	SATURDAY (11/01/08)	SUNDAY (11/02/08)	AVERAGE TUE-THUR
12:00 AM - 1:00 AM	243	285	305	301	337	417		297
1:00 AM - 2:00 AM	123	148	147	180	190	335	<u>,,</u>	158
2:00 AM - 3:00 AM	88	104	110	108	152	120	<u> </u>	107
3:00 AM - 4:00 AM	66	57	80	79	80	10		72
4:00 AM - 5:00 AM	72	61	79	84	85		. <u></u>	. 75
5:00 AM - 6:00 AM	143	163	134	156	195			151
6:00 AM - 7:00 AM	435	363	389	403	411			385
7:00 AM - 8:00 AM	694	616	669	674	641			653
8:00 AM - 9:00 AM	713	654	727	717	737			699
9:00 AM - 10:00 AM	592	529	564	540	579			544
10:00 AM - 11:00 AM	575	526	579	529	567	g andre and a second second a	the sea objection with the party and	545
11:00 AM - 12:00 PM	533	602	585	593	578			593
12:00 PM - 1:00 PM	537	632	358	611-	584			534
1:00 PM - 2:00 PM	657	624	593	585	614			601
2:00 PM - 3:00 PM	727	612	714	673	682			666
3:00 PM - 4:00 PM	. 702	710	706	736	701			717
4:00 PM - 5:00 PM	854	713	723	761	767			732
5:00 PM - 6:00 PM	723	707	589	721	698			672
6:00 PM - 7:00 PM	725	657	662	683	698			667
7:00 PM - 8:00 PM	627	731	560	646	681			646
8:00 PM - 9:00 PM	588	668	655	699	654			674
9:00 PM - 10:00 PM	531	649	732	627	662			669
10:00 PM - 11:00 PM	482	515	647	521	524			561
11:00 PM 12:00 AM	396	430	480	460	407			457
5025524 HOUR TOTAL	11,826	11,756	11,787	12,087	12,224	882		11,877

LOCATION: 23rd Street W/O First Avenue

DIRECTION: WB

START DAY: Monday 10/27/08 START TIME: 12:00 AM

ONE HOUR INTERVAL	MONDAY (10/27/08)	TUESDAY (10/28/08)	WEDNESDAY (10/29/08)	THURSDAY (10/30/08)	FRIDAY (10/31/08)	SATURDAY (11/01/08)	SUNDAY (11/02/08)	AVERAGE TUE-THUR
12:00 AM - 1:00 AM	209	241	246	270	385	572	484	252
1:00 AM - 2:00 AM	132	161	168	171	264	434	387	167
2:00 AM - 3:00 AM	79	102	108	138	185	369	326	116
3:00 AM - 4:00 AM	. 61	76	87	78	123	345	261	80
4:00 AM - 5:00 AM	89	82	95	83	109	294	211	87
5:00 AM - 6:00 AM	184	166	199	189	199	224 :	127	185
6;00 AM - 7:00 AM	396	369	372	410	368	281	171	384
7:00 AM - 8:00 AM	534	520	558	595	526	336	190	558
8:00 AM - 9:00 AM	643	601	665	624	610	490	- 247	630
9:00 AM - 10:00 AM	622	542	588	534	590	528	273	555
10:00 AM - 11:00 AM	599	515	486	615	599	551	305	539
11:00 AM - 12:00 PM	553	551	579	585	518	552	362	572
12:00 PM - 1:00 PM	526	496	581	504	553	518	370	527
1:00 PM - 2:00 PM	498	508	533	519	521	543	366	520
2:00 PM - 3:00 PM	487	562	542	506	547	624	402	537
3:00 PM - 4:00 PM	526	525	558	531	551	588	434	538
4:00 PM - 5:00 PM	576	504	533	530	602	568	426	522
5:00 PM - 6:00 PM	612	593	602	620	645	561	458	605
6:00 PM - 7:00 PM	610	634	655	641	716	589	414	643
7:00 PM - 8:00 PM	575	561	597	655	736	658	490	604
8:00 PM - 9:00 PM	478	539	529	558	695	634	447	542
9:00 PM - 10:00 PM	416	419	435	595	507	558	401	483
10:00 PM 11:00 PM	: 397	391	421	514	619	574	336	442
11:00 PM - 12:00 AM	334	395	i.g 369	490	634	605	301	418
24 HOUR TOTAL	- 10,136	10,053		10,955	11,802	11,996 rui	~ 8,189 · · · · ·	*****10,505 · .

LOCATION: 34th Street W/O First Avenue DIRECTION: EB START DAY: Monday 10/27/08 START TIME: 12:00 AM

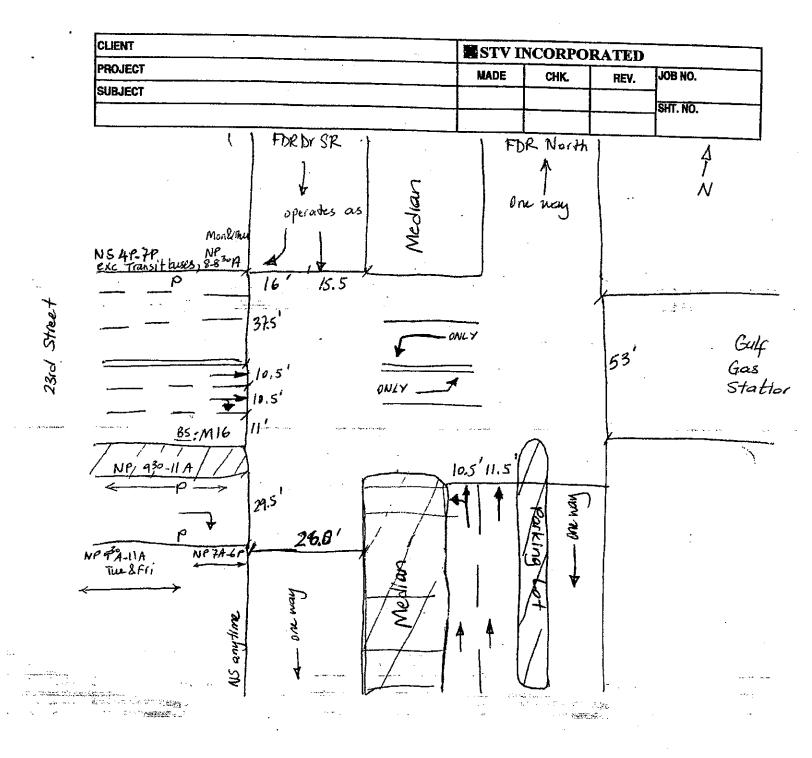
ONE HOUR INTERVAL	MONDAY (10/27/08)	TUESDAY (10/28/08)	WEDNESDAY (10/29/08)	THURSDAY (10/30/08)	FRIDAY (10/31/08)	SATURDAY (11/01/08)	SUNDAY (11/02/08)	AVERAGE TUE-THUR
12:00 AM - 1:00 AM	284	355	326	348	493	594	612	343
1:00 AM - 2:00 AM	128	195	165	247	307	546	418	202
2:00 AM - 3:00 AM	87	111	134	135	232	553	417	127
3:00 AM - 4:00 AM	57	98	86	109	145	592	312	98
4:00 AM - 5:00 AM	124	111	131	126	170	478	223	123
5:00 AM - 6:00 AM	270	229	222	236	263	356	184	229
6:00 AM - 7:00 AM	573	535	584	577	547	375	225	565
7:00 AM - 8:00 AM	893	808	862	888	806	483	333	853
8:00 AM 9:00 AM	814	804	823	849	853	512	301	825
9:00 AM - 10:00 AM	822	755	740	813	813	490	307	769
10:00 AM - 11:00 AM	708	735	670	643	643 -	497	309	683
11:00 AM - 12:00 PM	624	695	613	695	631	446	371	668
12:00 PM - 1:00 PM	585	659	710	698	709	534	423	689
1:00 PM - 2:00 PM	410	657	682	691	699	481	433	677
2:00 PM - 3:00 PM	658	598	701	699	794	544	453	666
3:00 PM - 4:00 PM	680	662	771	760	946	596	449	731
4:00 PM - 5:00 PM	722	637	810	826	899	586	574	758
5:00 PM - 6:00 PM	769	672	735	882	760	571	580	763
6:00 PM - 7:00 PM	751	657	745	749	691	613	527	717
7:00 PM - 8:00 PM	712	656	706	707	629	565	574	690
8:00 PM - 9:00 PM	659	718	657	703	645	572	556	693
9:00 PM - 10:00 PM	605	684	679	687	660	498	501	. 683
10:00 PM - 11:00 PM	502	590	696	651	665	527	502	646
11:00 PM - 12:00 AM	507	401	546	636	638	599	390	528
24 HOUR TOTAL	12,944	13,022	13,794	14,355	14,638	12,608	9,974	13,724

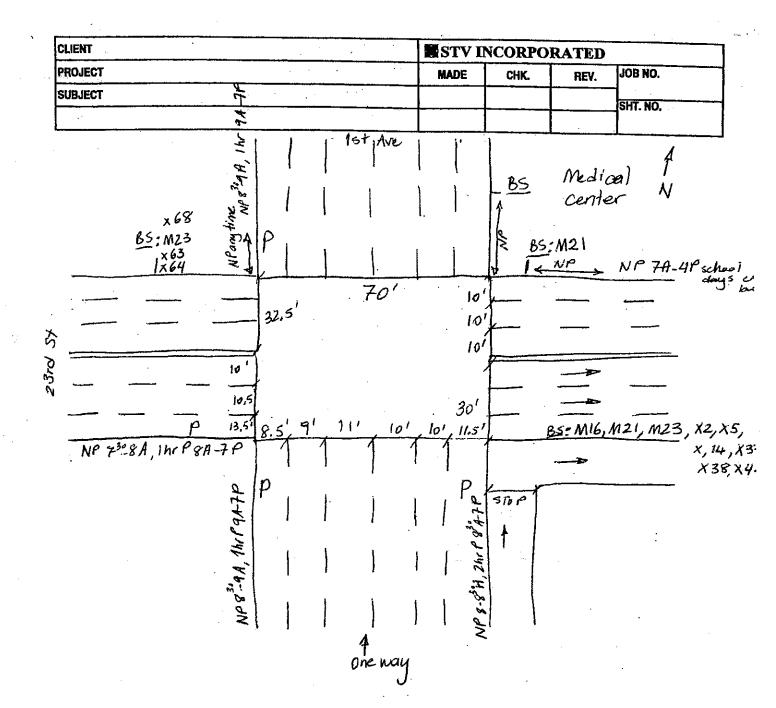
LOCATION: 34th Street W/O First Avenue

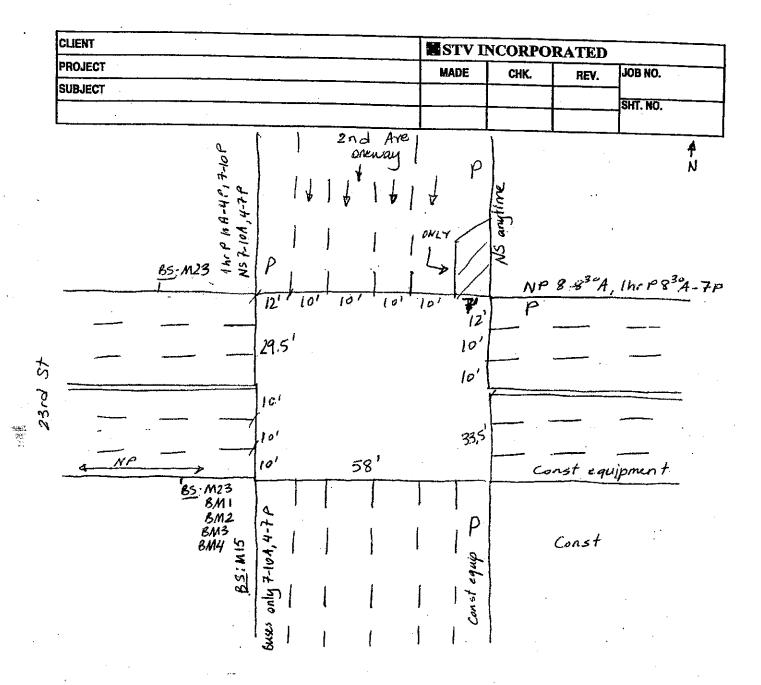
DIRECTION: WB START DAY: Monday 10/27/08 START TIME: 12:00 AM

ONE HOUR INTERVAL	MONDAY (10/27/08)	TUESDAY (10/28/08)	WEDNESDAY (10/29/08)	THURSDAY (10/30/08)	FRIDAY (10/31/08)	SATURDAY (11/01/08)	SUNDAY (11/02/08)	AVERAGE TUE-THUR
12:00 AM - 1:00 AM	171	222	178	246	345	437	281	215
1:00 AM - 2:00 AM	89	121	121	139	208	450	292	127
2:00 AM - 3:00 AM	61	56	74	98	143	468	208	76
3:00 AM - 4:00 AM	. 58	. 73	69	63	112	392	203	68
4:00 AM - 5:00 AM	107	97	116	88 .	127	. 318	145	100
5:00 AM - 6:00 AM	243	188	206	192	220	234	112	195
6:00 AM - 7:00 AM	346	315	345	385	357	288	119	348
7:00 AM - 8:00 AM	456	441	467	453	450	351	214	454
8:00 AM - 9:00 AM	538	524	519	547	607	393	273	530
9:00 AM - 10:00 AM	549	518	592	564	588	454	305	558
10:00 AM - 11:00 AM	488	493	556	526	551	412	281	525
11:00 AM - 12:00 PM	530	493	539	573	538	479	355	535
12:00 PM - 1:00 PM	491	477	581	573	466	493	402 .	544
1:00 PM - 2:00 PM	478	501	520	560	534	443	349	527
2:00 PM - 3:00 PM	521	435	536	563	557	521	414	511
3:00 PM - 4:00 PM	497	525	574	498	524	485	457	532
4:00 PM - 5:00 PM	547	508	592	534	534	543	454	545
5:00 PM - 6:00 PM	542	526	579	573	602	545	528	559
6:00 PM - 7:00 PM	573	572	530	609	617	580	488	570
7:00 PM - 8:00 PM	552	545	634	603	599	555	480	594
8:00 PM - 9:00 PM	462	517	520	647	593	572	440	561
9:00 PM - 10:00 PM	456	439	442	597	574	503	410	493
10:00 PM - 11:00 PM	387	361	462	543	. 556	501	369	455
11:00 PM - 12:00 AM	. 300	298	350	457	466	. January 460	289	368
24 HOUR TOTAL	9,442	9,245	10,102	10,631	10,868	- 10,877 ⁽ - /-	²⁷⁷⁸⁹⁵ 7,868 <u>±</u> ∍	9,393

Appendix C-3 Physical Inventories



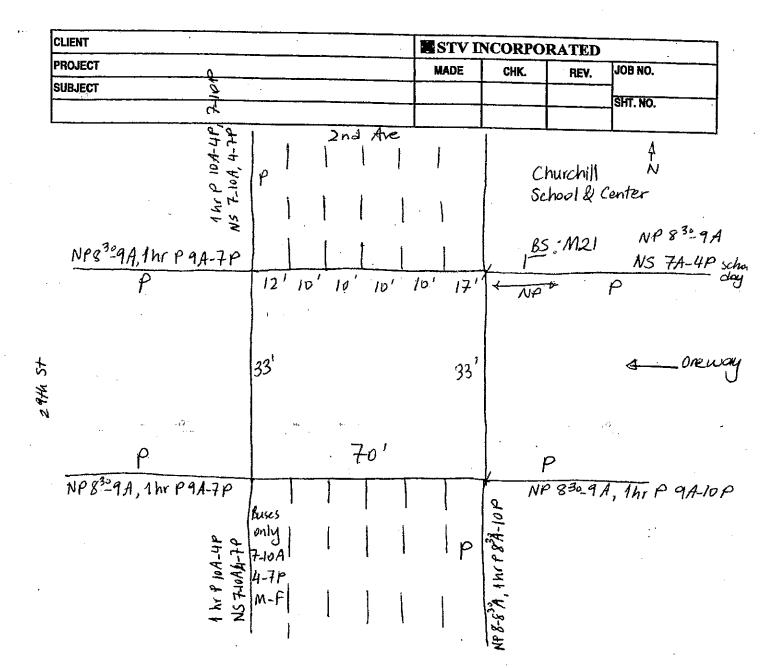


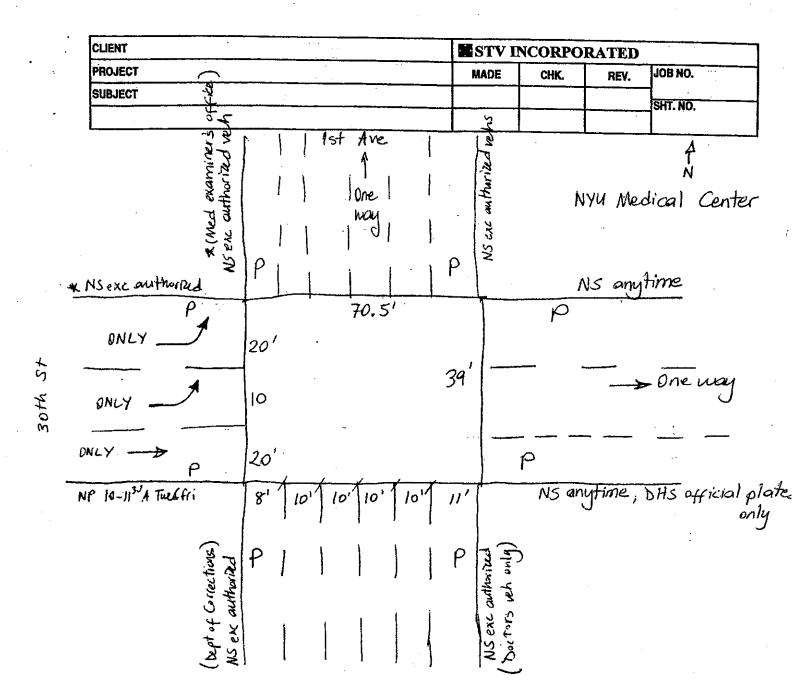


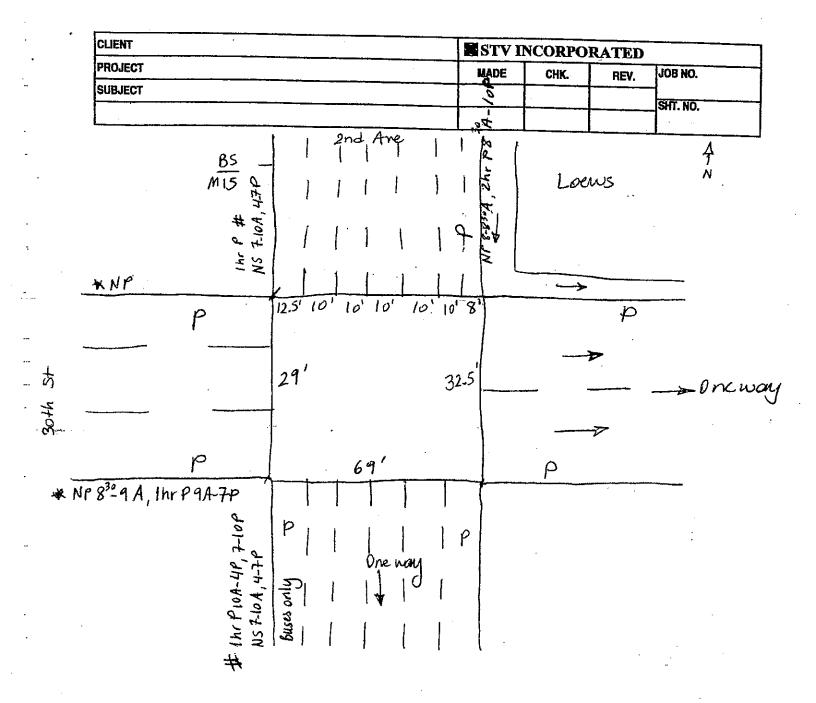
CT CT		NCORPOR		
PT	MADE	CHK.	REV.	JOB NO.
				SHT. NO.
		·		
(Nept of corrections) NS exe outhorized NS exe outhorized	p	NS cac authorized		4
69.51		<u> </u>		·
-One way 33.5'	10 11	Closed for		
Fire Dept) At the day At the	1 % 1 P	NSex authorized (Osctors rehand) (S	5	·

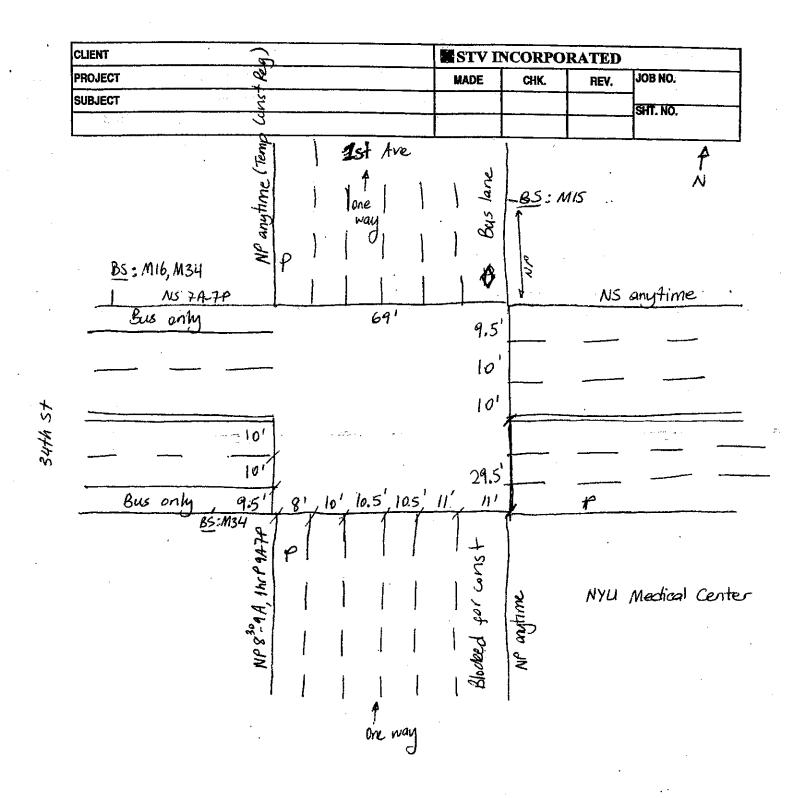
.

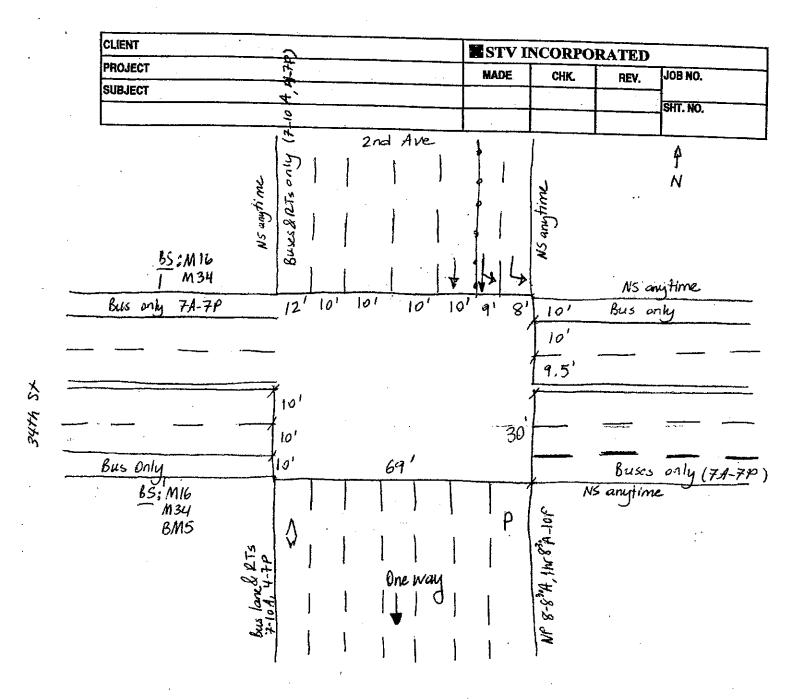
: ·



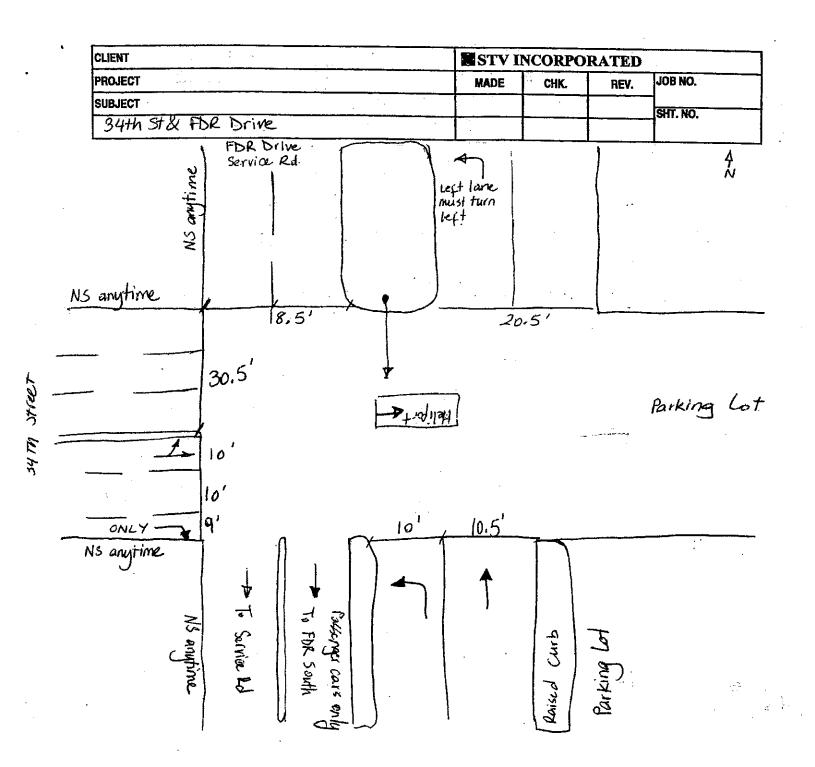








SB 2nd Are - operates w/4 T, 1RT (MD).



Appendix C-4

Highway Capacity Software (HCS) Analysis Summaries

Inter.: 23rd St and FDR Dr N SR

Area Type: CBD or Similar Agency: STV Incorporated

Date: 11/7/2008

Jurisd:

Year : 2008 Existing

Period: 7:45 - 8:45 AM

Project ID: Former Bellevue Psych Building Redevelopment

rive N SR

E/W St:	23rd	Street	N/S	St:	FDR	Dr
---------	------	--------	-----	-----	-----	----

			SI	GNALI:	ZED II	ITERS	ECTION	SUMM	ARY			
	Eas	stbour	nd	We:	stbour	nd	No:	rthbo	und	Sou	thbo	und
	L	${f T}$	R	L	T	R	L	${f T}$	Ř	Ĺ	Т	R,
No. Lanes	<u> </u>	1		1	_ 	0	-	1	0	-	0	0
LGConfig] L	LT	R R	L	TR	J	L -	TR	•			į
Volume	377	21	207	9	10	6	324	512	28	j		!
Lane Width	10.5	10.5	11.0	16.0	16.0		11.0	11.0		j		ļ
RTOR Vol	j		0 .	1		0	-		0			1

Dura	tion 0.25		Area Ty		CBD or nal Or							
Phas	e Combination	. 1	2	3	4	·		5	6	7	8	
	Left		P			NB	Left		P	P		
	Thru		P			ĺ	Thru	P	P	P		
	Right		P			Í	Right	P	P	P		
	Peds	Х				İ	Peds		X			
WB	Left		P			SB	Left					
	Thru	P P	P			İ	Thru			^		
	Right	P	P			İ	Right					
	Peds	X	Х			ĺ	Peds	X				•
NB	Right					EB	Right					
	Right					WB	Right					
Gree	_	6.0	24.0					19.0	8.0	13.0		
Yeli	Low	3.0	3.0					3.0	0.0	3.0		
All		2.0	2.0					2.0	0.0	2.0		
								Cycl	e Leng	gth: 90	.0	secs

		Intersec	tion Pe	erforman	ce Summa	ary				
Appr/ Lane	Lane Group	Adj Sat Flow Rate	Rat	ios	Lane	Group	Appro	oach	_	
Grp	Capacity	(s)	v/c	g/C	Delay	LOS	Delay	LOS		
Eastbo	und									
L	238	891	0.91	0.27	71.3	\mathbf{E}			•	
LTR -	239	896	0.90	0.27	69.7	Œ.	61.0	\mathbf{E}	e4	
R	315	1182 -	0.71	0.27	42.9	D				-
Westbo	und		•							
L	391	1841	0.03	0.39	17.5	В				
TR	693	1781	0.03	0.39	17.0	В	17.2	В		
Northb	ound									
L	398	1236	0.91	0.32	48.0	D.				
TR	637	1274	0.95	0.50	47.0	D	47.4	D		

Southbound

Intersection Delay = 52.3 (sec/veh) Intersection LOS = D

_OPERATIONAL ANALYSIS___

Phone: E-Mail:

Fax:

Analyst: James C.

Agency/Co:: STV Incorporated

Date Performed: 11/7/2008 Analysis Time Period: 7:45 - 8:45 AM

Intersection: 23rd St and FDR Dr N SR

Area Type: CBD or Similar

Jurisdiction:

Analysis Year: 2008 Existing

Project ID: Former Bellevue Psych Building Redevelopment

E/W St: 23rd Street N/S St: FDR Drive N SR

_____VOLUME DATA_

•	Ea:	stbou	nd	Wes	stbou	nđ	No	rthboi	und	Sou	thbo	und	1
	L	\mathbf{T}	R	L	T	R	L	T	R	L	${f T}$	R	İ
Volume	 377	21	207	 9	10 -	6.4	324	51-2	28	ļ	· · · · ·	,	- .
% Heavy Veh	!	16	16	ĺ	0	0	27	27	27	ł			-
PHF	0.92	0.92	0.92	0.89	-	0.89	0.89	0.89		ľ			'
PK 15 Vol	102	6	56	3	3	2	91	144	8				-
Hi Ln Vol	Ì			i -		-	1		J	1			ł
% Grade	İ	0		i	0			0		i			- 1
Ideal Sat	1900	1900	1900	1900	1900		1900	1900		ļ.			<u> </u>
ParkExist	İ			Ì			İ			ĺ			Ì
NumPark	İ			İ			İ			ĺ			ĺ
No. Lanes	1	1	1	1	1	0	1	1	0	0	0	. 0	İ
LGConfig	L	LT]	R R	L	TR		L	TR	*	Ì			i
Lane Width	10.5	10.5	11.0	16.0	16.0		11.0	11.0		İ			i
RTOR Vol			0]		0	ĺ		0	İ			i
Adj Flow	217	216	225	10	18		364	606		Ì			İ
%InSharedLn			0							ĺ			j
Prop LTs	1.00	0 0.8	92	1.000	0.0	00		0.0	00	Ì			j
Prop RTs	!	.000	1.000	0	.389		0	.051		j			j
Peds Bikes	!	00:		80	0	0	8	0	0	0			Ì.
Buses	0	0	6	0	0		0	0	:-	100			ĺ
%InProtPhase				0.0					0.0	-, -			ĺ
Duration	0.25		Area	Type:	CBD	or Sim	ilar						

OPERATING PARAMETERS_

	Eastbound			Westbound			Northbound			Southbound			1
·	L	T	R	L	${f T}$	R	Ŀ	${f T}$	R	L	T	R	İ
Init Unmet	 0.0	0.0	0.0	-	0 0		-	0 0		ļ			.
	! '	0.0	0.0	0.0	0.0		0.0	0.0		ļ			
Arriv. Type	3	3	3	3	3		5	3					
Unit Ext.	3.0	3.0	3.0	3.0	3.0		3.0	3.0		İ			İ
I Factor		1.00	0		1.00	0		1.000)	İ			İ
Lost Time	2.0	2.0	2.0	2.0	2.0		0.0	2.0		j		•	İ
Ext of g	2.0	2.0	2.0	2.0	2.0		8.0	2.0		ĺ			İ
Ped Min g	[3.9			3.7			3.7		j	3.2		İ

Inter.: 23rd St and FDR Dr S/ Ave C

Area Type: CBD or Similar

Agency: STV Incorporated Date: 11/7/2008

Jurisd:

Period: 7:45 - 8:45 AM

Year : 2008 Existing

Project ID: Former Bellevue Psych Building Redevelopment

E/W St: 23rd Street

N/S St: FDR Drive S/ Avenue C

					CTION SUMM Northbo		Cout	hbound	·
	Eas	tbound T R	Westb		L T	R R	1	r R	:
No. Lanes LGConfig Volume Lane Width RTOR Vol	0	0 0	1 L 9 10		0 0	0	1 L 98 2! 10.0 10	2 0 TR 57 82 0.5	
Duration	0.25	Area	a Type: CE Signa	D or Sim					
Phase Combi EB Left Thru Right Peds WB Left Thru Right Peds NB Right SB Right Green Yellow	nation	1 2 X P P X 24.0 3.0	3	4 NB	Left Thru Right Peds X Left Thru P Right P Peds X Right Right Right 3.0	3.0)	8	
All Red		2.0	B	£		cle Le) ength: 9	0.0	secs
Appr/ La		Inter Adj Sa	t Rat:			cle Le		0.0	secs
Appr/ Lane Gro	ne oup pacity	Inter	t Rat:		Cy ce Summary_	rcle Le	ength: 9	0.0	secs
Appr/ Lane Gro	oup	Inter Adj Sa Flow Ra	t Rat: te	ios	Cy ce Summary_ Lane Grou	rcle Le	ength: 9	-	secs
Appr/ Lan Lane Gro Grp Can Eastbound	oup	Inter Adj Sa Flow Ra	t Rat: te	ios	Cy ce Summary_ Lane Grou	rcle Le	ength: 9		secs
Appr/ Lane Grogrp Cap Eastbound Westbound	oup	Inter Adj Sa Flow Ra	t Rat: te	ios	Cy ce Summary_ Lane Grou	vcle Le	ength: 9		secs
Appr/ Lane Grogrp Cap Eastbound Westbound	oup pacity 91 58	Inter Adj Sa Flow Ra (s)	t Rat: te	g/C g/C	Cyce Summary_Lane Ground Delay LOS	vcle Le	ength: 9	-	secs
Appr/ Lane Gro Grp Cap Eastbound Westbound L 4 TR 4	oup pacity 91 58	Inter Adj Sa Flow Ra (s) 1841 1718	t Rat: te	g/C g/C 0.27 0.27	Cyce Summary_Lane Ground Delay LOS 24.4 C 24.6 C	vcle Le	ength: 9	0.0	secs
Appr/ Lane Gro Grp Cap Eastbound Westbound L 4 TR 4 Northbound Southbound L 3	oup pacity 91 58	Inter Adj Sa Flow Ra (s)	t Rat: te	g/C g/C 0.27 0.27	Cyce Summary_Lane Ground Delay LOS	vele Le	ength: 9 oproach Lay LOS		secs

Fax:

_OPERATIONAL ANALYSIS__

Analyst:

James C.

Agency/Co.:

STV Incorporated

Date Performed:

11/7/2008

Analysis Time Period: 7:45 - 8:45 AM

Intersection:

23rd St and FDR Dr S/ Ave C

Area Type:

CBD or Similar

Jurisdiction: Analysis Year:

2008 Existing Project ID: Former Bellevue Psych Building Redevelopment

E/W St: 23rd Street

N/S St: FDR Drive S/ Avenue C

____VOLUME DATA____

	Ea:	stbou	ınd	We	stbou	nd	No	rthbo	und	So	uthbo	und	ļ
Ţ	L	T	R	L	T	R	L I	T	R	L	T	R	
Volume				9	10	6				98	257	82	(1)
% Heavy Veh				0	0	0	į ·			11	11	11	İ
PHF				0.89	0.89	0.89	İ			0.96	0.96	0.96	ĺ
PK 15 Vol				3	. 3	2				26	67	21	İ
Hi Ln Vol		•								İ			İ
% Grade					0					İ	0		İ
Ideal Sat				1900	1900					1900	1900		İ
ParkExist										1			Ì
NumPark							ļ						
No. Lanes	0	0	0	1	. 1	0	0	0	0	1	2	0	
LGConfig			4	L	TR]			L	TR		
Lane Width				16.0	16.0		ļ		-	10.0	10.5		
RTOR Vol						0	ļ			ļ		0	ļ
Adj Flow				10	18		ļ			102	353		ļ
%InSharedLn							ļ						
Prop LTs					0.0		ļ			_	0.0	00	ļ
Prop RTs			:	: -	389		_				.241		
Peds Bikes	1	00				0	8	0	• •	. - 2		0	
Buses				0	0		ļ	.5 4/44	•	0	0		
%InProtPhase			3		ann	a'		i-	*	1			ļ
Duration	0.25		area	rype:	CRD	or Sim:	ılar						

__OPERATING PARAMETERS___

	Eastbound			Westbound			Northbound			Southbound		
·	L	${f T}$	R	L	${f T}$	R	L	T	R	L	${f T}$	R
							-			-		
Init Unmet				0.0	0.0		-			0.0	0.0	
Arriv. Type				3	3					3	3	İ
Unit Ext.				3.0	3.0					3.0	3.0	j
I Factor					1.00	0				,	1.000	į
Lost Time				2.0	2.0					2.0	2.0	İ
Ext of g				2.0	2.0		1			2.0	2.0	j
Ped Min g		3.9		1	3.7		1	3.7		İ	3.4	Ì

Analyst: James C.

Inter.: 23rd St and 1st Ave Area Type: CBD or Similar

Agency: STV Incorporated Date: 11/6/2008

Jurisd:

Period: 7:45 - 8:45 AM

Year : 2008 Existing

Project ID: Former Bellevue Psych Building Redevelopment

E/W St: 23rd Street

N/S St: First Avenue

E/W St: 23r	d Stre	et				N/S	St: F	irst Av	venue			
			_SIG				CTION :	SUMMAR!		South	bound	
	L Eas	tbound T R	. [wes L	tbour T	R	L		- 1	SOUCH.		
No. Lanes LGConfig	0	2 0 LT		0	3 TR	0	0	4 (0	0	0 0	-
Volume	150	493	.		383	103	178	1106 1	82			j
Lane Width		10.5	i		10.0		İ	10.0	.			1
RTOR Vol	j .		. j			0		0	1			ļ
Duration	0.25	Ar	ea T			or Sim			·····			
Phase Combi	ination	1	2	3±≌	4			5	6	7	8	
EB Left			P			NB	Left	P				
Thru		P	P	-			Thru	P				
Right							Right	P	•			
Peds		X					Peds	X				
WB Left						SB	Left					
Thru		P		•			Thru					
Right		P				ļ	Right					
Peds		X					Peds	X				
NB Right						EB	Right			-		
SB Right						WB	Right					
Green			7.0					36.0				
Yellow			3.0				ė	3.0				
All Red		2.0	3.0					8.0	e Leng	+ Ъ. 90		secs
		Tnte	rge	ction	Perf	ormano	e Summ	_	e neng	CII. 90		5005
Appr/ La:	ne	Adj S			atios			Group	Appr	oach		
	oup	Flow H									_	
	pacity			v/c	g	/C	Delay	LOS	Delay	LOS		
Eastbound							- 	•				
ът 7	47	2370		0.8	9 0	.36	42.0	. , D	42.0	D		- 4
Westbound			·						• •			
TR 6	40	2882		0.8	0 0	.22	431	D	43.1	D		•
Northbound	L											
LTR 1	792	4479		0.8	5 0	.40	29.9	С	29.9	С		
Southbound	l											

Intersection Delay = 35.4 (sec/veh) Intersection LOS = D

Fax:

OPERATIONAL ANALYSIS_

Analyst:

James C.

Agency/Co.:

STV Incorporated

Date Performed:

11/6/2008

Analysis Time Period:

7:45 - 8:45 AM

Intersection:

23rd St and 1st Ave

Area Type:

CBD or Similar

Jurisdiction:

Analysis Year:

2008 Existing

Project ID: Former Bellevue Psych Building Redevelopment E/W St: 23rd Street

N/S St: First Avenue

____VOLUME DATA_

Eastbound Westbound Northbound Southbound L T R L T R L T R
77-7
Volume 150 493 383 103 178 1106 182 383 103 383 383 383 383 383 383 383 383 383 383 383 383
% Heavy Veh 20 20 44 44 21 21 21
PHF 0.97 0.97 0.95 0.95 0.96 0.96
PK 15 Vol 39 127 101 27 46 288 47
Hi Ln Vol
% Grade 0 0 0
Ideal Sat 1900 1900 1900
ParkExist X X X
NumPark 5 3 3
No. Lanes 0 2 0 0 3 0 0 4 0 0 0 0
LGConfig LT TR LTR
RTOR Vol 0 0
Adj Flow 663 511 1527
%InSharedLn
Prop LTs 0.234 0.000 0.121
Prop RTs 0.000 0.211 0.124
Peds Bikes 50 0 100 0 0
Buses 0 0 0
%InProtPhase 0.0
Duration 0.25 Area Type: CBD or Similar

OPERATING PARAMETERS_

	Eastbound	Westbound	Northbound	Southbound
	L T R	L T R	LTR	L T R
• • •		-	-	-
Init Unmet	0.0	0.0	0.0	1
Arriv. Type	3	3	3	
Unit Ext.	3.0	3.0	3.0	j j
I Factor	1.000	1.000	1.000	i i
Lost Time	2.0	2.0	2.0	i i
Ext of g	2.0	2.0	2.0	i i
Ped Min g		3.5	3.9	3.2

HCS+: Signalized Intersections Release 5.3

Inter.: 23rd St and 2nd Ave

. Area Type: CBD or Similar

Agency: STV Incorporated Date: 11/7/2008

Jurisd:

Period: 7:45 - 8:45 AM

Year : 2008 Existing

Project ID: Former Bellevue Psych Building Redevelopment

N/S St: Second Avenue

E/W St: 23rd	d Stree	et.			•	N/S	St: Se	econd	Aven	ue			
		· · · · · ·	_SIGN				CTION S						1
	<u> </u>	tbound			tbour		:	thbou T		So	outhbo T	una R	l
	L	T R		L	Т	R	L	Ţ	R	1 11	1	K	
No. Lanes] -	3 0	-	0	2	0	0	0	0		1 4	0	
LGConfig	0	TR	ł	DefL		.*				jь	TF	Į.	į
Volume	<u>.</u>	425 17		180		•	İ			218	1433	200	j
Lane Width	1	10.0			10.0		į			10.	0 10.0)	İ
RTOR Vol		0								İ		0 .	j ·
Duration	0.25	Ar	ea Ty			or Sim					·		
							ions	5	6		7	8	
Phase Combi:	nation	1	2	3	. 4	l NB	Left	Э	0	١	′	0	
EB Left						I ND	Thru						
Thru		P					Right						
Right		P				1	Peds	х					
Peds		X				SB	Left	P					
WB Left		P P		. 21.		طما	Thru	_					
Thru		P					Right						
Right		17					Peds					•	
Peds		X				EB							
NB Right						WB	Right						
SB Right		25 0				WD	Kigne	45.0	1				
Green		35.0						3.0	,				
Yellow		3.0						2.0					
All Red		2.0							cle Le	ngth	. 90.	0	secs
		Inte	rsec	tion	Perf	ormano	e Summ	_				_	
Appr/ Lan	e	 Adj S	at	Ra	atios		Lane	Group	A <u>r</u>	proa	.ch		,
Lane Gro	up	Flow R	ate										
Grp Cap	acity	(s)		V/C	g	/C	Delay	LOS	De]	ay L	os		
Eastbound			··-··				•	•					
TR 12	22	3141	, :	0.6	2 0	.39	24.4	С	24	4 .	С		٠.,
Westbound									· · · · · · · · · · · · · · · · · · ·				
DefL 19	1	491		1.0	2 0	.39	96.8	F					
T 45		1167		0.9		.39	49.8		64	. 9	E		
Northbound													
						•							
Southbound													
L 55	55 .	1110					17.0		_	_	_		
	285	4569		0.8	0 ().50	21.9	С	21	. 3	С		

Fax:

_OPERATIONAL ANALYSIS__

Analyst:

James C.

Agency/Co.:

STV Incorporated

Date Performed:

11/7/2008

Analysis Time Period:

7:45 - 8:45 AM

Intersection:

23rd St and 2nd Ave

Area Type:

CBD or Similar

Jurisdiction:

Analysis Year:

2008 Existing

Project ID: Former Bellevue Psych Building Redevelopment E/W St: 23rd Street

N/S St: Second Avenue

____VOLUME DATA____

	Eastbound			We	stbou	nd	No	rthbou	ınd	So	uthbo	und
,	L	T	R	L	T	R	Ŀ	T	R	L	T	R
Volume		425	177	180	381		 			218	1433	200
% Heavy Veh		27	27	21	21					j 20	20	20
PHF		0.80	0.80	0.93	0.93				•	0.89	0.89	0.89
PK 15 Vol		133	55	48	102					61	403	′56
Hi Ln Vol			•	İ			İ			i ·		
% Grade		0		İ	0					i	0	
Ideal Sat		1900		1900	1900					1900	1900	
ParkExist				į ·		X	İ			x		Х
NumPark				ĺ		3	İ			i o		0
No. Lanes	0	3	0	0	. 2	0	0	0	0	1	4	0
LGConfig		TR		Defi	L T		ĺ			L	TR	
Lane Width		10.0		10.0	10.0		İ			110.0	10.0	
RTOR Vol			0	j			İ			j		0
Adj Flow		752		194	410		İ			245	1835	
%InSharedLn				Ì			İ			İ		
Prop LTs		0.0	00	1.00	0.0	00	į.			j	0.0	00
Prop RTs) o	.294		0	.000		İ			i o	.123	-
Peds Bikes	1	.20	0	İ			j 4	. 0		1	60	0
Buses		10		0-	0 -		İ			0	0	
%InProtPhase	B			İ			İ			İ		
Duration	0.25	;	Area	Type.	CRD	or Sim	lar				· +	

Duration

0.25 Area Type: CBD or Similar

___OPERATING PARAMETERS____

	Eastbound	Westbound	Northbound	Southbound
	L T R	L T R	LTR	LTR
Init Unmet	0.0	0.0 0.0		-
	0.0			0.0 0.0
Arriv. Type	3	3 3	<u> </u>	3 3
Unit Ext.	3.0	3.0 3.0		3.0 3.0
I Factor	1.000	1.000]	1.000
Lost Time	2.0	2.0 2.0]	2.0 2.0
Ext of g	2.0	2.0 2.0	1	[2.0 2.0]
Ped Min g	4.0		3.5	4.3

Analyst: James C.

Inter.: 29th St and 1st Ave

Agency: STV Incorporated

Area Type: CBD or Similar

Date: 11/6/2008

Jurisd:

Period: 7:45 - 8:45 AM

Year : 2008 Existing

Project ID: Former Bellevue Psych Building Redevelopment
E/W St: 29th Street
N/S St: First Ave

N/S St: First Avenue

E/W St: 29th St	creet		N/S	St: Fi	rst A	venue			
	SIG	NALIZED	INTERSE	CTION S	SUMMAR	Υ			
	Eastbound	Westbo			hboun		Sout	hboun	d
L	T R	L T	R	Ĺ	T I	R	L	T	R
No. Lanes LGConfig Volume Lane Width	0 0 0		1 0 TR 0	1	4 LT 1618 LO.0	0	0	0	0
Duration 0.	25 Area T		D or Sim						
Phase Combinat	ion 1 2	Signa 3	l Operat 4	ions	5	6	_	8	
EB Left	1011 1 2	J	NB	Left	P	Ū	•	_	
Thru			i	Thru	P				
Right			j	Right					
Peds	X			Peds	X				
WB Left			SB	Left					
Thru	P Comment			Thru				-	
Right	P		ļ	Right Peds	х				
Peds	X		EB	Right					
NB Right SB Right			l WB	Right					
Green	31.0		12		49.0				
Yellow	3.0				3.0				
All Red	2.0				2.0				
			_	_	_	e Len		90.0	secs
			rformano	e Summ	ary Group	Λnn	roach		
Appr/ Lane	Adj Sat Flow Rate		os	rane .	Group	App	LUACII		
Lane Group Grp Capaci		v/c	g/C	Delay	LOS	Dela	y LOS		
Eastbound									
Westbound				x	المؤوس				
TR 431	1250	0.00	0.34						
Northbound					•				
LT 2702	4962	0.82	0.54	19.9	В	19.9	В		
Southbound									
	•			•					

Phone:

Fax:

E-Mail:

OPERATIONAL ANALYSIS___

Analyst:

James C.

Agency/Co.:

STV Incorporated

Date Performed:

11/6/2008

Analysis Time Period:

7:45 - 8:45 AM

Intersection:

29th St and 1st Ave

Area Type:

CBD or Similar

Jurisdiction:

Analysis Year:

2008 Existing

Project ID: Former Bellevue Psych Building Redevelopment E/W St: 29th Street

N/S St: First Avenue

_____VOLUME DATA_

	Eastbound			. W	lestbou:	nd	No	rthbo	und	Soi	ıthbo	und	l
	L	T	R	L	T	R	L _.	\mathbf{T}	R	L	T	R	İ
Volume			-	1-	0	0	313	1618	···				
% Heavy Veh				Ì	19	19	11	11		İ	•		İ
PHF				j	0.79	0.79	0.87	0.87		İ			i
PK 15 Vol				İ	0	0	90	465		İ			i
Hi Ln Vol				İ			i			i			i
% Grade				İ	0		i	0		İ			i
Ideal Sat				į	1900		i	1900		İ			l
ParkExist				Х		X	x		Х	ì			i
NumPark				із		3	3		3	i			i
No. Lanes	0	0	0	j	0 1	0	i o	4	0	0	0	0	ŀ
LGConfig				İ	TR		i	ĿТ		i	_	-	ļ
Lane Width				İ	12.0		İ	10.0		i			i
RTOR Vol	İ			İ		0	i						l
Adj Flow	i			Ì	0		j	2220		i '			i
· %InSharedLn	ĺ			i			İ			Ì			l
Prop LTs	ĺ			i	0.0	00	İ	0.1	62				ŀ
Prop RTs	j .			i	0.000		0	.000					i
Peds Bikes				i	•	0	-			0	27		i
Buses	ĺ			- 1	0	-		10					l
%InProtPhase	: e			i									i
Duration	0 25		Area	Tune	· CBD	or Gim	1122			1.			١.

Duration

0.25

Area Type: CBD or Similar

__OPERATING PARAMETERS_

	Ea	stbou	nd	We	stbou	ınd	No	rthbo	und	So	uthbo	und	1
	L	T	R	L	T	R	L	${f T}$	R	L	${f T}$	R	Ì
Twit II				ļ	0 0		-						-
Init Unmet		•			0.0		ļ	0.0		1			- [
Arriv. Type					3			3					
Unit Ext.					3.0		Ī	3.0		j			İ
I Factor					1.00	0		1.00	0	j			ĺ
Lost Time					2.0		ŀ	2.0		İ			İ
Ext of g					2.0		1	2.0		İ			Ì
Ped Min g					3.5		ĺ			ĺ	3.2		į

HCS+: Signalized Intersections Release 5.3

Inter.: 29th St and 2nd Ave

Agency: STV Incorporated

Area Type: CBD or Similar

Date: 11/7/2008

Jurisd:

Period: 7:45 - 8:45 AM

Year : 2008 Existing

Project ID: Former Bellevue Psych Building Redevelopment

E/W St: 29th Street

N/S St: Second Avenue

	Eas	tboun			tbou		CTION S Nort	hbou		Sou	thbou	ınd	
	L	T	R	L	T	R	L	T	R	L	Т	R	 -
o. Lanes GConfig olume ane Width TOR Vol	0	0	0	0	1 LT 202 16.0	0	0	0 .	0	0	5 TR 2028 10.0	0 144 0	
uration	0.25		Area I							.			-
hase Combi	nation	1	2	Sig	gnaı 4	Operat 	10118	5	6	7		8	
nase combi B Left	.nacion	Τ.	2	J		NB	Left		Ū	•		_	
Thru							Thru						
Right	-					İ	Right						
Peds		X				ŀ	Peds	Х					
VB Left		P				SB	Left		•				
Thru	٠	P					Thru	P	·				
Right		-				i	Right						
Peds		Х				i	Peds	Х					
NB Right		••				EB	Right						
SB Right						WB	Right						
Green		31.0				1	2	49.0					
Yellow		3.0						3.0					
All Red		2.0						2.0					
ALL NCG		2.0							le Le	ngth:	90.0	ສ	ecs
		Tr	terse	ction	Perf	ormand	ce Summ	ary					
Appr/ Lai	ne	Adj	Sat	R	atios		Lane	Group	i Api	proac.	h		
Lane Gro	oup	Flow	/ Rate			<u>.</u>			<u> </u>				
Grp Ca	pacity	((s)	v/c	Q	/C	Delay	LOS	Dela	ay ro	S		-
Eastbound				<u>.</u>		· · · · · ·		···· <u>-</u>					
												·	
Westbound						·							
LT 5	26	152	26	0.7	0 0	.34	33.1	С	33.	1 C			
Northbound			•										
										-			
Southbound													
Southbound	177	58:	36	0.7	5 ().54	17.5	В	17.	5 B	•		

Phone:

Fax:

E-Mail:

__OPERATIONAL ANALYSIS_____

Analyst:

James C.

Agency/Co.:

STV Incorporated

Analysis Time Period: 7:45 - 8:45 AM

Intersection

Intersection:

29th St and 2nd Ave

Area Type:

CBD or Similar

Jurisdiction: Analysis Year:

2008 Existing

Project ID: Former Bellevue Psych Building Redevelopment

E/W St: 29th Street

N/S St: Second Avenue

VOLUME DATA

	Eas	tbou	nđ	We	stbour	ıd) No	rthbo	ound	S	outhbo	und
	L	Т	R	L	\mathbf{T}	R	L	T	R	L	${f T}$	R
Volume % Heavy Veh PHF PK 15 Vol Hi Ln Vol				111 7 0.85 33	59				-		2028 19 0.91 557	19
% Grade Ideal Sat ParkExist NumPark				X 3	0 1900					X 3	0 1900	
No. Lanes LGConfig Lane Width RTOR Vol Adj Flow %InSharedLn	0	0	0	0	1 LT 16.0	0	(0	0	 	0 5 TR 10.0 2387	0
Prop LTs Prop RTs Peds Bikes	10	0	· .	0	0.35	55	 				0.0 0.066 150	0 0 0
Buses %InProtPhase Duration	 ≘ 0.25	25	φ.		0	or Sim			•		0	*,- ;

__OPERATING PARAMETERS__

	Eas	stbou	nd	We	stbou	nd	No	rthbo	und	Sc	uthbo	und
ĺ	L	T	R	L	\mathbf{T}	R	L	${f T}$	R	L	${f T}$	R
	` 				0 0		.					
Init Unmet					0.0						0.0	
Arriv. Type					3			-			3	
Unit Ext.					3.0					1	3.0	
I Factor]	1.00	0				İ	1.00	0
Lost Time				1	2.0		1			İ	2.0	
Ext of g]	2.0		ĺ			İ	2.0	
Ped Min g		3.9		1			İ			İ	4.2	

Analyst: James C.

Inter.: 30th St and 1st Ave

Agency: STV Incorporated

Area Type: CBD or Similar

Date: 11/6/2008

Jurisd:

Period: 7:45 - 8:45 AM

Year : 2008 Existing

Project ID: Former Bellevue Psych Building Redevelopment

E/W St: 30th Street

N/S St: First Avenue

		SI	GNALIZED								
	Eas	tbound	Westb		•	hbound			hbou		ļ
	L	T R	L T	R	l L	r I	R I	1	T	Ř	
o. Lanes	3 2	1 0	0	0 0	0	4 (0	0	0	0	
GConfig	L	T	İ			TR	ļ				Į
olume -	369	221	İ		1	498 1	20				ļ
Lane Widt	h 11.0	12.0	1		1	0.0					ļ.
RTOR Vol	İ		1		1	0	l				i
Duration	0.25	Area	Type: CE	D or Sim	ilar					•	
hase Com	mbination	1 2	Signa	4	TOIIS	5	6	7		3	
B Left		. — — Р		NB	Left						
Thru		P		i	Thru	P					
Right		_		İ	Right	P					
Peds		х		İ	Peds	X					
VB. Left		-		SB.	Left						
Thru				i	Thru	+ +		•			
Right				į	Right				•		
Peds		X			Peds	X					
NB Right				EB							
B Right			•	i wb	Right						
Green	C	29.0		•		45.0					
Yellow		3.0	,			3.0					
All Red		2.0				8.0					
AII KCG		2.0			•	Cycl	e Leng	th:	90.0		secs
				erforman					 -		
-1- I ,	Lane Group	Adj Sat Flow Rate	Rat:	ios	Lane G	roup	Appr	oach			
	Capacity	(s)	v/c	g/C	Delay	LOS	Delay	LOS			
Eastboun	đ	• • • • • • • • • • • • • • • • • • • •						-			-
L	731	2269	0.58	0.32	28.8	С					
T	447	1388	0.57	0.32	30.5	C	29.4	С			
Westboun	đ		Post Special								• *
Northbou	nd										
TR	2480	4959	0.73	0.50	19.7	В	19.7	В			
rk Southbou		モノコノ	0.,5	0.00		_					
	7										

Intersection Delay = 22.4 (sec/veh) Intersection LOS = C

Fax:

OPERATIONAL ANALYSIS

Analyst:

James C.

Agency/Co.:

STV Incorporated

Date Performed:

11/6/2008

Analysis Time Period:

7:45 - 8:45 AM

Intersection:

30th St and 1st Ave

Area Type:

CBD or Similar

Jurisdiction:

Analysis Year:

2008 Existing

Project ID: Former Bellevue Psych Building Redevelopment E/W St: 30th Street

N/S St: First Avenue

____VOLUME DATA___

	Eas	stbour	nd	We:	stbou	nd	No	orthbo	und	Sou	thbo	und
	L	${f T}$	R	L	T	R	L .	${f T}$	R	L	${f T}$	R
Volume	369	221		 -		كتر	1	1498	120			
% Heavy Veh	9	9	-	j			ĺ	11	11	i		
PHF	!	0.87					i		0.89	·		
PK 15 Vol	106	64		İ			i	421	34			
Hi Ln Vol	İ			İ			i			į		
% Grade	i	0					i	0		1		
Ideal Sat	1900	1900					1	1900				
ParkExist	x		X	İ		•	x		х	i		
NumPark	ÌЗ		3	İ			3		3			
No. Lanes	2	1	0	i o	0	0	!	0 4	0	0	0	0
LGConfig	jь	T		İ			ì	TR	_	Ì	•	J
Lane Width	111.0	12.0		İ			i	10.0		İ		
RTOR Vol ·	i			i			i		0	i		
Adj Flow	424	254		i			į	1818	•	Ì		
%InSharedLn	i			i			ĺ			i		
Prop LTs	İ	0.00	0.0	j.			i	0.0	00	·	•	
Prop RTs	i o	.000		i .			1	0.074		`		
Peds Bikes	!			j 1	50		1	100		i		
Buses	io.	0		ĺ				0 - :		1.42		
%InProtPhase	1			İ			1	=				
	0.25		71 00 1	Dimo	מפט	or Gim	41.20			•		

Duration

0.25

Area Type: CBD or Similar

_OPERATING PARAMETERS__

	Eastbound			We	stbou	nd	No	rthbo	und	So	uthbo	und
	L	T	R	L	Т	R	L	T	R	Ŀ	${f T}$	R į
Trib Ilmmat	 0.0	0.0		ļ — —			-			-		
	!	0.0		ļ			ļ	0.0		Į		
Arriv. Type	3	3		ł		`	1	3				l
Unit Ext.	3.0	3.0						3.0		ĺ		į
I Factor	ĺ	1.00	0				İ	1.00	0	Ì		i
Lost Time	2.0	2.0		Ì			İ	2.0		1		
Ext of g	2.0	2.0		Ì			İ	2.0				i
Ped Min g				İ	4.2		j	3.9		İ		j

Analyst: James C.

Inter.: 30th St and 2nd Ave Area Type: CBD or Similar

Agency: STV Incorporated

Jurisd:

Date: 11/7/2008

Year : 2008 Existing

Period: 7:45 - 8:45 AM Project ID: Former Bellevue Psych Building Redevelopment

E/W St: 30th Street

N/S St: Second Avenue

E/W St: 30t			STG	NALTZ	ED I	NTERSE	CTION S	SUMMAR	Y				
	l Pac	tbou			tbou			hboun		Sou	ıthbou	nd	
	L	T	R	L	T	R	L		R	L	Т	R	į
	-	-					.i			İ			_
No. Lanes	0	1	1	0	0	0	0	0	0	0	5	0	.]
LGConfig	i	${f T}$	R				1			1	LT		ļ
Volume	i	233	87 İ				į ·			356	2084		1
Lane Width	•	13.0					İ		•		10.0		
RTOR Vol	i		0				İ						
RIOR VOI	' <u>:</u>						<u>'</u>			<u> </u>			
Duration	0.25		Area T	'ype:	CBD	or Sim	ilar						
Phase Cómbi	natio	2 1	. 2	3		operac 1	.10115	5	6	7	8	3	
EB Left	.iiac10i	.1 .1.		•		NB	Left	_	•				
Thru		Р				1.2	Thru						
1		P			•		Right						
Right		X				,	Peds	х					
Peds		Λ				SB	Left	P					
WB Left	•				•		Thru	P					
Thru						1	Right	==					
Right						ļ	Peds	x					•
Peds		X		•		1770	Right	Λ					
NB Right	•					EB WB	Right						
SB Right		54.0				l MB	Right	49.0					
Green		31.0						3.0					
Yellow		3.0											
All Red		2.0						2.0	0 T.c	nath.	90.0	,	secs
		т	`n t ordo	ation	Dor	forman	ce Summ	_	е пе	ing cir.	30.0	•	3605
Appr/ Lar			lj Sat		atio		Lane		Ar	proac	h		
	oup		w Rate			_							
	pacity		(s)	v/c		g/C	Delay	LOS	Del	ay LO	S		
Eastbound						-							
41	94	1 /	135	0.5	7	0.34.	28.7	C .	27	. 6 . C			
		93		0.3		0.34		C	27,				
	22 -) 4 ·	0.5		0.54	24.5	C					
Westbound												•	
Northbound													
MOT CUDOMIG	•												

Southbound

В 18.9 B 0.81 0.54 18.9 5977 3254 LT

Intersection Delay = 20.0+ (sec/veh) Intersection LOS = C

Fax:

OPERATIONAL ANALYSIS

Analyst:

James C.

Agency/Co.:

STV Incorporated

Date Performed:

11/7/2008

Analysis Time Period:

7:45 - 8:45 AM

Intersection: .

30th St and 2nd Ave

Area Type:

CBD or Similar

Jurisdiction:

Analysis Year:

2008 Existing

Project ID: Former Bellevue Psych Building Redevelopment

E/W St: 30th Street

N/S St: Second Avenue

____VOLUME DATA_

•	Ea	stbou	nd	We	stbou	nd	No:	rthbo	und	So	uthbou	ınd
	L	T	R	L	T	R	L	${f T}$	R	L	T	R
Volume		233	87			 .	ļ			356	2084	
% Heavy Veh		َ وَ	9				İ			15	15	
PHF	Ì	0.83	0.83	İ						0.93	0.93	. **
PK 15 Vol	ĺ	70	26	İ			İ			96	560	
Hi Ln Vol	İ			Ì			j .					
% Grade	j	0		İ			İ				0	
Ideal Sat	ĺ	1900	1900	ĺ			İ			İ	1900	
ParkExist	x		X	ĺ			İ			х		
NumPark	3		3 🔻	ĺ			İ			3		
No. Lanes	j 0	1	1	0	0	0	j o	0	0	0	5.	0
LGConfig	ĺ	${f T}$	R	Ì			İ			Ì	LТ	
Lane Width	ĺ	13.0	8.0	İ			İ			Ì	10.0	
RTOR Vol	Ì		0	į						İ		
Adj Flow	İ	281	105	ĺ	•		İ			İ	2624	
%InSharedLn	ĺ			ĺ			İ			İ		
Prop LTs	İ	0.0	00	Ì			İ			İ	0.14	16
Prop RTs	į o	.000	1.000	j .			İ		- *	Ó	000.	
Peds Bikes	1	.00	0			,	1:	25	1 34 16	į.		-
Buses	ĺ	0	0	İ			į	यो एक्ट्र	24.2	i	15	
%InProtPhase	e			1			İ	ert 😽 t	K-1	ĺ		
Duration	0.25	,	Area	Type:	CBD	or Sim	ilar			•		

Area Type: CBD or Similar

OPERATING PARAMETERS__

į	Eas	tbou:	nd	. We:	stbou	nd	No	rthbo	und	So	uthbo	und
	Ľ	T	R	L	${f T}$	R	L	T	R	L	${f T}$	R
Init Unmet		0.0	0.0	·			-			-		
Arriv. Type		3	3				-			1	0.0	
Unit Ext.		3.0	_	1			1			1	3.0	
I Factor		1.00	0	İ				• •		İ	1.00	0
Lost Time		2.0	2.0	[İ			İ	2.0	j
Ext of g		2.0	2.0	ļ						ĺ	2.0	j
Ped Min g		3.9		}			-	4.0				

Analyst: James C.

Inter.: 34th St and 1st Ave Area Type: All other areas

Agency: STV Incorporated

Jurisd:

Date: 11/6/2008

Year : 2008 Existing

Period: 7:45 - 8:45 AM Project ID: Former Bellevue Psych Building Redevelopment

E/W St: 34th Street

N/S St: First Avenue

Column		S	TGNALIZED	INTERSE	CTION SUM	MARY			
O. Lanes D 2 0 O 3 0 O 4 0 O 0 0 0 GConfig S 586 LT TR L TR LTR Olume 95 586 4444 142 118 1157 211 ITT O 0 O 0 O 0 Uration 0.25 Area Type: All other areas Signal Operations Thase Combination 1 2 3 4	1						South	bound	_
Second S					1		r a	R	İ
Solume and Width 10.0 10.0 10.0 10.5 10.0 10.5 10	No. Lanes	_			1	•	0	0 Ó	_
Anew Width 10.0 10.0 0 0 0 0 0 0 0 0 0	- :								į
TOR Vol			1		•		i		į
Area Type: All Other areas	RTOR Vol	10.0					į		İ
Second	Duration	0.25 Area				,			1,1
NB	Dhaga Cambin	ation 1				6	7	8 .	
Thru P P P Right P Peds X Peds			3				•	•	
Right Peds X B Left Thru Right Peds X B Left Thru Right Peds X B Left Thru Right Peds X B Left Thru Right Peds X B Left Thru Right Peds X B Left Thru Right Peds X B Left Thru Right Peds X B Left Thru Right Peds X B Right Peds X B Right				1,2					
Peds X B Left Thru P Right Peds X B Right B Ri				i					
SB Left	-	Х			_				
Thru Right P Right Peds X Peds				SB	Left				
Right Peds X EB Right Peds X BR Right WB Right Green 7.0 23.0 39.0 Fellow 3.0 3.0 3.0 All Red 2.0 8.0 Cycle Length: 90.0 secs Intersection Performance Summary Appr/ Lane Adj Sat Ratios Lane Group Approach Green Group Flow Rate Capacity (s) V/c g/C Delay LOS Delay LOS Eastbound AT 899 3033 0.91 0.39 41.1 D 41.1 D Westbound FR 1059 4142 0.64 0.26 32.7 C 32.7 C	· -	P	•		Thru				
Peds X IB Right BRight BRight BRight BRight BRight BRight BRight BRight BRight BRight BRight BRight BRight BRight BRight BRight BRight BRIght					Right				
EB Right WB Right WB Right WB Right WB Right Seen 7.0 23.0 39.0 39.0 3.0 3.0 3.0 2.0 Cycle Length: 90.0 Secs Intersection Performance Summary Approach Lane Group Approach Lane Group Approach Lane Group Approach Lane Group Approach Lane Group Lane G	_	X		İ	Peds X				
WB Right 39.0 39.				EB	Right				
Streen				WB	Right				
2.0 8.0 2.0 Cycle Length: 90.0 secs	Green	7.0 23.	0						
Intersection Performance Summary Appr/ Lane Adj Sat Ratios Lane Group Approach Lane Group Flow Rate Grp Capacity (s) v/c g/C Delay LOS Delay LOS Eastbound LT 899 3033 0.91 0.39 41.1 D 41.1 D Westbound RR 1059 4142 0.64 0.26 32.7 C 32.7 C Northbound	Yellow	3.0 3.0)						
Intersection Performance Summary Approach Approac	All Red	2.0 8.0)						
Appr/ Lane Adj Sat Ratios Lane Group Approach Lane Group Flow Rate Trp Capacity (s) V/C g/C Delay LOS Delay LOS Eastbound LT 899 3033 0.91 0.39 41.1 D 41.1 D Westbound TR 1059 4142 0.64 0.26 32.7 C 32.7 C						-	ngth: 9	0.0	secs
Eane Group Flow Rate V/C g/C Delay LOS Delay LOS Eastbound TT 899 3033 0.91 0.39 41.1 D 41.1 D Westbound TR 1059 4142 0.64 0.26 32.7 C 32.7 C	Appr/ Lane					up Ap	proach		
Exp Capacity (s) v/c g/C Delay LOS Delay LOS Eastbound Exp Service Capacity (s) v/c g/C Delay LOS Delay LOS Eastbound Exp Service Capacity (s) v/c g/C Delay LOS Delay LOS Eastbound Exp Service Capacity (s) v/c g/C Delay LOS Exp Service Capacity (s) v/c g/C Delay LOS Exp Service Capacity (s) v/c g/C Delay LOS Exp Service Capacity (s) v/c g/C Delay LOS Exp Service Capacity (s) v/c g/C Delay LOS Exp Service Capacity (s) v/c g/C Delay LOS Exp Service Capacity (s) v/c g/C Delay LOS Exp Service Capacity (s) v/c g/C Delay LOS Exp Service Capacity (s) v/c g/C Delay LOS Exp Service Capacity (s) v/c g/C Delay LOS Exp Service Capacity (s) v/c g/C Delay LOS Exp Service Capacity (s) v/c g/C Delay LOS Exp Service Capacity (s) v/c g/C Delay LOS Exp Service Capacity (s) v/c g/C Delay LOS Exp Service Capacity (s) v/c g/C		_ =						_	
TT 899 3033 0.91 0.39 41.1 D 41.1 D Westbound TR 1059 4142 0.64 0.26 32.7 C 32.7 C Northbound		-		g/C	Delay LO	S Del	ay LOS		
Westbound TR 1059 4142 0.64 0.26 32.7 C 32.7 C Northbound	Eastbound						· · · · · ·	<u></u>	
Westbound OR 1059 4142 0.64 0.26 32.7 C 32.7 C Northbound	LT 899		0.91	-0.39	41.1 I	41.	1 D		
Northbound	Westbound								
of the only and the control of the c	TR 105	59 4142	0.64	0.26	32.7	32.	7 · C		
LTR 2348 5418 0.69 0.43 22.3 C 22.3 C									
	Northbound								
Southbound	Northbound	18 5418	0.69	0.43	22.3	22.	3 C		
		48 5 4 18	0.69	0.43	22.3	22.	3 C		

Intersection Delay = 29.5 (sec/veh) Intersection LOS = C

Phone:

Fax:

E-Mail:

OPERATIONAL ANALYSIS

Analyst:

James C.

Agency/Co.:

STV Incorporated

Date Performed:

11/6/2008

Analysis Time Period:

7:45 - 8:45 AM

Intersection:

34th St and 1st Ave

Area Type:

All other areas

Jurisdiction:

Analysis Year:

2008 Existing

Project ID: Former Bellevue Psych Building Redevelopment E/W St: 34th Street

N/S St: First Avenue

____VOLUME DATA__

	Eastbo	und	We	stbou	nd	No:	rthbo	und	Sou	thbo	ınd
	L T	R	L	T ·	R	L	T	R	L	${f T}$	R
Volume	95 586			444	142	118	1157	211			
% Heavy Veh	10 10		İ	6	6	13	13	13	i		
PHF	0.83 0.8	:3	İ	0.87	0.87	0.92	0.92	0.92	İ		
PK 15 Vol Hi Ln Vol	29 177 	, .		128	41	32	314	57			
% Grade	i o			0		i	0		i		
Ideal Sat	190	0	İ	1900		Ì	1900		i		
ParkExist	j		İ			x		Х	i		
NumPark	j		j			3		3	j		
No. Lanes	j 0 2	0	į o	-3	0	į o	4	0	i o	0	0
LGConfig	į I	T	İ	TR		İ	LT:	R	İ		
Lane Width	10.	0	İ	10.0		Ì	10.5		İ		
RTOR Vol	İ		ĺ		0	İ		0	İ		
Adj Flow	820	1	İ	673		İ	1615		İ.		
%InSharedLn						j .			İ		
Prop LTs	0.	139	İ	0.0	00	İ	0.0	79	İ		
Prop RTs	j . 0, 000) (C + -	.0	.242		j 0	.142		i		
Peds Bikes			2	00	0	1	0.0%	0 .	0		
Buses	į o		1	0			0		İ		
%InProtPhas	e 50.0		İ			İ			İ		
Duration	0.25	Area	Type:	All	other	areas			•		

_OPERATING PARAMETERS_____

	Ea	.stbou	nđ	We	stbou	nd	No	rthbo	ound	So	uthbo	und	
	L	T	R	L	T	R	L	T	R	L	T	R	į
_				.			-	.		. 			_
Init Unmet		0.0			0.0			0.0		ł			
Arriv. Type		3			3			3		İ			İ
Unit Ext.		3.0			3.0		ĺ	3.0		İ			İ
I Factor		1.00	0	ĺ	1.00	0	Ì	1.00	0	ĺ			İ
Lost Time		2.0		ĺ	2.0		İ	2.0		j	•		i
Ext of g		2.0			2.0			2.0		İ			i
Ped Min g					4.6		İ	3.9		İ	3.2		İ

HCS+: Signalized Intersections Release 5.3

Inter.: 34th St and 2nd Ave Area Type: All other areas

Agency: STV Incorporated Date: 11/7/2008 Period: 7:45 - 8:45 AM

Jurisd:

Year : 2008 Existing

Project ID: Former Bellevue Psych Building Redevelopment

E/W St: 34th Street

N/S St: Second Avenue

			SIC	GNALI	ZED]	NTER	SEC	CTION S	IAMMU	₹Y				
	Eas	tbour	nd	We	stbou	ınd		Nort	hbour	nd	So	uthbo	und	
	L	T	R	L	T	R		L	T	R	l L	${f T}$	R	
o. Lanes		2	0	0	2	0		0	0	<u>`0</u>	1	5	0	-
GConfig	ì	TR		l Def	L T			İ			L	$_{ m LT}$	R	ŀ
olume	ì	627	113	191	265			İ			240	2295	84	1
ane Width	j	10.0		9.5	10.0)		· ·			8.0	10.0		ĺ
TOR Vol			0					İ			İ		0	ĺ
uration	0.25		Area '	Type:	A11	othe	er a	areas						
			·	-	_		rati	ions					<u> </u>	
hase Combi	.natio	n 1	2	3	•	4 1	1B	Left	5	6	7		8	
B Left		ъ				1	עני	Thru						
Thru		P				}		Right						
Right		P				1		Peds	Х					
Peds		X	_			,	30		P					
B Left		P	. P	-	,	3	5B	Left Thru	P					
Thru		P	Ρ.			1				•				
Right						ļ		Right	P X					
Peds		X						Peds	A					
B Right						!	EB	Right						
B Right							ΝB	Right	40.0					
reen		25.0							42.0					
Cellow		3.0	3.0					÷	3.0					
All Red		2.0	2.0						2.0	la re	nath.	90.0	1	secs
-		I	nterse	ction	n Per	form	anc	e Summa	-	10 110	gom			
ppr/ La	ne		j Sat		Ratio	S		Lane (Group	Ap	proac	ch		
Lane Gro	oup	Flo	w Rate					-						
Frp Ca	pacity	•	(ន)	v/c	3	g/C		Delay	LOS	Del	.ay L(os		
Eastbound														
rr 8	01	27	74 -	1.0	00	0.29		64.8	E	64.	. 8 I	Ξ	gas.	
•									<u>.</u>	minus projection	•			
Vestbound	85	1 /	.21	0.6	59	0.42		46.0	D					
	87		27	_		0.42		17.4		29.	.4	С		
r 6	0 /	1.0		0.,	. •	J. 40	-	_	_		`	-		
orthbound			•											
Torthbound														
Southbound	81	12	244	0.	4 7	0.47								
			244 599		47 86	0.47 0.47		16.1 21.0		20	.5	c		

Fax:

OPERATIONAL ANALYSIS_____

Analyst:

James C.

Agency/Co.:

STV Incorporated

Date Performed:

11/7/2008

Analysis Time Period:

7:45 - 8:45 AM

Intersection:

34th St and 2nd Ave

Area Type:

All other areas

Jurisdiction:

Analysis Year:

2008 Existing

Project ID: Former Bellevue Psych Building Redevelopment

E/W St: 34th Street

N/S St: Second Avenue

__VOLUME DATA_

,	Ea	stbou	nd	Wes	stbour	nd	No.	rthb	ound	So	uthboi	ınd
	L	T	R	L	Т	R	Ŀ	T	R	L	${f T}$	R
Volume % Heavy Veh PHF PK 15 Vol Hi Ln Vol		627 14 0.92 170	113 14 0.92 31	191 9 0.97 49	265 9 0.97 68	•				240 19 0.88 68	2295 19 0.88 652	84 19 0.88 24
% Grade Ideal Sat ParkExist NumPark	,	0 1900		1900	0 1900				·	1900	0 1900	
No. Lanes LGConfig Lane Width RTOR Vol	0	2 TR 10.0	0	Def]	2 L T 10.0	0	α	0	0	L 8.0	5 LTI 10.0	0 R 0
Adj Flow %InSharedLn		805		197	273					273 0	2703	
Prop LTs Prop RTs Peds Bikes Buses			00 13 0.	!	0.00 .000	00 * 	 5	0		•	0.0 .035 00 (00 0
%InProtPhase	0.25	_	Area '	0.0		other a	 areas	ł.			;	

_OPERATING PARAMETERS_____

	Ea	stbou	nd	We	stbou	nd	No	rthbo	und	So	uthbo	und
	L	T	R	L	T	R	Ĺ	T	R	L	T	R.
Init Unmet		0.0	<u> </u>	0.0	0.0	· .	_			-		
				1	4.0					0.0	0.0	ļ
Arriv. Type		4		4	4		ļ			4	4	
Unit Ext.		3.0		3.0	3.0					3.0	3.0	
I Factor		1.00	0	1	1.00	0					1.00	o j
Lost Time		2.0		2.0	2.0					2.0	. 2.0	į
Ext of g		3.0		2.0	2.0		1			2.0	2.0	į
Ped Min g		4.9		1			I	3.5		İ	4.6	· [

HCS+: Signalized Intersections Release 5.3

Inter.: 34th St and FDR Dr SR

Area Type: All other areas

Date: 11/7/2008

Jurisd:

Period: 7:45 - 8:45 AM

Agency: STV Incorporated

Year : 2008 Existing

Project ID: Former Bellevue Psych Building Redevelopment

E/W St: 34th Street

N/S St: FDR Drive Service Road

	Eas	tbour	nd	1	Wes	stbour	nd	No	rthbou	ınd	5	outhbo	und
	L	T	R	L		T	R	L	${f T}$	R	L	T	R
No. Lanes	1— <u> </u>		1	-	0	1	1	1	1	0	-	0 2	0
LGConfig	DefL	T	R	İ		LT	R	L	TR		İ	LI	'R
Volume	!	5	584	3		11	12	373	255	11	3	1121	150
Lane Width	10.0	10.0	9.0	İ		16.0	16.0	10.0	10.5		j.	9.5	
RTOR Vol			0	İ			0	į		0	İ	•	0.

Dur	ation 0.25		Area	Type:	All	. oi	her	areas		~ pr				
				Si	gnal	. 01	perat	ions						_
Pha	se Combination	n 1	2	3		4			5	6	7	8		
EB	Left	P					NB	Left	P	P				•
	Thru	P			•		Ì	Thru	P	P				
	Right	P					ĺ	Right	P	P				
	Peds						ĺ	Peds		X				
WB	Left	P					SB	Left		P .		_		
	Thru	P	1 + 1 × 1				j .	Thru		P		e e e de la companya de la companya de la companya de la companya de la companya de la companya de la companya	•	•
	Right	P					ĺ	Right	•	P				
	Peds	Х					j	Peds		X				
NB	Right						EB	Right	P					
SB	Right						WB	Right						
Gre	-	22.	0				•		13.0	40.0				
	.low	3.0							3.0	3.0				
	Red	2.0							2.0	2.0				
									Cvcl	e Tenati	90.	Ω	secs	

3-mm/	Tano	Intersec	tion Pe Rati				Appr	oach			
Appr/ Lane Grp	Lane Group Capacity	Flow Rate (s)	v/c	g/C		<u> </u>	Delay		_		
Eastbo	und	 				.					
DefL	276	1129	0.90	0.24	66.3	E					
T	398	-1627	0.01	0.24	25.8	, C	66.1	\mathbf{E}	-		
R	592	1333		0.44	66.3	E	-			-	
Westbo											
LT	507	2076	0.06	0.24	26.3	С	26.3	С			
R	420	1718	0.06	0.24	26.4	С					
Northb											
L	426	1541	0.98	0.64	56.4	E					•
TR	1060	. 1645	0.28	0.64	7.6	A	36.1	D	•		
Southb	oound						•				
LTR	1336	3007	1.00	0.44	50.5	D	50.5	D			
	Interse	ction Delay	= 51.0	(sec/v	zeh) :	Interse	ection	LOS :	= D	,	

Fax:

OPERATIONAL ANALYSIS_

Analyst:

James C.

Agency/Co.:

STV Incorporated

Date Performed:

11/7/2008

Analysis Time Period:

7:45 - 8:45 AM

Intersection:

34th St and FDR Dr SR

Area Type:

All other areas

Jurisdiction:

Analysis Year: 2008 Existing

Project ID: Former Bellevue Psych Building Redevelopment

E/W St: 34th Street

N/S St: FDR Drive Service Road

__VOLUME DATA

F=	ethou	a d	TATOS	~+bo	- A	l Mor	c+hhai		l co.		
:						!			!		
ļ	Τ'	R	L	T	R	ļ L	T	R	L	T	R
<u> </u>									<u> </u>		
241	5	584	3	11	12	373	255	11	3 300	1121	150
9	9	ຸ9	0	0	0	9	9	9	3	3	3 .
0.97	0.97	0.97	0.45	0.45	0.45	0.89	0.89	0.89	0.95	0.95	0.95
62	2	151	2	6	7	1105	72	3	1		39
i							-	•	-		33
	Λ	•		ń			n		1	Ω	
11900	1900	1.0.00		1000	1000	1000			1	,	
1 200	1900	1900		1900	1900	17900	1900			T-900	
									ļ		
	_		_			ļ			ļ		
! -	_	_	0	-	_	1	1	0	. 0	2	0
Def:	L T	R		LT	R	L	TR			LT:	R
10.0	10.0	9.0		16.0	16.0	10.0	10.5		Ì	9.5	
		0			0	İ		0	İ		0
248	5	602		31	27	419	299		i	1341	
İ											
1.00	0 0.0	0.0		0.2	2.6	1 000	n n n	00		0 0	n 2
!			0								02
•						• •			!	-	^
		Λ	•		-			U .	j. 51	•	
•	0 .	U -2	≥ ÷	U	U	! -	U			U ,	5
						,		0.0			
	L 241 9 0.97 62 1900 10.0 248 1.00 0 0	L T 241 5 9 9 0.97 0.97 62 2 0 1900 1900 0 2 DefL T 10.0 10.0 248 5 1.000 0.00 0 0 0 0	241 5 584 9 9 9 0.97 0.97 0.97 62 2 151 0 1900 1900 1900 0 2 1 DefL T R 10.0 10.0 9.0 0 248 5 602 1.000 0.000 0.000 1.000 0	L T R L 241 5 584 3 9 9 9 0 0.97 0.97 0.97 0.45 62 2 151 2 0 1900 1900 1900 0 2 1 0 DefL T R 10.0 10.0 9.0 0 248 5 602 1.000 0.000 0 0.000 1.000 0 0 50	L T R L T 241 5 584 3 11 9 9 9 0 0 0.97 0.97 0.97 0.45 0.45 62 2 151 2 6 0 0 0 1900 1900 1900 1900 0 2 1 0 1 DefL T R LT 10.0 10.0 9.0 16.0 0 248 5 602 31 1.000 0.000 0.20 0.000 1.000 0.000 0 0 0 0 0 0	L T R L T R 241 5 584 3 11 12 9 9 9 0 0 0 0 0.97 0.97 0.97 0.45 0.45 0.45 62 2 151 2 6 7 0 0 0 1900 1900 1900 1900 1900 0 2 1 0 1 1 DefL T R LT R 10.0 10.0 9.0 16.0 16.0 0 248 5 602 31 27 1.000 0.000 0.226 0.000 1.000 0.000 1.000 0 0 0 0 0	L T R L T R L 241 5 584 3 11 12 373 9 9 9 0 0 0 9 0.97 0.97 0.97 0.45 0.45 0.45 0.89 62 2 151 2 6 7 105 0 1900 1900 1900 1900 1900 1900 1 DefL T R L 10.0 10.0 9.0 16.0 16.0 10.0 0 248 5 602 31 27 419 1.000 0.000 0.226 1.000 0 0.000 1.000 0.000 1.000 0 0 0 0.000 1.000 0.000 0 0 0 0 0 0 0.000	L T R L T R L T 241 5 584 3 11 12 373 255 9 9 9 0 0 0 0 9 9 0.97 0.97 0.97 0.45 0.45 0.45 0.89 0.89 62 2 151 2 6 7 105 72 0 0 0 1900 1900 1900 1900 1900 1900 19	L T R L T R L T R L T R 241 5 584 3 11 12 373 255 11 9 9 9 0 0 0 0 9 9 9 9 9 0 0.97 0.97 0.9	L T R L T R	L T R L T R L T R L T 241 5 584 3 11 12 373 255 11 3 1121 9 9 9 9 9 9 9 3 3 0.97 0.97 0.95 0.45 0.45 0.45 0.89 0.89 0.89 0.95 0.95 62 2 151 2 6 7 105 72 3 1 295 0 0 0 0 0 0 0 0 0 1900

Duration 0.25 Area Type: All other areas

__OPERATING PARAMETERS_

	Ea	stbou	nd	We	stbou	nd	No	rthbou	ınd	So	uthbo	und
	L	T	R	L	${f T}$	R	L	T	R	L	T	R
Turk Hanne		0 0					-			. 		[
	0.0	0.0,	0.0		0.0	0.0	0.0	0.0			0.0	
Arriv. Type	3	3	3	ĺ	3	3	3	3			3	İ
Unit Ext.	3.0	3.0	3.0		3.0	3.0	3.0	3.0		Ì ,	3.0	į
I Factor		1.00	0		1.00	0	ĺ	1.000)	Ì	1.00	o [
Lost Time	2.0	2.0	2.0		2.0	2.0	2.0	2.0		İ	2.0	İ
Ext of g	2.0	2.0	2.0	Ì	2.0	2.0	2.0	2.0		j	2.0	
Ped Min g		3.2			3.5		İ	3.4		İ	3.5	İ

Inter.: 23rd St and FDR Dr N SR

Agency: STV Incorporated

Area Type: CBD or Similar

Date: 11/7/2008

Jurisd:

Period: 5:00 - 6:00 PM

Year : 2008 Existing

Project ID: Former Bellevue Psych Building Redevelopment

E/W St: 23rd Street

N/S St: FDR Drive N SR

			SI	GNALI	ZED I	NTERS	ECTION	SUMM	ARY			
	Ea:	stbou	nd	We:	stbou	nd	Non	thbo	und	Sou	thbou	ınd
	L	${f T}$	R	L	T	R	L	Т	R	L	T	R
No. Lanes	— <u> </u>		1	1	1	0		1	0	0	0	0
LGConfig	L	LT	R R	ļь	TR		L	TR				
Volume	295	20	337	4	9	4	279	400	18			
Lane Width	10.5	10.5	11.0	16.0	16.0		11.0	11.0				
RTOR Vol	İ		0	Ì		0			. 0		•	

Dur	ation 0.	25	Area T		CBD or							
Pha	se Combinat	ion 1	2	3 3	4	CLUC	TO110	5	6	7	8	
EB	Left		P			NB	Left		P	P		
	Thru		P				Thru	P	P	P		
	Right		P				Right	P	P	P		
	Peds	х	_				Peds		X			
WB	Left	P	. P			SB	Left					
***	Thru	· P	P ····		. ;		Thru	-6.3			,	
	Right	P	P				Right					
	Peds	Х	X	•			Peds	X				
NB	Right					EB	Right		•			
SB	Right					WB	Right					
Gre	_	6.0	28.0					18.0	8.0	10.0		
	Llow	3.0				•		3.0	0.0	3.0		
	L Red	2.0						2.0	0.0	2.0		
	· •							Cvcl	e Len	ath: 90	. 0	secs

		Intersec	tion Pe	erforman	ce Summa	ary				
Appr/	Lane	Adj Sat	Rat	ios	Lane (Group	Appro	oach		
Lane	Group	Flow Rate				T 0 0	D - 3	T 00	•	
Grp	Capacity	(s)	v/c	g/C	Delay	LOS	Delay	LOS		
Eastbo	und					١				
L	284	914	0.77	0.31	46.6	D				
LTR .	336	1079	0.66	0.31	36.8	D	39.4	D		•
R	-381	1224	0.66	0.31	35.5	D	•			1.11 Q.
Westbo	und			1,				•		
L	446	1841	0.01	0.43	15.0	В				
TR	780	1799	0.02	0.43	14.6	В	14.7	В		
Northb	ound									
L	365	1428	0.88	0.26	49.5	D				
TR	675	1482	0.71	0.46	26.1	C	35.4	D		

Southbound

Intersection Delay = 37.0 (sec/veh) Intersection LOS = D

Fax:

OPERATIONAL ANALYSIS_

Analyst:

James C.

Agency/Co.:

STV Incorporated

Date Performed:

11/7/2008

Analysis Time Period:

5:00 - 6:00 PM

Intersection:

23rd St and FDR Dr N SR

Area Type:

CBD or Similar

Jurisdiction:

Analysis Year:

2008 Existing

Project ID: Former Bellevue Psych Building Redevelopment

E/W St: 23rd Street

N/S St: FDR Drive N SR

VOLUME DATA

	Eas	stbou	nd	Wes	stbour	nd	No	rthbo	und	Sou	thbo	ınd
	L	T	R	L	T	R	L	T	R	L	T	R
Volume	295	20	337	 4	9	4-	279	400				
% Heavy Veh	ı	12	12	Ō	Ó	0 .	10	10	10	l j		
PHF	0.94		0.94	0.87	0.87	0.87	0.87	0.87		i		
PK 15 Vol	78	5	90	1	3	1	80	115	5	İ		
Hi Ln Vol	Ì			j			İ			i		
% Grade	Ì	0		ĺ	0		j .	0		İ		
Ideal Sat	1900	1900	1900	1900	1900		1900	1900	·	j		
ParkExist										ĺ		
NumPark				ļ								•
No. Lanes	1	1	1	1	1	0	1	1	0	0	0	0
LGConfig] L	LTI		L	TR		L	TR		ļ		
Lane Width	10.5	10.5		16.0	16.0		11.0	11.0		[
RTOR Vol			0	<u> </u>		0			0 - ,	<u> </u>		
Adj Flow	220	223	251	5	15		321	481				
%InSharedLn	!		30				ļ					
Prop LTs	}	0.43		!	0.0	00	ļ ·	0.0				
Prop RTs	ļ	.483		!	.333	_	!	.044		ļ		
Peds Bikes	!	00	1			0	5		.0	7 0		
	0	0 .	6	0	0		0	0 -		1 : 1	*:d="	
%InProtPhase			_	0.0			!_		0.0			
Duration	0.25		Area '	Type:	CBD (or Sim	ilar					

OPERATING PARAMETERS

•	Ea	stbou	nd	We	stbou	nd	No	rthbou	ınd	So	uthbo	und
	L	T	R	L	${f T}$	R	L	${f T}$	R	L	${f T}$	R
Init Unmet	0.0	0.0	0.0	0.0	0.0		0.0	0.0		1		
Arriv. Type	3 -	3	3	3	3		5	3		j .		
Unit Ext.	3.0	3.0	3.0	3.0	3.0		3.0	3.0		j		
I Factor		1.00	0		1.00	0	İ	1.000)	İ		
Lost Time	2.0	2.0	2.0	2.0	2.0		0.0	2.0		İ		
Ext of g	2.0	2.0	2.0	2.0	2.0		5.0	2.0		İ		
Ped Min g	1	3.9			3.9		ĺ	3.Š		İ	3.2	

Analyst: James C.

Inter.: 23rd St and FDR Dr S/ Ave C

Agency: STV Incorporated

Area Type: CBD or Similar

Date: 11/7/2008

Jurisd:

Period: 5:00 - 6:00 PM

Year : 2008 Existing

Project ID: Former Bellevue Psych Building Redevelopment E/W St: 23rd Street N/S St: FDR Drive

N/S St: FDR Drive S/ Avenue C

	l Bact	s bound	IGNALIZEI Wost	oound		hbound		ຮດນ	thbou	ınd	Ī
	L	T R	!	r R	!		R	L	T	R	į
No. Lanes LGConfig Volume Lane Width RTOR Vol	0	0 0 .	1 L 4 9 16.0 1	1 0 TR 4 6.0	0	0		1 L 57 L0.0	2 TR 251 10.5	0 228	
Duration	0.25	Area	Type: C	BD or Sim al Operat			•				
Phase Combi EB Left Thru Right Peds WB Left Thru Right Peds NB Right	ination	1 2 X P P P	3	4 NB	Left Thru Right Peds Left Thru Right Peds Right	5 X P X	6 Р	7		8	
Green Yellow		28.0 3.0 2.0	section P	WB	Right	_	21.0 3.0 2.0 e Len	gth:	90.0	٤	secs
Green Yellow All Red Appr/ La	ne	3.0 2.0 Inter: Adj Sa		erformano		3.0 10.0 Cycl	3.0 2.0 e Len	gth:		٤	ecs
Green Yellow All Red Appr/ La Lane Gr		3.0 2.0 Inter:	t Rat	erformano	ce Summa	3.0 10.0 Cycl ary Group	3.0 2.0 e Len		ı 	٤	secs
Green Yellow All Red Appr/ La Lane Gr	ne oup	3.0 2.0 Inter: Adj Sa Flow Ra	t Rat te	erformand	ce Summa Lane (3.0 10.0 Cycl ary Group	3.0 2.0 e Len	roacl	ı 	£	secs
Green Yellow All Red Appr/ La Lane Gr Grp Ca Eastbound Westbound L 5	ne oup pacity	3.0 2.0 Inter: Adj Sa Flow Ra (s)	t Rat te	erformancios g/C	ce Summa Lane (Delay	3.0 10.0 Cycl ary Group LOS	3.0 2.0 e Len App Dela	roacl	n S		secs
Green Yellow All Red Appr/ La Lane Gr Grp Ca Eastbound Westbound L 5	ne oup pacity 73	3.0 2.0 Inter Adj Sa Flow Ra (s)	t Rat te	erformandios g/C	ce Summa Lane (Delay	3.0 10.0 Cycl ary Group LOS	3.0 2.0 e Len	roacl	n S	S	secs
Green Yellow All Red Appr/ La Lane Gr Grp Ca Eastbound Westbound L 5 TR 5 Northbound	ne oup pacity 73 73	3.0 2.0 Inter: Adj Sa Flow Ra (s)	t Rat te	erformancios g/C 0.31 0.31	ce Summa Lane (Delay	3.0 10.0 Cycl ary Group LOS	3.0 2.0 e Len App Dela	roacl	n S	S	secs

Fax:

OPERATIONAL ANALYSIS___

Analyst:

James C.

Agency/Co.:

STV Incorporated

Date Performed:

11/7/2008

Analysis Time Period:

5:00 - 6:00 PM

Intersection:

23rd St and FDR Dr S/ Ave C

Area Type:

CBD or Similar

Jurisdiction:

Analysis Year:

2008 Existing

Project ID: Former Bellevue Psych Building Redevelopment

E/W St: 23rd Street

N/S St: FDR Drive S/ Avenue C

_VOLUME DATA

]	Eas	stbou	nd	We:	stbou	nd	Nor	thbou	ınd	So	uthbo	und
·	L	T	R	L	${f T}$	R	L	T	R	Į L	${f T}$	R
Volúme			****	4	9		 .		•	. 67	251	228 -
% Heavy Veh				0	0	0	 .			4	4	4
PHF				0.87	0.87	0.87	٠.			0.89	_	0.89
PK 15 Vol				1	3	1				119	71	64
Hi Ln Vol				i			İ	•			. –	
% Grade				İ	0		İ			i	0	
Ideal Sat	•			1900	1900		İ			1900	1900	
ParkExist							ĺ			İ		
NumPark					•		ĺ			İ		
No. Lanes	0	0	0] 1	1	0	0	0	0	1	2	0
LGConfig				L	TR					L	TR	
Lane Width	ļ			16.0	16.0		ļ			10.0	10.5	
RTOR Vol				ļ		0	ļ			İ		0
Adj Flow				5	15		<u> </u>			75	538	
%InSharedLn	!						<u> </u>			!		
Prop LTs					0.0	00				1	0.0	00
Prop RTs				0						!	.476	
Peds Bikes	10	10	-	:	00		į 50) i diam		5		0 .
Buses				0	0			-1.00 St.42		0	0	
%InProtPhase			3	<u> </u>	222	~ ·			, "	" · <i>'</i>		
Duration	0.25		Area	Type:	CBD	or Sim	ilar	•		•		'

__OPERATING PARAMETERS_

	Ea	Eastbound T R			stbou	ınd	No	rthbo	und	So	uthbou	ınd
	L	T	R	L	${f T}$	R	L	\mathbf{T}	R	L	T	R j
Init Unmet				- 	0.0		-		· ·	-	0 0	
Arriv. Type				3	3.0					0.0	0.0	
Unit Ext.				3.0	3.0		l			3.0	3.0	
I Factor				3.0	1.00	10	l			3.0	1.000	,
Lost Time				2.0	2.0					2.0	2.0	'
Ext of g				2.0	2.0					2.0	2.0	
Ped Min g		3.9			3.9			3.5		12.0	3.5	ļ

Analyst: James C.

Inter.: 23rd St and 1st Ave Area Type: CBD or Similar

Agency: STV Incorporated

Jurisd:

Date: 11/6/2008

Year : 2008 Existing

Period: 5:00 - 6:00 PM Project ID: Former Bellevue Psych Building Redevelopment

E/W St: 23rd Street

N/S St: First Avenue

			SI	GNALI	ZED I	NTERSI	ЕСТІОЙ	SUMM	ARY			
	Ea	stbour	nd	We	stbóu	nd	No:	rthbo	und	Sou	ıthboı	und
	L	T	R	L	T	R	L	Ť	R	L	T	Ř
No. Lanes		2	0	- c	3	0	-	4	0	0	0	0
LGConfig	İ	$\mathbf{L}\mathbf{T}$		İ	TR			$\mathbf{L}\mathbf{T}$	R			
Volume	130	492		ĺ	396	196	230	1200	160	1		
Lane Width		10.5		İ	10.0		İ	10.0		· .		
RTOR Vol	İ			j		0	İ		0	ĺ		

Dur	ation 0.	25	Area	Type:	CBD or	c Sim	ilar				
				Si	gnal Op	perat	ions				
Pha	se Combinat	ion 1	2	3	4			5	6 7	8	
EB	Left	P	P			NB.	Left	P			
	Thru	P	P			ĺ	Thru	P			
	Right						Right	P			
	Peds	Х				Ì	Peds	X			
WB	Left					SB	Left				
•••	Thru	· P			• :	į	Thru		-		
	Right	P				İ	Right				
	Peds	X				ĺ	Peds	X			
NB	Right					EB	Right				
SB	Right					WB	Right		-		
Gre	_	20.0	7.0					36.0			
_	low	3.0	3.0					3.0			
	Red	2.0	8.0					8.0			
								Cycle	Length:	90.0	secs

Appr/	Lane Group	Intersec Adj Sat Flow Rate	Rat		Lane (Appro	ach		
Lane Grp	Capacity	(s)	v/c	g/C	Delay	LOS	Delay	LOS		
Eastbo	und					<u>-</u>			-	
LT ·	757	2465	0.86	0.36	38.8	D	38.8	D		
Westbo	und	£ 25 m					* **		. <u> </u>	
TR	664	2986	1.06	0.22	87.0	F	87.0	F		
Northb	ound									
LTR	1886	4714	0.86	0.40	30.1	С	30.1	С		
- (11	-									

Southbound

Intersection Delay = 45.5 (sec/veh) Intersection LOS = D

Fax:

_OPERATIONAL ANALYSIS_____

Analyst:

James C.

Agency/Co.:

STV Incorporated

Date Performed:

11/6/2008

Analysis Time Period:

5:00 - 6:00 PM

Intersection:

23rd St and 1st Ave

Area Type:

CBD or Similar

Jurisdiction:

Analysis Year:

2008 Existing

Project ID: Former Bellevue Psych Building Redevelopment

E/W St: 23rd Street

N/S St: First Avenue

____VOLUME DATA____

	_											
	Ea:	stbou	nd	₩e	estbou	nd	No:	rthbo	und	Sou	thbou	ınd
•	L	T	R	L	T	. R.	L	${f T}$	R	L	T	R
							.				_	· [
Volume	130				396	196	230	1200	160		• •	
% Heavy Veh	!	14			26	26	14	14	14			[
PHF	0.96	0.96	-		0.84	0.84	0.98	0.98	0.98			ĺ
PK 15 Vol	34	128			118	58	59	306	41	ĺ		İ
Hi Ln Vol							İ			ĺ		į
% Grade	İ	0			0		Ì	0		Í		i
Ideal Sat	İ	1900		Ì	1900		İ	1900		İ		į
ParkExist	Ì		X	i			x		X	i		i
NumPark	j		5				5		5	i		i
No. Lanes	i o	2	0	() 3	0	0	4	0	i o	0	0
LGConfig	İ	$_{ m LT}$		İ	TR		İ	LT	R		-	i
Lane Width	İ	10.5		İ	10.0		İ	10.0		i		i
RTOR Vol	j			ĺ		0	İ		0	i		i
Adj Flow	i	648		İ	704		i	1622	•			i
%InSharedLn	İ			İ			i			i		ł
Prop LTs	İ	0.2	80	! 	0.0	00	١ .	0.1	45			i
Prop RTs	0	.000		i (0.331		1 0	.100			. د	٠ : ا
Peds Bikes	İ			:	200	0 .	:	00	0 :-	i o		i
Buses	İ	0			0	• • •	_	صيفد0	•			i
%InProtPhase	ė 0.0			i	-		1			1		ł
Duration	0.25		Area 1	I'vpe:	CBD	or Sim	ilar			ı		1

__OPERATING PARAMETERS__

	Ea L	astbou T	ınd R	We	stbou T	nd R	No	rthbo T	und R	Sc	uthbo T	und R
	0.0			-	_		-	•	1.		-	10
Init Unmet		0.0		0.0			0.0					
Arriv. Type	3			3			İ	3		į		
Unit Ext.	3 3.0			3.0			j	3.0		İ		
I Factor		1.00	0	ĺ	1.000			1.000				
Lost Time	2.0			ĺ	2.0			2.0				
Ext of g	2.0			2.0			2.0			İ		
Ped Min g	2.0			İ	4.6		İ	4.6		İ	3.2	

HCS+: Signalized Intersections Release 5.3

Inter.: 23rd St and 2nd Ave

Agency: STV Incorporated

Area Type: CBD or Similar

Date: 11/7/2008

Jurisd:

Period: 5:00 - 6:00 PM

Year : 2008 Existing

Project ID: Former Bellevue Psych Building Redevelopment

E/W St: 23rd Street

N/S St: Second Avenue

	SI	GNALIZED INTERSE	CTION SUMMARY	
	Eastbound	Westbound	Northbound	Southbound
	L T R	L T R	LTR	L · T R
	i	·		.
No. Lanes	0 3 0	0 2 0	0 0 0	1 4 0
LGConfig	i tr	DefL T	•	L TR
Volume	415 127	229 397	į ·	207 1836 227
Lane Width	10.0	10.0 10.0	j	10.0 10.0
RTOR Vol	1	1010 2010	<u> </u>	0

Duration	0.25	Area T	Type: Cl Signa				•			V -
Phase Comb	ination 1	. 2	srgm	4	Jerac	10115	5	6 7	8	
EB Left					NB.	Left	,			
Thru	P					Thru				
Right	P					Right				•
Peds	X					Peds	X			
WB Left	P			-	SB	Left	P			
Thru	P			. %	:	Thru	P			
Right					ĺ-	Right	P		,	
Peds	X				İ	Peds	X			
NB Right					EB	Right				
SB Right					WB	Right				
Green	35.0				•		45.0			
Yellow	3.0						3.0 -			
All Red	2.0		•				2.0			
							Cycle	Length:	90.0	secs

Appr/	Lane	Adj Sat	tion Po Rat:		ce Summary Lane Group	Approach	
Lane Grp	Group Capacity	Flow Rate (s)	v/c	g/C	Delay LOS	Delay LOS	
Eastbo	und						
TR	1311	3372	0.44	0.39	21.4C	21.4 C	
Westbo	und 🚈				, to the		
DefL	232	597	1.06	0.39	103.4 F	•	
T	512	1317	0.83	0.39	39.6 D	62.9 E	
1							

Northbound

South	oound							
T.,	600	1199	0.35	0.50	15.2	В		
ΤR	2563	5126	0.81	0.50	21.9	C	21.3	С

Intersection Delay = 29.2 (sec/veh) Intersection LOS = C

Fax:

__OPERATIONAL ANALYSIS_____

Analyst:

James C.

Agency/Co.:

STV Incorporated

Date Performed:

11/7/2008

Analysis Time Period: 5:00 - 6:00 PM

Intersection:

23rd St and 2nd Ave

Area Type:

CBD or Similar

Jurisdiction:

Analysis Year:

2008 Existing

Project ID: Former Bellevue Psych Building Redevelopment
E/W St: 23rd Street
N/S St: Second Avenue

N/S St: Second Avenue

1,000

____VOLUME DATA_____

	Eastbou	ınd	We	stbou	nd	[Nor	thbo	ound	Son	ıthboı	ınd
	L T	R	L	T	R	Ì	L	\mathbf{T}	R	L	Т	R į
Volume	-415	127	229	397		- -			Q= \	207	1836	227
% Heavy Veh	17	17	¹ 6	6		i				7	7	7
PHF	0.93	0.93	0.93	0.93		i			*	0.99	0.99	0.99 أ
PK 15 Vol	112	34	62	107	·	i				52	464	57
Hi Ln Vol	_ 		1			1.	-				101	~ '
% Grade	0		İ	0		i				l	0	ľ
Ideal Sat	1900)	1900	1900		i				1900	1900	ŀ
ParkExist					x	ł				x	1300	x
NumPark			i		5	H				0		0
No. Lanes	0 3	0	0	2	0	Ι.	0	0	0	1	4	o l
LGConfig	TF	_	Def	_	Ŭ	-		Ū	U	L	TR	ا "
Lane Width	10.0			10.0		ŀ				! -	10.0	
RTOR Vol	10.0	0	-0.0	10.0		l l				110.0	10.0	n
Adj Flow	583	Ü	246	427		l i				209	2084	U
%InSharedLn	505		240	74 <i>)</i>		ŀ				209	2004	
Prop LTs	0.0	100	1 00	0.0	20	ļ					0 0	00
Prop RTs	0.235			.000	00	1			·	^	0.0	
Peds Bikes	250	0	3.0	.000			1.0			!	.110	
	11	U _.	0-	0		.	10	0		3		0
Buses			J 0-	U			•			0	0	
%InProtPhase	∋ ∩ 25	λros ·	 	ann	«	! ,)	••	

Duration 0.25 Area Type: CBD or Similar

____OPERATING PARAMETERS___

	Ea	stbou	nđ	We	stbou	nd	No	rthbo	und	So	uthboi	ınd
	L	${f T}$	R	L	${f T}$	R	L	Т	R	L	T	R
	·			_			_			_		
Init Unmet		0.0		0.0	0.0		1			0.0	0.0	İ
Arriv. Type		3		3	3		Ì			3	3	j
Unit Ext.		3.0		3.0	3.0					3.0	3.0	j
I Factor	1.000				1.00	0	1			j.	1.00	o j
Lost Time	2.0			[2.0	2.0 2.0		j			2.0 2.0		j
Ext of g	2.0			2.0 2.0]			2.0	2.0 2.0	
Ped Min g	4.9			[1	3.9		j	4.6	j

Analyst: James C.

Inter.: 29th St and 1st Ave
Area Type: CBD or Similar

Agency: STV Incorporated

Jurisd:

Date: 11/6/2008

Year : 2008 Existing

Period: 5:00 - 6:00 PM

Project ID: Former Bellevue Psych Building Redevelopment

E/W St: 29th Street

Southbound

N/S St: First Avenue

TR			STO	ENALTZED	TNTERSE	CTTON S	HIMMARY	Y			
L T R L T R L T R L T R L T R L T R C CONTINUE NAME OF THE NAME OF		- I Pág							Sou	thbour	nd I
Tanes		!				!					i
Signal Operations	No. Lanes LGConfig Volume Lane Widt RTOR Vol		0 0	0	TR 0	250 1	LT 1583	0	0	0	0
Section Sect	Ouration	0.25	Area '	Type: CB	D or Sin	ilar	-		-	:	
NB	Dhage Cor	mhinatior	1 2			.10119	- 5	6	7	8	
Thru Right Peds X Peds X Peds X Right Peds X		mpinacio:	1 1 2	,	- !	Left.		_			
Right Peds X B Left Thru P Right Peds X B Left Thru P Right Peds X Right Peds X B Left Thru P Right Peds X B Right Peds X B Right Right Peds X B Right Right Peds X B Right Right Peds X B Right Right Peds X B Right Right Peds X B Right Right Peds X B Right Right Peds X B Right Reen 31.0 Cycle Length: 90.0 Second Summary Right Peds X B Left Peds X B Right Refer B Ri					1	_					
Peds X							_				
SB Left	_		v			_	x				
Thru P Right P Right Peds X EB Right Peds X EB Right WB Right WB Right Reen 31.0 49.0 2.0 Cycle Length: 90.0 second Performance Summary Ppr/ Lane Adj Sat Ratios Lane Group Approach ane Group Flow Rate Thru Right Ratios Delay LOS Delay LOS Delay LOS astbound estbound R 470 1365 0.00 0.34 19.3 B			Δ		GR						
Right P Peds X Right Peds X Right Peds X Right WB Right Right WB Right Right WB Right Right WB Right Right WB Right Reen 31.0 49.0 3.0 2.0 Cycle Length: 90.0 second recommend			A December 1985	i.	1 35						
Peds X Right Right Right Right Reen 31.0 2.0 2.0 Cycle Length: 90.0 second sec				•	ļ ļ			•			
EB Right WB Right	_		_		·		v				
WB Right WB Right WB Right			X		===		Λ.				
### ### ##############################	_					_					
astbound 3.0 3.0 2.0 Cycle Length: 90.0 sectors as the section Performance Summary DPT/ Lane Adj Sat Ratios Lane Group Approach ane Group Flow Rate TP Capacity (s) V/C g/C Delay LOS Delay LOS astbound estbound R 470 1365 0.00 0.34 19.3 B orthbound	SB Righ	t			l MB	Right	40.0				
2.0 Cycle Length: 90.0 sec	Green									·	
Cycle Length: 90.0 section Performance Summary	Yellow	•	3.0								
Intersection Performance Summary ppr/ Lane Adj Sat Ratios Lane Group Approach ane Group Flow Rate rp Capacity (s) v/c g/C Delay LOS Delay LOS astbound estbound R 470 1365 0.00 0.34 19.3 B orthbound	All Red		2.0					_			
ppr/ Lane Adj Sat Ratios Lane Group Approach ane Group Flow Rate V/C g/C Delay LOS Delay LOS astbound estbound R 470 1365 0.00 0.34 19.3 B orthbound				_			_	e Lei	ngth:	90.0	secs
ane Group Flow Rate v/c g/C Delay LOS Delay LOS astbound estbound R 470 1365 0.00 0.34 19.3 B orthbound											
rp Capacity (s) v/c g/C Delay LOS Delay LOS astbound estbound R 470 1365 0.00 0.34 19.3 B orthbound	Appr/	Lane			los	Lane	Group	Αp	proaci	ח	
astbound estbound R 470 1365 0.00 0.34 19.3 B orthbound											
estbound R 470 1365 0.00 0.34 19.3 B orthbound	Grp	Capacity	(s)	v/c	g/C	Delay	LOS	Dela	ay Los	5 	·
estbound R 470 1365 0.00 0.34 19.3 B orthbound	Eastboun	ıd									
estbound R 470 1365 0.00 0.34 19.3 B orthbound											
R 470 1365 0.00 0.34 19.3 B	Westboun	ıđ						1431 M			
orthbound											
	TR	470	1365	0.00	0.34	19.3	В				
T 2806 5154 0.68 0.54 16.2 B 16.2 B	Northbou	ınd									
	LT	2806	5154	0.68	0.54	16.2	В	16.	2 в		

Intersection Delay = 16.2 (sec/veh) Intersection LOS = B

Fax:

OPERATIONAL ANALYSIS

Analyst:

James C.

Agency/Co.:

STV Incorporated

Date Performed:

11/6/2008

Analysis Time Period:

5:00 - 6:00 PM

Intersection:

29th St and 1st Ave

Area Type:

CBD or Similar

Jurisdiction:

Analysis Year: 2008 Existing

Project ID: Former Bellevue Psych Building Redevelopment

E/W St: 29th Street

N/S St: First Avenue

VOLUME DATA

		_				•							
ļ		stbou		W	estbour	ıd		rthbou	ınd	S	outhbo	und	
ļ	L	${f T}$	R	L	T	R	L	${f T}$	R	L	T	R	
				_			.			.			
Volume				ļ	0	0	250	1583	· • ·	1			
% Heavy Veh				.	9	9	7 .	7					'
PHF	·				0.92	0.92	0.96	0.96		1 .			j
PK ·15 Vol					0	0	65	412		j			j
Hi Ln Vol										İ			į
% Grade					0		İ	0		į ·			
Ideal Sat				ĺ	1900		İ	1900		İ			i
ParkExist				X	•	X	X		Χ.	i			i
NumPark				3		3	3		3	ŀ			i
No. Lanes	0	0	0	İ	0 1	0	į o	• 4	0	i ,	0 0	0	
LGConfig					TR		j	LT					İ
Lane Width				İ	12.0		i	10.0		i			i
RTOR Vol				İ		0	į .			i '			
Adj Flow	İ			Ì	0		j'	1909		İ			İ
%InSharedLn	Ì			j ·			i			i			i
Prop LTs				İ	0.00	00	İ	0.13	36	i			İ
Prop RTs	j ,		ا الماد السيد	j	0.000		i o	.000		i	•		
Peds Bikes				ĺ	50 () 👵	i				0		i
Buses			, · · · · · · ·	. j	0		İ	10		İ			le:
%InProtPhase	≘			İ			Ì						
Duration	0.25		Area	Туре	: CBD o	or Sim	ilar			•	•		ı

___OPERATING PARAMETERS_

]	Eas	stbou	ınd	₩e	stbou	nd	No	rthbo	und	Southbound			- [
	L	${f T}$	R	L	${f T}$	R	Ĺ	${f T}$	R	L	T	R	j
							-			ļ			_
Init Unmet				0.0			0.0						
Arriv. Type				3				3		[-		j
Unit Ext.				3.0			j	3.0		İ			i
I Factor				1.000			1.000			İ			İ
Lost Time				2.0			2.0			İ			i
Ext of g				2.0			2.0			İ			İ
Ped Min g				3.5			j			İ	3.2		İ

Analyst: James C.

Agency: STV Incorporated

Inter.: 29th St and 2nd Ave Area Type: CBD or Similar

Jurisd:

Date: 11/7/2008 Period: 5:00 - 6:00 PM

Year : 2008 Existing

Project ID: Former Bellevue Psych Building Redevelopment

E/W St. 29th Street

N/S St: Second Avenue

E/W St: 29t	th Stre				St: Se					
	Eas	SIG tbound T R	NALIZED Westb L T	INTERSE(ound R		hbound		South!	oound R	
No. Lanes LGConfig Volume Lane Width RTOR Vol	0	0 0			0	0 (0	ŗ	5 0 FR 12 212 .0	
Duration	0.25	Area T		D or Sim		- 12				
Phase Combi		X P X 31.0 3.0 2.0	3	4 NB SB EB WB	Left Thru Right Peds Left Thru Right Peds Right Right	X 49.0 3.0 2.0 Cycl	6 e Leng	7 th: 90	. 0	secs
	ne oup	Adj Sat		Ratios		Lane Group		Approach		
	pacity	(s)	v/c	g/C	Delay	LOS	Delay	LOS		
Eastbound										
Westbound	•							•	•	•
LT 5	14	1493	0.53	0.34	27.5	·C	27.5	С.		
Northbound	I									
Southbound	l									
TR 3	3564	6546	. 0.69	0.54	16.1	В	16.1	В		
I	Interse	ction Delay	= 17.3	(sec/ve	eh) I	nterse	ection	LOS =	В	•

Fax:

OPERATIONAL ANALYSIS

Analyst:

James C.

Agency/Co.:

STV Incorporated

Date Performed:

11/7/2008

Analysis Time Period:

5:00 - 6:00 PM

Intersection:

29th St and 2nd Ave

Area Type:

CBD or Similar

Jurisdiction:

Analysis Year:

2008 Existing

Project ID: Former Bellevue Psych Building Redevelopment
E/W St: 29th Street N/S St: Second Ave

N/S St: Second Avenue

____VOLUME DATA_

	Eas	tbou	nd	We:	stbou	nd	l No	orthl	oound	l s	outhbo	und
	L	T	R	L	T	R	L	T	R	L	T	R
Volume % Heavy Veh PHF PK 15 Vol Hi Ln Vol % Grade			· .	73 6 0.92 20	177 6 0.92 48	•		3.7%	<u>.</u>		2112 6 0.94 562	212 6 0.94 56
Ideal Sat ParkExist NumPark		•		X 5	1900	х 5				X 5	1900	
No. Lanes LGConfig Lane Width RTOR Vol Adj Flow	0	0	0	0	1 LT 16.0	0) (0 0		0 5 TR 10.0	0
%InSharedLn Prop LTs Prop RTs Peds Bikes	10	10	•	0	0.2	92		••			0.0 0.091	
Buses %InProtPhase	7.	, ,	e series.		0				•		50.09 0	·
Duration	0.25		Area :	Type:	CBD	or Si	milar			•		•

__OPERATING PARAMETERS_

	Ea	stbou	nd	We	stbou	nd	No	rthbo	und	Sc	uthbo	und
	L	T	R	L	${f T}$	R	L	${f T}$	R	L	${f T}$	R
				ļ ———			-			-		<u> </u>
Init Unmet				1	0.0						0.0	
Arriv. Type					3					1	3	į
Unit Ext.					3.0					Ì	3.0	į
I Factor					1.00	0	İ			j	1.00	0 j
Lost Time					2.0		İ			İ	2.0	İ
Ext of g					2.0		ĺ			İ	2.0	Ì
Ped Min g		3.9					ĺ			j	3.5	į

Analyst: James C.

Agency: STV Incorporated

Inter.: 30th St and 1st Ave

Area Type: CBD or Similar

Date: 11/6/2008

Jurisd:

Period: 5:00 - 6:00 PM

Year : 2008 Existing

Project ID: Former Bellevue Psych Building Redevelopment

E/W St: 30th Street

N/S St: First Avenue

E/W St: 30t	n stre	ec		· · · · · · · · · · · · · · · · · · ·		N/5						
					rponn FD IV		CTION S	:hboun		South	201170	3 1
	· ·	tbour	na j R	wes L	T	R R	I L		RII			R
	L	T	R	ь	T	K	"	1 1	` -		•	.`
No. Lanes LGConfig	2 L	1 T	0	0	0	0	0	TR	0	0 () (0
Volume	365	252						1507 7	6			.]
Lane Width RTOR Vol	11.0	12.0			C			10.0	!			
Duration	0.25		Area				nilar ions	·				
Phase Combi	nation	1 1	2	3	4	Ĭ		5	6	7	8	•
EB Left		P				NB	Left					
Thru		P					Thru	P				
Right							Right					-
Peds		X					Peds	X				
WB Left						SB						
Thru						1	Thru					~ *
Right						-	Right					
Peds		X					Peds	X				
NB Right						EB	_					
SB Right	•					WB	Right					
Green		29.0						45.0				
Yellow		3.0						3.0				
All Red		2.0	•					8.0				
								_	e Leng	th: 90	. 0	secs
	<u>_</u>					orman	ce Summ					
Appr/ Lan	ne oup		j Sat w Rate		tios		Lane	Group	Appr	oacn	-	
	pacity		(s)	v/c	g	/C	Delay	LOS	Delay	LOS		· .
Eastbound												
-	25 .		50	0.54		.32	27.8	С				
т 46	69	14	55	0.57	0	.32	30.3	С	28.8	C		• • •
Westbound						Sen.						**
Northbound												

Intersection LOS = C Intersection Delay = 20.9 (sec/veh)

0.64 0.50 17.7 B

17.7 B \.

5179

2590

ТR

Southbound

Fax:

OPERATIONAL ANALYSIS_____

Analyst:

James C.

Agency/Co.:

STV Incorporated

Date Performed:

11/6/2008

Analysis Time Period:

5:00 - 6:00 PM

Intersection:

30th St and 1st Ave

Area Type:

CBD or Similar

Jurisdiction:

Analysis Year: Project ID: Former Bellevue Psych Building Redevelopment

2008 Existing

E/W St: 30th Street

N/S St: First Avenue

__VOLUME DATA_

	Eas	stbou	nd	Wes	tbou	nd	N	orthbo	ound	Sou	thbo	und
	L	T	R	L	${f T}$	R	L	T	R	L	T	R
Volume	365	252	-			N - 4		1507	776	— — — — — — — — — — — — — — — — — — —		
% Heavy Veh	4	4					İ	7	7	i		
PHF	0.94	0.94					İ	0.96	0.96			
PK 15 Vol	97	67					i	392				
Hi Ln Vol	Ì						İ			İ		
% Grade	į	0					i	0		1		
Ideal Sat	1900	1900					i	1900) [.]	ļ		
ParkExist	ĺх		X				x		X	! 		
NumPark	İЗ		3				3		3	! 		
No. Lanes	j 2	1	0	0	0	0	!	0 4	0	i o	0	0
LGConfig	j L	${f T}$					İ	TF	₹ .	İ	-	_
Lane Width	•	12.0					İ	10.0		Ì		
RTOR Vol	İ			Ì			i		0	İ		
Adj Flow	388	268						1649)	i		
%InSharedLn	İ			İ			i			i		
Prop LTs	İ	0.00	0.0				ĺ	0.0	000	j		
Prop RTs	į o	.000		İ				0.048		i .		
Peds Bikes	İ			20	0				.0 1111	İ.,		
Buses	ĺΟ	0					İ			£,*	VZ.	
%InProtPhase	e e			İ			İ	•		İ		
Duration	0.25		Area !	lvoe:	CBD	or Sim	ilar			'		

0.25

Area Type: CBD or Similar

___OPERATING PARAMETERS_

	Ea	stbou	nđ	We	stbou	ınd	No	rthbo	und	So	uthbo	und	1
	L	${f T}$	R	L	\mathbf{T}	R	L	T	R	L	${f T}$	R	
Init Unmet	 0.0	0.0		-			-	0.0		<u> </u>	.		-
Arriv. Type	3	3					i	3		i			l
Unit Ext.	3.0	3.0		İ			j	3.0		İ			i
I Factor	Ì	1.00	0	İ			j	1.00	0				İ
Lost Time	2.0	2.0		ĺ			İ	2.0		j,			İ
Ext of g	2.0	2.0		Ì			İ	2.0		İ			İ
Ped Min g	1			1	4.6		į .	3.9		İ			İ

HCS+: Signalized Intersections Release 5.3

Analyst: James C.

Agency: STV Incorporated

Inter.: 30th St and 2nd Ave

Area Type: CBD or Similar

Date: 11/7/2008

Jurisd:

Period: 5:00 - 6:00 PM

Year : 2008 Existing

Project ID: Former Bellevue Psych Building Redevelopment

E/W St: 30th Street

N/S St: Second Avenue

	l Eas	stbou	nd	We	stbou	nd	No	rthbo	und	Sou	ıthboı	ınd	Į
	L	T	R	Ĺ	${f T}$	R	L	${f T}$	R	L	T	R	-
No. Lanes		1	1	0	0	0	-\ 0	0	0	0	5	0	-
LGConfig	İ	T	R				į			1	LT		. Į
Volume	İ	242	143							375	2181		Į
Lane Width	İ	13.0	8.0	İ			1				10.0		-
RTOR Vol			0	Ì			. .						·

Dur	ation	0.25	,	Area			or Sim Operat				•	•
 Pha	se Combi	nation	1	2	3	.gna1 4	1		5	6 7	8	
EB	Left						NB	Left		•		•
	Thru		P					Thru				
	Right		P					Right				
	Peds		X					Peds	X			
WB	Left						SB	Left	P			
	Thru			•			Ì	Thru	P			
	Right	-					İ	Right				
	Peds		Х		-		İ	Peds	X			
NB	Right						EB	Right				
SB	Right						WB	Right				
Gre	-		31.0				•		49.0			
-	low		3.0						3.0			•
	Red		2.0						2.0			
****	1.04								Cycle	Length:	90.0	secs

/c g/(
g/(C Delay	LOS	Delay	LOS		
		C	27.7	С	e dis	
•	. – –	.49 0.34 28.5	.49 0.34 28.5 C	.49 0.34 28.5 C	.49 0.34 28.5 C	.49 0.34 28.5 C

Northbound

Southbound

LT 3511 6449 0.77 0.54 17.9 B 17.9 B

Intersection Delay = 19.2 (sec/veh) Intersection LOS = B

Fax:

_OPERATIONAL ANALYSIS___

Analyst:

James C.

Agency/Co.:

STV Incorporated

Date Performed:

11/7/2008

Analysis Time Period:

5:00 - 6:00 PM

Intersection:

30th St and 2nd Ave

Area Type:

CBD or Similar

Jurisdiction:

Analysis Year:

2008 Existing

Project ID: Former Bellevue Psych Building Redevelopment

E/W St: 30th Street

N/S St: Second Avenue

_____VOLUME DATA_____

	Ea	stbou	nd	Wes	stbou	nd]]	Nort	hbou	nd	Soi	ıthbou	ınd
	L	${f T}$	R	L	T	R	L		T	R	L	${f T}$	R
Volume	 	242	143	 							375	2181	
% Heavy Veh	İ	4	4	İ			i		,		6	6	
PHF	j	0.92	0.92	İ	,	•	i			-	0.94	-	
PK 15 Vol	İ	66	39	İ			İ				100	580	
Hi Ln Vol	İ			İ		•	ĺ						
% Grade	į	0		į ·			İ				i	0	
Ideal Sat	ĺ	1900	1900	ĺ			İ				İ	1900	
ParkExist	X		X				İ				x		
NumPark	5		5								5		
No. Lanes	ļ c) 1	1	0	0	- 0		0	0	0	0	5	0
LGConfig		${f T}$	R									LT	
Lane Width	İ	13.0					•					10.0	
RTOR Vol	•		0				ļ				ļ		
Adj Flow]	263	155	ļ			!				ļ	2719	
%InSharedLn				ļ			!				ļ		
Prop LTs		0.0		ļ			!				! .	0.14	١7
Prop RTs	!	0.000		-,	•		ļ.		_		j 0-	.000	•
Peds Bikes	· . 1		0 ,			•		100			1. 1		-
Buses		0	0	}					स्टिक्षेत्र नेपालिकः ।	×	. }	15	
%InProtPhase			3	[T	ann					- "	1		•
Duration	0.25)	Area .	r.àbe:	CRD	or Sim	11a	r		•			

__OPERATING PARAMETERS_

	Ea	stbou	nd	We	stbou	nd	No	rthbo	und	Sc	uthbo	und
	L	\mathbf{T}	R	Ŀ	T	R	L	${f T}$	R	L	\mathbf{T}	R
T-15 TT		0 0			•••		-			-		
Init Unmet		0.0	0.0	ļ			1				0.0	
Arriv. Type		3	3								3	ĺ
Unit Ext.		3.0	3.0							İ	3.0	į
I Factor		1.00	0 -				Ì			İ	1.00	o i
Lost Time		2.0	2.0				İ			İ	2.0	Ì
Ext of g		2.0	2.0				1			İ	2.0	į
Ped Min g		4.2					İ	3.9		İ		į

Analyst: James C.

Inter.: 34th St and 1st Ave Area Type: All other areas

Agency: STV Incorporated Date: 11/6/2008

Jurisd:

Period: 5:00 - 6:00 PM

Year : 2008 Existing

Project ID: Former Bellevue Psych Building Redevelopment

E/W St: 34th Street

N/S St: First Avenue

CTCMATTORD	TNTFFCFCTTON	CITMMARY

Fac	st bour							-	Sou	thbo	und
L	Т	R	L	T	R	L	T	R	L	T	R
0	2.	0	0	3	0	-	4	0	0	0	0
1.01	LT 628		İ			 144					
TOT	10.0						10.5	0			
_	Ea: L 0	0 2 LT 101 628	Eastbound L T R 0 2 0 LT 101 628	Eastbound We L T R L L	Eastbound Westbou L T R L T 0 2 0 0 3 LT TR 101 628 485	Eastbound Westbound L T R L T R 0 2 0 0 3 0 LT TR 101 628 485 117	Eastbound Westbound No. L T R L L C C C C C C C C	Eastbound Westbound Northbound L T R L T R L T 0 2 0 0 3 0 0 4 LT TR LT 101 628 485 117 144 1389	L T R L T R L T R 0 2 0 0 3 0 0 4 0 LT TR LTR 101 628 485 117 144 1389 232	Eastbound Westbound Northbound Sou L T R L T R L T R L 0 2 0 0 3 0 0 4 0 0 LT TR LTR 101 628 485 117 144 1389 232	Eastbound Westbound Northbound Southbound L T R L T R L T 0 2 0 3 0 0 4 0 0 0 LT TR LTR LTR LTR 101 628 485 117 144 1389 232 232

Dur	ation	0.25	•	Area :												
					SI	gnal	OF	perat	ions							
Pha	se Comb:	ination	1	2	3	. 4	1			5	6	7		В		
EB	Left		P	P				NB	Left	P						
	Thru		Ρ	P				,	Thru	P						
	Right							ĺ	Right	P						
	Peds			х				İ	Peds	X						
WB	Left							SB	Left			•				
, vv	Thru			P					Thru							
	Right			P				j	Right							
	Peds			X				İ	Peds	X						
NB	Right							EB	Right							
SB	Right							WB	Right							
Gre	_		7.0	23.0				•		39.0						
	low		3.0	3.0						3.0						
	Red		2.0	8.0						2.0						
WIT	nea		2.0	J., J						Cycle	Lengtl	1:	90.0		secs	

		Intersec	tion Pe	erforman	ce Summary		
Appr/	Lane Group	Adj Sat Flow Rate	Rat		Lane Group	Approach	
Lane Grp	Capacity	(s)	v/c g/C		Delay LOS	Delay LOS	•
Eastbo	und						· · · · · · · · · · · · · · · · · · ·
LT	790	3101	1.03	0.39	66.1 _ E	66.1 E	
Westbo	und	Named				***	Page
TR	1050	4107	0,.60	0.26	32.1 C	32.1 C	ŧ
Northb	ound						
LTR	2449	5652	0.78	0.43	24.5 C	24.5 C	
Southb	ound						

Intersection Delay = 35.9 (sec/veh) Intersection LOS = D

Fax:

OPERATIONAL ANALYSIS

Analyst:

James C.

Agency/Co.:

STV Incorporated

Date Performed:

11/6/2008

Analysis Time Period:

5:00 - 6:00 PM

Intersection:

34th St and 1st Ave

Area Type:

All other areas

Jurisdiction:

Analysis Year:

2008 Existing

Project ID: Former Bellevue Psych Building Redevelopment

E/W St: 34th Street

N/S St: First Avenue

N/S St: First Avenue

____VOLUME DATA____

	l Eas	stbour	nd.	l We:	stbou	nd	l No	rthbo	und	l goi	thbou	nđ
	L L	T	R	L	T	R	L L	Т	R	L DOG	Т	R
Volume	101-	628	<u>.</u> ,		485	117	<u></u> 144	1389	232		 	
% Heavy Veh	ļ 7	7		İ	9	9	İ 8	8	8	İ		
PHF	0.90	0.90		İ	0.95	0.95	0.92	0.92	0.92	i		
PK 15 Vol Hi Ln Vol	28 	174		j I	128	31	39	377	63	•	٠	
% Grade	i	0		Ì	0			0		ì		
Ideal Sat	i ·	1900		i	1900		;	1900		1		
ParkExist	İ			İ			x		x	}		
NumPark	i			i			5		5	}		
No. Lanes	i 0	2	0	0	3	0	ا م	4	0	0	0	0
LGConfig	i	LT	_		TR	_		LT:	•		Ū	·
Lane Width	i .	10.0		j	10.0		i	10.5		İ		
RTOR Vol	i			i		0			0			
Adj Flow	i	810		i	634	•	l	1919	•			
%InSharedLn	i			ì								
Prop LTs	İ	0.13	3.8	İ	0.0	0.0		0.0	82	1		
Prop RTs	i o		· .	i a	.194		i o	.131	.	<u> </u>		
Peds Bikes				•		0		00 <	n		-, 14 5	
Buses	i	0		i ~	0		-	05	•	"		
%InProtPhase	e 0.0	-		i	•		1	يەنىشىنىدى دارد				
Duration	0.25		Area '	l Time•	ווג	other:	3203G			ı		

Duration

0.25

Area Type: All other areas

__OPERATING PARAMETERS__

	Eastbound	Westbound	Northbound	Southbound
	LTR	L T R	LTR	LTR
Toda Monat	0.0	-		
Init Unmet	0.0	0.0	0.0	1
Arriv. Type	3	3	3	·
Unit Ext.	3.0	3.0	3.0	į į
I Factor	1.000	1.000	1.000	i i
Lost Time	2.0	2.0	2.0	
Ext of g	2.0	2.0	2.0	i
Ped Min g		4.6	3.9	3.2

HCS+: Signalized Intersections Release 5.3

Analyst: James C.

Inter.: 34th St and 2nd Ave

Agency: STV Incorporated

Area Type: CBD or Similar

Date: 11/7/2008

Jurisd:

Period: 5:00 - 6:00 PM

Year : 2008 Existing

Project ID: Former Bellevue Psych Building Redevelopment

E/W St: 34th Street

N/S St: Second Avenue

	Eastbound	Westbound	Northbound	Southbound			
	L T R	L T R	L T R	L T R			
No. Lanes	0 2 0	0 2 0	0 0 0	1 5 0			
LGConfig	l TR	DefL T		L LTR			
Volume	518 120	171 241		372 1931 111			
Lane Width	10.0	9.5 10.0	j	8.0 10.0			
RTOR Vol	0	1	į	j . 0			

Dur	ation 0.25		Area		: CBD OI						
701	se Combination	1	2	s 3	ignal Or 4	erat	TOHS	5	6 7	8	
		_	4	,	-	כודגו	Left	-	,		
EB	Left					NB					
	Thru	P					Thru				
	Right	P					Right				
	Peds	X			•		Peds	X			
WB	Left	Ρ.	P			SB	Left	P.			
	Thru	P	P		Territoria		Thru	P			-
	Right						Right	P			
_	Peds	X					Peđs	X			
NB	Right					EB	Right				4
SB	Right					WB	Right				
Gre	-	25.0	8.0					42.0			•
Yel	low	3.0	3.0					3.0			
A 11	Red	2.0	2.0					2.0			
								Cycle	Length:	90.0	secs

Lane	Adj Sat	Rati	ios	Lane G	roup	Appro	oach		
Capacity	(s)	v/c	g/C	Delay	LOS	Delay	LOS		
nd									···
743	2571	.0.99	0.29	61.5	. E	61.5	E _.		w d
ınd -		• • • • • • • • • • • • • • • • • • • •				•			
270	1312	0.68	0.42	44.6	D				
642	1520	0.40	0.42	17.6	В	28.8	C		
	Group Capacity nd 743 and 270	Group Flow Rate Capacity (s) nd 743 2571 and 270 1312	Group Flow Rate Capacity (s) v/c nd 743 2571 0.99 and 270 1312 0.68	Group Flow Rate Capacity (s) v/c g/C nd 743 2571 0.99 0.29 and 270 1312 0.68 0.42	Group Flow Rate Capacity (s) v/c g/C Delay nd 743 2571 0.99 0.29 61.5 and 270 1312 0.68 0.42 44.6	Group Flow Rate	Group Flow Rate Capacity (s) v/c g/C Delay LOS Delay nd 743 2571 0.99 0.29 61.5 E 61.5 and 270 1312 0.68 0.42 44.6 D	Group Flow Rate Capacity (s) v/c g/C Delay LOS Delay LOS nd 743 2571 0.99 0.29 61.5 E 61.5 E and 270 1312 0.68 0.42 44.6 D	Group Flow Rate Capacity (s) v/c g/C Delay LOS Delay LOS nd 743 2571 0.99 0.29 61.5 E 61.5 E and 270 1312 0.68 0.42 44.6 D

Northbound

Southi	bou	nd						
T.		587	1257	0.65	0.47	20.6	C	
LTR	-	3142	6733	0.67	0.47	16.3	В	17.0 B
		Intersect	ion Delay	= 27.3	(sec/v	eh) I	nters	ection LOS = C

Fax:

_OPERATIONAL ANALYSIS___

Analyst:

James C.

Agency/Co.:

STV Incorporated

Date Performed:

11/7/2008

Analysis Time Period:

5:00 - 6:00 PM

Intersection:

34th St and 2nd Ave

Area Type:

CBD or Similar

Jurisdiction:

Analysis Year:

2008 Existing

Project ID: Former Bellevue Psych Building Redevelopment

E/W St: 34th Street

N/S St: Second Avenue

____VOLUME DATA____

1	Eastb	ound	We:	stbour	nd	N-	orth	nboı	ınd	So	uthbo	und	1
	ь т	R	L	${f T}$	R	L		ľ	R	L	T	R	ĺ
 Volume	<u></u>	8 120	171	241		<u>:</u>				372	1931	111	ļ
	9	9	5	5		!				!			ļ
% Heavy Veh		_	ļ -	_		ļ				6	6	6	ļ
PHF	0.		0.93			!				0.97			ļ
PK 15 Vol	14	9 34	46	65		ļ				96	498	29	
Hi Ln Vol			ļ			ļ							į
% Grade	0			0							0		
Ideal Sat	19	00	1900	1900						[1900	1900		ĺ
ParkExist			1										Ì
NumPark			Ì			İ				İ			İ
No. Lanes	0	2 0	0	2	0	İ	0	0	0	1	5	0	i
LGConfig		TR	Def:	L T		İ				L	LT	R	İ
Lane Width	10	.0	9.5	10.0		İ				8.0	10.0		i
RTOR Vol		0	İ			i			•			0 ·	ì
Adj Flow	73	3	184	259		İ				384	2105	_	i
%InSharedLn			i	-		İ				0			ì
Prop LTs	0	.000	1.00	0.00	00	İ					0.0	00	İ
Prop RTs	0.18	8	. 0	.000		į				. 0	. 0.5.4		ተ
Peds Bikes	250	0	,			j	50			2	00	0 .	İ.
Buses	0		.0	0	- 44	İ				lo	0		ľ
%InProtPhase	∋		0.0			İ				j			1
Duration	0.25	Area	Type:	CBD o	or Sim	ilar				٠,			ı

__OPERATING PARAMETERS__

	Eas	stbou	nd	We	stbou	nd	No	rthbo	und	So	uthbou:	nđ
	Ŀ	T	R	L	${f T}$	R	L	T	R	L	T	R.
In it Unmet		0.0		$-\left \frac{1}{0.0}\right $	0.0		- - -		,	- 0.0	0.0	
Arriv. Type		4		4	4		İ			4	4	i
Unit Ext.		3.0		3.0	3.0		İ			3.0	3.0	İ
I Factor		1.00	0		1.00	0	ĺ			Ì	1.000	j
Lost Time		2.0		2.0	2.0					2.0	2.0	j
Ext of g		3.0		2.0	2.0		Ì			2.0	2.0	İ
Ped Min g		4.9					ĺ	3.5		İ	4.6	į

HCS+: Signalized Intersections Release 5.3

Analyst: James C.

Inter.: 34th St and FDR Dr SR

Agency: STV Incorporated

Area Type: All other areas

Date: 11/7/2008

Jurisd:

Year : 2008 Existing

Period: 5:00 - 6:00 PM Year : 2008 Exist Project ID: Former Bellevue Psych Building Redevelopment

Project ID: Forme E/W St: 34th Stre		Psych B	uilding 1 N/S	Redevelo: St: FDR	pment Driv	e Serv	vice R	oad
	a = a		TNICHTO CO	CMTON CIT	NATA 1737			
1 7		Westb Westb	INTERSE	North			South	bound
;	tbound			L T		i	L T	:
L	T R	L T	κ .		10	_	_	
No. Lanes 0	2 1	0	2 1	1	1 0		0	2 0
LGConfig DefL	!		LT R	L	TR	į		LTR
		6 9	6	443 21	.3 6	4	10	83 151
	10.0 9.0	16	.0 16.0	10.0 10	.5	ĺ	9.	5
RTOR Vol	0		0	İ	0	ļ		0 [
Duration 0.25	Area T	vpe: Al	1 other	areas			. •	
Dulacion 0.25			l Operat					
Phase Combination	1 2	3	4		5	6	7	8
EB Left	P		NB		P	P		
Thru	P			Thru	P	P		
Right	P			Right	P	P		
Peds		-	j	Peds		X		
WB Left	P		SB	Left		· P		
Thru	· " P			Thru		P		•
Right	P		ĺ	Right		P		
Peds	X		İ	Peds		X	-	
NB Right			EB	Right	P			
SB Right			WB	Right				
Green	22.0			1	L3.0	40.0		
Yellow	3.0			3	3.0	3.0		
All Red	2.0			2	2.0	2.0		
	Turk ozgod	ation Do	erformanc	o Cummar		e Leng	th: 90	0.0 secs
7/ T.270	Intersec Adj Sat	Rati		Lane Gr		Appr	oach	
Appr/ Lane	Flow Rate	ICC 1	-05	Lune o.	LOUD	66-		•
Lane Group Grp Capacity		v/c	g/C	Delay I	LOS	Delay	LOS	_
GIP Capacity	(2)							
Eastbound	1100	1.06	0.26	100.6	F.			
DefL 304	1188	0.01	0.24	25.8	C	68.0	E	a. 19
т 409	1673	0.95	0.44	50.2	D	00.0		
R 609	1371	0.95	0.44	30.2	_			
Westbound					and the state of	t.		
LT 904	3700	0.02	0.24	25.8	C	25.9	C	
R 420	1718	0.02	0.24	25.9	C	•		•
Northbound								
L 450	1487	1.06	0.66	74.8	E			
TR 1025	1591	0.23	0.64	3.6	A	51.3	D	
Southbound								
LTR 1422	3200	1.00	0.44	45.3	D	45.3	D	6. .e.

Intersection Delay = 53.2 (sec/veh) Intersection LOS = D

Fax:

OPERATIONAL ANALYSIS____

Analyst: .

James C.

Agency/Co.:

STV Incorporated

Date Performed:

11/7/2008

Analysis Time Period:

5:00 - 6:00 PM

Intersection:

34th St and FDR Dr SR

Area Type:

All other areas

Jurisdiction:

Analysis Year:

2008 Existing

Project ID: Former Bellevue Psych Building Redevelopment

E/W St: 34th Street

N/S St: FDR Drive Service Road

.

transition will

____VOLUME DATA___

	Eas	stbour	nd	Wes	stbour	nđ	No	rthbo	und	Soi	ıthboı	und
	L	T	R	L	T	R	L	T	R	L	T	R
Volume	 305	4	550	6	9		443	213	6	4	1083	151
% Heavy Veh	!	6	6	0	0	0	13	13	13	2	2	2
PHF	0.95	0.95	0.95	0.90	_	-	0.93	0.93		0.87	_	- ,
PK 15 Vol	80	1	145	2	3	2	119	57	2	1	311	43
Hi Ln Vol				İ				٠.	_	-	0	10
% Grade		0		İ	0		İ	0		İ	0	
Ideal Sat	1900	1900	1900	İ	1900	1900	1900	1900		j	1900	
ParkExist			,	İ			İ					i
NumPark			•	İ			İ			İ		
No. Lanes	0	2	1	0	2	1	1	1	0	0	2	0
LGConfig	Def:	T	R		LT	Ŕ	Ĺ	TR		İ	LT	R İ
Lane Width	10.0	10.0	9.0	1	16.0	16.0	10.0	10.5		İ	9.5	Ì
RTOR Vol			0	1		0	ĺ		0	į		0
Adj Flow	321	4	579	1	17	7	476	235			1424	
%InSharedLn]						Ì			İ	•	
Prop LTs	1.000	0.00	0.0		0.43	12	1.00	0.0	00	j	0.0	04 İ
Prop RTs	0	000	1.000	0	.000	1.000	0	.026 \downarrow	·	0	.122	· . i
Peds Bikes	0			50	0 - (0	2	5	0 .	. 50	0	o - j
Buses	0	0	0	- 00	0	0	0	0		İ	0 -	
%InProtPhase	₽				٠.		0.0		0.0			i
Duration	0.25		Area '	Type:	All d	other	areas			•		'

____OPERATING PARAMETERS___

	Ea	stbou	.nd	₩e	estbou	nd	No	rthbound	Southbound
	Ĺ	T	R	L	T	R	L	T R	LTR
Init Unmet	0.0	0.0	0.0	ļ 	0.0	0.0	$- {0.0}$	0.0	0.0
Arriv. Type	3	3	3	j	3	3	4	4	4
Unit Ext.	3.0	3.0	3.0	j	3.0	3.0	3.0	3.0	3.0
I Factor		1.00	0	1	1.00	0	j	1.000	1.000
Lost Time	2.0	2.0	2.0	j	2.0	2.0	2.0	2.0	j 2.0
Ext of g	3.0	2.0	2.0	Ì	2.0	2.0	3.0	2.0	j 2.0
Ped Min g		3.2	•		3.5		ĺ	3.4	3.5

Analyst: NS

Inter.: 23rd St and FDR Dr N SR

Agency: STV Incorporated

Area Type: CBD or Similar

Date: 12/09/08

Jurisd:

Period: 7:45 - 8:45 AM

Year : 2012 No Build

Project ID: Former Bellevue Psych Building Redevelopment E/W St: 23rd Street N/S St: FDR Drive

N/S St: FDR Drive N SR

		SI	GNALI:	ZED I	NTERS	ECTION	SUMM	ARY			
	Eastbou	ınd	We	stbou	nd	No	rthbo	und	Sou	thbo	und
	L T	R	Ĺ	T	R	L	T	R	ļ L	${f T}$	R
No. Lanes	1 1	1		1	0	- - 	1	0	-	0	0
LGConfig	L LT		L	TR	_	L	TR	20			
Volume Lane Width	385 21 10.5 10.5	211 5 11.0	9 16.0	10 16.0	6	335 11.0	522 11.0				
RTOR Vol	,	0	İ		0	İ		0	İ		

Dur	ation	0.25		Area T	'ype:	CBD o	r Sim	ilar					
•					Si	gnal 0	perat	ions					
Pha	se Comb	ination	1	2	3	4]		5	6	7	8	
EB	Left			P			NB	Left		P	P		
	Thru			P			į	Thru	P	P	P		
	Right			P			ĺ	Right	P	P	P		
	Peds		X				ĺ	Peds		X			
WB	Left		P	P			SB	Left					
	Thru	- *	Р	P			Ì	Thru			* · · · · · · · · · · · · · · · · · · ·	-	•
	Right		Р	P			ĺ	Right					
	Peds		Х	X				Peds	X				
NB	Right		•				EB	Right			-		
SB	Right						WB	Right					
Gre	-		6.0	24.0					19.0	8.0	13.0		
Yel	low		3.0	3.0					3.0	0.0	3.0		
A11	Red		2.0	2.0					2.0	0.0	2.0		
									Cycl	e Leng	gth: 90.0)	secs

		Intersec	tion Pe	eriorman	.ce Summa	ary				
Appr/	Lane	Adj Sat	Rati	ios	Lane (Froup	Appro	oach		
Lane	Group Capacity	Flow Rate (s)	v/c	g/C	Delay	LOS	Delay	LOS	-	
Grp	Capacity	(5)	V/C	9,0	DCIU,					
Eastbo	und									
L	238	891	0.93	0.27	75.4	\mathbf{E}				
LTR	238	894	0.92	0.27	72.9	E	63.8	\mathbf{E}^{\cdot}	* **	
R	315	1182	0.73	0.27	43.7	D		-		-
Westbo	unđ				** *					
L	389	1841	0.03	0.39	17.5	В				-
TR	693	1781	0.03	0.39	17.0	В	17.2	. В		
Northb	ound									
L	398	1236	0.94	0.32	53.4	D				
TR	637	1273	0.97	0.50	51.6	D	52.3	D		

Southbound

Intersection Delay = 56.2 (sec/veh) Intersection LOS = E

Fax:

OPERATIONAL ANALYSIS____

Analyst:

NS

Agency/Co.:

STV Incorporated

Date Performed:

12/09/08

Analysis Time Period:

7:45 - 8:45 AM

Intersection:

23rd St and FDR Dr N SR

Area Type:

CBD or Similar

Jurisdiction:

2012 No Build

Analysis Year:

Project ID: Former Bellevue Psych Building Redevelopment

E/W St: 23rd Street

N/S St: FDR Drive N SR

___VOLUME DATA

	Eas	stbou	nd	Wes	stbou	nd	No	rthboi	und	Sou	thbo	und	ı
	L	T	R	L	T	R	L	T	R	L	T	R	İ
Volume	385	21	211	9	10	6	335	522	29	41.	٦		
% Heavy Veh	!	16	16	0	0	0	27	27	27	ļ			
PHF	0.92			0.89	0.89		0.89	0.89		ļ			ļ
PK 15 Vol Hi Ln Vol	105	6	57	3	3	2	94	147	8				
% Grade		0			0		1	0		<u> </u> 			
Ideal Sat	1900	1900	1900	1900	1900		19.00	1900		Ì			İ
ParkExist				1			İ			İ			i
NumPark	ļ			1			İ			į			i
No. Lanes	1	1	1] 1	1	0	1	1	0	0	0	0	i
LGConfig	L	LT		L	TR		L	TR		İ			İ
Lane Width	10.5	10.5	11.0	16.0	16.0		11.0	11.0		İ			İ
RTOR Vol			0			0	ĺ.		0	j			İ
Adj Flow	222	219	229	10	18	,	376	620		İ			İ
%InSharedLn			0				İ		٠.	İ			İ
Prop LTs	1.00	0 0.8	97		0.0	00	ĺ	0:0	00 .	İ			İ
Prop RTs	. 0	.000	1.000	0	.389	1.0	. 0	.053		ļ			İ
Peds Bikes	1.9	0,0		81	0	0 .	8	0 , (0	0.	20		,
Buses	0	0	6- mm.	0	0		0	0		j	V	equi-	İ
%InProtPhase			•	0.0					0.0	Ì			İ
Duration	0.25		Area '	Type:	CBD	or Sim:	ilar						•

OPERATING PARAMETERS

	Ea	stbou:	nd	We	stbour	nd	No	rthbo	und	Son	uthbo	und	ı
	L	T	R	L	T	R	L	T	\mathbb{R}^{\cdot}	Į.	\mathbf{T}_{\cdot}	R	İ
Init Unmet	0.0	0.0	0.0	0.0	0.0		0.0	0.0				<u>_</u>	
Arriv. Type	3	3	3	3	3		5	3		İ			İ
Unit Ext.	3.0	3.0	3.0	3.0	3.0		3.0	3.0		İ			İ
I Factor	ĺ	1.00	0	j .	1.000)	İ	1.00	0	İ			i
Lost Time	2.0	2.0	2.0	2.0	2.0		0.0	2.0		İ			ŀ
Ext of g	2.0	2.0	2.0	2.0	2.0		8.0	2.0		İ			ĺ
Ped Min g		3.9		Ì	3.7		İ	3.7		İ	3.2		İ

Analyst: NS

Inter.: 23rd St and FDR Dr S/ Ave C

Agency: STV Incorporated

Area Type: CBD or Similar

Jurisd:

Date: 12/09/08 Period: 7:45 - 8:45 AM

Year : 2012 No Build

Project ID: Former Bellevue Psych Building Redevelopment

E/W St: 23rd Street

N/S St: FDR Drive S/ Avenue C

		SIC	GNALIZED	INTERSE	CTION S	MARITINE	I				
	Eas	tbound	Westb			hboun		Sou	ıthboı	ınd	
	L	T R	L T	R	L	T .	R	L	T	R	<u> </u>
No. Lanes LGConfig	0	0 0	L	1 0 TR	0	0	0	1 L 100	2 TR 264	0 84	\
Volume Lane Width RTOR Vol			9 10 16.0 16		ļ ļ				10.5	0	
Duration	0.25	Area	Type: CB	D or Sim	nilar						
			Signa 3	l Operat	ions	5	6	7		8	
Phase Comb EB Left Thru Right Peds	oination	1 2 x		NB	Left Thru Right Peds	Х	Ü	,			ı
WB Left Thru Right Peds	- "	P		SB	Left Thru Right Peds	X	P	•			
NB Right SB Right Green		24.0	·	EB WB	Right Right	19.0 3.0	24.0 3.0				
Yellow All Red		3.0 2.0				10.0	2.0				
			ation Do	rforman	ao Cumm	Cyc1	le Len	gth:	90.0		secs
-	ane	Interse Adj Sat	ection Pe Rati		ce Summ Lane	Cycl ary	le Len	gth: roac			secs
Lane Gr	ane coup apacity	Interse	Rati		Lane	Cycl ary	App		h	•	secs
Lane Gr	coup	Interse Adj Sat Flow Rate	Rati	Los	Lane	Cycl ary Group	App	roac	h		secs
Lane Gr Grp Ca	coup	Interse Adj Sat Flow Rate	Rati	g/C	Lane	Cycl ary Group	App	roac	h		secs
Lane Gr Grp Ca Eastbound	coup apacity	Interse Adj Sat Flow Rate (s)	Rati	g/C	Lane Delay	Cyclary Group LOS	App	roac	h		secs
Lane Gr Grp Ca Eastbound Westbound L	coup	Interse Adj Sat Flow Rate	Rati	g/C	Lane	Cycl ary Group	App	oroac	s		secs
Lane Gr Grp Ca Eastbound Westbound	coup apacity 491 458	Interse Adj Sat Flow Rate (s)	Rati	g/C g/C 0.27	Lane Delay	CyclaryGroup	App Dela	oroac	s		secs
Lane Gr Grp Ca Eastbound Westbound L 4	coup apacity 491 458	Interse Adj Sat Flow Rate (s)	Rati	g/C g/C 0.27	Lane Delay	CyclaryGroup	App Dela	oroac	s		secs
Lane Gr Grp Ca Eastbound Westbound L 4 TR 6 Northbound	coup apacity 491 458 d	Interse Adj Sat Flow Rate (s)	0.02 0.04	g/C g/C 0.27 0.27	Delay 24.4 24.6	Cyclary	App Dela	oroac	s		secs
Lane Gr Grp Ca Eastbound Westbound L 4 TR 6 Northbound Southbound	coup apacity 491 458	Interse Adj Sat Flow Rate (s)	Rati	g/C g/C 0.27	Delay 24.4 24.6	Cyclary	App Dela	y LO	s		secs

Fax:

OPERATIONAL ANALYSIS_____

Analyst:

NS

Agency/Co.:

STV Incorporated

Date Performed:

12/09/08

Analysis Time Period:

7:45 - 8:45 AM

Intersection:

23rd St and FDR Dr S/ Ave C

Area Type:

CBD or Similar

Jurisdiction:

Analysis Year:

2012 No Build

Project ID: Former Bellevue Psych Building Redevelopment

E/W St: 23rd Street

N/S St: FDR Drive S/ Avenue C

V	O1	∟UM.	E D	Α	\mathbf{r}{A}
_ •	-		_ ~		

	Eas	stbou	nđ	We	stbou	nd	No	rthbou	nd	Son	ıthbo	und
	L	${f T}$	R	L	T	R	L	${f T}$	R	L	T	R
Volume				9	10 .	.6.				100	264	84
% Heavy Veh	ĺ			0	0	0				111	11	11
PHF				0.89	0.89	0.89				0.96	0.96	
PK 15 Vol				3	3	2	İ			26	69	22
Hi Ln Vol	ĺ			Ī						İ		
% Grade	İ			ĺ	0					İ	0	
Ideal Sat				1900	1900					1900	1900	
ParkExist				ĺ	•					İ		
NumPark				j						İ		
No. Lanes	0	0	0	1	1	0	O	0	0	1	2	0
LGConfig				L	TR		ĺ			ĹЬ	TR	
Lane Width				16.0	16.0		ĺ			10.0	10.5	
RTOR Vol						0				İ		0
Adj Flow				10	18					104	363	
%InSharedLn										İ		
Prop LTs				1	0.0	00	Ì			İ	0.0	00
Prop RTs		-		` Q	.389		ĺ	7.2		0	.242	
Peds Bikes	10	00 =	· ·	8	0	0	8	0	2.7.	2	5 ` ^ `	0
Buses		•		0	0			mi <u>a</u> nak		0	0 :	
%InProtPhase										Ì		
Duration	0.25		Area	Type:	CBD	or Sim	ilar			•		

__OPERATING PARAMETERS_

·	Eas	stbou	nd	We	stbou	nd	No	rthbo	und	So	uthbo	und
	L	T,	R	L	${f T}$	R	L	Т	R	L	${f T}$	R
Init II				-	0 0					-		
Init Unmet				0.0	0.0		Ì			0.0	0.0	
Arriv. Type				3	3					3	3	1
Unit Ext.				3.0	3.0					3.0	3.0	į
I Factor					1.00	0				Ì	1.00	o į
Lost Time				2.0	2.0		İ			2.0	2.0	İ
Ext of g				2.0	2.0		İ			2.0	2.0	i
Ped Min g		3.9			3.7			3.7		j	3.4	į

Analyst: NS

Inter.: 23rd St and 1st Ave

Agency: STV Incorporated

Area Type: CBD or Similar

Date: 12/09/08

Jurisd:

Period: 7:45 - 8:45 AM

Year : 2012 No Build

Project ID: Former Bellevue Psych Building Redevelopment

E/W St: 23rd Street

N/S St: First Avenue

	1 73				boun		CTION S	hboun		Sout	hhoi	ınd	
·	Eas L	tboun T	a į R	L	T	.u R	L		:	-	Т	R	
No. Lanes LGConfig	0	2 LT.	0	. 0	3 TR	0	. 0	LTR	0	0	0	0	
Volume	1	503	ļ		391	109	1	1138 1	86				1
Lane Width RTOR Vol	l i	10.5		:	10.0	0		10.0 0	+				Ì
Duration	0.25		Area T			r Sim							<u>.</u> .
Phase Combi	nation	1	2	3±9.	4	J	10110	5	6	7		8	
EB Left	.1146101	P	P	•	_	NB	Left	P					
Thru		P	P			İ	Thru	P					
Right							Right						
Peds		X				ļ	Peds	X					
WB Left						SB	Left			:			
Thru	. ,	P .					Thru		•				
Right		P					Right						
Peds		X				EB	Peds Right	Х					
_													
SB Right		20.0	7.0			WB	Right						
SB Right Green		20.0	7.0					36.0					
SB Right Green Yellow		3.0	3.0					36.0 3.0					
SB Right Green								36.0 3.0 8.0	le Leng	th:	90.0		secs
SB Right Green Yellow		3.0 2.0	3.0 8.0	ction	Perf	WB		36.0 3.0 8.0 Cycl		th:	90.0		secs
SB Right Green Yellow All Red	ıe	3.0 2.0	3.0 8.0		Perf tios	WB	Right ce Summ	36.0 3.0 8.0 Cycl		th:			secs
SB Right Green Yellow All Red Appr/ Lar	ne oup	3.0 2.0 InAdj	3.0 8.0 hterse	Ra	tios	WB	Right ce Summ Lane	36.0 3.0 8.0 Cyclary Group	Appr	oach		·	secs
SB Right Green Yellow All Red Appr/ Lar Lane Gro		3.0 2.0 In Adj	3.0 8.0 ntersec	Ŕа	tios	WB	Right ce Summ Lane	36.0 3.0 8.0 Cycl	Appr	oach			secs
SB Right Green Yellow All Red Appr/ Lar Lane Gro	oup	3.0 2.0 In Adj	3.0 8.0 ntersed Sat V Rate	Ra	tios	WB	Right ce Summ Lane	36.0 3.0 8.0 Cyclary Group	Appr	oach			secs
SB Right Green Yellow All Red Appr/ Lar Lane Gro Grp Car Eastbound	oup	3.0 2.0 In Adj	3.0 8.0 atersed Sat V Rate	Ra	tios g	WB	Right ce Summ Lane	36.0 3.0 8.0 Cyclary Group	Appr	LOS	· · · · · · · · · · · · · · · · · · ·	·	secs
SB Right Green Yellow All Red Appr/ Lar Lane Gro Grp Car Eastbound	oup pacity	3.0 2.0 In Adj Flow	3.0 8.0 atersed Sat V Rate	Ra v/c	tios g	WB	Right ce Summ Lane Delay	36.0 3.0 8.0 Cyclary Group	Appr Delay	LOS	· · · · · · · · · · · · · · · · · · ·		secs
SB Right Green Yellow All Red Appr/ Lar Lane Gro Grp Car Eastbound	oup pacity 45	3.0 2.0 In Adj Flow	3.0 8.0 atersed Sat V Rate (s)	Ra v/c	g 0	WB	Right ce Summ Lane	36.0 3.0 8.0 Cyclary Group	Appr Delay	LOS	· · · · · · · · · · · · · · · · · · ·		secs
SB Right Green Yellow All Red Appr/ Lar Lane Gro Grp Car Eastbound LT 74 Westbound	oup pacity 45	3.0 2.0 In Adj Flow	3.0 8.0 atersed Sat V Rate (s)	0.91	g 0	WB ormand	Right See Summ Lane Delay 45.0	36.0 3.0 8.0 Cyclary Group LOS	Appr Delay	LOS	· · · · · · · · · · · · · · · · · · ·		secs
SB Right Green Yellow All Red Appr/ Lar Lane Gro Grp Car Eastbound LT 74 Westbound TR 65 Northbound	oup pacity 45	3.0 2.0 In Adj Flow (3.0 8.0 stersed Sat V Rate (s)	0.91	g 0	WB	Right See Summ Lane Delay 45.0	36.0 3.0 8.0 Cyclary Group LOS	Appr Delay 45.0	D D	· · · · · · · · · · · · · · · · · · ·		secs
SB Right Green Yellow All Red Appr/ Lar Lane Gro Grp Car Eastbound LT 74 Westbound TR 65	pacity 45	3.0 2.0 In Adj Flow (3.0 8.0 stersed Sat V Rate (s)	0.91	g 0	WB	Right See Summ Lane Delay 45.0	36.0 3.0 8.0 Cyclary Group LOS	Appr Delay 45.0	D D	· · · · · · · · · · · · · · · · · · ·		secs

Intersection Delay = 37.2 (sec/veh) Intersection LOS = D

Fax:

OPERATIONAL ANALYSIS

Analyst:

NS

Agency/Co.:

STV Incorporated

Date Performed:

12/09/08

Analysis Time Period:

7:45 - 8:45 AM

Intersection:

23rd St and 1st Ave

Area Type:

CBD or Similar

Jurisdiction: Analysis Year:

2012 No Build

Project ID: Former Bellevue Psych Building Redevelopment

E/W St: 23rd Street

N/S St: First Avenue

____VOLUME DATA___

!	Eas	stbou	nd	We	stbou	nd	No:	rthbo	und	So	uthboi	ınd	ı
	L	T	R	L	T	R	Ĺ	T	R	L	T	R	į
Volume	155	503			391	109	182	1138	186	-	74 + A	•	-
% Heavy Veh	20	20		İ	44	44	21	21	21	İ			i
PHF	0.97	0.97	;	İ	0.95	0.95	0.96	0.96		į ·	•		i
PK 15 Vol	40	130	:	j	103	29	47	296	48	i			i
Hi Ln Vol				İ			·			j			i
% Grade		0		Ì	0		İ	0		i			i
Ideal Sat	İ	1900		ĺ	1900		İ	1900					i
ParkExist			X				x		X	İ			i
NumPark			5				3		3	Ì			i
No. Lanes	0	2	0	0	3	0	0	4	0	j 0	0	0	İ
LGConfig		LT			TR		İ	$\mathbf{L}\mathbf{T}$	R	ĺ			i
Lane Width		10.5			10.0		1	10.0		Ì			j
RTOR Vol						0			0	İ			j
Adj Flow		679			527		Ì	1569		İ			j
%InSharedLn	ŀ			•			İ			Ì			į
Prop LTs	[0.23	36]	0.0	00	İ	0.1	21	İ			i
Prop RTs	0	.000] 0	.218		0	.124					i
Peds Bikes	1			5	0	0	1	0 0	0	· 0			j
Buses]	0			0		Ì	0/51/4/24	\ es :- :	İ			j
%InProtPhase	e 0.0			1			Ì			İ			į
Duration	0.25		Area :	Гуре:	CBD ·	or Sim	ilar			•			.'

_OPERATING PARAMETERS__

	Eastbound	Westbound	Northbound	Southbound
	L T R	L T R	L T R	LTR
Init Unmet	0.0	0.0	0.0	
Arriv. Type	3 -	3	3	i
Unit Ext.	3.0	3.0	3.0	
I Factor	1.000	1.000	1.000	i .
Lost Time	2.0	2.0	2.0	İ
Ext of g	2.0	2.0	2.0	İ
Ped Min g		3.5	3.9	3.2

HCS+: Signalized Intersections Release 5.3

Analyst: NS

Inter.: 23rd St and 2nd Ave Area Type: CBD or Similar

Agency: STV Incorporated

Jurisd:

Date: 12/09/08 Period: 7:45 - 8:45 AM

Year : 2012 No Build

Project ID: Former Bellevue Psych Building Redevelopment

E/W St: 23rd Street

N/S St: Second Avenue

<u> </u>	Eas	tbour			tbou		Nort					uthbo		
	L	T	R	L	${f T}$	R	L	T	R	į	L	T	R	İ
i			0	0	2	0		-0	0			4	0	
o. Lanes	. 0	3 TR	U	DefL		U	"	.0	v		Ľ.	TR	_	i
GConfig			181	ı	389		1			l	222	1471		. i
olume		436 10.0	TOT	10.0)				1		10.0		ĺ
ane Width TOR Vol		10.0	0	10.0	10.0	,	i			İ			0	İ
uration	0.25		Area"	Type:	CBD	or Sim	ilar		•					1
				Sig	nal	Operat	ions							
hase Combin	nation	1	2	3	. 4	<u> </u>		5		6	7		8	
B Left						NB	Left							
Thru		P					Thru							
Right		P					Right							
Peds		Х					Peds	X						
VB Left		P				SB		P						
Thru		P		*		1 2 11	Thru	P	• 1	•				
Right						Ì	Right	P						
Peds		Х					Peds	X						
NB Right						EB	Right							
SB Right						WB	Right							
Green		35.0						45.						
Yellow		3.0						3.0						
All Red		2.0						2.0						
						_	_	_	rcle	e Lei	ngth:	90.0)	secs
							ce_Summ			7				
Appr/ Lan Lane Gro			lj Sat w Rate		atio	S	Lane	Grou	ιp	Api	oroac	:n		
	acity		(s)	v/c		g/C	Delay	LOS	3	Dela	ay LO	S		
Eastbound									•	•				
TR : 12	22	31	.42	0.6	3 .	0.39	24.8	С		24.	8 (2	•	
•											4.1			
Westbound							100 6							
DefL 19		49		1.0		0.39	102.6			68.	7 1			
т 45	4	1.1	.67	0.9	2	0.39	52.6	ע		68.	, 1			
Northbound														
Southbound					_		.	_						
- 66	5	11	L10	0.4		0.50	17.1 22.6			22.				
ь 55			570	0.8		0.50		С				C		

Fax:

_OPERATIONAL ANALYSIS___

Analyst:

NS

Agency/Co.:

STV Incorporated

Date Performed:

12/09/08

Analysis Time Period:

7:45 - 8:45 AM

Intersection:

23rd St and 2nd Ave

Area Type:

CBD or Similar

Jurisdiction:

Analysis Year: 2012 No Build

Project ID: Former Bellevue Psych Building Redevelopment E/W St: 23rd Street

N/S St: Second Avenue

VOLUME	DATA
--------	------

	Eastbou	nd	We:	stbou	nd	Noi	thbo	und	So	uthbo	und l
	L T	R	L	T	R	L	${f T}$	R	L	T	R
Volume	436	181	184	389					- <u></u>	1471	204:
% Heavy Veh	27	27	21	21					20	20	204
PHF	0.80		0.93						10.89		
PK 15 Vol	136	57	49	105		i					0.89
Hi Ln Vol	130	57	143	100		! !			62	413	57
% Grade	0		ŀ	0						•	ļ
Ideal Sat	1900	`	1900	-		ļ 			11000	0	
	1900	,	1300	1900	77					1900	
ParkExist					X				X		X
NumPark		•		_	3		_	_	0		0
No. Lanes	0 3	0	0	_ 2	0	0	0	, 0	1	4	0
LGConfig	TI		Def:			ļ			L	TR	
Lane Width	10.0		10.0	10.0					10.0	10.0	
RTOR Vol		0	ļ			ŀ					0
Adj Flow	771		198	418					249	1882	
%InSharedLn			ł								
Prop LTs	0.0	000	1.00	0.0	00				İ	0.0	00 j
Prop RTs	0293		0	.000		İ			į o	.122.	، ر
Peds Bikes	120	0	j		100 g	40):		1	6.0	0
Buses	10		0	0		j	<u>:</u>		ĺΟ	0 -	
%InProtPhase	<u>.</u>		j			İ			j	<u> </u>	i
Duration	0.25	Area	Type:	CBD	or Sim	ilar		•			

___OPERATING PARAMETERS_

	Ea	stbou	nđ	We	stbou	ınd	No	rthbo	und	So	uthbou	ınd
	L	${f T}$	R	L	${f T}$	R	L	T	R	L	${f T}$	R į
Init Unmet		0.0		0.0	0.0		-			$-\frac{1}{0.0}$	0.0	
Arriv. Type		3		3	3					3	3	i
Unit Ext.		3.0		3.0	3.0		İ			3.0	3.0	į
I Factor		1.00	0	j	1.00	0	İ			İ	1.000	o j
Lost Time		2.0		2.0	2.0		ĺ			2.0	2.0	į
Ext of g		2.0		2.0	2.0		ĺ			2.0	2.0	į
Ped Min g		4.0					İ	3.5			4.3	į

Analyst: NS

Agency: STV Incorporated

Inter.: 29th St and 1st Ave Area Type: CBD or Similar

Intersection LOS = C

Jurisd:

Date: 12/09/08 Period: 7:45 - 8:45 AM

Year : 2012 No Build

Project ID: Former Bellevue Psych Building Redevelopment

E/W St: 29th Street

N/S St: First Avenue

			,;J _	GIAMIT	~.		CTION	CITELE.	***	 -				
	East	tboun	d	Wes	stbou	nd	Nor	thbou	ınd			thbo		ļ
	L	T	R	L I	T	R	L	T	R	I	,	T	R	
o. Lanes	0	0	0	0	1	0	0	4	0	_ _	0	0	0	i
GConfig	į				TR		Ì	LTF	Į.					
olume	Ì			ĺ	3	0	319	1658	3					
ane Width	i			İ	12.0		· '	10.0		1				1
TOR Vol				,		0	İ		0	į				ļ
uration	0.25	· · · · · · · · ·	Area	Type:							_			
hase Combi	nation	1	2	Si	gnal 4		ions_	5		5	7	•	8	
	ilacion	_	2	3	*	NB	Left	P		_	·			
						145	Thru							
Thru							Right							
Right		7.7				-	Peds							
Peds		X				00		Λ						
B Left		_	.,		* **	SB							***	F 1.2
Thru		P				-	Thru							
Right		P				-	Right			•				
Peds		Χ.					Peds							
NB Right						EB	Right							
BB Right						T-777								
						WB	Right		^					
		31.0				l MB	Righ	49.	0 ,					
Yellow		3.0				WB	Kign	49.0 3.0	0 ,					
rellow						WB	kign	49.0 3.0 2.0				00:		
rellow		3.0 2.0			Dow f	•		49.0 3.0 2.0 Cy		Leng	th:	90.0)	sec
Yellow All Red		3.0 2.0 Ir				orman	ce Sum	49.0 3.0 2.0 Cyo mary_	cle)	sec:
Yellow All Red Appr/ Lan	.e	3.0 2.0 Ir Ad_	j Sat	R	Perf atios	orman	ce Sum	49.0 3.0 2.0 Cy	cle	Leng Appr)	sec
Yellow All Red Appr/ Lan Lane Gro	e oup	3.0 2.0 Ir Ad Flow	j Sat w Rate	R ≘	atios	orman	ce Sum Lane	49.0 3.0 2.0 Cyomary Group	cle p	Appr	oach	<u> </u>)	sec:
Yellow All Red Appr/ Lan Lane Gro Grp Cap	.e	3.0 2.0 Ir Ad Flow	j Sat	R	atios	orman	ce Sum Lane	49.0 3.0 2.0 Cyo mary_	cle p		oach	<u> </u>		sec
Yellow All Red Appr/ Lan Lane Gro Grp Cap	e oup	3.0 2.0 Ir Ad Flow	j Sat w Rate	R ≘	atios	orman	ce Sum Lane	49.0 3.0 2.0 Cyomary Group	cle p	Appr	oach	<u> </u>		sec
Yellow All Red Appr/ Lan Lane Gro Grp Cap	e oup	3.0 2.0 Ir Ad Flow	j Sat w Rate	R ≘	atios	orman	ce Sum Lane	49.0 3.0 2.0 Cyomary Group	cle p	Appr	oach	<u> </u>		sec
Yellow All Red Appr/ Lan Lane Gro Grp Cap	e oup	3.0 2.0 Ir Ad Flow	j Sat w Rate	R ≘	atios	orman	ce Sum Lane	49.0 3.0 2.0 Cymary_ Group	cle p	Appr	oach	<u> </u>		sec
Yellow All Red Appr/ Lan Lane Gro Grp Cap Eastbound	e oup	3.0 2.0 Ir Ad Flow	j Sat w Rate	R ≘	atios	orman	ce Sum Lane	49.0 3.0 2.0 Cymary_ Group	p	Appr	oach	<u> </u>		sec
Yellow All Red Appr/ Lan Lane Gro Grp Cap Eastbound Westbound	e oup eacity	3.0 2.0 Ir Ad Flow	j Sat w Rate (s)	R ≘	atios	forman J/C	ce Sum Lane	49.0 3.0 2.0 Cymary Group	cle p D	Appr	oach	<u> </u>		sec
Yellow All Red Appr/ Lan Lane Gro Grp Cap Eastbound Westbound	e oup eacity	3.0 2.0 Ir Ad_ Flow	j Sat w Rate (s)	R / v / c	atios	forman J/C	ce Sum Lane Dela	49.0 3.0 2.0 Cymary Group	cle p D	Appr	LOS	<u> </u>		sec
Lane Gro Grp Cap Eastbound Westbound TR 43 Northbound	e oup eacity	3.0 2.0 Ir Adj Flow	j Sat w Rate (s)	0.0	atios	orman J/C	ce Sum Lane Dela	49.0 3.0 2.0 Cymary_ Group Y LOS	cle p - D	Apprelay	LOS	<u> </u>		sec
Yellow All Red Appr/ Lan Lane Gro Grp Cap Eastbound Westbound TR 43 Northbound LTR 27	e oup eacity	3.0 2.0 Ir Ad_ Flow	j Sat w Rate (s)	0.0	atios	forman J/C	ce Sum Lane Dela	49.0 3.0 2.0 Cymary Group	cle p - D	Apprelay	LOS	<u> </u>		sec
Tellow All Red Appr/ Lan Lane Gro Grp Cap Eastbound Westbound TR 43 Northbound	e oup eacity	3.0 2.0 Ir Adj Flow	j Sat w Rate (s)	0.0	atios	orman J/C	ce Sum Lane Dela	49.0 3.0 2.0 Cymary_ Group Y LOS	cle p - D	Apprelay	LOS	<u> </u>		sec

Intersection Delay = 20.7 (sec/veh)

Fax:

OPERATIONAL ANALYSIS____

Analyst:

NS

Agency/Co.:

STV Incorporated

Date Performed:

12/09/08

Analysis Time Period:

7:45 - 8:45 AM

Intersection:

29th St and 1st Ave

Area Type:

CBD or Similar

Jurisdiction:

Analysis Year:

2012 No Build

Project ID: Former Bellevue Psych Building Redevelopment E/W St: 29th Street

N/S St: First Avenue

__VOLUME DATA

	Eas	tbou	nd	l We	estbou	nd	l No	rthbo	บทศี	l Sou	thbo	und	
į	L	T	R	L	T	R	L	Т	R	L	Т	R	
Volume	A 550 c			-	3	0	319	1658	-3				
% Heavy Veh					19	19	11	11	11	İ			
PHF					0.79	0.79	0.87	0.87	0.87	İ			
PK 15 Vol					1	0	92	476	1	Ì			
Hi Ln Vol				ĺ			ĺ			İ			
% Grade				į	0		İ	0		į			
Ideal Sat				ĺ	1900		İ	1900		İ			
ParkExist				X		X	x		X	İ			
NumPark				3		3	3		3	İ			
No. Lanes	0	0	0	1 (0 1	10	. 0	4	0	0	0	0	
LGConfig				1	TR		İ	LT	R	İ			
Lane Width				İ	12.0		İ	10.0		İ			
RTOR Vol						0	İ		0	İ			
Adj Flow				İ	4		j ,	2276		ĺ			
%InSharedLn				ĺ			j			İ			
Prop LTs				İ	0.0	00	ĺ	0.1	61	İ			
Prop RTs				j. (0.000		j 0	.001	and on	Ì.			
Peds Bikes				1	5-0	0	1: 1	00	0	Ĩ o			
Buses				ĺ	0 -		İ	10 -	•	İ	•		
%InProtPhase	e			ĺ		**	İ			İ			
Duration	0.25		Area	Type	: CBD	or Sim	ilar			•			

__OPERATING PARAMETERS_

	Eas	stbou:	nd	Westbound			No:	rthbo	und	So	uthbo	und
	L	\mathbf{T}	R	L	${f T}$	R	l L	Ţ	R	L	${f T}$	R
				ļ 			_	·				
Init Unmet				0.0		0.0						
Arriv. Type					3			3		Ì		
Unit Ext.				[,	3.0		ĺ	3.0		İ		
I Factor					1.00	0	İ	1.00	0	İ		
Lost Time				ĺ	2.0		İ	2.0				
Ext of g					2.0		ĺ	2.0		Ì		
Ped Min g				İ	3.5		İ	3.9		Ì	3.2	

Analyst: NS

Inter.: 29th St and 2nd Ave

Agency: STV Incorporated

Area Type: CBD or Similar

Jurisd:

Date: 12/09/08 Period: 7:45 - 8:45 AM

Year : 2012 No Build

Project ID: Former Bellevue Psych Building Redevelopment

E/W St: 29th Street

N/S St: Second Avenue

			SI	GNALI	ZED IN	ITERS	ECTION	SUMM	ARY				
	l Eas	stbou	nd	We	stbour	ıd	ио	rthbo	und	So	uthbo	und	ļ
	L	${f T}$	R	L	T	R	L	T	R	L	${f T}$	R	
No. Lanes LGConfig Volume Lane Width RTOR Vol	0	0	0	116	1 LT 207 16.0	0	0	0	0	0	5 TR 2072 10.0	147	-

Phase Combin	nation 1	2	3	nal Or 4	ا		- 5	6 7	8	
Phase Combine EB Left Thru Right Peds	acton 1	Z	5	7	NB	Left Thru Right Peds	x			
WB Left Thru Right Peds	P P X	, «			SB	Left Thru Right Peds	P P X			
NB Right SB Right					EB WB	Right Right				
Green Yellow All Red	31. 3.0 2.0	0					49.0 3.0 2.0	Length:		

		Intersec	tion P	erforman	ce Summary		·-·
Appr/	Lane	Adj Sat	Rat	ios	Lane Group	Approach	
Lane Grp	Group Capacity	Flow Rate (s)	v/c	g/C	Delay LOS	Delay LOS	

Eastbound

Westbound |

1526 0.72 0.34 34.1 C 34.1 LT 526

Northbound

Southbound

3177 5836 0.77 0.54 17.9 B 17.9 B TR

Intersection Delay = 20.1 (sec/veh) Intersection LOS = C

Fax:

_OPERATIONAL ANALYSIS___

Analyst:

NS

Agency/Co.:

STV Incorporated

Date Performed:

12/09/08

Analysis Time Period:

7:45 - 8:45 AM

Intersection:

29th St and 2nd Ave

Area Type:

CBD or Similar

Jurisdiction:

Analysis Year: 2012 No Build

Project ID: Former Bellevue Psych Building Redevelopment E/W St: 29th Street

N/S St: Second Avenue

____VOLUME DATA

	Eas	stbo	und		We	stbour	ıd]	Nor	thbou	ınd	So	outhbo	und
	L	T		R	L	T	R	ļI	,	T	R	L	T .	R
Volume		1			116	207	-	- -				ļ	2072	147
% Heavy Veh					7	7		i				i	19	19
PHF					0.85	0.85		i				i		0.91
PK 15 Vol					34	61		i				ì	569	40
Hi Ln Vol								-				}	202	40
% Grade						0		-				ł	0	
Ideal Sat					l I	1900		-				}	1900	
ParkExist					x	1000		-		-		v	1900	
NumPark					3			-				X 3		
No. Lanes	0	0		0	ه آ	1	O	ŀ	0	0	0	3 () 5	0
LGConfig	U	U		o .	0	LT	U	į.	U	U	U	}	-	U
Lane Width					 	16.0		ļ					TR	
RTOR Vol					l i	10.0							10.0	•
					l t	200		- -				!	0.400	0
Adj Flow	•				ļ	380]				!	2439	
%InSharedLn					ļ	`0 05								
Prop LTs						0.35	8 8	ļ				ļ	0.0	00
Prop RTs					1 0	.000		ļ		+ 2 +	1.00] (0.066	•
Peds Bikes	10	00				**** **		ļ			N 4 4] :	L50.	0
Buses						.0				•	•.		0	
%InProtPhase														

Duration

0.25

Area Type: CBD or Similar

_OPERATING PARAMETERS___

	Ea	stbou	ınd .	We	stbou	nd	No	rthbo	und	Sc	uthbo	und
	L	T	, R	L	${f T}$	R	L	${f T}$	R	L	${f T}$	R
				- ļ — <u>: </u>			_			_		
Init Unmet					0.0		1			1	0.0	- 1
Arriv. Type				ŀ	3		1			ĺ	3	į
Unit Ext.					3.0		İ			İ	3.0	i
I Factor					1.00	0	j			İ	1.00	o i
Lost Time					2.0		Ì			İ	2.0	i
Ext of g					2.0		1			İ	2.0	j
Ped Min g		3.9					1			j	4.2	Ì

Analyst: NS

Southbound

Inter.: 30th St and 1st Ave

Agency: STV Incorporated

Area Type: CBD or Similar

Date: 12/09/08

Jurisd:

Period: 7:45 - 8:45 AM

Year : 2012 No Build

Project ID: Former Bellevue Psych Building Redevelopment

E/W St: 30th Street

N/S St: First Avenue

		SIC	GNALIZE		ERSE							
	Easth	ound	West	.bound		Nor	thbour	nd		thbou		ļ
	Į L T	r R	L	T I	3.	L	T	R	L	Т	R	.
No. Lanes	2	1 0	0	0 :	1	0	4	0	0	0	0	_
LGConfig	L	T			R		TR					!
Volume	378 26	51	Ì	2	0		1530 .	128				ļ
Lane Width	11.0 12	2.0	İ	12	2.0	1 :	10.0					!
RTOR Vol	İ		1 .	0		.	(0				.
Durātion	0.25	Area	Type: C									
				al Op	erat:	ions						
Phase Comb:			3	4		,	5 .	6	7		3	
EB Left	_	2			NB	Left	_					
Thru	I	•				Thru	P					
Right				ļ		Right						
Peds	2	K		ļ		Peds	X					
WB Left			•	ļ	sb	Left						
Thru	;		•	ļ	-	Thru						
Right	3	₽]		Right						
Peds	2	X		ļ		Peds	X					
NB Right					EB	Right						
SB Right				1	WB	Right						
Green		9.0					45.0					
Yellow		.0					3.0					
All Red	2	. 0					8.0					
				_				le Le	ngth:	90.0		secs
		Interse			manc							
<u></u>	ne	Adj Sat		tios		Lane	Group	Ap	proach	ı		•
		Flow Rate			-			· _ 				
Grp Ca	pacity	(s)	v/c	g/C	!	Delay	LOS	Del	ay LOS			
Eastbound			0 50	0.3		20 1	~					1.
	31	2269	0.59			29.1	C C	21	2 : C			
т 4	47	-1388	0.67	0.3	2	34.2	C	21.	2 : C			. ,
Westbound												
								21.	9 C			
	53	786	0.09	0.3	2	21.9	С					
Northbound	L											
TR 2	478	4955	0.75	0.5	0	20.2	С	20.	2 C			

Intersection Delay = 23.3 (sec/veh) Intersection LOS = C

Fax:

_OPERATIONAL ANALYSIS___

Analyst:

NS

Agency/Co.:

STV Incorporated

Date Performed:

12/09/08

Analysis Time Period:

7:45 - 8:45 AM

Intersection:

30th St and 1st Ave

Area Type:

CBD or Similar

Jurisdiction:

Analysis Year:

2012 No Build

Project ID: Former Bellevue Psych Building Redevelopment

E/W St: 30th Street

N/S St: First Avenue

_VOLUME DATA

-	Ea:	stbou	nd	We	estbo	ound	1	Noı	thbo	und	S	out	hbo	und	ı
·	L	${f T}$	R	L	\mathbf{T}	R	L	1	T	R	L		T	R	
Volume ·	378 -	261		·		20	- 		1530	128	 		. ,		
% Heavy Veh	9	9		İ		~ 62	İ		11	11	İ				i
PHF	0.87	0.87		*.	•	0.90	j		0.89	0.89	İ				i
PK 15 Vol	109	75				6 ·	İ		430	36	İ				İ
Hi Ln Vol							İ								i
% Grade		0			0		ĺ		0		İ				İ
Ideal Sat	1900	1900		1		1900	ĺ		1900		ĺ				İ
ParkExist	X		X				X			X	ĺ				İ
NumPark	3		3				3			3					İ
No. Lanes	2	1	0	() () 1	1	0	4	0	,	0	0	0	İ
LGConfig	L	${f T}$				R			TR		1				Ì
Lane Width	11.0	12.0	Ι.			12.0			10.0					*	Ì
RTOR Vol						0				0					ĺ
Adj Flow	434	300			•	22			1863						Ì
%InSharedLn				ļ											
Prop LTs		0.0	00	ļ]		0.0	00					ĺ
Prop RTs	0	.000		ļ ·		1.000		0.	.077						ĺ
Peds Bikes			٠٠٠.	ļ. 1	L50	0		1(0	0	ļ ,	•			ή,
Buses	0	0	(Fright)	ļ		0			0	-	ľ	•		** ***	ĺ
%InProtPhase							1								ĺ
Duration	0.25		Area	Туре	CBI	or Sim	ila	ır							

OPERATING PARAMETERS

	Ea	stbou	nd	We	stbou	ınd	No	rthbo	und	So	uthbo	und
	L	T	R	L	T	R	L	T	R	L	${f T}$	R
Init Unmet	0.0	0.0	-			0.0		0.0	x: 1	-		
Arriv. Type	3	3				3	İ	3		İ		į
Unit Ext.	3.0	3.0				3.0	Ì	3.0		İ		
I Factor		1.00	0		1.00	0 0	İ.	1.00	0	j	•	
Lost Time	2.0	2.0		Ì		2.0	İ	2.0		İ		j
Ext of g	2.0	2.0				2.0	İ	2.0		j		i
Ped Min g	ĺ			j	4.2			3.9		į		j

Analyst: NS

Inter.: 30th St and 2nd Ave Area Type: CBD or Similar

Agency: STV Incorporated

Jurisd:

Date: 12/09/08

Year : 2012 No Build

Period: 7:45 - 8:45 AM Project ID: Former Bellevue Psych Building Redevelopment

E/W St: 30th Street

N/S St: Second Avenue

			SI	GNALI:	ZED I	NTERSI	ECTION	SUMM	ARY			
	l Eas	stbour	nd	We	stbou	nđ	No	thbo	und	Sou	ıthbo	und
	L	T	R	L	T	R	L	T	R	L	Т	R
No. Lanes	0	1	1	0	0	0	-\ <u> </u>	0	0	0	5	0
LGConfig	İ	Ţ	R	1						383	LT 2129	
Volume Lane Width		256 13.0	89 8.0							303	10.0	1
DATE WIGGI	ł		0	1			i			İ		Ì

Dur	ation 0.	25	Area T									
				Sig	nal Or	perat	ions					
Pha	se Combinat	ion 1	2	3	4			5	6	7	. 8	
EB	Left				!	NB	Left					
	Thru	P					Thru					
	Right	P				1	Right					
	Peds	Х				1	Peds	X				
WB	Left					SB	Left	P				
	Thru	**				İ	Thru	P				
	Right					ĺ	Right					
	Peds	х				İ	Peds	X				
NB	Right					EB	Right					
SB	Right					WB	Right				•	
Gre	-	31.0				•		49.0				
	low.	3.0						3.0	•			
	. Red	2.0						2.0				
							•	Cycl	e Len	gth: 9	0.0	secs

Appr/	Lane	Adj Sat Flow Rate	Rat:	ios	Lane Group	Approach	
Lane Grp	Group Capacity	(s)	v/c	g/C	Delay LOS	Delay LOS	-
Eastbo	und						
T	494	1435	0.62	0.34	30.5 _ C	28.9 C	in the same
R	322	934	0.33	0.34	24.6 C		S
Westbo	und			••			•

Northbound

Southbound

5973 0.83 0.54 19.7 В 19.7 3252 LT

Intersection Delay = 20.9 (sec/veh) Intersection LOS = C

Fax:

OPERATIONAL ANALYSIS

Analyst:

NS

Agency/Co.:

STV Incorporated

Date Performed:

12/09/08

Analysis Time Period:

7:45 - 8:45 AM

Intersection:

30th St and 2nd Ave

Area Type:

CBD or Similar

Jurisdiction:

Analysis Year:

2012 No Build

Project ID: Former Bellevue Psych Building Redevelopment

E/W St: 30th Street

N/S St: Second Avenue

VOLUME DATA

ļ	Ea	stbou	nd	Wes	tbour	ıd	No:	rthbo	und	Son	uthbou	ınd
!	L	T	R	L	T	R	ļ L	${f T}$	R	ļ L	${f T}$	R
Volume		256	89	ļ ———			· 	('5'			2120	
			9	:						383	2129	
% Heavy Veh		9	_	1			!			15	15	
PHF			0.83				ļ			0.93	0.93	
PK 15 Vol		77	27]						103	572	
Hi Ln Vol							ĺ			İ		
% Grade		0		j			İ			i	0	
Ideal Sat		1900	1900	j			İ			i	1900	
ParkExist	Х		Х	ì			i			x		
NumPark	3		3	i			1			3		
No. Lanes		0 1	1	l o	0	0	0	0	0	٥	5	0
LGConfig	`	T	R		U	U	0	U	V	"	_	U
		_		!			1			}	LT	
Lane Width		13.0	_	ļ			!			ļ	10.0	
RTOR Vol			0	!			!					
Adj Flow		308	107								2701	
%InSharedLn										1		
Prop LTs		0.0	00	ĺ			i			İ	0.19	53
Prop RTs	i (0.000	1.000	: .			i	672.3		i . n	.000	
Peds Bikes			0		•		1 1	25	. ند	"	,	
Buses	-	0	O.	! 			1		· · · · · · · · · · · · · · · · · · ·	1	15	
%InProtPhase		J	J				1	784		ļ '	TO	
Duration	≓ רכ ח		yros i	[ann.	a:	1			1		

Duration

0.25

Area Type: CBD or Similar

____OPERATING PARAMETERS___

	Ea	stbou	.nd	We:	stbou	nd	No	rthbo	und	Sc	uthbo	und	
	L	${f T}$	R	L	T	R	L	${f T}$	R	L	T	R	j
							_			-			_
Init Unmet		0.0	0.0				1				0.0		
Arriv. Type		3	3	,			1			ĺ	3		İ
Unit Ext.		3.0	3.0				Ì			ĺ	3.0		İ
I Factor		1.00	0				İ			ĺ	1.00	0	į.
Lost Time		2.0	2.0	ĺ			İ			ŀ	2.0		İ
Ext of g		2.0	2.0	ĺ			İ			İ	2.0		i
Ped Min g		3.9					İ	4.0		İ			İ

Analyst: NS

Inter.: 34th St and 1st Ave

Agency: STV Incorporated

Area Type: All other areas

Date: 12/09/08

Jurisd:

Period: 7:45 - 8:45 AM

Year : 2012 No Build

Project ID: Former Bellevue Psych Building Redevelopment

E/W St: 34th Street

N/S St: First Avenue

			S	IGNALI	ZED I	NTERSI	ECTION	SUMM	ARY			
	Ea	stbou			stbou			rthbo		Sou	thbo	und
	L T R			Ŀ	T	R	L	T	R	L	T	R
No. Lanes	0	2	0	0	3	0	0	4	0	0	0	0
LGConfig		LT			TR		131	LT: 1182				
Volume Lane Width	97 	598 10.0		.	453 10.0	145	1131	10.5				
RTOR Vol	j			İ		0	İ		0	1		.

Dur	ation	0.25		Area T	ype:	All o	ther	areas				
					Si	gnal O	perat	ions				
Pha	se Combi	nation	1	2	3	4	1		5	6 7	8	
EB	Left		P	P			NB	Left	P			
	Thru		P	P	-			Thru	P			
	Right						Ì	Right	P			
	Peds			х			İ	Peds	X			
WB	Left						SB	Left		_		
	Thru			P		**	j	Thru			•	
	Right			P			İ	Right				
	Peds			X			Ì	Peds	X			
NB	Right						EB	Right				
SB	Right						WB	Right				
Gre	_		7.0	23.0			•		39.0			
	.low	,	3.0	3.0					3.0			
	Red		2.0	8.0					2.0			
									Cycle	Length:	90.0	secs

Appr/	Lane	Intersec Adj Sat Flow Rate	Rat		Lane G		Appro	ach		
Lane Grp	Group Capacity	(s)	v/c	g/C	Delay	LOS	Delay	LOS		
Eastbo	und									
LT	899	3034	0.93	0.39	43.7	D	43.7:	D		
Westbo	und			•					+ *	•
TR	1058	4141	0.65	0.26	33.0	С	33.0	С		
Northb	ound						•			
LTR	2347	5417	0.71	0.43	22.7	C .	22.7	С	•	
Couthh	ound				•					

Southbound

Intersection Delay = 30.4 (sec/veh) Intersection LOS = C

Fax:

_OPERATIONAL ANALYSIS__

Analyst:

NS

Agency/Co.:

STV Incorporated

Date Performed:

12/09/08

Analysis Time Period:

7:45 - 8:45 AM

Intersection:

34th St and 1st Ave

Area Type:

All other areas

Jurisdiction:

Analysis Year:

2012 No Build

Project ID: Former Bellevue Psych Building Redevelopment E/W St: 34th Street N/S St: First Aven

N/S St: First Avenue

____VOLUME DATA

	Ea:	stbour	ıd	Wes	stbour	nd	No:	rthbo	und	So	uth	bou	nd
	L	T	R	L	T	R	L	\mathbf{T}	R	L	T	•	R
Volume	97	598	-		453	145	131	1182	216				,
% Heavy Veh	10	10			6	6	13	13	13	i			
PHF	0.83	0.83			0.87	0.87	0.92	0.92	0.92	i			
PK 15 Vol Hi Ln Vol	29	180			130	42	36	321	59				
% Grade		0			0		ŀ	0		1			
Ideal Sat	1	1900			1900		i	1900		i			
ParkExist	ĺ						х	4500	X]			
NumPark	ĺ			÷			3		3				
No. Lanes	i o	2	.0 .	0	3	0	0	4	0	l 0		0	0
LGConfig	İ	${ t LT}$			TR			LT:	R			•	J
Lane Width	İ	10.0			10.0		İ	10.5		İ			
RTOR Vol	İ			İ		0	i		0				
Adj Flow	Ì	837			688		i	1662	_	i			
%InSharedLn	İ						i						
Prop LTs	İ	0.14	10	! 	0.0	00	i	0.0	85	İ			
Prop RTs	i o	.000	:	i o	.243		i o	.141					
Peds Bikes	İ			2	00	0	:		0	la 0			•.
Buses	İ	0			0		i -	0 4 =					
%InProtPhase	e 50.	0		į			į	-	ما مدمود				
Duration	0.25		Area	Fime	Δ 11 ,	other	ı arosc		•	1			

Duration 0.25

Area Type: All other areas

___OPERATING PARAMETERS_

	Eas	tbou	nd	We	stbou	nd	No	rthbo	und	So	uthbo	und	1
	L	T	R	L	T	R	L	Т	R	L	T	R	į
Init Unmet		0.0		- 	0.0		-	0.0		-			-
Arriv. Type		3		İ	3		j	3					-
Unit Ext.		3.0		j	3.0			3.0		i			i
I Factor		1.00	0		1.00	0	ĺ	1.00	0	j			İ
Lost Time		2.0			2.0			2.0		İ			j
Ext of g		2.0			2.0			2.0		Ì			j
Ped Min g					4.6		Ì	3.9		j	3.2		i

HCS+: Signalized Intersections Release 5.3

Analyst: NS

Agency: STV Incorporated

Date: 12/09/08

Period: 7:45 - 8:45 AM

E/W St: 34th Street

Inter.: 34th St and 2nd Ave Area Type: All other areas

Jurisd:

Year : 2012 No Build

Project ID: Former Bellevue Psych Building Redevelopment

N/S St: Second Avenue

			SI	GNALI	ZED II	NTERS	ECTION	SUMM	ARY			
	Eas	stbou	nd	We	stbour	nd	Non	thbo	und	So	uthbo	und
	L	${f T}$	R	L	T	R	L	T	R	L	Ţ	R
No. Lanes		2	0	-	2	0	-	0	0	- 1	5	0
LGConfig]	TR	Ŭ	Def	ьт	_	j	-		L	LT	R
Volume	İ	640	131	195	274		j			245	2344	86
Lane Width	İ	10.0		9.5	10.0		1			8.0	10.0	ļ
RTOR Vol	j		0				1			1		0

Dur	ation	0.25		Area 1							•	
					Sig	gnal O	perat	ions				
Pha	se Comb	ination	. 1	2	3	4			5	6 7	8	
EB	Left						NB	Left	•			
	Thru		P					Thru	•			
	Right		P					Right				
	Peds		X				1	Peds	X			
WB	Left		P	P			SB.	Left	P			
	Thru	•	P	P	•		1	Thru	P	F		
	Right		-					Right	P			
	Peds		X					Peds	X			
NB	Right						EB	Right				
SB	Right						WB	Right				
Gre	_		25.0	8.0					42.0			
_	low		3.0	3.0					3.0			
	Red		2.0	2.0					2.0			
									Cycle	Length:	90.0	secs

Appr/ Lane	Lane Group	Intersec Adj Sat Flow Rate	Rat		Lane (Appro	oach	_	
Grp	Capacity	(s)	v/c	g/C	Delay	LOS	Delay	LOS		
Eastbo	und									
TR	798	2761	1.05	0.29	77.6	·Ε	77.6	E	e e	
Westbo	und		٠							
DefL	286	1429	0.70	0.42	46.8	D				
T	687	1627	0.41	0.42	17.6	В	29.8	С		
Northb	ound									

Southb								
L	581	1244	0.48	0.47	16.2	В		
T/TR	3126	6699	0.88	0.47	21.8	С	21.3	C

Intersection Delay = 33.1 (sec/veh) Intersection LOS = C

Fax:

_OPERATIONAL ANALYSIS__

Analyst:

NS

Agency/Co :

STV Incorporated

Date Performed:

12/09/08

Analysis Time Period:

7:45 - 8:45 AM

Intersection:

34th St and 2nd Ave

Area Type:

All other areas

Jurisdiction:

Analysis Year:

2012 No Build

Project ID: Former Bellevue Psych Building Redevelopment E/W St: 34th Street

N/S St: Second Avenue

____VOLUME DATA

										·—·			
	Ea	stbou	nd	We:	stbour	nđ	No:	rthbou	ınd	So	uthbou	ınd	
	L	${f T}$	R	L	${f T}$	R	ļ L	${f T}$	R	L	T	R	ĺ
_				ļ			ļ			_			
Volume		640	131	195	274	•				245	2344	86	
% Heavy Veh		14	14	9	9					19	19	19	١.
PHF		0.92	0.92	0.97	0.97					0.88	0.88	0.88	İ
PK 15 Vol	*	174	36	50	71					70	666	24	İ
Hi Ln Vol							Ì			• j			İ
% Grade		0			0		İ			j	0		İ
Ideal Sat		1900		1900	1900		İ			1900	1900		İ
ParkExist				İ			Ì			İ			İ
NumPark				Ì		•	į			į			Ì
No. Lanes	0	2	0	0	2	0	j o	0	0	1	. 5	0 ·	i
LGConfig		TR		Def:	L T		İ			İЬ	LT	R	İ
Lane Width		10.0		9.5	10.0		İ			8.0	10.0		İ
RTOR Vol .			0	İ			ĺ			İ		0	ί
Adj Flow		838		201	282		İ			278	2762		İ
%InSharedLn				İ			İ			ĺО			ĺ
Prop LTs		0.0	00	1.00	0.00	00	ĺ			i .	0.0	0.0	İ
Prop RTs	0	.169		j o	.000		İ			j ö	.035	<i>)</i>	١,
Peds Bikes	2	50	0	İ			5	0 ಸ್ಪಾರ್ಡ		2	0.0	0.	İ
Buses		0		0	0.	. •	1			ÌО	0		·
%InProtPhase	e			0.0			İ	-		i.			j
Duration	0.25		Area	Type:	All d	other	areas			•			•

OPERATING PARAMETERS

	Eastbound L T R		Westbound			No	rthbo	und	So	und		
	L	T	R	L	${f T}$	R	Ĺ	${f T}$	R	L	Ţ	R
Init Unmet		0.0		-	0.0		-			-	0.0	
Arriv. Type		4		4	4		 			4	4	
Unit Ext.		3.0		3.0	3.0		i			3.0	3.0	
I Factor		1.00	0		1.00	0	i				1.00	0
Lost Time		2.0		2.0	2.0		İ			2.0	2.0	
Ext of g		3.0		2.0	2.0		1			2.0	2.0	İ
Ped Min g		4.9					1	3.5			4.6	j

HCS+: Signalized Intersections Release 5.3

Analyst: NS

Southbound

LTR

1336

Inter.: 34th St and FDR Dr SR

Agency: STV Incorporated

Area Type: All other areas

Date: 12/12/2008

Jurisd:

Period: 7:45 - 8:45 AM

AM Year : 2012 No Build
Rellevue Psych Building Redevelopment

Project ID: E/W St: 34t			Psych E	Building N/S	Redeve St: F	lopmen DR Dri	it .ve Se	rvic	e Roa	đ	
		QT/	ZMAT.TZET	INTERSE	CTTON	SIIMMAR	٧				
	1 23001	bound	West			thbour		Soi	uthbo	und	1
	L	T R	wescr		L	Т	R	L	Т	R	
No. Lanes	0	2 1	0	1 1	1		. 0	0	2	0	-
LGConfig	DefL	тR		LT R	L	${ m TR}$	ļ		$\mathbf{r}_{\mathbf{L}}$		
Volume	247	5 595	3 13	L 12	381	260 1	.1	3	1142	153	
Lane Width	10.0 1	LO.O 9.0	16	5.0 16.0	10.0	10.5			9.5		
RTOR Vol	j	. 0	İ	0	1	. ()			0	1
Duration	0.25	Area					-		<i>:</i>		
Phase Comb	instion	1 2	Signa 3	al Operat 4	ions	5	6	7	•	8	
	Illacton	P	3	NB	Left		P	·			
EB Left				115	Thru	P	P				
Thru		P			Right		P				
Right		P			Peds	. Е	X				
Peds		_		.							
WB Left		P .		SB	Left		P				
Thru		P		Į '	TILLU		P				
Right		P			Right	;	P				
Peds	•	X			Peds		. X				
NB Right				EB	Right					•	•
SB Right				WB	Right	:					
Green		22.0				13.0	40.0)			
Yellow		3.0				3.0	3.0				
All Red		2.0				2.0	2.0				
						Cyc	le Lei	ngth:	90.0) :	secs.
		Interse	ction P	erformand	e Sumn	nary				••••	
	ne oup	Adj Sat Flow Rate		ios	Lane	Group	Apj	oroac	:h		
	pacity	(s)	v/c	g/C	Delay	LOS	Dela	ay LC	S		
Eastbound											
DefL 2	276	1129	0.92	0.24	70.9	E					•
т 3	98	1627	0.01	0.24	25.8	С	71.	0 E	E		٠,
R 5	92	1333	- 1.04	0.44	71.5	, E	_				
Westbound											
LT 5	507	2076	0.06	0.24	26.3	C	26.	3 (2		
	120	1718	0.06	0.24	26.4	С					
Northbound											
	126	15 41	1.00	0.64	62.1	E					
	L060	1645	0.29	0.64	7.7	A	39.	5 I)		
11/		T033	Ų. 2J								

Intersection Delay = 55.5 (sec/veh) Intersection LOS = E

0.44

3007 1.02

55.5 E

55.5 E

Fax:

OPERATIONAL ANALYSIS

Analyst:

NS

Agency/Co.:

STV Incorporated

Date Performed:

12/12/2008

Analysis Time Period:

7:45 - 8:45 AM

Intersection:

34th St and FDR Dr SR

Area Type:

All other areas

Jurisdiction:

Analysis Year:

2012 No Build

Project ID: Former Bellevue Psych Building Redevelopment

E/W St: 34th Street

N/S St: FDR Drive Service Road

VO	T.	UME	DΔ	TΆ

•												
	Ea:	stbou	nd	We:	stbou	nđ	No:	rthbo	und	Sot	ıthbo	und
	L	${f T}$	R	L	${f T}$	R	L	T	R	L	${f T}$	R
				ļ 			<u> </u>					
Volume ·	247	5	595	3	11	12	381	260	11	3 %	1142	15.3
<pre>% Heavy Veh</pre>		9	9	0	0	- 0	9	9	9	3	3	3
PHF	0.97	0.97	0.97	0.45	0.45	0.45	0.89	0.89	0.89	0.95	0.95	0.95
PK 15 Vol	64	2	153	2	6	7	107	73	3	1	301	40
Hi Ln Vol										j		
% Grade		0			0			0		Ì	0	
Ideal Sat	1900	1900	1900		1900	1900	1900	1900		İ	1900	
ParkExist										İ		
NumPark				[ĺ		
No. Lanes	0	2	.1	[0	1	1	1	1	0	0	2	0
LGConfig	Defi	L T	R		$_{ m LT}$	R	L	TR		ĺ	LT:	R ·
Lane Width	10.0	10.0	9.0		16.0	16.0	10.0	10.5		İ	9.5	
RTOR Vol			0			0 '	ĺ		0	ĺ		0
Adj Flow	255	5	613	Ì	31	27	428	304		İ	1366	
%InSharedLn				İ			į			İ		
Prop LTs	1.00	0.0	00.	İ	0.2	2.6	1.00	0.0	00	i	0.0	02
Prop RTs	0	.000	1.000	0	.000	1.000	0	.039		0	.118	. Ji
Peds Bikes	0			5 5	0	0	2	5	Ò	5 (0	0
Buses	0	0	0-	İ	0	0	ļο	0		i	0	٠ -ي
%InProtPhase	3			Ì			0.0		0.0	İ		
Duration	0.25		Area	Type:	All	other a	areas			•		

OPERATING PARAMETERS

	Ea	stbou	nd	We	stbou	nd	No	rthbo	und	Sc	uthbo	und
	L	T	R	L	${f T}$	R	L	T	R	L	\mathbf{T}	R
Init Unmet	0.0	0.0	0.0		0.0	0.0	$-\frac{1}{0.0}$	0.0			0.0	
Arriv. Type	3	3	3	İ	3	3	[3	3		j	. 3	İ
Unit Ext.	3.0	3.0	3.0	İ	3.0	3.0	3.0	3.0		i	3.0	İ
I Factor		1.00	0	İ	1.00	0	İ	1.00	0	İ	1.00	0 أ
Lost Time	2.0	2.0	2.0	Ì	2.0	2.0	2.0	2.0		i	2.0	j
Ext of g	2.0	2.0	2.0	j .	2.0	2.0	2.0	2.0			2.0	Ì
Ped Min g		3.2			3.5		İ	3.4		j	3.5	į

Analyst: NS

Inter.: 23rd St and FDR Dr N SR

Agency: STV Incorporated

Area Type: CBD or Similar

Jurisd:

Date: 12/09/08 Period: 5:00 - 6:00 PM

Year : 2012 No Build

Project ID: Former Bellevue Psych Building Redevelopment

E/W St: 23rd Street

N/S St: FDR Drive N SR

			SI	GNALI	ZED II	NTERS	ECTION	SUMM	ARY	<u></u> -			
	Eas	stbou	nd	Wes	stbou	nd	Non	thbou	ınd	Sou	ithboi	und]
	L	T	R	L	T	R	ļ L	${f T}$	R	L	T	R	
37 T		1	1		1		_	1		-	0	0	
No. Lanes LGConfig	<u>+</u>	LT	R Ř	L	TR	U	L T	TR	Ŭ		J	•	İ
Volume	301	20	343	4	9	4	287	408	18	İ			
Lane Width	10.5	10.5	11.0	16.0	16.0		11.0	11.0		ļ			
RTOR Vol	İ		0			0			0	ļ			İ

Dur	ation 0.25		Area T								
					gnal Or	perat	ions			7	0
Pha	se Combination	1	2	3	4			5	6	,	8
EB	Left		P			NB	Left		P	P	4
	Thru		P				Thru	P	P	P	
	Right		P			ĺ	Right	P	P	P	
	Peds	X					Peds		X		
WB	Left	P	. P .			SB	Left				er er år ogge
	Thru	Ρ "	P		*** 1	[Thru				ef end wer
	Right	, P	P				Right				•
	Peds	X	x				Peds	X			
NB	Right				•	EB	Right				
SB	Right					WB	Right				
Gre	-	6.0	28.0					18.0	8.0	10.0	
_		3.0	3.0					3.0	0.0	3.0	
		2.0	2.0					2.0	0.0	2.0	
5.7.T.T	1.00							Cycl	e Leng	gth: 90.	0 secs

		Intersec	tion Pe	erforman	ce Summa	ary				
Appr/	Lane	Adj Sat Flow Rate	Rat:	ios	Lane (Group	Appr	oach		
Lane Grp	Group Capacity	(s)	v/c	g/C	Delay	LOS	Delay	LOS	_	
Eastbo	und									
L	284	914	0.79	0.31	47.9	D				•
LTR	335	1076	0.67	0.31	37.4	D.	40.3	D	<i>:</i> :-	-
R	381	-1224	0.67	0.31	36.1	D				
 	und				•••	1. C				
L	443	1841	0.01	0.43	15.0	. B				
TR	780	1799	0.02	0.43	14.6	В	14.7	В	÷	
Northb	ound									
L	365	1428	0.90	0.26	53.2	D				
TR	675	1482	0.73	0.46	26.6	С	37.3	D		

Southbound

Intersection Delay = 38.4 (sec/veh) Intersection LOS = D

Fax:

__OPERATIONAL ANALYSIS____

Analyst:

NS

Agency/Co.:

STV Incorporated

Date Performed:

12/09/08

Analysis Time Period: 5:00 - 6:00 PM
Intersection: 23rd St and FDR Dr N SR

Area Type:

CBD or Similar

Jurisdiction:

Analysis Year: 2012 No Build

Project ID: Former Bellevue Psych Building Redevelopment

E/W St: 23rd Street

N/S St: FDR Drive N SR

_____VOLUME DATA____

	Eas	stbou	nd	Wes	stbour	nd	No:	rthbo	und	Sou	thbo	und	1
	L	\mathbf{T}	R	L	T	R	L	T	R	L	T	R	Ì
Volume	301	20	343	4	9	4	287	408	-18	:	. 4	<i>:</i> .	-
% Heavy Veh	12	12	12	0	0 .	0	10	10	10	Ì			i
PHF	0.94	0.94	0.94	0.87	0.87	0.87	0.87	0.87	0.87	İ			i
PK 15 Vol	80	5	91	1	3	1	82	117	5	ĺ			ĺ
Hi Ln Vol	1						İ			ĺ			i
% Grade		0			0		ĺ	0		İ			i
Ideal Sat	1900	1900	1900	1900	1900		1900	1900		İ			j
ParkExist										į			j
NumPark										Ì			j
No. Lanes	1	1	1	1	1	0	1	1	0	0	0	0	į
LGConfig	L	$\mathbf{L}\mathbf{T}$	R R	L	TR		L	TR		İ			İ
	10.5	10.5	11.0	16.0	16.0		11.0	11.0		ĺ			Ì
RTOR Vol			0	}		0	1		0				Ì
Adj Flow	224	226	256	5	15		330	490					İ
%InSharedLn			30										
Prop LTs	!	0 0.4		1.00	0 0.0	00		0.0	00	1			ĺ
Prop RTs	!	<u>.</u> 485	1.000	0	.333		0	.043		1	·		
Peds Bikes	1	00	i.	1	0.0.	0	5	0	0 .	0	~ ~ ~		4
Buses	0	0	6	-0	0		0	0		!		7.	i i
%InProtPhase				0.0	•				0.0	1			1.
Duration	0.25		Area	Type:	CBD (or Sim	ilar						

OPERATING PARAMETERS

	Ea	stbou	nd	We	stbour	nd	No	rthbo	und	So	uthbo	und
	L	${f T}$	R	L	T	R	L	${f T}$	R	L	T	R
Init Unmet	0.0	0.0	0.0	$\frac{1}{0.0}$	0.0		$- {0.0}$	0.0		-		
Arriv. Type	3	3	3	3	3 ·		5	3		İ		į
Unit Ext.	3.0	3.0	3.0	3.0	3.0		3.0	3.0		İ		
I Factor	ļ	1.00	0	İ	1.000	0	j	1.00	0	j		j
Lost Time	2.0	2.0	2.0	2.0	2.0		0.0	2.0		Ì		
Ext of g	2.0	2.0	2.0	2.0	2.0		5.0	2.0		İ		į
Ped Min g	l	3.9		Ì	3.9		İ	3.5		j	3.2	j

HCS+: Signalized Intersections Release 5.3

Analyst: NS

Inter.: 23rd St and FDR Dr S/ Ave C

Agency: STV Incorporated

Area Type: CBD or Similar

Date: 12/09/08

Jurisd:

Period: 5:00 - 6:00 PM

Year : 2012 No Build

Project ID: Former Bellevue Psych Building Redevelopment

E/W St: 23rd Street

N/S St: FDR Drive S/ Avenue C

	 						CTION S			l ~			1
	<u>.</u>	tbound	:	West			!	hboun		1	outhbo T	und R	1
	L 	Т	R	Г	T	Ř	l L l	T	R	L	т	K.	
No. Lanes	0	0	0	1.	1	0	0	0	0) :	1 2	0	ĺ
LGConfig	j		ĺ	L	TR					L	TR		
Volume	j			4 9		4				68	260	232	- 1
Lane Width	į			16.0 1	.6.0		į			10.	0 10.5		
RTOR Vol	ĺ					0	1]		0	1
Duration	0.25	A	rea T	Type: (or Sim Operat		÷	•				_
Phase Combi	nation	1	2	3	4			5	6	-	7	8	
EB Left				•		NB	Left						
Thru			•				Thru					•	
Right						ļ	Right						
Peds		X				ļ	Peds	X					
WB Left		P				SB	Left		P				
Thru	44	P				ļ	Thru	P					
Right		· P				ļ	Right						
Peds							Peds	X					
NB Right	•					EB	Right						
SB Right						WB	Right			_			
Green		28.0						18.0	21.				
Yellow		3.0						3.0	3.0				
777 004													
All Red		2.0						10.0	2.0		. 00 (0	COCE
AII Red			terse	ction :	Perf	ormano	e Summ	Cyc			: 90.0	0	secs
Appr/ Lar		Int	Sat	Ra	Perf tios		e Summ Lane	Cycl ary	le Le			0	secs
Appr/ Lan		Ini Adj Flow		Ra	tios			Cycl ary Group	le Le Ap	ngth	ch	0	secs
Appr/ Lan Lane Gro Grp Cap	oup	Ini Adj Flow	Sat Rate	Ra:	tios	l 	Lane	Cycl ary Group	le Le Ap	ngth proa	ch	0	secs
Appr/ Lan	oup	Ini Adj Flow	Sat Rate	Ra:	tios	l 	Lane	Cycl ary Group	le Le Ap	ngth proa	ch	0	secs
Appr/ Lan Lane Gro Grp Cap	oup	Ini Adj Flow	Sat Rate	Ra:	tios	l 	Lane	Cycl ary Group	le Le Ap	ngth proa	ch	0	secs
Appr/ Lan Lane Gro Grp Cap	oup	Ini Adj Flow	Sat Rate	Ra:	tios	l 	Lane	Cycl ary Group	le Le Ap	ngth proa	ch	0	secs
Appr/ Lan Lane Gro Grp Cap	oup	Ini Adj Flow	Sat Rate	Ra v/c	g	7/C	Lane Delay	Cyc. ary Group LOS	le Le Ap	ngth proa	ch	0	secs
Appr/ Lan Lane Gro Grp Cap Eastbound	oup	Ini Adj Flow (:	Sat Rate s)	v/c 0.01	g	7/C	Lane Delay	Cyc. ary Group LOS	Ap Del	ngth proa ay L	ch		secs
Appr/ Lan Lane Gro Grp Cap Eastbound	oup pacity	Ini Adj Flow (:	Sat Rate s)	Ra v/c	g	7/C	Lane Delay	Cyc. ary Group LOS	le Le Ap	ngth proa ay L	ch		secs
Appr/ Land Lane Groger Cap Eastbound Westbound	oup pacity	Ini Adj Flow (:	Sat Rate s)	v/c 0.01	g	7/C	Lane Delay	Cyc. ary Group LOS	Ap Del	ngth proa ay L	os		secs
Appr/ Land Lane Groger Cap Eastbound Westbound L 57	oup pacity	Ini Adj Flow (:	Sat Rate s)	v/c 0.01	g	7/C	Lane Delay	Cyc. ary Group LOS	Ap Del	ngth proa ay L	os		secs
Appr/ Land Lane Groger Cap Eastbound Westbound L 57	oup pacity	Ini Adj Flow (:	Sat Rate s)	v/c 0.01	g	7/C	Delay 21.4 21.6	Cyclary	Ap Del	ngth proa ay L	os		secs
Appr/ Land Ground Cap Cap Cap Eastbound Westbound L 57 TR 57 Northbound	oup pacity	Ini Adj Flow (:	Sat Rate s)	0.01 0.03	tios g).31).31	21.4 21.6	Cyc. ary Group LOS	Ap Del	ngth proa ay L	ch OS		secs
Appr/ Land Lane Gro Cap Cap Eastbound Westbound L 57 TR 57 Northbound Southbound L 34	oup pacity 73	Int Adj Flow (:	Sat Rate s)	0.01 0.03	tios g).31).31	Delay 21.4 21.6	Cyclary	Ap Del	ngth proa ay L	os		secs

Fax:

_OPERATIONAL ANALYSIS__

Analyst:

NS

Agency/Co.:

STV Incorporated

Date Performed:

12/09/08

Analysis Time Period:

5:00 - 6:00 PM

Intersection:

23rd St and FDR Dr S/ Ave C

Area Type:

CBD or Similar

Jurisdiction:

Analysis Year:

2012 No Build

Project ID: Former Bellevue Psych Building Redevelopment E/W St: 23rd Street

N/S St: FDR Drive S/ Avenue C

__VOLUME DATA__

	_											
•	Eas	tbou	nd	We	stbou	nđ	No	rthbo	und	Sc	uthbo	und
	L	${f T}$	R .	L	${f T}$	R	L	${f T}$	R	L	T	R
	ļ —			ļ								
Volume				4	9	′4	•	•	121	68	260	232
% Heavy Veh				0	0	0.				4	4	4 [
PHF				0.87	0.87	0.87				0.89	0.89	0.89
PK 15 Vol				1	3	1				19	73	65
Hi Ln Vol	٠,								•			
% Grade					0					Ì	0	. İ
Ideal Sat				1900	1900					1900	1900	j
ParkExist	[İ
NumPark										j		ĺ
No. Lanes	0	0	0] 1	1	0	0	0	0	j 1	. 2	0
LGConfig				L	TR					L	TR	İ
Lane Width				16.0	16.0					10.0	10.5	j
RTOR Vol						0				İ		0
Adj Flow	1			5	15		Ι.			76	553	İ
%InSharedLn	1						ĺ			į		İ
Prop LTs	Ì.			İ	0.0	00	İ			İ	0.0	00
Prop RTs				0	.333		j '		7. TE	j	.472	j
Peds Bikes	10			1	00	*	5	0		j. 5	0	0 .
Buses	:		Alog e	0	0.	•	ĺ			, -	0	·,
%InProtPhase			•	ĺ			İ			j		
Duration	0.25		Area	Type:	CBD	or Sim	ilar			'		'

OPERATING PARAMETERS

	Eas	stbou	nd	We	stbou	nd	No	rthbo	und	So	uthboi	ınd
	L	\mathbf{T}	R	L	T	R	Ĺ	T	R	Ĺ	${f T}$	R
	-			<u> </u>	•		·			-		
Init Unmet				0.0	0.0					0.0	0.0	
Arriv. Type				3	3	•				3	3	Ì
Unit Ext.				3.0	3.0					3.0	3.0	į
I Factor				1	1.00	0				İ	1.00	0
Lost Time				2.0	2.0					2.0	2.0	į
Ext of g				2.0	2.0		Ì			2.0	2.0	į
Ped Min g		3.9			3.9			3.5		j	3.5	Ì

Analyst: NS

Inter.: 23rd St and 1st Ave

Agency: STV Incorporated

Area Type: CBD or Similar

Date: 12/09/08

Jurisd:

Period: 5:00 - 6:00 PM

Year : 2012 No Build

Project ID: Former Bellevue Psych Building Redevelopment

E/W St: 23rd Street

N/S St: First Avenue

	Ea:	stboun	ıd	Wes	tbou	nd	No	rthbo	und	Sou	ıthbo	und	
	L	Т	R	L	T	R	L	T	R	L	T	R	
No. Lanes LGConfig	0	2 LT	0	0	3 TR	0 .	0	4 LT:	0 R	0	0	0	_
Volume Lane Width	133	502 10.5			404 10.0	202	235	1237 10.0	163			•	
RTOR Vol				İ		0			0				ļ
Duration	0.25		Area	Type:					 .		,-		
**************************************		_ 1	2	Sig	gnaı 4	Opera	tions_	5	6	7		8	
Phase Combi	natio	пт	Z P	3	4	NB	Left	_	U	•		Ū	
Thru		P	P				Thru						

				Sig	gnal Or	erat	ions				
Pha	se Combination	1	2	3	4			5	6	7 8	
EB	Left	P	P			NB	Left	P			
	Thru	P	P				Thru	P			
	Right						Right	P			
	Peds	X					Peds.	X	•		
WB	Left					SB	Left		*		
••-	Thru	Р ; ,	I- 1				Thru	-5			•
	Right	P					Right				
	Peds	X					Peds	X			
NB	Right					EB	Right			-	
SB	Right			,		WB	Right				
Gre	-	20.0	7.0					36.0			
		3.0	3.0					3.0			
		2.0	8.0		•			8.0	-		
								Cvcle	Length	: 90.0	secs

__Intersection Performance Summary___ Ratios Lane Group Approach Lane Adj Sat Appr/ Flow Rate Group Lane Delay LOS Delay LOS g/C (s) v/c Grp Capacity Eastbound 41.0 D 41.0 D 2466 0.88 0.36 753 LT -Westbound 96.1 F 0.22 96.1 F 2983 1.09 663 TR Northbound 31.6 C 31.6 0.88 0.40 1886 4715 LTR Southbound

> Intersection Delay = 48.9 (sec/veh) Intersection LOS = D

Fax:

OPERATIONAL ANALYSIS___

Analyst:

NS

Agency/Co.:

STV Incorporated

Date Performed:

12/09/08

Analysis Time Period:

5:00 - 6:00 PM

Intersection:

23rd St and 1st Ave

Area Type:

CBD or Similar

Jurisdiction: Analysis Year:

2012 No Build .

Project ID: Former Bellevue Psych Building Redevelopment

E/W St: 23rd Street

N/S St: First Avenue

_VOLUME DATA

	Ea:	Eastbound				stbou	nd	No:	rthbo	ınd	l Sou	thbo	und	1
	L	T	R		L	T	R	L	T	R	L	${f T}$	R	Ì
Volume	<u></u> 133	502	-			404	202	235	1237	163				- .
% Heavy Veh	!	14			j. '	26	26	14	14	14	ì			\ \ '
PHF	0.96	0.96			İ	0.84		0.98	0.98		i			-
PK 15 Vol	35	131			İ	120	60	60	316	42	i			
Hi Ln Vol	ĺ				İ						Ì			1
% Grade	İ	0			ĺ	0	•	İ	0		İ			i
Ideal Sat		1900			Ì	1900		j	1900		İ			i
ParkExist			X					X		X	İ			i
NumPark			5					5		5	ĺ			j
No. Lanes	0	2	0		0	3	0	0	4	0	0	0	0	j
LGConfig	ļ	LT			ļ	TR		1	LT:	R				ĺ
Lane Width	ļ	10.5			İ	10.0		[10.0					ĺ
RTOR Vol	ļ				ļ		0			0	1			
Adj Flow	ļ	662			ļ	721		[1668]			
%InSharedLn	ļ .				ļ			!			ļ			
Prop LTs		0.2	LO		ļ _	0.0	00		0.1	44		,		
Prop RTs	!	.000			:	.333		•	.10.0		ļ			-
Peds Bikes					21		0 .	2	00:		0.			1
Buses		0			ļ	0		!	0	14E	,			ļ
%InProtPhase			_		<u> </u>			!_ `			· ~ 1			
Duration	0.25		Are	a'	Type:	CBD (or Sim	ilar į						

OPERATING PARAMETERS

	Eastbound	Eastbound			nd	No	rthbo	und	So	uthbo	und	-
	L T	R	L	${f T}$	R	L	${f T}$	R	L	T	R	İ
Init Unmet	0.0			0.0	 -		0.0		-		<u>-</u>	
Arriv. Type	3	3					.3		Ì			i
Unit Ext.	3.0		3.0		į.	3.0		j			İ	
I Factor	1.000	1		1.00	0	į	1.00	0	j			ĺ
Lost Time	2.0			2.0		İ	2.0		Ì			j
Ext of g	2.0			2.0		į	2.0		İ			İ
Ped Min g				4.6		ĺ	4.6		İ	3.2		İ

HCS+: Signalized Intersections Release 5.3

Analyst: NS

Agency: STV Incorporated

Inter.: 23rd St and 2nd Ave Area Type: CBD or Similar

Date: 12/09/08

Jurisd:

Period: 5:00 - 6:00 PM

Year : 2012 No Build

Project ID: Former Bellevue Psych Building Redevelopment
E/W St: 23rd Street
N/S St: Second Av

N/S St: Second Avenue

Signal Operations Sign				SIG	NALIZ	ED I	NTERSE	CTION S							
Config		Eas	tbour	ıd	Wes	tbou	nd	Nort		nd	•				- !
Track Trac		L	T	R	L	T	R	L	T	R	L		T	R	
Sconfig TR DefL T 233 405	o Tanos		3			2	0		0	0	- -	1	4	0	
Solume 424 129 233 405 211 1881 231 10.0 10.0 10.0 10.0		"			_		ŭ				iь	ı	TR		j
											!				.
Note				149											i
Area Type: CBD or Similar Signal Operations Signal Operation		}	10.0	^	10.0	10.0					-"	• •			i
Signal Operations Sign	TOR VOI		_		<u>.</u>			· · · · · · · · · · · · · · · · · · ·			<u> </u>				
NB	uration	0.25		Area :	Type:	CBD mal	or Sim	ilär ions							•
NB	nase Combi	nation	n 1	2					5	6		.7		8	
Thru Right P Peds X SB Left P Thru SC SC SC							NB	Left							
Right P Peds X Peds X SB Left P Thru P Right Peds X SB Left P Thru P Right Peds X SB Right Peds X SB Right SB Right WB Right WB Right Peds X SB Right SB Right SB Right SC 2.0 Cycle Length: 90.0 second Sc Sc Sc Sc Sc Sc Sc Sc Sc Sc Sc Sc Sc			P				ĺ	Thru							
Peds X B Left P Thru P Thru P Right Peds X B Right B Right Feds X B Right B Right Freen 35.0 Cycle Length: 90.0 sec Intersection Performance Summary DPT/ Lane Adj Sat Ratios Lane Group Approach ane Group Flow Rate Trp Capacity (s) V/c g/c Delay LOS astbound R 1312 3374 0.45 0.39 21.5 C 21.5 C Sestbound Set Sat Sat Sat Sat Sat Sat Sat Sat Sat Sa								Right							
SB Left P	_	•					i	_							
Thru P Right Peds X Ped					•		SB								
Right Peds X B Right B Right Freen 35.0 45.0 Ellow 3.0 Ellow 3.0 Ellow 2.0 Ellow 2.0 Ellow Adj Sat Ratios Lane Group Approach ane Group Flow Rate rp Capacity (s) V/c g/c Delay LOS astbound R 1312 3374 0.45 0.39 21.5 C 21.5 C Eestbound EefL 233 598 1.08 0.39 108.5 F S12 1317 0.85 0.39 41.2 D 65.8 E Forthbound Fouthbound Fouthbound Fouthbound Fight P Peds X EB Right WB Right Right Recen WB Right Recen WB Right Recen WB Right Recen WB Right Recen WB Right Recen WB Right Recen WB Right Recen WB Right Recen WB Right Recen WB Right Recen WB Right Recen WB Right Recen WB Right Recen WB Right Recen WB Recen Recen WB Recen Recen WB Recen Recen WB Recen Recen WB Recen Recen WB Recen Recen WB Recen Recen WB Recen Recen WB Recen Recen WB Recen Recen WB Recen Recen WB Recen Recen WB Recen Recen WB Recen Recen WB Recen Recen WB Recen Recen WB R							- 1 ·								
Peds X B Right B Right Creen 35.0 Creen 35.0 Cycle Length: 90.0 second and a second a secon			T.				- 1								
EB Right Rig			v												
B Right reen 35.0 ellow 3.0 11 Red 2.0 Intersection Performance Summary ppr/ Lane Adj Sat Ratios Lane Group Approach ane Group Flow Rate rp Capacity (s) v/c g/c Delay LOS astbound R 1312 3374 0.45 0.39 21.5 C 21.5 C estbound efL 233 598 1.08 0.39 108.5 F 512 1317 0.85 0.39 41.2 D 65.8 E forthbound fouthbound fouthbound fouthbound fouthbound fouthbound			Λ				FB								
Treem 35.0 45.0 3.0 3.0 11 Red 2.0 2.0 Cycle Length: 90.0 second performance Summary ppr/ Lane Adj Sat Ratios Lane Group Approach ane Group Flow Rate pro Capacity (s) v/c g/c Delay LOS Delay LOS astbound R 1312 3374 0.45 0.39 21.5 C 21.5 C estbound eff 233 598 1.08 0.39 108.5 F 512 1317 0.85 0.39 41.2 D 65.8 E corthbound outhbound 600 1199 0.35 0.50 15.3 B		•					!	_							
## 1312 3374 0.45 0.39 108.5 F 512 1317 0.85 0.39 41.2 D 65.8 E 600 1199 0.35 0.50 15.3 B 600 1199 0.35 0.50 15.3 B 600 1199 0.35 0.50 15.3 B 600 600 1199 0.35 0.50 15.3 B 600 60	B Right						[TATE	Diaht							
2.0 Cycle Length: 90.0 section Performance Summary ppr/ Lane Adj Sat Ratios Lane Group Approach ane Group Flow Rate rp Capacity (s) v/c g/C Delay LOS Delay LOS astbound R 1312 3374 0.45 0.39 21.5 C 21.5 C estbound efL 233 598 1.08 0.39 108.5 F 512 1317 0.85 0.39 41.2 D 65.8 E forthbound fouthbound fouthbound fouthbound fouthbound fouthbound	_		0.5.0				WB	Right		,					
The control of the	reen						WB	Right	45.0)					
Intersection Performance Summary	reen ellow		3.0				WB	Right	45.0 3.0)					
### Park Figure F	reen ellow		3.0				WB	Right	45.0 3.0 2.0		ongt	-h -	00 (,	506
ane Group Flow Rate rp Capacity (s) v/c g/C Delay LOS Delay LOS astbound R 1312 3374 0.45 0.39 21.5 C 21.5 C estbound efL 233 598 1.08 0.39 108.5 F 512 1317 0.85 0.39 41.2 D 65.8 E forthbound Southbound Gouthbound Gouthbound Southbound Southbound Gouthbound	reen ellow		3.0 2.0		ction	Perf	·		45.0 3.0 2.0 Cyc		engt	:h:	90.0)	sec
rp Capacity (s) v/c g/C Delay LOS Delay LOS astbound R 1312 3374 0.45 0.39 21.5 C 21.5 C estbound efL 233 598 1.08 0.39 108.5 F 512 1317 0.85 0.39 41.2 D 65.8 E forthbound southbound southbound southbound southbound southbound southbound	reen Tellow	e	3.0 2.0 I	nterse			ormano	ce Summ	45.0 3.0 2.0 Cyo ary_	cle I)	sec
R 1312 3374 0.45 0.39 21.5 C 21.5 C Sestbound	reen Tellow All Red		3.0 2.0 Ad	nterse j Sat	Ra		ormano	ce Summ	45.0 3.0 2.0 Cyo ary_	cle I)	sec
Sestbound	reen ellow ll Red ppr/ Lan ane Gro	up	3.0 2.0 Ad Flo	nterse j Sat w Rate	Ra	atios ———	cormanc	ce Summ Lane	45.0 3.0 2.0 Cyo ary_ Group	cle I	ppro	oac!	h ——)	sec
Sestbound	reen ellow ll Red ppr/ Lan ane Gro	up	3.0 2.0 Ad Flo	nterse j Sat w Rate	Ra	atios ———	cormanc	ce Summ Lane	45.0 3.0 2.0 Cyo ary_ Group	cle I	ppro	oac!	h ——)	sec
efL 233 598 1.08 0.39 108.5 F 512 1317 0.85 0.39 41.2 D 65.8 E 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6	reen ellow ll Red ppr/ Lan ane Gro	oup eacity	3.0 2.0 I Ad Flo	nterse j Sat w Rate (s)	v/c	atios G	Formanc s g/C	ce Summ Lane Delay	45.0 3.0 2.0 Cycary_ Group	o A	ppro	LO	h ——) 	sec
512 1317 0.85 0.39 41.2 D 65.8 E forthbound fouthbound 600 1199 0.35 0.50 15.3 B	reen ellow ll Red ppr/ Lan ane Gro rp Cap astbound	oup eacity	3.0 2.0 I Ad Flo	nterse j Sat w Rate (s)	v/c	atios G	Formanc s g/C	ce Summ Lane Delay	45.0 3.0 2.0 Cycary_ Group	o A	ppro	LO	h ——)	sec
orthbound Southbound 600 1199 0.35 0.50 15.3 B	reen ellow ll Red ppr/ Lan ane Gro crp Cap astbound R 13	oup oacity	3.0 2.0 I Ad Flo	nterse j Sat w Rate (s)	v/c 0.4	atios c	Formanc g/C	ce Summ Lane Delay	45.0 3.0 2.0 Cyc ary_ Group LOS	o A	ppro	LO	h ——)	sec
Southbound 600 1199 0.35 0.50 15.3 B	reen ellow ll Red ppr/ Lan ane Gro rp Cap astbound R 13 Westbound DefL 23	oup eacity 312	3.0 2.0 Ad Flo	nterse j Sat w Rate (s)	0.4	atios G	Formance 3/C	ce Summ Lane Delay	45.0 3.0 2.0 Cyc ary_ Group LOS	p A De	lay	LO LO	n S)	sec
600 1199 0.35 0.50 15.3 B	reen ellow ll Red ppr/ Lan ane Gro rp Cap astbound R 13 estbound eff 23	oup eacity 312	3.0 2.0 Ad Flo	nterse j Sat w Rate (s)	0.4	atios G	Formance 3/C	ce Summ Lane Delay	45.0 3.0 2.0 Cyc ary_ Group LOS	p A De	lay	LO LO	n S		sec
600 1199 0.35 0.50 15.3 B	reen ellow ll Red ppr/ Lan ane Gro rp Cap astbound R 13 estbound efL 23	oup eacity 312	3.0 2.0 Ad Flo	nterse j Sat w Rate (s)	0.4	atios G	Formance 3/C	ce Summ Lane Delay	45.0 3.0 2.0 Cyc ary_ Group LOS	p A De	lay	LO LO	n S		sec
600 1199 0.35 0.50 15.3 B	reen ellow ll Red ppr/ Lan ane Gro crp Cap astbound R 13 Westbound DefL 23	oup eacity 312	3.0 2.0 Ad Flo	nterse j Sat w Rate (s)	0.4	atios G	Formance 3/C	ce Summ Lane Delay	45.0 3.0 2.0 Cyc ary_ Group LOS	p A De	lay	LO LO	n S		sec
0.00	reen ellow ll Red ppr/ Lan ane Gro rp Cap astbound R 13 estbound efL 23 forthbound	oup eacity 312	3.0 2.0 Ad Flo	nterse j Sat w Rate (s)	0.4	atios G	Formance 3/C	ce Summ Lane Delay	45.0 3.0 2.0 Cyc ary_ Group LOS	p A De	lay	LO LO	n S		sec
R 2564 5127 0.83 0.50 22.6 C 21.9 C	reen ellow ll Red ppr/ Lan ane Gro rp Cap astbound R 13 estbound efL 23 forthbound Southbound	oup pacity 312 33 2	3.0 2.0 Ad Flo	nterse j Sat w Rate (s)	0.4 1.0 0.8	5 (8 (5 (5 (5 (5 (5 (5 (5 (5 (5 (5 (5 (5 (5	0.39 0.39	Delay 21.5 108.5 41.2	45.0 3.0 2.0 Cyc ary_ Group LOS	p A De	lay	LO LO	n S		sec
	reen ellow ll Red ppr/ Lan ane Gro rp Cap astbound R 13 estbound efL 23 forthbound Southbound	oup pacity 312 33 2	3.0 2.0 Ad Flo	nterse j Sat w Rate (s) 74	0.4 1.0 0.8	atios 5 (8 (5 (0.39 0.39	Delay 21.5 108.5 41.2	45.0 3.0 2.0 Cyc ary_ Group LOS C	cle I De	lay	LO	5 5		sec

Fax:

__OPERATIONAL ANALYSIS__

Analyst:

NS

Agency/Co.:

STV Incorporated

Date Performed:

12/09/08

Analysis Time Period:

5:00 - 6:00 PM

Intersection:

23rd St and 2nd Ave

Area Type:

CBD or Similar

Jurisdiction:

Analysis Year:

2012 No Build

Project ID: Former Bellevue Psych Building Redevelopment

E/W St: 23rd Street

N/S St: Second Avenue

__VOLUME DATA

	Eas	tbour	nd	Wes	tbour	nđ	No:	rthbou	ınd	Soi	ıthboı	ınd [
	L	T	R	L	T	R	L	T	R	L	T	R
Volume		424	12.9	233	405			<u> </u>		211	1881	231
% Heavy Veh		17	17	6	6					7	7	7
PHF		0.93	0.93	0.93						0.99	•	· !
PK 15 Vol	:	114	35	63	109					53	475	58
Hi Ln Vol												
% Grade	(0			0					į	0	
Ideal Sat	:	1900		1900	1900					1900	1900	i
ParkExist						X				x		x
NumPark						5				0		0 -
No. Lanes	0	3	0	0	2	0	0	0	0	1	4	o j
LGConfig		TR		DefI	T					L	TR	į
Lane Width	:	10.0		10.0	10.0					10.0	10.0	į
RTOR Vol			0							İ		0
Adj Flow	!	595		251	435					213	2133	į
%InSharedLn										İ		j
Prop LTs		0.00		1.000	0.0	00				Ì	0.00	j oc
Prop RTs	0.3	234		0.	.000	1.5			•	0-0	.109	j
Peds Bikes	25	0. (כ				1	00	77 17 75 4	2	00. (o. j
Buses	':	11		0	0			with the same	± .	0	0	· [
%InProtPhase								·		1		j
Duration	0.25		Area 5	Type:	CBD (or Sim	ilar					•

OPERATING PARAMETERS

	Ea	stbou	nd	We	stbou	nd	No	rthbo	und	So	utḥbo	und
	L	Т	R	L	${f T}$	R	L	${f T}$	R	L	T	R
Init Unmet		0.0		$-\frac{1}{0.0}$	0.0		-			$- {0.0}$	0.0	
Arriv. Type	į	3		3	3		j			3	3	
Unit Ext.		3.0		3.0	3.0		İ			3.0	3.0	
I Factor		1.00	0		1.00	0				İ	1.00	0
Lost Time		2.0		2.0	2.0					2.0	2.0	
Ext of g		2.0		2.0	2.0					2.0	2.0	
Ped Min g		4.9					j	3.9		j	4.6	

Analyst: NS

Inter.: 29th St and 1st Ave

Agency: STV Incorporated

Area Type: CBD or Similar

Date: 12/09/08

Jurisd:

Period: 5:00 - 6:00 PM

Year : 2012 No Build

Project ID: Former Bellevue Psych Building Redevelopment

E/W St: 29th Street

N/S St: First Avenue

CTCNIAI TOWN	ていかかり ひをつかて へい	V C A MINITE

	Eas	tbou	nd	Westboun	đ	North	oound	Sou	ıthbo	und
	L T R				R	L T	R	L	T	R
No. Lanes		0	0	0 1	0	-	1 0	0	0	0
LGConfig				TR		j :	LTR			
Volume	İ			3	0	255 163	24 3			
Lane Width	İ			12.0		10	. 0	,		
RTOR Vol	İ			, ,	.0		0			

Dur	ation	0.25		Area	Type:	CBD 01	: Sim	ilar				25 E)
						nal Or						
Pha	se Combin	nation	1	2 ·	3	4			5	6 7	8	•
EB	Left					1	NB	Left	P			
	Thru							Thru	P			
	Right					į		Right	P			
	Peds		Х					Peds	X			
WB	Left						SB	Left				
,,_	Thru		P				İ	Thru				•
	Right		P				į	Right				
	Peds		X				ĺ	Peds	X			
NB	Right						EB	Right				
SB	Right						WB	Right				
Gre	_		31.0				•		49.0			
	low		3.0						3.0			
	Red		2.0						2.0			
					•				Cycle	Length:	90.0	secs

•		Intersec	tion P	erforman	ce Summary	
Appr/	Lane Group	Adj Sat Flow Rate	Rat	ios	Lane Group	Approach
Lane Grp	Capacity	(s)	v/c	g/C	Delay LOS	Delay LOS

Eastbound

Westbound	•	nu#k					4	
TR	470	1365	0.01	0.34	19.4	В.	19.4	В
Northbou	nd			,				
LTR	2805	5152	0.70	0.54	16.6	В	16.6	В

Southbound

Intersection Delay = 16.6 (sec/veh) Intersection LOS = B

Fax:

_OPERATIONAL ANALYSIS____

Analyst:

NS

Agency/Co.:

STV Incorporated

Date Performed:

12/09/08

Analysis Time Period:

5:00 - 6:00 PM

Intersection:

29th St and 1st Ave

Area Type:

CBD or Similar

Jurisdiction:

Analysis Year:

2012 No Build

Project ID: Former Bellevue Psych Building Redevelopment E/W St: 29th Street

N/S St: First Avenue

____VOLUME DATA_

	Eas	tbou	nd	₩e	estbou	nd	No:	rthbo	und	Soi	ıthbo	und
	L	T	R	L	${f T}$	R	L	Т	R	L	T	R
Volume		·		·	3	0	255	1624	3	 		
% Heavy Veh				Ì	9	9	7	7	7	İ		
PHF'				Ì	0.92	0.92	0.96	0.96	0.96	į ·		
PK 15 Vol Hi Ln Vol					1	0	66	423	1			
% Grade					0			0				
Ideal Sat				1	1900	,	İ	1900				
ParkExist				X		X	X		X	İ		
NumPark				3		3	3		3			
No. Lanes	0	0	0	() 1	0	0	4	0	0	0	0
LGConfig				1	TR			LT:	R	İ		
Lane Width			•		12.0		1	10.0		İ		
RTOR Vol						0			0	Ì		
Adj Flow				1	3		j	1961		ĺ		
%InSharedLn							İ			ĺ		
Prop LTs				1	0.0	00	į,	0.1	36	İ		
Prop RTs	İ			1 9	0.000		0	.002		i .		
Peds Bikes	}			9		0	1	0.027	0 .	j o	-	
Buses	[0			10		İ		
%InProtPhase	е						İ			j		
Duration	0.25		Area	Type:	CBD	or Sim	ilar					

____OPERATING PARAMETERS_

	Eas	stbou	nd	We	stbou	nd	No	rthbo	und	So	uthbo	unđ	- [
	r	${f T}$	R	L	T	R	L	${f T}$	R	L	${f T}$	R	Ì
				ļ			·			ļ			_
Init Unmet					0.0			0.0					
Arriv. Type					3			3					İ
Unit Ext.				1	3.0		İ	3.0		İ			i
I Factor]	1.00)		1.00	0	İ			İ
Lost Time]	2.0		1	2.0		İ			j
Ext of g]	2.0		İ	2.0		İ			i
Ped Min g]	3.5		1	3.9		İ	3.2		j

HCS+: Signalized Intersections Release 5.3

Analyst: NS

Inter.: 29th St and 2nd Ave

Agency: STV Incorporated

Area Type: CBD or Similar

Date: 12/09/08

Jurisd:

Period: 5:00 - 6:00 PM

Year : 2012 No Build

Project ID: Former Bellevue Psych Building Redevelopment

E/W St: 29th Street

N/S St: Second Avenue

			IGNALIZEI								
		tbound	1	oound	•	thboun	:		thbo		
	ļ'L	T R	L 7	r R	L	T	R	L	Т	R	
lo. Lanes		0 0	- 0	1 0	0.	0	0	0	5	0	_
GConfig				LT	i		į		TR		ĺ
/olume	ì		76 18	32	İ	•	ĺ		2157	217	-
Lane Width	1		1	5.0	İ		İ		10.0		İ
RTOR Vol										0	ĺ
Duration	0.25	Area	Type: CI	BD or Si	milar				p =		
				al Opera	tions						
Phase Combi	nation	1 2	3	4	T ~ £ 4	5	6	7		8	
EB Left			•	NB							
Thru				ļ	Thru	•					
Right					Right						
Peds		X		ļ	Peds	X					
WB Left		P		SB							
Thru		P · `			Thru	P				•	
Right				ļ	Right						
Peds		X		i	Peds	X					
NB Right				EB	Right						
_											
SB Right				WB			-				
SB Right Green		31.0		WB		49.0	-				
Green				WE							
Green Yellow		3.0		WB		49.0					
Green Yellow		3.0		•	Right	49.0 3.0 2.0 Cyc	le Leng	ŋth:	90.0		secs
Green Yellow All Red		3.0 2.0 Inters	ection P	erforman	Right	49.0 3.0 2.0 Cyc.					secs
Green Yellow All Red Appr/ Lar	ne	3.0 2.0 Inters Adj Sat	Rat	erforman	Right	49.0 3.0 2.0 Cyc					secs
Green Yellow All Red Appr/ Lan Lane Gro	ne oup	3.0 2.0 Inters Adj Sat Flow Rat	Rat e	erforman ios	Right Ice Summ Lane	49.0 3.0 2.0 Cyc. ary Group	Appr	roacl	h 		secs
Green Yellow All Red Appr/ Lan Lane Gro	ne	3.0 2.0 Inters Adj Sat	Rat	erforman ios	Right	49.0 3.0 2.0 Cyc. ary Group		roacl	h 		secs
Green Yellow All Red Appr/ Lan Lane Gro	ne oup	3.0 2.0 Inters Adj Sat Flow Rat	Rat e	erforman ios	Right Ice Summ Lane	49.0 3.0 2.0 Cyc. ary Group	Appr	roacl	h 		secs
Green Yellow All Red Appr/ Lan Lane Gro Grp Can	ne oup	3.0 2.0 Inters Adj Sat Flow Rat	Rat e	erforman ios	Right Ice Summ Lane	49.0 3.0 2.0 Cyc. ary Group	Appr	roacl	h 		secs
Green Yellow All Red Appr/ Lan Lane Gro Grp Can	ne oup	3.0 2.0 Inters Adj Sat Flow Rat	Rat e	erforman ios	Right Ice Summ Lane	49.0 3.0 2.0 Cyc. ary Group	Appr	roacl	h 		secs
Green Yellow All Red Appr/ Lan Lane Gro Grp Can Eastbound	ne oup oacity	3.0 2.0 Inters Adj Sat Flow Rat	Rat e	erforman ios g/C	Right Lane Delay	49.0 3.0 2.0 Cyc. ary Group	Appr	LO:	h S		secs
Green Yellow All Red Appr/ Lan Lane Gro Grp Can Eastbound Westbound	ne oup oacity	3.0 2.0 Inters Adj Sat Flow Rat (s)	Rat e v/c	erforman ios g/C	Right Lane Delay	49.0 3.0 2.0 Cyc. ary Group	Appr	LO:	h S		
Green Yellow All Red Appr/ Lan Lane Gro Grp Can Eastbound	ne oup oacity	3.0 2.0 Inters Adj Sat Flow Rat (s)	Rat e v/c	erforman ios g/C	Right Lane Delay	49.0 3.0 2.0 Cyclary Group LOS	Appr	LO:	h S	•	
Green Yellow All Red Appr/ Lan Lane Gro Grp Can Eastbound Westbound LT 51 Northbound	ne oup oacity	3.0 2.0 Inters Adj Sat Flow Rat (s)	Rat e v/c	erforman ios g/C	Right Lane Delay	49.0 3.0 2.0 Cyclary Group LOS	Appr	LO:	h S	,	secs

Intersection Delay = 17.6 (sec/veh) Intersection LOS = B

Fax:

_OPERATIONAL ANALYSIS___

Analyst:

NS

Agency/Co.:

STV Incorporated

Date Performed:

12/09/08

Analysis Time Period:

5:00 - 6:00 PM

Intersection:

29th St and 2nd Ave

Area Type:

CBD or Similar

Jurisdiction:

Analysis Year:

2012 No Build

Project ID: Former Bellevue Psych Building Redevelopment E/W St: 29th Street

N/S St: Second Avenue

East	bour	_									
τ .		ıd	Wes	stbour	nd	Nor	thbo	und	l so	outhbo	und
п	T	R	L	T	R	L	Т	R	L	T	R
,			76 6 0.92 21	182 6 0.92 49 0 1900					,	6 0.94 574 0	6 0.94 58
0	0	. 0	X 5 0	1 LT 16.0	X 5 0	0	0	0	X 5	0 5 TR 10.0	0
				0.29 .000 0				·	· ·	0.0 0.091	
	0	0 0	0 0 0	76 6 0.92 21 0 0 0 0	76 182 6 6 0.92 0.92 21 49 0 1900 X 5 0 0 1 LT 16.0 281 0.29 0.000	76 182 6 6 0.92 0.92 21 49 0 1900 X X 5 5 0 0 1 0 LT 16.0 281 0.295 0.000 0	76 182 6 6 0.92 0.92 21 49 0 1900 X X 5 5 0 0 1 0 LT 16.0 281 0.295 0.000 0	76 182 6 6 0.92 0.92 21 49 0 1900 X X 5 5 0 0 1 0 0 0 LT 16.0 281 0.295 0.000 0	76 182 6 6 0.92 0.92 21 49 0 1900 X X 5 5 0 0 1 0 0 0 0 LT 16.0 281 0.295 0.000	76 182 6 6 0.92 0.92 21 49 0 1900 X	76 182 6 6 0.92 0.92 21 49

___OPERATING PARAMETERS__

	Ea	stbou	nd	We	stbou	nd	No	rthbo	und	Sc	uthbo	unđ	Ī
	L	${f T}$	R	L	T	R	L	Т	R	L	${f T}$	R	ļ
Init Unmet					0.0		-			-	0.0		
Arriv. Type					3		1				3		İ
Unit Ext.					3.0						3.0		İ
I Factor					1.00	0				ĺ	1.00	0	İ
Lost Time					2.0					İ	2.0		İ
Ext of g					2.0					ĺ	2.0		İ
Ped Min g		3.9								ĺ	3.5		İ

HCS+: Signalized Intersections Release 5.3

Analyst: NS

Inter.: 30th St and 1st Ave
Area Type: CBD or Similar

Agency: STV Incorporated Date: 12/09/08

Jurisd:

Period: 5:00 - 6:00 PM

Year : 2012 No Build

Project ID: Former Bellevue Psych Building Redevelopment

E/W St: 30th Street

N/S St: First Avenue

SIGNALIZED INTERSECTION SUMMARY_

	Eas	stbour	nd	We	stbou	nd	No	thbo	und	Sou	ıthbo	und
	L	T	R	L	T	R	L	T	R	L	T	R
No. Lanes	2	1	0	0	0	1	1 0	4	0	- - 0	0	0
LGConfig	L ~	$ar{ extbf{T}}$				R	ĺ	TR		İ		
Volume	375	272		İ		46	1	1545	79	1	•	
Lane Width	11.0	12.0		İ		12.0	ĺ	10.0		ĺ		
RTOR Vol				į .		0	İ		0	j		

Dur	ation 0.25		Area		CBD or				·		
				Si	gnal Op	perat	ions				
Pha	se Combination	1	2	3	4			5	6 7	8	3
EΒ	Left	P				NB	Left				
	Thru	P				1	Thru	P			
	Right						Right	P			
	Peds	Х					Peds	X			
WB	Left					SB	Left				
	Thru		in An 🖚		τ,	j	Thru				
	Right	Ρ				Ì	Right				
	Peds	X				Ì	Peds	X			
NΒ	Right			*		EB	Right				
SB	Right					WB	Right				
Gre		29.0)			•		45.0			
		3.0						3.0			
		2.0			•			8.0			
							•	Cycle	Length:	90.0	secs

		Intersec	tion Pe	erforman	.ce Summary		
Appr/ Lane	Lane Group	Adj Sat Flow Rate	Rat	ios	Lane Group) Approa	ach
Grp	Capacity	(s)	v/c	g/C	Delay LOS	Delay I	os
Eastbo	und						
L	725	2250	0.55	0.32	28.1 C		
T	469 .	-1455	0.62	0.32	31.8 C	29.6	C
· • • • • • • • • • • • • • • • • • • •							
Westbo	und				24.05		
						22.7	C
R	334	1038	0.15	0.32	22.7 C		
Northb	ound						
TR	2589	5178	0.65	0.50	18.0 B	18.0	В
IK	2505	32,0					
	_						

Southbound

Intersection Delay = 21.4 (sec/veh) Intersection LOS = C

Fax:

_OPERATIONAL ANALYSIS____

Analyst:

NS

Agency/Co.:

STV Incorporated

Date Performed:

12/09/08

Analysis Time Period:

5:00 - 6:00 PM

Intersection:

30th St and 1st Ave

Area Type:

CBD or Similar

Jurisdiction:

Analysis Year:

2012 No Build

Project ID: Former Bellevue Psych Building Redevelopment

N/S St: First Avenue

E/W St: 30th Street

____VOLUME DATA___

!	Eas	stbou	nd	W∈	stb	oun	ıd	l	Nor	thbo	und	Sou	ıthk	ou	nd	1
	L	Т	R	L	T		R	ļ		Т	R	L	\mathbf{T}		R	
Volume	375	272	· ·	l ——			46			1545	79	12.				-
% Heavy Veh	4	4		İ			16	i		7	7	İ				i
PHF	0.94	0.94		ĺ			0.90	İ		0.96	0.96	İ				i
PK 15 Vol	100	72		Ì ·			13	İ		402	21	i				i
Hi Ln Vol				į ·				İ								i
% Grade	Ì	0		İ	0			j		0						i
Ideal Sat	1900	1900		j			1900	İ		1900	l	İ				İ
ParkExist	X		X	Ì				X			X	İ				i
NumPark	3		3	ĺ				3			3					İ
No. Lanes	2	1	0	jo)	0	1	İ	0	4	0	0	()	0	i
LGConfig	L	${f T}$		ĺ			R	İ		TR		Ì				i
Lane Width	11.0	12.0		İ			12.0	İ		10.0	ł	İ				i
RTOR Vol	ĺ			1			0	İ			0	İ				i
Adj Flow	399	289					51	İ		1691	,	İ				i
%InSharedLn								ĺ				İ				i
Prop LTs		0.0	00					Ì		0.0	00	j .				ĺ
Prop RTs	0	.000				1	000	Ì	0.	048.	,	İ				İ
Peds Bikes	ĺ			2	00	0)	Ì	10	0 .	. 0	j				İ
Buses	0	0		l a			0	j		0		. i				
%InProtPhase	e .							ĺ				İ				İ
Duration	0.25		Area	Type:	CB:	D c	r Sim	ila	ır			•				,

__OPERATING PARAMETERS_

	Ea	stbou	nd	Westbound				rthbo	und	So	und	
	L	T	R	L	${f T}$	R	L	T	R	L	${f T}$	R
Init Unmet	0.0	0.0		.		0.0	<u> </u>	0.0				
Arriv. Type	3	3		İ		3	İ	3		•		
Unit Ext.	3.0	3.0		İ		3.0	İ	3.0		j		
I Factor		1.00	0		1.00	0	ĺ	1.00	0	j ·		İ
Lost Time	2.0	2.0				2.0	İ	2.0		j		
Ext of g	2.0	2.0		ĺ		2.0	j	2.0		i		
Ped Min g					4.6		j	3.9		İ		j

Analyst: NS

Inter.: 30th St and 2nd Ave Area Type: CBD or Similar

Agency: STV Incorporated

Jurisd:

Date: 12/08/09 Period: 5:00 - 6:00 PM

Year : 2012 No Build

Project ID: Former Bellevue Psych Building Redevelopment

E/W St: 30th Street

N/S St: Second Avenue

		-	SI	GNALI	ZED I	NTERS	ECTION	SUMM	ARY			
	Ea	stbou	nd	We	stbou	nd	No	thbo	und	So	uthbo	und
	L	T	R	L	T	R	L	T	R	L	T	R
No. Lanes	<u> </u>	1	1	<u> </u>	0	0	-\- 	0	0	- -	5	0
LGConfig	}	Ť	R		Ū	Ū		-		i	LT	į
Volume	i	254	146	i			i			393	2227	ļ
Lane Width		13.0	8.0				İ			Ì	10.0	ļ
RTOR Vol	İ		0 .	Ì								٠,

Dúr	ation	0.25		Area		CBD of			;				
					Si	gnal O	perat	ions					_
Pha	se Combi	.nation	1	2	3	4	ļ.		5	6	7	8	
EB	Left						NB	Left					
	Thru		P				[Thru					
	Right		P				Ì	Right					
	Peds		X				Ī	Peds	X				
WB	Left						SB	Left	.P			•	
•••	Thru	:					İ	Thru	P				
	Right						j	Right					
	Peds		Х					Peds	X				
NB	Right						EB	Right					
SB	Right						WB	Right					
Gre	_		31.0				•		49.0				
	.low		3.0						3.0				
	Red		2.0						2.0				
									Cycle	Ler	igth:	90.0	secs

Appr/	Lane	Adj Sat	Rat		ce Summary Lane Group	Approach	
Lane Group Grp Capacity		Flow Rate (s)	v/c	g/C	Delay LOS	Delay LOS	
Eastbo	und						
T R	512 318	1487 922	0.54	0.34 0.34	27.8 C 28.9 C	28.2 C	e e e e e e e e e e e e e e e e e e e
Westbo	und			~4			

Northbound

Southbound

0.79 0.54 18.4 18.4 6446 3509 LT

Intersection Delay = 19.7 (sec/veh) Intersection LOS = B

Fax:

_OPERATIONAL ANALYSIS___

Analyst:

NS

Agency/Co.:

STV Incorporated

Date Performed:

12/08/09

Analysis Time Period:

5:00 - 6:00 PM

Intersection:

30th St and 2nd Ave

Area Type:

CBD or Similar

Jurisdiction:

Analysis Year:

2012 No Build

Project ID: Former Bellevue Psych Building Redevelopment E/W St: 30th Street

N/S St: Second Avenue

__VOLUME DATA_

	Ea	stbou	nd		tbou	nd	Nor	thbo	ound	So	uthboi	ınd
	L	T	R	L	T	R	L	T	R	r	${f T}$	R
Volume.	<u>:</u> -	254	146	 			ļ. <u> </u>	•		393	2227	
% Heavy Veh	i	4	4	ì			l			6	6	
PHF	i	0.92	0.92	i		•	İ			0.94	_	
PK 15 Vol	i	69	40	j			İ			105	592	
Hi Ln Vol	İ			İ			i				332	
% Grade	i	0		Ì							0	
Ideal Sat	į .	1900	1900	İ			Ì				1900	
ParkExist	х		X	i						x	1300	
NumPark	5		5	İ						5		
No. Lanes	j () 1	1	i o	0	0	0	0	0	1 0	5	0
LGConfig	İ	T	R	i			j	-	•		LT	Ū
Lane Width	İ	13.0	8.0	İ			İ				10.0	
RTOR Vol	Ì		0	İ			İ					
Adj Flow	İ	276	159	j			j				2787	
%InSharedLn	İ			i			j					
Prop LTs	İ	0.0	00	j			İ	•, •			0.1	50
Prop RTs	(0.000	1.000	İ				•		0	.000	-
Peds Bikes	:		0	j		•	1	0				•:
Buses	j ·		0	İ			i				15	
%InProtPhase	e	·	*	İ			İ			ì		
Duration	0.2	5	Area '	Tyne:	CRD .	or Sim	lar			ı		

Area Type: CBD or Similar

__OPERATING PARAMETERS_

	Eastb	ound ·	We	stbou	nd	No	rthbo	und	Sc	uthbo	und	- 1
	L T	R	L	${f T}$	R	L	T	R	Ĺ	\mathbf{T}	R	į
T		0 0 0	ļ			- 			-			
Init Unmet	0.	0.0	1						[0.0		l
Arriv. Type	3	3							İ	3		İ
Unit Ext.	3.	0 3.0	1			Ì			İ	3.0		j
I Factor	1.	000	<u> </u> -						j	1.00	0	i
Lost Time	2.	0 2.0	ĺ			İ			İ	2.0		i
Ext of g	2.				ĺ			İ	2.0		i	
Ped Min g	4.	2	ĺ			Ì	3.9		İ			j

Analyst: NS

Inter.: 34th St and 1st Ave Area Type: All other areas

Agency: STV Incorporated

Jurisd:

Date: 12/09/08 Period: 5:00 - 6:00 PM

Year : 2012 No Build

Project ID: Former Bellevue Psych Building Redevelopment

E/W St: 34th Street

N/S St: First Avenue

•			SI	GNALI	ZED I	NTERSI	ECTION	SUMM	ARY			
 -	Ea	stbour			stbou			rthbo		Sou	uthbo	und
	L	T	R	L	T	R	L	T	R	Ь	T	R
No Inne		2	0		3	0	-\ <u></u>	4	0	- 0	0	0
No. Lanes LGConfig	"	LT	Ü		TR			LT	_		_	
Volume	103	641		Ì	495	119	163	1420	251			
Lane Width		10.0		İ	10.0		İ	10.5				
RTOR Vol	İ			į		0	1		0			

Dur	ation 0.25		Area T								•
				Si	gnal Og	perat	ions				
Pha	se Combination	1	2	3	4	İ	,	5	6 7	8	
EB	Left	P	P			NB	Left	P			
	Thru	P	P				Thru	P	•		
	Right					ĺ	Right	P			
	Peds		X		, .	İ	Peds	X			
WB	Left		•			SB	Left				
	Thru		\mathbf{P}		•	ĺ	Thru		•		***
	Right		Ρ -			j,	Right				
	Peds		х			ĺ	Peds	X			
NB	Right					EB	Right				
SB	Right					WB	Right				
Gre	-	7.0	23.0			•		39.0		•	
_		3.0	3.0					3.0			
	Red	2.0	8.0					2.0			
								Cycle	Length	: 90.0	secs

		Intersec	tion Pe	riorman							
Appr/	Lane	Adj Sat Flow Rate	Rati	os	Lane G	Froup	Appro	ach			
Lane Grp	Group Capacity	(s)	v/c	g/C	Delay	LOS	Delay	LOS	.		
Eastbo	und										
LT	785	3102	1.05	0.39	74.2	Ε	74.2	E	-	n ₂	
Westbo	und		* :								
TR	1050	4108	0.62	0.26	32.3	С	32.3	С			
Northb	ound						·				
LTR	2445	5643	0.82	0.43	25.5	С.	25.5	С			
0											

Southbound

Intersection Delay = 38.4 (sec/veh) Intersection LOS = D

Fax:

_OPERATIONAL ANALYSIS__

Analyst:

NS

Agency/Co.:

STV Incorporated

Date Performed:

12/09/08

Analysis Time Period:

5:00 - 6:00 PM

Intersection:

34th St and 1st Ave

Area Type:

All other areas

Jurisdiction:

Analysis Year:

2012 No Build

Project ID: Former Bellevue Psych Building Redevelopment

N/S St: First Avenue

E/W St: 34th Street

VOLUME DATA

	Ea:	stbour	ıđ	1	Westbou	ınd] No	rthbo	und	Sou	thbo	und	ı
	L	${f T}$	R	L	T	R	L	T	R	Ŀ	T	R	İ
Volume	 103	641	٠.	_ —	495	119	163	1420		ļ			-
% Heavy Veh	!	7		.	9	9	8	8	8				1
PHF	0.90	•		} .	0.95		1	_	0.92				-
PK 15 Vol	29	178			130	31	44	386	68	:			-
Hi Ln Vol				İ				500	••	i			-
% Grade	j	0		İ	0		i	0					
Ideal Sat	j ·	1900		İ	1900)	İ	1900		Ì			
ParkExist	j			İ			x		X	İ			i
NumPark	ĺ			ĺ			5		5	İ			İ
No. Lanes	0	2	0		0 3	0	0	4	0	0	0	0	İ
LGConfig		${f LT}$			TR	L		$_{ m LT}$	R.				ĺ
Lane Width		10.0			10.0)		10.5					İ
RTOR Vol	ļ			-		0	1		0				ĺ
Adj Flow	ļ	826		ļ	646]	1993					1
%InSharedLn	ļ												
Prop LTs		0.13	8 8	!	0.0	000	ļ	0.0	89				
Prop RTs		.000		ļ	0.193		! .	.137					
Peds Bikes	7			- !	200	0	1	00		0.	5.		
Buses	١	0			0			0: -==	<u>- 48</u>				ļ
%InProtPhase			_	1	_ = =		l		-				-
Duration	0.25		Area	Typ	e: All	other	areas			•			•

____OPERATING PARAMETERS_

•	East	bou	nd	We	stbou	nd	No	rthbo	und	So	uthbo	und	1
	L	\mathbf{T}	R	L	${f T}$	R	ļ L	Ŧ	R	L	T	R	İ
T				ļ 			-			ļ			-
Init Unmet	U	.0		ļ	0.0			0.0		i			
Arriv. Type	3				3			3					İ
Unit Ext.	3	.0			3.0	*		3.0		İ			İ
I Factor	1	.00	0 .		1.00	0	İ	1.00	0	j			İ
Lost Time	2		Ì	2.0		İ	2.0		İ			İ	
Ext of g	2			2.0		İ	2.0		İ			İ	
Ped Min g]	4.6		İ	3.9		İ	3.2		İ

HCS+: Signalized Intersections Release 5.3

Analyst: NS

Inter.: 34th St and 2nd Ave

Agency: STV Incorporated

Area Type: CBD or Similar

Date: 12/09/08

Jurisd:

Period: 5:00 - 6:00 PM

Year : 2012 No Build

Project ID: Former Bellevue Psych Building Redevelopment
E/W St: 34th Street N/S St: Second Av

N/S St: Second Avenue

E/W St: 34th	1 Street						St: Se			2			
	Eastb	ound	_SIGI 		ED II stbou		CTION S Nort	:hboun		Sou	thbo	und	
	L T			L	T	R	L		R	L	T		İ
No. Lanes	ò	2 0		0	2	0	0	0	0	1	5	0	
LGConfig	_	TR	i	DefI	T		į		İ	L	LT		ļ
Volume	52	9 12	8	174	248		j]:	379	1973		Į
Lane Width	10	.0	ĺ	9.5	10.0				Ţ	8.0	10.0		ļ
RTOR Vol		0	,				İ		i			0	·
Duration	0.25	Ar	ea T			or Sim Operat							
Phase Combin	nation 1		2	s_y	برمیر 4		10115	5	6	7		8	
EB Left	.1462011 2		-	•	-	NB	Left						
Thru	P	•				j	Thru						
Right	P	•					Right						
Peds	Х					1	Peds	X					
WB Left	P	þ	P			. SB	Left	P					
Thru	P	•	P		•		'Thru	P					
Right							Right						
Peds	X	Σ					Peds	X				•	
NB Right						EB	Right						
SB Right						WB	Right						
Green			.0					42.0 3.0					
Yellow			.0					2.0					•
All Red	2.	.∪ ∠	.0						le Len	ath:	90.0)	secs
		Inte	ersec	tion	Peri	ormano	e Summ	_					
Appr/ Lan Lane Gro		Adj S	at		atios		Lane			roac	h		
	acity	(s)		v/c	ç	J/C	Delay	LOS	Dela	y LO	S		
Eastbound										_			•
TR . 74	1	2564		1.0	2 (0.29	69.7	E	69.7	. E			
	-	:-							273		•		· 5
Westbound				0 6	0 /	0.42	45.8	D					
DefL 27		1317		0.6			17.8		29.4	1 C			
т 64	. 2	1520	•	0.4	· Z	J. 4 2	17.0	D	45.		•		
Northbound													
Southbound													
L 58	37			0.6	7 .	0.47	21.0		<u>.</u>	_			
LTR 31	42	6733		0.6	8	0.47	16.5	В	17.2	2 E	3		

Fax:

OPERATIONAL ANALYSIS

Analyst:

NS

Agency/Co.:

STV Incorporated

Date Performed:

12/09/08

Analysis Time Period:

5:00 - 6:00 PM

Intersection:

34th St and 2nd Ave

Area Type:

CBD or Similar

Jurisdiction:

Analysis Year:

2012 No Build

Project ID: Former Bellevue Psych Building Redevelopment

E/W St: 34th Street

N/S St: Second Avenue

__VOLUME DATA__

	Eas	tbour	ıd	Wes	stbour	nd	l N	ort	thbou	ınd	So	uthbo	ınd	I
	L	T	R	L	T	R	Ĺ		T	R	L	${f T}$	R	į
Volume	marks 4	529	128	 174	248		ļ 	•			379	1973	113	
% Heavy Veh		9	9	5	5		İ				6	6	6	-
PHF		0.87	0.87	0.93	0.93		İ				0.97	0.97	0.97	ľ
PK 15 Vol		152	37	47	67		İ				98	509	29	
Hi Ln Vol				į .			j							i
% Grade		0		İ	0						İ	0		
Ideal Sat		1900		1900	1900		İ				1900	1900		İ
ParkExist							į				İ			İ
NumPark							ĺ				İ			j
No. Lanes	0	2	0	0	2	0	ĺ	0	0	0	1	5	0	Ì
LGConfig		TR		Def1	L T		ĺ				L	LT	R	ĺ
Lane Width		10.0]9.5	10.0						8.0	10.0		İ
RTOR Vol			0										0	İ
Adj Flow		755		187	267		1		÷		391	2150		
%InSharedLn] 0			-:
Prop LTs		0.00	00	!	0.00	0.0	ļ] .	0.0	00	
Prop RTs	!	195		0	.000	-	ļ				0	.054	÷	.
Peds Bikes	25)	ļ _			ļ	50		6525	!	00	0 .	
Buses	l	0		0 .	0		,		~```* ¥" ₹5.		0	0		
%InProtPhase			_	0.0			<u> </u>		a View	<i>y</i> . •				+
Duration	0.25		Area '	Type:	CBD o	or Sim	ilar	•						

___OPERATING PARAMETERS_

1	Eåstbound	. W	estbound	Northbound	Southbound
	L T	R L	T R	L T R	LTR
			<u> </u>		
Init Unmet	0.0	0.0	0.0		0.0 0.0
Arriv. Type	4	4	4	•	4 4
Unit Ext.	3.0	3.0	3.0		3.0 3.0
I Factor	1.000		1.000		1.000
Lost Time	2.0	2.0	2.0		2.0 2.0
Ext of g	3.0	2.0	2.0		2.0 2.0
Ped Min g	4.9			3.5	4.6

HCS+: Signalized Intersections Release 5.3

Analyst: NS

Inter.: 34th St and FDR Dr SR

Agency: STV Incorporated

Area Type: All other areas

Date: 12/12/2008

Jurisd:

Period: 5:00 - 6:00 PM

Year : 2012 No Build

Project ID: Former Bellevue Psych Building Redevelopment

E/W St: 34th Street

N/S St: FDR Drive Service Road

			SI	GNAL:	[ZED I]	NTERSE	CTION	SUMM	ARY			
	East	tbour	nd	We	estbou	nd	No	rthboi	ınd	So	uthbo	und
	L	T	R	L	T	R	L	T	R	L	T	R
No. Lanes				ļ	<u> </u>	1		1	0	-	2	0
LGConfig	DefL	T	R		LT	R	L _	TR	_		LT:	!
Volume	326	_	562	6	9	6	452	218	6	4	1104	154
Lane Width RTOR Vol	10.0	10.0	9.0 0		16.0	16.0 0	10.0	10.5	0		9.5	0

Dur	ation	0.25		A	rea	Тур	e:	All	ot	her	areas					,	- ·
							Sig	nal	Or	erat	ions						
Pha	se Comb	ination	1		2		3	4	Į			5	6	7	8		
EB	Left		P							NB	Left	P ·	P				
	Thru		Р								Thru	P	P				
	Right		P						ĺ		Right	P	P				
	Peds										Peds		X				
WB	Left		P						 .	. SB	Left		P				
	Thru	m.	Р		-				:	-	Thru		P				• •
	Right		P								Right		P				
	Peds		Х						•	ĺ	Peds		X				
NB	Right									EB	Right	P					
SB	Right									WB	Right						
Gre	_		22.	0						•		13.0	40.0				
	low		3.0	i								3.0	3.0				
	Red		2.0									2.0	2.0				
												Cvcl	e Length	1:	90.0	(secs

		Intersec							_,	
Appr/	Lane	Adj Sat Flow Rate		os	Lane (Froup	Appro	oach		
Lane Grp		(s)	v/c	g/C	Delay	LOS	Delay	LOS	_	
Eastbo	und						· · · · · · · · · · · · · · · · · · ·		·	
DefL	304	1188		0.26	124.3					
\mathbf{T}^{+}	409	1673	0.01	0.24	25.8	C	80.0-	\mathbf{E}		
R	609	[∷] 1371	0.97	0.44	54.7	· D			e de	
Westbo	und	•					are de la companya de la companya de la companya de la companya de la companya de la companya de la companya d	**		
LT	904	3700	0.02	0.24	25.8	С	25.9	С		
R	420	1718	0.02	0.24	25.9	С				
Northb										
L	450	1487	1.08	0.66	82.2	F				
TR	1025	1591	0.23	0.64	3.6	Α	56.2	E	•	
Southb	oound		•							
LTR	1422	3200	1.02	0.44	50.2	D	50.2	D		
	Interse	ction Delay	= 60.3	(sec/v	reh) I:	nters	ection	LOS =	: E	

Fax:

_OPERATIONAL ANALYSIS__

Analyst:

NS

Agency/Co.:

STV Incorporated

Date Performed:

12/12/2008

Analysis Time Period:

5:00 - 6:00 PM

Intersection:

34th St and FDR Dr SR

Area Type:

All other areas

Jurisdiction:

Analysis Year:

2012 No Build

Project ID: Former Bellevue Psych Building Redevelopment

E/W St: 34th Street

N/S St: FDR Drive Service Road

__VOLUME DATA

	Eas	stbour	ıd	Wes	stbour	nd	No	thbo	ınd	Sou	ıthboı	ınd
	L	T	R	L	T	R	L.	T	R	L	T	R
Volume	326	·4	562	6	9	6	 452	218	6	4	1104	154
% Heavy Veh	6	6	6	0	0	0 .	13	13	13	2	2	2
PHF		0.95	0.95	0.90	0.90	0.90	0.93	0.93	0.93	į	0.87	0.87
PK 15 Vol	86	1	148	2	3	2	122	59	2	1	317	44
Hi Ln Vol				İ								
% Grade		0		Ì	0			0		İ	0	
Ideal Sat	1900	1900	1900	İ	1900	1900	1900	1900		İ	1900	İ
ParkExist						•				Ì		İ
NumPark			•	1						Ì		İ
No. Lanes	0	2	1	0	. 2	1	1	1	0	0	2	0
LGConfig	Def1	Ţ	R		LT	R	L	TR			LTI	₹ .
Lane Width	10.0	10.0	9.0		16.0	16.0	10.0	10.5			9.5	İ
RTOR Vol			0			0			0	Ì		0
Adj Flow	343	4	592		17	7	486	240			1451	
%InSharedLn				ļ								. [
Prop LTs	· ·	0.00			0.4		1.000	0.0	00		0.0	
Prop RTs	•	.000 (L. 000	0	.000	1.000	0	.025		0	122	
Peds Bikes	!			5 () (0	2!	5 , 1	0 .	[:. 50) (0 [
Buses	0.	0	0	-	0	0	0	0			0	į
%InProtPhase				1			0.0		0.0			į
Duration	0.25		Area '	Type:	A11	other a	areas					,

OPERATING PARAMETERS

	Ea	stbou	nd	We	stbou	nd	No	rthbou	ınd) sc	uthbo	und	1
	L	T	R	L	T	R	Ĺ	${f T}$	R	L	T	R	j
	<u> </u>			ļ			.		•	_			.
Init Unmet	0.0	0.0	0.0		0.0	0.0	0.0	0.0			0.0		1
Arriv. Type	3	3	3		3	3	4	4		İ	4		İ
Unit Ext.	3.0	3.0	3.0		3.0	3.0	3.0	3.0		İ	3.0		İ
I Factor		1.00	0		1.00	0	İ	1.000)	İ	1.00	0	İ
Lost Time	2.0	2.0	2.0		2.0	2.0	2.0	2.0			2.0		İ
Ext of g	3.0	2.0	2.0		2.0	2.0	3.0	2.0			2.0		İ
Ped Min g]	3.2		Ì	3.5		į.	3.4		İ	3.5		ĺ

Analyst: NS

Agency: STV Incorporated

Inter.: 23rd St and FDR Dr N SR

Area Type: CBD or Similar

Date: 12/09/08

Jurisd: Year : 2012 Build

E/W St: 23rd Street

Period: 7:45 - 8:45 AM

Project ID: Former Bellevue Psych Building Redevelopment N/S St: FDR Drive N SR

			SI	GNALI	ZED I	NTERS	ECTION	SUMM	ARY				
	l Ea:	stbou			stbou			rthbo		Sou	thbo	und	
	L	T	R	L	T	R	L	T	R	ĹĽ	T	R	
No. Lanes LGConfig Volume Lane Width RTOR Vol	1 385 10.5	1 LT 21 10.5	1 R R 211 11.0	1 L 9 16.0	1 TR 10 16.0	0 6 0	1 L 340 11.0	1 TR 522 11.0	29	0	0	0	

Dur	ation 0.25		Area T									
				Sig	gnal Og	perat	ions				_	
Pha	se Combination	1	2	3	4			5	6	7	8	
EB	Left	•	P			NB	Left		P	P ,		
	Thru		P				Thru	P	P	P		
	Right		P				Right	P	P	P		
	Peds	Х				İ	Peds		X			
WB	Left	P	P	••		SB	Left					
	Thru	Р	Р	1		İ	Thru				••	•
	Right	P	P			İ	Right					
	Peds	X	X			Ì	Peds	. X				<i>,</i>
NB	Right					EB	Right					
SB	Right					WB	Right					
Gre	-	6.0	24.0			•		19.0	8.0	13.0		
_		3.0	3.0					3.0	0.0	3.0		
	L Red	2.0	2.0					2.0	0.0	2.0		
	1.00							Cyc1	e Len	gth: 90.	0	secs

	•	Intersec	tion Pe	erforman	ce Summa	ary					
Appr/	Lane	Adj Sat Flow Rate	Rat		Lane (Appro	oach		-	
Lane Grp	Group Capacity	(s)	v/c	g/C	Delay	LOS	Delay	LOS	-		•
Eastbo	und	· -									
L	238	891	0.93	0.27	75.4	\mathbf{E}					
LTR	238	894	0.92	0.27	72.9	E	63.8	E			
R	315	1182 -	0.73	0.27	43.7	D	? .		•	•	
Westbo	und	•				The Sea	11.				٠.,
L	389	1841	0.03	0.39	17.5	В					
TR	693	1781	0.03	0.39	17.0	В	17.2	В			
Northb	ound										
L	398	1236	0.96	0.32	56.5	\mathbf{E}					
TR	637	1273	0.97	0.50	51.6	D	53.5	D .			

Southbound

Intersection Delay = 56.9 (sec/veh) Intersection LOS = E

Fax:

_OPERATIONAL ANALYSIS___

Analyst:

NS

Agency/Co.:

STV Incorporated

Date Performed:

12/09/08

Analysis Time Period:

7:45 - 8:45 AM

Intersection:

23rd St and FDR Dr N SR

Area Type:

CBD or Similar

Jurisdiction:

Analysis Year:

2012 Build

Project ID: Former Bellevue Psych Building Redevelopment

E/W St: 23rd Street

N/S St: FDR Drive N SR

____VOLUME DATA_

	Ea:	Eastbound		We:	stbou	nd	No:	rthbo	unđ	Sou	thbo	und
	L	T	R	L	T	R	L	T	R	L	${f T}$	R
Volume	385	21	211	9	10	6	340	522	2.9	٠,		*, *
% Heavy Veh	16	16	16	0	0	0	27	27	27	i		
PHF	0.92	0.92	0.92	0.89	0.89	0.89	0.89	0.89	0.89	i i		
PK 15 Vol Hi Ln Vol	105	6	57	3	3	2	96	147	8	İ		
% Grade		0			0		i	0		i		
Ideal Sat ParkExist	1900	1900	1900	1900	1900		1900	1900				
NumPark	•											
No. Lanes] 1	1	· 1	1	1	0	1	1	0	0	0	0
LGConfig	L	LT	R R	L	TR		L	TR		ĺ		
Lane Width	10.5	10.5	11.0	16.0	16.0		111.0	11.0		İ		
RTOR Vol			0			0 .			0	j		
Adj Flow	222	219	229	10	18		382	620		ĺ		
%InSharedLn	47		0				İ			Î		
Prop LTs	1.00	0.8	97	1.00	0.0	00	İ	0.0	00	j .		
Prop RTs	0	.000	1.000	0	.389		j o	.053		İ		
Peds Bikes	į 1.	00		8	0	0:-	8	-	0 .	. 0		
Buses	0	0	.6	0			ĺo	0	-			0
%InProtPhase	e			0.0			İ		0.0	i		
Duration	0.25		Area '	Ivpe:	CBD	or Sim	ilar					

Area Type: CBD or Similar

__OPERATING PARAMETERS_

	Ea	stbou	nd	We	stbour	ıđ	No	rthbou	ınd	So	uthbo	und	I
	L	T	R	L	T .	R	Ĺ	٠Ţ	R	L	T	R	İ
Init Unmet	 0.0	0.0	0.0	1 			-			-		<u>.</u> _	.
		0.0	0.0	0.0	0.0		0.0	0.0					-
Arriv. Type	3	3	3] 3	3		5	3					
Unit Ext.	3.0	3.0	3.0	3.0	3.0		3.0	3.0		İ			İ
I Factor		1.00	0	1	1.000)	j	1.000)	İ			İ
Lost Time	2.0	2.0	2.0	2.0	2.0		0.0	2.0		İ			İ
Ext of g	2.0	2.0	2.0	2.0	2.0		8.0	2.0		İ			İ
Ped Min g		3.9			3.7		Ì	3.7			3.2	•	İ

Analyst: NS

Inter.: 23rd St and FDR Dr S/ Ave C

Agency: STV Incorporated

Area Type: CBD or Similar

Date: 12/09/08

Jurisd:

Period: 7:45 - 8:45 AM

Year : 2012 Build Project ID: Former Bellevue Psych Building Redevelopment

Project ID: E/W St: 23r	Former Bel d Street	levue Psych	Building F N/S	tedevel St: FD	opment R Drive	S/ Avenu	e C
		CICNALIZE	D INTERSEC	ארדייי	TIMMARY		
	Eastboun		bound		hbound	Sout	hbound
	L T	RL	T R		T R		T R
No. Lanes LGConfig	0 0	0 1 L	1 0 TR	0	0 0	1 L	2 0 TR
Volume Lane Width		9 1 16.0 1	.0 6 .6.0			100 2	66 84 0.5
RTOR Vol		İ	0				0
Duration	0.25	Area Type: (CBD or Simi		- 23-		
Phase Combi	nation 1	2 3	4		5	6 7	8
EB Left Thru			NB	Left Thru			
Right				Right			
Peds	X		l an	Peds	\mathbf{X}_{\cdot}		
WB Left	P - P -		SB	Left Thru	P	P	- 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1
Thru Right	P			Right			4.5
Peds	X			Peds	X ·		
NB Right			EB	Right			•
SB Right			WB	Right			
Green	24.0					4.0	
Yellow	3.0					.0	
All Red	2.0					Length: 9	0.0 secs
	II	ntersection			ary	·	····
Appr/ Lane Gre		j Sat	tios 	Lane		Approach	
		(s) v/c	g/C	Delay	LOS D	elay LOS	
Eastbound							
*	•		Process of		3		•
Westbound			0.07	24.4	<u> </u>		
	91 18			$24.4 \\ 24.6$		24.5 C	
TR 4	58 17	18 0.04	0.27	24.0	C 2	14.5	
Northbound	•						
Southbound		66 0.29	0.27	28.2	С		
	64 13 62 26			38.2		36.0 D	·
I	ntersection	Delay = 35.	3 (sec/ve	eh) I	ntersect	cion LOS	= D

Phone:

Fax:

E-Mail:

_OPERATIONAL ANALYSIS___

Analyst:

NS

Agency/Co.:

STV Incorporated

Date Performed:

12/09/08

Analysis Time Period:

7:45 - 8:45 AM

Intersection:

23rd St and FDR Dr S/ Ave C

Area Type:

CBD or Similar

Jurisdiction:

Analysis Year:

2012 Build

Project ID: Former Bellevue Psych Building Redevelopment

E/W St: 23rd Street

N/S St: FDR Drive S/ Avenue C

____VOLUME DATA_

	Eas	tbou:	nd	We:	stbou	nd	N	ort	hbou	nd	So	ıthbo	und
	L	T	R	L	T	R	L		T	R	L	${f T}$	R
Volume				 9	10	6			1,4,		100	266	84
% Heavy Veh				lo	0	Ö	¦				111	11	11
PHF				0.89	0.89	_	i				0.96		
PK 15 Vol				3	3	2	i				26	69	22
Hi Ln Vol				j			i					0,5	
% Grade				İ	0		İ				İ	0	
Ideal Sat				1900	1900		İ				1900	1900	į
ParkExist							İ						j
NumPark		•		j.			İ				İ		
No. Lanes	0	0	0	1	1	0		0	0	0	1	2	0
LGConfig				L	TR						L	TR	ĺ
Lane Width			•	16.0	16.0						10.0	10.5	j
RTOR Vol	,			ļ		0							0
Adj Flow		-		10	18						104	365	
%InSharedLn				ļ			ļ						
Prop LTs				_	0.0	00	!			3.2	ļ	0.0	00
Prop RTs		_		!	.389	_			** ***				,
Peds Bikes	1,0	0;		· 8		0 -		80				5	
Buses	ļ. ·		Thereby	1.0	0						0	0	
%InProtPhase			_	<u> </u>			!_				[1
Duration	0.25		Area	Type:	$^{ m CBD}$	or Sim	ilar	:					

OPERATING PARAMETERS_

	Ea	Eastbound			Westbound			rthbo	und	So	ınd	
	L	T	R	L	T	R	Ĺ	${f T}$	R	L	${f T}$	R
Init Unmet	-			- 0.0	0.0		-			-		
				10.0	0.0		!			0.0	0.0	ļ
Arriv. Type				3	3		-		•	3	3	
Unit Ext.				3.0	3.0					3.0	3.0	į
I Factor					1.00	0					1.000) [
Lost Time				2.0	2.0		1			2.0	2.0	į
Ext of g				2.0	2.0	-				2.0	2.0	İ
Ped Min g	İ	3.9	Ē		3.7			3.7		İ	3.4	

Analyst: NS

Inter.: 23rd St and 1st Ave

Agency: STV Incorporated

Area Type: CBD or Similar

Jurisd:

Date: 12/09/08 Period: 7:45 - 8:45 AM

Year : 2012 Build

Project ID: Former Bellevue Psych Building Redevelopment

E/W St: 23rd Street

N/S St: First Avenue

			SI	GNALI	ZED I	NTERSE	ECTION	SUMM	ARY			
	l Ea	stbou			stbou	-		rthbou		Son	ıthbo	und
	L	L T R			T	R	L	${f T}$	R	L	${f T}$	R
No Inne	ļ	2	0	-	3	0	-	4	0	0	0	0
No. Lanes LGConfig		LT	•		TR	J		LT	R.			
Volume	164	503		İ	391	114	182	1204	186	•	•	
Lane Width	i	10.5		İ	10.0			10.0]		
RTOR Vol	İ			İ		0	1		0			

Dur	ation 0.25		Area 7		CBD or						
Pha	se Combination	1	2	3±	4			5	6 7	8	
EB	Left	P	P			NB	Left	P			
صط	Thru	P	P			i	Thru	P			
	Right	-	-			İ	Right	P			
	Peds	Х	•			j	Peds	X			
WB	Left	**				SB	Left				
WD	Thru	P	1.00	-			Thru				
	Right	P					Right				
	Peds	X				į.	Peds	X			
NID	Right	21.				EB	Right				
NB SB	Right					WB	Right				
	-	20.0	7.0			1		36.0			,
Gre		3.0	3.0					3.0			
		2.0	8.0					8.0			
ALI	Red	2.0	0.0						Length:	90.0	secs

		Intersec	ction Pe	erforman	ce Summa	ıry			
Appr/	Lane	Adj Sat Flow Rate	Rati	ios	Lane C	roup	Appro	oach	
Lane Grp	Group Capacity	(s)	v/c	g/C	Delay	LOS	Delay	LOS	•
Eastbo	und			<u> </u>					
LT	· 742	2368	0.93	0.36	47.3	D	47.3	D	
Westbo	und		.,,,,,	• <u>-</u> ,.					
TR	638	2873	0.83	0.22	45.6	ם	45.6	D	
Northb	ound								
LTR	1794	4486	0.91	0.40	34.2	C ·	34.2	С	
Southb	ound								

Intersection Delay = 39.4 (sec/veh) Intersection LOS = D

Fax:

_OPERATIONAL ANALYSIS____

Analyst:

NS

Agency/Co.:

STV Incorporated

Date Performed:

12/09/08

Analysis Time Period:

7:45 - 8:45 AM

Intersection:

23rd St and 1st Ave

Area Type:

CBD or Similar

Jurisdiction:

Analysis Year:

2012 Build

Project ID: Former Bellevue Psych Building Redevelopment E/W St: 23rd Street N/S St: First Aven

N/S St: First Avenue

___VOLUME DATA____

	Eas	stbour	nd	We	stbou	nd	No	rthbo	und	l Soi	uthbo	und
	L	T	R	L	T	R	L	T	R	L	T	R
Volume	164	503		 -	391	114	182	1204	186			
% Heavy Veh	20	20			44	44	21	21	21	İ		
PHF	0.97	0.97			0.95	0.95	0.96	0.96	0.96	İ		
PK 15 Vol	42	130			103	30	47	314	48	Ì		
Hi Ln Vol			,				İ			İ		
% Grade	1	0			0		j ·	0		Î		
Ideal Sat		1900			1900		İ	1900		j ·		
ParkExist			X ·	l			x		X	İ		
NumPark	1		5				3		3	İ		
No. Lanes	0	2	0	0	3	0	j 0	4	0	0	0	0.
LGConfig		${f LT}$		[TR		İ	LT	R	Î		
Lane Width		10.5		İ	10.0		İ	10.0		İ		
RTOR Vol				Ì		0	İ		0	İ		
Adj Flow	į	688		ĺ	532		Ì	1638		İ		
%InSharedLn	-			İ			İ			İ		
Prop LTs		0.24	16	İ	0.0	00	ĺ	0.1	16	İ		
Prop RTs	0	.000		0	.226		j o	.118		İ		
Peds Bikes	İ	•		5	0	0			.0	0		
Buses		.0	•	ĺ	0		İ	0		· i	··· v	
%InProtPhase	e 0.0			Ì						j	4	
Duration	0.25		Area !	Type:	CBD	or Sim	ilar			•		

OPERATING PARAMETERS

	Eastbound	Westbound	Northbound	Southbound
	L T R	L T R	L T R	LTR
Init Unmet	0.0	0.0	0.0	\ <u></u>
	0.0	0.0	1 0.0	ļ
Arriv. Type	3	. 3	3	
Unit Ext.	3.0	3.0	3.0	
I Factor	1.000	1.000	1.000	į į
Lost Time	2.0	2.0	2.0	i i
Ext of g	2.0	2.0	2.0	į į
Ped Min g		3.5	3.9	3.2

HCS+: Signalized Intersections Release 5.3

Analyst: NS

Inter.: 23rd St and 2nd Ave

Agency: STV Incorporated

Area Type: CBD or Similar

Date: 12/09/08

Jurisd:

Period: 7:45 - 8:45 AM

Year : 2012 Build

Project ID: Former Bellevue Psych Building Redevelopment

E/W St: 23rd Street

N/S St: Second Avenue

E/W St: 231	a Stree				M/D	DC. De	cona i	ıv Çiru			
		sig	NALIZI	ED IN	TERSE	CTION S					
	East	bound	West	boun	.đ	1	hbound	:		ıthbo	
	L	T R	L	T	R	L	T I	R	L	T	Ř
No. Lanes	0	3 0	0	2	0	0	0	0	1	4	0
LGConfig		TR	DefL	T				ļ	L	TR	
Volume	1	445 181	184					ļ	222	1513	!
Lane Width) :	LO.O	10.0	10.0]		!	10.0	10.0	i
RTOR Vol	1	0				1		ļ			0
Duration	0.25	Area 7					······································			•	•
		1 2	Sigi	naı ()perat 	TOHS	5	6	7		8
Phase Combi	ination	1 2	3	4	NB	Left	,	Ŭ	•		•
EB Left Thru		P			112	Thru			-		
Right		P			ł	Right					
Peds		X				Peds	х				
		P			SB	Left	P				
WB Left Thru		P				Thru	P	-			6
Right		.			i	Right					
Peds		x			İ	Peds	x				
NB Right		Λ			EB	Right					•
					WB	Right					
SB Right Green		35.0			, .,		45.0				
Yellow		3.0					3.0				
All Red		2.0					2.0				
AII Ked		2.0			•		Cycl	e Lei	ngth:	90.0) sec
		Interse	ction	Perf	ormano	e Summ	_				
Appr/ La	ne	Adj Sat	Ra	tios		Lane	Group	Apj	proac	h	
	oup	Flow Rate									•
	pacity	(s)	v/c	g	/C	Delay	LOS	Del	ay LO	S	
Eastbound											
	222	3145	0.64	Λ	.39	24.9		24.	9 C		
TR 1	223	2142	0.04			24.7	., .	2.1	_		
. 1			: •.								•
Westbound	0.1	492	1.04	n	39	102.6	F				
	91	1167						68.	7 E	:	
т 4	54	1107	0.52	, 0		52.0		00.	,		
Northbound		•									
Southbound	l										
L 5	555	1110							_		
	285	4570	0.85	5 0	.50	23.6	С	22.	9 (2	
					,		·_ L		_ TA	1 - C	
	ntersec	tion Delay	= 31.	. 2 (sec/v	en) I	nters	ect10	n LOS	s = C	-

Fax:

_OPERATIONAL ANALYSIS____

Analyst:

NS

Agency/Co.:

STV Incorporated

Date Performed:

12/09/08

Analysis Time Period:

7:45 - 8:45 AM

Intersection:

23rd St and 2nd Ave

Area Type:

CBD or Similar

Jurisdiction:

Analysis Year:

2012 Build

Project ID: Former Bellevue Psych Building Redevelopment E/W St: 23rd Street

N/S St: Second Avenue

____VOLUME DATA____

I	Eastbound L T R			Wes	stbour	nd	Non	thbou	ınd	Sou	uthbo	ınd
	Ŀ	T	R	L	\mathbf{T}	R	L	${f T}$	R	L	${f T}$	R
 Volume		445	181	184	200	 	ļ				1510	
				!	389	•	ļ		1	222	1513	210
% Heavy Veh		27	27	21	21					20	20	20]
PHF		0.80	0.80	0.93	0.93					0.89	0.89	0.89
PK 15 Vol		139	57	49	105		ĺ			62	425	59 İ
Hi Ln Vol				Ì			İ			İ		
% Grade		0		İ	0		İ			į	0	
Ideal Sat		1900		1900	1900		j .			1900	1900	
ParkExist				Ì		Χ.	İ			х		х
NumPark				j		3	i			0		0
No. Lanes	0	3	0	0	2	0	i o	0	0	1	4	0
LGConfig		TR		Defi	L T		İ			L	TR	·
Lane Width		10.0		10.0	10.0		i			!	10.0	i
RTOR Vol			0				İ					o i
Adj Flow		782		198	418		i			249	1936	· .
%InSharedLn				İ			İ			İ		ĺ
Prop LTs		0.0	00	1.000	0.0	00	İ			İ	0.0	00 j
Prop RTs	j o	.289		0	.000	•	j ;			0	.122	
Peds Bikes	1	20	0				1 40) (Aba				0 أ
Buses	İ	10		j o	0		İ	and officer	42 ·	0	0 -	
%InProtPhase	<u> </u>			ĺ			İ		****			
Direction	0 25		****	T	CDD	02				•		

Duration

0.25

Area Type: CBD or Similar

_OPERATING PARAMETERS____

	Eas	Eastbound			Westbound			rthbo	und	So	ınd	
	L	T	R	L	T	R	L	T	R	L	T	R
Init IImmat	-	0.0		-			-			-		
Init Unmet		0.0		0.0	0.0		ļ			0.0	0.0	
Arriv. Type		3		3	3					3	3	
Unit Ext.		3.0		3.0	3.0		İ			3.0	3.0	j
I Factor		1.00	0		1.00	0					1.000) [
Lost Time		2.0		2.0	2.0					2.0	2.0	Ì
Ext of g		2.0		2.0	2.0					2.0	2.0	ĺ
Ped Min g		4.0				•		3.5			4.3	į

Analyst: NS

Agency: STV Incorporated

Inter.: 29th St and 1st Ave Area Type: CBD or Similar

Date: 12/09/08

Jurisd:

Year : 2012 Build Period: 7:45 - 8:45 AM Project ID: Former Bellevue Psych Building Redevelopment

E/W St: 29th Street

N/S St: First Avenue

	Eas	tbou	nd	We	stbou	ınd	No	rthbo	und	Sou	ıthboı	ınd
	L	T	R	ŗ	\mathbf{T}	R	L	T	R	L	T	R
No. Lanes		0	0	0	1	0	-	4	0	-	0	0
LGConfig	, -	-		İ	TR	t	İ	$\mathbf{L}\mathbf{T}$	R	İ		
Volume	İ			İ	15	8	319	1718	23	Ì		
Lane Width				i	12.0)	İ	10.0		İ		
RTOR Vol	j			İ		0	İ		0	İ		

Dur	ation	0.25		Area		CBD or					/*	
					Si	perat	ions				 	
Pha	se Comb	ination	1	2	3	4			5	6 7	8	
EB	Left						NB	Left	P			
•	Thru							Thru	P			
	Right							Right	P			
	Peds		X					Peds	X			
WB	Left						SB	Left				
	Thru		P			* .	İ	Thru				
	Right		P				ļ	Right				
	Peds		X				1	Peds	X			
NB	Right	-					EB	Right				
SB	Right						WB	Right		ar i		
Gre	_		31.0				•		49.0			
	low		3.0						3.0			
	Red		2.0						2.0			
	· 								Cycle	Length:	90.0	secs

		Intersec	tion Performance	e Summary		
Appr/ Lane	Lane Group Capacity	Adj Sat Flow Rate (s)	Ratios	Lane Group Delay LOS	Approach Delay LOS	
Grp	Capacity	(5)	v/C 9/C	Deray Bob	20107 202	

Eastbound

	_	* 8a					•	
Westboun	.d	Contact and						
TŖ	404	1174	0.07	0.34	20.2	С	20.2	С
Northbou	nd							
LTR	2695	4950	0.88	0.54	22.4	С	22.4	С

Southbound

Intersection Delay = 22.3 (sec/veh) Intersection LOS = C

Fax:

OPERATIONAL ANALYSIS

Analyst:

NS

Agency/Co.:

STV Incorporated

Date Performed:

12/09/08

Analysis Time Period:

7:45 - 8:45 AM

Intersection:

29th St and 1st Ave

Area Type:

CBD or Similar

Jurisdiction: Analysis Year:

. 2012 Build

Project ID: Former Bellevue Psych Building Redevelopment

E/W St: 29th Street

N/S St: First Avenue

___VOLUME DATA____

	Eas	tbo	und	W	estbou	nd	No	rthbo	und	Sot	ıthbo	und
	L	T	R	L	T	R	L	T	R	L	T	R
Volume			** *=		15	8	319	1718	23		~ -	
% Heavy Veh	· ·				19	19	11	11	11	İ		
PHF			•		0.79	0.79	0.87	0.87	0.87	İ		
PK 15 Vol	ĺ				5	3	92	494	7	j		
Hi Ln Vol	1			İ			İ			İ		
% Grade	İ			İ	0		İ	0		İ		
Ideal Sat	İ			Ì	1900		İ	1900		İ		
ParkExist	İ			Х		X	x		X	i		
NumPark	İ		•	3		3	3		3			
No. Lanes	j o	0	0	İ	0 1	0	0	4	0	i o	.0	0
LGConfig	İ			Ì	TR		j	LT	R	İ		
Lane Width	İ			İ	12.0		j	10.0		İ		
RTOR Vol	İ			İ		0	İ		0	İ		
Adj Flow	İ			İ	29		į .	2368		İ		
%InSharedLn	İ			j			İ			į		
Prop LTs	İ			İ	0.0	00	İ	0.1	55	İ		
Prop RTs	İ.			İ	0.345		i 0	.011		j		
Peds Bikes	İ			j	50	0	•	00 =-	·0 ·	0	•	•
Buses	İ			İ	0		İ	10: L		i		
%InProtPhase	e e			i			İ	Visit 6 mm		i		
Duration	0.25		Area	Туре	: CBD	or Sim	ilar			'		

____OPERATING PARAMETERS_

	Eas	stbou	ınd	We	stbou	nd	No	rthbo	und	So	uthbo	und	1
	L	T	R	L T R			L	Ţ	R	L	T	R	į
Init Unmet				·	0.0	-	-	0 0		-			
				!	0.0		!	0.0		!			
Arriv. Type					3		-	3		1			1
Unit Ext.				1	3.0			3.0		1.			İ
I Factor					1.00	0		1.00	0				İ
Lost Time					2.0			2.0					İ
Ext of g					2.0			2.0					İ
Ped Min g					3.5			3.9			3.2		İ

Analyst: NS

Agency: STV Incorporated

Inter.: 29th St and 2nd Ave Area Type: CBD or Similar

Date: 12/09/08

Jurisd:

Period: 7:45 - 8:45 AM

Year : 2012 Build Project ID: Former Bellevue Psych Building Redevelopment

E/W St: 29th Street

N/S St: Second Avenue

E/W St: 29t	h Stre	et				N/S	St: Se	econd	Avenue			
							CTION S			- ·		
	:	tbour			stbour		Nort	hboun T	:		hbound T R	
•	L	T	R	l L	Т	R	1 1	Т	R	ш	1 K	
No. Lanes	0	0	0	0	1	0	0	0	0	0	5 · 0	
LGConfig	į			İ	LT					_	TR	
Volume				123	212]		100 14	7
Lane Width				ļ	16.0					Т	0.0	
RTOR Vol				1					ı		U	
Duration	0.25	•	Area '									
Phase Combi	nation	1	2	S1 3	gnar (perat 	ions		6	7	8	
Phase Combi	.nac.ton	. 1	4	3	-	NB	Left	<i>J</i>	v	•	J	
Thru							Thru					
Right						İ	Right			.*		
Peds		X					Peds	X				
WB Left		P			 		Left	_				No.
Thru		P			•		Thru	P				
Right		**				-	Right Peds	P X				
Peds NB Right		X				EB	Right					
NB Right SB Right						WB	Right					
Green		31.0				'		49.0				
Yellow		3.0						3.0				
All Red		2.0						2.0		. 1 .		
		-			Dame	- · · · · · · · ·	- Cumm		le Leng	jth: S	10.0	secs
Appr/ Lar			nterse j Sat		l Peri Ratios		ce Summ Lane		raak	oach		
Lane Gro			y Rate									
	pacity		(s)	v/c	g	/C	Delay	LOS	Delay	LOS		
Eastbound								-				
						-						
	i				•	eft e						
Westbound	* •			•		•						
LT 52	25	15	24	0.7	75 0	.34	35.6	D	35.6	, D		
Northbound												
						•						
Southbound	· ·			•								
TR 3	178	58	37	0.	78 C	.54	18.1	В	18.1	В		
T.	nterse	ction	Delay	7 = 2	0.5 (sec/v	eh) I	nters	ection	LOS	= C	

Fax:

OPERATIONAL ANALYSIS__

Analyst:

NS

Agency/Co.:

STV Incorporated

Date Performed:

12/09/08

Analysis Time Period:

7:45 - 8:45 AM

Intersection:

29th St and 2nd Ave

Area Type:

CBD or Similar

Jurisdiction:

Analysis Year:

2012 Build

Project ID: Former Bellevue Psych Building Redevelopment

E/W St: 29th Street

N/S St: Second Avenue

_____VOLUME DATA

	Ea	stb	oun	.d	1	Wes	tboun	ıđ	No	rthb	ound		S	outhbo	und
	L	T		R	L		${f T}$	R	L	T	R		L	, T	R
Volume % Heavy Veh PHF		eren t			12: 7 0.		212 ⁻ 7 0.85		 -		er er er er er			2100 19 0.91	19
PK 15 Vol Hi Ln Vol					36		62							5 77	40
% Grade Ideal Sat	 				177		0 1900		<u> </u> 					0 1900	
ParkExist NumPark	 		^	0	X 3		4	0		,			X 3		•
No. Lanes LGConfig Lane Width RTOR Vol		,	0	U		0	1 LT 16.0	0	0 	(. 0	•		0 5 TR 10.0	
Adj Flow %InSharedLn							394						 	2470	·
Prop LTs Prop RTs		0.0				0.	0.36 .000	8						0.0	
Peds Bikes Buses %InProtPhase	j .	100					0	, italy	- t 				1	150. 0	0
Duration	0.25	5		Area	Тур	e:	CBD o	r Sim	ilar				•		

OPERATING PARAMETERS

	Ea	stbou	ind	We	stbou	ınd	No	orthbo	ound	Sc	uthbo	und
	L	${f T}$	R	L	T	R	L	${f T}$	R	L	${f T}$	R
_				ļ			_			.		
Init Unmet				Į.	0.0						0.0	.
Arriv. Type					3					1	3	į
Unit Ext.				[3.0					j	3.0	į
I Factor					1.00	00	ĺ			İ	1.00	o j
Lost Time				Ì	2.0		j			İ	2.0	į
Ext of g				İ	2.0		Ì			İ	2.0	į
Ped Min g		3.9		İ			į			Ì	4.2	

Analyst: NS

Southbound

Inter.: 30th St and 1st Ave

Agency: STV Incorporated

Area Type: CBD or Similar

Date: 12/09/08

Jurisd:

Period: 7:45 - 8:45 AM

Year : 2012 Build

Project ID: Former Bellevue Psych Building Redevelopment

E/W St: 30th Street

N/S St: First Avenue

			IGNALI						0	- h h -		i
•		tbound	!	stbou		!	hbour	:		thbo T	una R	ļ
	L	·T R	ļ L	T	R	L	T	R	L	T	K	
No. Lanes	2	1 0	0	0	. 1	0	4	0	0.	0	0	
LGConfig	L	${f T}$	İ		R	1	\mathtt{TR}					1
Volume	394	305	j		50] :	1563 1	L63				
Lane Width	11.0	12.0	İ		12.0	[:	10.0					ļ
RTOR Vol	į		ļ		0		. ()				
Duration	0.25	Area	Type:				•	,	1.444			
				_	Operat	ions						
Phase Combi	nation		3	4	1		5	6	7		8	
EB Left		P			NB	Left	-					
Thru		P			ļ	Thru	P					
Right						Right						
Peds		X]	Peds	X					
WB Left					SB	Left						
Thru			, ,			Thru						
Right		P				Right						
Peds		X				Peds	X					
NB Right		•			EB	Right						
SB Right					WB	Right						
Green		29.0					45.0 3.0					
Yellow	,	3.0					3.0 8.0					
All Red		2.0						le Le	ngth:	90.0)	secs
			section									
Appr/ La		Adj Sai		≀atio	S	Lane	Group	Ap	proach	L		*
	oup	Flow Rat			g/C	Delay	TOC	Do1	ay LOS	 •		
Grp Ca	pacity	(s)	v /c		g/C	Deray	поэ	Der	ay 101	,		
Eastbound	-	0000	0.6		0.32	29.8	С					۸.
	31	2269			0.32 0.32 ·	40.7	D	34.	5 C	٠,		
Т 4	47	1388	0.7	19	0.32	40.7	_		J (
Westbound							* - 24.6	75.				
								24.	3 C			
R 2	53	786	0.2	22	0.32	24.3	C					
Northbound			•									
TR 2	467	4934	0.	79	0.50	21.1	С	21.	1 C			

Intersection Delay = 25.0 (sec/veh) Intersection LOS = C

Phone:

Fax:

E-Mail:

OPERATIONAL ANALYSIS_____

Analyst:

NS

Agency/Co.:

STV Incorporated

Date Performed:

12/09/08

Analysis Time Period:

7:45 - 8:45 AM

Intersection:

30th St and 1st Ave

Area Type:

CBD or Similar

Jurisdiction: Analysis Year:

2012 Build

Project ID: Former Bellevue Psych Building Redevelopment

E/W St: 30th Street

N/S St: First Avenue

____VOLUME DATA___

	Eas	stbou	nd	We	stbo	ınd	j :	Nort	hbo	und	Sou	thbou	ınd	1
,	L	T	R	L	T	R	L	!	ľ	R	L	${f T}$	R	į
Volume	 394	305		 	 -	50		1 !	563	-163		2 f . 4		-
% Heavy Veh	9	9	•	İ		62	1	1:		11	i			ł
PHF	0.87	0.87		İ	•	0.90	ì		.89		İ			-
PK 15 Vol	113	88		İ		14	i		39	46	İ			ŀ
Hi Ln Vol	İ			ĺ			İ			-	İ			ì
% Grade	j	0		Ì	0		İ	0			Ì			ĺ
Ideal Sat	1900	1900		İ		1900	İ	1:	900		İ			i
ParkExist	х		X	İ			x			X	j ·			i
NumPark	3		3	İ			3			3	i			i
No. Lanes	2	1	0	0	0	1	İ	0	4	0	0	0	0	ĺ
LGConfig	L	${f T}$		İ		R	İ		TR		i			İ
Lane Width	11.0	12.0		ĺ		12.0	İ	1	0.0		i			i
RTOR Vol				-		0	İ			0	İ			i
Adj Flow	453	351				56	į.	1:	939		İ			i
%InSharedLn	İ						İ				İ			i
Prop LTs	· ·	0.0	00	ĺ		*	ĺ		0.0	00	Ì			İ
Prop RTs	0	.000	•	ĺ	1.	1.000	İ	0.0	94:::		Ì.	2 75		į.
Peds Bikes				1	50 ·	0 -	İ	.100	·	0 .				ĺ
Buses	0	0	*	-	-	0	ĺ	0		-	İ	-		į
%InProtPhase	е						ĺ							ĺ
Duration	0.25		Area :	Type:	CBD	or Sim	ila	r			•			•

__OPERATING PARAMETERS_

	Ea	stbou	nđ	We	stbou	nd	No	rthbo	und	So	uthbo	und
	L	${f T}$	R	L	Т	R	L	T	R	L	${f T}$	R
Init Unmet	0.0	0.0				0.0	·	0.0		-		
Arriv. Type	3	3		Ì		3	İ	3				į
Unit Ext.	3.0	3.0		Ī		3.0	İ	3.0		İ		İ
I Factor		1.00	0		1.00	0	İ	1.00	0	İ		i
'Lost Time	2.0	2.0				2.0	Ì	2.0		İ		j
Ext of g	2.0	2.0	•			2.0	İ	2.0		Ì		į
Ped Min g				İ	4.2		ĺ	3.9		İ		İ

HCS+: Signalized Intersections Release 5.3

Analyst: NS

Inter.: 30th St and 2nd Ave Area Type: CBD or Similar

ت :

Agency: STV Incorporated

Jurisd:

Date: 12/09/08

Year : 2012 Build

Period: 7:45 - 8:45 AM Project ID: Former Bellevue Psych Building Redevelopment

E/W St: 30th Street

N/S St: Second Avenue

E/W St: 30	tn Stree			N/D							
	Book	SIGI bound	NALIZED Westb	INTERSE		JMMARY abound		Sou	thbou	nd	<u> </u>
	L	T R	L T		,	r F		L	T	R	
No. Lanes LGConfig Volume Lane Width RTOR Vol		1 1 T R 67 89 3.0 8.0	0	0 0	0	0 0			5 LT 2157 10.0	0	
Duration	0.25	Area T		D or Sim							
Phase Comb EB Left Thru Right Peds WB Left Thru Right Peds NB Right SB Right Green Yellow All Red		P P X X 31.0 3.0 2.0	3	4 NB	Left Thru Right Peds Left Thru Right Peds Right Right	_	e Len	7	90.0		Secs .
v - <u>1</u> -1	ine	Adj Sat	tion Pe Rati	erformanc Los	e Summa Lane G		App	roach	1		
	oup pacity	Flow Rate (s)	v/c	g/C	Delay	LOS	Dela	y LOS	5		· .
Eastbound											
	194 322	1435 934	0.65 0.33	0.34	31.5 24.6	. C	29.8	C	· .		× .
Northbound	i								,		
Southbound	đ										
LT :	3246	5962	0.86	0.54	20.7	С	20.7	. c			
:	Intersec	tion Delay	= 21.9	(sec/v	eh) Ir	nterse	ction	LOS	= C		

Fax:

OPERATIONAL ANALYSIS_____

Analyst:

NS

Agency/Co.:

STV Incorporated

Date Performed:

12/09/08

Analysis Time Period:

7:45 - 8:45 AM

Intersection:

30th St and 2nd Ave

Area Type:

CBD or Similar

Jurisdiction:

Analysis Year:

2012 Build

Project ID: Former Bellevue Psych Building Redevelopment E/W St: 30th Street N/S St: Second Ave

N/S St: Second Avenue

__VOLUME DATA

	Ea	stbou	nd	Wes	stboı	ınd	1 1	Nort	hbo	und	So	uthbou	ınd	
	L	T	R	L	${f T}$	R	L		T	R	L	${f T}$	R	İ
Volume	<u>-</u> 	267	89				-	٨			432	2157		
% Heavy Veh		9	9								15	15		Ì
PHF		0.83	0.83								0.93	0.93		İ
PK 15 Vol		80	27								116	580		İ
Hi Ln Vol											Ì			İ
% Grade		0					1				j	0		İ
Ideal Sat		1900	1900				İ			•		1900		İ
ParkExist	X		X				ĺ				x			İ
NumPark	3		3				- [3			į
No. Lanes	0	1	1	0	. 0	0	İ	0	0	0	į o	5	0	İ
LGConfig		${f T}$	R				ĺ				İ	LT		İ
Lane Width		13.0	8.0				Ì				j	10.0		İ
RTOR Vol	1		0			·	İ				İ		'	İ
Adj Flow		322	107				İ				İ	2784		İ
%InSharedLn	1						İ							İ
Prop LTs	ĺ	0.0	00	İ			İ					0.16	57	İ
Prop RTs	0	.000	1.000		•		İ.				i - 0	.000		İ
Peds Bikes	1	00	0	Ï	÷	•	Ì	125				, ,		1
Buses	ĺ	0	0				İ					15	1.1 m.	İ
%InProtPhase	ė			Ì			j				į			İ
Duration	0.25		Area '	Type:	CBD	or Si	mila	r			•			'

OPERATING PARAMETERS

	Eastbound			₩e	stbou	nd] No	rthbo	und	Southbound		
	L	${f T}$	R	L T R			L	${f T}$	R	L T R		
	·			<u> </u>			-			- —— -		
Init Unmet		0.0	0.0								0.0	
Arriv. Type		3	3							İ.	3	j
Unit Ext.		3.0	3.0				İ			İ	3.0	Ì
I Factor		1.00	0				ĺ			İ	1.00	0
Lost Time		2.0	2.0				ĺ			İ	2.0	
Ext of g		2.0	2.0				ĺ			j ·	2.0	
Ped Min g		3.9	-					4.0		İ		j

Analyst: NS

Inter.: 34th St and 1st Ave Area Type: All other areas

Agency: STV Incorporated

Jurisd:

Date: 12/09/08

Year : 2012 Build

Period: 7:45 - 8:45 AM Project ID: Former Bellevue Psych Building Redevelopment

E/W St: 34th Street

N/S St: First Avenue

			S:	GNALI	ZED I	NTERSI	ECTION	SUMM	ARY				
	l Ea	stbou			Westbound			Northbound			Southbound		
	L T R		L	LTR		Ļ	L TR		L T R				
No. Lanes	l	2	0	-\- 	3	0	- 0	4	0	0	, 0	0	
LGConfig	İ	LT		İ	TR	<u> </u>	İ	$_{ m LT}$	R	1			
Volume	97	598		İ	482	145	137	1219	223				
Lane Width	i	10.0		İ	10.0)		10.5		ļ		'	
RTOR Vol	İ			İ		0	1		. 0				

Dur	ation	0.25		Area	Type:						•		
					Si	gnal	Οţ	perat	ions	·			
Pha	se Combi	nation	1	. 2	3	4	1			5	6 7	8	
EB	Left		P	P		•		NB	Left	P			
	Thru		P	P					Thru	P			
	Right				-			Ì	Right	P			
	Peds			Х				ĺ	Peds	X			
WB	Left	- •						SB	Left				
","	Thru	,		P				ĺ	Thru		•		e Page
	Right			P				į	Right				
	Peds			Х				i ·	Peds	X			
NB	Right							EB	Right				
SB	Right							WB	Right				
Gre	_		7.0	23.0	כ			•		39.0			
	low		3.0	3.0						3.0			
	Red		2.0	8.0						2.0			
LY T	1100									Cycle	Length:	90.0	secs

Intersection Performance Summary											
Appr/ Lane	Lane Group	Adj Sat Flow Rate	Rat	ios	Lane Group		Approach				
Grp	Capacity.		v/c	g/C	Delay	LOS	Delay	LOS	_		
Eastbo	und										
LT	900	3034	0.93	0.39	43.5	D	43.5	D			
Westbo	und		** · ·								
TR	1063	4160	0.68	0.26	33.7	C .	33.7	С			
Northb	ound			,							
LTR	2347	5417	0.73	0.43	23.2	С	23,2	C .			
Southb	ound						•				

Intersection Delay = 30.7 (sec/veh) Intersection LOS = C

Fax:

_OPERATIONAL ANALYSIS___

Analyst:

NS

Agency/Co.:

STV Incorporated

Date Performed:

12/09/08

Analysis Time Period:

7:45 - 8:45 AM

Intersection:

34th St and 1st Ave

Area Type:

All other areas

Jurisdiction:

Analysis Year:

2012 Build

Project ID: Former Bellevue Psych Building Redevelopment

E/W St: 34th Street

N/S St: First Avenue

__VOLUME DATA_

•	Eas	Eastbound			stbou	nd	No	rthboı	ınd	Sou	thbo	und
	L	T	R	L	${f T}$	R	L	T	R	L	T	R
Volume	97	598			482	145	137	1219	~223			
% Heavy Veh	10	10		İ	6	6	13	13	13	! 		}
PHF	0.83				0.87	0.87	0.92		0.92	! 		i
PK 15 Vol	29	180			139	42	37	331	61			i
Hi Ln Vol				İ			İ			į		i
% Grade	Ì	0		j	0		İ	0		İ		i
Ideal Sat		1900		İ	1900		j	1900		ĺ		į
ParkExist		•					ĺΧ		X	į		İ
NumPark							3 ,		3	İ		į
No. Lanes	0	2	0	0	3	0	0	4	0	0	0	0 j
LGConfig		$\mathbf{L}\mathbf{T}$			TR			LTI	₹.	1		İ
Lane Width		10.0	`		10.0			10.5				İ
RTOR Vol						0	1		0			j
Adj Flow		837		ļ	721		ĺ	1716				ĺ
%InSharedLn				ļ					•	ł		į.
Prop LTs		0.14	0		0.0	00		0.0	37			Ī
Prop RTs	0	.000		0	.232		0	.141				İ
Peds Bikes				2	00	0 .	1	00	0 55.3.	0		. [
Buses		0		[0		[0	- 1	1 1 1	· · ·	į
	%InProtPhase 50.0								1 3	č	. !	
Duration	0.25		Area !	Type:	All (other	areas					•

___OPERATING PARAMETERS____

[Eastbound		₩e	stbou	ınd	No	rthbo	und	So	uthbo	und
	L T	R	L	${f T}$	R	L	${f T}$	R	Ĺ	T	R
Init Unmet	0.0	1	- -	0.0		-	0.0		- <u> </u>		
Arriv. Type	3	,		3		 	3		i i		
Unit Ext.	3.0)	ŀ	3.0			3.0		l I		
I Factor	1.0	000	Ì	1.00	0	İ	1.00	0			
Lost Time	2.0)	İ	2.0		j	2.0		İ		
Ext of g	2.0		2.0		İ	2.0		İ			
Ped Min g		-	4.6			3.9		Ì	3.2		

HCS+: Signalized Intersections Release 5.3

Inter.: 34th St and 2nd Ave

Agency: STV Incorporated

Area Type: All other areas

Date: 12/09/08

Period: 7:45 - 8:45 AM

Year : 2012 Build Project ID: Former Bellevue Psych Building Redevelopment

N/S St: Second Avenue

E/W St:	34th Stre	et		N/S	St: Se	cond .	Avenue			•
			IGNALIZED I					O = x = 2-2-2	20112	
	<u>!</u>	tbound_	Westbou		!	hboun	:	South! L T	oouna R	j.
	L	T R	L T	R	L	T	R i	L T	K	
to Issa	s	2 0	0 2	0	0	0	0 -	1	5 0	
No. Lane	- !	TR	DefL T	J		-	!		LTR	İ
LGConfig		640 132	224 282		i				63 86	İ
Volume	<u> </u>	10.0	9.5 10.0	1				.0 10		į
Lane Wid			19.5 10.0	,	}		,		0	i
RTOR Vol	1	0	1		I					<u></u>
Duration	0.25	Area	Type: All _Signal							parties F
Dhage Co	mbination	1 2			10119	5	6	7	8	
EB Left			,	NB	Left	-	Ŧ			
		P		1,2	Thru					
Thru					Right					
Righ		P			Peds	x				
Peds		X		l cp	Left	.P.				
WB Left		P P		SB	Thru					
Thru		P P								
Righ					Right					
Peds		X]	Peds	X				
NB Righ	ıt			EB	Right					
SB Righ	nt			WB	Right					
Green		25.0 8.0				42.0				
Yellow		3.0 3.0)			3.0				
All Red		2.0 2.0)			2.0				
	•			_	_		le Leng	th: 90	1.0	secs
			section Per:				7002			
Appr/ Lane	Lane Group	Adj Sat		S	Lane	Group	Appr	roacn		
Grp	Capacity			g/C	Delay	LOS	Delay	LOS	-	
Eastbour	nd			<u> </u>	· · · · · · · · · · · · · · · · · · ·	•				
	797	2760	1.05	0.29	78.5	E	78.5	E	٠	
TR	191	2700	#1.05		70.5	-	,			
Westbour	nd .		-		•					-
DefL	286	1429	0.81	0.42	55.5	E				. •
T	687	1627	0.42	0.42	17.8	В	34.5	C		
Northbou	und									
			•							
Southbo	und									
L	581	1244	0.48	0.47	16.2	В				
LTR	3126		0.89				21.6	C		
пти	5120	0000		 -		-				
	Interse	ction Del	ay = 33.9	(sec/v	eh) I	nters	ection	LOS =	C	

Fax:

_OPERATIONAL ANALYSIS____

Analyst:

NS

Agency/Co.:

STV Incorporated

Date Performed:

12/09/08

Analysis Time Period:

7:45 - 8:45 AM

Intersection:

34th St and 2nd Ave

Area Type:

All other areas

Jurisdiction:

Analysis Year: 2012 Build

Project ID: Former Bellevue Psych Building Redevelopment

E/W St: 34th Street

N/S St: Second Avenue

__VOLUME DATA

	Ea	Eastbound		Wes	stbour	ıd	1	Nort]	hbou	nd	So	uthbo	und
·	L	${f T}$	R	L	${f T}$	R	L	,	Т	R	L.	${f T}$	R
Volume	 	640	132	224	282		-	-			245	2363	86
% Heavy Veh	•	14	14	9	9		j.				19	19	19
PHF	[0.92	0.92	0.97	0.97		i				0.88		
PK 15 Vol	į	174	36	58	73		į,				70	671	24
Hi Ln Vol	ļ						İ				Ì		
% Grade		0			0						İ	0	
Ideal Sat		1900		1900	1900						1900	1900	
ParkExist	!			ļ			1						
NumPark			_	ļ [*]			1						
No. Lanes) 0	_	0	0	2	0		0	0	0	1	5	0
LGConfig	ļ	TR		Defi			-				L	LT:	R.
Lane Width	!	10.0		9.5	10.0		ŀ				8.0	10.0	
RTOR Vol		000	0								ļ		0
Adj Flow		839		231	291					_	278	2783	
%InSharedLn		0 0	0.0	1 00							0		
Prop LTs		0.0	00	!	0.00	, 00						0.0	00
Prop RTs	!	1.170	0 .	ļ U	.000		ļ.	۲,			:	.035	•
Peds Bikes	[∠ !	50 0	J ,		0			50			!		0 .
Buses %InProtPhase	 -	U		0.0	0		1.		E derivati	eriori Kongresi types i	0	0	
Duration	- 0.25	;	Area	•	A11 c	ther	l area	a s			١ ,		

___OPERATING PARAMETERS__

	Ea	Eastbound			stbou	nđ	No	rthbo	und	So	uthbou	ınd
	L	${f T}$	R	L	${f T}$	R	L	Ţ	R	L	T	R
Trait IImmat		0.0			0.0		- 			-		
Init Unmet				0.0	0.0		!			0.0	0.0	ļ
Arriv. Type		4	4	4					4	4		
Unit Ext.		3.0			3.0		İ			3.0	3.0	j
I Factor		1.00	0		1.00	0				ĺ	1.000) [
Lost Time		2.0		2.0	2.0					2.0	2.0	Ì
Ext of g		3.0		2.0	2.0		1			2.0	2.0	ĺ
Ped Min g	4.9						1	3.5			4.6	İ

HCS+: Signalized Intersections Release 5.3

Inter.: 34th St and FDR Dr SR

Agency: STV Incorporated

Area Type: All other areas

Date: 12/12/2008

Jurisd:

Period: 7:45 - 8:45 AM

Year : 2012 Build

Project ID: Former Bellevue Psych Building Redevelopment

E/W St: 34th Street

N/S St: FDR Drive Service Road

			SI	GNAI	IZI	ED IN	ITERSE	CTION	SUMM	ARY				
	Eas	tbour	ıd	V	Vest	bour	nd	No	rthbo	und		Sou	ıthboı	ınd
	L	T	R	ļ L		T	R	Ĺ	T	R	L		T	R
No Tanos		- 2	1		Λ	1	1		. 1	0	- -	0	2	0
No. Lanes LGConfig	DefL	T	R		Ü	LT	R	L	TR	•		_	LT	R
Volume	254	5	595	3	-	11	12	381	260	11	3		1142	182
Lane Width	10.0	10.0	9.0	1	:	16.0	16.0	10.0	10.5		1		9.5	
RTOR Vol	İ		0	ĺ			0			0				0

Dur	ation	0.25	Area	Type:	All o	ther	areas					14.14
				Si	gnal 0	perat	ions					
Pha	se Comb	ination 1	2	3	4	1		5	6	7	8	
EB	Left	P				NB	Left	P	P ·			
	Thru	P					Thru	P	P			
	Right	P				1	Right	P.	P			
	Peds					ĺ	Peds		X			
WB	Left	P				SB	Left		P			
	Thru	P				1	Thru		P			
	Right	P				İ	Right		P			
	Peds	X				Ì	Peds		X			·
NB	Right	·				EB	Right	P				
SB	Right					WB	Right					
Gre	_	22.	0			•		13.0	40.0			
_	.low	3.0						3.0	3.0	•		
	Red	2.0						2.0	2.0			
	· 			,				Cycl	.e Lengtl	a: 90.0	0	secs

•		Intersec	tion Pe	rformano	ce Summa	ry			·
Appr/ Lane	Lane	Adj Sat Flow Rate	Rati	os	Lane G	roup	Appro	ach	
Grp		(s)	v/c	g/C	Delay	LOS	Delay	LOS	
Eastbo	und								
DefL	276	1129	0.95	0.24	76.0				
т	398	1627	0.01	0.24	25.8	C	72.6	E	
Ř	592	1333	1.04	0.44	71.5	E	કહે		1.3 (4)
Westbo	und	%t 							ear P
LT	507	2076	0.06	0.24	26.3	С	26.3	C	
Ŕ	420	1718	0.06	0.24	26.4	С			
Northb	ound	•							
L	426	1541	1.00	0.64	62.4	E			
TR	1060	1645	0.29	0.64	7.7	A	39.7	D	
Southb	ound								
LTR	1332	2996	1.05	0.44	63.5	E	63.5 .	E	
	Intersec	ction Delay	= 59.7	(sec/v	eh) In	terse	ection 1	Los =	E

Fax:

OPERATIONAL ANALYSIS_____

Analyst:

NS

Agency/Co.:

STV Incorporated

Date Performed:

12/12/2008

Analysis Time Period:

7:45 - 8:45 AM

Intersection:

34th St and FDR Dr SR

Area Type:

All other areas

Jurisdiction:

Analysis Year:

2012 Build

Project ID: Former Bellevue Psych Building Redevelopment

E/W St: 34th Street

N/S St: FDR Drive Service Road

__VOLUME DATA

	Eas	Eastbound		Wes	stbour	nd] No:	rthbo	und	Son	ıthboı	ınd
	L	T	R	L	Т	R	ļ L	T	R	L	${f T}$	R
Volume	254	5	595	3	11	12	381	260	11	3	1142	182
% Heavy Veh	9	9	9	0	0	0	j 9	9	9	3	3	з і
PHF	0.97	0.97	0.97	0.45	0.45	0.45	0.89	0.89	0.89	0.95	0.95	0.95
PK 15 Vol	65	2	153	2	6	7	107	73	3	1	301	48
Hi Ln Vol	Ì			Ì			i				- +-	
% Grade	j	0		İ	0		i	0			0	i
Ideal Sat	1900	1900	1900	İ	1900	1900	1900	1900			1900	
ParkExist	İ			Ì			İ					
NumPark		•		İ			i					
No. Lanes	0	2	1	0	1	1	1	1	0	0	2	0
LGConfig	Defl	T	R	į	LT	R	l L	TR			LT	3
Lane Width	10.0	10.0	9.0	İ	16.0	16.0	110.0	10.5		İ	9.5	-
RTOR Vol	į ·		0	İ		0	j		0			0
Adj Flow	262	5	613	i	31	27	428	304		i	1397	
%InSharedLn	İ			j						İ		
Prop LTs	1.000	0.00	00]	0.22	26	1.00	0.0	00	j.	0.0	02
Prop RTs	į o.	000	L.000	0.	.000	1.000	i o	.039		i o	. 13.7:	
Peds Bikes	0			50	י כ	0	2.	5 ≕ ⊸a.a	0 .	i 5:	0.	:
Buses	0	0	0	İ	0 .	0	<u>-</u> 0	0.		i	0	-
%InProtPhase			İ			0.0		0.0	i	-		
Duration	0.25		Area '	Type:	A11	other	areas			'		'

OPERATING PARAMETERS

	Ea	Eastbound		We	stbou	nd	No	rthbo	und	So	uthbo	und
•	L	T	R	L T R			Ĺ	T	R	L	${f T}$	R
Init Unmet	 0.0	0.0	0.0	 	0.0	0.0	0.0	0.0		·	0.0	
Arriv. Type		3	3		3	3	3	3			3	.
Unit Ext.	3.0	3.0	3.0	į	3.0	3.0	3.0	3.0		İ	3.0	į
I Factor		1.00	0 ·		1.00	0	1	1.00	0	İ	1.00	o j
Lost Time	2.0	2.0	2.0		2.0	2.0	2.0	2.0		j	2.0	į
Ext of g	2.0	2.0	2.0		2.0	2.0	2.0	2.0		İ	2.0	į
Ped Min g	1	3.2			3.5		ĺ	3.4		İ	3.5	İ

HCS+: Signalized Intersections Release 5.3

Analyst: NS

Inter.: 23rd St and FDR Dr N SR

Agency: STV Incorporated

Area Type: CBD or Similar

Date: 12/09/08

Jurisd:

Period: 5:00 - 6:00 PM

Year : 2012 Build

Project ID: Former Bellevue Psych Building Redevelopment

E/W St: 23rd Street

N/S St: FDR Drive N SR

E/W St:	23rd Stre	eet	•	. N/S	St: FI	JR Driv	e N S	oK.		
		SI	GNALIZED	INTERSE	CTION :	SUMMAR	<u> </u>			
	Eas	tbound	Westb			thbound		South	ıbound	. [
	L	T R	L T	R	ļ L	T I	₹	r j	R	
No. Lane LGConfig Volume Lane Wid	J L 301	1 1 LTR R 20 343 10.5 11.0	1 L 4 9 16.0 16		1 L 290 11.0	TR 408 18	B	0	0 0	
RTOR Vol	L ·	0	1	0		. 0	1			İ
Duration	0.25	Area	Type: CE	BD or Sin				 	ed 6	
71 C	ombination	ı 1 2		4		5	6	7	8	
••		1 1 2 P	3	T NB	Left		P	P	-	
EB Left		P		113	Thru	P	P	P		
Thru		P			Right		P	P		
Righ				}	Peds	_	x	, =		-
Peds		X P P		sB	. – –					
WB Left		P P	1.	1 .	Thru					
Thru		P P		•	Right		*			
Righ		X X			Peds	Х	,			•
Peds		A A		EB						
NB Rigi				WB	_					
SB Righ	nt	6.0 28.	0	1 112	it i giro	18.0	8.0	10.0		
Green		-	-			3.0	0.0	3.0		
Yellow		3.0 ' 3.0 2.0 2.0				2.0	0.0	2.0		
All Red		2.0 2.0						gth: 9	0.0	secs
		Tatora	ection P	orforman.	ce Summ			9011. 9	0.0	
3/	T 222	Incers Adj Sat				Group		roach		
Appr/	Lane	Flow Rat		105	Luito	·	To To			
Lane Grp	Group Capacity		v/c	g/C	Delay	LOS	Dela	y LOS	_	
Eastbou	nđ	<u> </u>								
L	284	914	0.79	0.31	47.9	D				
LTR	335	1076	0.67	0.31	37.4	D	40.3	D		
R	381 ***	1224	0.67	0.31	36.1	; D -				

L TR	443 780	1841 1799	0.01 0.02	0.43 0.43	15.0 14.6	B B	14.7	В
North	oound							
L	365	1428	0.91	0.26	54.5	D	37.9	T)
ΨR	675	1482	0.73	0.46	26.6	_	21.2	1

Southbound

Westbound

Intersection Delay = 38.7 (sec/veh) Intersection LOS = D

Fax:

_OPERATIONAL ANALYSIS___

Analyst:

NS

Agency/Co.:

STV Incorporated

Date Performed:

12/09/08

Analysis Time Period:

5:00 - 6:00 PM

Intersection:

23rd St and FDR Dr N SR

Area Type:

CBD or Similar

Jurisdiction:

Analysis Year:

2012 Build

Project ID: Former Bellevue Psych Building Redevelopment

E/W St: 23rd Street

N/S St: FDR Drive N SR

____VOLUME DATA_

	Eastbound			We	stbou	nđ	No:	rthbo	und	Sou	thbo	unđ
•	L	T	R	L	T	R	L	T	R	L	T	R
Volume .	301	20	343	4	9	4	290	408	-1-8	i t-		<u> </u>
% Heavy Veh	•	12	12	Ö	0	0.	10	10	10		•	
PHF	•		0.94	0.87	0.87	0.87	0.87	0.87	- +			
PK 15 Vol	80	5	91	1	3	1	83	117	5			
Hi Ln Vol	İ			İ			i		-	i		
% Grade	İ	0		İ	0		İ	0		i		
Ideal Sat	1900	1900	1900	1900	1900		1900	1900		ŀ		
ParkExist	ĺ			Ì			İ			i		
NumPark	j			İ			i			İ		
No. Lanes	1	1	1	1	1	0	1	1	0	i o	0	0
LGConfig	Ĺ	LT	R R	L	TR		L	TR		Ì		
Lane Width	10.5	10.5	11.0	16.0	16.0		111.0	11.0		İ		
RTOR Vol	İ		0	į		0	j		0	İ		
Adj Flow	224	226	256	5	15		333	490		İ		
%InSharedLn	30		30	İ			j			İ		
Prop LTs	1.00	0 0 . 4:	25	1.00	0.0	00	İ	0.0	00	İ		
Prop RTs.	0	.485	1.000	j 0	.333		j o	.043		i .		
Peds. Bikes	[1	00		1	00	0	· 5	0	0	0	_ *.	
Buses	0	O	6 .	,0	0.		0	0	-	j		•
%InProtPhase	e			0.0			İ		0.0	j		
Duration	0.25		Area '	Ivpe:	CBD (or Sim	ilar			•		

OPERATING PARAMETERS

	Ea T.	stbou T	nd R	We	stbour T	nd R	No	rthbo	ınd R	So	uthbo T	und R	
	_	-	••	-	•		~	-	1.	} "	-	K	ł
Init Unmet	0.0	0.0	0.0	0.0	0.0		0.0	0.0					-
Arriv. Type	3	3	3	3	3		5	3		İ			İ
Unit Ext.	3.0	3.0	3.0	3.0	3.0		3.0	3.0		İ			Ì
I Factor		1.00	0		1.000)	İ	1.00	0	i			i
Lost Time	2.0	2.0	2.0	2.0	2.0		0.0	2.0		i			ı
Ext of g	2.0	2.0	2.0	2.0	2.0		5.0	2.0					İ
Ped Min g		3.9		Ì	3.9		ĺ	3.5		i	3.2		İ

HCS+: Signalized Intersections Release 5.3

Inter.: 23rd St and FDR Dr S/ Ave C

Agency: STV Incorporated

Area Type: CBD or Similar

Date: 12/09/08

Jurisd:

Period: 5:00 - 6:00 PM

Year : 2012 Build

Project ID: Former Bellevue Psych Building Redevelopment

E/W St: 23rd Street

N/S St: FDR Drive S/ Avenue C

16.0 16.0 10.0 10.5 10.0 10.0 10.5 10.0 10.5	E/W St: 23	3rd Stre				St: FI			aven	iue C		•
No. Lanes									Sor	thhou	nd.	ī
No. Lanes		!	:			!		:				i '
L TR 4 9 4 68 265 232 10.0 10.5 10.0 10.0 10.5 10.0 10.0 10.5 10.0 10.0 10.5 10.0 10.5		"	TK		10	-		İ				_
L TR	No. Lanes	0	0 0	1	1 0	0	0	0	1	2	0	Ì
Volume				L '	ľR	İ]				ļ
Duration 0.25 Area Type: CBD or Similar Signal Operations Phase Combination 1 2 3 4 NB Left Thru Right Peds X Peds	Volume	İ			-	•		ļ			232	
Duration 0.25 Area Type: CBD or Similar Signal Operations Phase Combination 1 2 3 4 5 6 7 8 EB Left	Lane Widtl	n İ	·	16.0 16	. 0	ļ]	10.0	10.5	_	
Signal Operations Sign	RTOR Vol				. 0	İ		Į			U	\
Phase Combination 1 2 3 4 5 6 7 8 EB Left Thru Right Peds X Peds X WB Left P SB Left P Thru P Right P Peds X NB Right P Peds NB Right SB Right SB Right NB Right SB Right SB Right NB Right SB Right SB	_1 ~ 1		1 0			ions			. 7		₹	
Thru Right Peds X WB Left P Thru P Right P Peds X WB Left P Thru P Right P Peds X NB Right P Peds X NB Right B Right WB Right Green 28.0		oination	. 1 2	3	- !	T.o.f+	,	Ū		,		
Right					1 1/12							
Peds X WB Left P Thru P Right P Right P Peds X NB Right P Peds X NB Right P Peds X NB Right S											•	
WB Left P Thru P Thru P Right P Peds X NB Right P Peds X NB Right SB Right WB P Thru Thru P Thru Thru P Thru Thru Thru Thru Thru Thru Thru Thru	_		y			_				•		
Thru P Right P Peds X NB Right P Peds X NB Right SB Right SB Right SGreen 28.0 18.0 21.0 Yellow 3.0 3.0 3.0 All Red 2.0 Cycle Length: 90.0 secs Intersection Performance Summary Appr/ Lane Adj Sat Ratios Lane Group Flow Rate Grup Flow Rate Gry Capacity (s) V/C g/C Delay LOS Delay LOS Eastbound Westbound L 573 1841 0.01 0.31 21.4 C TR 573 1841 0.03 0.31 21.6 C 21.6 C Northbound Southbound L 340 1458 0.22 0.23 29.4 C TR 534 2669 1.05 0.20 87.8 F 80.8 F					SB			P				
Right Peds Peds X Right SB Right BRight BRI				••			P					
Peds				•								
NB Right SB Right Green 28.0 3.0 3.0 3.0 3.0 3.0 3.0 3.0 3.0 3.0 3			F									
SB Right Green 28.0 18.0 21.0 Yellow 3.0 3.0 3.0 All Red 2.0 Cycle Length: 90.0 secs Intersection Performance Summary Appr/ Lane Adj Sat Ratios Lane Group Approach Grp Capacity (s) v/c g/c Delay LOS Delay LOS Eastbound Westbound L 573 1841 0.01 0.31 21.4 C TR 573 1841 0.03 0.31 21.6 C 21.6 C Northbound Southbound L 340 1458 0.22 0.23 29.4 C TR 534 2669 1.05 0.20 87.8 F 80.8 F					EB							
Green 28.0	_				<u>.</u>	, -						
Yellow 3.0 3.1 3.1 4.0 6.0 3.0 3.1 3.1 4.0 6.0 3.0 3.0 3.1 3.1 4.0 <t< td=""><td>_</td><td></td><td>28.0</td><td></td><td>•</td><td>•</td><td></td><td>21.0</td><td>0</td><td></td><td></td><td></td></t<>	_		28.0		•	•		21.0	0			
All Red 2.0 Cycle Length: 90.0 secs Intersection Performance Summary Appr/ Lane Adj Sat Ratios Lane Group Approach Lane Group Flow Rate Grp Capacity (s) V/c g/c Delay LOS Delay LOS Eastbound Westbound L 573 1841 0.01 0.31 21.4 C TR 573 1841 0.03 0.31 21.6 C 21.6 C Northbound Southbound L 340 1458 0.22 0.23 29.4 C TR 534 2669 1.05 0.20 87.8 F 80.8 F							3.0	3.0				
Cycle Length: 90.0 secs							10.0	2.0				
Appr/ Lane Adj Sat Ratios Lane Group Approach Lane Group Flow Rate Grp Capacity (s) v/c g/C Delay LOS Delay LOS Eastbound Westbound L 573 1841 0.01 0.31 21.4 C TR 573 1841 0.03 0.31 21.6 C 21.6 C Northbound Southbound L 340 1458 0.22 0.23 29.4 C TR 534 2669 1.05 0.20 87.8 F 80.8 F							Cycl	e Lei	ngth:	90.0	٤	ecs
Southbound L 340												
Grp Capacity (s) v/c g/C Delay LOS Delay LOS Eastbound Westbound L 573 1841 0.01 0.31 21.4 C TR 573 1841 0.03 0.31 21.6 C 21.6 C Northbound Southbound L 340 1458 0.22 0.23 29.4 C TR 534 2669 1.05 0.20 87.8 F 80.8 F					.os	Lane	Group	Apı	proac	n	,	
Eastbound Westbound L 573 1841 0.01 0.31 21.4 C TR 573 1841 0.03 0.31 21.6 C 21.6 C Northbound Southbound L 340 1458 0.22 0.23 29.4 C TR 534 2669 1.05 0.20 87.8 F 80.8 F												
Westbound L 573 1841 0.01 0.31 21.4 C TR 573 1841 0.03 0.31 21.6 C 21.6 C Northbound Southbound L 340 1458 0.22 0.23 29.4 C TR 534 2669 1.05 0.20 87.8 F 80.8 F	Grp C	apacity	(s)	v/c	g/C	Delay	LOS	Der	ау ьо 			
L 573 1841 0.01 0.31 21.4 C TR 573 1841 0.03 0.31 21.6 C 21.6 C Northbound Southbound L 340 1458 0.22 0.23 29.4 C TR 534 2669 1.05 0.20 87.8 F 80.8 F	Eastbound								•			
L 573 1841 0.01 0.31 21.4 C TR 573 1841 0.03 0.31 21.6 C 21.6 C Northbound Southbound L 340 1458 0.22 0.23 29.4 C TR 534 2669 1.05 0.20 87.8 F 80.8 F												
L 573 1841 0.01 0.31 21.4 C TR 573 1841 0.03 0.31 21.6 C 21.6 C Northbound Southbound L 340 1458 0.22 0.23 29.4 C TR 534 2669 1.05 0.20 87.8 F 80.8 F	•											
L 573 1841 0.01 0.31 21.4 C TR 573 1841 0.03 0.31 21.6 C 21.6 C Northbound Southbound L 340 1458 0.22 0.23 29.4 C TR 534 2669 1.05 0.20 87.8 F 80.8 F	Worthound	1	•				1					
TR 573 1841 0.03 0.31 21.6 C 21.6 C Northbound Southbound L 340 1458 0.22 0.23 29.4 C TR 534 2669 1.05 0.20 87.8 F 80.8 F	_		1841	0.01	0.31	21.4	C					
Northbound Southbound L 340 1458 0.22 0.23 29.4 C TR 534 2669 1.05 0.20 87.8 F 80.8 F				0.03	0.31		C	21.	6 C	:		
Southbound L 340 1458 0.22 0.23 29.4 C TR 534 2669 1.05 0.20 87.8 F 80.8 F	IK	373										
L 340 1458 0.22 0.23 29.4 C TR 534 2669 1.05 0.20 87.8 F 80.8 F	Northbour	ıd ·		•								
L 340 1458 0.22 0.23 29.4 C TR 534 2669 1.05 0.20 87.8 F 80.8 F												
L 340 1458 0.22 0.23 29.4 C TR 534 2669 1.05 0.20 87.8 F 80.8 F	Southbour	nd										
TR 534 2669 1.05 0.20 87.8 F 80.8 F									_			•
Intersection Delay = 79.0 (sec/veh) Intersection LOS = E			2669	1.05	0.20	87.8	F	80.	8 F	' /		
THOULDWOOL MOREY TO TO THE TOP TO		Interse	ction Delay	r = 79.0	(sec/v	eh)]	Inters	ectio	n LOS	S = E		
		THESTOC	colon bold,	, , , ,	,===,,	, -	•					

Fax:

_OPERATIONAL ANALYSIS___

Analyst:

NS

Agency/Co.:

STV Incorporated

Date Performed:

12/09/08

Analysis Time Period:

5:00 - 6:00 PM

Intersection:

23rd St and FDR Dr S/ Ave C

Area Type:

CBD or Similar

Jurisdiction:

Analysis Year:

2012 Build

Project ID: Former Bellevue Psych Building Redevelopment

E/W St: 23rd Street

N/S St: FDR Drive S/ Avenue C

VO	ìΤ.	TIME	DATA

· .	Eastbound L T R			Wes	stbou	Westbound		thbo	und	So	uthbo	und
	L	T	R	L	${f T}$	R	L	${f T}$	R	L	${f T}$	R
Volume	<u></u>		-	—— <u>—</u>	9	4	<u> </u>		rawa ma	68	265	232
% Heavy Veh				0	0	0	! 		•	4	4	4 4
PHF				0.87	0.87	0.87	l İ			0.89	-	_
PK 15 Vol	! i	•		1	3	1	! 			19	74	65
Hi Ln Vol	ľ			-	,	т.	! !			1 7 9	14	05
% Grade	l I				0		 				0	
Ideal Sat	<u>[</u>]			11900	1900		[1000	1900	
ParkExist	1			1 200	1900		<u> </u>			1 1 3 0 0	1900	
NumPark	! !			.			<u> </u>					
No. Lanes	0	0	0	1	1	0	0	0	0	1	2	0
LGConfig		Ū	Ü	L T	TR	O	1	U	U	L	Z TR	-
Lane Width	! 			16.0]]			•	10.5	
RTOR Vol	 			1 - 0 . 0	10.0	0] 			110.0	10.5	
Adj Flow	! 		* *	5	15	U	 			76	EEO	0
%InSharedLn	! 			-	13		 			76	559	
Prop LTs	<u> </u>			}	0.0	00	 			1		00
	<u> </u>			0	.333	00	 				0.0	UU
Prop RTs	10	20	•	•			-,	<u>.</u>			.467	
Peds Bikes	i T	00			00		ן 5ו)	• • • • •		0 . 1.	U .
Buses	<u> </u> -		-	. 0	0 .		ļ	-		0	0	
%InProtPhase	e 0.25		Area		CD D	or Sim	 !	-				

Duration

0.25

Area Type: CBD or Similar

OPERATING PARAMETERS

	Eastbound			Westbound			No.	rthbo	und	So	uthbo	und
	L	T	R	L	${f T}$	R	L	T	R	L	T	R
Trit Homet				-			-			-		
Init Unmet				0.0	0.0		!			0.0	0.0	1
Arriv. Type				3	3					3	3	1
Unit Ext.				3.0	3.0		İ			3.0	3.0	i
I Factor					1.00	0				İ	1.00	o į
Lost Time				2.0	2.0					2.0	2.0	İ
Ext of g				2.0	2.0					2.0	2.0	i
Ped Min g		3.9			3.9			3.5		1	3.5	. j

HCS+: Signalized Intersections Release 5.3

Analyst: NS

Inter.: 23rd St and 1st Ave

Agency: STV Incorporated

Area Type: CBD or Similar

Date: 12/09/08

Jurisd:

Period: 5:00 - 6:00 PM

Year : 2012 Build

Project ID: Former Bellevue Psych Building Redevelopment

E/W St: 23rd Street

N/S St: First Avenue

E/W St: 231	rd Stre		GNALIZED		SC: LTI					
	Ha-		Westb			bound		South	bound	
	L	tbound T R	Wesco		1		R I			
	1 "	, N			i					i `
lo. Lanes		2 0	0	3 0	0	4 (0	0	0 0	
GConfig		LT	_	TR	İ	LTR	i			ĺ
Jolume	136	502	40		235 12	259 1	63			!
Lane Width	!	10.5	10		1 10	0.0	İ			l
RTOR Vol			i	. 0	İ	. 0	İ			ĺ
Ouration	0.25	Area	Type: CB	D or Sim	ilar	e 45	4.			
		1 2		1 Operat 4	ions	5	6	7	8	
Phase Comb	ınatıon		3	4 NB	Left	P	v	•	9	
EB Left		P P P P		מא	Thru	P				
Thru		P P		ł	Right	P				
Right		77			Peds	X				
Peds		Х		SB	Left	Δ				
WB Left		· EP		DB DB	Thru				. :	
Thru		=]						
Right		P			Right Peds	Х				
Peds		X		ED.		Λ				
NB Right				EB						
SB Right		00 0 7 0		WB	Right	36.0				
Green		20.0 7.0				3.0				
Yellow		3.0 3.0				8.0				
All Red		2.0 8.0				-	e Leng	-h• 9	n n	secs
		Interse	ction Pe	rformano	e Summa	_		C11. J	0.0	2002
Appr/ La	ine	Incerse Adj Sat	Rati		Lane G		Appr	oach		
	coup	Flow Rate				_			_	
	pacity		v/c	g/C	Delay	LOS	Delay	LOS	_	
Eastbound										
ւս 7	751	-2465	0.89	0.36	41.7	D	41.7.	. D	1. 1	
Westbound			-	_		_		_		
TR 6	562	2979	1.10	0.22	98.8	F	98.8	F		
Northbound	1									
LTR 1	1887	4718	0.90	0.40	32.4	С	32.4	С		
Southbound	a					·				

Intersection Delay = 50.0 (sec/veh) Intersection LOS = D

Phone:

Fax:

E-Mail:

_OPERATIONAL ANALYSIS____

Analyst:

NS

Agency/Co.:

STV Incorporated

Date Performed:

12/09/08

Analysis Time Period:

5:00 - 6:00 PM

Intersection:

23rd St and 1st Ave

____VOLUME DATA___

Area Type:

CBD or Similar

Jurisdiction:

Analysis Year:

2012 Build

Project ID: Former Bellevue Psych Building Redevelopment E/W St: 23rd Street

N/S St: First Avenue

	Ea:	stboui	nd	We	stbou	nd	l No:	rthbou	ınd	Sou	thbo	und
	j L	T	R	Ŀ	Т	R	L	T	R	L	Т	R
Volume	136	502		·	404	205	235	1259	163	<u> </u>		· · · ·
% Heavy Veh	14	14]	26	26	14	14	14			
PHF	0.96	0.96			0.84	0.84	0.98	0.98	0.98			
PK 15 Vol Hi Ln Vol	35 	131			120	61	60	321	42			
% Grade	İ	0 .		İ	0		i	0				
Ideal Sat	į ·	1900		ĺ	1900		j·	1900		!		
ParkExist	İ	-	X	Ì			x		X			
NumPark	ĺ		5	İ			j 5		5	!		
No. Lanes	0	2	0	j 0	3	0	į o	4	0	0	0	0
LGConfig	ĺ	LT		İ	TR		İ	LŢ	₹.			
Lane Width		10.5		İ	10.0		İ	10.0				
RTOR Vol						0	İ		0			
Adj Flow		665			725		İ	1691	•	İ		
%InSharedLn				ĺ			j ·					
Prop LTs		0.2	L 4		0.0	00	j	0.14	12	Í		
Prop RTs	0	.000		0	.337		0	098		j ,		
Peds Bikes				2	00	0	2	0)	. 0		
Buses		0	onta.		0		İ	0	-		44	
%InProtPhase	e 0.0						İ			İ		-
Duration	0.25		Area '	Type:	CBD (or Sim	ilar			•		

OPERATING PARAMETERS

	Eastbound L T R			Westbound			Northbound			So	uthbo	und	1
	L	T	R	L	${f T}$	R	L	T	R	L	T	R	Ì
Init Unmet		0.0			0.0	· · · · · · · · · · · · · · · · · · ·	·	0.0		- 			.
Arriv. Type		3			3		İ	3		İ			i
Unit Ext.		3.0			3.0		İ	3.0					i
I Factor		1.00	0		1,00	0	İ	1.00	0				İ
Lost Time		2.0			2.0		j	2.0					İ
Ext of g		2.0			2.0		į	2.0					ì
Ped Min g					4.6		ĺ	4.6		İ	3.2		İ

HCS+: Signalized Intersections Release 5.3

Inter.: 23rd St and 2nd Ave

Agency: STV Incorporated

Area Type: CBD or Similar

Date: 12/09/08

Jurisd:

Period: 5:00 - 6:00 PM

Year : 2012 Build

Project ID: Former Bellevue Psych Building Redevelopment

N/S St: Second Avenue

E/W St: 23rd Stree	et		N/S	St: Se	cond A	Avenue	3			
	sig	NALIZED	INTERSE	CTION S	UMMAR.	Y				
Eas	tbound	Westb		!	hboun	i		thbou		!
L	T R	L T	R	L	T 1	R	L	T	R .	<u> </u>
No. Lanes 0	3 0	0	2 0	0	0	o -	1	4	0	
LGConfig .	TR		T	İ		į	Ŀ	TR		
		233 40	5	İ		[:	211	1918	236	
		10.0 10		İ		į:	10.0	10.0		1
RTOR Vol	0			İ		j			0	1
			D en Cim	47.46					··· ·	
Duration 0.25	Area T		BD or Sim al Operat							
Phase Combination	1 2	3	4		5	6	7		8	
EB Left			NB	Left						
Thru	P		ļ	Thru						
Right	P		1	Right						
Peds	X		Ī	Peds	X					
WB Left	P		SB	Left	P					
Thru	P .			Thru	P					
Right			į	Right	P					
Peds	X		i i	Peds	X					
NB Right			EB	Right						
SB Right			WB	Right						
	35.0		•	_	45.0					
-	3.0				3.0					
All Red	2.0				2.0					
Wil Ved	2.0	-				e Len	igth:	90.0	s	ecs
			erformand	e Summa	ary					
Appr/ Lane	Adj Sat		ios	Lane (Group	App	roac	h		
Lane Group Grp Capacity	Flow Rate (s)	v/c	g/C	Delay	LOS	Dela	y LO	 S		
Grp Capacity	(5)									
Eastbound			•							
TR 1313	3375	0.46	0.39	21.6	C	21.6	5 C		į.	
18 1313			W. J. S							
Westbound	N=1	:	√ .							
DefL 233	598	1.08	0.39	108.5	F	,				
T 512	1317	0.85	0.39	41.2		65.8	3 E			
1 312	131,	***	•							
Northbound										
					,					
Southbound										
L 600	4 4 0 0	0.35	0.50	15.3	В					
	1199									
TR 2564	1199 5127	0.85		23.3		22.	6 C	:		

Phone:

Fax:

E-Mail:

OPERATIONAL ANALYSIS

Analyst:

NS

Agency/Co.:

STV Incorporated

Date Performed:

12/09/08

Analysis Time Period:

5:00 - 6:00 PM

Intersection:

23rd St and 2nd Ave

Area Type:

CBD or Similar

Jurisdiction:

Analysis Year:

2012 Build

Project ID: Former Bellevue Psych Building Redevelopment

E/W St: 23rd Street

N/S St: Second Avenue

____VOLUME DATA___

	East	tbour	nd	We	stbour	nđ	No:	rthbou	ınđ	Soi	ıthboı	ınd
	L	T	R	L	T	R	L.	T	R	L	T	R
Volume		427	129	 233	405		<u></u>	/ == 1	· ·	211	1918	236
% Heavy Veh		17	17	6	6		i			7	7	7
PHF		0.93	0.93	0.93	0.93		ĺ			0.99	•	0.99
PK 15 Vol	-	115	35	63	109		j			53	484	60
Hi Ln Vol				İ			İ			1		
% Grade	(0		į	0		ĺ			İ	0	i
Ideal Sat	:	1900		1900	1900		j			1900	1900	į
ParkExist						X	ĺ	•		х		x .
NumPark				1		5				0		0 į
No. Lanes	0	3	0	0	2	0	0	0	0	1	4	0
LGConfig		TR		Def	L T					L	TR	İ
Lane Width		10.0		10.0	10.0					10.0	10.0	į
RTOR Vol			0									0
Adj Flow		598		251	435					213	2175	
%InSharedLn				ļ			ļ					1
Prop LTs		0.00	00	!	0 0.00	00					0.0	00 [
Prop RTs	Į.	232		<u> </u>	.000		•			0	.109	1
Peds Bikes	250)				1	0.0	31.	21	0.0.4) · C
Buses		11	•	0	0		į	- 15		0	0 _	
%InProtPhase							1					·
Duration	0.25		Area !	Type:	CBD o	or Sim:	ilar					

OPERATING PARAMETERS

	Eastbound			Westbound			ио	rthbo	und	So	uthbou	ınd İ
	L T R			L	T	R	Ĺ	T	R	L	${f T}$	R
Tanik Thamas		0.0		-			-					
Init Unmet		0.0		0.0	0.0		ļ			0.0	0.0	
Arriv. Type		3		3	3					3	3	1
Unit Ext.		3.0		3.0	3.0					3.0	3.0	ĺ
I Factor		1.00	0	1	1.000)	ĺ			İ	1.000	o i
Lost Time		2.0		2.0	2.0		ĺ			2.0	2.0	İ
Ext of g		2.0		2.0	2.0		j			2.0	2.0	
Ped Min g		4.9					İ	3.9		İ	4.6	

Inter.: 29th St and 1st Ave

Agency: STV Incorporated

Area Type: CBD or Similar

Date: 12/09/08

Jurisd:

Period: 5:00 - 6:00 PM

Year : 2012 Build

Project ID: Former Bellevue Psych Building Redevelopment

E/W St: 29th Street

N/S St: First Avenue

E/W St: Z9CI	T Derec										
-		SIG	NALIZED	INTERS	ECTION S	SUMMAR	Υ				
	East	bound	Westb			thbound		Sout	hbou	ınd	İ
		T R	L T	R	L	T 1	R	L	T	R	` -
No. Lanes LGConfig Volume Lane Width	0	0 0	0 16	1 0 TR 0		4 LTR 1639 1	6	0	0	0	
RTOR Vol		İ		0		0	İ				İ
Duration	0.25	Area T	vpe: CE	D or Si	milar	· · · · · · · · · · · · · · · · · · ·	<u> </u>	-			
			Signa	l Opera	tions						
Phase Combi	nation	1 2	3	4		5	6	7	, :	8	
EB Left				NE		P					
Thru					Thru	P					
Right				- 1	Right	. P					
Peds		X ·		į	Peds	X					
WB Left				i si	B Left		•				
Thru		P		į	Thru						
Right		P		į	Right	•			•		
Peds		X		i	Peds	×.					
				E							
				W	_				•		
SB Right	-	31.0		,		49.0					
Green		3.0				3.0					
Yellow		2.0				2.0					
All Red	. •	2.0					e Leng	rth:	90.0		secs
		Intersec	tion Pe	erforma	nce Summ	_	.0 2.011;	,			
Appr/ Lan		 Adj Sat	Rat			Group	Appı	roach			
Lane Gro	up acity	Flow Rate (s)	v/c	g/C	Delay	LOS	Delay	7 LOS			
Eastbound			·								
Labasaara									-		
					•					-	
Westbound	-	Market State Control					٠			٠	• •
TR 47	70	1365	0.04	0.34	19.7	В.	19.7	В			
Northbound											-
LTR 28	301	5144	0.71	0.54	16.8	В	16.8	В			
Southbound											
						•					

Intersection Delay = 16.8 (sec/veh) Intersection LOS = B

Fax:

_OPERATIONAL ANALYSIS___

Analyst:

NS

Agency/Co.:

STV Incorporated

Date Performed:

12/09/08

Analysis Time Period:

5:00 - 6:00 PM

Intersection:

29th St and 1st Ave

Area Type:

CBD or Similar

Jurisdiction: Analysis Year:

2012 Build

Project ID: Former Bellevue Psych Building Redevelopment

E/W St: 29th Street

N/S St: First Avenue

VOLUME DATA

.	Eas	stbou	nd	We	stbou	nd.	No:	rthbo	und	Sou	ıthbo	und
	Ĺ	${f T}$	R	L	T	R	L	${f T}$	R	L	T	R
Volume				-	16	0 -	 255	1639	16		-	
% Heavy Veh		•		i .	9	9	7	7	7			
PHF					0.92	0.92	0.96	0.96	0.96	Ì		
PK 15 Vol				·	4	0	66	427	4			
Hi Ln Vol	ļ [']			İ			ĺ					
% Grade					0		ĺ	0		İ		
Ideal Sat					1900		į	1900		İ		
ParkExist				x		X	X		X	İ		
NumPark				3		3	3		3			
No. Lanes	0	0	0	0	1	0	0	4	0	0	0	0
LGConfig					TR			LT:	R			
Lane Width				ļ	12.0		ļ	10.0				
RTOR Vol						0	[0			
Adj Flow				ļ	17		!	1990		ļ		
%InSharedLn				ļ			!]		
Prop LTs					0.0	00	ļ	0.1	34]		
Prop RTs .					.000	_ · .	!	.009		[
Peds Bikes				5	_	0	1		<u>،</u> س	a⊓ 0		
Buses				ļ	0		ļ	10.44				
%InProtPhase				<u> </u>			!_		*****			
Duration	0.25		Area	Type:	CBD	or Sim:	ilar					

__OPERATING PARAMETERS____

	Ea:	stbou	nd	W∈	stbou	nd	No	rthbo	und	So	uthbo	und
	L	T	R	L	${f T}$	R	ĹL	T.	R	L	${f T}$	r j
				ļ ———			-			- [
Init Unmet					0.0			0.0				
Arriv. Type					3			3				į
Unit Ext.					3.0		1	3.0		j		
I Factor					1.00	0		1.00	0	İ		
Lost Time]				2.0			2.0		İ		
Ext of g]		,	,	2.0		Ì	2.0		Ì		
Ped Min g	1				3.5		1	3.9		j	3.2	j

HCS+: Signalized Intersections Release 5.3

Inter.: 29th St and 2nd Ave Area Type: CBD or Similar

Agency: STV Incorporated

Jurisd:

Year : 2012 Build

Date: 12/09/08 Period: 5:00 - 6:00 PM Project ID: Former Bellevue Psych Building Redevelopment

E/W St: 29th Street

N/S St: Second Avenue

5/W St: 29t	n Stree	36											
	l Engt	hound	— .		KED IN stboun		CTION S	hbour		Sou	thbou	ınd	l
,	L	bound T	R	L	Т	R	L	Т		L	Т	R	
No. Lanes LGConfig Volume Lane Width RTOR Vol	0	0	0	0	1 LT 185 16.0	0	0	0	0		5 TR 2180 10.0	0 217 0	
Ouration	0.25	A	rea T			or Sim Operat					• • •		
Phase Combi		X P P X 31.0 3.0 2.0		3	4 Perf	SB EB WB	Left Thru Right Peds Left Thru Right Peds Right Right	X 49.0 3.0 2.0 Cyc ary	le Lenç		90.0	8	secs
Appr/ Lar Lane Gro	ne oup	Adj Flow	Sat		atios		Lane	Group		oach			
Grp Cap	pacity	(£	∌)	v/c	g	/C	Delay	LOS	Delay	LOS	5		
Eastbound			· -										
Westbound		* · * * * * * *	JT -					:	· •				•
	1·3	1488	3	0.5	7 0	.34	28.7	С	28.7	C			
Northbound													
Southbound													
TR 3	564	654	7	0.7	2 0	.54	16.6	В	16.6	В			

Phone:

Fax:

E-Mail:

__OPERATIONAL ANALYSIS____

Analyst:

NS

Agency/Co.:

STV Incorporated

Date Performed:

12/09/08

Analysis Time Period:

5:00 - 6:00 PM

Intersection:

29th St and 2nd Ave

Area Type:

CBD or Similar

Jurisdiction:

Analysis Year: Project ID: Former Bellevue Psych Building Redevelopment

2012 Build

E/W St: 29th Street

N/S St: Second Avenue

____VOLUME DATA___

	Eas	stbou	ınd	We	stbou	nd	No	rthbou	ınd	S	outhbo	und
	L	T	R	L	T	R·	L	Т	R	L	T	R
Volume % Heavy Veh PHF PK 15 Vol Hi Ln Vol				86 6 0.92 23	185 6 0.92 50					,	2180 6 0.94 580	217 6 0.94 58
% Grade Ideal Sat ParkExist NumPark		·		 X 5	0 1900	X 5				 x 5	0 1900	
No. Lanes LGConfig Lane Width	0	. 0	0	0	1 LT 16.0			0	0		5 TR 10.0	
RTOR Vol Adj Flow %InSharedLn					294						2550	
Prop LTs Prop RTs Peds Bikes Buses	 10	00		0	0.3			Supplied to	•		0.0 0.091 50	
%InProtPhase	0.25		Area	 Type:		or Sim	 ilar				-	

__OPERATING PARAMETERS__

	Ea	stbou	.nd	We	stbou	nd	No	rthbo	und	Sc	uthbo	und
	L	T	R.	L	${f T}$	R	L	${f T}$	R	L	Т	R
T-n				 			·			-	 -	
Init Unmet					0.0						0.0	
Arriv. Type					3						3	1
Unit Ext.					3.0						3.0	İ
I Factor					1.00	0				İ	1.00	10 j
Lost Time					2.0		j			İ	2.0	·
Ext of g				1	2.0		İ	,		İ	2.0	
Ped Min g		3.9					İ		`	İ	3.5	

' HCS+: Signalized Intersections Release 5.3

Analyst: NS

TR

Southbound

Inter.: 30th St and 1st Ave

Agency: STV Incorporated

Area Type: CBD or Similar

Date: 12/09/08

Jurisd:

Period: 5:00 - 6:00 PM

Year : 2012 Build

Project ID: Former Bellevue Psych Building Redevelopment

E/W St: 30th Street

N/S St: First Avenue

	Eac	tbour					und		CTION Nor		bound			Sou	thbo	und	1
	L	T	R	P.		T		₹	L	T		ર	L		T	R	
No. Lanes	2	1	0		0	0			0		4 ()		0	0	0	
LGConfig	L	${f T}$		j				R	İ		TR						!
Volume	397	303		Ì			75		1		50 89	9					ļ
Lane Width	11.0	12.0						2.0	ļ	10	.0]				
RTOR Vol				1			0		1		0						I
Ouration	0.25	i gjar	Area												. 12		
Phase Combi	natio	n 1	2		51g: 3		∪p: 4	erat	ions		5	6		7		8	
B Left	,14 C T OI	P	2		_		-	NB	Left			=					
Thru		P		•			į		Thru		P						
Right							j		Right	-	P						
Peds		X					İ		Peds		X						
VB Left		-						SB	Left								
Thru									Thru		• .					•	
Right		Ρ.					ļ		Right	:							
Peds		X							Peds		X						
NB Right							!	EB	Right								
SB Right		200					ļ	WB	Right		15.0						
Green		29.0 3.0									3.0						
Yellow All Red		2.0									3.0						
AII Keu		2.0									Cycl	e Le	ngt	h:	90.	0	secs
				cti				mano	e Summ	nai	Y						
Appr/ Lan			j Sat		Rа	tic	S		Lane	Gı	coup	Αp	pro	oach	l		
Lane Gro			w Rate						73 - 3			D = 1		T 00	-		
Grp Car	acity		(s)	۷	/c		g/C		Delay	7 1	LOS	Del	ау	тóв			
Eastbound			-		•			_			,						
ь 72	-		-	. 0			0.3		28.8		C	2.1	_	~			
T . 46	9	14	55	. 0	.69	}	0.3	2	34.5		C	31.	3	. 0			
Westbound			,										٠.				
												24.	2	·C	•		
													_	_			
R 33	4	10	38	0	.25	5	0.3	2	24.2		С		_	Ū			

Intersection Delay = 22.2 (sec/veh) Intersection LOS = C

18.1 B

2585 5170 0.66 0.50 18.1 B

Fax:

_OPERATIONAL ANALYSIS__

Analyst:

NS

Agency/Co.:

STV Incorporated

Date Performed:

12/09/08

Analysis Time Period:

5:00 - 6:00 PM

Intersection:

30th St and 1st Ave

Area Type:

CBD or Similar

Jurisdiction:

2012 Build .

Analysis Year:

Project ID: Former Bellevue Psych Building Redevelopment

E/W St: 30th Street

N/S St: First Avenue

____VOLUME DATA_

	Eas	stbour	nd	W	est:	bou	ınd	l	Noz	thbo	und	Sou	thbo	und	1
	L	T	R	L	1	Т	R	L	,	T	R	L	T	R	
Volume "	 3 [.] 9 <i>7</i>	303	. ••				75			1550	-89	. 2.5			-
% Heavy Veh	4	4		į			16	i			7	i .			-
PHF	!	0.94		İ			0.90	ì		0.96	0.96	Ì			i
PK 15 Vol	106	81		İ			21	Ì		404	23	ĺ			ì
Hi Ln Vol	Ì		,	İ				İ							i
% Grade		0		Ì	0			İ		0	•				İ
Ideal Sat	1900	1900		j			1900	İ		1900		İ			i
ParkExist	X		X	Ì				X			X	Ì			i
NumPark	3		3]				3			3	İ			ı
No. Lanes	2	1	Ö	1	0	0	1	İ	0	4	0	. 0	0	0	ĺ
LGConfig	L	${f T}$					R			TR					ĺ
Lane Width	11.0	12.0					12.0			10.0		ĺ			j
RTOR Vol							0				0	ĺ			j
Adj Flow	422	322					83			1708		ĺ			ĺ
%InSharedLn												1 .			ĺ
Prop LTs		0.00	0.0		-					0.0	00				Ì
Prop RTs	0	.000	٠.,				1.000	!	0.	.054		1 .			1.
Peds Bikes					200		0		10	00	0	1			1
Buses	0	0.	- 1				0	1		0 .					
%InProtPhase															
Duration	0.25		Area 5	Гуре	: C	$^{\mathrm{BD}}$	or Sim	ila	ır						

OPERATING PARAMETERS

	Ea	stbou:	nd	We	stbou	ınd	No	rthbo	unđ	So	uthbo	und [
·	L	T	R	L	${f T}$	R	L	T	R	L	${f T}$	R
Init Unmet	0.0	0.0				0.0		0.0				
Arriv. Type] 3	3				3	1	3		Ì		i
Unit Ext.	3.0	3.0				3.0		3.0		İ		į
I Factor		1.00	0	ĺ	1.00	0	İ	1.00	0			.
Lost Time	2.0	2.0		ĺ	1	2.0	İ	2.0				j
Ext of g	2.0	2.0		İ		2.0	İ	2.0				į
Ped Min g	ĺ			ĺ	4.6		İ	3.9		İ		j

HCS+: Signalized Intersections Release 5.3

Agency: STV Incorporated

Inter.: 30th St and 2nd Ave
Area Type: CBD or Similar

Date: 12/08/09

Jurisd:

Period: 5:00 - 6:00 PM

Year : 2012 Build

Project ID: Former Bellevue Psych Building Redevelopment

E/W St: 30th Street

N/S St: Second Avenue

	Ea	stbou	nd	We:	stbou	nd	Nor	thbo	und	So	uthbou	ınd
	L	T	R	L	T	R	L	\mathbf{T}	R	Ĺ	Ţ	R
No. Lanes LGConfig Volume Lane Width RTOR Vol	0	1 T 258 13.0	1 R 146 8.0	0	0	0	0	0	0	442	5 LT 2250 10.0	0 ,
Duration	0.25		Area			or Sin						
Phase Combi	natio	n 1	2	3	4	7	T.eft	5	6	7		3

Dur	ation 0.25		Area T		BD Or al Or						
Pha	se Combination	1	2	3	4		10115	5	6 7	8	
EB	Left	•				NB	Left				
	Thru	P			,		\mathtt{Thru}				
	Right	P					Right				
	Peds	X .					Peds	X			
WB	Left					SB	Left	P			
	Thru		\$14 × %		.5-	n	Thru	P			
	Right						Right				
,	Peds	X				1	Peds	X			
NB	Right					EB	Right				
SB	Right					WB	Right				
Gre	_	31.0					5	49.0			
Yel	low	3.0						3.0			
		2.0						2.0			
	-							Cycle	Length:	90.0	secs

		Intersec	tion P	erforman	ce Summ	ary				
Appr/ Lane	Lane Group	Adj Sat Flow Rate	Rat		Lane		Appro	oach	_	
Grp	Capacity	(s)	v/c	g/C	Delay	LOS	Delay	LOS	-	
Eastbo	und									
T	512	1487	0.55	0.34	28.0	С	28.3	С	-	
R	318	-922	0.50	0.34	28.9	C				,
Westbo	unđ			ž <u>.</u>		77.35				

Northbound

Southbound

LT 3502 6433 0.82 0.54 19.1 B 19.1 B

Intersection Delay = 20.3 (sec/veh) Intersection LOS = C

Fax:

OPERATIONAL ANALYSIS_____

Analyst:

NS

Agency/Co.:

STV Incorporated

Date Performed:

12/08/09

Analysis Time Period:

5:00 - 6:00 PM

Intersection:

30th St and 2nd Ave

Area Type:

CBD or Similar

Jurisdiction:

Analysis Year:

2012 Build

Project ID: Former Bellevue Psych Building Redevelopment

E/W St: 30th Street

N/S St: Second Avenue

____VOLUME DATA_

	Ea	astbou	nd	Wes	stbou	nd	No	thbo	und	So	uthbou	ınd
	L	T	R	L	T	R	L	T	R	L	T	R į
Volume	-	258	146				-	. ~		442	2250	
% Heavy Veh	ĺ	4	4	Ì			i '			6	6	
PHF	İ	0.92	0.92	Ì			i			0.94	0.94	
PK 15 Vol	İ	70	40	ĺ						118	598	l I
Hi Ln Vol	İ			j			i				550	
% Grade	İ	0		İ			i			ŀ	0	
Ideal Sat	İ	1900	1900	Ì			i			1	1900	
ParkExist	х		X	İ			1			x	100	l I
NumPark	5		5				1			5		.
No. Lanes	•	0 1	1	Ó	0	0	1 0	0	0	ا ا	5	0
LGConfig	i	T	R	İ		J		·	•	"	LT	- 1
Lane Width	İ	13.0		ļ 			1			}	10.0	!
RTOR Vol	İ		0) 			1	•		}	10.0	ļ
Adj Flow		280	159	i İ							2864	1
%InSharedLn	! 	200	100	l İ						ļ	2004	
Prop LTs	i	0.0	0.0	! 						1.	0.1	ا د ۱
Prop RTs	4	0.000		•			-	91			.000) 4
Peds Bikes	!		0	Ì	-,		1 1	 00 .		"	. 000.	
Buses	¦ '	0	0-	- 4°.	•		-,	JO .			 1 €	
%InProtPhase	1	U.	• · · ·							ŀ	15:	. '
Duration	= 0 . 2 !	5	Area '	l Damos	CDD	or Sim	1			1		l

Duration

Area Type: CBD or Similar

OPERATING PARAMETERS

1	Ea	stbou	ınd	We	stbou	nd	No	rthbo	und	Sc	uthbo	und
[L	T	R	L	T	R	Ĺ	Т	R	L	Ţ	R j
	-						ļ	· · · -		ļ		
Init Unmet		0.0	0.0							ļ	0.0	İ
Arriv. Type		3	3				1			Í	3	į
Unit Ext.		3.0	3.0				1			ĺ	3.0	į
I Factor		1.00	10				İ			ĺ	1.00	o i
Lost Time		2.0	2.0				ĺ			ĺ	2.0	į
Ext of g		2.0	2.0				İ			İ	2.0	į
Ped Min g		4.2					İ	3.9		İ		į

HCS+: Signalized Intersections Release 5.3

Analyst: NS

Agency: STV Incorporated

Inter.: 34th St and 1st Ave Area Type: All other areas

Date: 12/09/08

Jurisd:

Southbound

Period: 5:00 - 6:00 PM

Year : 2012 Build

Project ID: Former Bellevue Psych Building Redevelopment

E/W St: 34th Street

N/S St: First Avenue

		S	IGNALIZ	ED IN	rerse	CTION S	SUMMARY	ζ			
	East	bound		tbound		Nort	hbound	1		bound	
	L	T R	L	T	R	L	T I	₹ ፲	Т	R	
No. Lanes LGConfig Volume Lane Width RTOR Vol	1	2 0 LT 641 10.0		10.0	0 119 0		4 (LTR L448 2! L0.5	55	0	0 0	
Duration	0.25	Area	Type:			areas ions		- 3			
Phase Combi	nation	1 2	3	4			5	6	7	8	
EB Left		P P			NB		P	•			
Thru		P P				Thru	P				
Right					ļ	Right				·	
Peds		X			SB	Peds Left					
WB Left Thru	. 1 0	"P			l sp	Thru			* *		
Thru Right	•	P P			1	Right					•
Peds		X				Peds	Х				
NB Right					EB	Right	,		•		
SB Right					WB	Right					
Green		7.0 23	. 0				39.0				
Yellow		3.0 3.0					3.0				
All Red		2.0 8.0)				2.0	e Lengt	-h. 90) n	secs
		Tnter	section	Perfo	rmanc	e Summ		е пепа	J11. J		БСОБ
Appr/ Lar	ne	Adj Sat	: Ra	atios	_ man		Group	Appro	oach		
	oup pacity	Flow Rat	re <u>v/c</u>	g/	c	Delay	LOS	Delay	LOS	_	
Eastbound											
LT 78	83	3102	1.05	5 0.	39	75.1	E	75.1°	E	. •	·
Westbound			a significan	Ngo W	٠٠ ٠.					•	
TR 1	050	4110	0.6	2 0	26	32.4	С	32.4	С		
Northbound					,						
LTR 2	446	5644	0.8	3 0.	43	26.0	С	26.0	С		
_											

Intersection LOS = D Intersection Delay = 38.8 (sec/veh)

Fax:

_OPERATIONAL ANALYSIS___

Analyst:

NS

Agency/Co.:

STV Incorporated

Date Performed:

12/09/08

Analysis Time Period:

5:00 - 6:00 PM

Intersection:

34th St and 1st Ave

Area Type:

All other areas

Jurisdiction:

Analysis Year:

2012 Build

Project ID: Former Bellevue Psych Building Redevelopment

E/W St: 34th Street

N/S St: First Avenue

__VOLUME DATA

	Ea:	stbour	ıd	We	stbou	nd	No:	rthbo	unđ	Sou	thbou	ınd
	L	T	R	L	${f T}$	R	L	Т	R	L	T	R
Volume	103	641			500	119	165	1448	255			
% Heavy Veh	ļ 7	7		ĺ	9	9	18	8	8	i		
PHF	0.90	0.90		İ	0.95	0.95	0.92	0.92	0.92	j		
PK 15 Vol	29	178			132	31	45	393	69			
Hi Ln Vol % Grade	 	0		 	0			0				
Ideal Sat	i .	1900.			1900		İ	1900		! 		
ParkExist				!			x		Х	! 		
NumPark	Ì						5		5			
No. Lanes	j o	2	0	0	3	0	1 0	4	0	o	0	0
LGConfig	Ì	LT			TR		i	LT	R.		Ū	•
Lane Width	İ	10.0		İ	10.0		i	10.5				
RTOR Vol	İ					0	i		0			
Adj Flow	Ì	826		Ì	651		İ	2030	-			
%InSharedLn	ĺ						İ			İ		
Prop LTs	İ	0.13	8		0.0	00	· ·	0.0	88			
Prop RTs	i o	.000		0	.192	- 1	:	.136				
Peds Bikes	:			:		0	:		0			
Buses		~·0~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~	ost :	i	0		1	0		ĺ	مرمتم بالمناب	or .
%InProtPhase		-		Ì			İ	· -				7.54
Duration	0.25		Area 5	Ivoe:	All	other	areas			1		

Area Type: All other areas

___OPERATING PARAMETERS__

	Ea	stbou	nd	We	stbou	nd	No	rthbo	und	So	uthbo	und
	L	T	R	L	${f T}$	R	L	${f T}$	R ·	L	T	R
			<u>-</u>	ļ			-			ļ — _		
Init Unmet		0.0			0.0			0.0				
Arriv. Type		3			3			3		İ		į
Unit Ext.		3.0]	3.0		İ	3.0		ĺ		. i
I Factor		1.00	0		1.00	0	İ	1.00	0	j '		į
Lost Time		2.0			2.0			2.0		İ		<i>'</i> i
Ext of g		2.0		1	2.0			2.0		İ		İ
Ped Min g					4.6		İ	3.9			3.2	j

HCS+: Signalized Intersections Release 5.3

Analyst: NS

Agency: STV Incorporated

Inter.: 34th St and 2nd Ave Area Type: CBD or Similar

Date: 12/09/08

Jurisd:

Period: 5:00 - 6:00 PM

Year : 2012 Build

Project ID: Former Bellevue Psych Building Redevelopment E/W St: 34th Street N/S St: Second Av

N/S St: Second Avenue

				T.T				SUMMA) :hbou		50	uthbo	und	I
	!	tbour	i		tbour T	R R	l P	.IDOdii T	R	l L	T	R	
	L	${f T}$	R	L	T	K	"	1	K	1 1	_	1.	i
is Tanad		2	0	0	2	0	0	0	0	1	5	0	
lo. Lanes	"	TR		DefI		Ū		•	_	ĺь	LT	'R	i
GConfig Jolume	1	529	130	187	250	•	i			379	2007	7 113	.
Jane Width	1	10.0	1,50	9.5	10.0		ì			8.0	10.0		į
TOR Vol	!	10.0	0	3.3	,		Ì					0	İ
CIOK VOI													· · · · · ·
uration	0.25		Area !			or Sim Operat				• *			
hase Combi	nation	1 1	2	3	4			5	6	7		8	
EB Left	1100101	-	_			NB	Left						
Thru		P				j	Thru						
Right		P				j	Right						
Peds		x					Peds	x					
VB Left		P	P			SB	Left	P					
Thru		P	P -				Thru	Ρ.					
Right		-	-				Right						
Peds		х					Peds	X					
NB Right		21				EB	Right						
						WB	Right						
SB Right Green		25.0	8.0			, ,,,,,		42.0					
Yellow		3.0	3.0					3.0				•	
		J. 0											
אסם ווג		2 0	20					2.0					
All Red		2.0	2.0					2.0 Cyc	le Le	ngth:	90.	0 .	sec
All Red		I	nterse				e Summ	Cyc ary_	·			0 .	sec
	ie	I Ad	nterse j Sat	R	Perf atios		e Summ Lane	Cyc ary_	·	ngth:		0 .	sec
Appr/ Lan		I Ad Flo	nterse j Sat w Rate	R	atios	·	Lane	Cyc ary_ Group) Ap	proac	eh	0	sec
Appr/ Lan		I Ad Flo	nterse j Sat	R	atios			Cyc ary_ Group) Ap		eh	0	sec
Appr/ Lan Lane Gro Grp Cap	oup	I Ad Flo	nterse j Sat w Rate	R	atios	·	Lane	Cyc ary_ Group) Ap	proac	eh	0 .	sec
Appr/ Lar Lane Gro Grp Car Eastbound	oup pacity	I Ad Flo	nterse j Sat w Rate (s)	v/c	atios g	/C	Lane Delay	Cyc ary Group	Ap Del	proac	eh	0	sec
Appr/ Lar Lane Gro Grp Car Eastbound	oup pacity	I Ad Flo	nterse j Sat w Rate	R	atios g	/C	Lane	Cyc ary Group	Ap Del	proac	ch OS	0 .	sec
Lane Gro Grp Car Eastbound TR 74 Westbound	oup pacity	I Ad Flo	nterse j Sat w Rate (s)	1.0	g 2 0).29	Lane Delay 70.8	CycaryGroup	Ap Del	proac	ch OS	0	sec
Appr/ Land Lane Grows Cap Cap Eastbound TR 74 Westbound DefL 27	oup oacity 	I Ad Flo	nterse j Sat w Rate (s) 	1.0	atios g 2 0).29	Tane Delay 70.8	CycaryGroup	Del	ay LO	os os	0	sec
Appr/ Land Lane Grows Cap Cap Eastbound TR 74 Westbound DefL 27	oup pacity	I Ad Flo	nterse j Sat w Rate (s) 	1.0	atios g 2 0).29	Lane Delay 70.8	CycaryGroup	Del	proac	os os	0	sec
Appr/ Land Grown Cap Cap Cap Eastbound TR 74 Westbound DefL 27	oup oacity 	I Ad Flo	nterse j Sat w Rate (s) 	1.0	atios g 2 0).29	Tane Delay 70.8	CycaryGroup	Del	ay LO	os os	0	sec
Appr/ Land Grown Carp Carp Carp Carp Carp Carp Carp Carp	oup bacity 10 70	I Ad Flo	nterse j Sat w Rate (s) 62	1.0 0.7 0.4	2 0 2 0 4 0 2 0	.29).42).42	Tane Delay 70.8 49.6 17.9	Cyc ary Grour LOS	70.	ay LO	ch os	0	sec
Appr/ Land Grown Carp Carp Carp Carp Carp Carp Carp Carp	oup bacity 10 70	I Ad Flo	nterse j Sat w Rate (s) 62	1.0 0.7 0.4	2 0 2 0 4 0 2 0	.29).42).42	Tane Delay 70.8	Cyc ary Grour LOS	70.	ay LO	ch os	0	sec

Phone:

Fax:

E-Mail:

_OPERATIONAL ANALYSIS____

Analyst:

NS

Agency/Co.:

STV Incorporated

Date Performed:

12/09/08

Analysis Time Period:

5:00 - 6:00 PM

Intersection:

34th St and 2nd Ave

Area Type:

CBD or Similar

Jurisdiction: Analysis Year:

2012 Build

Project ID: Former Bellevue Psych Building Redevelopment

E/W St: 34th Street

N/S St: Second Avenue

VOLUME DATA

İ	Ea	stbou	nd	Wes	stbour	nd	No	rthbo	und	So	uthboi	ınd
	L	T	R	L	T	R	L	Т	R .	L	${f T}$	R
Volume	•	529	130	187	250	-		*		379	2007	113 ·
% Heavy Veh		9	9	5	5		į			6	6	6
PHF		0.87	0.87	0.93	0.93					0.97	0.97	0.97
PK 15 Vol		152	37	50	67		İ	•		98	517	29
Hi Ln Vol										İ		
% Grade		0		-	0					İ	0	
Ideal Sat		1900		1900	1900					1900	1900	
ParkExist				ļ								
NumPark	_	_	_	_								•
No. Lanes	0	_	0	0	2	0	0	0	0	1	. 5	0
LGConfig		TR		Defi						L	LTI	3.
Lane Width		10.0	^	9.5	10.0					8.0	10.0	_
RTOR Vol		757	0	201	260					0.04		0
Adj Flow %InSharedLn		757		201	269		<u> </u>			391	2185	•
Prop LTs		0.0	20	 1 000	0.00	0.0	İ			0	0.0	
Prop RTs		.197	30	0			! !		•		0.00	JU .
Peds Bikes	2	•	0		. 000	,		0		! .	.053	·
Buses	1.	0	,	lo	0			U		' 0-	0:07.3 0:07.3	J
%InProtPhase	2	_		0.0	J			, .		0 	U	
Duration	0.25		Area '		CBD o	or Sim:	ilar			I		

OPERATING PARAMETERS_

	Eastbound	Westbound	Northbound	Southbound
	L T R	L T R	L T R	L T R
Init Unmet	0.0	0.0 0.0		0.0 0.0
Arriv. Type	4	4 4		4 4
Unit Ext.	3.0	3.0 3.0		3.0 3.0
I Factor	1.000	1.000		1.000
Lost Time	2.0	2.0 2.0		2.0 2.0
Ext of g Ped Min g	3.0 4.9	2.0 2.0	3.5	2.0 2.0 4.6

HCS+: Signalized Intersections Release 5.3

Northbound

Southbound

L

ΤR

LTR

450

1025

1421

1487

3197

1591

Inter.: 34th St and FDR Dr SR

Agency: STV Incorporated

Area Type: All other areas

Date: 12/12/2008

Jurisd:

Period: 5:00 - 6:00 PM

Year : 2012 Build Project ID: Former Bellevue Psych Building Redevelopment

Project ID E/W St: 34			levue	Psych	. Bull	N/S	Redeve St: F	DR Dr	ent cive	Sex	vice	e Road	Ē	
		•	STG	NAT.T7	ED IN	TERSE	CTION	SUMMA	ARY					
	Fac	tboun			tboun			thbou			Soi	ıthboı	und	
	L	T	R	L	Т	R	L	T	R	Ì	L	T	R	
No. Lanes	0 DefL	2 T	1 R	0	2 LT	1 . R	1 L	1 TR	0	-	0	2 LT	0 R	
Volume			562	6	9	6	452	218	6	4	1	1104	159	İ
Lane Width	1			•	16.0	16.0	10.0			İ		9.5		1
RTOR Vol		10.0	0			0			0	İ			0	Ì
Duration	0.25		Area I	ype:	Ăll c	ther	areas					·	-	
	·)perat	ions_							
Phase Comb	ination	1	2	3	4	•		5		6	7		8	
EB Left		P				NB	Left	P		P				
Thru		P				ļ	Thru	P		P				
Right		P				ļ	Right	: P		P				
Peds							Peds			X				
WB Left		P				SB	Left			P				
Thru		P				· · · ·	Thru		•	P		,		
Right		P					Right			P				
Peds		X					Peds			X				
NB Right		•				EB	Right							
SB Right						WB	Right							
Green		22.0						13.		10.0				
Yellow		3.0						3.0		3.0				
All Red		2.0						2.0		2.0				
	•							Су	cle	Len	gth:	90.0)	secs
•		Ir	nterse	ction	Perf	ormano	ce Sum	mary_						
Appr/ La	ane	Ad	j Sat	R	atios		Lane	Grou	\mathbf{p}_{i}	App	roac	h		
	roup	Flov	w Rate											
	apacity		(s)	v/c	g	/C	Dela	y LOS	, 1	Dela	y LO	S		
Eastbound			-											
	304		88.	1.1	•	.26	129.			• • •	_	_		
T	409	16'		0.0		.24		· C		81.9	F	•		
R ·	609 ·	13'		0.9	7 0	.44	54.7	; D						-
Westbound			- 4 4							•				•
T ITT	an 1	37	nn	0.0	2 0	.24	25.8	С		25.9) (
	904 420	17		0.0		.24	25.9				•			
R	4 Z U	т/.	70	0.0	_ 0	. 44	45.5	-						

Intersection Delay = 61.6 (sec/veh) Intersection LOS = E

0.44

0.66

0.64

1.08

0.23

1.03

82.3

3.6

51.6

F

Α

 \mathbb{D}

56.3

51.6

Fax:

OPERATIONAL ANALYSIS___

Analyst:

NS

Agency/Co.:

STV Incorporated

Date Performed:

12/12/2008

Analysis Time Period:

5:00 - 6:00 PM

34th St and FDR Dr SR

Intersection: Area Type:

All other areas

Jurisdiction:

Analysis Year:

2012 Build

Project ID: Former Bellevue Psych Building Redevelopment

E/W St: 34th Street

N/S St: FDR Drive Service Road

_VOLUME DATA__

	Eas	stbou	nd	Wes	stbour	nd	No:	rthboi	und	Sou	ıthboı	und
	L	T	R	L	Т	R	L	T	R	L	T	R
Volume	330	4	562	6	9	6	452	218	6	4	1104	159
% Heavy Veh	6	6	6	0	0	0	13	13	13	2	2	2
PHF	0.95	0.95	0.95	0.90	0.90	0.90	0.93	0.93	0.93	0.87	0.87	0.87
PK 15 Vol Hi Ln Vol	87 	1	148	2	3	2	122	59	2	1	317	46
% Grade		0			0		i	0		! 	0	
Ideal Sat ParkExist	1900	1900	1900		1900	1900	1900	1900		 	1900	
NumPark							Ì			İ		
No. Lanes	0	2	1	0	2	1	1	1	0	0	2	0
LGConfig	Def:	L T	R	Ì	$_{ m LT}$	R	ļь	TR		İ	LT	R
Lane Width	10.0	10.0	9.0	Ī	16.0	16.0	10.0	10.5		j	9.5	
RTOR Vol			0	<u> </u>		0	İ		0	İ		0
Adj Flow	347	4	592	İ	17	7	486	240		i	1457	
%InSharedLn	İ			İ			i i			İ.		
Prop LTs	1.00	0.0	00	Ì	0.4	12	1.00	0.0	00 .	İ	0.0	03
Prop RTs .	0	.000	1000	0	.000	1.000	į o	.025		0	126	
Peds Bikes	j 0			50		0	2		0 ಇತ್ಯಾಥ	1		0
Buses	0	0	0		0	0	lo	041 est			0. •	_
%InProtPhase	e			İ			0.0		0.0	į.		
Duration	0.25		Area '	Tvoe:	A11	other	areas			1		

Area Type: All other areas

__OPERATING PARAMETERS

	Ea	stbou	nd	We	stbou	nd	No	rthbo	und	So	uthbo	und
	L	T	R	L	${f T}$	R	L	T	R	L	T	R
Init Unmet	0.0	0.0	0.0		0.0	0.0	0.0	0.0		-	0.0	
Arriv. Type	3	3 🕟	3		3	3	4	4		İ	4	
Unit Ext.	3.0	3.0	3.0		3.0	3.0	3.0	3.0		İ	3.0	
I Factor	İ	1.00	0	Ì	1.00	0	İ	1.00	0	Ì	1.00	0
Lost Time	2.0	2.0	2.0		2.0	2.0	2.0	2.0		j	2.0	
Ext of g	3.0	2.0	2.0		2.0	2.0	3.0	2.0		Ì	2.0	
Ped Min g		3.2		ĺ	3.5		İ	3.4		İ	3.5	

HCS+: Signalized Intersections Release 5.3

Agency: STV Incorporated

Inter.: 34th St and FDR Dr SR

Area Type: All other areas

Date: 12/12/2008

Jurisd:

Period: 7:45 - 8:45 AM

Year : 2012 Build Mitigation

Project ID: Former Bellevue Psych Building Redevelopment

E/W St: 34th Street

N/S St: FDR Drive Service Road

	East	bour	ıd	V	ve:	tbour	ıd	No	rthbou	ınd	1	Sou	ithboi	ınd
		r	R	ь	•	Т	R	L	Т	R	L		T	R
No. Lanes	0	2	1.	- [0	1	1	-	1	0	- -	0	2	0
LGConfig	DefL	T	R	i		LT	R	L	TR		Ì		LT	R.
Volume	254 5		595	3		11	12	381	260	11	3		1142	182
Lane Width	10.0 1		9.0	İ		16.0	16.0	10.0	10.5		ĺ		9.5	
RTOR Vol			0	İ			0	1		0	İ			0

Dur	ation 0.25		Area T	ype:	ALL Of	ner	areas					
				Sig	nal Or	perat	ions					
Pha	se Combination	1	2	3	4			5	[.] 6	7	8	
EB	Left	P	P			NB	Left	P	P			
	Thru	P	P				Thru	P	P			
	Right	P	P				Right	P	P			
	Peds					j	Peds		X			
WB	Left		P			- SB	Left		P			
""	Thru		P	: 5		j - 1	Thru		P			
	Right		P			į	Right		P			
	Peds		х			İ	Peds		X	•		
NB	Right					EB	Right	P				
SB	Right					WB	Right				•	
Gre	-	7.0	14.0			•		14.0	41.0			
		0.0	3.0					3.0	3.0			
		0.0	2.0					1.0	2.0		•	
2 1.L d	·							Cycl	e Lengt	h:	90.0	secs

Appr/ Lane	Lane Group	Adj Sat Flow Rate	Rati	.os	Lane G	roup	Appro	ach	_	
Grp	Capacity	(s)	v/c	g/C	Delay	LOS	Delay	LOS		
Eastbo	und									
DefL	325	1410	0.81	0.29	49.3	D				
T :	380	1627	0.01	0.23 ·	26.6	. C	64.6	\mathbf{E}_{i}		
R	592	1333	1.04	0.44	71.5	E			1- 12 At 3.1	
Westbo	und					10.77		•		
LT	320	2054	0.10	0.16	33.2	C	33.3	C		
R	257	1654	0.11	0.16	33.4	С				
Northb	ound									
L	448	1541	0.96	0.67	49.5	D				
TR	1078	1645	0.28	0.66	7.2	A	31.9	С		
Southb	ound					•				
LTR	1365	2996	1.02	0.46	55.0-	D	55.0-	D .		
	Intersec	ction Delay	= 51.8	(sec/v	eh) Ir	nterse	ection I	os =	D	

Fax:

__OPERATIONAL ANALYSIS

Analyst:

NS

Agency/Co.:

STV Incorporated

Date Performed:

12/12/2008

Analysis Time Period:

7:45 - 8:45 AM

Intersection:

34th St and FDR Dr SR

Area Type:

All other areas

Jurisdiction:

Analysis Year:

2012 Build Mitigation

Project ID: Former Bellevue Psych Building Redevelopment

E/W St: 34th Street

N/S St: FDR Drive Service Road

____VOLUME DATA___

	Eas	stbour	nd	Wes	stbour	nd	No	thbo	und	Soi	ıthboı	und
	L	T	R	L	T	R	L	T	R	L	T	R
Volume	254	5	595	3	11	12	381	260	11	3	1142	182
% Heavy Veh	9 -	9	9	0	0	0	9	9	9	3	3	3
PHF	0.97	0.97	0.97	0.45	0.45	0.45	0.89	0.89	0.89	0.95	0.95	0.95
PK 15 Vol	65	2	153	2	6	7	107	73	3	1	301	48
Hi Ln Vol				Ì			İ			İ.		
% Grade]	0		ĺ	0		İ	0		Ì	0	
Ideal Sat	1900	1900	1900	ĺ	1900	1900	1900	1900		į	1900	
ParkExist							Ì			Ì		
NumPark]			[İ			ĺ		
No. Lanes	0	2	1	0	1	1	1	1	0	j · 0	2	0
LGConfig	Defi	L T	R	ĺ	LT	R	L	TR		j	LT	R i
Lane Width	10.0	10.0	9.0		16.0	16.0	10.0	10.5		Ì	9.5	
RTOR Vol			0			0	Ì		0	j		0
Adj Flow	262	5	613	ĺ	31	27	428	304		İ	1397	
%InSharedLn				1						İ		
Prop LTs	1.000	0.0	0.0]	0.22	26 .	1.000	0.0	00	İ	0.0	02
Prop RTs	. 0.	.000	L::000	- 0.	.000	1.000	0	039		. 0	:137	
Peds Bikes	0			5.0) (0	2 !	5.Dr (Q	50	D	0
Buses	0 .	0	0		. 0	0	0.	0		İ	0	
%InProtPhase	≥ 0.0			1			0.0		0.0	İ		
Duration	0.25		Area '	Type:	All d	other	areas		-	•		

____OPERATING PARAMETERS___

	Ea	stbou	nd	We	stbou	nd	No	rthbo	und	Sc	uthbo	und
	L	T	R	L	T	R	L	T	R	L	${f T}$	R
Init Unmet	0.0	0.0	0.0		0.0	0.0	0.0	0.0		-	0.0	
Arriv. Type	[3	3	3		3	3	3	3		ĺ	3	į
Unit Ext.	[3.0	3.0	3.0	,	3.0	3.0	3.0	3.0			3.0	į
I Factor	[1.00	0		1.00	0	ĺ	1.00	0	Ì	1.00	o i
Lost Time	2.0	2.0	2.0	ĺ	2.0	2.0	2.0	2.0			2.0	ì
Ext of g	2.0	2.0	2.0	İ	2.0	2.0	2.0	2.0			2.0	
Ped Min g		3.2		İ	3.5		j	3.4		j	3.5	į

HCS+: Signalized Intersections Release 5.3

Inter.: 34th St and 2nd Ave

Agency: STV Incorporated

Area Type: All other areas

Date: 12/09/08

Jurisd:

Period: 7:45 - 8:45 AM

Year : 2012 Build Mitigation

Project ID: Former Bellevue Psych Building Redevelopment E/W St: 34th Street N/S St: Second Av

N/S St: Second Avenue

	1 7700	tbound			stbo		ا	TION S	hbou		1	Sou	thbo	ound	l
	L	T	R I	l Me.	T	R		L	T	R	ı		Ţ	R	i
•	 	*	10	~	_		i	- -			_ _				<u>—</u> i
o. Lanes	0	2	0	0	2	0	_ i	0	0	0	į	1	5	0	1
GConfig	i -	\mathtt{TR}		Def:	ь т		j				I	<u>.</u>	L		
olume	ì		L32	224	282		į				24	15	2363	86	
Lane Width		10.0		9.5	10.	0	ĺ				8.	. 0	10.0) [1
RTOR Vol)	İ			Ì				1			0.	
uration	0.25		Area '												-
			2	S1 3	gnaı	Oper	atı	ons	5			7		8	
hase Combi	nation	1 Т	2	3			В	Left	,			•		Ū	
B Left		p				"	_	Thru							
Thru		P				ļ		Right							
Right		X				1		Peds	х						
Peds WB Left		P	P			9	В	Left	P						
WB Left Thru		P .	P	r s		. "		Thru	P	÷					
		F	E			<i>'</i>		Right	P						
Right Peds		x				i		Peds	X						
		Λ				F	В	Right							
NB Right						-									
UD DIATHE						l W	$^{ m IB}$	Right							
SB Right		25.0	9.0			. N	ΙB	Right	41.0)					
Green		25.0 3.0	9.0			. W	ΙB	Right	41.0)					
Green Yellow		3.0	3.0			. W	ΙΒ	Right	41.0 3.0 2.0)		,			
Green Yellow						. W	IB	Right	3.0 2.0	ole I	Leng:	th:	90.		secs
Green Yellow	·	3.0 2.0	3.0 2.0	ction	. Per			e Summ	3.0 2.0 Cyd ary_	cle I		_		0	secs
Green Yellow All Red Appr/ Lar		3.0 2.0 In Adj	3.0 2.0 terse Sat	R	Per latio	rforma		_	3.0 2.0 Cyd ary_	cle I	leng Appr	_		0	secs
Green Yellow All Red Appr/ Lan Lane Gro		3.0 2.0 In Adj Flow	3.0 2.0 terse			rforma		e Summ	3.0 2.0 Cyc ary_ Group	cle I		oac]	n·	0	secs
Green Yellow All Red Appr/ Lan Lane Gro	oup	3.0 2.0 In Adj Flow	3.0 2.0 terse Sat Rate		atio	rforma os		e Summ Lane	3.0 2.0 Cyc ary_ Group	cle I	Appr	oac]	n·	0	secs
Green Yellow All Red Appr/ Lan Lane Gro Grp Can	oup oacity	3.0 2.0 In Adj Flow	3.0 2.0 terse Sat Rate s)		atio	rforma os		e Summ Lane	3.0 2.0 Cyc ary_ Group	cle I	Appr	LO:	n. S	0	secs
Green Yellow All Red Appr/ Lan Lane Gro Grp Car Eastbound	oup oacity	3.0 2.0 In Adj Flow (3.0 2.0 terse Sat Rate s)	v/c	atio	rforma os g/C		e Summ Lane Delay	3.0 2.0 Cyc ary_ Group	cle I	Appr	LO:	n. S	0	secs
Green Yellow All Red Appr/ Lan Lane Gro Grp Car Eastbound TR 79 Westbound	oup oacity	3.0 2.0 In Adj Flow (3.0 2.0 terse Sat Rate s)	v/c	atio	g/C	ance	E Summ Lane Delay	3.0 2.0 Cyc ary_ Group	cle I	Appr	LO:	n. S	0	secs
Green Yellow All Red Appr/ Lar Lane Gro Grp Car Eastbound TR 79 Westbound DefL 30	oup oacity 07	3.0 2.0 In Adj Flow (3.0 2.0 terse Sat Rate s)	1.0	eations:	g/C 0.29	ance	Delay	3.0 2.0 Cycary_ Group LOS	p De	Apprelay	LO:	n· S	0	secs
Green Yellow All Red Appr/ Lar Lane Gro Grp Car Eastbound TR 79 Westbound DefL 30 T 70	oup oacity 07	3.0 2.0 In Adj Flow (3.0 2.0 terse Sat Rate s)	1.0	eations:	g/C 0.29	ance	E Summ Lane Delay	3.0 2.0 Cycary_ Group LOS	p De	Appr	LO:	n· S	0	secs
Green Yellow All Red Appr/ Lar Lane Gro Grp Car Eastbound TR 79 Westbound DefL 30	oup oacity 07	3.0 2.0 In Adj Flow (3.0 2.0 terse Sat Rate s)	1.0	eations:	g/C 0.29	ance	Delay	3.0 2.0 Cycary_ Group LOS	p De	Apprelay	LO:	n· S	0	secs
Green Yellow All Red Appr/ Lar Lane Gro Grp Car Eastbound TR 79 Westbound DefL 30 T 70	oup oacity 07	3.0 2.0 In Adj Flow (3.0 2.0 terse Sat Rate s)	1.0	eation	g/C 0.29	ance	Delay	3.0 2.0 Cycary_ Group LOS	p De	Apprelay	LO:	n· S	0	secs
Green Yellow All Red Appr/ Lan Lane Gro Grp Cap Eastbound TR 79 Westbound DefL 30 Northbound	oup pacity 97 02 05	3.0 2.0 In Adj Flow (276	3.0 2.0 terse Sat Rates)	1.0 0.7 0.4	operation of the state of the s	g/C 0.29 0.43 0.43	ance	Delay 78.5 50.1 16.9	3.0 2.0 Cyc Group LOS E	p De	Apprelay	LO:	n· S	0	secs
Green Yellow All Red Appr/ Lan Lane Gro Grp Cag Eastbound TR 79 Westbound DefL 30 Northbound Southbound	oup pacity 97 02	3.0 2.0 In Adj Flow (276	3.0 2.0 terse Sat Rates)	1.0 0.7 0.4)5 76	g/C 0.29	ance	Pelay 78.5 50.1 16.9	2.0 Cyc ary_ Group LOS E	De la cole I	Apprelay	LO:	S S	0	secs

Fax:

_OPERATIONAL ANALYSIS

Analyst:

NS

Agency/Co.:

STV Incorporated

Date Performed:

12/09/08

Analysis Time Period:

7:45 - 8:45 AM

Intersection:

34th St and 2nd Ave

Area Type:

All other areas

Jurisdiction:

Analysis Year:

2012 Build Mitigation

Project ID: Former Bellevue Psych Building Redevelopment

N/S St: Second Avenue

E/W St: 34th Street

Myb bc. becond

	ME DATA	E DAT	UME I	LU.	ΟI	V
--	---------	-------	-------	-----	----	---

	Ea	stbou	nd	Wes	stbour	ıd	No	rthbou	ınd	So	ıthboı	und
	L	${f T}$	R	L	T	R	L	T	R	L	${f T}$	R
Volume % Heavy Veh PHF		640 14 0.92	132 14 0.92	224 9 0.97	282 9 0.97	<u></u>		Normal and	_	245 19 0.88	2363 19 0.88	86 19 0.88
PK 15 Vol		174	36	58	73					70	671	24
Hi Ln Vol % Grade		0			0						0	
Ideal Sat ParkExist NumPark		1900		1900	1900					1900	0 1900	
No. Lanes	0	_	0	0	2	0 .	0	0	0	1	5	0 ,
LGConfig Lane Width		TR 10.0		Defi 9.5	L T 10.0					L 8.0	LT:	R
RTOR Vol Adj Flow		839	0	231	291					278	2783	0
%InSharedLn Prop LTs		0:0			0.00	00				0	0.0	00
Prop_RTs; Peds Bikes		.170 50 (2	· 0	.000	5 1	5)	25	1	.035 0.0	0
Buses %InProtPhase		0		0.0	0 • • • •			-		0	0	
Duration	0.25		Area !	Type:	A11 c	ther a	areas			•		1

OPERATING PARAMETERS

	Ea	stbou	nd	We	stbou	nd	No	rthbo	und	So	uthbo	und
	L	${f T}$	R	L	T	R	L	T	R	L	T	R į
Init Unmet		0.0		0.0	0.0		-		-	0.0	0.0	
Arriv. Type		4		4	4		İ			4	4	j
Unit Ext.		3.0		3.0	3.0		İ			3.0	3.0	į
I Factor		1.00	0		1.00	0	İ			İ	1.00	o i
Lost Time		2.0		2.0	2.0		İ			2.0	2.0	į
Ext of g		3.0		2.0	2.0		İ			2.0	2.0	į
Ped Min g		4.9						3.5		İ	4.6	į

HCS+: Signalized Intersections Release 5.3

Inter.: 34th St and FDR Dr SR

Agency: STV Incorporated

Area Type: All other areas

Date: 12/12/2008

Jurisd:

Period: 5:00 - 6:00 PM

Year : 2012 Build Mitigation

Project ID: Former Bellevue Psych Building Redevelopment

E/W St: 34th Street

N/S St: FDR Drive Service Road

			SI	GNAI	ΊZ	ED IN	NTERSE	CTION	SUMM	ARY				
	Eas	tbour	<u></u> _	V	ves	tbour	nd	No:	cthbo	und	Sc	uthbo	und	ļ
	L	T	R	L		T	R	L	Ţ	R	L	T	R	
No. Lanes		2	1	-	0	2	1	·	1	0	-	2	0	-
LGConfig	DefL	T	R	i		$\mathbf{L}\mathbf{T}$	R	L	TR		İ	LT	R	
Volume		4	562	6		9	6	452	218	6	4	1104	159	-
Lane Width	10.0	10.0	9.0	İ		16.0	16.0	10.0	10.5			9.5		1
RTOR Vol			0	.			0	İ		0	İ		0	

Dur	ation 0.25		Area	Type:	All	ot	ther	areas		-,			
				Si	gnal	Or	perat	ions				·	· · · · · · · · · · · · · · · · · · ·
Pha	se Combination	. 1	2	3		4			5	6	7	8	
EB	Left	P	P				NB	Left	P	P			
	Thru	P	P				Ì	Thru	P	P			
	Right	P	P				İ	Right	P	P			
	Peds						j	Peds		X			
WB	Left		P				SB	Left		P			
,,,,,	Thru		P			- "	j	Thru		P			7
	Right		P				ĺ	Right		P			
	Peds		Х				Ì	Peds		X			
NB	Right						EB	Right	P				
SB	Right						WB	Right					
Gre		6.0	16.	0			•	-	13.0	40.0			
_	.low		3.0						3.0	3.0			
	Red	0.0			_				2.0	2.0			
4 4 4 4					-				Cycl	e Leng	th:	90.0	secs

Appr/ Lane	Lane Group	Adj Sat Flow Rate	Rati	ios	Lane 0	roup	Appro	oach	_	
Grp	Capacity	(s)	v/c	g/C	Delay	LOS	Delay	LOS		
Eastbo	und									
DefL	353	1160	0.98	0.31	74.7	\mathbf{E}				
т	409	1673	0.01	0.24	25.8	C	61.9	E		
R	609	1371	0.97	0.44	54.7	D.				
Westbo	und				•	te o				
LT	651	3664	0.03	0.18	30.6	С	30.7	С		
R	298	1676	0.02	0.18	30.7	С				
Northb	ound									
L	450	1487	1.08	0.66	82.3	F				
TR	1025	1591	0.23	0.64	3.6	Α	56.3	E		
Southb	ound									
LTR	1421	3197	1.03	0.44	51.6	D	51.6	D		
	T	ation Delaw	- 55 6	(sec/s	roh) Ti	ntorea	ection	TOS =	я:	

Intersection Delay = 55.6 (sec/veh) Intersection LOS = E

Fax:

OPERATIONAL ANALYSIS

Analyst:

NS

Agency/Co.:

STV Incorporated

Date Performed:

12/12/2008

Analysis Time Period:

5:00 - 6:00 PM

Intersection:

34th St and FDR Dr SR

Area Type:

All other areas

Jurisdiction:

Analysis Year:

2012 Build Mitigation

Project ID: Former Bellevue Psych Building Redevelopment
E/W St: 34th Street
N/S St: FDR Drive Se

N/S St: FDR Drive Service Road

53

VOLUME DATA

	Ea:	stbou	nd	We	stboui	nd	No:	rthbo	und	Soı	uthbo	ınd	ı
	L	T	R	L	${f T}$	R	L	T	R .	L	T	R.	
Volume	,330	4	562	6	9	6 .	452	218	6	4 50	1104	159	.
% Heavy Veh	6	6	6	0	0	0	13	13	13	2	2	2	1.
PHF	0.95	0.95	0.95	0.90	0.90	0.90	0.93		0.93	0.87	_	_	-
PK 15 Vol Hi Ln Vol	87	1	148	2	3	2	122	59	2	1	317	46	
% Grade	ĺ	0		İ	0		i	0		}	0		-
ParkExist	1900	1900	1900		1900	1900	1900	1900			1900		
NumPark	0	2	1.	0	_				_		_	_	
No. Lanes	! -	_		0	2	1_	1	1	0	0	2	0	ļ
LGConfig	Defi		R	!	LT	R	L	TR		ļ	LT	R	!
Lane Width	110.0	10.0	9.0	ļ	16.0	16.0	10.0	10.5		!	9.5		
RTOR Vol		_	0	ļ		0	!		0	ļ		0	
Adj Flow %InSharedLn]347 	4	592		17	7	486	240	_		1457		
Prop LTs	1.00	0.0	00	Ì	0.4	12	11.00	0.0	00	İ	0.0	03	i
Prop RTs	0	.000	1.000	0	.000	1.000	j o	.025		1 0	.126		.
Peds Bikes	j o	•		5 (0 = (0	1 2		0	5		0	l
Buses	i.o	0 .	0	A	0	0 .	0	0			0	` 4·	14.
%InProtPhase	e 0.0			j			0.0	=	0.0		-		
Duration	0.25		Area '	Type:	All d	other	,		3.5	٠,			ı

Ouration 0.25 Area Type: All other areas

__OPERATING PARAMETERS_

	Ea	.stbou	nd	We	stbou	nd	No	rthbo	und	Sc	uthbo	und
	L	T	R	L	${f T}$	R	Ĺ	T	R	L	${f T}$	R
Init Unmet	 0.0	0.0	0.0		0.0	0.0	-	0.0		· [0.0	
Arriv. Type	3	3	3	İ	3	3	4	4			4	
Unit Ext.	3.0	3.0	3.0	İ	3.0	3.0	3.0	3.0			3.0	
I Factor		1.00	0		1.00	0	j	1.00	0	İ	1.00	o i
Lost Time	2.0	2.0	2.0	Ì	2.0	2.0	2.0	2.0		İ	2.0	İ
Ext of g	3.0	2.0	2.0		2.0	2.0	3.0	2.0		į	2.0	j
Ped Min g		3.2		ĺ	3.5		İ	3.4		İ	3.5	j

Appendix C-5

No Build Projects Trip Generation

Former Bellevue Psych Building Redevelopment No Build Projects Trip Generation Rates and Assumptions

Residential	130 90 PDVs DVs	8.075 per DU	e) 9.1% 10.7%	а а 8.0% 7.0% 9.0% 6.0% 23.0% 41.0%	2.0% 1.0% 12.0% 16.0% 44.0% 28.0% 2.0% 1.0%	(4) In Out 15% 85% 70% 30%	.9 1.20 1.40	9 0.03 per DU	12.2%	In Out 50% 50%
Land Use	Size/Units	Trip Generation	Temporal Distribution AM PM	Modal Splits Auto Taxi Subway	Commuter Rail Bus Walk Other	Directional Distribution AM PM	Vehicle Occupancy Auto Taxi	Truck Trip Generation	AM PM	AM/PM

Notes: (1) CEQR Technical Manual (2001)

(2) 2000 Census for New York County Tract 70 journey-to-work data (3) 2000 Census for New York County Tract 66 journey-to-work data (4) Pushkarev & Zupan, Urban Space for Pedestrians (1975) (5) First Avenue Properties SFEIS (2008)

Former Bellevue Psych Building Redevelopment No Build Projects Person Trips by Mode

			É	╟	Carbayay	I ACA	Rail		Riic	١,	Walk	<u>د</u>	Total	al
	¥	Auto	1471		JUL D	2		1		†				
No Build Residential Dvelopments	ũ	Out	In Out	Out	Щ	Out	In Out In Out	Out	In Out In Out	Out	ц	Out	й	Out
		Į₹	AM PEAK HOUR	K HO	ğ									
305 E 33rd Street	7 ~4	7	1	7	3	19	0	2	2	10	9	36	14	81
F 25th Street btw First & Second Avenues	7	4	1	m	4 23	23	0	1	7	6	3	16	10	56
		FM	PM PEAK HOUR	K HO	É									
305 E 33rd Street	9	3	7	3	18	8	7	1	6	4	35	15	22	33
E 25th Street btw First & Second Avenues	4	2	3	Н	22 10	10	1	0	6	4	15	7	54	23
Total	12	15	12 15		48	59	3	3	21	27	59	23	155	193

Former Bellevue Psych Building Redevelopment No Build Projects Vehicle Trips by Mode

Me Parild Desidential Dwelenmonte	Auto	e -	Taxi	izi	Deli	Delivery	Total	tal
	In	Out	In	In Out In Out	Щ	Out	In	Out
AM PEAK HOUR	к но	E E						
305 E 33rd Street	T	9	9.	9	0	0	7	12
E 25th Street btw First & Second Avenues	Ħ	3	- 61	2	0	0	3	5
Total	2	6	8	8	0	0	10	17
PM PEAK HOUR	КНО	J.R						
305 E 33rd Street	5	2	ro.	5	0	0	10	7
E 25th Street btw First & Second Avenues	က	, - 1	~~ ~	7	0	0	ъ	ю
Total	8	3	7	7	0	0	15	10

377 A

Former Bellevue Psych Building Redevelopment No Build Condition (ESRP) Person Trips by Mode

New Employees In Staff Housing (walk only)

1,468 employees

220 employees

	Au	Auto	Taxi		Subway	way	Ē	Bus	W	Walk	Other	ıer	Total	tal
Person Trips	된	In Out In	녈	Out	됨	Out	দ	Out	'n	Out In Out In Out	ц	Out	In	Out
AM	20	9	11	7	285	15	61	3	3 217	11	17	1	641	34
PM	9	47	7	10	33	267	~	57	25	204	17	1	89	586
Total	56	50	12	11 317		282	99	61	243	215	33	2	731	620

Former Bellevue Psych Building Redevelopment No Build Condition (ESRP) Vehicle Trips by Type

e el Men

New Employees In Staff Housing (walk only)

1,468 employees 220 employees

Design Transport	Αt	Auto	Ta	Taxi	Tr	Truck	To	Total
reson migs	П	Out	ਘ	Out	П	In Out In Out In Out	μŢ	Out
AM	42	2	χ ₀	. :8	18	18	89	28
PM	5	39	7	7%	10	10	22	56
Total	47	41	15	15	27	27	68	84

Former Bellevue Psych Building Redevelopment Homeless Shelter Trip Generation Rates and Assumptions

	Land Use	Homeless Shelter	Shelter	
	# Employees	150	0	
	Trip Generation	(1) 2.0 per employee	n ployee	
	Temporal Distribution AM PM	(1) 33.3% 0.0%	% %	
	Modal Splits Auto Mass Transit Other	(3) 26.0% 56.0% 18.0%	%C %C	
	Directional Distribution $AM \ PM$	In 50%	Out 50% 0%	
-	Vehicle Occupancy Auto	(3) 1.65	55	
70 (E.) 1000 1000	Truck Trip Generation	(4) 4.00 per day	00 00 day	+21 .
	AM PM	10.0	10.0% 0.0%	

- (1) Assumes one trip in and one trip out per employee
- (2) 2000 Census for New York County Tract 62 reverse-journey-to-work data
 (3) Pushkarev & Zupan, Urban Space for Pedestrians (1975)
 (4) Based on information provided by the Department of Homeless Services