

APPENDIX A SEATTLE MUNICIPAL CODES

APPENDIX A1 SEATTLE MUNICIPAL CODE CONTENTS OF A MASTER PLAN

For convenience of readers, this Appendix lists “Contents of a Master Plan” as noted in Seattle Municipal Code (SMC) 23.69.030 and where this Draft Master Plan and associated Draft Environmental Impact Statement (EIS) provides that information.

SMC 23.69.030 Reference Contents of a Master Plan	Location in Draft Master Plan or Draft EIS
A	
The master plan is a conceptual plan for a Major Institution consisting of three (3) components:	
Development standards component	See “Standards for Future Development” on page 29.
Development program component	See “Master Plan Program” on page 21 and “Addressing Neighborhood Needs” on page 23 of this Draft Master Plan.
Transportation management program component	See Draft Master Plan: “Comprehensive Safety and Mobility Plan” on page 29. Also, see Draft EIS Section 3.10 - Transportation and Appendix D – Transportation.
B	
The development standards component in an adopted master plan shall become the applicable regulations for physical development of Major Institution uses within the MIO District and shall supersede the development standards of the underlying zone. Where standards established in the underlying zone have not been modified by the master plan, the underlying zone standards shall continue to apply. Proposed development standards shall be reviewed according to the criteria contained in Section 23.69.032 E, Draft Report and Recommendation of the Director. The development standards component may be changed only through a master plan amendment.	
C	
The development standards component of a master plan shall include the following:	
1	
Existing underlying zoning of the area within the boundaries of the MIO District. If a change to the underlying zoning is proposed, the master plan shall identify the proposed zone(s), and the master plan shall be subject to rezoning approval according to the procedures of Chapter 23.76, Procedures for Master Use Permits and Council Land Use Decisions; and	The zoning underlying the existing MIO District is single-family. The zoning underlying the Hartmann property and Laurelon Terrace is multi-family, low-rise 3 (L-3). Expansion of Children’s MIO District is being requested in Alternatives 3, 6 and 7. The proposed MIO heights will supersede the heights allowed in the underlying zoning. See Draft Master Plan: “Major Institution Overlay Districts” on pages 34-43.

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2	
If modifications to the underlying zone development standards are proposed, the proposed modifications and reasons for the proposed modifications or for special standards tailored to the specific institution; and	Modifications to the underlying zone development standards are proposed for allowed floor area, structure setbacks, height limits, lot coverage and other standards. See Draft Master Plan: "Major Institution Overlay Districts" on pages 34-43 and "Building and Facilities" on pages 44-75 for each of the alternatives.
3	
Standards in the master plan shall be defined for the following:	
<ul style="list-style-type: none"> a. Structure setbacks along public rights-of-way and at the boundary of the MIO District, b. Height limits as provided for in Section 23.69.004, c. Lot coverage for the entire MIO District, d. Landscaping, e. Percentage of MIO District to remain in open space; and 	<p>Structure setbacks will vary between 20 and 40 feet. See Draft Master Plan: "Major Institution Overlay Districts" for location and size of setbacks and buffers.</p> <p>Height limits ranging from MIO 37' to MIO 160' are proposed for each alternative. See Draft Master Plan: Table 1 on pages 12 and 13.</p> <p>Lot coverage will vary with each alternative: 57% (Alt 3), 59% (Alt 6), and 58% (Alt 7). See Draft Master Plan: Table 1 on pages 12 and 13.</p> <p>See Draft Master Plan: "Plan for the Future, Site Concept, The Garden Edge" on page 32, and "Open Space" on pages 100 to 108.</p> <p>The percentage of the MIO District to remain in open space will vary with each alternative: 33% (Alt 3), 31% (Alt 6), and 36% (Alt 7). See Draft Master Plan: Table 1 on pages 12 and 13.</p>
4	
<p>The Major Institution may choose or the Director may require the Major Institution to address the following:</p> <ul style="list-style-type: none"> a. Transition in height and scale between development within the MIO District and development in the surrounding area, b. Width and depth limits for structures or measure by which a reduction in the apparent bulk of a structure may be achieved, 	<p>In Children's proposed Master Plan, the tallest buildings are in the center of the campus (MIO 160') and away from single-family residential areas. In Alternatives 3, 6, and 7 the proposed MIO heights would transition downward from the center of the existing campus toward single-family residential areas, from MIO 160', MIO 90' and MIO 50' on the north; from MIO 160', MIO 50' and MIO 37' on the east; from MIO 160', MIO 90', MIO 70', MIO 50' and MIO 37' on the south; from MIO 160', MIO 90' and MIO 37' on the west side of hospital campus. At each perimeter boundary there is a buffer in which no building development can occur above grade. See the "Site Concepts" section on page 32; "Major Institution Overlay Districts" section on pages 34-43; "Building and Facilities" and "Building Elevations" sections on pages 44-75 of this Draft Master Plan.</p> <p>None are proposed. See the "Site Concepts" section on page 32 and "Building and Facilities" and "Building Elevations" section on pages 44-75 of this Draft Master</p>

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<p>c. Setbacks between structures which are not located on a public right-of-way or along the boundary of the MIO District,</p> <p>d. Preservation of historic structures which are designated on federal, state or local registers,</p> <p>e. View corridors or other specific measure intended to mitigate the impact of Major Institution development on the surrounding area,</p> <p>f. Pedestrian circulation within and through the MIO District.</p>	<p>Plan.</p> <p>None are proposed. See the "Site Concepts" section on page 32 and "Building and Facilities" and "Building Elevations" sections on pages 44-75 of this Draft Master Plan.</p> <p>Not applicable as there are no designated historic structures on the hospital campus.</p> <p>Buildings are generally oriented in an east-west direction in Alternatives 3 and 6, and consolidated together over existing buildings at the center of the hospital campus. This is intended to minimize view disruption from upland single-family areas. In Alternative 7, most of the proposed development would be located "downhill" on the Laurelon Terrace property, with heights comparable to the elevation of the current buildings on the "upper" campus.</p> <p>The hospital campus design affords public pedestrian routes that connect neighborhood open space amenities in a system of landscape. See the "Nonmotorized Connections" section on pages 90-99 of this Draft Master Plan.</p>
D	
<p>The development program component shall include the information set forth in subsection E of this section. With regard to future development, the development program component shall describe planned physical development, defined as development which the Major Institution has definite plans to construct. The development program may describe potential physical development or uses for which the Major Institution's plans are less definite. The development program may be amended according to the provisions of Section 23.69.035 without requiring amendment of the development standards component.</p>	<p>In Children's proposed Master Plan, future planned developments would be constructed in a sequence that begins with Bed Unit 1 and a first phase of parking garage expansion, and infrastructure and roadway improvements; Bed Units 2, 3, 4, remaining garage expansion, Hartmann development, and additional infrastructure and roadway improvements would occur in later phases. See Alternative 3, on pages 58-63, Alternative 6 on pages 64-69, and Alternative 7 on pages 70-75, for summaries of the building areas, parking counts, and sequence of development.</p>
E	
<p>The development program component shall include the following:</p>	
1	
<p>A description of alternative proposals for physical development including an explanation of the reasons for considering each alternative, but only if an Environmental Impact Statement is not prepared for the master plan; and</p>	<p>Not applicable. EIS being prepared for this MIMP.</p>
2	
<p>Density as defined by total maximum developable gross floor area for the MIO District and an overall floor area ratio (FAR) for the MIO District. Limits on total gross floor area and floor area ratios may also be required for sub-areas within the MIO District but only when an MIO District is over four hundred (400) acres in size or when an MIO District has distinct</p>	<p>Alternatives 3, 6 and 7 provide for a total maximum developable gross floor area (excluding mechanical, interstitial, below grade, parking and circulation space) of 2.4 million gsf. The FAR for the proposed MIO District in each alternative is 2.35 (Alt 3), 2.54 (Alt 6), and 1.82 (Alt</p>

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geographical areas; and	7). See Draft Master Plan: "Table 1 – Summary of Development Proposals" on pages 12 and 13 for a list of FAR for each alternative.
3	
The maximum number of parking spaces allowed for the MIO District; and	Alternatives 3, 6 and 7 provide for a total of 3,600 parking spaces on and off campus. The proposed MIO Districts would include 3,100 parking spaces (Alt 3 and Alt 7) and 2,845 parking spaces (Alt 6). See Draft Master Plan: "Table 1 – Summary of Development Proposals" on pages 12 and 13 for a list of parking spaces for each alternative.
4	
A description of existing and planned future physical development on a site plan which shall contain:	
<p>a. The height, description, gross floor area and location of existing and planned physical development, and</p> <p>b. The location of existing open space landscaping and screening, and areas of the MIO District to be designated open space. Designated open space shall be open space within the MIO District that is significant and serves as a focal point for users of the Major Institution. Changes to the size or location of designated open space will require an amendment pursuant to Section 23.69.035, and</p> <p>c. Existing public and private street layout, and</p>	<p>Alternative 3 proposes building heights in a range of 50' to 160', with gross floor area of 2.4 million square feet including 170,000 square feet being built on the Hartmann property; the patient buildings will be built south of Penny Drive on or above the existing hospital buildings, and the parking structures will be built north of Penny Drive. Alternative 6 proposes building heights in the range of 50' to 160', with gross floor area of 2.4 million square feet including 170,000 square feet being built on the Hartmann property; the patient buildings will be built north and south of Penny Drive on or above the existing hospital buildings, and the parking structures will be built north of Penny Drive. Alternative 7 proposes building heights in the range of 50' to 160', with gross floor area of 2.4 million square feet including 170,000 square feet being built on the Hartmann property; the bulk of the patient buildings will be built to the west of the existing hospital on the boundary expansion site at Laurel Terrace, a medical office building and parking garage will be built north of Penny Drive, and an expansion of the existing hospital will be built south of Penny Drive. See Draft Master Plan: "Table 1 – Summary of Development Proposals" on pages 12 and 13, and "Four Alternative Draft Master Plans" on pages 52 to 53.</p> <p>For the existing conditions see Figure 43 on page 101, for Alt 3 see Figure 45 on page 105, for Alt 6 see Figure 46 on page 107, and for Alt 7 see Figure 47 on page 109.</p> <p>For the existing conditions see Figure 34 on page 83, for Alt 3 see Figure 35 on page 85, for Alt 6 see Figure 36 on page 87, and for Alt 7 see Figure 37 on page 89.</p>

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d. Existing and planned parking areas and structures; and	For the existing conditions see Figure 17 on page 45, for Alt 3 see Figure 22 on page 59, for Alt 6 see Figure 25 on page 65, and for Alt 7 see Figure 28 on page 71.
5	
A site plan showing: property lines and ownership of all properties within the applicable MIO District, or areas proposed to be included in an expanded MIO District, and all structures and properties a Major Institution is leasing or using or owns within two thousand five hundred (2,500) feet of the MIO District; and	For the existing conditions see Figure 12 on page 35, for Alt 3 see Figure 14 on page 39, for Alt 6 see Figure 15 on page 41, and for Alt 7 see Figure 16 on page 43. "Table 1 - Summary of Development Proposals" on page 12 lists the owned and leased spaces included in each alternative.
6	
Three (3) dimensional drawings to illustrate the height, bulk and form of existing and planned physical development. Information on architectural detailing such as window placement and color and finish materials shall not be required; and	For the existing conditions see Figures 18 and 19 on pages 47 and 49, for Alt 3 see Figures 23 and 24 on pages 61 and 63, for Alt 6 see Figures 26 and 27 on pages 67 and 69, and for Alt 7 see Figures 29 and 30 on pages 73 and 75.
7	
A site plan showing any planned infrastructure improvements and the timing of those improvements; and	For Alt 3 see Figure 35 on page 85, for Alt 6 see Figure 36 on page 87, and for Alt 7 see Figure 37 on page 89. For development timing sequence see page 58 for Alt 3, page 64 for Alt 6, and page 70 for Alt 7. Conceptually the time-frame for development is 1 to 5 years for the first bed unit, 6 to 10 years for the second bed unit and Hartmann, and 10 to 20 years for the third and fourth bed units.
8	
A description of planned development phases and plans, including development priorities, the probable sequence for such planned development and estimated dates of construction and occupancy; and	For development timing sequence see page 58 for Alt 3, page 64 for Alt 6, and page 70 for Alt 7. Conceptually the time frame for development is 1 to 5 years for the first bed unit, 6 to 10 years for the second bed unit and Hartmann, and 10 to 20 years for the third and fourth bed units.
9	
A description of any planned street or alley vacations or the abandonment of existing rights-of-way; and	Implementation of Alternative 7 will require the vacation of portions of 41 st Avenue NE and NE 46 th Street. See Draft Master Plan: "Table 1 – Summary of Development Proposals" on page 12.
10	
At the option of the Major Institution, a description of potential uses, development, parking areas and structures, infrastructure improvements or street or alley vacations. Information about potential projects is for the purpose of starting a dialogue with the City and the community about potential development, and changes to this information will not require an	See responses to Items 4, 5, 6, 7, 8 and 9 above.

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amendment to the master plan; and	
11	
<p>An analysis of the proposed master plan's consistency with the purpose and intent of this chapter as described in Section 23.69.002; and</p> <p>A. Permit appropriate institutional growth, within boundaries while minimizing the adverse impacts associated with development and geographic expansion;</p> <p>B. Balance a Major Institution's ability to change and the public benefit derived from change with the need to protect the livability and vitality of adjacent neighborhoods;</p> <p>C. Encourage the concentration of Major Institution development on existing campuses, or alternatively, the decentralization of such uses to locations more than two thousand five hundred (2,500) feet from campus boundaries;</p> <p>D. Provide for the coordinated growth of major institutions through major institution conceptual master plans and the establishment of major institutions overlay zones;</p>	<p>The proposed Master Plan will allow Children's to implement its strategic plan for the care of children in Seattle and the region. Children's proposes to minimize adverse impacts associated with such development through MIO heights that put the tallest buildings in the center of the campus and away from SF residential areas, the continuation of generous landscaped buffers, an aggressive Transportation Management Program, and other mitigation measures identified throughout the proposed Draft Master Plan and Draft EIS. See "Introduction" on page 15 of this Draft Master Plan. Also see the Hospital's Plan for the Future Section starting on page 27 for discussions on development objectives, shared community and hospital goals, standards for future development, comprehensive safety and mobility plan, construction management plan, decentralization, consolidation of hospital facilities and housing.</p> <p>The public benefits derived from fulfillment of Children's mission include the prevention, treatment and elimination of pediatric diseases in the greater Seattle area, Washington, Alaska, Montana and Idaho. Children's proposes to protect the livability and vitality of its adjacent neighborhoods through the kinds of mitigation measures referenced in Paragraph A above.</p> <p>In Alternatives 3 and 6, Children's has proposed to continue the concentration of its development on the existing 21.7 acre campus. In Alternative 7, Children's has proposed to expand its campus to include the adjacent 6.75 acre Laurelon Terrace property. However, in all Alternatives, Children's is also proposing to expand upon its use of the Hartmann Property at 40th Ave NE and Sand Point Way NE and continue to lease space in the Springbrook Office Buildings at the intersection of Sand Point Way NE and NE 45th Street. Both Hartmann and Springbrook are within 2,500 feet from the existing campus. See "Existing Building and Facilities" on pages 44-49; for proposed alternatives, see "Four Alternative Draft Master Plans" on pages 51-75 of this Draft Master Plan. Also see response to Item 12 below.</p> <p>Children's proposed Draft Master Plan provides for its coordinated growth and the establishment of new MIO height districts on portions of its existing campus as well as the Hartmann and Laurelon Terrace properties. See "Major Institution Overlay Districts" on pages 34-43 of this Draft Master Plan.</p>

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<p>E. Discourage the expansion of established major institution boundaries;</p> <p>F. Encourage significant community involvement in the development, monitoring, implementation and amendment of major institution master plans, including the establishment of citizen's advisory committees containing community and major institution representatives;</p> <p>G. Locate new institutions in areas where such activities are compatible with the surrounding land uses and where the impacts associated with existing and future development can be appropriately mitigated;</p> <p>H. Accommodate the changing needs of major institutions, provide flexibility for development and encourage a high quality environment through modifications of use restrictions and parking requirements of the underlying zoning;</p> <p>I. Make the need for appropriate transition primary considerations in determining setbacks. Also setbacks may be appropriate to achieve proper scale, building modulation, or view corridors;</p> <p>J. Allow an increase to the number of permitted parking spaces only when it is 1) necessary to reduce parking demand on streets in surrounding areas, and 2) compatible with goals to minimize traffic congestion in the area;</p> <p>K. Use the TMP to reduce the number of vehicle trips to the major institution, minimize the adverse impacts of traffic on the streets surrounding the</p>	<p>Children's is proposing the expansion of its major institution boundaries to include the Hartmann and Laurelton Terrace property in order to mitigate the height, bulk and density of development on the existing campus. See Alternative 3, proposed Major Institution Overlay on page 38, Alternative 6, proposed Major Institution Overlay on page 41, and Alternative 7, proposed Major Institution Overlay on page 43.</p> <p>The Seattle City Council created a Citizen's Advisory Committee (CAC) composed of 15 members. See City of Seattle Resolution 31002, dated July 30, 2007. The CAC has held regular meetings which include public comment periods. Beginning in spring 2007, Children's also initiated community meetings, and for the past year, has met with various community groups and stakeholders in the surrounding neighborhoods. See meetings referenced in "Addressing Neighborhood Needs," on page 23 of this Draft Master Plan. Children's also maintains a Web site where it posts information germane to its proposed Master Plan. See http://masterplan.seattlechildrens.org</p> <p>Children's is an existing, not a new, institution that first located a hospital at its current 21.7-acre site in northeast Seattle in 1953. Its first Master Plan was adopted by the City in September 1994. See Ordinance No. 117319.</p> <p>The proposed Draft Master Plan is intended to accommodate Children's changing needs, particularly the development of up to 600 beds, and provide flexibility for development of a high quality campus environment through the modification and imposition of appropriate use and development standards. In order to reduce the impact of traffic to and from Children's campus, Children's proposes the use of a revised Transportation Management Plan to serve its diverse transportation needs and connect remote park-and-ride lots with buses and shuttles to the campus. See "Comprehensive Safety and Mobility Plan" on page 76 of this Draft Master Plan for further details.</p> <p>Children's proposes to continue its generous landscape setbacks and buffers on the perimeter of its campus and to step down its building heights from the center of the site to the adjacent single-family residences. See Figure 14 on page 39, Figure 15 on page 41, and Figure 16 on page 43.</p> <p>Children's proposes to increase its on-campus parking capacity to a range from 2,570 to 2,845 spaces (3,600 parking spaces overall, including Hartmann and off-site spaces) in order to avoid parking on nearby streets and minimize traffic congestion in the vicinity of its campus.</p> <p>Children's has already developed a very successful TMP, which has resulted in fewer than 38% of its dayshift</p>

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<p>institution, minimize demand for parking on nearby streets, especially residential streets, and minimize the adverse impacts of institution-related parking on nearby streets. To meet these objectives, seek to reduce the number of SOVs used by employees and students at peak time and destined for the campus;</p> <p>L. Through the master plan: 1) give clear guidelines and development standards on which the major institutions can rely for long-term planning and development; 2) provide the neighborhood advance notice of the development plans of the major institution; 3) allow the city to anticipate and plan for public capital or programmatic actions that will be needed to accommodate development; and 4) provide the basis for determining appropriate mitigating actions to avoid or reduce adverse impacts from major institution growth; and</p> <p>M. Encourage the preservation, restoration and reuse of designated historic buildings.</p>	<p>employees driving to work in a single-occupant vehicle. Children's has now proposed a revised TMP which would reduce to 30% the number of its dayshift employees (at existing and proposed new MIMP facilities) in SOV mode. See "Comprehensive Safety and Mobility Plan" on pages 79-81 of this Draft Master Plan, and Draft Transportation Management Program in Appendix D – Transportation, of the Draft EIS.</p> <p>The proposed Draft Master Plan provides clear guidelines and development standards, including proposed MIO heights. Proposed development is described for the purpose of providing advance notice to the surrounding neighborhoods, and the City. Proposed mitigation measures are embedded in the Draft Master Plan and Draft EIS. As the review process continues, Children's expects to identify further mitigation measures.</p> <p>There are no designated historic buildings on Children's existing campus, the Hartmann property, or the Laurelon Terrace property.</p>
12	
<p>A discussion of the Major Institution's facility decentralization plans and/or options, including leasing space or otherwise locating uses off-campus; and</p>	<p>Children's is decentralizing its outpatient facilities to serve patients closer to their homes. This includes future expanded outpatient facilities in Bellevue, Everett and south King County. Children's is also locating its research facilities at its Stewart Place property at 1000 Stewart Street in downtown Seattle. See the "Building and Facilities" section on pages 44-75, and "Decentralization" on page 30 of this Draft Master Plan.</p>
13	
<p>A description of the following shall be provided for informational purposes only. The Advisory Committee, pursuant to Section 23.69.032 D1, may comment on the following but may not subject these elements to negotiation nor shall such review delay consideration of the master plan or the final recommendation to Council:</p>	
<p>a. A description of the ways in which the institution will address goals and applicable policies under Education and Employability and Health in the Human Development Element of the Comprehensive Plan, and</p> <p>b. A statement explaining the purpose of the development proposed in the master plan, including the public benefits resulting from the proposed new development and the way in which the proposed development will serve the public purpose mission of the Major Institution.</p>	<p>See the "Health Care Needs" section on page 18 of this Draft Master Plan.</p> <p>Children's can achieve its mission to serve the growth of pediatric health-care needs in Seattle and the region through expanded facilities. See "Children's Mission" on page 17 and "Health-Care Needs" on page 18 of this Draft Master Plan.</p>
F	
<p>The Transportation Management Program component shall satisfy the</p>	<p>See proposed transportation mitigation measures in</p>

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requirements of Section 23.54.016. The Transportation Management Program shall include, at a minimum, the following:	Section 3.10 - Transportation and Draft Transportation Management Program included in Appendix D - Transportation, of the Draft EIS.
1	
A description of existing and planned parking, loading and service facilities, and bicycle, pedestrian and traffic circulation systems within the institutional boundaries and the relationship of these facilities and systems to the external street system. This shall include a description of the Major Institution's impact on traffic and parking in the surrounding area; and	See "Transportation System" and "Nonmotorized Connections" sections on pages 76-89 and 90-99, respectively, of this Draft Master Plan. For Additional information see Section 3.10 – Transportation, in the Draft EIS.
2	
Specific institutional programs to reduce traffic impacts and to encourage the use of public transit, carpools and other alternatives to single-occupant vehicles. Any specific agreements with the City for the provision of alternative modes of transportation shall also be included.	See proposed transportation mitigation measures in Section 3.10 - Transportation and Draft Transportation Management Program included in Appendix D - Transportation, of the Draft EIS.
G	
Environmental information and the master plan may be integrated into one (1) document.	A Draft EIS is being prepared by Department of Planning and Development.
H	
Where two (2) or more institutions are located in close proximity to one another, the Director may require their combined land use, traffic and parking impacts on the surrounding area to be evaluated in the master plan for each institution.	The closest major institution is the University of Washington, located approximately one mile from Children's. The University's traffic has been evaluated as part of the existing traffic levels that may be affected by Children's. See Section 3.10 - Transportation of the Draft EIS for a description of existing traffic levels, and for a description of potential impacts from the Children's alternatives.

APPENDIX A2 SEATTLE MUNICIPAL CODE GENERAL REZONE CRITERIA

For convenience of readers, this Appendix lists “General rezone criteria” as noted in Seattle Municipal Code (SMC) 23.34.008 and where this Draft Master Plan and associated Draft Environmental Impact Statement (EIS) provides that information.

SMC 23.34.008 General rezone criteria	Response
A	
To be approved a rezone shall meet the following standards:	
1	
In urban centers and urban villages the zoned capacity for the center or village taken as a whole shall be no less than one hundred twenty-five percent (125%) of the growth targets adopted in the Comprehensive Plan for that center or village.	Not applicable. Children’s is designated as a major institution and is located outside of an urban center or village. The Hartmann property and Laurelon Terrace are also not in an urban center or urban village
2	
For the area within the urban village boundary of hub urban villages and for residential urban villages taken as a whole the zoned capacity shall not be less than the densities established in the Urban Village Element of the Comprehensive Plan.	Not applicable.
B	
Match Between Zone Criteria and Area Characteristics. The most appropriate zone designation shall be that for which the provisions for designation of the zone type and the locational criteria for the specific zone match the characteristics of the area to be rezoned better than any other zone designation.	In Alternative 6, the Hartmann property is rezoned from multi-family residential, Low-rise 3 (L-3) to Neighborhood Commercial 3 (NC3-65’). The Hartmann property would qualify for NC 3 zone for the same reasons that other nearby properties bordering Sand Point Way NE have qualified. The proposed height is less than the height of the multi-family project immediately to the south. See Draft Master Plan: “Major Institution Overlay Districts” section on pages 34-43.
C	
Zoning History and Precedential Effect. Previous and potential zoning changes both in and around the area proposed for rezone shall be examined.	The original zoning for the Hartmann property allowed medical clinics, which have continued on this property since these uses were established in the 1950s. There are other medical clinics on this portion of Sand Point Way NE, e.g., the Springbrook buildings, and there are other nearby NC zones.
D	
Neighborhood Plans.	Neither Children’s, the Hartmann property, nor the Laurelon Terrace property are located within an area covered by an adopted neighborhood plan. Children’s is within 0.5 miles from the Ravenna portion of the “University Community Urban Center” and 2 miles from the “Roosevelt Residential Urban Village.”

SMC 23.34.008 General rezone criteria	Response
1	
For the purposes of this title, the effect of a neighborhood plan, adopted or amended by the City Council after January 1, 1995, shall be as expressly established by the City Council for each such neighborhood plan.	Not applicable.
2	
Council adopted neighborhood plans that apply to the area proposed for rezone shall be taken into consideration.	Not applicable.
3	
Where a neighborhood plan adopted or amended by the City Council after January 1, 1995 establishes policies expressly adopted for the purpose of guiding future rezones, but does not provide for rezones of particular sites or areas, rezones shall be in conformance with the rezone policies of such neighborhood plan.	Not applicable.
4	
If it is intended that rezones of particular sites or areas identified in a Council adopted neighborhood plan are to be required, then the rezones shall be approved simultaneously with the approval of the pertinent parts of the neighborhood plan.	Not applicable.
E	
Zoning Principles. The following zoning principles shall be considered:	
1	
The impact of more intensive zones on less intensive zones or industrial and commercial zones on other zones shall be minimized by the use of transitions or buffers, if possible. A gradual transition between zoning categories, including height limits, is preferred.	The proposed heights of up to 105 feet for the Hartmann property are comparable to nearby multi-family residential development. In terms of use, Children's MIMP, Springbrook, and other nearby uses have comparable or greater intensity. See the Draft Master Plan: "Major Institution Overlay Districts" section on pages 34-43 for a description of the proposed height limits and transition zones for each of the alternatives.
2	
Physical buffers may provide an effective separation between different uses and intensities of development. The following elements may be considered as buffers: a. Natural features such as topographic breaks, lakes, rivers, streams, ravines and shorelines; b. Freeways, expressways, other major traffic arterials, and railroad tracks; c. Distinct change in street layout and block orientation; d. Open space and greenspaces.	The Hartmann property borders the Burke-Gilman Trail on the west (a former railroad track) and Sand Point Way NE on the east. The multi-family project immediately south of Hartmann is 120 feet in height and the multi-family project to the north is 35 feet. See the Draft Master Plan: "Major Institution Overlay Districts" section on pages 34-43, and "Four Alternate Draft Master Plans: Open Space" on page 102 and each alternative starting on pages 102-109.
3	
Zone Boundaries. a. In establishing boundaries the following elements shall be considered:	Boundaries between Hartmann property and the adjacent multi-family building to the south, and the properties

SMC 23.34.008 General rezone criteria	Response
<p>(1)Physical buffers as described in subsection E2 above; (2)Platted lot lines.</p> <p>b. Boundaries between commercial and residential areas shall generally be established so that commercial uses face each other across the street on which they are located, and face away from adjacent residential areas. An exception may be made when physical buffers can provide a more effective separation between uses.</p>	<p>directly across Sand Point Way NE share the same Neighborhood Commercial (NC2) zone at different height designations. The Hartmann property abuts the Burke-Gilman Trail despite grade difference to the west. A garden edge or buffer would be planned along the north edge of the Hartmann property next to the existing multi-family residential, Low-rise 3 (L-3). See Draft Master Plan: "Major Institution Overlay Districts" section on pages 34-43, and "Four Alternate Draft Master Plans: Open Space" section on pages 102-109.</p>
<p>4</p>	
<p>In general, height limits greater than forty (40) feet should be limited to urban villages. Height limits greater than forty (40) feet may be considered outside of urban villages where higher height limits would be consistent with an adopted neighborhood plan, or where the designation would be consistent with the existing built character of the area.</p>	<p>The proposed height designation for Hartmann property would be consistent with the existing built character of the area. South of the Hartmann property, the multi-family building is approximately 120'. See Draft Master Plan: "Major Institution Overlay Districts" section on pages 34-43.</p>
<p>F</p>	
<p>Impact Evaluation. The evaluation of a proposed rezone shall consider the possible negative and positive impacts on the area proposed for rezone and its surroundings.</p>	
<p>1</p>	
<p>Factors to be examined include, but are not limited to, the following:</p> <ol style="list-style-type: none"> Housing, particularly low-income housing; Public services; Environmental factors, such as noise, air and water quality, terrestrial and aquatic flora and fauna, glare, odor, shadows, and energy conservation; Pedestrian safety; Manufacturing activity; Employment activity; Character of areas recognized for architectural or historic value; Shoreline view, public access and recreation. 	<p>The Hartmann site is zoned multi-family residential, Low-rise 3 (L-3), and it has been used as office space and medical clinic since the 1950s. The rezoning of the site would not cause the loss of housing nor be a change from the existing use. With the redevelopment of the site, R.O.W. improvements, transit and shuttle amenities would be implemented in the proposed alternatives except for Alternative 1: No Build. At the northeastern corner on Sand Point Way NE, a pedestrian-orientated entry plaza with garden space has been proposed. Towards the southeastern corner on Sand Point Way NE, a consolidated vehicular entry would serve the proposed under-structure parking. See Draft Master Plan: "Hartmann" under "Transportation System" on page 76, "Alternative Draft Master Plans: Transportation and Parking" section for each alternates on pages 89. Also, see "Nonmotorized Connections" section on pages 90-99. See Draft EIS: Table 3.7-5 "Consistency with Economic Development Goals and Policies" for employment activity.</p>
<p>2</p>	
<p>Service Capacities. Development which can reasonably be anticipated based on the proposed development potential shall not exceed the service capacities which can reasonably be anticipated in the area, including:</p> <ol style="list-style-type: none"> Street access to the area; Street capacity in the area; 	<p>See Draft EIS: "3.10 Transportation", and "Appendix D-Transportation" for street access, street capacity, transit service and parking capacity. Also see Draft Master Plan: "Comprehensive Safety and Mobility Plan" on page 29, Appendix B1: "Sound Transit Letter of Intent", and</p>

SMC 23.34.008 General rezone criteria	Response
<p>c. Transit service; d. Parking capacity; e. Utility and sewer capacity; f. Shoreline navigation.</p>	<p>Appendix B2: "Comprehensive Safety and Mobility Plan." See Draft EIS: "3.11 Public Services and Utilities." Shoreline navigation is not applicable.</p>
<p>G</p>	
<p>Changed Circumstances. Evidence of changed circumstances shall be taken into consideration in reviewing proposed rezones, but is not required to demonstrate the appropriateness of a proposed rezone. Consideration of changed circumstances shall be limited to elements or conditions included in the criteria for the relevant zone and/or overlay designations in this chapter.</p>	<p>Changed circumstances applicable to the Hartmann property since its current use was established in the 1950s include the development of Children's Hospital and Regional Medical Center on the current 21.7-acre site, the zoning of other nearby properties bordering Sand Point Way NE to NC, as well as the development of more intensive multi-family residential development in this same corridor. The entire Sand Point Way NE/NE 45th Street corridor from Children's to Montlake has also become more intensely commercial, including the expanded University Village shopping center.</p>
<p>H</p>	
<p>Overlay Districts. If the area is located in an overlay district, the purpose and boundaries of the overlay district shall be considered.</p>	<p>The Hartmann property is not currently in an overlay district. See Draft Master Plan: "Draft Master Plan Major Institution Overlay Districts" on pages 34 to 43.</p>
<p>I</p>	
<p>Critical Areas. If the area is located in or adjacent to a critical area (SMC Chapter 25.09), the effect of the rezone on the critical area shall be considered.</p>	<p>The Burke-Gilman Trail on the west is situated at a higher elevation and separated from the Hartmann property by a steep slope; a portion of this slope is designated as an Environmentally Critical Area, and Children's is committed to employ best construction practices to stabilize the slope.</p>

APPENDIX A3 SEATTLE MUNICIPAL CODE

DESIGNATION OF MAJOR INSTITUTION OVERLAY DISTRICTS AND PURPOSE AND INTENT

For convenience of readers, this Appendix lists “Designation of Major Institution Overlay (MIO) districts” as noted in Seattle Municipal Code (SMC) 23.34.124 and “Purpose and Intent” as noted in SMC 23.69.002 and where this Draft Master Plan and associated Draft Environmental Impact Statement (EIS) provides that information.

SMC 23.34.124 Designation of Major Institution Overlay (MIO) districts.	Response
A	
<p>Public Purpose. The applicant shall submit a statement which documents the reasons the rezone is being requested, including a discussion of the public benefits resulting from the proposed expansion, the way in which the proposed expansion will serve the public purpose mission of the major institution, and the extent to which the proposed expansion may affect the livability of the surrounding neighborhood. Review and comment on the statement shall be requested from the appropriate Advisory Committee as well as relevant state and local regulatory and advisory groups. In considering rezones, the objective shall be to achieve a better relationship between residential or commercial uses and the Major Institution uses, and to reduce or eliminate major land use conflicts in the area.</p>	<p>These criteria apply to Children’s proposed changes in its MIO boundaries and allowable heights. Children’s proposes to expand its current MIO boundary to include the Hartmann property in Alternative 3 in order to reduce the intensity of development on the existing 21.7 acre campus. The proposed heights of 50’ and 105’ are comparable to the height of nearby multi-family development. See “Alternative 3-Proposed: Major Institution Overlay” on page 38.</p> <p>In Alternative 7: Expanded Boundary, Early Laurelton Development, Children’s proposes to expand its current MIO boundary to include Laurelton Terrace and the Hartmann properties. This creates an opportunity to reduce the need for additional building area and height on the existing hospital campus while providing contiguous and adjacent locations for growth to serve the need for pediatric care in the Hospital’s service area, and helps to disperse related traffic. This alternative also proposes connecting neighborhood pedestrian and open-space systems across Children’s campus, and continuing to enhance the campus garden edge to make desirable and usable spaces to benefit patient care, caregivers, as well as the surrounding neighborhood. See “Plan for the Future” section on pages 27-31, and “Alternative 7-Expanded Boundary, Early Laurelton Development” on pages 42 and 43.</p>
B	
<p>Boundaries Criteria. The following criteria shall be used in the selection of appropriate boundaries for: 1) new Major Institution Overlay districts; 2) additions to existing MIO districts; and 3) modifications to boundaries of existing MIO districts.</p>	<p>Children’s proposes to include Hartmann property as an addition to the existing major institution overlay district in Alternatives 3 and 7. In Alternative 7, Children’s also proposes to include the Laurelton Terrace property as an addition to its existing major institution overlay district. See “Alternative 3: Proposed Major Institution Overlay with Heights” on pages 38 and 39. See also, “Alternative 7: Expanded Boundary, Early Laurelton Development Major Institution Overlay with Heights” on pages 42 and 43.</p>
1	

SMC 23.34.124 Designation of Major Institution Overlay (MIO) districts.	Response
Establishment or modification of boundaries shall take account of the holding capacity of the existing campus and the potential for new development with and without a boundary expansion.	Alternatives 3 and 6 propose expanding the Hospital within the existing MIO boundaries at a greater density of development. Alternative 3 also includes a limited boundary expansion across Sand Point Way NE covering the Hartmann property. Alternative 7 proposes a boundary expansion to cover the adjacent Laurelton Terrace property to the west allowing for less density being developed on the existing campus and increasing the overall holding capacity for future growth. Holding capacity is a function of both the scope of the MIO boundaries and the allowed MIO height districts. These alternatives show how holding capacity can be increased either by more allowable height on the existing campus or by expanding Children's MIO boundaries. See Draft Master Plan: "Major Institution Overlay Districts" on pages 34 to 43.
2	
Boundaries for an MIO shall correspond with the main, contiguous major institution campus. Properties separated by only a street, alley or other public right-of-way shall be considered contiguous.	In Alternatives 3 and 6, , Children's main hospital campus and the Hartmann property are separated by Sand Point Way NE. Through public amenity improvements such as signalized pedestrian crossings and new and improved sidewalks on Sand Point Way NE, the Hartmann property can become a safe and functioning extension of Children's campus. In Alternative 7, the main hospital campus and the adjacent Laurelton property are joined to one another.
3	
Boundaries shall provide for contiguous areas which are as compact as possible within the constraints of existing development and property ownership.	All three alternatives provide for contiguous areas which are as compact as possible within the constraints of the existing development, depending, of course, upon the allowable height limits for the existing campus. The Hartmann property is owned by the Hospital and the Laurelton Terrace owners have indicated their willingness to sell the Laurelton property to Children's, contingent on the City's approval of the MIMP and of MIO boundaries to include the Laurelton Terrace property.
4	
Appropriate provisions of this chapter for the underlying zoning and the surrounding areas shall be considered in the determination of boundaries.	In Alternatives 3 and 7, consideration has been given to the effects of such boundary extensions on the nearby neighborhoods. See "Draft Master Plan Major Institution Overlay Districts" section on pages 36-43.
5	
Preferred locations for boundaries shall be streets, alleys or other public rights-of-way. Configuration of platted lot lines, size of parcels, block orientation and street layout shall also be considered.	MIO boundaries for each of the three alternatives are consistent with these criteria. See "Major Institution Overlay" section on pages 34 to 43.
6	
Selection of boundaries should emphasize physical features that create	The MIO boundaries for each of the three alternatives

SMC 23.34.124 Designation of Major Institution Overlay (MIO) districts.	Response
natural edges such as topographic changes, shorelines, freeways, arterials, changes in street layout and block orientation, and large public facilities, land areas or open spaces, or green spaces.	are consistent with these criteria. See "Major Institution Overlay" section on pages 34 to 43.
7	
New or expanded boundaries shall not be permitted where they would result in the demolition of structures with residential uses or change of use of those structures to non-residential major institution uses unless comparable replacement is proposed to maintain the housing stock of the city.	In Alternative 7, the existing Laurelon Terrace condominium housing would have to be demolished. If this Alternative is chosen, Children's is committed to meet the City's replacement housing requirements by partnering with public, private or non-profit agencies to provide for such housing in northeast Seattle. See "Housing" under "Plan for the Future" on page 31.
8	
Expansion of boundaries generally shall not be justified by the need for development of professional office uses.	The Hartmann property would be used for Children's medical services and facilities. The Laurelon Terrace property would be used for inpatient bed wings, the relocation of the emergency department, and other medical facilities. See "Health-Care Needs" and "Master Plan Program" on pages 18-21.
9	
The establishment or expansion of boundaries shall be in conformance with the provisions of SMC Section 23.69.024, Major Institution designation.	The expansions of the boundaries would be in conformance with the provisions of SMC 23.69.024, which, in turn, incorporate the purpose and intent of SMC 23.69.006 and the rezone criteria in SMC 23.34.124. See other responses in this Appendix and see Draft Master Plan: "Major Institution Overlay Districts" on pages 34 to 43.
C	
Height Criteria. The following criteria shall be used in the selection of appropriate height designations for: 1) proposed new Major Institution Overlay districts; 2) proposed additions to existing MIO districts; and 3) proposed modifications to height limits within existing MIO districts;	
1	
Increases to height limits may be considered where it is desirable to limit MIO district boundary by expansion.	MIO height limits of 160' are required to accommodate Children's expected growth in Alternatives 3, 6, and 7. One of the principal differences between the alternatives is the location of the MIO boundaries where such development would occur.
2	
Height limits at the district boundary shall be compatible with those in the adjacent areas.	All Alternatives propose MIO height increases to the minimum needed to accommodate Children's growth and, at the boundaries, are compatible with adjacent areas. See Draft Master Plan: "Major Institution Overlay Districts" on pages 34 to 43.
3	

SMC 23.34.124 Designation of Major Institution Overlay (MIO) districts.	Response
<p>Transitional height limits shall be provided wherever feasible when the maximum permitted height within the overlay district is significantly higher than permitted in areas adjoining the major institution campus.</p>	<p>In Alternatives 3 and 6, the MIO heights transition from a height of 37' adjacent to the residential neighbors to a height of 160' at the center of the campus. See Draft Master Plan: "Major Institution Overlay Districts" on pages 34 to 43.</p> <p>In Alternative 7, Children's proposes a MIO 160' on the Laurelon Terrace property. Due to the lower elevation of the Laurelon Terrace property, the 160' height corresponds with the elevation of the 90' MIO on the existing hospital campus and the proposed buildings will not be at a higher elevation than the highest structure on the existing campus. The heights transition down to MIO 50' then to MIO 37' along the southern boundary of Laurelon Terrace adjacent to the residential housing on NE 45th Street.</p>
<p>4</p>	
<p>Height limits should generally not be lower than existing development to avoid creating non-conforming structures.</p>	<p>The proposed height limits are not lower than the existing development. See Draft Master Plan: "Major Institution Overlay Districts" on pages 34 to 43.</p>
<p>5</p>	
<p>Obstruction of public scenic or landmark views to, from or across a major institution campus should be avoided where possible.</p>	<p>There will be no obstruction of public scenic or landmark views to, from or across a major institution campus.</p>
<p>D</p>	
<p>In addition to the general rezone criteria contained in Section 23.34.008, the comments of the Major Institution Master Plan Advisory Committee for the major institution requesting the rezone shall also be considered.</p>	<p>Alternatives 6 and 7 have been refined in response to comments received from the CAC to fine tune the heights at the MIO boundaries. See Draft Master Plan: "Addressing Neighborhood Needs" on page 23.</p>

SMC 23.69.002 Purpose and intent.	Response
The purpose of this chapter is to regulate Seattle's major educational and medical institutions in order to:	
A	
Permit appropriate institutional growth within boundaries while minimizing the adverse impacts associated with development and geographic expansion;	See the description of Children's Development Objectives on page 27 for the proposed alternatives addressing the institutional growth and actions to be taken to minimize the impacts of the proposed growth and expansion.
B	
Balance a Major Institution's ability to change and the public benefit derived from change with the need to protect the livability and vitality of adjacent neighborhoods;	The ability to change and grow is vital to the fulfillment of Children's mission to provide the best pediatric specialty care to the citizens of Seattle, Washington, and the region they serve. See Draft Master Plan: "Need for Growth" on pages 7 and 8. For additional discussion see "Master Plan Program" on page 21, "Addressing Neighborhood Needs" on page 23, and "Development Objectives" starting on page 27.
C	
Encourage the concentration of Major Institution development on existing campuses, or alternatively, the decentralization of such uses to locations more than two thousand five hundred (2,500) feet from campus boundaries;	Children's is proposing three "build alternatives" in the Draft Master Plan. Two alternatives, Alt 3 and Alt 6, confine the growth to the existing hospital campus with a modest expansion to the Hartmann property within 2500 feet of the campus. The third alternative, Alt 7, looks at a boundary expansion directly to the west of the existing campus at Laurelon Terrace along with the expansion to the Hartmann property. Children's has decentralized its services wherever possible, through its establishment of regional clinics and a research center in the Denny Triangle area of downtown Seattle. See Draft Master Plan, "Decentralization," on page 30.
D	
Provide for the coordinated growth of major institutions through major institution conceptual master plans and the establishment of major institutions overlay zones;	Children's submitted in July 2007 a Concept Master Plan for the next years of development on their campus. This was followed by a Preliminary Draft Master Pan in the fall of 2007 that proposed three alternatives with revised and new MIO zones. The Draft Master Plan has refined the proposed alternatives based on public and DPD comments. See "The Major Institution Master Plan (MIMP)" on

SMC 23.69.002 Purpose and intent.	Response
	page 9, and “Table 1 – Summary of Development Proposals” on pages 12 and 13.
E	
Discourage the expansion of established major institution boundaries;	The proposed expansion of MIO boundaries to include Hartmann and the Laurelon Terrace properties will reduce the impacts in terms of bulk and scale, traffic, and other elements that would otherwise be concentrated on the existing 21.7-acre campus. See Comprehensive Plan Policy LU 182 and Section 3.7 Land Use, of the Draft EIS.
F	
Encourage significant community involvement in the development, monitoring, implementation and amendment of major institution master plans, including the establishment of citizen’s advisory committees containing community and major institution representatives;	See Draft Master Plan: “Addressing Neighborhood Needs” on page 23.
G	
Locate new institutions in areas where such activities are compatible with the surrounding land uses and where the impacts associated with existing and future development can be appropriately mitigated;	Not applicable as this is an existing institution with an established MIMP.
H	
Accommodate the changing needs of major institutions, provide flexibility for development and encourage a high quality environment through modifications of use restrictions and parking requirements of the underlying zoning;	See Draft Master Plan: “Plan for the Future” on pages 27 to 30.
I	
Make the need for appropriate transition primary considerations in determining setbacks. Also setbacks may be appropriate to achieve proper scale, building modulation, or view corridors;	In all three “build alternatives” the height of the proposed development transitions from the tallest development at the core of Children’s campus down to less intense development adjacent to the single-family residential zone. A significant landscape buffer exists between the existing campus and the single-family zone. This buffer is continued in all three alternatives and, in some cases, its depth is increased. See Figures 12, 13, 14, 15 and 16. Also see Figures 43, 44, 45, 46 and 47.
J	
Allow an increase to the number of permitted parking spaces only when it is 1) necessary to reduce parking demand on streets in surrounding areas, and 2) compatible with goals to minimize traffic congestion in the area;	Through a more efficient Transportation Management Plan, developed over the past months as a part of Children’s Comprehensive Safety and Mobility Plan, total parking demand for 600 beds can be reduced from

SMC 23.69.002 Purpose and intent.	Response
	3,600 spaces to 3,100 spaces; see Appendix B2, Table 9. See "Comprehensive Safety and Mobility Plan" on page 29.
K	
<p>Use the TMP to reduce the number of vehicle trips to the major institution, minimize the adverse impacts of traffic on the streets surrounding the institution, minimize demand for parking on nearby streets, especially residential streets, and minimize the adverse impacts of institution-related parking on nearby streets. To meet these objectives, seek to reduce the number of SOVs used by employees and students at peak time and destined for the campus;</p>	<p>Children's is a regional leader among employers and institutions with Commute Trip Reduction (CTR) and Transportation Management Plan (TMP) programs. The 2006 TMP Report demonstrated that fewer than 38 percent of affected day-shift staff drive alone to work. Children's offers a variety of transportation tools to serve diverse transportation needs. These tools include a fully subsidized FlexPass program, on-site Zipcars, carpool and vanpool formation, priority HOV parking, Guaranteed Ride Home, bicycle parking and shower/locker facilities, parking charges and commute bonus incentives for alternative commuters. See "Comprehensive Safety and Mobility Plan" on page 29, Appendix B1: "Sound Transit Letter of Intent", and Appendix B2: "Comprehensive Safety and Mobility Plan."</p>
L	
<p>Through the master plan: 1) give clear guidelines and development standards on which the major institutions can rely for long-term planning and development; 2) provide the neighborhood advance notice of the development plans of the major institution; 3) allow the city to anticipate and plan for public capital or programmatic actions that will be needed to accommodate development; and 4) provide the basis for determining appropriate mitigating actions to avoid or reduce adverse impacts from major institution growth; and</p>	<p>See Draft Master Plan: "Addressing Neighborhood Needs" on page 23, and this Appendix A.</p>
M	
<p>Encourage the preservation, restoration and reuse of designated historic buildings.</p>	<p>Not applicable as there are no designated historic structures on Children's campus or the Hartmann and Laurelton Terrace properties.</p>

APPENDIX B1 SOUND TRANSIT LETTER OF INTENT



Letter of Intent
between
Children's Hospital and Regional Medical Center
and the Central Puget Sound Regional Transit Authority

Children's Hospital and Regional Medical Center is a nonprofit corporation in Washington exempt from federal income tax under Section 501(c)(3) of the Code, and fulfills its charitable health care mission in part through the operation of an acute care children's hospital and other children's health services in Seattle, Washington.

The Central Puget Sound Regional Transit Authority (Sound Transit) is a duly organized regional transit authority and has all the powers necessary to implement a high capacity transportation system. Sound Transit has implemented a regional transit system consisting of ST Express bus, Sounder commuter rail, Tacoma Link light rail and the capital infrastructure that supports these services. In mid 2009, Central Link light rail will offer service from downtown Seattle to Tukwila, followed by service to SeaTac Airport in December 2009.

Purpose

The purpose of this Letter of Intent is to document our mutual interest in discussing and identifying short-term and long-term partnerships designed to encourage alternative transportation uses.

General Approach

Sound Transit and Children's Hospital and Regional Medical Center will work together to:

- (a) Identify future service enhancements such as Sound Transit buses or facilities that link to Children's expanded shuttle service.
- (b) Identify potential private-public partnerships which will allow Children's to access current or future park and ride lots owned and operated by Sound Transit.
- (c) Participate in regional forums or workshops where we advance regional transportation alternatives.

Both parties also recognize the need to hold coordinated discussions with other local and regional transit agencies related to service enhancements and other transit related arrangements.

Agency Representatives

Sound Transit and Children's Hospital and Regional Medical Center will each identify a single point of contact for carrying out this Letter of Intent.

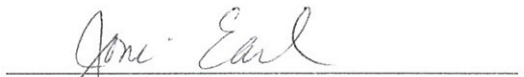
Conclusion

Sound Transit and Children's Hospital and Regional Medical Center recognize the importance of our collaboration in ensuring effective transportation options that enhance regional mobility. We recognize that potential service or capital project partnerships will be subject to approval by the Sound Transit Board and the Children's Hospital and Regional Medical Center Board of Trustees.



Children's Hospital and Regional Medical Center
Thomas N. Hansen, MD, Chief Executive Officer

3-26-08
Date



Sound Transit
Joni Earl, Chief Executive Officer

3-26-08
Date

APPENDIX B2 COMPREHENSIVE SAFETY AND MOBILITY PLAN

MEMORANDUM

To: Paulo Nunes-Ueno, Children's Hospital and Regional Medical Center (Children's)

From: Tom Brennan, Nelson\Nygaard
Maggie McGehee, Nelson\Nygaard
Manuel Soto, Nelson\Nygaard
Peter Valk, TMS

Date: March 28, 2008

Subject: Recommended Comprehensive Safety and Mobility Plan in Support of the 2008 MIMP

Introduction

This memorandum outlines a recommended Comprehensive Safety and Mobility Plan (CSMP) for Children's Hospital and Regional Medical Center (Children's) as part of its proposed Major Institution Master Plan (MIMP). This plan consists of two key components:

- 1) Enhancements to Children's Transportation Management Program (TMP) to achieve a 30% SOV mode split or lower, as measured under Commute Trip Reduction requirements, and
- 2) Through a Subarea Safety and Mobility Study, identification of potential capital investments in transportation infrastructure designed to improve person-movement capacity, person travel time, and safety, including:
 - a. Improvements to pedestrian and bicycle facilities that support non-motorized elements of the TMP and improve access, mobility, and safety for Children's employees, visitors, and members of the surrounding community; and
 - b. Improvements that support high-occupant vehicle (HOV) movement in corridors impacted by Children's expansion.

TMP Enhancements. Children's achieves significant commute trip reduction through its current TMP. This memorandum recommends enhancements to Children's existing TMP as part of the proposed Comprehensive Safety and Mobility Plan, outlines the expected effectiveness of these actions, and suggests methods for monitoring TMP performance. The recommended TMP enhancements would allow Children's to:

- Further reduce the percent of commute trips made by single-occupant vehicle (SOV)
- Further reduce PM peak hour vehicle travel
- Reduce the need to build parking on campus or in nearby facilities within the area that would be affected by MIMP-related vehicle trips, and

- Support Children's continued leadership in delivering innovative transportation solutions in the context of climate change.

The proposed TMP enhancements, consisting of enhanced shuttle and Transportation Demand Management programs, is expected to reduce the mode split among daytime employees from 38% SOV commuters today to 30% or fewer driving alone at MIMP build out, as measured under Commute Trip Reduction requirements. This 30% ratio would be achieved against not only new employees associated with Children's expansion, but also the existing employee base.

Identification of potential capital improvement projects. As part of the Comprehensive Safety and Mobility Plan, Children's will fund a Subarea Safety and Mobility Study through which the City and area stakeholders will identify, evaluate, and prioritize capital improvement projects that improve safety and mobility for all travelers, fully in support of Children's TMP goals.

I. Enhanced TMP¹

Background

Children's has long been recognized as a leader in Transportation Demand Management (TDM), receiving awards from the Governor's office, King County, and the U.S. Environmental Protection Agency for its excellent commuter benefits and achievements in vehicle trip reduction. The hospital's programs targeted to reduce drive-alone commuting and vehicle trips to the campus have successfully resulted in a drive-alone rate of only 38% among daytime employees in 2007, down from 73% in 1995 and 54% in 2001. This accomplishment is significant both for a hospital and for an employer located in a neighborhood with limited public transit service.

Estimated Further Reduction in SOV Commutes

The TMP enhancements described in this document are expected to result in an additional reduction in the percent of employees driving alone to work, leading to an **SOV mode split of 30% or lower among daytime employees** at MIMP build out.² For comparison, this meets or exceeds the 2020 goal of 70% non-SOV travel set for the University District Urban Village in the City of Seattle's Comprehensive Plan (*see the Appendix for a complete discussion of the methodology used to calculate the proposed TMP's SOV and vehicle trip reduction benefits*).

TMP Strategies

The proposed TMP enhancements rely on three strategies that build on the continuation of all existing Children's shuttle and TDM programs:

- **Transit Shuttles.** Significant investment should be made in the operation of new shuttles from major transit hubs that connect riders directly to campus. Shuttle routes should meet regional transit service hubs at 3rd Avenue/Westlake downtown, the University District, and the future light rail station at Montlake. Another route should provide connections from south Snohomish County during peak commute times.
- **TDM Enhancements.** Children's should add new TDM services and programs, including increased Commuter Bonus cash awards for employees who do not drive alone to campus.
- **Parking Management Policies.** Children's should raise the cost of SOV parking along with raising Commuter Bonus awards. This would dramatically increase financial incentives for

¹ For a complete description of the recommended Enhanced TMP, see the Appendix to this memo.

² As measured by Washington State Commute Trip Reduction (CTR) law reporting requirements.

those who do not drive alone. Reducing or eliminating free parking, allowing pay-per-use, and assigning staff to off-campus lots based on proximity to home addresses would further encourage non-SOV travel, reduce miles traveled by SOV, and potentially remove vehicles from the area impacted by MIMP-related trips.

Tables 1, 2, and 3 summarize Children’s current TMP (i.e., shuttle service, TDM programs, and parking management strategies) and present the enhancements the consultant team recommends to support Children’s TMP goals referenced above (i.e., pioneering innovative climate change solutions and further reducing SOV rates, vehicle trips, and parking demand). Implementing the “Recommended Enhancements” outlined in Tables 1 and 2 would allow Children’s to shift more employees and other visitors from SOV to shuttle and transit, carpool and vanpool, and cycling and walking. Expanding Children’s existing shuttle routes to connect with regional transit services would effectively extend the reach and convenience of the public transit system. *(See the Appendix to this memorandum for a detailed description of TMP strategy development, recommended TMP elements, and expected effectiveness.)*

Table 1. Current Shuttle Service and Proposed Enhancements

Current Program	Recommended Enhancements
<ul style="list-style-type: none"> • 6 routes offer free rides between the main campus and parking lots, other Children’s facilities, and affiliated institutions, Mon-Fri • Shuttle fleet of 12 vehicles • 2 routes connect the hospital campus with nearby off-campus parking lots: every 7-10 minutes, runs 5:30AM-9PM • 1 route between the 70th/Sand Point Way administrative building and main campus: every 15 minutes, 6AM-6:30PM • 1 route connecting the Magnuson Park lot and 70th/Sand Point Way building: every 10 minutes, 6AM-10AM, 3PM-7PM • 1 route between Children’s main campus and Metropolitan Park West offices in downtown Seattle: every 30 minutes during peak, 20 minutes off-peak, 6AM-8PM • 1 route between Children’s Building 1, Fred Hutchinson, University of Washington Medical Center (UWMC), and Children’s main campus: every hour, 8AM-5PM • Fred Hutchinson provides one route from the Seattle Cancer Care Alliance to UWMC and Children’s: every 40 minutes, 7AM-7PM 	<ul style="list-style-type: none"> • Initiate additional Transit Shuttle routes to public transit hubs • Increase shuttle fleet as needed to support service enhancements • Route to University District every 10 minutes during peaks, every 15 minutes off-peak • Route to 3rd Avenue/Westlake and Downtown Transit Tunnel every 15 minutes during peaks, every 20 minutes off-peak (combined with Metropolitan Park West route) • Route to SR 520/Montlake Blvd. Station every 10 minutes during peaks, every 15 minutes off-peak • Route to Future UW light rail station at Husky Stadium, every 10 minutes during peaks, every 15 minutes off-peak • Route to south Snohomish County every 30 minutes, only during peaks

Table 2. Current TDM Programs and Proposed Enhancements

Element	Current Program	Recommended Enhancement
Incentives for Alternate Commutes	Children’s employees and CUMG physicians can earn up to \$50 per month in Commuter Bonus	Medical residents, fellows, and students also eligible for the Bonus; maximum incentive increased to \$65 per month
	Internal rideshare matching, reserved parking for vanpools and carpools, and additional quarterly bonuses for vanpool drivers, backup drivers, and bookkeepers	Same
	FlexPass for all Children’s and CUMG employees; PugetPass for others upon request	FlexPass extended to medical residents & fellows; UPass subsidized for students (out of pocket portion)
	Showers, lockers, secure bike parking, and free bike tune-ups	Implement Flexbike program in cooperation with the University of Washington; implement a Children’s Company Bike program, which will provide a free bicycle to employees who commit to cycling; and institute a \$100 per year gear bonus for bike commuters
	Umbrellas and reflective lights provided annually	\$100 per year gear bonus for walking commuters
Supportive programs	Guaranteed Ride Home and carsharing memberships provided to employees	Continue proportional investment in GRH and Zipcar as employee populations grow

Table 3. Current Parking Management Policies and Proposed Enhancements

Element	Current Program	Recommended Enhancement
Parking management	Children’s employees who drive alone to work assigned to on-campus or off-campus parking lots based on seniority and position. Medical residents and fellows park on campus	Off-campus parking assignments made on the basis of home address (begun in March 2008). Day-shift medical residents and fellows should be added to those who can be assigned to off-campus lots
	Children’s monitors speed limits, directs traffic, and enforces parking policies through a parking officer and security staff. Parking on neighborhood streets is forbidden, as strictly enforced by regular patrols who check license plates and issue warnings and tickets	Children’s should invest in technology to allow pay-per-use charges, control access to visitor lots, and more tightly manage on-campus parking supply. This will allow Children’s to refocus FTE currently assigned to on-campus monitoring to patrol neighborhood streets for parking violations
Parking costs	Children’s employees, CUMG Physicians, Pace temps, travelers, UW employees, and contractors who drive alone to work charged \$50 per month for parking	Raise on-campus SOV parking charge to \$65 per month. Add medical residents, students and fellows to employees charged for monthly parking, similar to UW policies

Element	Current Program	Recommended Enhancement
	Patients, families, carpools and vanpools park on campus for free, as do: medical residents, students, fellows, volunteers, community physicians, trustees, board members and vendors	Eliminate free parking with introduction of pay-per-use. Charge patients and families for parking, with the potential for validation or Medicaid vouchers for families

Commitment and Measurement

Children's is legally obliged to monitor its TMP program under state, county, and city Commute Trip Reduction (CTR) requirements. This monitoring is conducted using annual employee travel behavior surveys. Children's ongoing commitment to implement an innovative TMP and achieve desired trip and parking reduction should include:

- Continued annual employee CTR surveys
- Adoption of an appropriate measure of attainment relative to TMP performance
- Annual monitoring and reporting on TMP performance

Resource Impact

Children's invests approximately \$3.5 million annually to plan, implement, and monitor its TMP. The consultant team estimates that the proposed TMP's enhanced operating programs, financial incentives, staffing, and campus facilities would require Children's to substantially increase its annual financial commitment in order to support the following activities:

- **Staffing.** Additional staffing in Commuter Services and additional shuttle drivers.
- **Parking.** Enhanced monitoring and enforcement of HOV and payment policies.
- **Shuttle fleet.** Additional shuttle purchases, maintenance, and storage facilities.
- **Bike parking.** Increased to serve 600 cyclists around campus.
- **Transit and shuttle accommodation.** Better pedestrian connections from public transit stops and provision of new shuttle loading and layover facilities.
- **Pedestrian circulation.** Careful design of pedestrian facilities into and within campus.

II. Capital Improvements

Identification of capital improvements through a Subarea Safety and Mobility Study comprises the second key element of the Comprehensive Safety and Mobility Plan recommended for Children's. The hospital should commit to funding this Study and partnering with the City of Seattle and other area stakeholders in order to analyze, prioritize, and consider funding capital improvements. Consideration for potential investment should be applied to projects that support person travel capacity, person travel speed, and safety, as identified using specific evaluation criteria developed through the Study process. Any identified projects should be cost effective, and should have a direct nexus to mitigating the impacts of the Children's MIMP and/or supporting the use of alternative modes promoted through the TMP program. Potential projects should be considered for implementation at the following locations:

- within the Children's campus
- along the Montlake corridor (subject to change based on SR 520 planning process outcomes)

- along the NE 45th Street corridor
- through the Five Corners intersection, and
- on and between improved pedestrian and bicycle facilities.

This section suggests a strategy for identifying, vetting and funding these projects.

On-Site Capital Improvements

Children’s should make capital investments on-campus and at the site’s key entry points to support mobility and efficient access. The consultant team recommends that Children’s specifically design the new site to serve increasing numbers of shuttle and transit passengers, bike commuters, and pedestrians. The principle for the design of these facilities should be to help users of alternative transportation recoup travel time lost when choosing an alternate mode of transportation (for example, locating the main entry near transit, or deliberately placing bicycle facilities near desired destinations). Careful attention should be paid to pedestrian and bicycle connections between shuttle stops, public transportation bus stops, and main buildings. These capital improvements should be part of the MIMP process throughout design and construction, and funded as a part of MIMP building costs.

This same attention should be applied to safety treatments at existing and newly built campus entrances where vehicles, pedestrians, and cyclists all enter. In addition, under the “Bicycle and Pedestrian Safety and Access” section below, the consultant team recommends that Children’s participate in improving intersections where pedestrians and cyclists must cross a major road to reach campus, such as at Sand Point Way and Penny Drive, and potentially at Sand Point Way and NE 40th Street, depending on which MIMP alternative is chosen.

Table 4. Current On-Campus Facilities and Proposed Enhancements

Travel Mode	Current Program	Recommended Enhancements
Shuttle	Shuttles drop passengers off at the turn-around platform in front of the Giraffe Building	Enhanced shuttle service will require 4-5 bus bays for efficient drop off/pick up and bus turn around
	Passengers dropped off adjacent to hospital building	Pedestrian circulation should be supported with clear, separated infrastructure between any shuttle drop-offs and hospital buildings
	Shuttles stored overnight on campus in parking lot by Facilities buildings	Dedicate 18,000 sf. (on or off campus) for fleet storage, maintenance and operator facilities
King County Metro Transit riders	Route 75: Arriving passengers must walk up a steep hill on Penny Way from the bus stop to buildings. From the southbound stop, riders must also cross five lanes of traffic on Sand Point Way	Create a pedestrian-oriented building entrance directly adjacent to a Route 75 stop
	Route 25: Passengers arrive in a protected turn-around but must walk through the Whale parking garage, or find a hidden stairway leading through a garden plaza to the hospital	Enhance signage directing passengers to the path through the garden plaza
Cyclists and pedestrians	Secure bicycle parking for 120 provided inside parking garages and at building entrances	Add enough bicycle parking to accommodate 600 cyclists; focus bike parking in one location with the remainder spread through campus. Create dedicated location for Flexbikes

	Shower and locker facilities provided free of charge	Add secure bicycle parking and shower/locker facilities in conjunction with the main bike parking area or at the base of Penny Way, so cyclists do not need to navigate the steep hill
	Burke-Gilman Trail connects north of the campus but does not extend south to Sand Point Way	Create safe, clear connection from trail to the hospital campus (possibly grade-separated)
	Pedestrian crossings on Penny Way are clearly marked with crosswalks, signage, and flashing signal lights	Continue similar enhancements to any new pedestrian crossings created by changed inter-campus circulation routes

Sub-area Safety and Mobility Study

As mentioned above, Children’s should propose, fund, and partner in a Sub-area Safety and Mobility Study that helps to identify specific capital projects outside its campus that mitigate MIMP traffic impacts and support the use of HOV and non-motorized modes (bicycling and walking) promoted through the Children’s TMP. The City of Seattle should lead the study or designate a project lead. This study will allow Children’s, the City, and area stakeholders to fully examine the costs, design, and expected function of potential projects, including those listed in the University Area Transportation Study (UATS).

The goal of the Sub-area Safety and Mobility Study should be to identify projects that would have the most beneficial impact on transportation through this northeast Seattle sub-area, and ensure multiple stakeholders have the opportunity to participate. Children’s should take a leadership role in initiating the process and would consider participating in funding a share of the implementation or construction costs for selected appropriate projects that promote HOV and non-motorized travel.

Criteria for Project Selection

In order to be selected for funding from among the candidate capital projects, a project must:

- Be tailored to achieving greater person travel capacity and improved person travel times, rather than improving general capacity or travel times for single-occupant vehicles
- Mitigate the impact of the Children’s MIMP on regional and local traffic
- Support City of Seattle and sub-area transportation goals, including the Mayor’s initiative to make Seattle the most walkable and bikeable city in the country
- Be deemed feasible, including full funding for such project
- Offer a cost effective solution
- Garner community acceptance, and
- Provide benefit to the widest range of people within the community, including Children’s employees, patients, and visitors.

Table 5 presents a potential initial list of projects that might be included for study consideration, as they appear to proffer a great transportation benefit. Most of the candidate projects listed in Table 5 were developed through the UATS, and thus already possess a certain level of public approval. Projects marked with an asterisk below were not identified in the UATS, but are listed here as potential capital improvements that could have an immediate, direct impact on travel to and around Children’s.

This list is neither exhaustive nor definitive; listed projects may be excluded from study or new projects added, and no projects are guaranteed selection for implementation and funding. Specifically, any

improvements identified for the Montlake corridor would be subject to amendment based on the final outcomes of the SR 520 planning process. Children’s and the Safety and Mobility Study partners would also include and examine projects suggested by the City, neighbors, or other stakeholders. As detailed above, in order to be included in the study, a potential capital improvement must be targeted to increase speed, reliability, or safety for non-SOV travel. That is, as the first bullet above emphasizes, the studied projects will be tailored to achieving greater person travel capacity and improved person travel times, rather than improving general capacity or travel times for single-occupant vehicles.

Table 5. Potential Subarea Safety and Mobility Study Projects for Consideration

Pedestrian & Bicycle Improvements	
Burke-Gilman Trail (BGT) at Pend Oreille Rd / Brooklyn Ave / Blakely St	Modify traffic control & signage; raise and color BGT crossing
NE 50 th St / 41 st Ave NE / BGT *	Improve Sand Point Way crossing, improve sidewalks to BGT on 50 th ,
40 th Ave NE / BGT *	Create connection from Hartman Building to 40 th Ave and BGT
36 th Ave NE / BGT	Connect BGT with ramp from 36 th Ave NE at NE 45 th St
BGT / 25 th Ave NE	Modify signal timing, intersection design; upgrade crossing for safety
NE 50 th St / 30 th Ave to 35 th Ave NE	Complete sidewalk south of roadway; install traffic calming devices
NE 45th St Corridor & Vicinity	
NE 45 th St corridor	Add westbound Business Access and Transit-only (BAT) lane
NE 45 th St viaduct	Convert westbound climbing lane to a sidewalk
15 th Ave / NE 45 th St	Extend left-turn lane pocket, modify signal to move more buses
NE 45 th Corridor and BGT	Construct a ped/bike connection between BGT and NE 45 th St
I-5 / NE 45 th St overpass	Widen overpass to reduce delay and improve sidewalks and bike lanes
I-5 / NE 45 th St interchange	Provide new northbound on-ramp from 7 th Ave NE to reduce delay
7 th Ave NE / I-5 off-ramp at NE 45 th St	Provide transit queue bypass lane to improve transit speeds/reliability
Montlake Corridor & Vicinity (all subject to change based on outcomes of the SR 520 planning process)	
Montlake Blvd NE	Extend HOV lane southbound from NE Pacific Place to 25 th Ave NE
Extend Montlake HOV *	Further extend the Montlake HOV lane from NE Pacific Place through 25 th Ave NE to connect along NE 45 th St to Five Corners
Montlake Blvd E / E Hamlin St	Extend northbound left/U-turn lane to reduce congestion
Montlake Blvd NE / NE Shelby St	Narrow intersection, add bike lanes, widen sidewalk
Montlake Blvd / NE 45 th St intersection	Install variable message signs for real-time traffic information

* **Note:** Projects marked with an asterisk do not appear in the University Area Transportation Study.

The physical improvements selected after Study examination will support the achievement of Children’s mode split goals, bolster cyclist and pedestrian safety, and boost person movement capacity and travel times through the area by primarily increasing the speed and reliability of transit, shuttles, HOV, and non-motorized modes. Projects should also be screened based on general feasibility, cost effectiveness, and overall community acceptance and benefit.

Pedestrian and Bicycle Safety and Access Projects

As part of playing a leadership role in transportation solutions and showing dedication to TMP goals, Children’s should commit up to \$2.0 million to funding the construction and implementation of selected projects that promote bicycling and walking. Supporting the safety and attractiveness of these non-motorized modes would make non-motorized travel options more attractive to neighbors, visitors, Children’s staff, other local employees, and residents throughout the region. This directly supports the

hospital's goal of enabling the most healthful, least impactful transportation modes while protecting the safety of all travelers.

The dedication of \$2.0 million would allow Children's to fully fund the bicycle and pedestrian projects listed in Table 5, if all are assessed and selected through the Sub-area Safety and Mobility Study. The four UATS-identified projects would complete gaps in the bicycle and pedestrian network, including connections to the regional Burke-Gilman Trail and full sidewalks along NE 50th Street. In addition to the UATS projects, Children's should propose sidewalk improvements from the Burke-Gilman Trail and the Ronald McDonald House to Sand Point Way on NE 50th Street, and enhancements to the crossing on Sand Point Way including dedicated signals to protect the safety of cyclists and people on foot. Children's should also propose bicycle and pedestrian connections between the Hartman Professional Building and the Burke-Gilman on NE 40th Street, as these connections are crucial non-motorized links to hospital facilities.

Each of these projects is included in the \$2.0 million in funding dedicated to bicycle and pedestrian safety and access projects. Again, as with all projects in the Safety and Mobility Study, these are not the only bicycle and pedestrian projects that could be considered. Children's committed \$2.0 million should also be spent on appropriate projects proffered by the City, community members, or other stakeholders and assessed through the Safety and Mobility Study process as offering clear support for non-motorized travel and safety and meeting the criteria of the overall study. Planned community workshops may be a good opportunity to prioritize improvements based on Children's and local resident needs.

Commitment

Children's should make financial contributions to support the following sub-area capital improvement mitigation efforts:

- Funding up to \$500,000 for the Sub-area Safety and Mobility Study,
- Funding selected bicycle and pedestrian projects up to \$2.0 million, and
- Children's should also consider funding a share of selected corridor and intersection projects to be determined based on outcomes of the Sub-area Safety and Mobility Study.

Children's should receive credit for its investment in the Safety and Mobility Study and non-motorized projects to apply towards its total investment in capital improvements. Through the Subarea Safety and Mobility Study process, all selected projects should be assessed and selected by a coalition of local and regional partners. Children's is willing to contribute a share of the funding for projects that are ultimately selected.

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APPENDIX. Recommended Enhancements to Children's Transportation Management Program in Support of the 2008 MIMP

Appendix Contents

I. Purpose

II. Program Elements

III. Facility Enhancements and Resource Impact

IV. Effectiveness: SOV Rates, Vehicle Trips, and Parking Demand

I. Purpose³

Children's Hospital and Regional Medical Center (Children's) has long been recognized as a leader in Transportation Demand Management (TDM), receiving awards from the Governor's office, King County, and the U.S. Environmental Protection Agency for its excellent commuter benefits and achievements in reducing vehicle trips. The hospital's programs and incentives are targeted to reduce single-occupant vehicle commuting to the campus, and have successfully resulted in a drive-alone rate of only 38% among daytime employees. This accomplishment is significant both for a hospital and for an employer located in a neighborhood with limited public transit service.

Children's achieves significant commuter trip reduction through its current Transportation Management Program (TMP). This appendix recommends enhancements to the existing TMP that would allow Children's to achieve the following goals:

- Further reduce the percent of commute trips made by single-occupant vehicle (SOV)
- Further reduce PM peak hour vehicle travel
- Reduce the need to build parking on campus or in nearby facilities within the area that would be affected by MIMP-related vehicle trips
- Support Children's continued leadership in delivering innovative transportation solutions in the context of climate change.

This TMP was developed as part of the Major Institution Master Plan (MIMP) process, through which Children's is proposing to expand its main campus in northeast Seattle. The planned expansion will better serve the growing, complex healthcare needs of children in the four-state service region. The Preliminary Draft MIMP alternatives include 1.5 million additional square footage, growth to 500-600 beds, up to 3,600 parking stalls (with 3,000 on-site), and two or three new access points to the main campus.

Children's must respond to City and neighborhood concerns regarding additional traffic to the campus in order for the MIMP to be approved. The major transportation issues, as identified in the DEIS and by the Citizens' Advisory Committee (CAC), focused on increased congestion and delay at intersections in the surrounding transportation network, such as the Five Corners intersection, NE 45th Street, and the Montlake corridor. Neighbors have also expressed concerns for pedestrian safety stemming from increased vehicle volumes and additional egress and ingress points from the campus.

Expanding Children's existing successful TMP will demonstrate a commitment to reduce potential traffic impacts generated by increasing populations of employees and patients through MIMP build out in 2028. In this appendix, the consultant team recommends enhancements to the existing TMP and outlines how the mitigation strategies will reduce new vehicle trips to the main campus. In preparing this TMP, the consultant team: a) relied on the COMMUTER Model (v2.0), a widely accepted model developed for the United States Environmental Protection Agency for assessing TDM strategy impacts, and b) prepared shuttle routes that connect with regional transit hubs and effectively extend the reach and convenience of the public transit system.

Measurement

The consultant team identified the above four TMP goals against which to evaluate different strategy packages. Pursuing these goals also contributes to ameliorating the major traffic impacts described in

³ see *Executive Summary- Introduction*

the DEIS. In conjunction with MIMP build out, Children's should commit to continuing its historically effective TMP programs and adopt additional programs to reduce its future contribution to area traffic.

The Transpo Group (i.e., Transpo), the firm that is analyzing the proposed MIMP's effects on the transportation system as part of the Environmental Impact Statement (EIS) process, previously forecasted Children's contribution to daily vehicle trips at MIMP build out if no additional mitigation measures were put in place. Transpo identified that there are 710 PM peak hour vehicle trips today, and that 1,400 PM peak hour vehicle trips could be expected in 2028 with development associated with the proposed MIMP. The unmitigated forecast is 690 net new PM peak hour vehicle trips at MIMP build out.

Transpo's Trip Generation Model assumes that the proportion of people arriving by single-occupant vehicle (SOV) and by other transportation modes will remain constant while the total number of people grows. TMP mitigation strategies seek to shift the mode split so that greater proportions of people arrive by shuttle and transit, carpool and vanpool, and bicycle and on foot rather than by driving alone, in order to reduce vehicle trips even while person trips increase.

Children's is legally obliged to monitor its TMP program under state, county, and city Commute Trip Reduction (CTR) requirements. This monitoring is conducted via annual employee travel behavior surveys. These surveys have shown a remarkable reduction in Children's daytime employee SOV travel from 73% in 1993, to 54% in 2001, and to 38% in 2007.

Children's should commit to achieving a **30% SOV mode split goal among these daytime employees at MIMP build out**. For comparison, this meets the 30% SOV goal set for the U District Urban Village in the City of Seattle's Comprehensive Plan.

Children's ongoing commitment to implementing the enhanced TMP and achieving desired transportation results should include:

- Continued annual employee CTR surveys
- Adoption of an appropriate measure of attainment relative to the TMP performance goal
- Annual monitoring and reporting on the performance of the TMP

II. Program Elements

Children's delivers a TMP that has achieved considerable success in reducing SOV travel to its campus. The current Children's Shuttle routes and array of incentives and benefits for alternate commuters are models of innovative transportation solutions both for reducing a worksite's contribution to local and regional traffic, and in the context of global climate change. Children's should work to shift an even greater percentage of SOV trips to carpools, vanpools, transit, bicycle, and walking in order to reduce the transportation impacts of MIMP build out.

This section describes each existing Children's TMP program along with recommended enhancements proposed as part of the modeled strategy package. Under no element does the consultant team recommend that Children's reduce its current programming. Instead, the Transit Shuttle service and enhanced TDM elements recommended below build on Children's already notable successes.

1. Children's Shuttle

Children's operates six shuttle routes to provide access to off-site employee parking lots and connections between the hospital, administrative buildings, research facilities, and affiliated institutions. Shuttle counts conducted in October 2007 found approximately 500 riders per day. Riding the shuttle is free, and all routes operate Monday through Friday.

- Shuttle fleet of 12 vehicles
- 2 routes connect the hospital campus with nearby off-campus parking lots: every 7-10 minutes, runs 5:30AM-9PM
- 1 route between the 70th/Sand Point Way administrative building and main campus: every 15 minutes, 6AM-6:30PM
- 1 route connecting the Magnuson Park lot and 70th/Sand Point Way building: every 10 minutes, 6AM-10AM, 3PM-7PM
- 1 route between Children's main campus and Metropolitan Park West offices in downtown Seattle: every 30 minutes during peak commute periods, every 20 minutes off-peak, 6AM-8PM
- 1 route between Children's Building 1, Fred Hutchinson, University of Washington Medical Center (UWMC), and Children's main campus: every hour, 8AM-5PM
- Fred Hutchinson provides one route from the Seattle Cancer Care Alliance to UWMC and Children's: every 40 minutes, 7AM-7PM

Proposed Shuttle enhancements:

Children's should expand its existing shuttle service to extend the reach and convenience of the regional public transit system. Children's should do this by introducing a "last mile" Transit Shuttle program, a collection of routes that connect the campus to major transit hubs. Public transit riders can take regional buses and eventually light rail to one of these hubs, and then transfer onto a shuttle to continue directly to the Children's campus. New Transit Shuttle routes should meet riders at the following hubs:

Table 6. Transit Shuttle Routes and Frequencies

Transit hub connections	Service Description
University District hub	Every 10 minutes during peaks; every 15 minutes off-peak
SR 520/Montlake Blvd. Station	Every 10 minutes during peaks; every 15 minutes off-peak
Future UW light rail station at Husky Stadium	Every 10 minutes during peaks; every 15 minutes off-peak
Westlake Center / 3 rd Avenue and Downtown Transit Tunnel ¹	Every 15 minutes during peaks; every 20 minutes off-peak
South Snohomish County	Every 30 minutes, only during commute peaks

1. Westlake Center / 3rd Avenue shuttle would combine with the existing Metropolitan Park West/Building 1 shuttle routes

This enhanced shuttle strategy package does not include any further investments in regional public transit beyond the current Transit Now improvements to King County Metro routes 25 and 75.

2. Commuter Services

Children’s funds a full-time staff in Commuter Services to support its current TMP. Commuter Services offers the following programs:

- Meets with new employees on their first day of work to provide personalized commuting assistance, including transit route plans and potential car and vanpool partners
- Follows up with support and advice year-round to help staff and visitors identify transportation options
- Distributes information and marketing materials and plans events that promote and reward transportation alternatives to driving alone.

Materials are distributed via brochures, transportation bulletin boards, a weekly in-house newsletter, email broadcasts, and an annual transportation fair. Commuter Services also maintains a comprehensive internal website and up-to-date print resources.

Proposed Commuter Services staffing enhancements:

Children’s plans to add three new hires in Spring 2008, including Leads for Vanpool Programs, Bicycle Programs, and Transit Programs. One of these Leads will fill a previously temporary position. In total:

- Children’s should increase Commuter Services staff between 50% and 80% to administer, promote, and monitor this level of commitment to expanded TDM and shuttle programs.

3. Parking

Children’s assigns employees to on-campus or off-campus lots according to seniority, shift, and position. Children’s Shuttles connect employees from the off-campus Magnuson Park and Church and Archives Lots. Parking management and cost policies include:

- Children's employees, Children's University Medical Group (CUMG) physicians, travelers, Pace temps, UW employees, and contractors who drive alone to campus pay \$50 per month to park.
- Patients and their visitors park free of charge, as do volunteers, community physicians, board members and trustees, vendors, medical residents, students, and fellows.
- Carpools and vanpools park on campus in reserved spots at no charge.
- Students are required to park at an off-site lot.
- Children's offers valet patient parking between 9:30 AM and 3:30 PM on weekdays in order to use the existing parking supply as efficiently as possible and reduce the number of on-site spaces required.
- Employees are prohibited from parking on local neighborhood streets.
- Children's monitors speed limits, directs traffic, and enforces parking policies through a parking officer and security staff.

Parking enhancements already proposed by Children's:

Children's is proposing the following parking management reforms:

- Raising the on-campus and off-campus SOV parking charge to \$65 per month (proposed for May 2008)
- Partnering with the University of Washington on an agreement that allows Children's staff as employees of an affiliated institution to use the University of Washington's E1 parking lot (implemented in March 2008)
- Reassigning employees to off-campus parking lots based on the direction from which they travel from home to campus, in order to reduce vehicle travel especially through the Five Corners intersection (implemented in March 2008).

Geographic parking assignment will be a key policy in ongoing parking management strategies at Children's. For example, employees who live south of campus and would have to drive past the E1 lot from their homes to reach campus will be assigned to park in E1. As with the current shuttles from nearby leased parking lots, employees who park in E1 will ride a new, dedicated shuttle route to complete their commute trip. This program will reduce the net number vehicles proceeding further on Montlake and through Five Corners to get to Children's.

Consultant team's proposed parking enhancements:

- Children's should continue to allow carpools and vanpools to park on campus at no charge and in reserved spaces, with strict enforcement to ensure that poolers are complying with required vehicle occupancy.
- Children's should invest in technology to control access to visitor lots, allow pay-per-use charges as well as monthly fees, and more tightly manage on-campus parking supply. This will allow Children's to refocus FTE currently assigned to enforce and monitor on campus parking lots to instead patrol neighborhood streets for parking violations.
- Children's should charge no less than \$65 per month for on-campus SOV parking (a 30% increase from 2007).
- Similar to UW policies, students, medical residents, and fellows who currently park for free should be required to pay the monthly parking fee as paid by Children's and CUMG employees. Day-shift medical residents and fellows should be added to those who can be assigned to off-campus lots.

- Free parking should be eliminated. This will be supported by per-use-charges enabled through the new parking management technology. Children's may consider offering parking validation, reduced fees, or Medicaid parking vouchers to patients' families.
- Children's should continue to assign employees to off-site parking lots on the basis of home addresses to reduce distances traveled and potentially remove vehicles from corridors impacted by increases in vehicle trips due to new Children's facilities.

4. Incentives for Not Driving Alone

Children's employees and CUMG physicians can currently earn up to \$50 per month in Commuter Bonus incentives, depending on how many days per week they don't drive to the campus by themselves. Other existing incentives for those who choose non-drive alone commutes include:

Carpool:

- Free, reserved parking on campus (204 spaces for carpools and vanpools)

Vanpool:

- 100% subsidized vanpool fare
- \$250 additional bonus per quarter for vanpool drivers, \$75 for backup drivers, and \$50 for bookkeepers
- Free, reserved parking on campus
- Internal rideshare matching

Transit:

- FlexPass - annual, unlimited transit pass purchased for all Children's permanent employees and CUMG physicians
- PugetPass - monthly transit pass provided upon request to contractors, consultants, Pace temps, and University of Washington staff
- Partnership with King County Metro "Transit Now" to fund 63 additional roundtrips per week on Routes 25 and 75, to provide for higher frequency during shift changes

Bicycle:

- Showers and lockers
- Approximately 120 total covered and secured bicycle parking spaces, located in each parking garage and at employee entrances
- Subsidized annual bicycle tune-up, on-site

Walk:

- Umbrellas and reflective safety lights provided on an annual basis

Motorcycle:

- Free, covered parking for this more efficient, less-polluting mode

Proposed Incentives enhancements:

- Children's should increase the Commuter Bonus award up to an amount equal to the cost of parking (at least \$65 per month). This bonus should be extended to students, medical residents, and fellows in addition to the Children's employees and CUMG physicians who are already eligible.
- Medical residents and fellows should also begin receiving FlexPass, and Children's should purchase each student's portion of a University of Washington UPASS (currently \$45 per quarter).
- A large number of Children's employees live within walking and biking distance of the main campus. Children's should offer cyclists and pedestrians an additional \$100 award once a year for equipment, such as bikes, shoes, or clothing, to further reward non-motorized commutes.
- Children's should implement the Flexbikes bike sharing program. Children's Transportation Department may be able to begin this program as early as September 2008, in conjunction with the University of Washington's pilot. Two Flexbike stations on the Children's campus will hold 30 bikes each, available throughout the day free of charge for employee use. *NOTE: This program was not modeled as part of the TMP package analyzed using the COMMUTER Model, and could further increase non-SOV mode split.*
- Children's should implement the planned Company Bikes program. Under this program, the hospital would make a bicycle available to any employee who commits to reduce their drive-alone commute trips by at least two fewer driving days every week. *NOTE: This program was not modeled as part of the TMP package analyzed using the COMMUTER Model, and could further increase bicycle mode split.*

5. Alternative Work Schedules

Approximately 2% of Children's staff whose work schedules begin between 6:00 AM and 9:00 AM telecommute. Though the consultant team has not modeled expansion of this program, telework and compressed work weeks represent the quickest, least expensive way to remove a commuter from the road. Employees need not telecommute every day; even one day a week at home provides a trip reduction benefit. Compressed work weeks, such as working 10 hours a day, 4 days per week, 9 hours a day for 9 days over two workweeks, or even the common Children's work schedules consisting of 12 hours a day, 3 days per week, are also potential options for reducing commute trips. The consultant team will work with Children's to further explore employee categories, work tasks, and accountability systems that could allow the hospital to expand these scheduling options.

Proposed Alternative Work Schedule enhancements:

- No new alternative work schedule or telework programs are included in the modeled package.

6. Supportive Transportation Benefits

Children's should continue to fund on-site Flexcars, employee Flexcar membership, and the Guaranteed Ride Home program that subsidizes emergency taxi rides home for alternative commuters in the event of personal or family illness or unscheduled overtime. The COMMUTER Model used to evaluate proposed TDM program impacts does not assume any mode shift resulting directly from these benefits, as they are too integrated and dependent on other programs being in place. Nevertheless, these benefits bolster the opportunity for campus visitors to leave personal cars at home.

Proposed Supportive Transportation Benefits enhancements:

- No new supportive transportation benefits are included in the modeled package.

7. Neighborhood Transportation Programs

Children's offers various transportation programs and benefits to the neighborhood at large. The hospital sponsors annual Bike to Work Day commuter stations, last year serving over 700 bicycle commuters. The Flexcars that Children's funds add to the fleet of cars available for the entire community of Flexcar members. The addition of 63 new daily roundtrips on King County Metro routes 25 and 75 provide enhanced mobility to all riders along those routes. Near the research campus in South Lake Union, Children's participated in a streetscape pedestrian safety audit, sponsored by Feet First, King County Metro, and Vulcan. These and other potential neighborhood programs benefit the entire community and expose more people to transportation alternatives, though it is difficult to predict with certainty what effect these activities have on trip reduction and traffic.

Proposed Neighborhood Transportation Program enhancements:

- Children's should consider offering neighborhood residents free access to use the Children's shuttle system.

8. Other Strategies Under Consideration

Other strategies are being considered by the consultant team and Children's, but are not included in the recommended TMP package. These other strategies are not necessary to meet the trip reduction or SOV mode splits modeled by the consultant team in preparation for this appendix's proposed TMP enhancements.

Other proposed strategies:

No other strategies are yet recommended, but possible strategies under consideration include:

- **Building, underwriting, or buying down the cost of location-efficient employee or patient housing.** In order to be considered for subsidy, a housing development must be built adjacent to campus, where residents or patients can easily walk to campus; adjacent to a major public transit hub; or in residential densities sufficient to support a dedicated Children's shuttle route.
- **Additional investments for expanded public transit service.** This appendix does not recommend any investment beyond the Transit Now partnership through which Children's has funded 63 additional runs per week on King County Metro routes 75 and 25. Such investment was modeled using the COMMUTER Model, but did not deliver significant additional trip reduction or mode shifts.
- **Utilizing remote parking stalls.** Children's might consider leasing or constructing parking spaces in remote lots, far outside of the area affected by MIMP-generated trips. Like the UW E1 lot, these parking stalls would be served by a new Children's Parking Shuttle route. Employees would be assigned to remote lots based on their home addresses in order to reduce the distance traveled via SOV and the number of vehicles entering the congested corridors and intersections.
- **Adopting a policy of no new employee parking on campus.** Adopting such a policy in conjunction with remote parking and geographic assignment would dramatically reduce SOV travel to campus.

III. Facility Enhancements and Resource Impact

Children's should continue to fund and operate existing on-campus facilities and services including secure, covered bicycle parking for 120 bicycles, on-site exercise facilities, and daycare located in the nearby administrative offices. In addition, the effects of the proposed TMP strategies and enhanced Shuttle services will require attention during facility design.

- A substantial number of new shuttle vehicles serving campus will require new infrastructure to support passenger loading and shuttle layover and storage.
- More cyclists, pedestrians, transit users, and simply more people moving around campus require extra attention to on-foot circulation. The MIMP design process should incorporate walking facilities and, if possible, locate these to improve operating conditions and safety for all visitors.

On-campus Modal Connections

The TMP consultant team recommends that Children's MIMP team specifically design the new site to serve increasing numbers of shuttle and transit passengers, bike commuters, and pedestrians. The principle for the design of these facilities should be to help users of alternative transportation recoup travel time lost when choosing an alternate mode (for example, locating the main hospital entry near transit, or deliberately placing bicycle facilities near desired on-site destinations). Careful attention should be paid to pedestrian and bicycle connections between shuttle stops, public transportation bus stops, and the main buildings. These capital improvements should be part of the MIMP process throughout design and construction, and funded as a part of the MIMP building costs.

Children's Shuttle Facilities

Children's Shuttles collect and drop off passengers in the turn-around in front of the Giraffe building. Expanded shuttle service will require extra accommodation for passenger loading platforms, shuttle turning, and increased parking for overnight fleet storage. The enhanced shuttle program will require:

- Up to 4-5 bays for 30' coaches, shelters for passenger loading, and shuttle turnaround opportunities designed to handle 30' vehicles or bigger
- Up to 18,000 square feet for storage of 21 fleet vehicles and shuttle maintenance and operations facilities (this could be accommodate on- or off-site and could be a shared use with daytime parking)

Children's should plan to use some of its employee and visitor parking for overnight shuttle fleet storage, when general parking demand is lowest. Further, the MIMP designers should consider how shuttle and transit riders will get from the drop-off points to hospital buildings. This is discussed under "Pedestrian Circulation" below.

Bicycle Facilities

The COMMUTER Model estimated that approximately 550 employees will bike to work in 2028 under the enhanced TDM incentive package. Children's goal for a 10% bicycle mode split will mean up to 600 daily cyclists including affiliated staff, volunteers, and visitors. Children's currently offers 120 secure, covered bicycle parking spots, including locations in each garage and at building entrances. To accommodate the huge increase in cyclists in 2028, the MIMP design must include secure parking for 600 bicycles. This will require up to 21,000 square feet.

- The consultant team recommends that bicycle facilities be located throughout campus, to serve each building. One concentration of such facilities (including parking, showers, lockers, and a

bike tune-up shop) should be co-located. Remaining bicycle parking should be scattered throughout campus, directly at building entrances so cyclists have a choice of where to arrive and store their bicycles.

- If possible, cyclists should not have to make a sharp turn and then ride up the steep Penny Way hill as is currently necessary to reach the closest on campus bicycle parking.
- Children's and its cyclists benefit immensely from the hospital's location near the Burke-Gilman Trail. However, this trail is a few blocks from Sand Point Way, and there is no easy, safe connection from the trail to campus. Children's should investigate opportunities for creating a bicycle and pedestrian facility – possibly even a grade-separated bridge – linking the Burke-Gilman Trail to the hospital.

Pedestrian Circulation

Pedestrian routes into and around the Children's campus affect all people arriving at the hospital, whether by driving alone, taking public transit, riding the Children's Shuttle, or cycling. Employees and visitors must walk between garages, transit stops, and bicycle parking to reach hospital buildings. As the MIMP expands the hospital's footprint, careful attention must be paid to the design, location, and grade of sidewalks and paths into and within campus. Children's current use of well-painted crosswalks, pedestrian signs, and flashing crossing signals should be extended to any pedestrian routes across new internal campus roads.

The COMMUTER Model and Transit Shuttle calculations predict that the proposed enhanced TMP package will result in nearly 1,000 pedestrians arriving by public transit each day. Steep hills, such as on the path from King County Metro's route 75 bus stop up Penny Way, are barriers for people on foot. Children's MIMP team should consider designs that place major pedestrian routes away from hills. One such connection could be created by locating a major pedestrian-oriented entrance where Laurelon Terrace is currently located, so transit riders and other pedestrians could walk directly from the bus stop into a Children's building.

Resource Impact

Children's already spends \$3.5 Million annually to plan, implement, and monitor its excellent TDM and shuttle programs. The proposed TMP will require substantial increased financial investment in the facilities described above, as well as in ongoing support of program operations, staffing, and enhanced monitoring and enforcement of parking policies. The consultant team estimates that the hospital will need to substantially increase its annual financial commitment in order to implement these programs.

IV. Effectiveness: SOV Rates, Vehicle Trips, and Parking Demand

The consultant team evaluated TMP strategy packages for expected reductions in SOV rates as measured under CTR requirements. In order to analyze associated reductions in vehicle trips and parking demand, the consultant team focused its attention on those trips made during the PM peak hour. Trips made in the middle of the afternoon or the night, when there are few cars on the road, have less potential for adding to overall delay than trips made during the morning and evening peak commute times. Transpo forecasted Children's unmitigated vehicle trips at MIMP build out during the most congested hour of both the AM and PM peak. In order to achieve a substantive reduction of the otherwise unmitigated impacts described in the Preliminary DEIS, Children's should seek to reduce net new vehicle trips in peak hours, when traffic volumes are highest and intersection performance on Sand Point Way and in other impacted corridors is poorest. For analysis purposes, the consultant team chose the PM peak hour in addition to SOV rates as the standard of measurement for the TMP's effects, also because there are more patient trips during this period than in the AM, making it more challenging to mitigate vehicle travel.

EPA COMMUTER Model

The consultant team used the U.S. Environmental Protection Agency COMMUTER Model (v2.0) to predict future SOV rate and trip reduction achievements of the above-described TMP program enhancements. The COMMUTER Model was created for use by government agencies and individual employers to model the effectiveness of various Transportation Demand Management and Transportation Control Measure strategies.

The COMMUTER Model uses inputs of current and future populations, existing mode splits and TDM incentives, and packages of TMP strategy and policy changes to forecast the mode split effects of the proposed programs. These adjusted mode split percentages can then be used to calculate future travel behavior and trip reduction, including daily trips, vehicle trips in the PM peak hour, and peak period parking demand.

The consultant team modeled all of the TDM enhancements outlined in Section II, assuming that full TDM offerings continue to apply to Children's employees and CUMG physicians, and that full benefits (including FlexPass or UPass) are extended to medical residents, fellows, and students. These are the only groups included in the model. Other opportunities for trip reduction may exist in patient and non-employee populations, but these cannot be modeled by the COMMUTER Model, and are not estimated here.

Transit Shuttle Calculations

The COMMUTER Model is set up to predict mode shifts as a result of new parking pricing, fiscal incentives for using an alternate mode, or TDM programming, but not changes in travel behavior that would occur as the result of additional shuttle or transit service except with respect to reductions in waiting or in-vehicle travel times. Before running the model, the consultant team calculated the vehicle trip reduction that could be expected as a result of the enhanced Transit Shuttle service plan by calculating ridership and converting these person trips to vehicle trips. Shuttle patronage was based on projections of employee home locations, presence and quality of connecting public transit services, and the level of programmed shuttle service (headways).

Methodology

Base numbers were input into the COMMUTER Model, using Tranpo's Trip Generation Model groups, unmitigated mode splits (adjusted for shuttle riders), and expected 2028 population. EPA COMMUTER forecasts the following mode splits resulting solely from the TDM strategies outlined in Section II:

Table 7. Percent mode splits with enhanced TDM strategies (not including Shuttle)

Modesplits (in percent %)	Children's Day-shift		Children's Non-day shift		CUMG Physicians		Students, Medical residents, & Fellows	
	Unmitigated	w/TDM	Unmitigated	w/TDM	Unmitigated	w/TDM	Unmitigated	w/TDM
SOV	38	30	63	58	66	60	73	53
Carpool	21	20	11	12	3	4	8	14
Vanpool	9	9	0	0	0	0	0	0
Transit	10	17	10	13	10	13	6	13
Bike	6	8	5	6	6	8	4	9
Walk	5	6	4	5	5	6	2	4
Other	11	10	7	6	10	9	7	7

The new mode splits achieved by TDM programs alone predict an SOV rate of 30% among Children's daytime employees in 2028. This corresponds to a 17% reduction in net new vehicle trips in the PM peak hour at MIMP build out when inserted into the Transpo Trip Generation Model.

Shuttle ridership estimates then had to be accounted for to forecast the total reduction in SOV rates and in net new PM peak hour vehicle trips in 2028. The "Transit Shuttle Calculations" described above predict a peak hour ridership of 225 persons. To calculate the Transit Shuttle's effect on mode split, the consultant team assumed that these 225 riders shift proportionally from each of the modeling groups, and, within each group, from among SOV, carpool, vanpool, and transit riders. Existing mode split numbers were used to calculate the number of persons and vehicle trips shifted to Transit Shuttle from each mode to make up 225 peak hour riders. This allowed us to adjust the COMMUTER Model's mode split outputs to account for person and then vehicle trips shifted to shuttle.

Results: SOV Reduction and Vehicle Trip Reduction

As shown in Table 7 above, the COMMUTER Model mode splits forecasted based on TDM programs alone deliver a 30% SOV mode split among daytime Children's employees. Additional mode shift away from SOV should be expected due to use of the Transit Shuttles.

Final net new PM peak hour vehicle trips in 2028 were then calculated using these mode splits. ***Implementing the proposed TMP could be expected to result in a 39% reduction in net new PM peak hour vehicle trips in 2028,*** based on these calculations. Table 8 outlines the net new PM peak hour vehicle trips expected with and without enhanced TMP programs. All of these vehicle trip and SOV mode split estimates include expected new vehicle trips generated by shuttle, carpool, vanpool, and SOV vehicles in 2028. Other opportunities for trip reduction may exist in other population groups, such as patients, contract and temporary employees, and volunteers.

Table 8. Net new PM peak hour vehicle trips in 2028 with and without enhanced TMP mitigation

Without additional mitigation	690
With expanded TDM programs	570
<i>Subtotal Reduced</i>	115
<i>Percent Reduced</i>	17%
With TDM and Transit Shuttle	420
<i>Total Reduced</i>	265
<i>Percent Reduced</i>	39%

Results: Parking Demand

SOV mode split reductions and vehicle trip reductions resulting from the proposed TMP package would also reduce the amount of parking needed. Rather than the 3,600 stalls that Transpo forecasted would be necessary at MIMP build out without mitigation, Children’s would need only 3,100, a reduction of 500 parking spaces. Parking may be accommodated on campus, or in leased stalls in off-campus parking lots. Under this mitigation package, Children’s would need a total supply of 3,100 total stalls on and/or off campus.

Table 9. Future Peak Parking Demand at MIMP Buildout

Peak Parking Demand in 2028	Without mitigation	With TDM programs	With TDM and Transit Shuttle
Children’s Employees - Day Shift	830	690	510
Children’s Employees - Non-day	635	610	550
CUMG Physicians	270	250	240
Students, Medical residents, & Fellows	290	200	190
Other employees ¹	555	550	560
Patients (in- and out-)	890	890	890
Total:	3,470	3,190	2,940
Effective demand <i>(+ 5% for circulation):</i>	3,600	3,350	3,100

1. “Other employees” include EE Off-site Children’s Employees, Pace temps, construction, consultants, community physicians, vendors, and volunteers. All numbers are rounded to the nearest 5.