



Seattle Children's[®]
HOSPITAL • RESEARCH • FOUNDATION



Comprehensive Transportation Plan

SUBMITTED TO: City of Seattle

PROPOSED BY: Seattle Children's





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Highlights

How is Seattle Children's building a healthier future?

Children's Mission: We believe all children have unique needs and should grow up without illness or injury. With the support of the community and through our spirit of inquiry, we will prevent, treat, and eliminate pediatric disease.

Children's is a highly specialized academic medical center that serves children and youth from Washington, Alaska, Montana and Idaho, regardless of their family's ability to pay. Our patients often face the most complex chronic conditions and require teams of specialists to deliver the best treatment. During the past two years, Children's has worked with our partners in the Citizens Advisory Committee (CAC), City agencies, and the surrounding neighborhoods to create a plan for development that will minimize the hospital's impact on the people who live nearby and the community at large while continuing to care for the region's children for the next 20 years and beyond.

This publication describes Seattle Children's proposed Comprehensive Transportation Plan. This plan is designed not only to improve traffic and reduce driving among employees, but also to encourage physically active transportation and improve the health of people and our environment. Children's multi-faceted strategy includes an enhanced, innovative Transportation Management Plan, and goes beyond a standard TMP to include significant investments in capital projects that improve the efficiency of the nearby transportation network and support biking, walking, and transit. In anticipation of Major Institution Master Plan approval, the hospital began piloting several of these programs in 2008.



Comprehensive Transportation Plan

Four-tiered Approach

Commitment

Elements

Reduce Vehicle Traffic: Transportation Management Plan

several million/year

Reach 30% daytime employee SOV rate; Reduce 30-40% of net new PM peak hour vehicle trips

- 1) Best-in-Class commute benefits
- 2) Shuttle links to transit hubs
- 3) Innovative bicycle programs
- 4) Parking charges and Management

Make Traffic Flow More Efficiently: Contribution to corridor projects

\$1.9 M capital

Intelligent Transportation Systems alone: Reduce 5-10% of delay

- 5) Capital investment in line with City priorities (\$1.4 M)
- 6) Intelligent Transportation Systems (ITS) - smart signals that improve traffic flow (\$0.5 M)

Make Northeast Seattle a Better Place to Walk + Bike: Capital contribution to active transportation projects

\$2.0 M capital

Significantly increase bicycling and walking

- 7) Invest in bicycle and pedestrian improvements that link the hospital and surrounding community to larger walking and biking networks

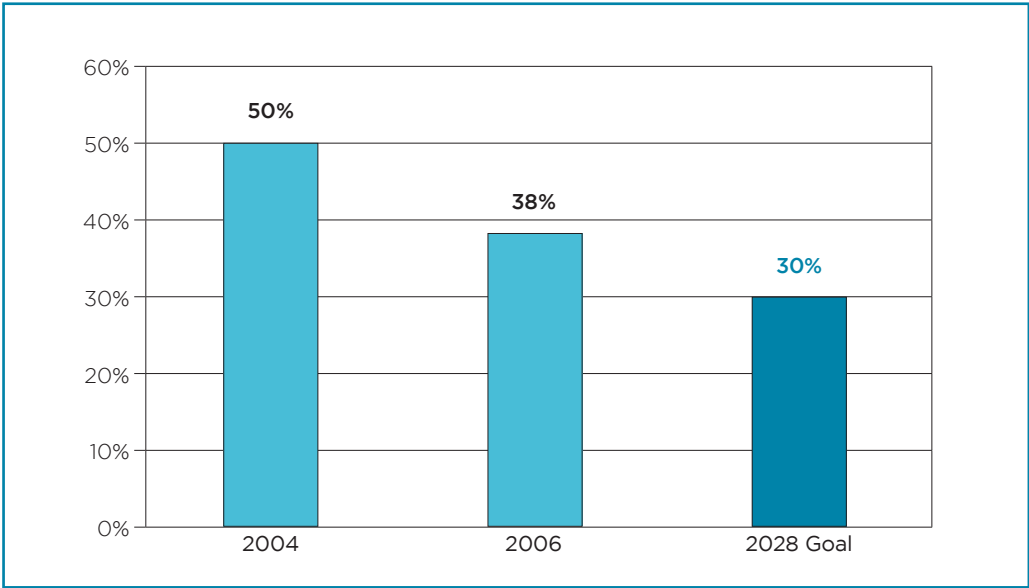
Good campus design that supports our transportation plan

Children’s is building on its record of success in transportation.

Transportation is a key regional issue and a major contributor to noise and pollution, including green house gases. In order to be a good neighbor and a steward to the environment, Seattle Children’s has invested heavily in alternative transportation as part of its existing Transportation Management Plan (TMP).

In the two years between 2004 and 2006, the hospital reduced the percentage of its daytime employees who commute via single-occupant vehicle (SOV) from 50% to 38%, using incentives for carpools, transit, bicycling, and walking.* Had Children’s not made this shift, there would be 1,420 more vehicle trips every day on Northeast Seattle roads, with 150 more during the most congested hour of the evening commuting peak. Few other regional employers have invested as much in commute programs for each employee, or achieved such success reducing drive-alone commuting.

Percent of Children’s Daytime Employees Driving Alone to Work as measured in CTR surveys 2004 - 2006, and 2028 Goal



* Note: SOV rates as measured in the 2004 and 2006 Washington State Commute Trip Reduction (CTR) survey, a more stringent survey than used in Children’s existing TMP agreement with the City. Children’s target, a 30% SOV rate among daytime employees as measured by the CTR survey, mirrors the 2020 goal set for the University District Urban Village in the City of Seattle’s comprehensive plan

Children's Comprehensive Transportation Plan objectives:

- 1) Further reduce vehicle trips to and from campus, minimizing Children's contribution to traffic congestion
- 2) Reduce the need to build parking on Children's main campus in Northeast Seattle
- 3) Make transit, bicycling, and walking the preferred ways to commute to Children's
- 4) Take a regional leadership role in combating climate change

Children's measures of success:

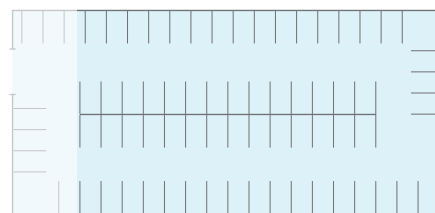
Children's Comprehensive Transportation Plan will achieve a 30% drive-alone rate among employees in 2028, down from 38% in 2006. Fewer people driving to campus means less congestion on area roads, healthier air to breathe, fewer harmful greenhouse gas emissions, and more friendly streets for local residents. By 2028, the plan will also produce the following results:

Children's Transportation Plan will achieve by 2028:

30-40% fewer net new PM peak hour vehicle trips



approximately 500 fewer parking spots needed



add only 1 minute of travel time on Montlake



Montlake Boulevard NE
southbound between NE
45th St and SR 520

Travel time today: 14 minutes

**Future travel time with CTP:
15 minutes**

With Children's transportation plan, traveling on Montlake Boulevard in 20 years will take only one minute longer than it would with no expansion.

By 2028, the Children's transportation plan will reduce 2,700 metric tonnes of carbon emissions every year...



...This is the equivalent of planting 2,700 acres of trees

How does our plan reduce vehicle traffic?

In a nutshell:

Objective: Minimize vehicle trips

Children's Commitment: Add innovative and diverse programs that get more people out of their cars

Plan Elements:

Best-in-class commute benefits and increased financial incentives

Robust shuttle-to-transit system linking Children's to regional transit hubs

Innovative bicycle programs

Increased parking charges and tightly managed parking supply

Decentralized services and clinic locations close to home

Results:

30-40% reduction in net new PM peak hour vehicle trips to campus in 2028

30% SOV rate among daytime employees by 2028

Eliminate the need for 500 parking spaces for the main campus

Keep 2,700 metric tonnes of CO₂ and 140 metric tonnes of methane and nitrous oxides from being released into the air over the course of each year, by 2028



By providing best-in-class comprehensive commute benefits and financial incentives for alternate commutes.



- ✓ Provide transit passes and vanpool fare, including an unlimited-rides FlexPass for all employees
- ✓ Provide last mile shuttle service from regional transit hubs
- ✓ Charge solo drivers for parking*
- ✓ Pay employees to not drive alone*
- ✓ Offer Guaranteed Ride Home to those who carpool, walk, bike, or take transit - a free taxi ride home in the case of an emergency
- ✓ House on-site hospital vehicle fleet and Zipcar carsharing vehicles for mid-day trips, so employees can leave their cars at home
- ✓ Support on-site services, such as coffee shops, cafeterias, and nearby daycare, so that employees can combine personal activities into their work day, reducing the need for extra trips



Double Financial Incentive: Parking fee + Commuter Bonus

Employees who drive alone to work must pay for parking. The hospital periodically raises parking fees in step with market changes. At the same time, employees who get to work by bus, bicycle, carpool, vanpool, or on foot receive a monthly Commuter Bonus in their paychecks. Employees who do not drive alone to work essentially receive a double incentive – earning the Commuter Bonus, and saving the cost of parking.

Did you know:

Children's has the third largest VanPool fleet in the Puget Sound region, after only Microsoft and Boeing.

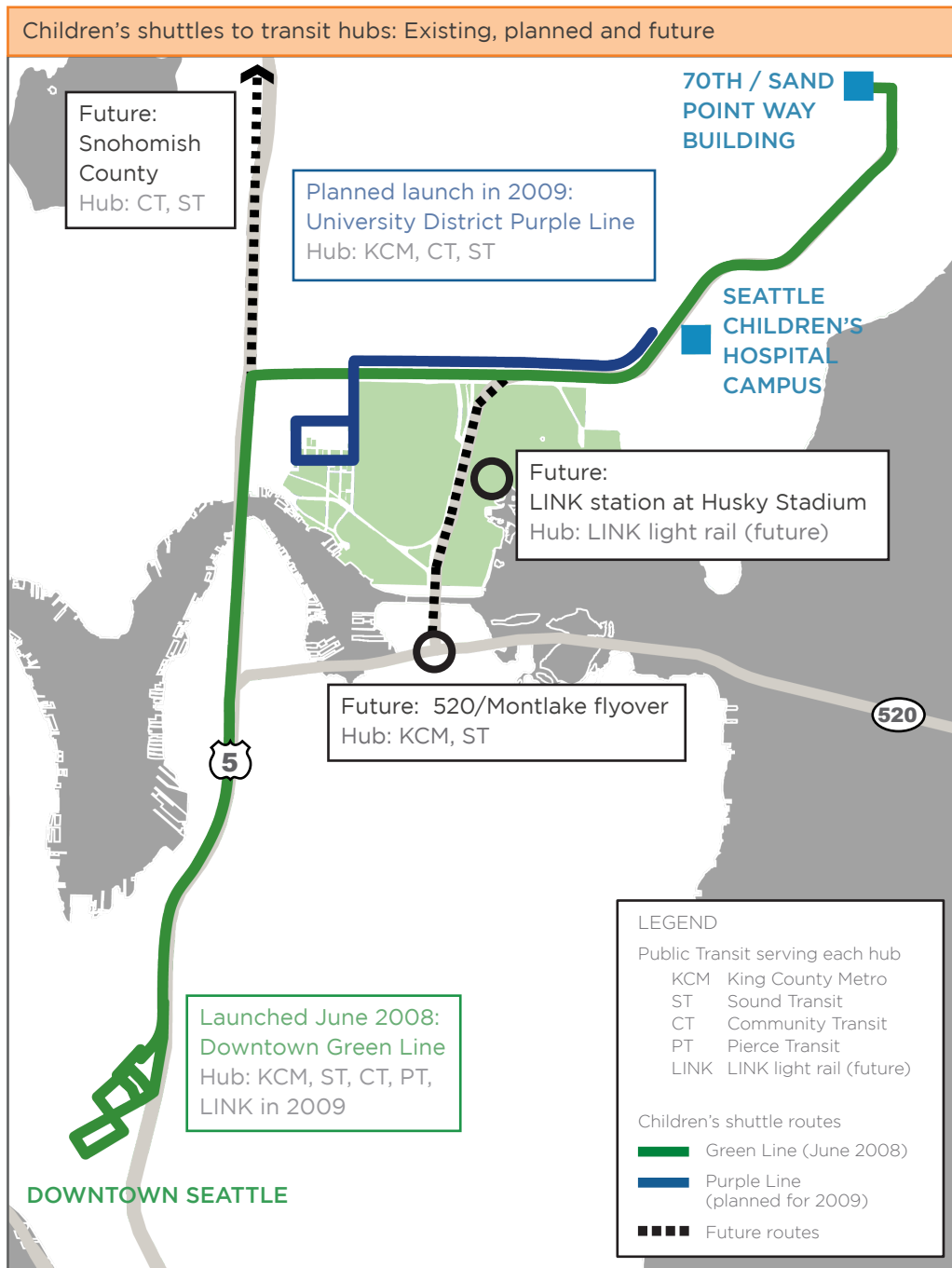
By decentralizing services and bringing clinics closer to where people live.

Children's growth plans include building facilities around the region. Children's is concentrating its research facilities in downtown Seattle, where there is excellent regional transit access. Over the next 15 years, the addition of local clinics throughout the region will allow patients and families to receive non-specialized medical care in their home neighborhood without having to travel to the main campus. Smaller, community-based facilities will make travel easier and trips shorter for more families under Children's care.

How does our plan reduce vehicle traffic?

By developing a robust shuttle system that connects the hospital to key regional transit hubs.

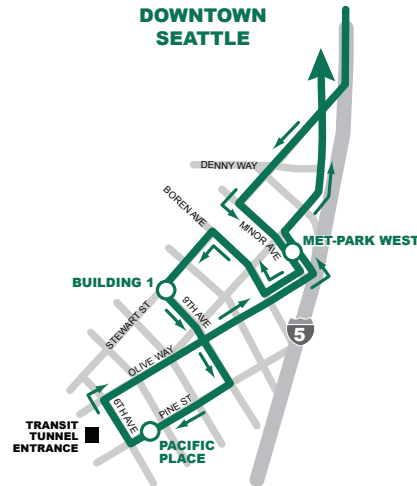
With its expanded shuttle system, Children's is creating a new commute option for employees. Children's shuttles will whisk passengers from public transit hubs to the hospital, making it easier for people to ride transit to get to work.



How does our plan reduce vehicle traffic?

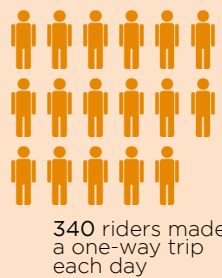
Green Line

In June 2008, Children's created a shuttle stop near the Downtown Transit Tunnel, converting a previous inter-facility route into a brand new commute option. 160 more one-way trips are made every day on the route compared to before the stop was added, as 80 new commuters are using transit + shuttle to get to and from work and home.

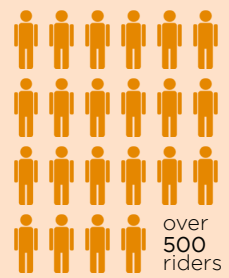


Green Line Daily Ridership

Before June 2008



After Transit Hub stop added

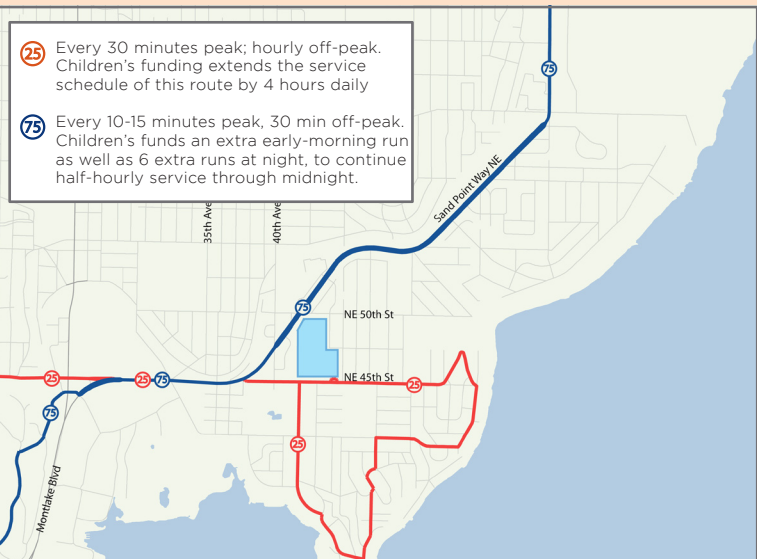


*each icon represents 20 people boarding Green Line

Did you know:

Children's funds 63 additional round trips per week on the two King County Metro routes serving its Northeast neighborhood.

Enhanced transit service made possible by Children's funding and partnership with King County Metro:



How does our plan reduce vehicle traffic?

By creating innovative programs that support more employees biking and walking.

Nearly 25% of Children's employees live within three miles of campus, a comfortable biking distance for most people. The hospital is making an extraordinary commitment to encourage employees to bike to work, including its Company Bikes and Flexbikes programs.

Children's Company Bikes program

Employees who pledge to bike to work at least two days each week get a Company Bike free of charge, theirs to use as long as they continue to commute by bike. The program includes training classes and bicycle maintenance. Over 100 employees have signed up since the program's launch in July 2008.

Company Bikes Statistics

Launched July 17, 2008
30 bikes awarded in two days.

By September, Children's reached its 2008 goal of 100 participants. Planning for 100 more bicycles in FY 2009

Children's hosted five bicycle commuting courses in the summer of 2008. 22 more planned through November 2008



Children's Flexbikes program

Like Zipcars for bikes, Flexbikes features automated kiosks where employees can check out electric-assist bicycles for midday trips. This partnership with the University of Washington will get more people onto bikes and out of cars, especially new riders concerned about cycling up hills.



Did you know:

Children's plans include:

- More showers and changing areas
- Bike parking for 600 daily cyclists
- Annual \$100 Gear Bonus to those who bike or walk to work

Children's #1 in Bike to Work Month 2008

During May 2008, Children's Bike to Work Month Teams rode over **30,800 miles** to and from work, saving 30,800 pounds of carbon from being released into the air.

Out of all 627 competing organizations, Children's registered:

- the most riders in the contest (318)
- the most new riders (101)
- the most teams (45)

By comparison, Microsoft formed 44 teams, but has around 10 times more employees than Children's.

The Children's-sponsored Bike to Work Day station on the Burke-Gilman Trail served over 1,000 area cyclists during the day.

How does our plan reduce the need to build parking?

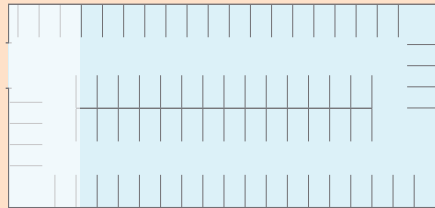
By charging for parking and closely managing parking supply.

Children's will reduce the amount of parking needed on campus by:

- Charging for parking on a daily basis and making it more expensive for solo drivers
- Continuing to monitor neighborhood streets to ensure that no employees are parking there, and enforcing penalties for violators
- Using state-of-the-art technology to manage Children's parking lots, freeing up additional personnel to patrol neighborhood streets
- Identifying 100-200 parking stalls out of the area per phase of development, and requiring employees who live near the off-site lot to park in those stalls and travel the rest of the way to campus by shuttle

Did you know:

Children's Comprehensive Transportation Plan will reduce so many vehicle trips that 500 fewer parking spaces will be needed.



Building 500 fewer parking spots means:

Saving 225,000 SF = enough space to accommodate 56 patient beds and required support space.

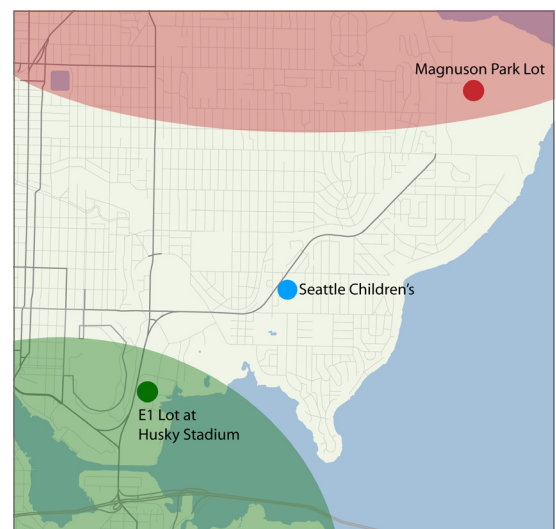
At an average construction cost of \$40,000 per parking space, building 500 fewer spots translates into \$20 Million saved that can be devoted to health care.

Employees are assigned to parking lots based on their home address proximity to off-site lots and their direction of travel to Children's. The bubbles on this map give a visual example of how home addresses may be assigned to given lots.



Every 100 spaces reduced on site and located out of the area can lead to an additional 5-10% reduction in local travel time and congestion.

Geographic Parking Assignment



How will Children's make traffic flow more efficiently?

In a nutshell:

Objective: Move people and vehicles efficiently through Northeast Seattle

Children's Commitment: \$1.9 Million toward corridor projects and state-of-the-art technology

Plan Elements:

Contribute \$1.4 Million toward City of Seattle transportation projects

Directly fund \$0.5 Million in Intelligent Transportation System (ITS) improvements

Results:

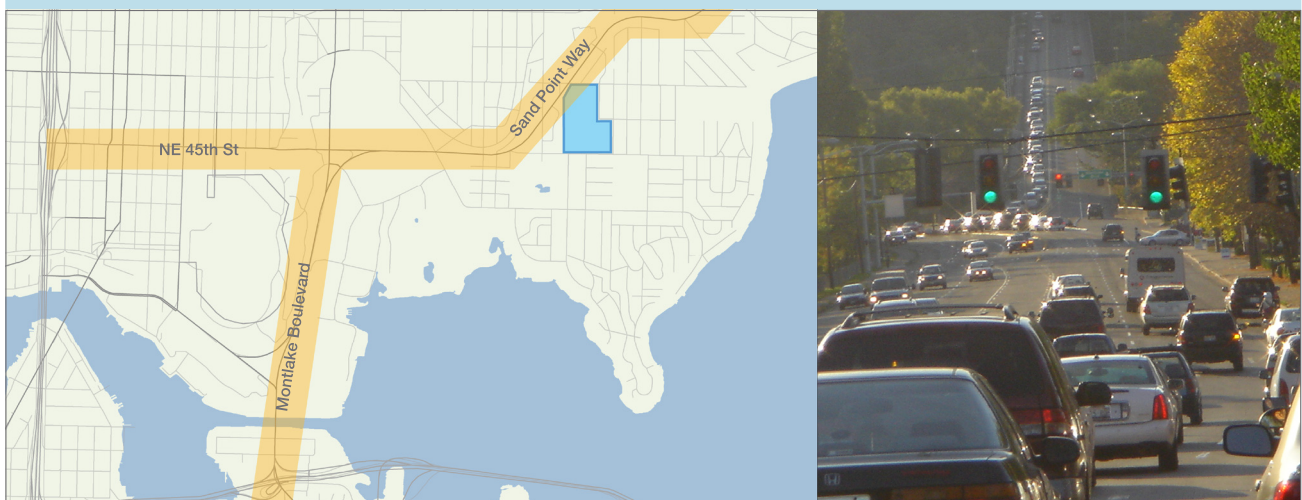
Substantial financial support toward currently unfunded improvements in the Northeast Seattle transportation network

At least 5-10% reduction in delay and travel time as a result of ITS projects

By contributing a total of \$1.9 Million to improve traffic conditions on Montlake Boulevard, NE 45th Street, and Sandpoint Way NE to Children's campus.

In addition to an aggressive program to reduce vehicle travel to and from its campus, Children's is investing in cutting-edge technology and new projects to make traffic flow more efficiently through the major corridors that lead to the hospital.

Target Corridors for ITS and Capital Improvements:
Montlake Boulevard, NE 45th Street, Sand Point Way NE



By contributing \$1.4 Million to capital projects identified in City plans.

Children's worked with the City of Seattle's Department of Transportation (SDOT) to identify the most important transportation projects planned to improve traffic conditions on streets impacted by the hospital. The selected projects would:

- Improve travel-time reliability
- Improve road conditions for drivers, transit, and high-occupancy vehicles
- Support safety for all road users, especially pedestrians and cyclists

Children's is contributing \$1.4 Million toward these capital projects. The City will have flexibility to use this money to fund the most beneficial improvements.

By funding \$0.5 Million of Intelligent Transportation Systems (ITS) projects to improve corridor travel.

Have you ever wondered – “Can those signals be timed to move traffic more efficiently?” or, “Can I use the internet to check road conditions and plan alternate routes?” Thanks to recent improvements in technology, called ITS, it is possible to:

- Create more free-flowing traffic
- Make trip times more predictable
- Provide better information to give you more control over your trip

Children's is investing \$0.5 Million in ITS projects on Montlake Boulevard / NE 45th Street / Sand Point Way NE. ITS technology can be installed quickly and will create little interruption to traffic during construction. Better yet, the results are immediate. Specific projects include:

- Installing variable message signs (VMS) to give drivers real-time information on travel time estimates and collision updates, linked to a system that measures congestion
- Potentially using these signs to implement variable speed limits throughout the day in order to keep traffic flowing as smoothly as possible.
- Optimizing signal coordination and adjusting signal timing as traffic speeds change
- Installing traffic cameras that allow drivers to view conditions on the internet

Did you know:

“ITS improvements at Greenwood Avenue N and Holman Road NW in Seattle resulted in a 30% reduction in vehicle delay and a 15% reduction in travel time.”

– McManus, Aileen, ITS Project Manager King County Traffic Engineering, Conference: *Beyond Oil: Transforming Transportation: A National Demonstration Project Cascadia Institute Presentation: Puget Sound Traffic Technology and Management: Making the System Smarter*, September 4, 2008.

How will Children's make Northeast Seattle a better place to walk and bike?

In a nutshell:

Objective: Invest in a safer and more attractive walking and biking environment

Children's Commitment: \$2.0 Million Bicycle + Pedestrian Fund

Plan Elements:

Fund bicycle and pedestrian projects in the hospital's neighborhood

Support unfunded Bicycle Master Plan projects connected to Children's

Collaborate with the City and community members to identify improvements

Explore the potential for Bicycle Boulevards to make new riders, families, and children more comfortable cycling

Results:

Project outcomes may include:

New sidewalks and better pedestrian signals

Better connections to the Burke-Gilman Trail

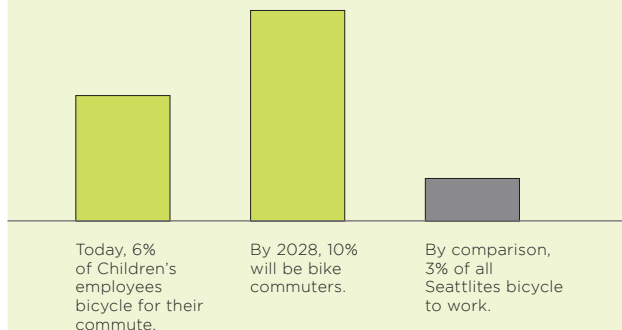
Bicycle Boulevards linking communities

Fewer bicycle injuries

Greater numbers of people walking and cycling



Did you know:



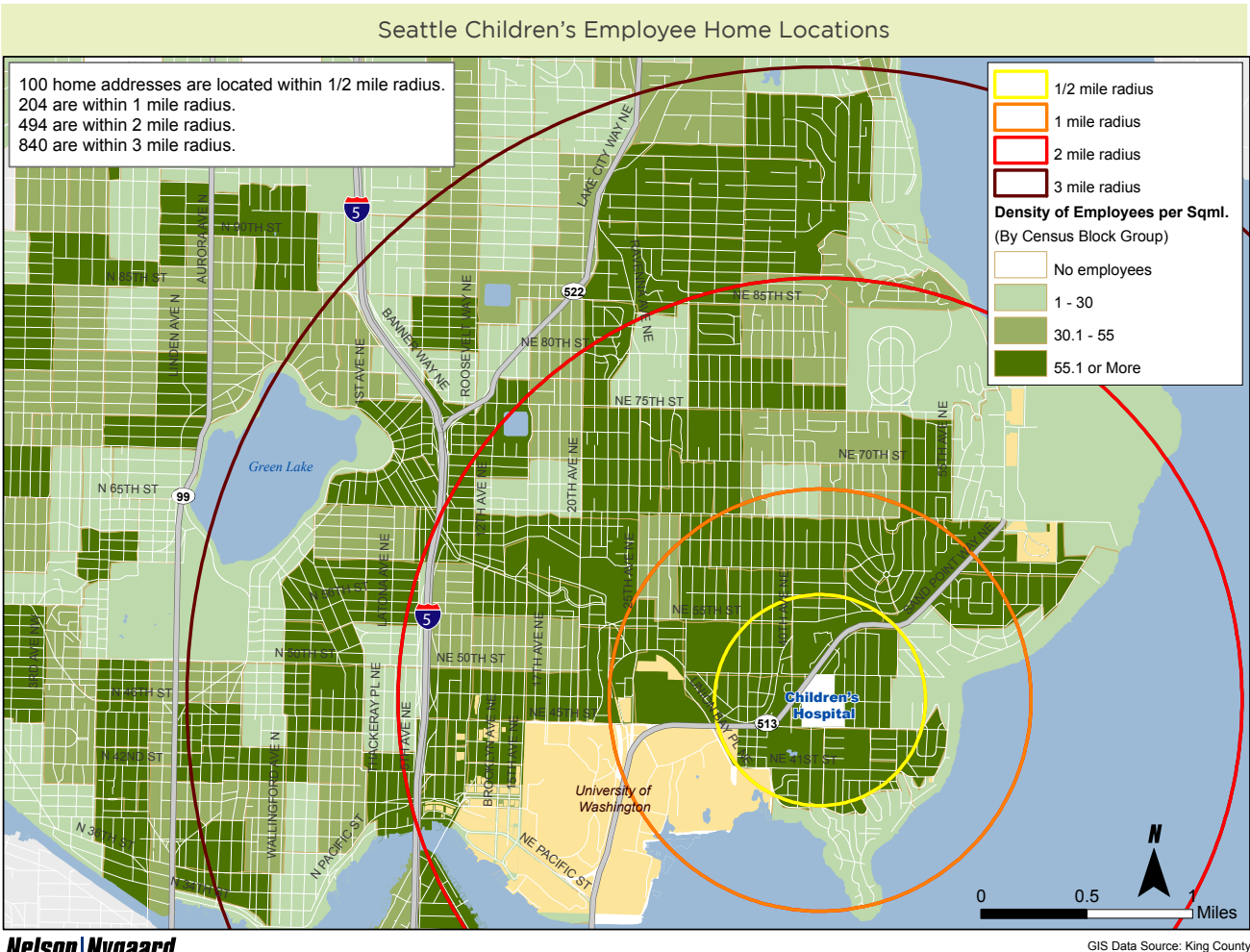
How will Children's make Northeast Seattle a better place to walk and bike?

By contributing \$2.0 Million to fund Bicycle + Pedestrian projects that make it safer and more appealing to walk and bike.

Approximately 1/4 of Children's employees live within three miles of the hospital. Projects made possible by this fund will make it easier for more employees to choose to commute by bicycle and on foot.

By working with the City of Seattle and community members to identify needed projects, Children's will make bicycling and walking safer and more attractive for people of all ages and abilities.

Supporting increased physical activity for employees, families, and children aligns with the hospital's core mission to combat childhood illness and improve public health.



How does good campus design support our transportation plan?

In a nutshell:

Objective: Make walking, biking, and transit the best ways to arrive at work

Children's Commitment: Integrate pedestrian, cyclist, and transit and shuttle supportive designs into every element of the new campus in Northeast Seattle

Plan Elements: Develop a shuttle/transit hub, secure intersection crossings, and clear pathways within and into and out of campus

Results: Children's campus will visibly and tangibly reflect its transportation priorities, making it easier to choose alternative transportation modes

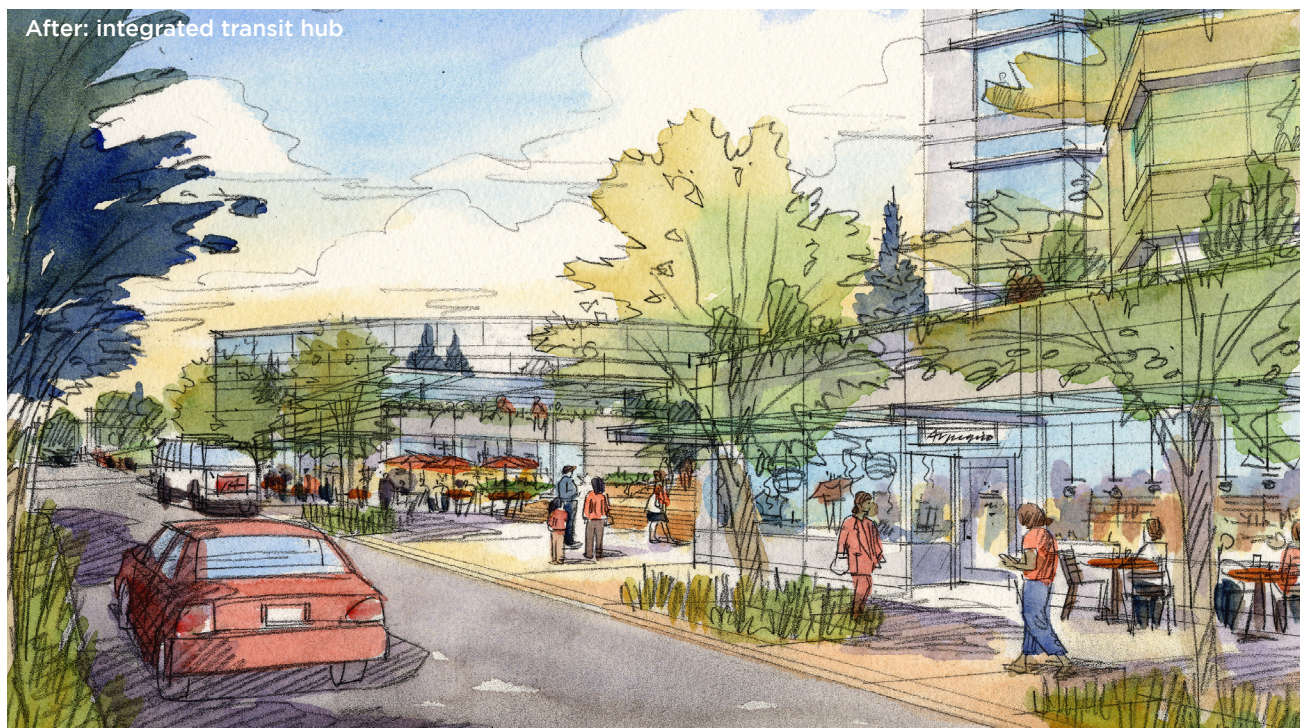
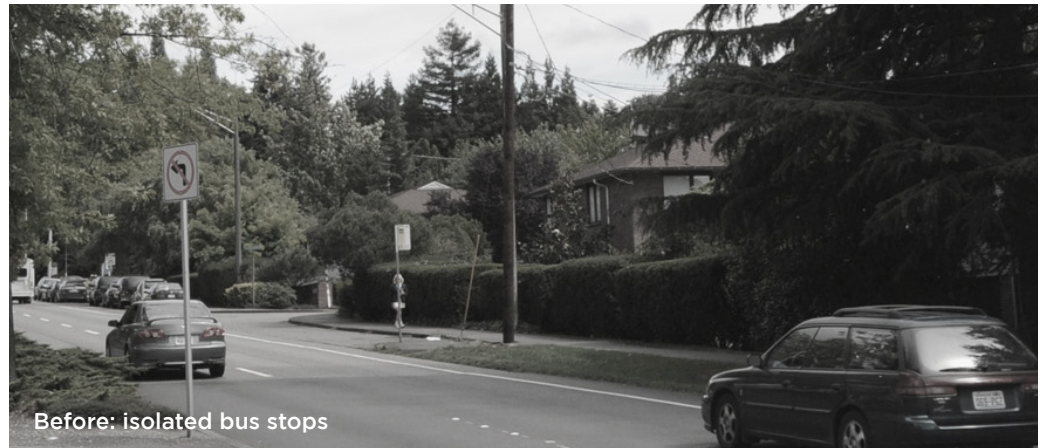
People choose how to travel based on convenience, time, and other factors, but the quality of the streets and places along the way also influence decision-making. Attractive, safe streets encourage people to walk and bike, and promote healthy people and communities. Children's new campus will create a better place in the neighborhood and support the hospital's goal of making walking, biking, and transit the best ways to commute to work.

Did you know:

Children's Transportation Management Plan reduced the percent of its daytime employees driving alone to work from 50% to 38% in two years.

By making it convenient to ride transit.

A Transit Hub built at the campus gateway will be equipped to receive King County Metro buses and Children's shuttles at an integrated, attractive location. The hub will be connected to buildings via clear pathways, and street crossings will be improved at transit stops.



Stephanie Bower, Architectural Illustration

Did you know:

Children's FlexPass—provided to all of its employees—takes passengers anywhere on transit free of charge, including bus, commuter rail and street car.

How does good campus design support our transportation plan?

By providing top-class bicycle and pedestrian facilities throughout the site and making it easy to walk in and out of campus.

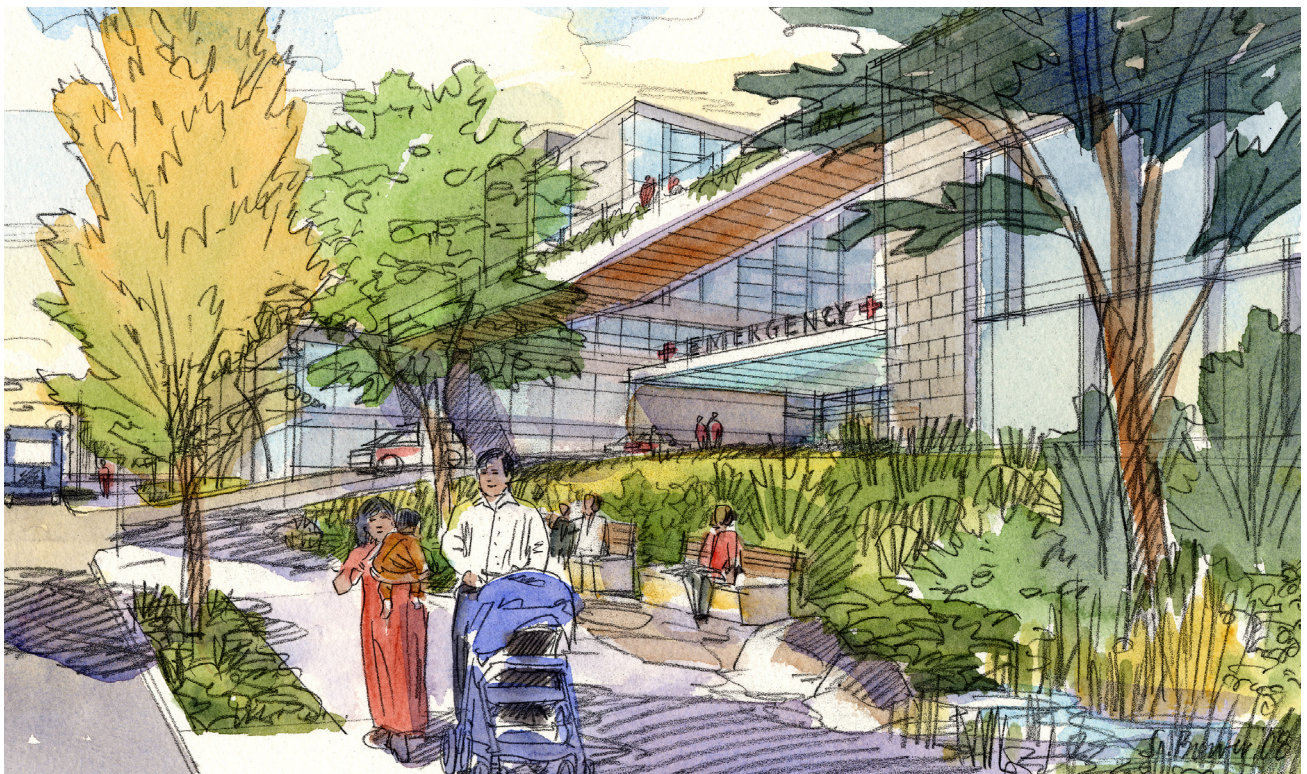
Dedicated campus facilities - including a network of pathways, bicycle storage and changing areas, and a comprehensive wayfinding system - will guide and support all who move through campus. Where Children's campus meets surrounding streets, the hospital is designing its buildings to create a safe and appealing environment for walking. This improved street frontage will invite pedestrians, bicyclists, and transit riders to campus and provide a more pleasing interface for those passing by.



The existing Hartmann Building is surrounded by parking lots, blank walls and steep grades, with no connection to the Burke-Gilman Trail that runs behind its site. Children's new campus designs will replace the current building with a facility that is connected to the Trail, linked with sidewalks and transit stops, and integrated into the improved signalized street crossing at 40th Ave NE and Sand Point Way NE.

By designing the campus to blend with and enhance the neighborhood.

Children's is designing its edges along Sand Point Way NE and 40th Ave NE as community thoroughfares that serve a multi-modal transportation function, safely accommodating auto, bikes, and pedestrians, while simultaneously acting as great places for people. The designs will incorporate elements such as wide sidewalks and inviting building frontages, street trees and landscaped buffers, and human-scale amenities such as lighting, seating, and weather protection. Street-level hospital amenities such as coffee shops and gift shops will bring life, interest, and security to the pedestrian realm around Children's gateway.



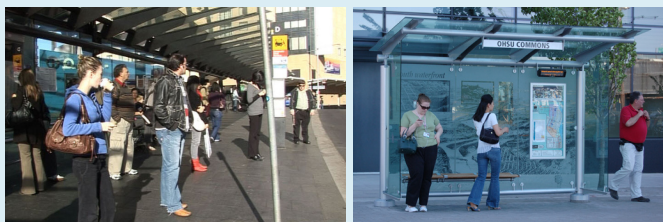
Stephanie Bower, Architectural Illustration



Children's transportation plan supports local, regional and city goals.

The City of Seattle has aggressively sought innovative solutions to meet our transportation challenges. Children's has developed a multi-faceted strategy in line with City of Seattle, neighborhood, and regional policy goals. Children's Comprehensive Transportation Plan elements are directed at moving people more efficiently by all modes of transportation. In addition to mitigating traffic, the plan strongly supports the use of human-powered transportation, an essential opportunity to improve public health and well-being.

City of Seattle Comprehensive Plan elements supported by Children's Transportation Plan:



"Promote and accommodate [growth]... while reducing reliance on single occupancy vehicles."



"The City will employ land use policies and parking strategies that encourage increased use of transit, walking, biking, and carpooling."



"Improve mobility and safe access for walking and bicycling, and create incentives to promote non-motorized travel."

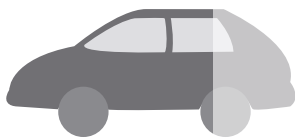
Bottom Line Result

Seattle Children's is growing in order to continue to provide world-class, specialized healthcare for our most vulnerable citizens, the children and youth across the Puget Sound region and even beyond our state borders. Recognizing the impacts transportation can have on environmental, physical, and community health, Children's has developed a Comprehensive Transportation Plan to complement its expansion plans that:

- Reduces vehicle travel and minimizes the hospital's contribution to traffic
- Enhances opportunities in the neighborhood for safe, physically-active transportation
- Prevents dangerous pollutants and greenhouse gases from being released into the air
- Makes traveling by transit, bicycle, carpool, and on foot the best ways to get to campus

Through its transportation goals, investments, and measures of success, Seattle Children's exemplifies the leadership our city and region require in order to solve the growing challenges from traffic congestion, safety, and climate change.

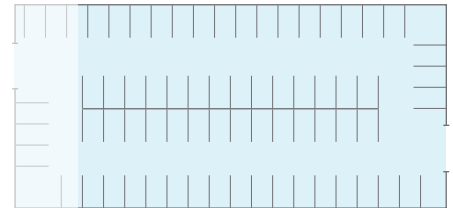
30-40% fewer PM peak hour vehicle trips



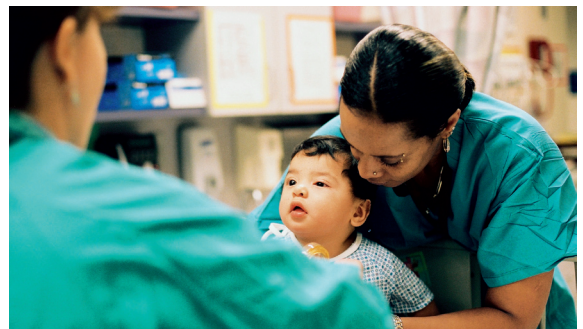
Adding only 1 minute of travel time on Montlake



500 fewer parking spots



Keeping 2,700 metric tonnes of carbon emissions out of the air every year by 2028





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Visit www.masterplan.seattlechildrens.org for more detailed information
on Seattle Children's Comprehensive Transportation Plan.

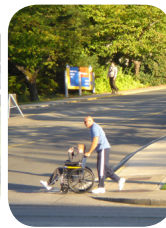
Every Seattle Children's employee plays a part in the hospital's profound commitment to sustainable transportation. Seattle Children's is pleased to share with you this video of the commute orientation every employee receives on Day One of their employment, outlining commute benefits, options, and the assistance offered by Commuter Services.



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Covers printed on 30% post-consumer recycled paper



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Visit www.masterplan.seattlechildrens.org for more detailed information on Seattle Children's Comprehensive Transportation Plan.

