



AGENDA

SHORELINE CITY COUNCIL SPECIAL MEETING

Monday, July 24, 2017
5:15 p.m.

Meet in Lobby · Shoreline City Hall
17500 Midvale Avenue North

TOPIC/GUESTS: Tour with PRCS/Tree Board

SHORELINE CITY COUNCIL REGULAR MEETING

Monday, July 24, 2017
7:00 p.m.

Council Chamber · Shoreline City Hall
17500 Midvale Avenue North

	<u>Page</u>	<u>Estimated Time</u>
1. CALL TO ORDER		7:00
2. FLAG SALUTE/ROLL CALL		
3. REPORT OF THE CITY MANAGER		
4. COUNCIL REPORTS		
5. PUBLIC COMMENT		
<i>Members of the public may address the City Council on agenda items or any other topic for three minutes or less, depending on the number of people wishing to speak. The total public comment period will be no more than 30 minutes. If more than 10 people are signed up to speak, each speaker will be allocated 2 minutes. Please be advised that each speaker's testimony is being recorded. Speakers are asked to sign up prior to the start of the Public Comment period. Individuals wishing to speak to agenda items will be called to speak first, generally in the order in which they have signed. If time remains, the Presiding Officer will call individuals wishing to speak to topics not listed on the agenda generally in the order in which they have signed. If time is available, the Presiding Officer may call for additional unsigned speakers.</i>		
6. APPROVAL OF THE AGENDA		7:20
7. CONSENT CALENDAR		7:20
(a) Approving Minutes of Special Meeting of June 12, 2017	<u>7a1-1</u>	
Approving Minutes of Regular Meeting of June 12, 2017	<u>7a2-1</u>	
(b) Approving Expenses and Payroll as of July 7, 2017 in the Amount of \$9,155,711.03	<u>7b-1</u>	
8. ACTION ITEMS		
(a) Discussing and Appointment of the Parks, Recreational and Cultural Services/Tree Board Youth Position	<u>8a-1</u>	7:20
9. STUDY ITEMS		
(a) Discussing Fee in Lieu Program for Affordable Housing	<u>9a-1</u>	7:30
(b) Discussing the Implementation of the Light Rail Subarea Projects and Policies	<u>9b-1</u>	8:00
(c) Discussing District Energy Feasibility Study	<u>9c-1</u>	8:40

10. ADJOURNMENT

9:25

The Council meeting is wheelchair accessible. Any person requiring a disability accommodation should contact the City Clerk's Office at 801-2231 in advance for more information. For TTY service, call 546-0457. For up-to-date information on future agendas, call 801-2236 or see the web page at www.shorelinewa.gov. Council meetings are shown on Comcast Cable Services Channel 21 and Verizon Cable Services Channel 37 on Tuesdays at 12 noon and 8 p.m., and Wednesday through Sunday at 6 a.m., 12 noon and 8 p.m. Online Council meetings can also be viewed on the City's Web site at <http://shorelinewa.gov>.

CITY OF SHORELINE

SHORELINE CITY COUNCIL SUMMARY MINUTES OF SPECIAL MEETING

Monday, June 12, 2017
5:45 p.m.

Lobby – Shoreline City Hall
17500 Midvale Avenue North

PRESENT: Mayor Roberts, Deputy Mayor Winstead, Councilmembers McGlashan, Scully, Hall, McConnell, and Salomon

ABSENT: None

STAFF: Debbie Tarry, City Manager; John Norris, Assistant City Manager; Eric Friedli, Parks, Recreation and Cultural Services Director; Amanda Zollner, PRCS Supervisor I; Waldo Nambo-Ojeda, Recreation Specialist II

GUESTS: Shoreline Youth Ambassadors

At 5:45 p.m., the meeting was called to order by Mayor Roberts.

After a welcome by Mayor Roberts, the City Council and members of the Shoreline Youth Ambassadors (SYA) enjoyed dinner together. Mayor Roberts thanked SYA for their work and past accomplishments, and spoke on SYA's commitment to the community and schools.

Mr. Nambo-Ojeda talked about the history of SYA and accomplishments of prior participants. He mentioned every culminating SYA project since 2009 when SYA first started, and spoke on the City of Shoreline's Youth and Teen Development programs, including the Richmond Highlands Recreational Center and school programming.

SYA members Rouen de La O and Maggie Horne spoke on behalf of SYA on the importance of Shoreline to them, as well as what it has been like to be a part of SYA.

At 6:45 p.m., the meeting was adjourned.

Jessica Simulcik Smith, City Clerk

CITY OF SHORELINE

SHORELINE CITY COUNCIL SUMMARY MINUTES OF REGULAR MEETING

Monday, June 12, 2017
7:00 p.m.

Council Chambers - Shoreline City Hall
17500 Midvale Avenue North

PRESENT: Mayor Roberts, Deputy Mayor Winstead, Councilmembers McGlashan, Scully, Hall, McConnell, and Salomon

ABSENT: None

1. CALL TO ORDER

At 7:00 p.m., the meeting was called to order by Mayor Roberts who presided.

2. FLAG SALUTE/ROLL CALL

Mayor Roberts led the flag salute. Upon roll call by the City Clerk, all Councilmembers were present.

3. REPORT OF CITY MANAGER

Debbie Tarry, City Manager, provided reports and updates on various City meetings, projects and events.

4. COUNCIL REPORTS

Mayor Roberts reported that along with Mountlake Terrace Mayor Jerry Smith, and City of Lynnwood representatives, he met with Sound Transit Boardmembers and discussed pedestrian access improvements. He announced that he and Deputy Mayor Winstead have been appointed to the City Council Subcommittee to interview applicants for the Parks, Recreation, and Cultural Services/Tree (PRCS) Board Youth Member vacancy.

Mayor Roberts acknowledged Gillian Lauter, outgoing PRSC Board Youth Member. He provided her with a token of appreciation and thanked her for her service to the City. Ms. Lauter expressed her gratitude and stated it has been a blessing to be on the Board.

5. PUBLIC COMMENT

George Webster, Shoreline resident, talked about the origin of the Ronald Wasterwater District (RWD) Interlocal Operating Agreement. He recommended applying an extension to the Agreement and keeping RWD and the City as separate entities until legal issues are worked out. He said this would be easier than the contractual method proposed by the City, and proposed that

the City could also initiate a service agreement. He said a contractual method is not the appropriate way to function.

John Lombard, Thornton Creek Alliance, conveyed support for the Draft 2017-2023 Parks, Recreation, and Open Space (PROS) Plan, and thanked staff for their work. He expressed appreciation for the expansion of Paramount Open Space and stated he supports the concept of Park Impact Fees as a way to help fund the \$83 Million cost to implement the Plan. He asked questions about the timing of property acquisitions and the inflation calculations used, and recommended the City allow impact fees from the given year to be used to reduce property taxes levied in the following year.

Judy Lehde, Shoreline resident, said she was surprised to see the RWD Interlocal Agreement Amendment on the Agenda. She questioned the legality of approving the Amendment and posed a number of questions to the City Council.

Karen Gilbertson, Shoreline resident, said citizens were not notified when the original RWD Interlocal Operating Agreement was signed in 2002, and the notification deadline to make the Amendment was missed. She recommended that citizens be allowed to vote on the RWD Assumption.

Margaret King, City Attorney, said the City and the Ronald Wastewater District followed legislative statute in all assumption matters, and noted the City has the authority to amend the Interlocal Agreement.

6. APPROVAL OF THE AGENDA

The agenda was approved by unanimous consent.

7. CONSENT CALENDAR

Upon motion by Deputy Mayor Winstead and seconded by Councilmember McConnell and unanimously carried, 7-0, the following Consent Calendar items were approved:

(a) Approving Expenses and Payroll as of May 26, 2017 in the Amount of \$2,036,933.67

***Payroll and Benefits:**

Payroll Period	Payment Date	EFT Numbers (EF)	Payroll Checks (PR)	Benefit Checks (AP)	Amount Paid
4/23/17-5/6/17	5/12/2017	71986-72208	14908-14926	66847-66852	\$557,339.74
					<u>\$557,339.74</u>

***Wire Transfers:**

Expense Register Dated	Wire Transfer Number	Amount Paid
5/25/2017	1121	\$2,996.14
		<u>\$2,996.14</u>

***Accounts Payable Claims:**

Expense Register Dated	Check Number (Begin)	Check Number (End)	Amount Paid
5/11/2017	66696	66710	\$43,808.89
5/11/2017	66711	66725	\$81,800.51
5/11/2017	66726	66736	\$19,949.24
5/11/2017	66737	66756	\$182,619.07
5/11/2017	66757	66775	\$14,934.03
5/11/2017	66776	66784	\$1,086.77
5/16/2017	66686	66686	(\$232.02)
5/18/2017	66785	66812	\$189,798.63
5/18/2017	66813	66819	\$55,451.96
5/18/2017	66820	66841	\$108,106.69
5/18/2017	66842	66846	\$610.28
5/22/2017	66853	66853	\$1,464.35
5/22/2017	66854	66855	\$56,498.85
5/25/2017	66856	66874	\$254,141.85
5/25/2017	66875	66893	\$84,388.84
5/25/2017	66894	66910	\$382,169.85
			<u>\$1,476,597.79</u>

- (b) Authorizing the City Manager to Execute the Commute Trip Reduction Interlocal Agreement with King County**
- (c) Adopting Resolution No. 407 - Employee Handbook Updates Related to Initiative 1443 including Extra Help Sick Leave Policy**
- (d) Authorizing the City Manager to Execute Change Order 1 in the Amount of \$80,785.17 with SRV Construction for the Meridian Avenue Pavement Preservation Project**
- (e) Approval of the First Amendment to the 2002 Interlocal Operating Agreement between the City of Shoreline and the Ronald Wastewater District**

8. STUDY ITEMS

- (a) Discussing Resolution No. 408 - Establishing New Connie King Scholarship Program Policies and Procedures**

Mary Reidy, Recreation Superintendent, explained that the Connie King Scholarship Program was established in 2000 in honor of former Mayor Connie King, and that it has not been active since 2003 due to administrative processing challenges. She shared that the new Max Galaxy Software System allows for easy online scholarship application, and easy online scholarship donations during the registration processes. She shared the Scholarship Program allows the community to support each other and assist residents unable to afford recreation fees.

Councilmembers asked if donations are limited to \$1, and if the System will allow people to donate if they are not registering for a recreation activity. Ms. Reidy replied that the program is starting out with a \$1 donation, and said the City is working with Max Galaxy to allow anyone who wants to donate the opportunity to do so and for whatever amount they choose.

(b) Discussing the Draft 2017-2023 Parks, Recreation and Open Space Plan Final Report

Eric Friedli, Parks, Recreation, and Cultural Services (PRCS) Director, provided an overview of the Parks, Recreation, and Open Space (PROS) Plan development. He introduced PRCS/Tree Boardmembers Betsy Robertson, Chair; John Hoey, Vice Chair; and Recreation Superintendent Mary Reidy. Ms. Robertson shared why the themes *Securing Our Foundation* and *Shaping Our Future* were selected, and said the Plan responds to the needs of current and future residents. Mr. Hoey and Ms. Robertson presented the following PROS Plan's strategic action initiatives:

- | | |
|---|--|
| <ol style="list-style-type: none"> 1. New Community/Aquatics Center 2. Expand Opportunities to Connect with Nature 3. Expand recreation program facilities 4. Serve full spectrum of aging adult recreation needs 5. Support diverse communities 6. Enhance place making through public art | <ol style="list-style-type: none"> 7. Ensure adequate park land for future generations 8. Maintain, enhance and protect the urban forest 9. Enhance walkability in and around parks 10. Secure sustainable funding 11. Ensure administrative excellence |
|---|--|

Mr. Friedli reviewed major required capital improvement maintenance projects, future park development projects, the Community/Aquatics Center project, priority acquisition projects, 2024-2029 park acquisition recommendations, and 2018-2023 anticipated revenues.

Councilmembers thanked staff and the PRCS/Tree Board for the work completed on the PROS Plan. Councilmember Scully commented that it appears to be a realistic and achievable plan. He pointed out that \$83 Million at face value is an overwhelming figure, but noted that the voters will have the opportunity to support a new Community/Aquatic Center by approving a \$68 Million Bond. He said he appreciates the land acquisition initiative to acquire more open space and stressed the importance of the City getting started now due to increasing property costs. He expressed concern that the Commission for the Accreditation of Parks and Recreation Agencies (CAPRA) provides only a seal of approval and a list of administration functions to perform, and no other tangible value. He asked how much it will cost. Mr. Friedli responded the accreditation

would be great to have and explained that going through the process is more important to help implement best practices, policies, and procedures. He said he would report back to Council on the cost of accreditation.

Councilmember McGlashan asked about improvements to James Keough Park, and stated he hopes community outreach will be conducted. He asked about the upkeep of unplanned trails cropping up in parks. Mr. Friedli responded that plans for James Keough Park include the installation of basketball and pickle ball courts, a playground, and a trail to make it a nice community park. He said it will meet a critical need in that neighborhood. He explained that staff will attempt to close off non-planned trails but if the path is worn, closing the trail will be unsuccessful, and in this scenario barring any environmental reasons the path would be enhanced.

Councilmember Salomon pointed out how successful the community gardens and dog parks are, and stated there is a demand for more of these types of spaces. He conveyed the need to make the hard choice in long range planning of investing in sidewalks versus additional parks. He said he supports the Park Impact Fee, and expressed concern about pursuing the CAPRA accreditation unless it can be leveraged into grants. He said he believes James Keough Park has the potential to be a great park, noted its access issues, and ask if sound barriers can be built to abate the noise. Ms. Tarry said staff will look into the sound barriers at the Park. Councilmember McGlashan asked about the possibility of getting Sound Transit to plant trees as a buffer for the Park. Mr. Friedli replied that the Park would be high on the list for trees to be planted. Mayor Roberts agreed that the Park has a lot of opportunity for improvements.

Mayor Roberts asked if parks located on Shoreline School District property are included in the City's goal of 95 acres of park space. Mr. Friedli explained there is currently 7.14 acres of park land per 1,000 residents. School District property already goes into this calculation, so in order to keep up with this ratio, new property would needed to be added. Ms. Robertson stated being creative and adding pocket pieces of land and activating the City's right-of-way spaces will help achieve the goal of 95 acres of park space.

Deputy Mayor Winstead advised staff to revisit the work that has already been completed related to planning for Shoreline Parks, and expressed her support for a community garden at James Keough Park.

Mayor Roberts said he is pleased with the Plan and appreciates the strategic initiative supporting a diverse community and public art. He asked about the next steps in the process and shared that residents can provide feedback about the Plan on the City's website. Mr. Friedli responded that a Public Hearing is scheduled for July 17, 2017 and Council action is scheduled for July 31, 2017.

(c) Discussing the Status of the 2017-2022 Capital Improvement Plan

Tricia Juhnke, City Engineer, provided an overview of the City's Capital Improvement Plan development process. She shared recent accomplishments include the installation of wayfinding signs along the Interurban Trail, and the 15th Avenue and Meridian Avenue Pavement Preservation projects. Current projects under construction are the Interurban and Burke-Gilman

Trail Connectors; Echo Lake Safe Routes to School; the Bike Plan Implementation; 2017 Bituminous Surface Treatment; Catch basin repair and replacement, and a few other projects. Current projects in the design phase are 145th and I-5 Interchange; Richmond Beach Road Rechannelization; Westminster and 155th preliminary design; and the Boeing Creek Regional Stormwater Facility Study. Ms. Juhnke reviewed upcoming projects and noted that Real Estate Excise Tax (REET) revenue is up, but cautioned that it is an unstable revenue source. Ms. Juhnke presented the following fund balances:

General Capital Fund

Ms. Juhnke said General Capital Fund expenditures include the PROS Plan, Turf Lighting Replacement, the North Maintenance Facility, and the Police Station at City Hall. She encouraged Council to postpone programming the General Capital Fund until definitive information is received on the PROS Plan and the North Maintenance Facility.

Councilmembers concurred with staff's recommendation to postpone programming General Capital Funds.

Facilities Major Maintenance Fund

Ms. Juhnke stated no issues have been identified for this fund. Councilmembers had no questions or comments regarding this fund.

Surface Water Utility Capital Fund

Ms. Juhnke stated projects in this fund include the Surface Water Master Plan and the 25th Ave NE Flood Reduction. She recommended that the programming of funds be postponed until the Surface Water Master Plan has been approved by Council.

Councilmember Hall asked if the Hidden Lake Dam removal is on schedule. Ms. Juhnke answered yes. Councilmembers concurred with staff's recommendation to postpone programming the Surface Water Utility Capital Fund until the Surface Water Master Plan is completed.

Roads Capital

Ms. Juhnke stated projects in the Roads Capital Fund include the Annual Road Surface Program; Sidewalk Repair and Maintenance; New Sidewalks and priorities; 25th Ave N Sidewalks; Traffic Signal Rehabilitation Program; and North 145th Interchange. She explained if the Annual Road Surface Program is fully funded that it would leave a \$150,000 fund balance, excluding grant funding. She pointed out that the funding for the 25th Avenue North Sidewalks has been reallocated to the Sidewalk Fund, and shared challenges and recommendations for the Traffic Signal Rehabilitation Program. She stated Roads Capital Projects recommended for funding are Westminster and 155th, 160th and Greenwood, Ballinger Way, and Linden and 185th Street. She said the other projects recommended, but without funding at this time, are the Trail Along the Rail, the 148th non-motorized Bridge, and the 185th Street Corridor. She reviewed Roads Capital Grant Fund matches.

Councilmember Hall said he appreciates funding the maintenance of the City's road assets, noting that deferred maintenance could impose a greater cost in the future. He suggested that

new sidewalks and sidewalk maintenance be a joint discussion undertaken by the Sidewalk Advisory Committee. He stated asset preservation and the safety of people and non-motorized movement are at the top of his priority list; and the capacity for moving vehicles is at the bottom of his list. He also shared his preference is to aggressively work on a funding package for the 148th Street non-motorized bridge, instead of the Ballinger and Linden Projects.

Councilmember Scully said he generally agrees with Councilmember Hall's prioritization preferences and fully supports funding maintenance first. He expressed concern with not increasing funding to sidewalk repair and maintenance and said there are non-motorized safety hazards that need to be addressed. He cautioned having the 148th Street non-motorized bridge as the sole goal as doing so may adversely impact other needed projects. He said he would like to see the Sidewalk Advisory Committee focus on where sidewalks should be placed and not how they are funded, as the latter should be done by the Council. Ms. Tarry recalled Council discussion at the Goal Setting Workshop was that the Sidewalk Advisory Committee was to address sidewalk placement, maintenance, and funding sources.

Councilmember McGlashan stated he agrees with most of his colleagues' comments and supports placing the Trail Along the Rail on hold until Sound Transit's Maintenance Facility access plans are known. He asked if the improvements on Linden Avenue and 185th Street can be done at the same time as the Richmond Beach Road rechannelization, and if the no left hand turn out of Fred Meyer's parking lot onto 185th Street will be addressed. Ms. Juhnke responded that the Rechannelization Project does not reach the Linden Avenue and 185th Street Project due to limited funding. She explained improvements to the Linden/185th intersection would be a full rebuild and noted there is not adequate conduit space for additional wire to change the traffic signal.

Mayor Roberts agreed with Councilmember Hall's prioritization recommendations. He asked clarifying questions about the Safe Routes to School Grants. Ms. Juhnke said the City opted not to apply for a grant in 2016, and stated a new school is opening up at Aldercrest and could be a good candidate in 2018 for grant funding for 25th Avenue. Mayor Roberts said he has received complaints about the condition of 185th Street, and asked when plans for resurfacing the road would will be triggered. Ms. Juhnke responded that she will review the road's condition. She said the Draft CIP will be provided in the budget preview scheduled for September 19, 2017.

9. ADJOURNMENT

At 8:50 p.m., Mayor Roberts declared the meeting adjourned.

Jessica Simulcik Smith, City Clerk

CITY COUNCIL AGENDA ITEM
CITY OF SHORELINE, WASHINGTON

AGENDA TITLE: Approval of Expenses and Payroll as of July 7, 2017
DEPARTMENT: Administrative Services
PRESENTED BY: Sara S. Lane, Administrative Services Director

EXECUTIVE / COUNCIL SUMMARY

It is necessary for the Council to formally approve expenses at the City Council meetings. The following claims/expenses have been reviewed pursuant to Chapter 42.24 RCW (Revised Code of Washington) "Payment of claims for expenses, material, purchases-advancements."

RECOMMENDATION

Motion: I move to approve Payroll and Claims in the amount of \$9,155,711.03 specified in the following detail:

***Payroll and Benefits:**

Payroll Period	Payment Date	EFT Numbers (EF)	Payroll Checks (PR)	Benefit Checks (AP)	Amount Paid
5/7/17-5/20/17	5/24/2017	72209-72433	14927-14952	66948-66955	\$714,370.12
5/21/17-6/3/17	6/9/2017	72434-72661	14953-14977	67093-67098	\$543,839.43
6/4/17-6/17/17	6/23/2017	72662-72889	14978-15006	67210-67217	\$718,768.89
					<u>\$1,976,978.44</u>

***Wire Transfers:**

Expense Register Dated	Wire Transfer Number	Amount Paid
6/27/2017	1122	\$5,329.88
		<u>\$5,329.88</u>

***Accounts Payable Claims:**

Expense Register Dated	Check Number (Begin)	Check Number (End)	Amount Paid
6/1/2017	66911	66918	\$31,405.91
6/1/2017	66919	66926	\$11,817.58
6/1/2017	66927	66945	\$136,396.61
6/1/2017	59117	59117	(\$190.36)
6/1/2017	61962	61962	(\$96.00)

***Accounts Payable Claims:**

Expense Register Dated	Check Number (Begin)	Check Number (End)	Amount Paid
6/1/2017	66946	66947	\$286.36
6/8/2017	66956	66972	\$129,198.04
6/8/2017	66973	66979	\$9,192.34
6/8/2017	66980	67005	\$17,171.93
6/8/2017	67006	67009	\$369.09
6/14/2017	67010	67011	\$61,143.69
6/14/2017	67012	67012	\$2,730.27
6/15/2017	67013	67032	\$283,091.13
6/15/2017	67033	67051	\$422,814.08
6/15/2017	67052	67059	\$48,651.98
6/15/2017	67060	67085	\$206,043.92
6/15/2017	67086	67091	\$37,337.18
6/15/2017	63815	63815	(\$54.08)
6/15/2017	67092	67092	\$54.08
6/22/2017	67099	67111	\$55,948.93
6/22/2017	67112	67130	\$18,185.87
6/29/2017	67131	67146	\$213,351.78
6/29/2017	67147	67163	\$639,682.88
6/29/2017	67164	67178	\$4,419,134.62
6/29/2017	67179	67198	\$68,740.36
6/29/2017	67199	67209	\$4,802.07
7/6/2017	67218	67235	\$337,777.05
7/6/2017	67236	67256	\$483.00
7/6/2017	67257	67263	\$9,695.38
7/6/2017	67264	67271	\$8,237.02
			<u>\$7,173,402.71</u>

Approved By: City Manager _____ City Attorney _____

CITY COUNCIL AGENDA ITEM
CITY OF SHORELINE, WASHINGTON

AGENDA TITLE:	Appointment of Erik Ertsgaard as a Youth Member to the Shoreline Parks, Recreation and Cultural Services Board		
DEPARTMENT:	Parks, Recreation and Cultural Services		
PRESENTED BY:	Eric Friedli, PRCS Department Director		
ACTION:	<input type="checkbox"/> Ordinance	<input type="checkbox"/> Resolution	<input checked="" type="checkbox"/> Motion
	<input type="checkbox"/> Discussion	<input type="checkbox"/> Public Hearing	

PROBLEM/ISSUE STATEMENT:

In 2007, the City Council added two youth positions to the Shoreline Parks, Recreation, and Cultural Services/Tree (PRCS) Board. Previous youth Board member, Gillian Lauter was acknowledged by the Council on June 12, 2017 after completing her term on the Board. This vacancy creates an opening for one new youth Board member.

This service opportunity was advertised at Shorewood and Shorecrest High Schools, in *Currents*, and on the City's website. Six applications were received to fill the position. According to the Board's Rules of Procedure, Section 2.4, Mayor Roberts and Deputy Mayor Winstead were appointed to interview the candidates. They met with five of the six applicants on June 19, 2017. One scheduled applicant failed to show. The interviews were advertised and open to the public.

Based on their deliberations, Mayor Roberts and Deputy Mayor Winstead recommend Erik Ertsgaard to the Council for appointment to the PRCS Board, effective September 1, 2017 and expiring June 30, 2018. Term lengths are established Ordinance No. 666 and aim to coincide with the academic calendar (September through June). Youth Board positions have the option to renew additional one-year terms for a maximum of four terms.

RESOURCE/FINANCIAL IMPACT:

There is no financial impact to the City as a result of this appointment.

RECOMMENDATION

Staff recommends that Council appoint Erik Ertsgaard as a youth member to the Shoreline Parks, Recreation, and Cultural Services/Tree Board effective September 1, 2017 through June 30, 2018, with the option to renew three additional one-year terms for a maximum of four years of service.

Approved By: City Manager *DT* City Attorney *MK*

BACKGROUND

The Parks, Recreation and Cultural Services/Tree (PRCS) Board advises the City Council and staff on a variety of parks and recreation issues, including plans and policies, park operation and design, program activities, property acquisition, and development of rules and regulations. In 2007, the Council added two youth positions to the PRCS Board. The youth members of the Board must be between the ages of 15 and 19 at the beginning of their term.

While adult members of the PRCS Board are appointed by the Council to four-year terms, the youth positions serve one-year terms. These term lengths were established in July of 2013 with the adoption of Ordinance No. 666. This changed the youth board members' terms of service from two years to one year, coinciding with the academic calendar (September through June). Eligible youth may be reappointed without a break in service during the summer for a maximum of four consecutive one-year terms.

DISCUSSION

One youth Park Board member completed her term and left the Board to attend college, creating an opening for one new youth member. Gillian Lauter was recognized for her service on June 12, 2017.

Six applications were received to fill the position, and five of the six applicants were interviewed by Mayor Roberts and Deputy Mayor Winstead on June 19, 2017. One applicant failed to show for the interview. Following their deliberations, Mayor Roberts and Deputy Mayor Winstead recommend the appointment of Erik Ertsgaard to the youth position on the Parks, Recreation and Cultural Services/Tree Board.

Erik Ertsgaard lives in the Richmond Beach neighborhood and will be a sophomore at Shorewood High School beginning fall 2017. He is active in concert band, marching band, youth group and Young Life, and he enjoys golf and tennis. Math and biology interest him most, fueling his desire to pursue a career in ecological science. He is excited for this opportunity to serve on the Board and wants to contribute to discussions about how to better the parks and ecosystems in the Shoreline community.

RESOURCE/FINANCIAL IMPACT

There is no financial impact to the City as a result of this appointment.

RECOMMENDATION

Staff recommends that Council appoint Erik Ertsgaard as a youth member to the Shoreline Parks, Recreation and Cultural Services/Tree Board effective September 1, 2017 through June 30, 2018, with the option to renew three additional one-year terms for a maximum of four years of service.

ATTACHMENTS

Attachment A: Youth Parks, Recreation and Cultural Services Board Application for Erik Ertsgaard

RECEIVED

MAY 31 2017

Please supply the following information. Applicants must live in Shoreline to be eligible to apply.

CITY CLERK
CITY OF SHORELINE

Name: Erik Ertsgaard Age: 15

How long have you lived in Shoreline? 14 1/2 years

Which neighborhood do you live in? Richmond Beach

What school do you attend? Shorewood

What year in school are you? 9th

What academic subjects interest you most?
Math and biology interest me the most.

List your extra-curricular activities (including sports, music, clubs, leadership groups, social groups):

Golf, tennis, concert band, marching band, youth group and younglife

How have you been involved in the Shoreline Community?

I have completed community service hours by fundraising for the SSF Bike Rodeo and other various church service projects

Have you ever served on a committee? If so, describe your experience.

I have not, but am excited for an opportunity to serve on this one.

Describe why you are interested in serving in this position.

I am interested in serving in this position because I am interested in a career in ecological science. Also, I want to contribute to discussions on how to better the parks and ecosystems in this community.

Describe any special expertise or interest which is applicable for this Board.

I can put my comprehensive skills of algebraic and geometric topics of graphing and analyzing trends to benefit the committee. I also spend a lot of time walking and jogging in parks around the city.

Appointment to this committee requires consistent attendance at regularly scheduled meetings. PRCS Board meetings occur on the 4th Thursday of most months. Are you available for evening meetings?

(circle one) Yes No

Disclosure Notice: Please note that your responses to the application questions may be disclosed to the public under Washington State Law.

CITY COUNCIL AGENDA ITEM
CITY OF SHORELINE, WASHINGTON

AGENDA TITLE:	Implementing Affordable Housing Provisions of Station Subarea Plans: Fee-In-Lieu
DEPARTMENT:	Community Services Division Planning & Community Development Department
PRESENTED BY:	Rob Beem, Community Services Division Manager Rachael Markle, AICP, Planning & Community Development Director Miranda Redinger, AICP, Senior Planner
ACTION:	<input type="checkbox"/> Ordinance <input type="checkbox"/> Resolution <input type="checkbox"/> Motion <input checked="" type="checkbox"/> Discussion <input type="checkbox"/> Public Hearing

PROBLEM/ISSUE STATEMENT:

The Puget Sound region, along with many other areas of the country, lacks an adequate stock of housing that is affordable to a significant percentage of the population. As the region becomes more affluent through growth within the technology industry, this problem continues to get worse.

Shoreline began examining this problem and potential solutions in 2006 when it convened a Citizen Advisory Committee and adopted a Comprehensive Housing Strategy in 2008. As well, as part of the 2012 update to the City's Comprehensive Plan, City staff worked with the Housing Development Consortium and other affordable housing advocates to craft policy language that supports preservation and creation of more affordable housing.

Through the 185th and 145th Street Station Subarea Plans, Shoreline adopted inclusionary zoning, which requires a given share of new rental-market construction to be affordable for people with low to moderate incomes in Mixed-Use Residential (MUR) -45' and -70' zoning designations. These provisions are designed to increase the housing that is available to households with annual incomes between 60% and 80% of the King County Area Median Income, or \$57,600 and \$76,820 for a four person household. In April of this year, the City also extended the applicability of the Multi Family Property Tax Exemption (PTE) to portions of the Station Areas to further support affordable housing development.

Currently, developers are required to meet the City's affordable housing requirement with housing units that are constructed as a part of their developments. The Development Code allows for, but does not require, that a "Fee-in-Lieu" (FIL) option for this affordable housing be developed, wherein a developer may request permission to pay a fee rather than to construct the affordable housing.

City staff is in the process of developing the administrative guidelines and processes to administer these provisions. As a part of this work, staff is seeking Council guidance on the provision of a FIL for affordable housing. While this work is largely administrative, to establish a FIL and the Housing Trust Fund to manage the fees collected requires Council direction and action.

The purpose of this staff report and discussion is for Council to provide direction on whether or when to offer a fee-in-lieu option; and if so, to determine the appropriate formula to capture the value of the affordable units.

RESOURCE/FINANCIAL IMPACT:

Tonight's discussion will not have a direct financial impact, but decisions about whether to offer a FIL alternative to constructing required affordable units on-site, and how to administer this fee and resultant Housing Trust Fund, could have resource and financial impacts.

RECOMMENDATION

While this item is for discussion purposes only, staff is seeking direction from Council regarding the use of a Fee-In-Lieu as a method to support the development of affordable housing in the Station Areas. Staff recommends that Council establish a Fee-In-Lieu formula, that the Development Code be amended to explicitly state that PTE in the Stations Areas may not be used in combination with the Fee-In-Lieu, that the affordability gap method be used to calculate the Fee-In-Lieu, that the Fee-In-Lieu only be available for partial units of affordable housing, and that a Housing Trust Fund be established.

Approved By: City Manager *DT* City Attorney *MK*

INTRODUCTION

The Puget Sound region, along with many other areas of the country, lacks an adequate stock of housing that is affordable to a significant percentage of the population. As the region becomes more affluent through growth within the technology industry, this problem continues to get worse.

Shoreline began examining this problem and potential solutions in 2006 when it convened a Citizen Advisory Committee and adopted a Comprehensive Housing Strategy in 2008 (<http://www.shorelinewa.gov/home/showdocument?id=2611>). As well, as part of the 2012 update to the City's Comprehensive Plan, City staff worked with the Housing Development Consortium and other affordable housing advocates to craft policy language that supports preservation and creation of more affordable housing.

Attachment A to this staff report provides a graphic that was originally included in the 2008 Comprehensive Housing Strategy which has been updated with figures that reflect current market conditions. It defines various thresholds such as the current Median Home Price in Shoreline (\$530,000 as of May 2017), and the percent of Area Median Income (AMI) that a household would need to make in order to be able to afford it (136% of AMI or \$130,000). It further identifies the types of interventions and support that is most useful at the various points along the spectrum. For example, inclusionary zoning, the subject of this discussion, is most effective for requiring market rate developers to provide "workforce housing" (for households earning from 60% to 80% of the AMI). Deeper levels of affordability require subsidies like grants provided to non-profit affordable housing developers.

BACKGROUND

The [Housing Element](#) of the 2012 Comprehensive Plan contains policy direction to fulfill the State Growth Management Act goal to "Encourage the availability of affordable housing to all economic segments of the population of this state, promote a variety of residential densities and housing types, and encourage preservation of existing housing stock." Comprehensive Plan policies H7-H20 articulate ways to "Promote Affordable Housing Opportunities", but the most relevant policies are below:

- **Policy H9** - Explore the feasibility of creating a City housing trust fund for development of low income housing.
- **Policy H18** - Consider mandating an affordability component in Light Rail Station Areas or other Transit-Oriented Communities.

Policy H18 was implemented in March 2015 through adoption of the 185th Street Station Subarea Plan, specifically [Ordinance No. 706](#), which codified affordable housing requirements for the MUR-45' and MUR-70' zoning designations (and the MUR-70'+ option that would require a development agreement and deeper levels of affordability in addition to other criteria) under SMC 20.40.235.

At the time of adoption, it was envisioned that the City would ultimately establish the administrative framework to implement these inclusionary housing provisions. This includes the process for a developer to go through during permit review and the internal

process and procedures to monitor and ensure that units continue to meet affordability requirements in future years. The Code speaks to methods of alternative compliance for meeting the affordable housing requirements including the establishment of a Fee-in-Lieu (FIL) option as well as establishing the framework for a Housing Trust Fund to receive such payments.

This year, the City has worked with Michael Stanger of *Social Impact Workshop* to develop the administrative procedures and to assist with any additional policy development that may be required. Mr. Stanger has experience with A Regional Coalition for Housing (ARCH) developing and implementing similar programs in cities on the eastside of Lake Washington. This work is scheduled to be completed by the end of 2017. The City will then have the capability to take in and process development applications which contain housing affordability requirements. In addition, the City will have the framework established to monitor these agreements over time. While this work is largely administrative, to establish a fee in lieu and the Housing Trust Fund requires Council direction and action.

Station Area Inclusionary Housing/Fee-In- Lieu Provisions

Both Station Areas contain inclusionary housing provisions to support the development of “workforce” housing. This is largely considered housing available to households with incomes between 60% and 80% of AMI. The policy direction from the City Council is clear that the City’s priority for workforce housing is that it be developed “on site”. This means that developers would build these affordable units into their development projects, as opposed to using a FIL option. SMC 20.40.235(E) states:

“The City’s priority is for residential and mixed-use developments to provide the affordable housing on site.”

While this is the City’s stated priority, the Code does allow for a developer to meet these affordable housing requirements by paying a FIL rather than constructing qualifying units as a part of their project if the City Council establishes a FIL formula. SMC 20.40.235(B)(2) states:

“Payment in lieu of constructing mandatory units is available upon City Council’s establishment of a fee in lieu formula. See subsection (E)(1) of this section.”

If the Council decides to establish the formula, then the “alternative compliance” must achieve a result equal to or better than providing affordable housing on site. This is identified in SMC 20.40.235(E):

“The Director, at his/her discretion, may approve a request for satisfying all or part of a project’s on-site affordable housing with alternative compliance methods proposed by the applicant. Any request for alternative compliance shall be submitted at the time of building permit application and must be approved prior to issuance of any building permit. Any alternative compliance must achieve a result equal to or better than providing affordable housing on site.”

The thinking at the time was that there could be circumstances where it would be advantageous to a developer to seek this alternative. The City would then retain the FIL in a "Housing Trust Fund." Proceeds in this fund would then be made available to affordable housing developers through a process much the same as is used to allocate housing capital in the Community Development Block Grant.

The Code is also specific as to the conditions under which a FIL would be acceptable. SMC 20.40.235(E)(1) states the following:

"Payments in lieu of constructing mandatory affordable housing units is subject to the following requirements:

- a. The in-lieu fee is set forth in Chapter 3.01 SMC, Fee Schedules. Fees shall be determined at the time the complete application for a building permit is submitted using the fee then in effect.*
- b. The fee shall be due and payable prior to issuance of any certificate of occupancy for the project.*
- c. The City shall establish a housing program trust fund and all collected payments shall be deposited in that fund."*

DISCUSSION

Property Tax Exemption (PTE) in the Station Areas

In April 2017, PTE was extended to the Station Areas through adoption of Ordinance No. 776. The staff report for this Council action can be found at the following link: <http://cosweb.ci.shoreline.wa.us/uploads/attachments/cck/council/staffreports/2017/staffreport041017-7c.pdf>.

Prior to this, when the Station Area zoning and development regulations (including inclusion of the FIL alternative option) were initially adopted, the PTE program was considered but not offered in these areas. In the process of staff's analysis of the FIL, staff has concluded that the value of PTE outweighs any potential value of a FIL in most foreseeable cases.

The State's requirements for PTE call for 20% of a development project's units to be affordable. For instance, if a 162 unit multi-family apartment project was developed in one of the station areas, to make use of the PTE, a developer would need to make 32.4 affordable units available. To meet this requirement, the developer would need to construct 33 units of affordable housing (rounding up from 32.4 units, as it is impossible to construct two fifths of a unit). Paying a FIL for the 0.4 unit would result in only 32 affordable units being constructed, which would not meet the PTE requirements that 20% of the units be constructed. Should a developer not opt to use the PTE there would be an option to allow them to meet their affordable housing requirement for a partial unit through the FIL.

Should the FIL Formula be Established?

Based on the newly available PTE incentive in the Station Areas, staff does not see the use of the FIL as an option developers will likely exercise. While this further strengthens the City's priority that affordable units be constructed on site, maintaining the FIL option in the Development Code does increase the tools available to the

development community. It is also possible that a developer may still choose to use the FIL option instead of build on site for various reasons that are difficult to discern now.

Staff therefore recommends that the Council continue to proceed with setting the FIL in the City's Fee Schedule so that the option exists as currently identified in SMC 20.40.235(E). Staff also recommends that the Development Code be amended to clearly and explicitly articulate that a FIL cannot be used in conjunction with PTE.

What Method Should be Used to Calculate the FIL?

If Council agrees that the FIL Formula should be established, there are two general approaches to computing a FIL for affordable housing: the Affordability Gap Method and the Production Cost Method.

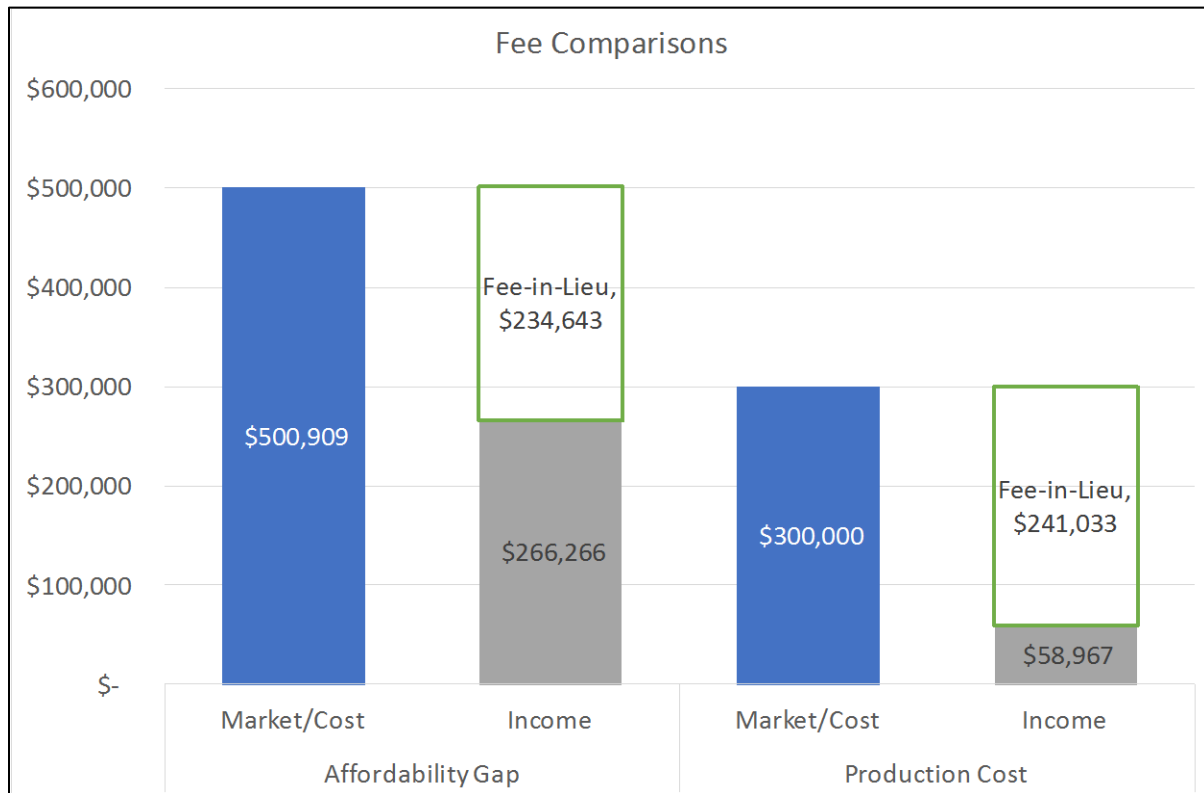
Affordability Gap Method

The "affordability gap method" is intended to recover the value (or "public benefit") of the affordable units; i.e., the gap between what a low- or moderate-income household can afford and what they would have to pay on the open market. To calculate the fee using this approach, one subtracts the affordable rent from the present market rent for comparable new multifamily housing and divides the difference by the current market capitalization rate (the "cap rate"). The result is a lump sum fee per unit. This approach has roughly the same economic impact on the average project as building the affordable units. See Attachment B for a more detailed discussion of this approach.

Production Cost Method

The "production cost method" is designed to calculate the amount needed to produce the units off site for the units the developer wants to "buy out." Whereas the affordability gap approach represents the market-rate developer's perspective, the production cost approach corresponds to the non-profit developer's view. The fee aims to fill the gap between what residents will pay and the cost of creating the affordable housing. The fee is calculated by dividing the net operating income of an affordable unit by the cap rate, and subtracting that result from the per-unit cost of a typical affordable housing project. See Attachment C for a more detailed discussion of this approach.

Applying these approaches to development in Shoreline results in the following for a two to three bedroom unit affordable at 60% AMI. The source of the costs were based on market rents in the spring of 2017 and the development costs experienced in building the Ronald Commons project.



Both formulas are capable of producing fee revenue equal to or better than the value of on-site construction of units, as required in SMC 20.40.235(E). The production cost method will calculate the fee needed for creating affordable units off-site if the land, development, and construction costs for non-profit developers are accurately gauged. Typically these costs are calculated using data on cost generated by looking at similar projects in a given city or market area. Those can be difficult to pin down, particularly because few affordable housing projects have been developed recently in Shoreline. The affordability gap method is somewhat simpler and more reliable in that (unlike production costs) market rents can be obtained from survey data which is updated annually.

Given that both formulas generate roughly equivalent figures, staff recommends that the City use the affordability gap method to calculate the FIL. This method is easier to calculate, update and to explain to developers and the community.

Should the FIL be Applicable to all Required Units or only Partial Units?

As noted earlier, in some developments, there may be a situation where a developer must produce a partial (or fractional) affordable housing unit. In this event, SMC 20.40.235(C)(6) states the following:

“In the event of a fractional affordable housing unit, payment in lieu in accordance with subsection (E)(1) of this section is allowed for the fractional unit”.

This means that fractional affordable units cannot be rounded down by the developer, but satisfied either by the construction of a whole affordable unit (rounded up) or

through a FIL if established by the City. As staff is recommending that the Council establish a FIL formula, Council also needs to provide direction on whether the FIL should be available for all units (applicable to an entire project) or just applicable to fractional units if they exist in a project.

As noted earlier, there is policy direction to have the required affordable units built on site. By limiting the use of FIL to only partial units, nearly all affordable units will be constructed on-site and the affordable units will be equal to the market rate units in the same project. Staff therefore feels that the FIL should only be allowed to be used for partial units, with the understanding that the practical application of the Code and the PTE incentive means that there will likely be very little use of the FIL at all. Staff also recommends that the Development Code be amended to clarify that FIL is available only for partial units.

Housing Trust Fund

As noted above, while staff does not anticipate much (if any) usage of the FIL for partial units, in order to receive any FIL payments, the City will need to receive these funds into a specific fund. Monies in this fund would clearly be dedicated to the provision of affordable housing. For now it is sufficient to simply establish a fund. At a later date the City can set up the specific guidelines and timelines for use of these funds. These guidelines would address things such as income targets, whether funds could be used for capital or operating expenses, how often the funds would be made available and through what process.

Given the current rate of development, the fact that FIL would be just for partial units (if Council provides this policy direction), and the fact that developers would likely not use the FIL at all because of the PTE incentive, work to determine the parameters of the Housing Trust Fund can follow the enactment of the FIL and can be scheduled for the 2018 work plan.

Administration of Inclusionary Housing and PTE

Staff anticipates that there will be one to three projects annually that will require review for compliance with the City's affordable housing provisions and/or Property Tax Exemption program. Using experience at ARCH, Mr. Stanger calculated that it takes about 50-60 hours of staff time to administer the affordable housing provisions of the City's codes per development per project. These projects, once constructed, will also require ongoing monitoring to ensure continued compliance. Staff anticipates that the City Manager's 2018 Budget will include resource to retain consulting services to assist City staff with the necessary reviews of development proposals and to assist with the ongoing compliance monitoring. New fees may be established to support all or some of this work.

Income Verification for Tenants

As staff develops the administrative requirements for this program they will be evaluating approaches to income verification. Currently participants in the City's PTE program provide the City with an annual certification that indicates they and their tenants are in compliance with the income requirement of the program.

Different agencies validate household income eligibility in various ways. ARCH has a process whereby landlords include eligibility qualification as part of their usual screening process for tenants. ARCH administers land use and tax incentive housing programs for eight Eastside cities; none of those cities base eligibility on household assets. They require a two-page certification form filled out by the applicant and the applicant's income tax return (or other wage statements). The King County Housing Authority (KCHA) requires applicants to submit longer forms which KCHA uses to obtain income and asset documentation directly from their sources (including employers and the federal government). The City of Seattle relies on landlords to check for income verification, but expects them to get documentation directly from employers (instead of relying on tax returns or pay stubs). Applicants must disclose their assets, although assets themselves are not part of the qualification. Unlike ARCH cities, Seattle does not require affordable housing tenants to recertify their eligibility after initial occupancy.

Based on this review of others' practices, Shoreline's current policy of requiring annual certification for compliance appears to be at the low end in terms of complexity and cost to administer. Staff is seeking additional direction as to whether to retain Shoreline's current practice or to adjust it to include additional steps to verify tenants' incomes. If so, and the adjustment becomes more complex to administer, staff will include this cost in the next review of the program and in the 2018 Budget.

NEXT STEPS

With the guidance received from this meeting, staff will include the Development Code amendments noted here with the batch amendments that will be reviewed by the Planning Commission later in 2017. When these come before Council in late 2017 or early 2018, staff will also bring forward the necessary amendments to the City's Fee Schedule (SMC Section 3.01) and legislation to create a Housing Trust Fund. Staff will also continue to work on the administrative processes for the inclusionary housing program and the development of guidelines for a Housing Trust Fund.

COUNCIL GOALS ADDRESSED

This item addresses the following Council Goals and Action Steps:

Council Goal 3: Continue preparation for regional mass transit in Shoreline

- Action Step 8- Implement the Affordable Housing Program as identified in light rail station subarea plans.

Council Goal 4: Expand the City's focus on equity and inclusion to enhance opportunities for community engagement.

- Action Step 2- Facilitate the development of affordable housing projects in Shoreline and engage in regional efforts focused on addressing homelessness.

RESOURCE/FINANCIAL IMPACT

Tonight's discussion will not have a direct financial impact, but decisions about whether to offer a fee-in-lieu alternative to constructing required affordable units on-site, and how to administer this fee and resultant Housing Trust Fund could have resource and financial impacts as discussed in this staff report.

RECOMMENDATION

While this item is for discussion purposes only, staff is seeking direction from Council regarding the use of a Fee-In-Lieu as a method to support the development of affordable housing in the Station Areas. Staff recommends that Council establish a Fee-In-Lieu formula, that the Development Code be amended to explicitly state that PTE in the Stations Areas may not be used in combination with the Fee-In-Lieu, that the affordability gap method be used to calculate the Fee-In-Lieu, that the Fee-In-Lieu only be available for partial units of affordable housing, and that a Housing Trust Fund be established.

ATTACHMENTS

Attachment A: Housing Options Based on Income Graphic
Attachment B: Affordability Gap Method
Attachment C: Production Cost Method

HOUSING OPTIONS BASED ON INCOME



**INCOME
(% OF MEDIAN)**

\$130,000
136%

MARKET

Able to afford the median priced home; \$530,000, May 2017.

\$96,000
Median

MEDIAN

Can purchase the lowest priced single-family house or have a choice in condo/townhouse market.

- *Afford up to \$2400/month for housing; 21% of owner-occupied homes*

\$76,800
80%

ENTRY TO MARKET

Predominantly rental housing. May be able to purchase if they have savings or gifts for a down payment or are willing to pay more than 30% of income for housing. Limited First Time Home Buyer assistance available.

- *Afford up to \$1920/month; 13% of owner-occupied homes.
44% of renter-occupied homes, 24% of all housing units.*

\$48,000
50%

WORKFORCE HOUSING

Exclusively rental housing. Construction requires subsidy usually from federal, state and/or local governments.

- *Afford up to \$1200/month; 4% of owner-occupied homes.
24% of renter-occupied homes. 11% of all housing units.*

\$28,000
30%

VERY LOW INCOME

Exclusively multi-family rental operated by non-profits or housing authorities. Needs subsidy for capital and operating costs. Construction subsidized through federal low-income tax credits, WA State Housing Trust Funds, other state and local programs. Operating costs subsidized by Section 8 Vouchers, other public resources or private foundations/organization.

- *Afford \$720/month; no owner-occupied homes.
14% of renter-occupied homes; 5% of all housing stock.*

Attachment B

Affordability Gap Example

On Fees in Lieu of Affordable Housing

The “affordability gap” method to setting a fee in lieu of affordable housing is to have the owner/developer pay the amount they see themselves “losing” if they provided the affordable units themselves. In the case of a rental housing project, the idea is to calculate the value of a negative income stream over time from the difference between market-rate and affordable rents.

The formula is not very complicated. The fee-in-lieu is derived by subtracting the maximum housing expense of an affordable unit, including utilities, from the market rent of an equivalent unit, and dividing the result by the current market capitalization rate. (See box.) The property owner’s long-term income loss is now converted to a current value in the same basic way that an investor would calculate how much he or she might pay for a rental property based on the property’s net operating income.

For “market rent,” the city can choose a survey average (from the American Community Survey or a survey research firm, such as Dupre+Scott Apartment Advisors) or another basis believed to represent the current market rate of new apartments in Shoreline. To the extent possible, the market rent and capitalization rate should each adhere to consistent sources year to year. Utility allowances come from the King County Housing Authority.

What is the “capitalization rate?”

The capitalization rate, or “cap rate,” is the rate of return on a real estate investment property based on the income that the property is expected to generate. The capitalization rate is used to estimate the investor's potential return on his or her investment.

The capitalization rate of an investment may be calculated by dividing the investment’s net operating income (NOI) by the current market value of the property, where NOI is the annual return on the property minus all operating costs. The formula for calculating the capitalization rate can be expressed in the following way:

$$\text{Capitalization Rate} = \text{Net Operating Income} / \text{Current Market Value}$$

Some consider the capitalization rate to be, in essence, the discount rate of a perpetuity, though the use of perpetuity in this case may be slightly misleading as it implies cash flows will be steady on an annual basis.

Direct capitalization is a method used for valuing a real estate investment that incorporates the capitalization rate. With this method, one can divide NOI by the cap rate in order to determine the investment’s capital cost.

<http://www.investopedia.com/terms/c/capitalizationrate.asp#ixzz4RAzkCLkL>

Here's an example taken from the accompanying spreadsheet: A studio unit has a market rent of \$1,580, and a 50 AMI affordable rent (less utility allowance) of \$682. The difference (affordability gap) between the two is \$898 per month. Dividing by the cap rate yields \$215,550, which would be the fee in lieu of an affordable studio apartment.

	Studio Apartment	
Monthly Rent, 100 AMI		\$1,580
Maximum Housing Expense, 50 AMI	\$790	
Utility Allowance	\$108	
Affordable Monthly Rent		\$682
Rent Loss per Unit per Month		\$898
Capitalized Value (5.0%)		\$215,550

Utilities are deducted from the affordable rent, and not the market rent, assuming that all tenants pay their own utility bills, and utility expenses must be included in the maximum monthly cost of affordable housing (i.e., 30% of household income).

Attachment C
Production Costs Example
On Fees in Lieu of Affordable Housing

The “production costs” method to setting a fee in lieu of affordable housing is to have the owner/developer pay the amount it would take someone to develop equivalent affordable housing off-site, less the income generated by the unit. The fee is calculated by subtracting the capitalized value of the net operating income per unit from the cost to produce a unit of affordable housing, including land and site development (see box in Attachment A).

The production cost can be derived either from a survey of recent affordable housing projects, where land prices are similar to those of Shoreline, or by a custom calculation using standardized sources for land, construction, and related costs. We estimate the net income by subtracting a utility allowance, vacancy and credit losses, and operating costs from the maximum affordable housing expense. Utility allowances come from the King County Housing Authority. Average vacancy and credit losses and operating costs can be obtained from survey research firms.

Here’s an example taken from the accompanying spreadsheet: A studio unit has a 50 AMI affordable housing expense of \$790. Deducting the utility allowance, vacancy and credit losses, and general operating expenses leaves net operating income of \$254 per month. Dividing the annual NOI of \$3,050 by the cap rate equals \$61,001. The difference between this and the production cost is the fee-in-lieu, equal to \$238,999.

	Affordable Unit (50 AMI)	
Cost to Produce One Unit		\$300,000
Maximum Housing Expense, 50 AMI	\$790	
Utility Allowance	\$108	
Vacancy & Credit Loss (2.3%)	\$25	
Operating Expense	\$403	
Net Operating Income (NOI)	\$254	
NOI per Year	\$3,050	
Capitalized Value (5.0%)		\$61,001
Fee-in-Lieu		\$238,999

CITY COUNCIL AGENDA ITEM
CITY OF SHORELINE, WASHINGTON

AGENDA TITLE:	Discussion of the Implementation of the Light Rail Station Subarea Plans		
DEPARTMENT:	Planning & Community Development		
PRESENTED BY:	Miranda Redinger, AICP, P&CD		
ACTION:	<input type="checkbox"/> Ordinance	<input type="checkbox"/> Resolution	<input type="checkbox"/> Motion
	<input checked="" type="checkbox"/> Discussion	<input type="checkbox"/> Public Hearing	

PROBLEM/ISSUE STATEMENT:

Council adopted the [185th Street Station Subarea Plan](#) “package”, which consisted of Ordinance Numbers [702](#), [706](#), and [707](#), on March 16, 2015. Council adopted the [145th Street Station Subarea Plan](#) “package”, which consisted of Ordinance Numbers [750](#), [751](#), [752](#), and [756](#), on September 26, 2016.

These actions:

- Legislatively rezoned “Phase 1” areas near each future Sound Transit light rail station, and designated zoning changes to take place in “Phase 2 and 3” areas in 2021 and 2033;
- Amended Development Code regulations to establish Mixed-Use Residential (MUR) zoning designations and other provisions related to station subareas; and
- Defined a Planned Action Boundary and requisite mitigations for projects within it.

These actions represented the conclusion of a multi-year planning process. However, in order to fully implement the policy recommendations contained in each subarea plan, additional work needed to be completed by all departments within the City. The Discussion section of this staff report outlines the projects that represented next steps in implementing the light rail station subarea plans.

RESOURCE/FINANCIAL IMPACT:

This discussion does not have any direct resource or financial implications. Implementation of individual projects will have resource and financial impacts, which will be discussed as each project comes before Council as part of its process.

RECOMMENDATION

This discussion is for information only. Council does not need to make any decisions or provide any specific direction. Council decision-making will take place in the context of individual project processes.

Approved By: City Manager *DT* City Attorney *MK*

BACKGROUND

Council adopted the [185th Street Station Subarea Plan](#) package, which consisted of Ordinance Numbers [702](#), [706](#), and [707](#), on March 16, 2015. Separate staff reports for each ordinance are available on the [meeting agenda page](#). Minutes are available [here](#).

Council adopted the [145th Street Station Subarea Plan](#) package, which consisted of Ordinance Numbers [750](#), [751](#), [752](#), and [756](#), on September 26, 2016. The [staff report](#) and [minutes](#) from that meeting are also available on the City's "[Live and Video Council Meetings](#)" page.

Background information for projects that implement the station subarea plans may be found in the Discussion section of this staff report.

DISCUSSION

Below is a summary of individual projects that fall under the umbrella of implementing light rail station subarea plans. For each project, the description includes the project manager, their title, and department; current status of the project; past or upcoming Council action; policies from the subarea plans that are implemented through the project; and a project summary.

TRANSPORTATION PROJECTS

145th Street Corridor Study Implementation

Project Manager: Don Ranger, Capital Projects Manager, Public Works

Status: On-Going

Council Action: Council will be briefed on the project in mid-2018.

Subarea Plan Policies Implemented by this Project:

- 145th Street Station Subarea Plan (145SSSP) Transportation Policy 13- Planning and implementation of improvements along NE 145th Street and intersecting streets should be consistent with the adopted 145th Corridor Study, including its guiding principles.
- 145SSSP Transportation Policy 14- Create a cross-corridor connection plan between the Interurban Trail (Aurora Avenue N) on the west and 15th Avenue NE on the east and the light rail station(s).
 - a. Analyze an east-west (Aurora Avenue N - 15th Avenue NE) non-motorized connection route utilizing N and NE 155th Street.
 - b. Include north-south connection recommendations such as 15th Avenue NE, 5th Avenue NE, and Meridian Avenue N.
 - c. Explore sub-route connections between the corridors for access to Shoreline Community College and Shoreline Place on the west and Briarcrest Neighborhood on the east as well as extended connections to the Burke-Gilman Trail.
 - d. Identify "marked" sub-route connections between these major routes and the 145th Street Station.
 - e. Incorporate the designation of these roads as alternative "non-motorized arterials."

- f. Identify needed bicycle and pedestrian improvements to these routes to reduce conflicts between motorized and non-motorized use.
- g. Encourage connectivity from development projects to the designated network.
- h. Use pavement color and signage to enhance way-finding and safety for pedestrians and bicyclists.
- 145SSSP Economic Development Policy 2- Identify priority nodes along 145th Street and others corridors in the subarea in which to target incentives for redevelopment that encourage catalyst projects and initial growth.

Project Summary:

Two capital projects are being advanced at this time. Both projects are funded through the design phase. The first project will upgrade the freeway interchange at 145th Street and Interstate 5. Anticipated improvements include a new northbound on-ramp, widening along the existing vehicular bridge, and the addition of a new non-motorized bridge to accommodate bikes and pedestrians. These changes are needed to safely and efficiently provide access to the future Sound Transit station nearby.

Another project will improve safety, mobility, and capacity along 145th Street between Aurora Avenue and Interstate 5. The project would build new sidewalks along the length of the roadway, removing the barriers that currently discourage or prevent pedestrian use. The project will also improve roadway capacity by adding dedicated left turn lanes at key intersections as well as adding a second turn lane from southbound Aurora Avenue onto 145th Street. Bike routes will generally be provided along parallel streets.

Additional project information on the 145th Street Corridor Study, which delineated project segments and a preferred design concept for the entire corridor, can be found on the City’s website at www.shorelinewa.gov/145corridor.

Additional information about the two segments that are currently moving forward into more detailed design and environmental review may be found at the project web pages: [I-5 Interchange Project](#) and [Aurora Avenue to I-5 Project](#).

185th Street Multimodal Corridor Strategy (MCS)

Project Manager: Nora Daley-Peng, AICP; Senior Transportation Planner, Public Works

Status: On-Going. Advertised RFQ deadline is July 31, 2017. Consultant selection is expected in August 2017.

Council Action: Council authorization of contract is anticipated in September 2017. Council will be briefed throughout the project. Council’s selection of a preferred concept is anticipated in March 2018.

Subarea Plan Policies Implemented by this Project:

- 185th Street Station Subarea Plan (185SSSP) Transportation Policy- Redevelop 185th Street/10th Avenue NE/NE 180th Street as the primary connection between Town Center, Aurora Avenue N, the light rail station, and North City for all travel modes. Create a corridor plan that:

- Includes analysis of all arterials and streets in the subarea to determine appropriate cross-sections for each classification, including sidewalks, amenity zones, and non-motorized facilities where appropriate.
- Includes generous bicycle and pedestrian facilities. Minimize conflicts between transit, vehicles and bicycles by designing bicycle facilities behind the curb.
- Identifies needed infrastructure to improve transit speed and reliability, such as queue jumps and transit signal priority.
- Includes intersection and roadway improvements needed to maintain the City's adopted transportation level of service.
- Results in a "boulevard" style street with tree canopy and amenity zones.
- Explores opportunities for undergrounding of overhead utilities.
- 185SSSP Transportation Policy- Incorporate recommendations of the 185th Street/10th Avenue NE/NE 180th Street corridor plan into the City's six year Capital Improvement Plan (CIP).
- 185SSSP Transportation Policy- Undertake additional analysis of potential impacts to NE 188th Street and Perkins Way and identify mitigations to calm traffic that will use these roads to access the station from the east, and provide additional safety features.
- 185SSSP Economic Development Policy- Identify priority nodes along 185th Street in which to target incentives for redevelopment that encourage catalyst projects and initial growth along this corridor.

Project Summary:

In 2015, the City adopted a subarea plan surrounding the 185th Street corridor that will transform the current, primarily single-family community to a denser, mixed-use community. Thus, the purpose of the 185th Street MCS is to create a master plan for the corridor to evaluate the needs for capacity, safety, access management, and accommodations for multiple travel modes (vehicles, buses, walking, cycling, and freight). The MCS will take into consideration the future location of the Sound Transit light rail station at NE 185th Street on the east side of Interstate 5 and the parking garage on the west side of Interstate 5, and the additional transportation demands created as a result, as well as new demands based on anticipated population growth from the rezoning.

Master Street Plan Update

Project Manager: Nora Daley-Peng, AICP; Senior Transportation Planner, Public Works

Status: Award of Administrative Selection Contract anticipated in summer 2017.

Council Action: On-Going. Council will be briefed throughout the project. Council adoption of the MSP Update and relocation to SMC Title 12 anticipated in December of 2018.

Subarea Plan Policies Implemented by this Project:

- 145SSSP Transportation Policy 5- Ensure that developments provide frontage improvements. Analyze viability of fee-in-lieu program for areas where the cross-section design has not been confirmed, in order to fund City-sponsored frontage improvements.

- 145SSSP Transportation Policy 6- Evaluate opportunities to incorporate best practices for complete street design concepts, including but not limited to grid patterns of short blocks, narrower lane widths, low impact development techniques, street trees, pedestrian-scale lighting, and intelligent transportation systems.
- 145SSSP Transportation Policy 7- Implement improvements along arterials to revitalize business, increase pedestrian and bicycle safety and usability, and add vehicle capacity where necessary.
- 145SSSP Transportation Policy 8- Analyze all street classifications in the subarea to determine appropriate cross-sections for each, including sidewalks, amenity zones, and non-motorized facilities where appropriate, and update the Engineering Development Manual Master Street Plan accordingly.
- 145SSSP Transportation Policy 9- An update of the Master Street Plan should:
 - a. Examine classifications of roadways to determine which should be improved to reduce congestion and which should be improved to include traffic-calming measures and discourage cut-through traffic.
 - b. Consider reclassifying arterials within the subarea to accommodate potential growth projections.

Project Summary:

The strong economy and interest in urban living near high capacity transit is spurring redevelopment activity in the future station areas. The City of Shoreline recognizes the existing Master Street Plan and development review processes need internal alignment and revision to enable the City to support coordinated and orderly station area redevelopment. The next step in subarea plan implementation is to conduct Station Subarea charrette series with a City staff team to develop the substantive basis for an update to the Master Street Plan (2011 TMP) that will implement Vision 2029 and Shoreline’s Complete Streets Ordinance.

Sidewalk Prioritization Project

Project Manager: Nora Daley-Peng, AICP; Senior Transportation Planner, Public Works

Status: On-Going. Sidewalk Advisory Committee kicked off on June 29, 2017.

Council Action: Sidewalk repair, maintenance funding discussion and possible adoption in December 2017. Council will be briefed throughout the project. Council's adoption of Sidewalk Prioritization Plan is expected in May 2018.

Subarea Plan Policies Implemented by this Project:

- 145SSSP Transportation Policy 1- Develop a multi-modal transportation network within the subarea through a combination of public and private infrastructure investments. Emphasize the creation of non-motorized transportation facilities and improvements that support greater transit reliability. The bicycle and pedestrian network should have robust connectivity with existing and proposed non-motorized corridors within the city and region. Elements that increase safety for all users, such as Crime Prevention through Environmental Design (CPTED), lighting, and crash countermeasures should be a top priority.
- 145SSSP Community Design Policy 6- Encourage the development of walkable communities by installation of a pedestrian friendly street grid and street design

that includes amenities such as curb, gutters, amenity zones, sidewalks, street landscaping, and trees.

Project Summary:

The Sidewalk Prioritization Plan will address how to prioritize and fund pedestrian needs for both repair of existing sidewalks and installation of new sidewalks or alternative pedestrian treatments.

For more information, visit the Sidewalk Prioritization Plan [project web page](#).

Trail Along the Rail

Project Manager: Nora Daley-Peng, AICP; Senior Transportation Planner, Public Works

Status: On-Going. Staff is currently finalizing the Feasibility Study Report. A Request of Qualifications (RFQ) for 30% Design and Environmental Review is expected in September 2017.

Council Action: Council authorization of 30% Design contract is anticipated in fall 2017.

Subarea Plan Policies Implemented by this Project:

- 145SSSP Policy 10- Develop a multi-use, non-motorized trail in the light rail line alignment, along the east side of Interstate-5, connecting the two stations at NE 185th and 145th Streets.

Project Summary:

Development of light rail through Shoreline presents a unique and rare opportunity. The City is looking at the feasibility of building an approximately 14 foot-wide shared-use trail running roughly parallel to the light rail alignment from NE 145th Street to NE 195th Street. It would enhance pedestrian and cyclist access to the planned NE 145th Street and NE 185th Street light rail stations, as well as connect to the NE 195th Street pedestrian bridge over I-5. In addition, the trail could connect to parks, open spaces, and schools within the neighborhoods adjacent to the light rail alignment.

For more information, visit the Trail Along the Rail [project web page](#).

148th Street Non-Motorized Bridge

Project Manager: Nora Daley-Peng, AICP; Senior Transportation Planner, Public Works

Status: On-Going. Staff is currently finalizing the Feasibility Study Report. A Request for Qualifications (RFQ) for 30% Design and Environmental Review is expected in fall 2017.

Council Action: Council authorization of 30% Design contract is anticipated in fall 2017.

Subarea Plan Policies Implemented by this Project:

- 145SSSP Transportation Policy 15- Explore joint funding of a non-motorized bridge crossing at NE 147th or 148th Street with City partners to include King County, the Washington State Department of Transportation, and Sound Transit.

Project Summary:

The feasibility study analyzed options for additional pedestrian/bicycle bridge connections over Interstate 5 to the future 145th Street Light Rail Station based on a planning-level assessment of constructability, cost, watershed impacts, and projected increase of pedestrian/bicycle commuters to 145th Street Station. In February 2017, Council selected the 148th Street Bridge option as the preferred alternative to develop to 30% design.

SURFACE WATER PROJECTS

Master Plan Update

Project Manager: Uki Dele, Surface Water and Environmental Services Manager, Public Works

Status: On-Going

Council Action: Study Session on 2017 Update of the Surface Water Master Plan took place on July 17, 2017; Council dates for individual project components are listed under *Project Summary* below.

Subarea Plan Policies Implemented by this Project:

- 145SSSP Land Use Policy 4- Continue planning to determine the specific requirements for meeting future demands on utilities, infrastructure, parks, and schools. Cost estimates will be an important component of this planning. In addition, funding sources will need to be identified.
- 145SSSP Utility Policy 2- Implement Low Impact Development (LID) retrofits, where feasible, within public right-of-way as streets are improved by private development and City and utility capital improvement projects.
- 145SSSP Utility Policy 3- Explore sub-basin approach to storm-water management to reduce costs and incentivize redevelopment.

Project Summary:

The purpose of the 2017 Surface Water Master Plan Update is to address drainage and water quality challenges associated with growth, increasing regulations, and aging infrastructure. The Master Plan will guide the Surface Water Utility (Utility) for the next five to 10 years including recommendations for capital improvements, programs, and a financial plan for long-term asset management.

The 2017 Master Plan includes elements to ensure a comprehensive plan that addresses current and future anticipated needs including establishing Levels of Service and a mechanism for prioritizing existing and future projects and programs to meet the Levels of Service and provide information for the financial analysis and associated rates to support the Utility.

Feedback received from Council on the prioritization process and management strategy will be used in refining the projects and programs to be recommended and presented to Council at the August 7, 2017 meeting.

Upon receiving direction from Council on the Project and Programs to be incorporated in the 2017 Master Plan, the rates and financial impacts of the recommended

management strategy will be further analyzed and a financial plan is scheduled for presentation to Council in October 2017.

The Draft 2017 Master Plan Document is scheduled for presentation for approval to Council in November 2017.

COMMUNITY SERVICES PROJECTS

Affordable Housing Program

Project Manager: Rob Beem, Community Services Manager, Community Services Division

Status: On-Going

Council Action: Council Study Session on July 24, 2017; additional discussion or decision-making on September 18, 2017.

Subarea Plan Policies Implemented by this Project:

- 145SSSP Housing Policy 1- Develop and fund the systems necessary to implement and administer the City's affordable housing program.
- 145SSSP Housing Policy 2- Develop a fee schedule or formula in SMC Title 3 to set the fee-in-lieu value for mandatory affordable housing, including ongoing maintenance and operation costs.

Project Summary:

Adoption of the 185th and 145th Street Station Subarea Plans included mandates for affordable housing in Mixed-Use Residential-45' and -70' zones as defined in SMC 20.40.235.

At the time of adoption it was envisioned that the City would ultimately establish the necessary administrative framework to implement these inclusionary housing provisions. This includes the process for a developer to go through during permit review and the internal process and procedures to monitor and ensure that units continue to meet affordability requirements in future years. The code anticipates that the City would examine the feasibility of setting up a fee-in-lieu option, which would allow a developer to meet its affordable housing commitments by paying a fee as well as establishing the framework for a Housing Trust Fund to receive such payments.

See the staff report on tonight's agenda, study item 8a, for more information.

PARKS PROJECTS

PROS Plan Update and Park Impact Fee

Project Manager: Eric Friedli, Director; Parks, Recreation, and Cultural Services (PRCS)

Status: On-going

Council Action: See Council dates for individual project components under *Project Summary* below.

Subarea Plan Policies Implemented by this Project:

- 185SSSP Parks, Recreation, and Open Space Policy- Investigate potential funding and master planning efforts to reconfigure and consolidate existing City

facilities at or adjacent to the Shoreline Center. Analyze potential sites and community needs, and opportunities to enhance existing partnerships, for a new aquatic and community center facility to combine the Shoreline Pool and Spartan Recreation Center services.

- 145SSSP Parks, Recreation, and Open Space Policy 1- Acquire property to increase available land for park and recreation use.
- 145SSSP Parks, Recreation, and Open Space Policy 2- Develop a park impact fee and/or dedication program for acquisition and maintenance of new parks or open spaces.
- 145SSSP Parks, Recreation, and Open Space Policy 4- Mitigate impacts of increased activity in existing parks and open spaces by creating a major maintenance/capital investment funding program.
- 145SSSP Parks, Recreation, and Open Space Policy 5- Through Parks Master Planning processes, determine specific needs for spaces, facilities, and programs to accommodate anticipated growth, taking into consideration demographic projections.
- 145SSSP Parks, Recreation, and Open Space Policy 6- Establish additional park space with active recreation near areas of denser development, outside of wetlands and other critical areas.
- 145SSSP Parks, Recreation, and Open Space Policy 7- Consider purchasing parcels with critical areas and their buffers to increase open space, prioritizing areas around Paramount Open Space and Twin Ponds Park.
- 145SSSP Natural Environment Policy 1- Prioritize acquisition of sites that are ill-suited for redevelopment due to high water table or other site-specific challenge for new environmental or storm-water function.

Project Summary:

Over the course of the past 18 months the PRCS has been updating the City's Parks, Recreation and Open Space Plan (PROS Plan). A key component of the development of the PROS Plan was the development of a Light Rail Stations Subarea Parks and Open Space Plan that, along with the Park Impact Fee proposal presented to the City Council on July 17, 2017, encompasses the actions anticipated by the subarea plans.

Through the PROS Plan process an Aquatics/Community Center Feasibility Study was completed and presented to the City Council on December 12, 2016 and April 17, 2017. A proposal for a new facility is included in the PROS Plan.

Proposed Ordinance 784, presented to the City Council on July 17, 2017, would adopt Park Impact Fees.

The Light Rail Stations Subarea Parks and Open Space Plan, presented to the City Council on October 19, 2016 and March 6, 2017, identifies expected population growth and identifies targets for acquiring new parkland and adding park amenities needed to keep up with that growth. It identifies high growth areas and areas adjacent to exiting parks as priorities for acquisition. The results of the Light Rail Stations Subarea Parks and Open Space Plan have been incorporated into the PROS Plan that was presented to the City Council on June 12 and July 17, 2017 and is expected to be adopted on July 31.

CITY MANAGER’S OFFICE PROJECTS

Solarize Campaign

Project Manager: Eric Bratton, Communications Program Manager, City Manager’s Office

Status: Complete

Council Action: On September 14, 2015, Council identified a Solarize Campaign as a 2016-2019 Priority Recommendation to implement the Climate Action Plan. The program was completed in December 2016.

Subarea Plan Policies Implemented by this Project:

- 145SSSP Utility Policy 1- Pursue Solarization program, community solar, or other innovative ways to partner with local businesses and organizations to promote installation of photovoltaic systems.

Project Summary:

Solarize Shoreline was an education and group purchase campaign for residential and small commercial solar photovoltaics. The project was a partnership between the City of Shoreline, Northwest SEED, a community selected solar installer (Northwest Electric & Solar), Shoreline Solar Project, Shoreline Community College, and community volunteers. The program was held April 2016-January 2017, with active registration and workshops June-September 2016.

Below are results from the program:

Total Installations	Total kW installed	Estimated annual kWh production	Lbs. Carbon Avoided	Total investment	Total Educated	Volunteers Engaged
16	117	117,100	114,758	\$394,000	203	11

Lessons Learned:

- Shade is a problem for many. In follow-up survey responses, shade was the primary reason that participants did not install solar. The installer confirmed that many interested participants were ruled out due to shading. This reality points to a need for community solar in Shoreline to allow residents with too much shade to participate in a solar investment. Another option is to concentrate new programs on commercial clients that tend to have less shade.
- Economic factors are also a big issue. Both “uncertain incentives” and “prices too high” were cited by participants, and anecdotal evidence from the installer and Northwest SEED interactions also suggests this. A better incentive program and/or lower prices to bring payback under 10 years would considerably help those who do have sun to participate. In general, a lower total price is the most important factor because it reduces the upfront cost, while customers receive higher incentives over several years. However, Shoreline has already taken most or all feasible steps to reduce costs, so engaging on incentives may be the only actionable pathway. The fourth workshop helped us reach goals. Based on

community interest and support from the installer partner and Shoreline Solar Project, the project partners added another workshop in September. The workshop ultimately allowed us to reach our goal to educate 200 people, and 4 additional contracts came from this workshop.

- Explore other technologies. “More technology options” was a top response to improve the Solarize program, and respondents also mentioned efficiency technologies, solar hot water, and electric vehicles in comments.

Sound Transit Design Review, Special Use Permit, and Public Involvement

Project Manager: Juniper Nammi, AICP; Sound Transit Project Manager, City Manager’s Office

Status: On-going

Council Action: On June 19, Council was updated on the 60% Lynnwood Link Extension project design and Mayor Roberts sent a letter on behalf of Council to Sound Transit on June 26 commenting on the design consistency with the City’s adopted Guiding Principles for Light Rail Facility Design.

Subarea Plan Policies Implemented by this Project:

- 145SSSP Community Design Policy 1- Support Sound Transit’s community involvement process during the design phase for stations and other light rail facilities.

Project Summary:

City review of the Sound Transit Lynnwood Link Extension project is ongoing. The Special Use Permit (SUP) application, submitted May 17, 2017, was determined to be incomplete on June 13, 2017 and the City is waiting for additional submittal items to start review of the application and the 21 day public comment period. Sound Transit is currently reviewing the project for cost reduction opportunities while still advancing the project towards 90% design (anticipated in fall of 2017). The next project update to Council will follow the 90% Design Open House, which is the last of three public design review opportunities for the project.

For more information on materials presented at Sound Transit’s May 24, 2017 60% Design Workshop, visit their [web page](#).

PLANNING PROJECTS

Transfer of Development Rights (TDR) and Landscape Conservation and Local Infrastructure Program (LCLIP)

Project Manager: Steve Szafran, AICP; Senior Planner, Planning & Community Development

Status: Upcoming

Council Action: Council Study Session scheduled for October 30, 2017

Subarea Plan Policies Implemented by this Project:

- 145SSSP Transportation Policy 12- Identify opportunities to maximize use of outside sources to fund or finance infrastructure projects throughout the subarea including federal, state, and local grant agencies, private investments and the Landscape Conservation and Local Infrastructure Program (LCLIP).

Project Summary:

The City of Shoreline received a grant from the Washington State Department of Ecology to study the feasibility of implementing a Landscape Conservation and Local Infrastructure Program (LCLIP).

LCLIP is a form of tax increment financing enacted in 2011. The program offers cities access to tax increment financing in return for their acceptance of development rights transferred from regional farms and forests. These transfers are typically conducted as private real estate transactions, but can also be conducted by cities.

In exchange for the placement of development rights in LCLIP districts, the jurisdictional county agrees to contribute a portion of its regular property tax to the sponsoring city for use for a defined period (25 years). Cities may use this revenue to fund infrastructure improvements that support infill growth and redevelopment.

On July 20, 2015, City planning staff, King County, ECONorthwest, and Forterra presented the findings of a Shoreline LCLIP Feasibility Study. For more information, read the [staff report](#) from that meeting.

The Council had a number of questions after the presentations. Each of the Councilmembers wanted to continue to study the feasibility of implementing an LCLIP program. Most of the questions that the Councilmembers asked had to do with risk, benefits to the City, and how the program could affect property tax. Staff is in the process of evaluating questions proposed by Council and determining if the LCLIP program will be beneficial to the City.

Deep Green Incentive Program (DGIP)

Project Manager: Miranda Redinger, AICP; Senior Planner, Planning & Community Development

Status: Complete

Council Action: On September 14, 2015, Council identified adoption of Living Building Challenge and Petal Recognition program as a 2016-2019 Priority Recommendation to implement the Climate Action Plan. The DGIP was adopted through Ordinance No. 760 on April 17, 2017.

Subarea Plan Policies Implemented by this Project:

- 145SSSP Land Use Policy 3: Promote more environmentally-friendly building practices. Options for doing so may include:
 - a. Adoption of International Green Construction Code
 - b. Encouraging the development of highly energy efficient buildings that produce or capture all energy and/or water used on-site (Net Zero).
 - c. Partner with the International Living Future Institute to adopt Living Building Challenge Ordinance and/or Petal Recognition Program.
- 145SSSP Utilities Policy 6- Encourage innovative technologies to make buildings as efficient as possible with regard to energy and water use.

Project Summary:

This incentive program rewards development projects that achieve the most stringent standards for green building certification available through the International Living

Future Institute, Built Green, or the U.S. Green Building Council. A detailed history of the project is available in the March 27, 2017 Council staff report: <http://cosweb.ci.shoreline.wa.us/uploads/attachments/cck/council/staffreports/2017/staffreport032717-9b.pdf>. A hand-out describing the program, which includes the regulations adopted by Council in April, is available at the following link: <http://cityofshoreline.com/Home/ShowDocument?id=31411>.

District Energy Feasibility Study

Project Manager: Miranda Redinger, AICP; Senior Planner, Planning & Community Development

Status: On-going

Council Action: On September 14, 2015, Council identified a feasibility study for District Energy as a 2016-2019 Priority Recommendation to implement the Climate Action Plan. Study Session will be held on July 24, 2017; next steps will be discussed later in 2017.

Subarea Plan Policies Implemented by this Project:

- 145SSSP Economic Development Policy 4- Consider incentive program for new buildings to incorporate District Energy and Combined Heat and Power systems and other innovative energy saving solutions.

Project Summary:

This project expands upon a white paper, authored by Puttman Infrastructure, which was a product of the 145th Street Station Subarea Plan. The white paper is available as Attachment C to the September 14, 2015 Council staff report:

<http://cosweb.ci.shoreline.wa.us/uploads/attachments/cck/council/staffreports/2015/staffreport091415-9b.pdf>. Council received additional information about District Energy at their February 1, 2016 meeting, as agenda item 8a. The video is available at the following link: http://shoreline.granicus.com/MediaPlayer.php?view_id=4&clip_id=668.

District Energy (DE) refers to the central provision of heating and/or cooling services within a defined service area. Electricity is sometimes also produced as part of a combined heat and power (CHP) system. The study will examine the feasibility of DE and CHP systems in areas of Shoreline that are most likely to redevelop in the foreseeable future. The study will focus on the 185th Street Station Subarea, but findings could apply to the 145th Street Station Subarea, the Community Renewal Area at Shoreline Place, and Town Center.

See the staff report and attachment for tonight's agenda, study item 8c, for more information.

STAKEHOLDER OUTREACH

Individual projects will have their own public involvement plans and processes.

COUNCIL GOAL ADDRESSED

This item addresses Council Goal 3: Continue preparation for regional mass transit in Shoreline.

RESOURCE/FINANCIAL IMPACT

This discussion does not have any direct resource or financial implications. Implementation of individual projects will have resource and financial impacts, which will be discussed as each project comes before Council as part of its process.

RECOMMENDATION

This discussion is for information only. Council does not need to make any decisions or provide any specific direction. Council decision-making will take place in the context of individual project processes.

Transportation Division Master Schedule
20170724 Staff Report- Attachment A

Plan Task	Project Manager	Project Support	Year 2017												Year 2018											
			Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Master Street Plan Update	NDP	MR, KD, CL																								
Sidewalk Prioritization	NDP	KD, CL																								
185th Street Multimodal Corridor Strategy	NDP	MR, CL, KD																								
Park and Ride Study and Transit Assessment*	NS	CL, KD																								
Woonerf																										
Multi-modal LOS	KD	NDP																								
Complete TMP Document Update	NS	NDP, KD, CL																								

LEGEND

- Work Task (Grey box)
- CMO/ Council Check-in (Blue box)
- Stakeholder Meeting (Purple box)
- Open House/ Public Meeting (Green box)

CITY COUNCIL AGENDA ITEM
CITY OF SHORELINE, WASHINGTON

AGENDA TITLE:	Discussion of the District Energy Feasibility Study		
DEPARTMENT:	Planning & Community Development		
PRESENTED BY:	Miranda Redinger, AICP; Senior Planner, P&CD		
ACTION:	<input type="checkbox"/> Ordinance	<input type="checkbox"/> Resolution	<input type="checkbox"/> Motion
	<input checked="" type="checkbox"/> Discussion	<input type="checkbox"/> Public Hearing	

PROBLEM/ISSUE STATEMENT:

District Energy (DE) refers to the central provision of heating and/or cooling services within a defined service area. Electricity is sometimes also produced as part of a Combined Heat and Power (CHP) system. The draft District Energy Feasibility Study, Attachment A, examines the feasibility of DE and CHP systems in areas of Shoreline that are most likely to redevelop in the foreseeable future. The study will focus on the 185th Street Station Subarea, but findings could apply to the 145th Street Station Subarea, the Community Renewal Area at Shoreline Place, and Town Center.

RESOURCE/FINANCIAL IMPACT:

This discussion does not have financial implications. Should Council decide to move forward with strategies to implement District Energy or Combined Heat and Power systems in Shoreline, there would be resource and financial impacts. These will be further articulated in the next draft of the feasibility study.

RECOMMENDATION

Staff recommends that Council review the draft District Energy Feasibility Study and provide direction about whether and how to move forward. If there is direction to proceed, staff will return for additional discussion and Council authorization as appropriate.

Approved By: City Manager *DT* City Attorney *MK*

BACKGROUND

Since the 2008 adoption of the City's [Environmental Sustainability Strategy](#), Shoreline has positioned itself to be a regional and national leader on how local governments can work to reduce the potential severity of climate change. Other City initiatives that have focused on environmental sustainability and climate action include:

- Analysis of City and Community Carbon Footprints ([2009](#) and [2012](#));
- Launching of the [forevergreen](#) indicator tracking website (2012);
- Adoption of the [Climate Action Plan](#) (2013);
- Adoption of [King County-City Climate Collaboration \(K4C\) Joint Letter of Commitments](#) (2014);
- Development of [Carbon Wedge Analysis](#) and Strategies (2015);
- Completion of significant capital projects with a variety of climate and other benefits, such as the construction of a LEED Gold certified City Hall (2010) and the Aurora Avenue Corridor project (completed in 2016);
- Promoting transit-oriented development and multi-modal transportation systems through subarea planning for light rail stations opening in 2023 (2013-2016); and
- Adoption of a [Deep Green Incentive Program](#) to encourage development of green buildings that meet the most stringent certification standards available (2017).

The draft District Energy Feasibility Study (Attachment A) expands upon a white paper, authored by Puttman Infrastructure, which was a product of the 145th Street Station Subarea Plan. The white paper is available as Attachment C to the September 14, 2015 Council staff report, where Council designated a District Energy Feasibility Study as a 2016-2019 Priority Recommendation to implement the Climate Action Plan (CAP). The staff report and attachment can be found at the following link:

<http://cosweb.ci.shoreline.wa.us/uploads/attachments/cck/council/staffreports/2015/staffreport091415-9b.pdf>.

Council also received additional information about District Energy at their February 1, 2016 meeting. The staff report for this discussion can be found at the following link:

<http://cosweb.ci.shoreline.wa.us/uploads/attachments/cck/council/staffreports/2016/staffreport020116-8a.pdf>.

DISCUSSION

Originally, the scope of the District Energy Feasibility Study was to focus on the technical, financial, and regulatory viability of implementing District Energy to serve the 185th Street Station Subarea. In addition, the original scope included development of a detailed implementation strategy (i.e. 3-5 year action plan), if Council decided to pursue this option, to ensure DE development aligned well with 185th Street Station Subarea (185SSS) development.

Tasks to analyze feasibility included:

- 1) Identifying potential district-scale infrastructure systems that generate benefits not achievable through conventional building-centric development;
- 2) Testing financial performance to ensure commercial viability;

- 3) Assessing the most appropriate development model – public, private, or public private partnership – in which to finance, build, and operate each system; and
- 4) Making clear recommendations as to which district infrastructure systems the City of Shoreline should implement for the 185th Street Station Subarea.

Initial assessment of DE for the 185SSS found positive environmental, economic, and social benefits including:

- Energy and Carbon Savings – DE could generate significant energy and carbon savings, up to 12% and 93% respectively.
- Cost Effectiveness – DE could be 46% more cost effective from a life-cycle perspective than building-scale systems.
- Reduced Private Development Cost – DE could reduce private development costs by eliminating capital investments in building-scale heating equipment. It would also likely yield significant positive investment return.
- Brand and Market Differentiation – DE has the potential to generate marketing “buzz” and market differentiation that could prove valuable for supporting local Economic Development initiatives.

The assessment also revealed that financial viability of DE is very sensitive to development build-out and growth rate (i.e., the faster and denser the subarea develops, the better the investment return for DE). Therefore, early in the analysis, it also became clear that because planned development within the subarea would likely take place over a 100-year period, a standard assessment of commercial viability for a DE system that may not be implemented for another 20-30 years was not the most useful path. Since the City’s primary interest in understanding the potential role of DE was achievement of CAP goals, a subarea-specific climate action strategy was needed.

The draft District Energy Feasibility Study in Attachment A has been amended to describe how new building energy efficiency, existing building energy efficiency, providing alternatives to natural gas heating, and increased reliance on renewable energy (solar, biomass, and geothermal) would facilitate future feasibility of DE strategies and GHG reductions.

Specifically, five actions are described to facilitate future viability of DE:

1. No Use of Combustion or Natural Gas Heating in New Buildings
2. Increased Energy Efficiency in New Buildings
3. Retrofit Existing Buildings for Greater Energy Efficiency and to Fuel-Switch from Combustion/Natural Gas Heating
4. Utilize Onsite Renewable Energy
5. Develop District Energy and Combined Heat and Power Systems

If these conditions are met, the assessment found that innovative district-scale infrastructure systems that leverage planned growth and existing City infrastructure assets demonstrate tremendous potential to reduce energy consumption and greenhouse gas emissions. This would significantly contribute to Shoreline meeting the emission reduction targets adopted through the CAP. A District Energy system would also generate significant economic benefit to Shoreline residents and businesses.

Please note that the Draft Feasibility Study in Attachment A is formatted for content review and does not include graphs and other illustrations that will be included in the final report. Graphs and illustrations will be included in the Council presentation.

STAKEHOLDER OUTREACH

A Speaker's Series event will be dedicated to this topic on Tuesday, July 25 from 7:00-9:00 pm in the Council Chambers at City Hall.

COUNCIL GOAL ADDRESSED

This agenda item addresses Council Goal #2: Improve Shoreline's infrastructure to continue the delivery of highly-valued public services, and most specifically:

- Action Step #5- Implement the 2016-2019 Priority Environmental Strategies, including adoption of incentives for environmentally sustainable buildings, exploration of district energy, update of the City's "forevergreen" website, and continued focus on effective storm-water management practices including restoration of salmon habitat.

RESOURCE/FINANCIAL IMPACT

This discussion does not have financial implications. Should Council decide to move forward with strategies to implement District Energy or Combined Heat and Power systems in Shoreline, there would be resource and financial impacts. These will be further articulated in the next draft of the feasibility study.

RECOMMENDATION

Staff recommends that Council review the draft District Energy Feasibility Study and provide direction about whether and how to move forward. If there is direction to proceed, staff will return for additional discussion and Council authorization as appropriate.

ATTACHMENTS

Attachment A: District Energy Feasibility Study

**CITY OF SHORELINE
DRAFT DISTRICT ENERGY FEASIBILITY STUDY
July 24, 2017**

ONE GOAL – FIVE ACTIONS – THIRTY YEARS

Statement of Findings:

Innovative district-scale infrastructure systems that leverage planned growth and existing City infrastructure assets demonstrate tremendous potential to reduce energy consumption and Greenhouse Gas (GHG) emissions. This would significantly contribute to Shoreline meeting the emission reduction targets adopted through the 2013 Climate Action Plan (CAP). A District Energy (DE) system would also generate significant economic benefit to Shoreline residents and businesses.

However, conditions to support District Energy do not currently exist within the 185th Street Station Subarea (185SSS). The following series of actions would contribute to making District Energy and/or Combined Heat and Power (CHP) systems feasible in the future:

1. No Use of Combustion or Natural Gas Heating in New Buildings
2. Increased Energy Efficiency in New Buildings
3. Retrofit Existing Buildings for Greater Energy Efficiency and to Fuel-Switch from Combustion/Natural Gas Heating
4. Utilize Onsite Renewable Energy
5. Develop District Energy and Combined Heat and Power Systems

The following report summarizes why these five key actions would allow Shoreline to meet CAP commitments to achieve GHG emission reduction targets of 25% by 2020, 50% by 2030, and 80% by 2050, compared to 2007 levels.

INTRODUCTION

What are District Energy and Combined Heat and Power Systems?

District Energy systems utilize a Central Utility Plant (CUP) to generate heating and/or cooling service distributed to multiple buildings, replacing the need for individual building-scale heating and/or cooling systems. DE is viewed as a cost effective approach to reducing energy use and GHG emissions.

Combined Heat and Power, or cogeneration, is the use of a heat engine or power station to generate electricity and useful heat at the same time.

Why District Infrastructure?

Much infrastructure development of the past century focused on large, centralized, single purpose systems. These systems were highly effective for promoting economic

development, public health, and environmental quality in rapidly growing urban areas. And these systems will continue to play an important role in cities. However, aging infrastructure, the densification and expansion of cities, new fiscal constraints, new technologies, and changing societal values are calling for an expanded toolkit to optimize infrastructure and meet sustainability objectives. Not as a replacement of centralized systems, but as an alternative or complementary strategy to address new challenges and seize new opportunities.

Sustainability demands creative and flexible solutions that are sensitive to local context and that produce real improvements in service quality and resource efficiency. In recent years, the focus has been on building-scale alternatives to centralized infrastructure – high efficiency to net-zero green building – but buildings may not always be the most appropriate or cost-effective scale to promote sustainability. District infrastructure systems—neighborhood-scale utilities that provide services such as heating, cooling, electricity, and recycled water—are emerging as a key strategy for cities that are pursuing aggressive sustainability goals.

Evolving Scope of Feasibility Study

Originally, the scope of this assessment was to focus on the technical, financial, and regulatory viability of implementing District Energy to serve the 185th Street Station Subarea. In addition, the original scope included development of a detailed implementation strategy (i.e. 3-5 year action plan), if Council decided to pursue this option, to ensure DE development aligned well with 185SSS development.

Tasks to analyze feasibility included:

- 1) Identifying potential district-scale infrastructure systems that generate benefits not achievable through conventional building-centric development;
- 2) Testing financial performance to ensure commercial viability;
- 3) Assessing the most appropriate development model – public, private, or public private partnership – in which to finance, build, and operate each system; and
- 4) Making clear recommendations as to which district infrastructure systems the City of Shoreline should implement for the 185th Street Station Subarea.

Initial assessment of DE for the 185SSS found positive environmental, economic, and social benefits including:

- Energy and Carbon Savings – DE could generate significant energy and carbon savings, up to 12% and 93% respectively.
- Cost Effectiveness – DE could be 46% more cost effective from a life-cycle perspective than building-scale systems.
- Reduced Private Development Cost – DE could reduce private development costs by eliminating capital investments in building-scale heating equipment. It would also likely yield significant positive investment return.
- Brand and Market Differentiation – DE has the potential to generate marketing “buzz” and market differentiation that could prove valuable for supporting local Economic Development initiatives.

The assessment revealed that financial viability of DE is very sensitive to development build-out and growth rate (i.e., the faster and denser the subarea develops, the better the investment return for DE). Therefore, early in the analysis, it also became clear that because planned development within the subarea would likely take place over a 100-year period, a standard assessment of commercial viability for a DE system that may not be implemented for another 20-30 years was not the most useful path. Since the City's primary interest in understanding the potential role of DE was achievement of CAP goals, a subarea specific climate action strategy was needed.

This report has been amended to describe how new building energy efficiency, existing building energy efficiency, providing alternatives to natural gas heating, and increased reliance on renewable energy (solar, biomass, and geothermal) would facilitate future feasibility of DE strategies and GHG reductions.

DISTRICT ENERGY "101"

Overview

Buildings are part of a community, and resource sharing is a common practice in communities, from sharing public spaces to water to electricity grids. Cities and building owners will be compelled to look to district-level solutions to meet their clean energy needs, and to meet their needs around other resource and infrastructure issues such as sustainable storm-water management and waste water recycling. The aggregation of energy demand and the customer service model established for DE can serve as the foundation for these other "eco-district" services and infrastructure projects.

About District Energy

District Energy is a very old concept used as far back as Ancient Rome. DE helped the initial development of the electric power industry by enhancing the economics of new power plants by generating additional revenue from waste heat recovery. Today, more than 50% of all building stock in countries of Northern Europe are connected to district systems. In Stockholm, Sweden, for instance, the entire city of more than 800,000 people is served by two systems. As they incrementally expanded to serve more people, these systems added new sources of energy. With such systems, technologies tend to evolve on a regular basis, approximately every 15 to 20 years.

Based on 2005 information from the International District Energy Association (IDEA), the U.S. and Canada had about 650 district systems in operation, though a number of systems have begun operations since then. Of this number, more than 75 percent serve either university or hospital campuses, while the remainder serve portions of downtown urban areas. These DE systems provide energy to about 10 percent of non-residential spaces in the U.S.

District Energy Components

- **Central Energy Plant** – One or more energy-producing plants provide all of the heating and/or cooling energy required by customers within the defined service area. A single, central plant offers significant economies of scale compared to individual systems within every building, and simplifies system design and operation. However, several plants may be better in certain circumstances, notably where development is slow and/or dispersed, or where different energy sources are being integrated in different locations.
- **Distribution Piping System (DPS)** – Hot and cold water are distributed to individual customers via underground pipes (one supply and one return pipe each for heating and for cooling). While older district heating systems distributed energy in the form of steam, newer systems almost all use hot water distribution. Systems often grow out of central distribution line, with smaller loops that link buildings together.
- **Energy Transfer Station (ETS)** – Individual buildings are served via energy transfer stations (ETS) consisting of heat exchangers and meters, eliminating the need for on-site boilers in the case of district heating and chillers, or cooling towers in the case of district cooling. Within buildings, thermal energy must be provided to individual spaces by hydronic HVAC systems, which could include fan coils, hydronic baseboards, or in-floor radiant systems.

In order to deliver DE services, some form of utility service provider (e.g., a local government or a privately-owned utility), assumes responsibility for capital investments (i.e., construction), secures (i.e., generates or captures), and delivers energy that meets the end users' needs, and ultimately charges building owners for use of the system. A utility is simply an entity that plans, invests in, and operates the infrastructure required to deliver services and recover costs, both capital and ongoing operating costs, whether through user rates or other funding mechanisms.

Benefits of District Energy

District Energy systems have the potential to generate numerous benefits to the City of Shoreline as well as the owners and tenants of the buildings connected to the system. Making sure that energy consumers and building owners understand the ways that DE directly benefits them is critical. Of course many of these benefits overlap with those of communities—what's good for owners is good for communities, and vice versa. Nevertheless, in order to engage the participation of owners and tenants, cities need to analyze and articulate how DE could benefit the community as well as building owners and tenants through key metrics like energy efficiency, cost savings, and risk management over the long term.

Community Benefits Include:

- **Increased Energy Efficiency and Reduced GHG Emissions**
District Energy systems can produce significant energy savings – up to 20 to 30 percent - compared to stand alone building systems due to load diversification, equipment “right-sizing” and operational efficiency. Enhanced efficiency reduces energy-related GHG emissions while also providing the opportunity for greater emissions reductions by shifting to cleaner energy sources over time.
- **Improved Resiliency and Risk Mitigation**
District Energy systems increase community resiliency by providing distributed energy solutions that reduce risk in terms of future energy and environmental policy, carbon costs, fuel availability, and cost variability, and the future effects of climate change.
- **Partnership and Investment Opportunity**
As a commercially viability investment, DE provides cities the opportunity to partner with the private sector to begin non-tax based investments into the city to realize both policy and development objectives.

Building Benefits Include:

- **Reduced Energy Costs and Cost Stability**
The bottom line for any building owner is cost. Long-term net cost savings are a key selling point of DE systems. District Energy delivers lower cost energy through improved efficiency, load diversification, and economies of scale. Also due to the long-term aggregate nature of demand, a DE system operator can negotiate long-term fuel contracts, which facilitates greater energy price stability for consumers.
- **Increased Cost Effectiveness**
District Energy enables incentives and financing that would not otherwise be available. District Energy systems can attract sources of financing, such as municipal bonds or community energy grants, which are not available to individual owners. The cost efficiencies gained with a DE utility can in some cases create enough of a revenue premium for cities to offer incentives to owners of existing buildings for installing systems compatible with DE and connecting to the system. This in turn can enable owners to take into consideration the full spectrum of options for replacement of heating and cooling equipment without having to support a first cost premium.
- **Enhanced Energy Efficiency and Greener Energy**
Buyers and renters are becoming more and more aware of the energy performance of existing buildings, which makes energy efficiency a source of either opportunity or risk for owners, depending on how well their buildings compete. Cities are now adopting new policy initiatives around energy performance ratings and disclosure to accelerate the degree to which market forces will distinguish efficient buildings from those that use too much energy. Some cities, like Seattle and Vancouver, B.C., are already moving beyond disclosure policies toward regulations that will

require buildings to meet aggressive post-retrofit energy targets in return for flexibility to innovate in how they achieve such targets, including use of on-site renewable generation equipment and/or low-carbon DE sources. District Energy offers an essential opportunity to owners in this emerging policy environment.

- **Reduced Building Operations & Maintenance Responsibility and Cost**

With DE, building owners receive reliable and predictable energy service from professional system operators. This means fewer worries for building management staff, in terms of fuel price uncertainty and system maintenance, upgrade, and repair, compared to on-site systems.

- **Future Technology Benefits**

District Energy allows cities and building owners to “fuel switch” over time to take advantage of new clean energy technology options and access capital financing for these fuel/technology upgrades.

Challenges to Implementing District Energy

There are normally many potential challenges to overcome as well. Some key challenges include:

- **Building Developer/Owner Buy-In**

The most critical challenge to DE development is building developer/owner buy-in (i.e., “will they choose to connect”). Detailed financial analysis will provide these future customers with the necessary information to make informed decisions. Moreover, having the City backing the system will provide additional certainty of energy service and cost now and into the future.

- **Staging of Capital Investments**

Some DE capital investments are “lumpy” and must be staged carefully to minimize carrying costs prior to securing energy service revenues and to minimize stranded investment risk. One strategy to reduce these risks includes interim reliance on temporary or permanent natural gas boilers, which can then be used for peaking and back-up once loads reach sufficient levels to support investment in alternative technologies for baseload supply.

- **Energy Revenue Risks**

Customer capture and retention is critical to ensuring economies of scale while minimizing the risk of stranded capital. Often communities and stakeholders play a critical role in mitigating these risks through vision and policy support.

- **Project Financing**

District energy offers stable, utility-style returns. However, there is a need to finance pre-implementation feasibility studies and design work for new systems. New systems will also typically need a “levelized rate” structure whereby expenses may exceed revenues in early years. Additional capital will be required to finance operating deficits in early years, which would be repaid through surpluses in later years of the investment cycle. Multiple

sources of financing may be required to reflect the mix of public and private benefits. For example, customers may pay a small premium over conventional heating and cooling systems to reflect intangibles such as higher reliability, better service, reduced risks, and better environmental performance. But the willingness of private customers to pay for societal and long-term benefits such as deep carbon reductions and technological flexibility may be limited. Other sources of capital will be required to maximize these societal benefits.

- **Planning and Coordination**

Considerable coordination among land use and infrastructure planning is required to minimize implementation costs, secure energy production sites, and secure certain alternative energy sources such as waste heat sources. Building codes and enforcement can be used to promote voluntary connection and ensure system performance. Careful coordination with building developers and designers is required to ensure optimal system compatibility.

- **Supply and Price of Alternative Technologies and Fuels**

Supply chains for some alternative technologies and fuels are not yet well developed, and there may be both supply and price risks compared to well-established conventional fuels. These can be managed in part through competitive procurement processes, performance contracting, and the staging and diversification of technologies. Governments may also have a role to play in facilitating market development for technology and fuel suppliers, as well as access to resources such as waste streams and heat recovery opportunities.

- **Electricity Market Interface**

The primary focus of DE is on the provision of thermal energy service (heating and/or cooling). Combined Heat and Power (CHP) can reduce DE costs and enhance the efficiency and security of the local electricity system. However, investors will often require long-term and stable power prices to financing the additional costs of CHP. Alternatively, electric utilities or independent power producers may need to build, own, and operate the plants including the management of electricity supply contracts, and then sell waste heat to a DE provider.

Determining the Potential Value Proposition of District Energy

The value propositions, costs and risks of DE must be weighed in project-specific business cases that consider the unique features and local context of every project.

The ultimate business case for DE will depend upon a number of criteria including:

- The ultimate scale of the expected system;
- The density and mix of loads (higher density and greater use mix will typically results in greater ratio of benefits to costs);
- The actual rate and staging of development;

- The security of loads (requirements or incentives for customers to connect and consume);
- The options for on-site energy systems (many building sites may be limited in terms of their ability to access alternative energy sources such as solar orientation or available scape and suitable ground conditions for geo-exchange systems);
- The availability and cost of alternative energy sources (e.g., large nearby waste heat sources, local underutilized biomass resources);
- Potential synergies with other infrastructure (e.g., as sources of waste energy and/or in the installation and maintenance of equipment); and
- Other opportunities for future growth or the addition of other services (sometimes referred to as “growth options” in the finance literature).

Assessing District Energy Viability

Based on input from the City of Shoreline, DE evaluation criteria were identified as follows:

1. **Technical** – Does DE provide for better performance than compared to building-scale solutions?
2. **Regulatory and Policy** – Do existing regulations and policies allow DE? If not, how should they be evolved? Do the benefits of DE reinforce existing City policies and community values?
3. **Financial (i.e., Business Case)** – Based on sound cost estimating (including Capital and Operations & Maintenance) and revenue projections, does a DE system make financial sense? Is there an adequate business case to justify the investment?
4. **Development Model** – Public (i.e., City), private (i.e., 3rd party), or public-private partnership, which is the best development model to finance, own, and operate a DE system? What is the specific role and responsibility of the City to support DE development efforts?
5. **Risk Management** – Have potential risks been identified and mitigation measures developed to ensure proper finance, design, construction, and operations?
6. **Value to Future 185th Street Station Subarea Development** – Does DE provide a strong value proposition to the City and future developers?

185TH STREET STATION SUBAREA ENERGY USE AND CARBON EMISSIONS

The following section summarizes existing and planned development for the 185SSS, projects baseline energy use and carbon emissions, and identifies strategies to reduce energy use and GHG emissions to achieve CAP goals.

Development Assumptions

Expected Growth

The City of Shoreline’s anticipated population, households, and employees in the 185SSS were shown in the Subarea Plan Final Environmental Impact Statement (FEIS)

in Tables 3.2-12 and 3.2-13. Projections were based on a 20-year outlook (to 2035) and a full build-out of 80 to 125 years (2095 to 2140).

The expected growth was estimated as follows:

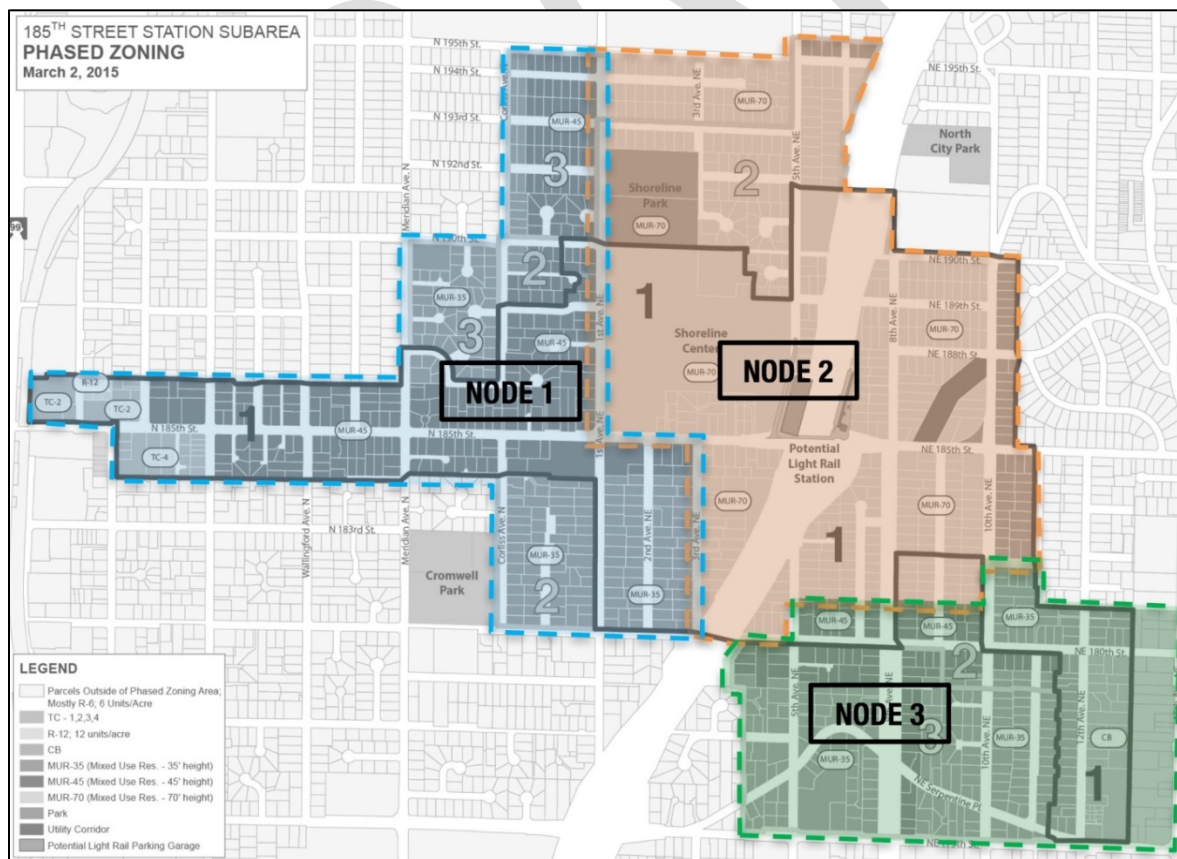
	<u>2014</u>	<u>2035</u>	<u>Full Build-Out</u>
Population	7,944	12,102	56,529
Households	3,310	4,975	23,554
Employees	1,448	2,160	15,340

Zoning

The 185SSS zoning map, adopted on March 16, 2015, shows the subarea divided into three different phases. Phase 1 zoning became effective upon adoption; Phase 2 zoning will become effective in 2021 (two years before the light rail station is anticipated to open for service; and Phase 3 zoning will become effective in 2033 (ten years after the beginning of light rail service).

At full build-out, approximately 86% of the subarea development is projected to be residential, 11% will be office/commercial, and 3% will be retail, by square footage.

For purposes of analysis, the subarea was divided into three different nodes. A map of the subarea nodes is below:



- **NODE 1** – Node 1 is the west side of the subarea, west of 1st Ave NE and 3rd Ave NE, mostly zoned as MUR-45' and MUR-35' (Mixed Use Residential - 35 and 45 foot height limits). This node would account for approximately 24% of the projected residential development. The core of this node abuts NE 185th Street and is part of Phase 1, but portions of this node farther from NE 185th Street fall into the boundaries of Phases 2 and 3.
- **NODE 2** – Node 2 is in the middle of the subarea, centered around the future light rail station. This is the highest density portion of the subarea, predominantly zoned as MUR-70' (70 foot height limit), which is intended to become "Transit-Oriented Development" (TOD). This node accounts for approximately 57% of the projected residential development. The zoning in this node falls within the boundaries of Phases 1 and 2, unlocking in 2015 and 2021, but the timing of development here is expected to be more closely tied to opening of the light rail station because it will be proximity to transit that makes projects viable.
- **NODE 3** – Node 3 is the southeast portion of the subarea, marked by the MUR-35', MUR-45', and Community Business (CB) zoning around NE 180th Street. This node consists of approximately 19% of the projected residential development. Most of the new zoning in this node is part of Phase 3, unlocking in 2033.

Energy Use and Carbon Emissions Assumptions

Electrical power is serviced to this subarea by Seattle City Light (SCL). Based on Seattle City Light's fuel mix in 2014, approximately 97% of their portfolio is from renewable sources. The GHG emissions measured in metric tons of carbon dioxide (tCO₂) from SCL is relatively low. With a goal of the elimination of coal as a fuel source by 2025, and the increase in other renewable power options, it was modeled that the electrical power supply would not contribute to any GHG emissions by 2050.

Natural gas service is provided by Puget Sound Energy (PSE). Natural gas is typically used for heating purposes. While it is currently a lower cost option than electricity for the equivalent amount of energy produced, and does not emit carbon like other fossil fuel-based sources, the extraction process emits a significant amount of methane, which is 20 times more potent as a greenhouse gas.

Existing buildings and new development were evaluated by the common measure of energy performance in buildings, Energy Use Intensity (EUI). Buildings were categorized by three different uses: office, multi-family residential, and retail, as each type of building use has different needs for heating and cooling.

Existing buildings were assumed to have EUI values like other existing Seattle-area buildings. The existing buildings were modeled to have reductions in EUI over time, to match the targets described in the City's Carbon Wedge Analysis (CWA), which was developed in 2015 to provide a pathway for the City to meet CAP emission reduction targets.

According to the CWA, the City target for new buildings should be to achieve zero net GHG emissions in 100% of new buildings citywide by 2030. A combination of State code changes and other policy decisions will help to achieve this goal. For example, the Washington State Energy Code will ensure that new buildings constructed after 2030 must use 70 percent less energy than new buildings constructed in 2006. Another advantage for Shoreline is that Seattle City Light's fuel mix is low carbon, so electrical power to new buildings will have minimal GHG impact, and coal power as a source is expected to phase out entirely by 2025.

For this analysis, new building EUI values were initially based on the 2015 Seattle Energy Code Target Performance Path, which was used as a benchmark for EUI standards. These values were lowered by about 15%, as Shoreline's light rail station subareas have green building requirements that will result in buildings more energy efficient than code. These EUI values were also modeled to reduce over time to reflect future potential for DE and/or CHP systems and other building efficiency improvement brought to market or mandated by code.

In existing buildings, retrofits should be utilized to achieve the City goal of 40% reductions of natural gas for heating by 2030. Renewable energies will be sought after as a replacement source for heating, and existing building electrical use must reduce by 25%.

Baseline Energy Use and Carbon Emissions Estimates

Business as Usual (BAU) Scenario

BAU conditions were modeled with the existing and new building EUI values described above. BAU modeling assumed a typical use of natural gas for heating in new development.

The baseline energy demand with no new development is 314,000 million British Thermal Units (MMBtu) for approximately 4 million square feet of interior space. A BTU is a measure of the energy content in fuel, and is used in the power, steam generation, heating and air conditioning industries. The GHG emissions of the original existing development are approximately 8,229 tCO₂.

The results of a BAU projection to 2050 resulted in the subarea consuming approximately 290,500 MMBtus of energy annually, based on 2.5 million square feet of existing buildings and 9 million square feet of new buildings by 2050.

Greenhouse gas emissions resulted in 1,917 tCO₂ from the existing buildings and 4,253 tCO₂ from new development by 2050. The resulting reduction of GHG emissions based on new building and existing building energy efficiency is approximately 25% – well short of the 80% goal by 2050.

To achieve the CAP reduction goal would require a significant amount of onsite renewable energy generation. For example, the amount of on-site solar generation required to offset the GHG emissions in 2050 would be the equivalent of over 20 MW

(megawatts) of solar PV (photovoltaic) generation, which is approximately 1.75 million square feet worth of solar arrays. Having recently conducted a Solarize campaign, the City learned that existing tree canopy and resultant shading can be an impediment to solar power generation in Shoreline, although this could be less of an issue in the 185SSS due to likely loss of existing canopy as a result of redevelopment.

Business As Usual - without use of natural gas as a heating source (BAU – NO GAS Scenario)

After the BAU conditions were modeled, a scenario with no natural gas used in new development was analyzed. The same strategy for reducing existing and new building EUIs was modeled. As a result, the energy demand in 2050 is the same 290,500 MMBtu as the BAU condition, but it will be met entirely with electrical service for the 9 million square feet of new buildings, and a mix of gas and electric for the remaining 2.5 million square feet of existing buildings. Electrical options for heating include heat pumps, which also have the ability to provide air conditioning.

Again, the baseline energy demand with no new development is 314,000 MMBtu for approximately 4 million square feet. The GHG emissions of the original existing developments are approximately 8,229 tCO₂.

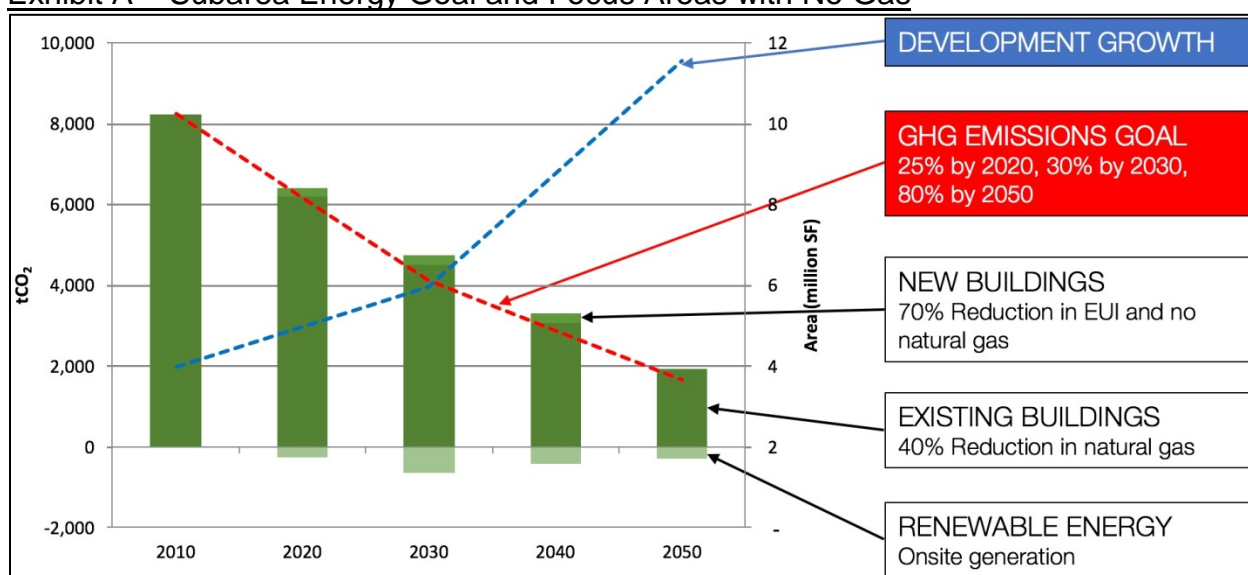
Carbon emissions resulted in 1,917 tCO₂ from the existing buildings and no GHG from new development by 2050, since it was assumed that the SCL service will be entirely carbon-free by 2050. The resulting reduction of GHG emissions is approximately 77%, almost meeting the 80% goal with just building efficiency improvements (combined with targeted DE service within high density areas, such as Node 2) and elimination of natural gas in new development.

Achieving CAP goals would require implementing onsite renewable energy generation. The amount of on-site solar generation required to offset the GHG emissions in 2050 would be the equivalent of approximately 1.25 MW of solar PV, which is approximately 100,000 square feet worth of solar arrays.

ACTIONS TO ACHIEVE CLIMATE ACTION PLAN GOALS

The following graphic demonstrates how the City of Shoreline may utilize development the 185SSS to achieve CAP goals.

Exhibit A – Subarea Energy Goal and Focus Areas with No Gas



Current development is approximately 4 million square feet and 2050 development is projected to be approximately 11.5 million square feet. The graphic above shows that even though the 185SSS could triple its population over the next 30 years, GHG emissions can be reduced to 80% below 2007 levels.

Achieving this goal will require the following actions:

- ACTION 1 – No Gas Policy**
 Since SCL energy is essentially, or will be shortly, 100% renewable, Shoreline should focus on creating development policy/codes to limit or eliminate the use of natural gas within the subarea. This action has the most significant impact on reducing GHG emissions associated with subarea development.
- ACTION 2 – New Building Energy Efficiency**
 To achieve the GHG emissions goals, new buildings should not use natural gas as an energy source. Between now and 2050, there is projected to be an approximate three-fold increase in population and development square footage. Accommodating that type of growth while reducing overall GHG emissions by 80% would not be possible with the addition of new natural gas buildings, even with the aggressive improvements in building efficiencies.

To reiterate this point, it is worth noting that the City's GHG emission reduction goals are cumulative, not per capita, so it is necessary to pursue a bold plan to reduce emissions despite projected population growth and a low/no carbon energy supply.

With new buildings getting all their energy needs from SCL and on-site renewable energy sources, the City could achieve its goal of net-zero GHG emissions in all new buildings.

- **ACTION 3 - Existing Building Energy Efficiency Retrofits**

The target of 40% reduction in natural gas for existing building heating would allow the subarea to keep pace with CAP goals.

One way to achieve that goal, or improve upon the 40% number, is to promote the removal of natural gas heating in existing buildings. With a 30+ year outlook to 2050, and a projected full subarea build-out of approximately 100 years, it is natural for existing buildings to need system upgrades and replacements over that time. The City and/or State could incentivize building owners and managers to replace natural gas systems with electric systems that will have little-to-no GHG emissions.

Oil Free Washington (www.oilfreewashington.enhabit.org/), recently convened a focused, short-term coalition of city planners, policy makers, utility partners, and carbon analysts to support Enhabit's efforts to eliminate residential heating oil in Washington State. The City of Shoreline was represented in the coalition during the initial phase, which worked to develop:

- A model policy and 2-5 year implementation plan to successfully transition residences off of home heating oil.
- Agreement on a regional baseline for carbon impacts of residential oil-heating and lower carbon alternatives.
- Inform and develop an assistance program from the Carbon Reduction Incentive Fund (CRIF).
- Create an incentive plan for King County cities, with the goal to ultimately promote the program throughout the state.

The main focus of the project was to encourage property owners to convert from gas furnace heating, which Shoreline has a higher percentage of than most King County cities, to more sustainable options like electric heat pumps. Yet it is possible that the results of this work could create meaningful incentives and public education materials to promote heat pumps as an attractive alternative to both heating oil and natural gas.

- **ACTION 4 – Onsite Renewable Energy**

The model shows that with an improvement of existing building EUI and the elimination of gas for heating in new buildings, there is still a small gap to make up to get to an 80% reduction of GHG emissions by 2050. On-site renewable energy would allow the subarea to achieve a net-80% goal by producing energy equivalent to the tCO₂ above the limit.

The estimated on-site solar PV required would be approximately 1.25 MW, or just over 100,000 square feet worth of solar array. This amount of solar PV distributed throughout the rooftops in the subarea should be easily achievable. Existing City strategies, such as the standardization of solar installation process, could encourage on-site renewable energy.

- **ACTION 5 – District Energy**

Specific to Node 2, DE should be implemented utilizing a “no gas” source such as sewer heat recovery, biomass, or ground source heat pumps. Node 2 is a ripe location for DE due to the mix of uses and scale of development, which creates enough thermal density to make DE viable. Preliminary assessments conducted for the subarea identified Node 2 as having the most financial potential, while reducing energy use of buildings connected to the system by 10-25%.

SUMMARY OF FINDINGS AND RECOMMENDED NEXT STEPS

The Climate Action Plan goals within the 185th Street Station Subarea are achievable by following the right steps in promoting new development requirements and retrofits to existing development. The GHG emissions reductions of 50% by 2030 and 80% by 2050 goals are aggressive, especially when considering that the population of the subarea is projected to triple by 2050.

Even with the large increase in building area, the aggressive targets for new and existing building efficiency resulted in no net increase in energy demand by 2050. Energy demand on its own is not enough to decrease GHG emissions to the level required to achieve the goals, but the following steps can be taken to achieve further GHG emissions:

- **Renewable Grid Energy** – Seattle City Light’s fuel mix is currently low carbon, with over 90% of energy coming from renewable sources. SCL’s goal of eliminating coal as a fuel source by 2025 will lower their carbon contribution further within the next 10 years, and it was assumed that all GHG-emitting fuel sources will be removed from their portfolio by 2050. As a result, shifting the source of all building’s energy demands to the electrical grid will decrease the GHG emissions throughout the subarea.
- **No Gas** – Natural gas is the leading contributor of GHG emissions in buildings. As stated above, shifting reliance to the electrical grid will have the biggest influence on reducing GHG emissions in the subarea. Eliminating gas service in new development is the most important strategy to achieve the aggressive GHG emission reductions.

The City of Shoreline has a target to reduce use of natural gas for heating 40% by 2030, which was modeled as continuing to a 60% reduction by 2050. As mentioned in the City’s Carbon Wedge Analysis, a suite of strategies should be implemented for existing building retrofits. These include City and State incentives, retrofit programs for increased efficiency, and/or retrofit policies requiring upgrades based on different criteria.

- **New Building Energy Efficiency** – Continue advocating for the State of Washington to outline and adopt a new code pathways for new building efficiencies to improve 70% by 2031 compared to new buildings in 2006.
- **Existing Building Energy Efficiency Retrofits (including no gas retrofits)** – Existing buildings will need attention to reduce energy use and GHG emissions. Existing City programs should be continued, including the potential to retrofit existing buildings away from natural gas use.
- **District Energy for Node 2** – Due to the development and thermal demand density in Node 2, DE should be implemented to provide heating, and potentially cooling if needed. Energy sources for the DE system should be non-combusting, utilizing potentially sewer heat recovery, biomass, or ground source geothermal.
- **Onsite Renewable Energy Generation** – Onsite renewable energy generation allows for the subarea to better reach the 50% and 80% emission reduction goals, where building improvements and electric/gas improvements alone fall short. In this subarea, solar generation can be distributed throughout rooftops and open spaces such as parks to directly offset energy demand and provide excess energy back onto the grid.
- **Living Building Demonstration Project** – Since Shoreline adopted the Deep Green Incentive Program in April 2017, the City should pursue a Living Building demonstration project within the 185SSS. This could be an important, and potentially market transforming, effort to demonstrate the feasibility of the type of low carbon development the City is looking to promote.
- **Looking Beyond 2050** – The subarea build-out plan is a longer timeline than the stated Climate Action Plan goals. This allows for GHG emission strategies to be planned in such a way that improvements continue well beyond 2050.