

CITY OF BELLEVUE

In Partnership with the University of Washington

> ECODISTRICT EVALUATION

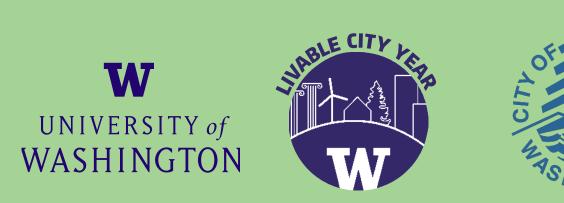
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Livable City Year 2018–2019 in partnership with City of Bellevue

Winter 2019



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Livable City Year 2018–2019 in partnership with City of Bellevue www.washington.edu/livable-city-year/

ACKNOWLEDGMENTS

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- Rochester, New York
- British Columbia, Canada
- - Columbia, Canada
- Columbia, Canada
- Minneapolis, Minnesota

- Denmark

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A Note on Anonymity

We offered anonymity to the local private developer and to the City of Bellevue employees who we interviewed to ensure that everyone felt comfortable being transparent during the interview process. For this reason, in the report, we have attributed quotes to the department within the City of Bellevue from which they came, and to the private developer generally, instead of using names and titles.

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• Sarah Heinicke, Executive Director of Lloyd EcoDistrict, Portland, Oregon, • Stephen Klimek, Project Manager at Towerside Innovation District,

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ABOUT LIVABLE CITY YEAR

The University of Washington's Livable City Year (LCY) initiative is a partnership between the university and one local government for one academic year. The program engages UW faculty and students across a broad range of disciplines to work on city-defined projects that promote local sustainability and livability goals. Each year hundreds of students work on high-priority projects, creating momentum on real-world challenges while serving and learning from communities. Partner cities benefit directly from bold and applied ideas that propel fresh thinking, improve livability for residents, and invigorate city staff. Focus areas include environmental sustainability; economic viability; population health; and social equity, inclusion and access. The program's 2018–2019 partner is the City of Bellevue; this follows partnerships with the City of Tacoma (2017–2018) and the City of Auburn (2016– 2017).

LCY is modeled after the University of Oregon's Sustainable City Year Program, and is a member of the Educational Partnerships for Innovation in Communities Network (EPIC-N), an international network of institutions that have successfully adopted this new model for community innovation and change. For more information, contact the program at uwlcy@uw.edu.



ABOUT CITY OF BELLEVUE

Bellevue is the fifth largest city in Washington, with a population of more than 140,000. It's the high-tech and retail center of King County's Eastside, with more than 150,000 jobs and a skyline of gleaming high-rises. While business booms downtown, much of Bellevue retains a small-town feel, with thriving, woodsy neighborhoods and a vast network of green spaces, miles and miles of nature trails, public parks, and swim beaches. The community is known for its beautiful parks, top schools, and a vibrant economy. Bellevue is routinely ranked among the best mid-sized cities in the country.

The city spans more than 33 square miles between Lake Washington and Lake Sammamish and is a short drive from the Cascade Mountains. Bellevue prides itself on its diversity. Thirty-seven percent of its residents were born outside of the US and more than 50 percent of residents are people of color, making the city one of the most diverse in Washington state.

Bellevue is an emerging global city, home to some of the world's most innovative technology companies. It attracts top talent makers such as the University of Washington-Tsinghua University Global Innovation Exchange. Retail options abound in Bellevue and artists from around the country enter striking new works in the Bellwether arts festival. Bellevue's agrarian traditions are celebrated at popular seasonal fairs at the Kelsey Creek Farm Park.

Bellevue 2035, the City Council's 20-year vision for the city, outlines the city's commitment to its vision: "Bellevue welcomes the world. Our diversity is our strength. We embrace the future while respecting our past." Each project completed under the Livable City Year partnership ties to one of the plan's strategic areas and many directly support the three-year priorities identified by the council in 2018.





BELLEVUE 2035: THE CITY WHERE YOU WANT TO BE

EcoDistrict Evaluation supports the Bellevue: Great Places Where You Want to Be target area of the Bellevue City Council Vision Priorities and was sponsored by the Department of Community Development.



Bellevue is the place to be inspired by culture, entertainment, and nature. Learn, relax, shop, eat, cook, read, play, or marvel at our natural environment. Whatever your mood, there is a place for you in Bellevue.

From the sparkling waters of Meydenbauer Bay Park, you can walk or bike east, through Downtown, across the Grand Connection to the Wilburton West center for business and entertainment. Along the way you enjoy nature, culture, street entertainment, a world fusion of food, and people from all over the planet.

For many of us, Bellevue is home. For the rest of the region and the world, Bellevue is a destination unto itself.

The arts are celebrated. Bellevue's Performing Arts Center is a success, attracting the best in onstage entertainment. Cultural arts organizations throughout the city are supported by private philanthropy and a cultural arts fund. Arts and cultural opportunities stimulate our creative class workers and residents, whether they are members of the audience or performers. The cultural arts attract Fortune 500 companies to our community, whether it is to locate their headquarters or visit for a convention.

The past is honored. Residents experience a sense of place through an understanding of our history.

Our community buildings, libraries, community centers, City Hall, and museums provide places where neighbors gather, connect with each other, and support our civic and business institutions.

Bellevue College, the Global Innovation Exchange (GIX), and our other institutes of higher learning are connected physically and digitally from Eastgate to Bel-Red, Downtown, and the University of Washington in Seattle. We've leveraged our commitment to higher education into some of the most successful new companies of the future.

From the constant beat of an urban center, you can quickly escape into nature in our parks, streams, trails, and lakes. You can kayak the slough, hike the lake-to-lake trail, and have the opportunity to enjoy the latest thrill sport.

BELLEVUE 2035: THE CITY WHERE YOU WANT TO BE

Bellevue welcomes the world. Our diversity is our strength. We embrace the future while respecting our past.

The seven strategic target areas identified in the Bellevue City Council Vision Priorities are:



ECONOMIC DEVELOPMENT Bellevue business is global and local



TRANSPORTATION AND MOBILITY Transportation is both reliable and predictable. Mode choices are abundant and safe.



HIGH QUALITY BUILT AND NATURAL ENVIRONMENT From a livable high-rise urban environment to large wooded lots in an equestrian setting, people can find exactly where they want to live and work.





the region.



ACHIEVING HUMAN POTENTIAL Bellevue is caring community where all residents enjoy a high quality life.



People are attracted to live here because they see that city government is well managed.

For more information please visit: https://bellevuewa.gov/city-government/citycouncil/council-vision

BELLEVUE: GREAT PLACES WHERE YOU WANT TO BE

Bellevue is a place to be inspired by cuilture, entertainment, and nature.

REGIONAL LEADERSHIP AND INFLUENCE

Bellevue will lead, catalyze, and partner with our neighbors throughout

HIGH PERFORMANCE GOVERNMENT

As graduate students at the University of Washington Bothell, we were honored to be asked by the City of Bellevue to (1) evaluate the implementation of environmental policies within their BelRed Subarea Plan, and (2) to research other jurisdictions outside of Bellevue that have created EcoDistricts and understand their processes in doing so.

To address the first goal of evaluating the implementation of the environmental policies that are laid out in the BelRed Subarea Plan, we began by identifying private developers and departments within the City of Bellevue that had knowledge of and played a role in the implementation of these policies. We successfully interviewed eight individuals who have expertise in the areas of parks and open space, public-private collaboration, incentives, and water. Based on this interview data, we identified several data categories: what has happened, barriers of the project, and interviewees' recommendations. Our findings suggest that overall, the BelRed Subarea Plan has not seen much development. We realize that many of the goals of the 2010 BelRed Subarea Plan will not see much progress until the light rail system is completed. In the meantime, we suggest several next steps. Multiple interviewees suggested that the land use code should be reviewed to determine if it is suitable for the environmental goals of the BelRed Subarea Plan. Additionally, we found that private developers typically favor fee-in-lieu strategies due to a lack of incentives to participate in other more environmentally-friendly approaches, and that this is creating barriers for the City to implement its environmental policies in the area.

To address the second goal of researching other jurisdictions outside of Bellevue that have created EcoDistricts and understanding the processes they used to do so, we worked with our partners at the City of Bellevue, Jennifer Ewing and Manette Stamm, to identify the environmental objectives that would be of focus. We decided to select models that were similar in climate to the Pacific Northwest, so that any recommendations made could be adopted in a timely fashion. Ultimately, we decided to include models from Europe to highlight the role and importance of government engagement in building EcoDistricts. These chosen models would provide a comprehensive view of EcoDistrict projects across multiple sectors. We conducted semi-structured interviews with employees, program managers, and architects from the chosen models to highlight critical successes, challenges, concerns, and advice that they could provide. At the conclusion of our interviews, we identified four common themes: challenges around leadership, funding, maintaining community support, and policy obstacles. The selected models had commonalities in policy implementation strategies, including rezoning for mixed use, creating new or reforming existing policies, and forming steering committees. All of our interviews additionally highlighted the advice that cities need to take the time to find out what is needed for their communities before beginning the EcoDistrict process. This key step, in all cases, was a special opportunity to involve citizens and stakeholders alike to discuss ideas and possible challenges for the upcoming EcoDistrict.

INTRODUCTION

The City of Bellevue's BelRed Subarea Plan, released in 2010, includes a number of environmental goals. For this Livable City Year project, the City's Department of Community Development asked policy students at the University of Washington to:

- 1. evaluate the City's progress in implementing these environmental goals to date
- 2. evaluate the suitability of the EcoDistrict model to implement these environmental goals.

Students began by interviewing City staff about the environmental goals and policies of the BelRed Subarea Plan. The students sought to understand what development has taken place to date, barriers and potential opportunities for improvement, and planned next steps. The students then selected and interviewed other jurisdictions with climates similar to the Pacific Northwest that have implemented EcoDistricts, to further understand their processes. Finally, the students compiled the key messages from these interviews and recommended next steps.

It is hoped that this policy research is helpful to the City of Bellevue as it considers the suitability of the EcoDistrict model to achieve its environmental goals for the BelRed neighborhood.



Simulation of Goff Creek in the BelRed neighborhood. CITY OF BELLEVUE

WHAT IS AN ECODISTRICT?

An EcoDistrict is a designated space within an urban setting that is intentionally designed to communicate a municipality's commitment to environmental sustainability and to the importance of culture. Many major cities have already implemented EcoDistricts, such as Portland, Seattle, San Diego, New York, and San Francisco.

METHODS

To address our first goal, we selected private developers and City of Bellevue employees, who played a role in the development of and who had a greater knowledge of the BelRed Subarea Plan, as our interviewees. Within the City of Bellevue, we interviewed employees from the Departments of Planning, Utilities, Transportation, Community Development, and Parks & Community Services. These departments were selected for interviews based on the environmental goals and policies in the BelRed Subarea Plan. We felt that these departments were likely to have the most knowledge regarding the progress that has been made in the implementation of the policies within the BelRed Subarea Plan. Once the departments and private developers were selected, we narrowed down a list of individuals to contact, who later became our interviewees. This process required assistance from our partners at the City of Bellevue, Jennifer Ewing and Manette Stamm. They graciously gave us their insight on who, from the departments we had selected, they felt would be able to speak the most on the topics at hand. Ultimately, our sample would include eight interviewees, comprising one private developer and seven City of Bellevue employees. Next, we reached out to our prospective interviewees via email. Interviews were conducted in person, via telephone, and via email. Following the interviews, we transcribed our correspondences, familiarized ourselves with the data, and then began analyzing it. We spent many days identifying patterns and overarching themes between the interviews. Finally, we coded them, categorized them, and organized them into a digestible table.

To address our second goal, we used semi-structured interviews to gather information about the process, challenges, and successes of developing an EcoDistrict. We additionally identified advice for Bellevue, as well as common themes across all models. Models were chosen based on the City of Bellevue's specific model interests, which were regional location, similar environmental goals, similar model type, and the availability of contacts within each of the managing organizations. A total of 12 models were selected, nine of which are EcoDistrict-based, with locations ranging across North America and Europe. Five of the chosen models have a backbone structure, two have a steering committee, and two are community-driven. Six of our models have mix-used rezoning, and seven operate in conjunction with a light rail system. Five models are in the United States, four are in Canada, two are in Denmark, and one model is in Germany.



Green space in Bellevue MAGDALENA NILGES

FINDINGS

FIRST GOAL FINDINGS

While evaluating the BelRed Plan, three main topical categories were discussed by our interviewees. Many interviewees spoke almost chronologically, beginning by telling us about past or current significant events to provide us with some context. Next, they discussed barriers that they faced during these significant events. Finally, they provided recommendations as to what the City of Bellevue could do, moving forward, to help alleviate some of those barriers for that event, and for future events.

OPEN SPACE

Past or Current Significant Events

- Money has been collected for investing in future park and open space improvements
- New development park and open space amenities have been built
 - » Wright Runstad & Company built a small park at a former Safeway site at 120th station
 - » Neighborhood park at the mid-mountain site planned
 - » Park at Eastside Rail planned
 - » 130th station needs transit oriented development (TOD)

Barriers

- Not expected that some policies and plans would be difficult to enforce with current code and circumstances
- Financial assets in low millions of dollars
- Private Developers prefer fee-in-lieu strategies
- Daylight streaming and open space projects can be too expensive
- City needs more money to buy back projects

Recommendations

- Update land use code and BelRed Subarea Plan based on current circumstances
 - » Need to come to solutions that attempt to satisfy everyone's goals
- Use incentive money to build parks and open space
 - » Include any privately-developed park space in the system
- Implement catalyst project at 130th station

PRIVATE-PUBLIC COLLABORATION

Past or Current Significant Events

- Strict rules and regulations for private developers
- Not enough freedom for planning
- Previous green streets do not meet current green street standards

Barriers

• Universal rules and regulations are utilized, but do not not fit the development site. For example, downtown rules were applied to a neighborhood development

Recommendations

- Update land use code and BelRed Subarea Plan based on current circumstances
 - » Need to come to solutions that attempt to satisfy everyone's goals
- Use incentive money to build parks and open space
- » Include any privately-developed park space in the system
- Implement catalyst project at 130th station

INCENTIVES

Past or Current Significant Events

- Private developers are using fee-in-lieu strategies
- No development on daylighting streams, wetlands, and parks and open space
- City of Bellevue's incentive system
 - » Tier 1: affordable housing and open space
 - » Tier 2: green building, arts, and cultural space, etc.
- 7-10% of units outside the Spring District are affordable units
- Collected millions of dollars for future park and open space improvements
- A large chunk of King County's regional transfer of developers rights (TDR's) were bought by a developer; performed density project and was able to save land in Raging River Watershed
- Successful agreement with King County to participate in the TDR program

Barriers

- Not enough incentives for developers to contribute to environmental areas
- Sound Transit & Golf Creek interest conflicts
 - » Sound Transit knew that there were plans for Golf Creek to be daylighted and built on this site nonetheless
- People confuse the formal Incentive System with everything done in the city to make things happen
- No development has taken advantage of green building incentives

Recommendations

- Raise parks and open space tax for private developers
- Transfer development rights to the City of Bellevue
- Re-establish TDR agreement with King County under the BelRed Lookback
- Update incentives to include current Green Building Recognition programs

WATER

Past or Current Significant Events

- No streams have been daylighted
- Regarding what has already been implemented in the BelRed Subarea Plan, mobility and infrastructure for BelRed is a capital program that allows funding for restoration work and putting culverts in the west tributary
- Policies 28 and 31 in the BelRed Subarea Plan are a priority due to the federal Clean Water Act
 - » The entire city is working to implement this Act

Barriers

- Difficulty controlling streams due to private developers owning land through which streams run
- Safeway site has artesian aquifer issues
- Funding is available but private development hinders work due to streams flowing through multiple private properties
- No projects to date have led to stream daylighting requirements

Recommendations

- Consolidation and resale of private property, as this is ideal for daylight stream work
- Purchase property in west tributary area for daylighting
- Review of land use incentives in the BelRed plan
- Landscaping changes near streams, to a more riparian palette
- Revisit regional stormwater plan



Parks provide space for community members to connect with each other, as well as nature. CITY OF BELLEVUE

PARKS AND OPEN SPACE

According to our interviewees, the current status of the land use progress in the BelRed area is that funding is in the low millions of dollars, and there have been some plans for building parks, such as at mid-mountain and the eastside rail 130th station. This site, however, was noted as not yet seeing any transit oriented development (TOD). One notable park, which was previously a Safeway site near 120th station, has already been built by an investment developer, Wright Runstad & Company.

> "We have some money for [daylighting streams], but it's in the low millions of dollars where ultimately, you need to get that up into the tens of millions to go do something significant. But the good news is we did invest in a property purchase. We have the east side rail core that's going to be built and that's going to be a key amenity."

> > -Planning Department Representative

"Not a lot of new park and open space amenities have been added to date, except for a relatively small park that Wright Runstad built as part of the Spring District."

-Planning Department Representative

"Spring District is just 36 acres of the whole subarea, which is 910 acres in size. And more specifically it's the Wright-Runstad-owned property in and around what's called the 120th light rail station. So we did know that during the planning process there, Wright Runstad was looking to buy the property. It was originally owned by Safeway, the grocer, and they determined they didn't need about half of their property and were going to move those operations down to the Kent valley."

-Planning Department Representative

"We did purchase property out there called the mid-mountain site back in the 2007, 2008 time period. And we have a plan to eventually develop a neighborhood park out there, but that hasn't happened vet."

-Planning Department Representative

There has not been much park, open space, or environmental development in the 10 years since the creation of the Plan, due to the fact that private development is not incentivized nor required to do so, and finding alternative options, such as pay-in-lieu strategies, are much more affordable. One interviewee hoped that future projects will include daylighting streams and further development of open spaces and parks.

The land use code was mentioned by interviewees, in that it was difficult to work within current circumstances, due to unexpected population density and more residential development occurring and conflicting with environmental development than expected. This has resulted in minimal development for daylighting streams and for parks and open space. One workaround that was described by an interviewee was having the City repurchase streams and property from private development, although this is an expensive process.

> "Some of these policies are difficult to implement because they didn't include language in the land use code to implement them. For example, daylighting streams and creeks in BelRed is mentioned in policies and other documents, i.e., [the Parks & Open Space Plan], but they didn't include language in the land use code to enforce it. So, we can't really require a developer to daylight the stream."

> > -Planning Department Representative

"Daylighting streams can be difficult when they run through multiple property owners, and revising policies, plans, and approaches would make that easier. As observed now, private development has no incentive to build for parks and open space projects or to daylight streams. Thus, developers go through the pay-in-lieu option and bypass the need to work on these projects. In some cases, it is also less expensive for private development to use a pay-in-lieu option, should a parcel be too small to daylight inexpensively. Sometimes, the City then ends up buying back the property for these projects, but as a result, it needs more money to keep doing so."

-Parks Department Representative

"Another good thing to think about is that the size of some of those parcels are potentially quite small for a larger development and if we are requiring a large stream buffer or daylighting a stream, that can eat up quite a large portion of a site and then make developing economically infeasible for the developers. So, given the choice to provide just a setback and to not daylight a stream and follow the critical areas code, some developers may be incentivized to do that."

-Parks Department Representative

"But the other thing I should say about [developers opting for the pay-in-lieu options is that] we're early on, so it may be that in the future we'll see more development taking advantage of improving and providing open spaces on their sites. Certainly, once there are more examples of that in the neighborhood that will help."

-Parks Department Representative

"I don't think anyone anticipated that so far, we've seen a lot of residential development in BelRed. If you look at the FAR amenities tier, you'll see that for residential actually the first tier of incentives is focused on affordable housing and the second tier is focused on parks, streams, and trails. So, what that means is assuming most of the development so far has been residential and most of it is at a lesser density than we expected, we're not getting that many projects that are actually reaching the park streams trails category. So, there's kind of a gap between what the policies are calling for in the Subarea Plan and what the codes say and what our land use planners who are working with developers can enforce."

-Planning Department Representative

"This policy [S-BR-26, rehabilitation of streams and their corridors,] has not [been completed], because when they drafted the BelRed Subarea policies, they neglected to include land use code language to implement [or] enforce this policy. In the past year, we've provided preliminary guidance on a property in BelRed that should have had an open stream on the property for redevelopment, but even though we have all these documents that discuss opening streams, we didn't have concrete code authority [through the land use code] to require them to do so."

—Planning Department Representative

The interviewees specified that potential actions that could be taken are to reassess and update the land use code and BelRed Plan, as well as to review the agendas of everyone involved to make more progress on the BelRed goals. One suggestion that came from the interviewees is to make it easier to enforce plans and policies that support the development and maintenance of parks, trails, open spaces, and streams.

Additional methods include determining how to collect and use more financial incentives for parks and open spaces, adjusting the code to be

more site-specific and supportive of EcoDistrict objectives, and helping to develop and promote any privately-developed parks and open spaces. Initializing a catalyst project out of the 130th station, as well as reviewing and updating policies regarding land use and development, would also assist in making progress on the BelRed land use goals.

> "It can be very difficult to undertake a daylighting project for a stream and ecological expression for the stream when it crosses through multiple different property owners. So we really need to approach this in partnership with landowners in the neighborhood and come up with a solution that is a win-win for everyone. The solution needs to prioritize stream daylighting in areas where that is feasible and prioritizes other things we care about like parks and open spaces and affordable housing in areas that make sense for that too."

> > -Parks Department Representative

"We know where development has happened, which is good, but the 130th is kind of noteworthy that there just hasn't been any TOD development there. We want to do something to help, have a catalyst project happen out at 130th, whatever it might be. So that would be definitely something we would want to look back at the policies and codes to make that easier."

—Developer

"[We are] figuring out how we can use our incentive money to actually go build park space and then have privately developed park space added to the system as well."

-Developer

"What do I think could make the plan's vision more achievable? Is there a way to fine tune our incentive system so that it is more site-specific, bringing the policies and code more into alignment so that the vision that is outlined in the BelRed Subarea Plan transfers more seamlessly into the code, particularly in terms of daylight streams? That's the whole vision of the BelRed Subarea Plan — those EcoDistricts that predicated on structures around these stream corridors and plantings and streetscapes. That's really the heart and vision for that area."

-Parks Department Representative

PRIVATE-PUBLIC COLLABORATION

When private developers work with cities and other public offices they usually are aware of the politics involved, as were the private developers involved with the City of Bellevue in implementing the BelRed Subarea Plan. These private actors knew progress would be slow, as the city council must approve everything, as well as that there is an overall disconnect between the City and its various departments, and between the City and private developers. Strict rules and regulations imposed by the City do not allow private developers freedom of design. A private developer for the BelRed Subarea Plan said,

> I'm not throwing the City of Bellevue under the bus, but they have certain ways of maintaining things. They have certain rules and regulations so that we would have never ended up with the freedom of designing a park that we wanted as a part of our neighborhood."

> > -Private Developer

It would benefit the City to vett these restrictions and identify where changes can be made, because allowing more flexible codes and rezoning could open up land for more diverse development. Often times, what happens is that restrictions are so strict that there is no mixed-use development, but rather all residential or business use. Furthermore, another barrier that private developers have identified is that rules and regulations are usually the same across the board for buildings and utilities and as such, they often do not fit the development site.

Additionally, the approach to environmental sustainability is different for each group, as cities are usually focused on addressing very specific intervention categories, such as water, with actions like daylighting streams and creating natural drainage, whereas private developers take a more holistic approach that focuses on how all the various aspects of sustainability can come together. Overall, we recommend that the restrictions and rules for private development are vetted by a diverse committee of private developers, city council members, city department employees, private companies, and community members.

"Some of the truly formulaic restrictions need to be really vetted and, *I would recommend that [they are] vetted with more than one group* of people pulling together to tether a committee like they had before with the BelRed Code. There was a committee that they had elected to be on it. I think if they can create something like that and not just be doing it in a vacuum as city employees, it could have a better chance."

-Private Developer

INCENTIVES

It was important for our team to evaluate the incentives being used within the city because they often are the primary motivators of action. When asking our interviewees about incentives within the city, we were told by persons with experience in planning that, to date, private developers have opted to use fee-in-lieu strategies over on-site amenities. This tells us that the fee-in-lieu system is priced at a rate that is too low. If a developer can pay a low fee in lieu of including a percentage of affordable housing, then they will be able to recuperate that fee by charging market rate prices for all units in the development. If the fee was considerably higher, developers may be more likely to dedicate a percentage of the units to affordable housing.

> "And even the people that are paying in or are using the incentive system, they're mostly using the in-lieu fee, versus putting the [onsite] amenities into their properties. Which, to me, and I'm not an economic analyst, but it says that the incentive system, the in-lieu fee, is too cheap."

-Planning Department Representative

From a residential standpoint, the City of Bellevue has an incentive system that focuses on affordable housing and looks to collect funding for park and open space improvements. The incentive system has not yet triggered any action related to stream daylighting, wetlands, or parks and open space. For instance, one Planning Department representative stated, "There's not a lot of new, let's call it park and open space amenities that have been added to date except for a relatively small park that Wright Runstad built as part of the Spring District."

It was important for our team to evaluate the incentives being used within the city because they often are the primary motivators of action.

The City of Bellevue has an incentive system that focuses on affordable housing and looks to collect funding for park and open space improvements.

"At least right now we have an incentive system out there that, from a residential standpoint, really focuses on affordable housing and has been able to get about seven to 10% of units outside of the Spring District as affordable units. And there was a couple of big projects that have that amount of affordable housing in it. It also, from a residential standpoint, looks to get money for park and open space improvements. So it has been able to collect in the millions of dollars of money for future park and open space improvements."

-Planning Department Representative

The Incentive System, which is a formal zoning incentive system in the City of Bellevue's code, is often confused with everything done in the city to make things happen. However, the Incentive System has been successful in designating seven to 10% of units outside of the Spring District as affordable units and collecting millions of dollars for future park and open space improvements. Another success was an interlocal agreement set up with King County to participate in their transfer of development rights (TDR) exchange program. A large portion of King County's regional TDRs were bought by a developer, which performed a density project and was able to save land in the Raging River Watershed. Regarding this, a recommendation that we received from an interviewee in the planning department is to rewrite the TDR agreement with King County under the BelRed Lookback.

> *"I think one thing that I observe is that people confuse our Incentive"* System with everything we do in the city to make things happen. And that's not the case. So there's a whole host of things we do to encourage things to happen beyond just our formal zoning Incentive System."

> > -Planning Department Representative

"We also had a large chunk of King County regional TDRs bought by one of the developers. So they essentially did density in a project in Bellevue and saved the land out in the Raging River Watershed, which was identified as an important place to protect."

-Planning Department Representative

"We set up an interlocal agreement with King County to participate in their TDR program. And it was, I guess a success because we've already used up all the credits, so we have to redo that under the BelRed Lookback to have more people be able to use it."

-Planning Department Representative

WATER

Currently, no streams have been fully daylighted in the BelRed area. A city planner from the City of Bellevue said, "We don't have any successes on stream daylighting to date in BelRed after 10 years. I would give us a fairly low mark right now as far as achieving the daylighting of streams vision."

An environmental scientist from the Bellevue Department of Utilities spoke with us concerning what funding has been implemented for the BelRed Subarea Plan. This interviewee stated that funding is available for putting new culverts in Goff Creek:

> "Under policy 26, which pertains to the rehabilitation of streams and their adjacent riparian corridors, we have implemented a capital program within the City of Bellevue Utility department called Mobility and Infrastructure for BelRed, through which we have funding for putting in new culverts under BelRed for the west tributary Goff Creek."

> > -Bellevue Department of Utilities Environmental Scientist

Low impact development, infiltration, and green infrastructure work have become a priority for the City of Bellevue, due to the federal Clean Water Act. An environmental scientist from the Bellevue Department of Utilities said, "The polices encouraging natural drainage practices and green infrastructure, policies 28 and 31, are now citywide priorities, under the Clean Water Act requirements."

In regards to barriers that arose with the BelRed plan, private development and a lack of incentives seemed to be general themes throughout interviews. The environmental scientist said, "The problem that I have right now is that we have the funding available to do the project, but we do not have the property."

Another barrier that the environmental scientist mentioned regarded daylighting Goff Creek:

"Right now we have barriers for daylighting Goff Creek because the land use incentives are not strong enough to overwhelm the costs of the property set aside for the stream corridors. And so, property owners are not really interested in opening up the stream as part of their development."

-Bellevue Department of Utilities Environmental Scientist

Adding to this, a member of the Planning Department stated that, "All of the projects to date haven't really triggered a stream daylighting requirement."

As for recommendations, the environmental scientist explained that the consolidation and resale of property, especially in the West Tributary area, must occur for daylighting work to be completed:

"I think there's a need [for] additional investments in properties and in some of the cases the investments could be done with someone else where we consolidate properties, but there needs to be some funding in order to do that. In the case of the West Tributary, just a flat-out purchase of some of the property if we could, and find out where the stream will actually go when it is daylighted. Because right now we have a private property gap on the other side of BelRed Road."

-Bellevue Department of Utilities Environmental Scientist

The environmental scientist also recommended that transfer of development rights and land use incentives should be reviewed. This matches well with what our other interviewees discussed:

"I think that the transfer of development rights and land use incentives all need to have a review of people who [know] how to make that stronger and better. How to get choices of credits is not working well for the open space side of things."

-Bellevue Department of Utilities Environmental Scientist

We also received a stream landscaping recommendation:

"Within this plan, of five streams going through BelRed, four are fish-bearing. To bring awareness and build up character, and also drive the importance of the streams home, we're going to be dictating landscaping changes to more of a riparian palaette."

—Planning Department Representative



Children plant a tree at Bellevue's Earth Day-Arbor Day celebration. CITY OF BELLEVUE

EcoDistrict Protocol	Canadian Model (EcoDistrict)	German Model - DNGB (Similar to LCC)
Capitol Hill	TOPSOIL	Copenhagen
Seattle, WA	Victoria, B.C.	Denmark
High Falls	Green Bloc Neighborhoods	Frieburg
Rochester, NY	Vancouver, B.C.	Germany
Towerside	FED	Nordhavn
Minnaepolis-St. Paul, MN	Victoria, B.C.	Copenhagen
Lloyd EcoDistrict Portland, OR	East Harbour East Harbour, ON	
North Rainier Hub <i>Rainer,WA</i> (Living Community Challenge)		

Models used to determine the process, challenges, and successes of becoming an EcoDistrict. LCY STUDENT TEAM

SECOND GOAL FINDINGS

To obtain information about the process, challenges, and successes of becoming an EcoDistrict, we utilized semi-structured interviews. Models were chosen if they had similar characteristics to Bellevue, Washington.

ECODISTRICTS SAMPLED

Capitol Hill (Seattle, Washington)

The Capitol Hill EcoDistrict is a neighborhood-based sustainability initiative that serves the most densely-populated urban village in the Pacific Northwest. The Capitol Hill EcoDistrict was developed in 2011 under the Bullitt Foundation. Located in Seattle, the EcoDistrict is constructed under the ideals of a sustainable neighborhood, and is led by the Capitol Hill Housing Cooperative. This Cooperative has been existence for almost four decades, rendering its leadership robust through experience. The neighborhood has five main areas of focus, which include entrepreneurship, community development, civic engagement, environment, and economic development. The key performance areas that Capitol Hill EcoDistrict is involved in include water, culture, materials, habitat, energy, equity, health, and transportation.

> "Capitol Hill Housing agreed to accept an early grant from the Bullitt Foundation to study the opportunity to do EcoDistrict in Capitol Hill. The study was done by GGLO, which is a local design firm, and was completed in 2012. That report outlined different opportunities for work in the neighborhood. The Bullitt Foundation was a driver. Another driver was the anticipated arrival of the Light Rail Station on Capitol Hill, which eventually opened in 2015, although Capitol Hill has been anticipating a light rail station since the late '90s. In addition to a big infrastructure investment, there was also going to be a fair bit of redevelopment around the station area. There was a big transit-oriented development in the works for the station area, and in a neighborhood as dense as Capitol Hill, this would be one of the biggest redevelopments in the neighborhood for some time. There's this big opportunity, and a desire to do the transit-oriented development well."

> > —Joel Sisolak, Sustainability and Planning Director, Capitol Hill Housing, Capitol Hill EcoDistrict Project

The majority of people living in the heart of Capitol Hill are renters, and they have historically lacked a voice in important decisions about the neighborhood. To address this disparity, the Capitol Hill EcoDistrict has launched a Renter Initiative:

> "We created something called the Capitol Hill Renter Initiative. We held a Renter Summit. We've been organizing renters for the past few years. Those renters are very active in influencing policies such as mandatory housing, inclusionary zoning, and local transportation investments. It's been a really good and somewhat new model for engaging renters in local governance and shifting the power dynamic so that these residents who make up the majority actually have at least equal say to the 20% minority who previously had all the power. The success of that initiative led to the creation of the Seattle Renter Commission. There's now a citywide advisory body that pools renters from neighborhoods across the city and influences city policy." —Joel Sisolak, Sustainability and Planning Director, Capitol Hill Housing, Capitol Hill EcoDistrict Project



One of the most spectacular features of the High Falls neighborhood is a 96-foot waterfall, which has been linked to the community's character and personality. DCWOM

High Falls (Rochester, New York)

The High Falls EcoDistrict project started in 2014 and was initiated by Greentopia, a sustainable development organization. Greentopia received \$240,000 from the New York State Environmental, Research and Development Authority (NYSERDA) to conduct a planning study for the creation of this EcoDistrict. The High Falls EcoDistrict sits in the center of the city and unites multiple community assets, including an impending community college campus, a minor league baseball stadium, a natural river, and waterfall system. One of the most spectacular features of the neighborhood is a 96-foot waterfall, which has been linked to the community's character and personality. Through the EcoDistrict, the neighborhood seeks to address community education, urban gardens, water efficiency, enhanced walkability, enhanced bikeability, placemaking, wayfinding, river-trail reconnection, mixed-use development, community solar energy, green workforce development, and mixed-use development. The EcoDistrict has three main imperatives: equity, resilience, and climate protection. As the first EcoDistrict in the state of New York, it is a visible representation of Rochester's commitment to being a green leader among mid-sized cities. The 280 acres surrounding the falls are full of developable potential. The High Falls EcoDistrict project will include improved waste management solutions, energy and water efficiencies, stormwater management, and improved habitat through a combination of mixed-use and mixed-income development, and neighborhood-scale parks, schools, and services.

The sustainability goals of the project include energy, riverfront access, agriculture and food, and transportation.

"The City of Rochester looks very strongly at climate action and so that was a place where we focused. Ecosystem management was another goal of ours. We looked at material and waste goals and we were hoping for 90% waste aversion and district-wide composting by 2030. [For] agriculture and food systems, [we strove to] increase accessibility to fresh foods in the EcoDistrict through urban gardens and pop up markets [because] there is no grocery store in the area. There's nothing available to the people who live there. So we were looking at what sort of small things could we do to begin to get it happening. When we looked at livable communities, we got [advocates] for neighborhood development, [which] displays the equitable, vibrant, and diverse character of a resilient place. Then as far as transportation and mobility, we looked at bike lanes and sharing district-wide, and retro complete streets on major corridors."

> —Valerie Avalone, Director of Planning at Monroe Community College



The MetroTransit running in Minneapolis, Minnesota. JOSH HILD



The Towerside Innovation District in Minneapolis-Saint Paul utilizes community planning to create a holistic vision and directly benefit the community. JOHN POLO

Towerside (Minneapolis-Saint Paul, Minnesota)

Located in the heart of the Minneapolis-Saint Paul region, the Towerside Innovation District comprises 370 acres of space that brings together residents and businesses to form a vibrant urban community.

Ideas for the creation of the Towerside Innovation District began in 2013, from the realization that the Green Rail light-rail transit (LRT) stations connecting Minneapolis and Saint Paul cut through an industrial district and key neighborhood that would have inevitably been redeveloped. Community planning was initiated to create a holistic vision that focused on sustainable infrastructure and programs that directly benefited the community.

Towerside has been successful in the area of stormwater management. By partnering with the Mississippi Watershed Management Organization (MWMO), Towerside has been able to capture and treat stormwater runoff for reuse (MWMO 2017).

Towerside has also been working towards getting the innovation district itself recognized through policy. Stephen Klimek, a project manager for Towerside, has said, "we just, actually, are going through comprehensive planning process for both Minneapolis and Saint Paul. As part of that work, we've been trying to find ways to say, officially recognize an innovation district as a thing that is recognized by policy" (Klimek 2019).

Further tasks that Towerside plans to tackle are developing land use regulations and finding ways to incentivize developers to work with communities.



The Lloyd EcoDistrict in Portland, Oregon, was initiated to revitalize a business district and spread the idea of sustainability by setting an example for other cities to follow.TEAM SAM ADAMS

Lloyd EcoDistrict (Portland, Oregon)

In 2009, local government, businesses, developers, and other community stakeholders came together to create an EcoDistrict in Portland, Oregon Initially made to revitalize the Lloyd business district and spread the idea of sustainability by setting a model for other cities to follow, the Lloyd EcoDistrict reached out to local businesses to support their endeavors. Later, the Lloyd EcoDistrict reached out to the community, which was predominantly comprised of retirees and gainfully employed people who lived around the area. While power resided with local businesses for funding, the Lloyd EcoDistrict began incorporating the community to motivate them to donate money through fundraisers.

Besides its focus on sustainability goals such as energy efficiency, waste management, and transportation, the Lloyd EcoDistrict has also taken on the issue of affordable housing. Right 2 Dream Too is a rest and recharge campaign that provides socks, sleeping pods, and solar battery units to the homeless population in the Portland area. The Lloyd EcoDistrict uses the issue of affordable housing as an entry to garner the support of residents in the adjacent neighborhoods.

North Rainier Hub (Rainier, Washington)

After implementing the North Rainier Neighborhood Plan Update in 2010 and conducting an extensive literature review, the North Rainier community registered for the Living Community Challenge. This case was an outlier in our study, due to the fact that a development plan has not yet been put to action. Thus, the North Rainier neighborhood is in the very early stages of the Living Community Challenge. The North Rainier Mt. Baker Hub Alliance focuses on advocating for and supporting small businesses, especially those owned by people of color. It also works to clean up murals and businesses. Advocacy surrounding becoming a sustainable hub is in the works, and was supported by the neighborhood plan that highlighted local consensus.



The Food EcoDistrict in Victoria, British Columbia, was developed by a group of local restaurant owners who were passionate about creating a movement around sustainable food and business operations. CHRISJOHNSTONE86

Food Eco District (Victoria, British Columbia)

The Food EcoDistrict (FED) is a local nonprofit organization that promotes education and community awareness around food and sustainability in the downtown core of Victoria, British Columbia. FED was initiated by a group of local chef-driven restaurant owners who were passionate about creating a movement around sustainable food and business operations. FED partnered with the Vancouver Island Green Business Collective (VIGBC) and provided the standard for sustainability in the district. This allowed them to begin certifying restaurants based on seven categories of sustainability: building and operations, waste, water, transportation, purchasing and products, climate action, and social issues. FED additionally provides suggestions regarding how restaurants can become more sustainable in other areas of the business management process.

FED has partnered with LifeCycles Project Society to build an Urban Learning Garden that is comprised of raised beds in the courtyard of the downtown public library, in order to support education and community awareness on various urban sustainability- and garden-related topics. FED aims to impact both the community and the city:

> "[Our goal is to] apply our leadership in the community to influence policy change. One of the issues we face trying to get more urban agriculture to our downtown core is that our buildings were not designed to allow the necessary access, or to support the weight of building a rooftop garden. We are now working with a construction [and] development company within the district to implement a viable rooftop garden that will act as a template for what is possible when we put sustainability at the forefront of development."

> > -Holly Dumbarton, Project Coordinator, Food Eco District

Through this work, the FED has learned the following:

"The potential for urban agriculture will be one of the answers to increasing urbanization, soil depletion, loss of essential farming infrastructure, and our inability to feed ourselves in the future due to many of these issues and many more, and that we're all stronger together. Rather than compete against other nonprofits for grants and funding, we all need to work together to lift each other up and address the serious problems together."

-Holly Dumbarton, Project Coordinator, Food Eco District

TOPSOIL (Victoria, British Columbia)

TOPSOIL is an urban agriculture business established in 2014, in Victoria, British Columbia by Chris Hildreth. The pilot project began as a 400-square-foot rooftop garden. The City of Victoria supported Hildreth's urban agriculture and rezoned the city to a mixed use residential district so that TOPSOIL could grow and sell produce on a commercial basis. TOPSOIL helps to supply locally-grown, sustainable produce to 18 local restaurants and the surrounding community at its local market stand. TOPSOIL aspires to bring sustainable urbanized organic farming into a city setting, feeding the population, creating jobs, promoting horticultural career opportunities, and remaining carbon neutral.

TOPSOIL operates on 20,000 square feet of underutilized urban space and uses geotextile containers and an automated watering system that keeps plants hydrated without wasting water. TOPSOIL's garden systems are lightweight and inner-city friendly, as there are no fixed structures or loose soil. The geotextile garden containers can be easily configured into any pattern necessary to suit the requirements of each space, and are completely removable when required.

> "TOPSOIL was founded to create an innovative approach to food production — one that values environmental sustainability and the local economy. Urban agriculture is a revolutionary way to provide food that is healthier for us, cares for the environment, and just simply tastes better."

> > ----Chris Hildreth, Founder & CEO, TOPSOIL, Food Eco District

TOPSOIL has grown over 11.3 metric tons of produce and has offset five tons of carbon emissions utilizing an electric vehicle and bikes for delivery. It has additionally raised awareness in over 100,000 people through bike tours and pedestrians. TOPSOIL has an innovative model that can be quickly arranged and operational in one week, as well as broken down or moved to a new location, also in the span of one week.

Green Bloc Neighbourhoods (Vancouver, British Columbia)

The Green Bloc Neighbourhoods project was initiated in 2010 by a group of neighbors seeking to actively participate in the City of Vancouver's Greenest City Action Plan. Green Bloc Neighbourhoods projects are managed by Evergreen, a backbone organization that focuses on connecting stakeholders that can engage and collaborate to bring innovative ideas into fruition.

Green Bloc Neighbourhoods foster "sustainability through collaboration and innovation at the neighborhood level, connecting like-minded folks who are interested in finding innovative, creative, and resident-focused ways to reduce their ecological footprints" (Green Bloc Neighbourhoods n.d.). To enroll in the project, a neighborhood must enlist 20 households that will commit to participating in the program and attending four quarterly workshops during the year. These workshops are tailored to each neighborhood and are based on collective goals or skills that are identified as priorities. The overarching goal of the program is to measure



The EcoDistrict in Vancouver, British Columbia, began as a way for citizens to actively participate in the city's Greenest City Action Plan. ADI KAVAZOVIC

each household's carbon footprint before and after participation, with the goal of reducing the overall carbon footprint of each neighborhood by 15%. Through the program, participants are introduced to ecological footprint concepts, and how to map their consumption of resources, identify reduction goals, and plan a sustainable project.

Evergreen works with the City of Vancouver to review and develop policies:

> "We do make policy recommendations to the City when each project cycle is completed. Usually they are around making it easier for residents to do projects in their neighborhood, as sometimes permits can be hard to get, and creating a workshop series or training for residents who are interested in being leaders or champions in their neighborhoods, but may not be able to."

> > -Robyn Chan, Project Manager of Green Bloc Neighbourhoods

Reflecting on successes, our interviewee reported:

"Green Bloc has been most successful in neighborhoods where people already know each other. Because Vancouver is developing so quickly, we want to make sure the program also works in neighborhoods where people live in apartments, and where they may not have a lot of existing connections. So, we are brainstorming ways to make it work better in those instances."

> -Robyn Chan, Project Manager of Green Bloc Neighbourhoods



The East Harbour EcoDistrict in Toronto, Ontario, will bring more than 50,000 jobs and a vibrant new district for Torontonians to explore and enjoy. WLADYSLAW

East Harbour (Toronto, Ontario, Canada)

A master-planned, 60-acre, mixed-use development in the heart of eastern downtown Ontario, East Harbour will bring more than 50,000 jobs and a vibrant new district for Torontonians to explore and enjoy. This dynamic corner of the downtown will see a new neighborhood rise from its industrial past. Visitors will find a modern, urban mix of office and retail sites, cultural and public spaces, entertainment, parks, and restaurants, all threaded within a highly walkable, bikeable environment.



To promote livability and sustainability, Nordhavn has been designed as a "five minute city," making it possible to reach key destinations within a five minutes' walk from any point in the district. POLITIKANER

Reflecting on challenges in developing and certifying EcoDistricts, Katy Ricchiuto, Program Manager, EcoDistricts said:

> "I think the two main challenges that we see are as follows: One is funding and that is not so much funding [to] get document certified, but funding to pursue the implementation strategy long-term and make sure that there are staff members and people dedicated to the process. We always hear from those teams that funding is an issue. *The second is just capacity because things change. The capacity for* change for pursuing certification long-term is challenging, especially *if it's a community-led project. It's just a matter of understanding,* putting together the roadmap and going through the process of community engagement."

> > -Katy Ricchiuto, Program Manager, EcoDistricts

Nordhavn (Copenhagen, Denmark)

The areas around the Århusgade district of Copenhagen used to serve as a combined port and industrial area. Since 1970, cargo and container traffic have each influenced the design of the area. A number of similar companies have been closely associated with Nordhavn, including Nordisk Film and Dansk Industri Syndikat (Riffelsyndikatet), which was the target of sabotage during the Nazi occupation, circa 1940.

> "The uniqueness of the Århusgade quarter is based on its long history and strong identity: The history of the port and the area's qualities, combined with the future urban spaces and buildings, will create a unique neighbourhood with strong contrasts: New meets old. Large meets small. Closed meets open. The refined meets the rugged. The city meets the water."

—(Forside)

"The planning of the Århusgade district started in 2009 with the implementation of an international competition. Since then, the winning project has been further developed in the form of development strategies, construction plans, and a number of planning themes that will guide the continued development of Nordhavn. Copenhagen City Council has also adopted the necessary local development plan. CPH City & Port Development has therefore begun to implement the first phase of the largest and most ambitious urban project in Copenhagen."

—(Forside)

With its unique positioning and an area spanning the size of 625 football fields, Nordhavn, also called Nordhavnen, in Copenhagen, Denmark, is a sustainable city of the future. To promote liveability and sustainability, Nordhavn has been designed as a "five minute city," making it possible to reach shops, institutions, work places, cultural facilities, and public transport within a five minutes' walk from any point in the district. Nordhavn is also "creating a neighborhood which drastically rethinks how ways of living can be combined with sustainable energy, environment, traffic, and cityscape solutions," as explained by project manager Jacob Deichmann (Deichmann). At Nordhavn, it will be easier to walk, cycle, and use the metro, than to use a car.



The Vauban project in Freiburg, Germany, considered diversity, low energy, good public transportation, and short walking distances in its design. JÖRGENS.MI

Speaking on government involvement, Annette Walter, Project Manager in the Sustainability Department of The Copenhagen City and Port Development Corporation, said:

> "Basically, environmental issues and planning issues are decided at the government level. We have environment laws we have to follow, and we have laws of how you can build cities, because in Copenhagen, we have to follow a plan called the finger plan. So, we have this rule now that you can only build if you have proximity to public transport. This is a government law, which is sort of supporting that we build dense, and close to public transport. But then there's a lot of legislation also on the municipal level [City of Copenhagen]. They have a number of strategies and plans which you have to follow. They have a climate plan where they're trying to deal with plans to avoid flooding. They have a [carbon] reduction plan. They want Copenhagen to be [carbon] neutral by 2025. So, they expect us to support that as well. There's a building legislation, which are the building codes, and there are the rules that you have to try to save energy. So, there's legislation at many different levels with which we have to comply."

—Annette Walter, Project Manager in the Sustainability Department of The Copenhagen City and Port Development Corporation

Freiburg (Germany)

The Vauban project in Freiburg, Germany was successfully implemented between 1997 and 1999. Vauban featured 2,000 housing units with 5,000 inhabitants, including co-building and cohousing groups. This project considered diversity, low energy, good public transportation, and short walking distances for social and commercial infrastructure such as child care, school, and shops.

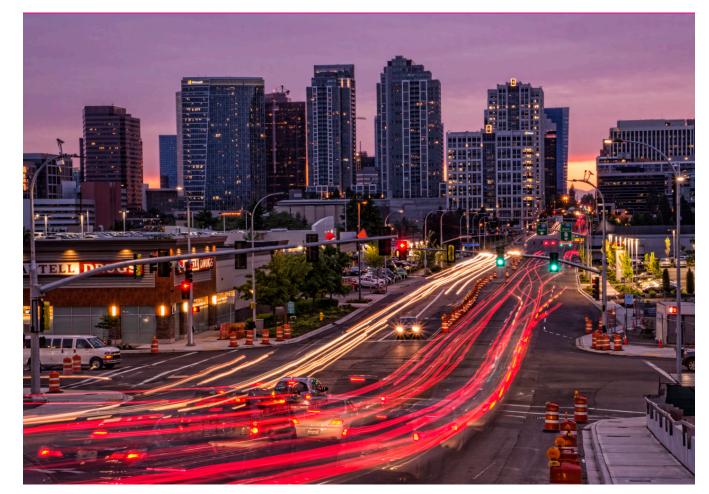
> "In the former barracks area [in] Vauban you live on the green outskirts of Freiburg, but at the same time it's urban and close to the city center. Vauban is a district of short distances. Many facilities such as grocery stores, drugstores, farmers markets, doctors, pharmacies or bike shops are within walking distance."

> > -Vauban project website, Freiburg n.d.

Nan Ding, a Green City employee, reflected on Vauban:

"I think the government should be behind us and provide some incentive. So that both the companies and also the citizens can join in. If I am just a normal citizen and I want to see if it's worth it to put up some solar panels on my rooftop, I can have this free consultation from the government with experts of course, and then they can help you to calculate whether it's worth it or not and answer if that the investment itself is financially beneficial within a few years following the federal incentives. Although there was no exempt incentives from the city Freiburg, the government would make a promise that they would buy the electricity generated from your rooftop, because if all the households have solar panels, it would be connected to the National Grid. So then financially it's already beneficial but now the federal incentives are already cut off. First of all, too many people have converted. Secondly, it's good enough already."

-Nan Ding, Green City employee, Freiburg EcoDistrict



CITY OF BELLEVUE

Each of the 11 models sampled in this report feature several main achievements that can be taken as examples when considering how to develop an EcoDistrict in Bellevue.

SAMPLED ECODISTRICT ACHIEVEMENTS

Model Sampled	EcoDistrict Achievements
Capitol Hill (2011) Seattle, Washington	Steering Committee; Shared Parking; Renters Initiative/ Consortium; Current project: Protected bike path
High Falls (2015) Rochester, New York	Community College - New location; Green spaces and pedestrian bridge; Technology parks (solar charging/ wifi)
Towerside (2013) Minneapolis-Saint Paul, Minnesota	Light rail connecting Minneapolis and Saint Paul; Innovative District Framework and Master Plan; Phase I - Stormwater treatment plant; Restoration and development within district; Walkable green spaces
Lloyd EcoDistrict (2010) Portland, Oregon	Right 2 Dream Too; Waste Reduction Plan; Energy Action Plan
Food EcoDistrict (2015) Victoria, British Columbia	Community education sustainability awareness; Restaurant sustainability certification; Public educational programs; Urban Learning Gardens - six raised garden beds
TOPSOIL (2014) Victoria, British Columbia	20,000 square feet of active food production; Supplies 18 restaurants and operates a local market stand
Green Bloc Neighbourhoods (2013) Vancouver, British Columbia	Innovation at the neighborhood level; Reducing carbon footprint; Community building; Neighborhood sustainable workshops
East Harbor (2015) East Harbor, Ontario	2015 Stakeholder Workshop; 2017 East Harbor EcoDistrict Case Study; 2018 East Harbor Master Plan; 2018 East Harbor Design Review Panel
Nordhavn (1998) Copenhagen, Denmark	A green capital city; Green buildings, green spaces, and public transportation within five minutes; Dynamic city; Energy Lab of Nordhavn: developing new sustainable energy solutions; Carbon neutral by 2025
Freiburg (1970's) Germany	Traffic less than 30 miles per hour; Renewable energy; Waste management; Goals: Traffic development plan by 2020
North Rainier Hub Rainier, Washington	Community-driven art projects; Community clean ups; Business support through walkabouts and advocacy

The following leadership, policy, incentive, and funding partnership recommendations came about through the analysis of our primary and secondary data. To provide evidence and context, they are paired with relevant interview quotes.

LEADERSHIP RECOMMENDATIONS

LOCAL GOVERNMENT LEADERSHIP

Direction: In order for the City of Bellevue to provide predominant direction and infrastructure guidelines during the development phase of the BelRed EcoDistrict, it will be necessary for the City to provide stewardship by maintaining a constant role within a steering committee or backbone organization.

Longevity: It is important to recognize that building an EcoDistrict is a long-term endeavor that can take upwards of 20 to 50 years. The need for continuity in leadership could be better achieved through the creation of a Sustainability Consultation Department within the City of Bellevue that specializes in green and sus÷tainable district codes. This would be one way of guaranteeing success in directing and managing collaborations with residents and stakeholders.

RELEVANT QUOTES FROM SAMPLED ECODISTRICT MODELS

"We organized a steering committee of stakeholders that includes representation of different institutions in the neighborhood: businesses, community groups, [and] local renters."

> —Joel Sisolak, Sustainability and Planning Director, Capitol Hill Housing, Capitol Hill EcoDistrict Project

"We are the sustainability department of Copenhagen's City and Port Corporation. We are owned by [the] City of Copenhagen 95%, and 5% by the government. Our job is to develop urban areas in the city." — Annette Walter, Project Manager in the Sustainability Department of The Copenhagen City and Port Development Corporation It is important to recognize that building an EcoDistrict is a long-term endeavor that can take upwards of 20 to 50 years.

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Residential and mixed-use zoning is required for urban agriculture to exist within an EcoDistrict for the purpose of selling produce to the community. "[The creation of an EcoDistrict] could take 10, 20 years. But during that time-span obviously the players turn over. To keep the commitment going, and to keep the interest, those are the challenges."

> —Valerie Avalone, Director of Planning at Monroe Community College

"It's going to take 40 years to develop all of Nordhavn, and we've just finished developing the first part. We've been doing that for the past eight years."

Annette Walter, Project Manager in the Sustainability
Department of The Copenhagen City and Port Development
Corporation

POLICY RECOMMENDATIONS

ECODISTRICT GREEN POLICIES

Policy: A predominant recurring theme from existing EcoDistrict models is the inability to oversee the development of green and sustainable infrastructure without existing policy guidelines regulating the levels or options of sustainability that the landowner or developer is required to follow within the boundaries of the EcoDistrict.

Example: In order for structures to have gardens on the rooftops, the infrastructure must support an extensive design (plants and shrubs), or an intensive design (trees and shrubs).

Land use: Residential and mixed-use zoning is required for urban agriculture to exist within the EcoDistrict for the purpose of selling produce to the community.

RELEVANT QUOTES FROM SAMPLED ECODISTRICT MODELS

"A big, broad, holistic vision does try to encompass everything that you'd want for community development. How do we achieve that without owning land? It has been about finding those leverage points and really trying to lead from an asset opportunity."

> —Stephen Klimek, Project Manager at Towerside Innovation District

"We are now working with a construction [and] development company within the district to implement a viable rooftop garden that will act as a template for what is possible when we put sustainability at the forefront of development."

-Holly Dumbarton, Project Coordinator, Food Eco District

"The potential for urban agriculture will be one of the answers to increasing urbanization, soil depletion, loss of essential farming infrastructure, and our inability to feed ourselves in the future due to many of these issues and many more."

-Holly Dumbarton, Project Coordinator, Food Eco District

INCENTIVE RECOMMENDATIONS

COMMUNITY ENGAGEMENT

Sustainable-incentive-based partnerships: Focusing on the positive aspects of sustainable development requires a commitment and collaboration amongst the EcoDistrict community and stakeholders. Several of the models sampled have employed the use of certification.

Infrastructure developers are given three different sustainable building options that correlate to Silver, Gold, or Green Building Certifications.

Restaurants owners and chefs are given three different sustainable operating options that correlate to Silver, Gold, or Green Food Sustainability Certifications.

Neighborhoods are also able to gain certification by reducing their carbon footprint and attending community building and sustainability workshops.

RELEVANT QUOTES FROM SAMPLED ECODISTRICT MODELS

"The only way that this business works, and the only way we have approached it, or I have approached it, is a full-on partnership model."

> —Chris Hildreth, Founder & CEO, TOPSOIL, Food Eco District

"I believe this system of certification has been successful because" we really try to work with each business to provide easy-to-digest information and suggestions on ways to become more sustainable. Also, they need to be passionate about all of this, otherwise it wouldn't work."

-Holly Dumbarton, Project Coordinator, Food Eco District

"Certification is basically working to make this commitment, to hold ourselves accountable, and to demonstrate leadership and implement the protocol in a really in-depth way."

-Katy Ricchiuto, Program Manager, EcoDistricts

FUNDING PARTNERSHIPS

COLLABORATIONS

Funding Opportunities: Based on the responses collected from the sampled EcoDistrict models, a good backbone organization will possess the knowledge and skill set necessary to find the funding opportunities needed to develop the desired EcoDistrict.

A large portion of federal funding can be obtained through grants for the restoration of natural environmental habitats, streams, and salmon habitat.

A good backbone organization will possess the knowledge and skill set necessary to find the funding opportunities needed to develop the desired EcoDistrict.

This type of project proposal is usually spearheaded by the backbone organizations that specialize in finding and generating funding for the project. This is typically not a skill set that a steering committee possesses

RELEVANT QUOTES FROM SAMPLED ECODISTRICT MODELS

"Developers pitched in what they would have normally had to pay for stormwater management and the watershed supplemented it with some of their funding. And Mississippi watershed created this system that serves four different properties over eight acres, collects the water, treats the water, [and] stores it for reuse. And it does it all to a higher standard than what the City would normally require."

> ---Stephen Klimek, Project Manager at Towerside Innovation District

"We received [a] \$75,000 tree-planting grant from the Department of Environmental Conservation."

> -Valerie Avalone, Director of Planning at Monroe Community College

OPPORTUNITES

Some forms of federal funding could be available to use in the development of an EcoDistrict. For example, the Washington State Conservation Commission offers a Natural Resource Investment grant of \$150,000 per landowner. Furthermore, the Washington Department of Fish and Wildlife offers a Salmon Restoration Program, as well as a Stream and Habitat Restoration Program, both of which can be attached to sources of funding.

CROSS-CASE ANALYSIS

Through our case analysis, we found several distinctions and commonalities. The European cases were much more developed than the cases from North America because they were initiated earlier in time. Additionally, they were supported by government on multiple levels to carry out projects. However, there were some similarities found around food, transportation, and energy. Both the Food EcoDistrict and the TOPSOIL business in Victoria, British Columbia support sustainable organic food for restaurants and the local community, as well as sustainable education programs. The Food EcoDistrict also provides incentives such as a restaurant certification so more businesses are motivated to participate. Capitol Hill in Seattle, Washington, High Falls in Rochester, New York, Towerside Minneapolis-Saint Paul, Minnesota, Nordhavn in Copenhagen, Denmark, and Vauban in Freiburg, Germany include goals for more walking space, a push for less cars, and sometimes a centralized public transit system. Finally, the cases of High Falls, Vauban, and Nordhavn involve cities that have put forth efforts into technology as renewable energy. For example, Rochester, New York has solar panels in its parks, and Nordhavn has the Energy Lab of Nordhavn, through which it is working to develop new sustainable energy solutions to achieve its goal of becoming carbon neutral by 2025.

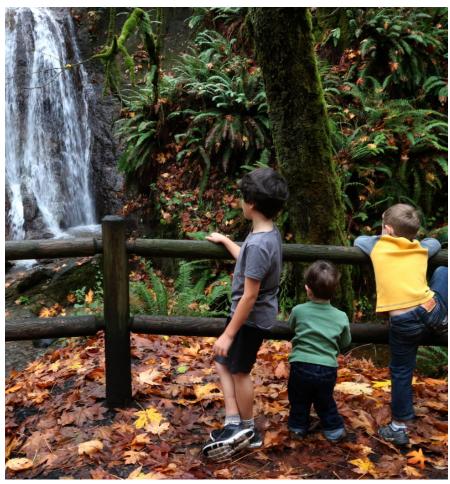
CONCLUSION

The purpose of the first goal of our research was to interview persons within the City of Bellevue whose departments played a role in the development of the BelRed EcoDistrict as laid out by the policies and plans in the BelRed Subarea Plan. These interviews helped us to determine what development has or has not taken place, what barriers were faced, and to gather interviewees' thoughts on potential opportunities and next steps to take. The eight interviews that we conducted from various departments across the City of Bellevue conveyed to us that the overall project has not seen much development over the past 10 years. In some interviews, it was highlighted that the land use code should be reviewed to ensure that it aligns with the environmental goals of the BelRed Subarea Plan. It was recommended to make environmental policies, such as open spaces, trails, and streams, first-tier priorities to ensure a holistic approach and avoid overlooking environmental sustainability. On a similar note, one major barrier expressed in many of our interviews was that private development leans towards fee-in-lieu strategies, due to lack of incentives, and that this makes it difficult for the City to implement environmental policies. According to some of our interviewees, having a reinstatement of the committee to review rules and regulations could promote collaboration and communication between departments within the City of Bellevue and private developers. Additionally, rewriting the TDR agreement under the BelRed Lookback could also help to serve more people within the city.

The intent of our second goal was to examine other cities that have implemented EcoDistricts and see what we could learn from them. From these cases, we have found that it is essential to be clear and transparent with goals to aid the implementation process. In the bigger picture, one of the main highlights we found was the difference between a community supported by its federal government which understands the need to be a sustainable community, and a community that is not, and needs to advocate to become sustainable. On a micro level, this highlights the importance of policies to implement a sustainable society. On a micro level, this highlights the importance of policies, including property policies, to implement a sustainable society.

NEXT STEPS

Further research could include additional interviews from key stakeholders, particularly those not interviewed in this report. Further studies could also look into the role of policy changes that can be made by the City regarding land use. Studies could also seek to examine the role of federal funding to support EcoDistricts.



The BelRed EcoDistrict could draw success from making environmental policies like open spaces, trails, and streams, a first-tier priority. CITY OF BELLEVUE

REFERENCES

Avalone, Valerie, Director of Planning at Monroe Community College, 2019, Rochester, New York.

Chan, Robyn, Project Manager of Green Bloc Neighbourhoods, Evergreen, 2019, Vancouver, British Columbia, Canada.

Deichmann. (n.d.). Nordhavn: Role model for sustainable urban development. Retrieved June 24, 2019, from https://ramboll.com/sustainability/solutions/projects/nordhavn

Ding, Nan, Green City employee, Freiburg EcoDistrict, 2019, Freiburg, Germany.

Dumbarton, Holly, Project Coordinator, Food Eco District, 2019, Victoria, British Columbia, Canada.

Forside. (n.d.). Retrieved June 24, 2019, from https://byoghavn.dk/nordhavn/

"Green Bloc Neighbourhoods." Green Bloc. Accessed 2019. http://greenbloc.lighterfootprint. ca/.

Heinicke, Sarah, Executive Director of Lloyd EcoDistrict, Lloyd EcoDistrict, 2019, Portland, Oregon.

Hildreth, Chris, Founder & CEO, TOPSOIL, Food EcoDistrict, 2019, Victoria, British Columbia, Canada.

Homepage. (n.d.). Retrieved June 24, 2019, from https://www.mwmo.org/

Klimek, Stephen, Project Manager at Towerside Innovation District, 2019, Minneapolis, Saint Paul, Minnesota.

Miller, Anne, Manager of Meaningful Movies Project. Interviewed as a member of the board of the Mt. Baker Hub Alliance for North Rainier Hub EcoDistrict, 2019 Rainier, WA.

Mississippi Watershed Management Organization. Homepage. (n.d.) Retrieved June 24, 2019, from https://www.mwmo.org/

Ricchiuto, Katy. Program Manager, EcoDistricts, 2019, Seattle, Washington.

Sisolak, Joel, Sustainability and Planning Director, Capitol Hill Housing, Capitol Hill EcoDistrict Project, 2019.

"Stadtteil Vauban, Freiburg." freiburgvaubande. Accessed May 25, 2019. https://freiburg-vauban.de/en/quartier-vauban-2/.

Walter, Annette, Project Manager in the Sustainability Department of The Copenhagen City and Port Development Corporation, 2019, Copenhagen, Demark.