

Daybreak Cohousing

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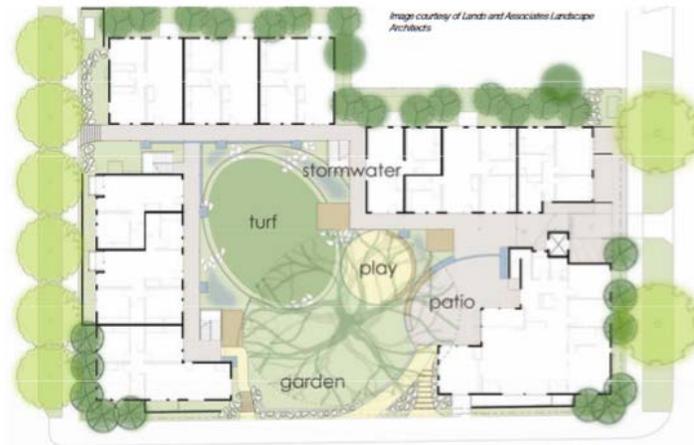
Daybreak Cohousing



We are a cohousing community in urban Portland, Oregon. Our primary wish is to live in a place where our multigenerational neighbors know each other like an extended family. We wish to live among neighbors who want community support through the cycles of life, have a desire to simplify and live sustainably, and keep an active connection to larger community. We wish to live with neighbors who help us nurture our spiritual values and practices, whatever they may be. We wish to create a community accessible to those with a diversity of personal abilities.

Introduction

Daybreak is a 30-unit cohousing development built in 2009 in the Overlook neighborhood of Portland, Oregon. The site is two-thirds of an acre centered around a fifty-year-old maple tree which serves as the development's aesthetic, solar-modulating, and ecological anchor. Daybreak consists of four multi-story buildings, three with residential units and one a large common house with two residential units on top. The buildings are variously 2, 3, and 4 stories to maximize solar exposure. The condominium units are 1 to 3 bedrooms and range from 650 to 1,200 sf. The shared common house is 7000 sf with a communal kitchen, main dining hall, library, communal laundry, tool workshop, bike parking and other amenities. A circular green and children's play area fills the central courtyard. The grassy surface of the green sits atop an on-site stormwater filtration system.



Lando & Associates Landscape Architects

The property is located on North Kilingsworth Street which is a high frequency transit corridor and so falls under the City of Portland's parking minimums exemption. This exemption made it possible for Daybreak to develop the property without car parking which served their ecological goal of minimizing car use and allowed them to keep their massive tree. The location is a "20-minute neighborhood" with a concentration of commercial services. Residents can walk, bike, or use public transport (bus and light rail) to get easily and quickly to grocery stores, restaurants, cafes, a Kaiser medical center, a library, a community college, parks, and schools. Downtown is 25-minutes via bus or light rail.

Cohousing: a brief introduction

Cohousing evolved in Denmark in the 1960's. The movement arose in response to the increasing dominance of isolated nuclear family living. The cohousing model sought to provide a new kind of living arrangement which, while rooted in the privatization of resources constitutive of Capitalism (each resident owned or rented their own residence), permitted substantive and meaningful opportunities for residents to share their resources communally. Cohousing was and is often framed as a mode of living that is "more natural" and rooted in traditional community forms but it is also considered to be, simply, more pragmatic, ecological, affordable, sociable and pleasant form of housing. The first cohousing project in the world, Sættedammen, was built in Denmark in 1972 and housed 80 people. By and large, cohousing communities to this day share the key elements that were features of the original Sættedammen project including a consensus structure for community governance, private ownership or rental, shared resources (including laundry, tools, toys and etc.), a communal kitchen and dining hall with periodic shared meals, and cross-generational community.

Sharing and Ecology

The principle of sharing is fundamental to the cohousing model. The Copenhagen-based journal *Politiken* published an article in 1967 by Bodil Graae, "Children Should Have a Hundred Parents"

which is often cited as the catalyst for the cohousing movement. In this article, the principle of shared parenting is founded on reworking the nuclear family's built environment. Graae's argument for better parenting models is rooted in an analysis of social and ecological systems as connate. She begins with an examination of the ways car infrastructure undermines children's ability to safely and richly inhabit and explore their world. That ecological and social flourishing are interconnected is an insight which extends throughout her vision of cohousing as a corrective to the excesses and deprivations of the 20th century's built environment.

For the Daybreak founders, cohousing offered a model in which sharing what is material (space, things) and immaterial (time, care) makes a much lower ecological footprint achievable. Kristin Wells, who was one of the first to join the Daybreak project told me that the social reasons for building a cohousing community were "totally connected" to the ecological reasons.

A smaller personal home is pragmatic and comfortable in cohousing due to the expansive public spaces: you can use the large hall and kitchen for hosting parties like a kid's birthday party. And there is a guest house for out of town visitors. Instead of each unit having a washer, dryer, storage space, exercise equipment, lawn mower, gardening tools, work tools and hardware, camping gear, movies, books, and toys, and so forth. many of these things are held in common and shared so the cost is lower, the ecological footprint is lower, and the space required for storage is lower. But there is also the sustainability of time. That is something people overlook when they think about sustainability. Shared meals, for example, means that households don't always have to cook every meal. (Wells Interview)

Many people who live in cohousing communities report that they prize the way they can come home from work and just walk down to have a dinner that's already prepared (Cohousing Association, US). They feel it is rewarding not only because they don't have to cook privately but also because they have a chance to relax and socialize. Of course, there are challenges when people share their lives. Interviewing Daybreak residents, some told me that they didn't eat with the group as often as they'd like because they preferred to eat more organic food or vegetarian than was provided at a given moment (depending on the priorities of the group which change as the resident group changes) or simply because the timing might not be possible based on their family's schedule at a given period in their lives.

Cooking is only one of the ways "time" is shared at Daybreak according to Wells—the fact that people at Daybreak are a close-knit group means that one's time is less strained, "it is easy to ask a neighbor to watch your kids while you run to the store, or to 'borrow a few eggs' rather than having to go run to the store in the first place" (Wells Interview).

While there has not been a formal car-sharing program specific to Daybreak the residents report that they have been able to go without owning a car or having only one car because residents are generally happy to loan each other cars when needed.

Early Evolution and Daybreak's Development Team

The Daybreak project began in 2005 as a labor of love first conceived by Terri and Dave Huggett. Terri began the project with extensive research on cohousing, particularly in the US and Denmark. The Huggetts attended alternative and green building workshops where they began to learn about the social and material systems involved in successful cohousing. They began building a network of like-minded people and in December 2005 they met Kristin and Rich Wells who became key collaborators. Kristin has an architecture degree from University of Arizona where she first learned about cohousing projects (Daybreak website). Kristin would come to serve as the Daybreak Project Manager.

Originally the Daybreak community intended only to remodel an existing apartment complex but they quickly realized that by pooling their resources they would be able to finance a much larger project, custom designed for the scope and style of community life they hoped to create and with the kinds of ecological features to which they were committed. Through public outreach Daybreak began to build a network of people committed to making a cohousing project in Portland come to life.



As they began to look for a site, Daybreak formed an LLC made up of the four founders and an additional team of seven households. In August 2006 Daybreak LLC found their 12-unit apartment complex on a public transit corridor with 12 off-street parking spots, an ideal close-in urban location.



Existing site 2525 N. Killingsworth, 2005

Because the cohousing model remains atypical, the LLC had some difficulty securing loans. Both their construction loan and the commercial property loan were serviced by ShoreBank Pacific, a mission driven local bank with their offices in the Portland EcoTrust Building. As we will see, a significant piece of their financing was also provided by friends and family who would, due to the Financial Crisis of 2007-8, lose substantial sums from their investment in Daybreak. The loan requirements did include a secondary schematic design which included the felling of the old maple tree to make space for a parking lot. There was some concern on the bank's part that the units could experience difficulty selling as a result of not having off-street parking. Fortunately, despite all the unforeseen financial problems (resulting from the Financial Crisis) the parking lot was never built.

The Design and Building Team

After the purchase of the property in October of 2006, Daybreak hired B&G Builders of Portland. They were selected as the contractor primarily for their knowledge of and commitment to ecological building practices. B&G describe their company as one "founded to fulfill a vision of developing and constructing socially, economically and environmentally viable projects. This vision is based in the principle of being stewards of our community through strong sustainable design and construction practices" (B&G Builders). According to Wells, "We selected them because of their green building experience and interest." Daybreak members were specifically impressed by what B&G would *not* do for clients: "They would not do projects unless they were

FSC certified and they would not use vinyl windows. They had non-negotiables, and we liked that” (Wells Interview).

Seeking a design firm, a request for qualifications was sent out nationally in 2006. Soon after the RFQ was posted, Kristin Wells met Grace Kim of Schemata Workshop at a conference on cohousing. Kim had much to offer as an architect on a cohousing project; she had written a book length study *Designing the Cohousing Common House* based on her research in Denmark where, over the course of two months, she and Schemata Workshop cofounder Mike Mariano visited, interviewed, and documented over twenty cohousing communities. Schemata Workshop was invited to submit and eventually awarded the project. Daybreak would be their first multi-family project.

The Design Process

Pre-design

As a first design step Schemata organized a sustainability charrette hosted by the multi-national Arup firm. Arup is a large multi-national that is one of the world’s oldest firms with a commitment to qualitatively improve world’s built environment. Working from the information gathered and from the goals and intentions of participants gathered during the day-long charrette, Arup produced an extended report on design strategies for the site to maximize environmental integrity in systems including human health, ventilation, water efficiency, heating and hot water, building envelope, renewables, passive solar, and energy monitoring.

An original hope for many of the Daybreak group was to build a net-zero development, however the charrette process made clear that trying to achieve net-zero for water or energy would be extremely costly without producing economic benefits for an extremely long time. According to Mike Mariano, a cofounder of Schemata Workshop, one barrier to green building in the Pacific Northwest is extremely cheap electricity as a result of dam infrastructure. Our cheap energy disincentivizes the most ambitious green building goals. Perhaps as the dam infrastructure ages and needs massive scale repairs (as we are seeing presently at Oroville Dam in California), the costs of electricity will rise and encourage a shift to greener renewable sources (Mariano interview). After the charrette, Arup and Schemata Workshop produced a Sustainable Strategies Report which served as a research guideline for the development team helping prioritize green strategies most cost effective for their particular site and region.

Integrated Design Process

Although there were no legally binding IPD contracts drawn up, the Daybreak project relied heavily on collaboration and communication between the different teams. Daybreak LLC hired their contractor, B&G Builders, before they hired their Architectural firm and was in conversation with them regarding what and how to build based on their extensive knowledge of green building. Schemata Workshop used site plans drawn by Project Manager Kristin Wells (BArch) as

a starting point in their design and Arup's charrette helped clarify the goals of the community for both the builders and the architects. B&G insisted on smart framing, no vinyl, low VOC materials. The back-and-forth among the team members and larger Daybreak community was time consuming and challenging, but also something all the team members cite as a rewarding aspect of the project: "there was a tremendous amount of energy and engagement that was fostered by the consensus cohousing model" (Mariano Interview).

Sharing, collectivity, and a smaller footprint

According to Schemata Workshop architect Mike Mariano, Daybreak Cohousing was an exciting green project for social reasons as much as for the mechanical and material systems employed. On the one hand, certain systems they were interested in were hard to achieve because the "social piece of green design" can be hard to police: "some consideration was given to the possibility of using the pre-existing basements as a location for waste water recycling. However, ultimately, we decided against it since the community was not ready to commit to policing that system over the long haul—just one resident unwittingly using Drain-O would contaminate the whole system" (Mariano Interview). However, on the positive side, "so much can be achieved simply through alternative social models and cohousing's social goals have inherent ecological benefits" (Mariano Interview). By sharing many fundamental systems like laundry, storage and equipment, cohousing cuts back on the Western living standard's ecological footprint. The units for residents are smaller than they would normally be and therefore require fewer raw materials to build and use fewer resources over the long term.

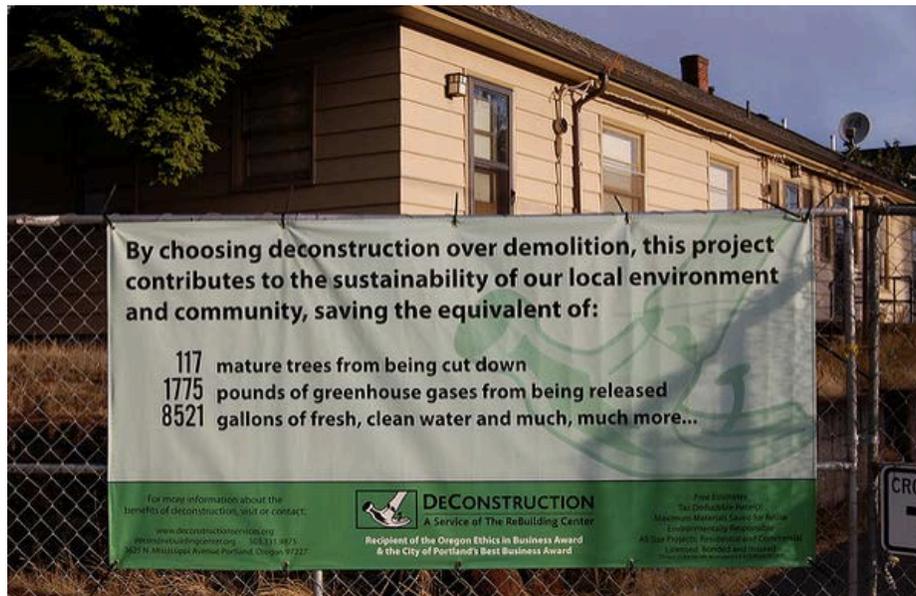
Certification: LEED and EarthAdvantage

I heard conflicting reports regarding the certification of Daybreak and I was not able to locate any record of certification. However, Kristin Wells who served as the Project Manager told me that EarthAdvantage certification was achieved. Mike Mariano of Schemata Design and Gabe Genauer of B&G told me that the residents, at every moment, attempted to build "as green as possible within [the] budget" (Daybreak Case Study and Genauer Interview). In addition, had LEED certification been sought it would have been relatively easily achieved according to a case study by Grace Kim of Schemata Workshop. In Kim's calculation Daybreak would have been eligible for points in LEED categories including "Sustainable Sites" 14 points, "Water Efficiency" 5 points, "Energy and Atmosphere" 17 points, "Materials and Resources" 13 points, "Indoor Environmental Quality" 15 points, and "Innovative Design" 5 points. With a total of 69 points Daybreak would have been competitive for LEED Platinum in 2009 (Kim, National Cohousing Conference).

Green Building and Systems at Daybreak

Recycling

Daybreak hired DeConstruction Services, a project of The ReBuilding Center, to deconstruct and recycle the original structure. Approximately 85% of the original building materials were recycled. The normal costs for demolition of a 9,600 sf property would be approximately \$20,000 with approximately \$5,000 for disposal fees and city permitting. To deconstruct would cost approximately one and a half times this amount with lower costs for disposal but an additional cost for appraisal of materials.



August 8, 2008

The cost of deconstruction is offset by a tax savings through the donation of the salvaged materials to the nonprofit ReBuilding Center. According to DeConstruction Services, deconstruction, after tax breaks, can cost substantially less than demolition. Daybreak's architect and Project Manager reported that deconstruction, in the end, did cost them more than demolition would have. However, it was a price they wanted to pay for ethical reasons.



September 1, 2008

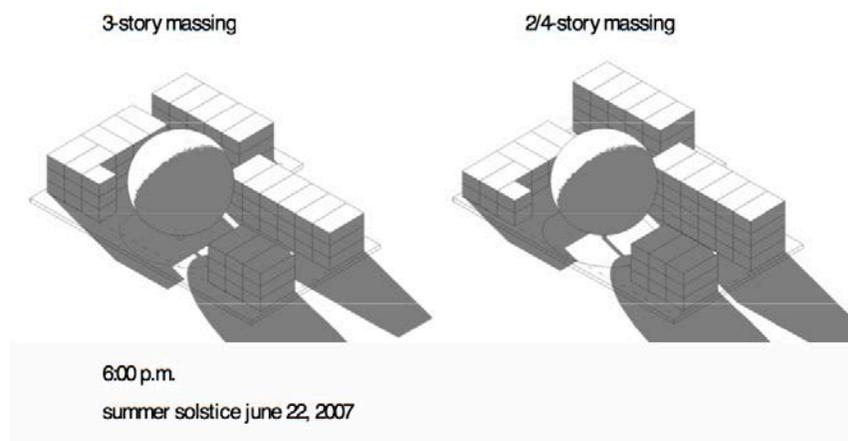
According to The ReBuilding Center, “By choosing deconstruction over standard demolition, the members of Daybreak Cohousing are saving the equivalent of 35,505 cubic feet of reusable materials out of the landfill; 8,521 gallons of clean water, or daily water intake of 17,042 people; 117 mature trees left in the forest, or 36 acres of new planted pine; 2,343 square feet of affordable housing from the reused building materials; 3,221 additional hours of work at a living wage, supporting our local economy; 10.2 cars removed from the road in the reduction in greenhouse gases” (ReBuilding Center).

Thermal Systems

Solar Orientation

A primary design constraint involved orienting all the units so that they both provide excellent solar orientation year-round and the “eyes on the street” perspective from the kitchen window which is a design feature much used in cohousing projects. All units have kitchen windows that overlook the central green space and Kilingsworth Street.

Optimal solar exposure was achieved by staggering the units at 2, 3, and four stories which provided all units south-facing sun exposure.



Engineered sunshades with slating at south facing windows provides shading during the summer months to help keep residences cool. The maple in full leaf at the center of the site provides summer solar shading to many of the south-facing residences. West facing windows are equipped with exterior roller blinds.



Thermal massing

Concrete floors with hydronic radiant floor heating (paired with an EnergyStar electric boiler) is used to heat all buildings and units. The dense pack insulation in the building envelope serve to augment the floor's thermal mass and passive solar strategies employed through site orientation.

Ductless Mini-splits

The common house is heated and cooled using ductless mini-split systems. These systems were chosen for their efficiency and because they work well in extra large public spaces permitting flexibility in heating/cooling only in the areas being used at a given time.

Ventilation and Glazing

The units are designed to optimize natural ventilation with windows located on opposite sides of each unit's main living area. Pella triple pane aluminum clad windows with wood interior framing and low-e coating are used in all units. A combination of operable awning and casement windows are used throughout the units to permit a variety of options for capturing breezes and to make use of stack effect—moving air from low to high to increase the air flow.

Natural ventilation and shading are the sole means of building cooling.

Building envelope

High quality building and durability

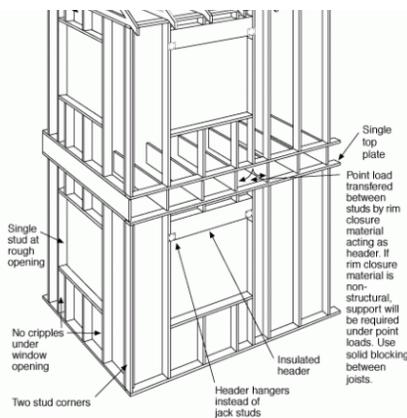
Beginning with a very involved design collaboration among owners, architects, and the builders—including an Arup charrette and research report—and followed by careful attention to detail and a rigorous commitment to ecologically sustainable and nontoxic materials, the result is an extremely well built and durable structure. As their blower door tests showed, they have a very tight envelope thanks to carefully constructed thick walls and high quality windows. The building should last a very long time. A recent study conducted by Daybreak analyzed all building systems eight years into the structure’s life. While some problems are present, including some poorly installed flooring systems which have caused water pooling on walkways and even at and inside some front doors, the early building commissioning and recent analysis show that the structure has a high level of integrity (Freyman-Danielsen Interview).

Air leakage

Blower door tests were done for each unit at the end of construction by an accredited third party as required by EarthAdvantage for certification. The blower door tests identified missed air leakage paths to be corrected.

Wall construction

The walls are breathable, highly insulative (R-45), with minimal thermal bridging. A “smart framing” technique was used (24” stud spacing) to reduce the amount of wood required and to decrease thermal breaks. The walls exceed code level insulation level by 20%. The insulation is formaldehyde-free fiberglass and they selected binding agents and glues that were all water-based. The rain screen construction is achieved using a water-resistant barrier, air gaps between the WRB and siding, flashings at all penetrations and weep holes in the wall bottoms.



Roof construction

The roof is flat in order to permit solar (PV panels are not presently used but the roof is solar-ready). The roofing is a TPO white bi-laminate rubber membrane and keeps roof temperatures low during hot months due to the reflectivity of white, minimizing heat island effect. They chose

not to exceed Oregon's requirements of R-38 roof insulation. The low emissivity roofing's reduction in heat gain diminished the need for additional insulation. Additional insulation above R-38 was not considered cost effective as the "payback" on investment is greater than 10 years.

Site Ecology

Stormwater management

Originally Daybreak and the design team did extensive research to determine if it might be possible to install an underground greywater and/or stormwater catchment system in the site's existing basements. In the end, they decided against this for a number of reasons including that the initial cost was quite high relative to code stormwater management requirements and the savings possible through minimizing the need for City of Portland water for toilets, gardens, and laundry was not sufficient. Instead they use a system of swales distributed around the site to capture stormwater and direct it through a water-table return system affectionately called "the burrito." The burrito is a simple construction consisting of a buried pit of gravel combined with a non-woven felt-like geotextile fabric lining.



"Stormwater Burrito"

Green Space

The site has raised garden beds where residents work together to grow food used in communal meals. There is a large, onsite composting area. The grassy green at the center of the site is a

social gathering place and play area and doubles as the stormwater drainage well. A system of swales and rain gardens runs throughout the site and makes use of native plantings. Fruit trees and berry vines grow on the west side of the building and Hardy Kiwi vines grow two and three stories high along the metal stairways at the borders of the green. There is a small patio area with a screen of large bamboo toward the back of the site.



While green space in this dense urban development is not extensive, much effort has been given to maximizing it. Their landscaping was designed by Lando & Associates with an emphasis on native plantings and food crops. Daybreak has a policy of using no synthetic chemical pesticides or herbicides.

Appliances, Fixtures, and Materials



Appliances

All of the appliances are EnergyStar certified. The dishwashers and washing machines are energy efficient and minimize water use. There was some debate about using gas ranges in kitchens. They chose electric stoves for the indoor air quality benefits of not using a combustion source indoors and in order to avoid using a fossil fuel energy source. The one gas appliance in the development is the commercial kitchen stove in the communal house.

Fixtures

The fixtures are also EnergyStar certified. The showers and faucets are low flow and the toilets are dual flush. They replaced their shower and faucet fixtures after a year with even more efficient ones with the help of the Water Bureau (in 2010). According to Arup projections the low flow features save the site 34% in water reduction. This amounts to approximately 6,333 gallons savings per annum.

The residents were very troubled as the water usage numbers began to come in after the project was peopled. Their water usage was much higher than would be expected for a site of their size, much less one with such efficient fixtures. They studied their system to determine if they had a leak and canvassed residents to see if people were using unusually high amounts of water. It turned out that the Water Bureau, when they installed the meter, put a decimal point in the wrong place so they were paying ten times more than their actual usage for the first three years. The rebate for over-payment was in excess of \$35,000. With the proper meter measuring in place their water use and costs typically improve upon the Arup projections (Wells Interview).

Materials selection

All wood was either FSC certified or engineered. The engineered wood chosen was made with low-formaldehyde binders.

Throughout the building process non-toxic materials were a priority. The insulation is formaldehyde free, the windows are nontoxic (specifically no vinyl), the floors throughout are concrete with a zero-VOC sealant, no carpeting was used to avoid any chemical off gassing. All paints were low or zero-VOC.

Eco-nomics

The original group of Daybreak “developers” created an LLC which included the 4 majority members, Terri, Dave, Kristin and Rich, as well as 7 new households. To join the project involved a financial commitment totaling \$20,000 (per house/unit) and this cash was used as part of the down payment needed to buy the site. The property was purchased for \$1,153,000. Their lender was the local community bank, ShoreBank Pacific.

The purchase of the property was not terribly difficult, involving a common loan structure (calculated using LTV) for a commercial property; however, the construction loan was more complicated because of the atypical nature of a cohousing project.

To secure their construction loan, Daybreak LLC was required to pre-sell 75% of the units (about 22 of the 30 units). Daybreak LLC had to pay all the design costs using cash which was raised through their own savings (the personal savings of member of the LLC) and through funds raised in the form of loans from friends and family at 8% interest (these loans were, according to Kristin Wells, provided by from friends, family, and others who simply wanted to invest in the project because they felt strongly about its mission and wanted to help make the project happen). They were able to raise \$2,391,000 for soft costs in this manner, without funds from ShoreBank Pacific.

Hard costs for the project totaled approximately \$5,579,000. Although I was not able to access a proforma for this project, we can estimate this based on the numbers I was provided. According to Kristin Wells, the total project cost was \$9,500,000. The portlandmaps.com record of the sale of the site in 2006 is \$1,530,000. If the soft costs were 30% of the project costs as is typical, then the soft costs would be \$2,391,000 and the hard costs would be \$5,579,000.

If the total costs of development are indeed \$9,500,000 then the cost per sf is \$316 including common spaces. These squarefootage costs line up fairly accurately with the costs of new units in 2009 when these first went on the market. Daybreak units sold in 2009 averaged \$353 sf (portlandmaps.com).

Costs of Green Building and Trade Offs

Green building choices were fully integral to the design. However, there were many trade-offs which were negotiated by the development team. For example, they did not choose to do solar at the time of building to save on upfront costs. However, they did design their roof and infrastructure wiring to make the building solar-ready so that it might be installed seamlessly in the future. They might have, as discussed previously, built a more elaborate water-recovery system if funds had allowed. Their deconstruction costs were in excess of what demolition would have cost by approximately \$15,000. The use of FSC wood and non-vinyl windows came at a premium of 20% over standard costs (Daybreak Case study).

Tax Breaks and Incentives

Did the team make use of any incentives available for green building? This was a question I posed to all the key players in the development team whom I interviewed. Although I don't have specific record regarding particular incentives used for the project, I conjecture that they leveraged some incentives. If they had wanted to, there were a number of incentives available to them. These incentives include: the City of Portland's Bureau of Environmental Services' Community Watershed Stewardship Grant; One Percent for Green; Treebate and Clean River

Rewards; Clean Energy Works Oregon energy and weatherization incentives; Energy Trust of Oregon Cash Incentives; Portland Water Bureau free water efficiency devices; as well as the Federal Tax Incentives Assistance Program for energy efficient technologies and the State of Oregon EIP (for renewables and energy efficiency) grants.

ελληνική τραγωδία (Greek Tragedy Interlude)

By the time all the building labor and materials contracts had been signed, around 2008, the market crash began to happen and when building was completed in 2009, the Financial Crisis had fully taken hold. The Daybreak team designed and financed everything at the height of the market and had to sell at its nadir. This was a disaster for the owners. Many of the households which had pre-purchased (committing their \$20,000 before building began) experienced financial difficulties. Some lost their jobs or their retirement or lost so much value on the house they intended to sell in order to buy the Daybreak condo, they could no longer afford to buy. Many families were not able to secure a bank loan as was common during the Financial Crisis. After November 2009, no loans under any circumstance were possible since a red mark against property was registered due to a looming foreclosure. For a period during 2009-2010 the community rented out units as a way of raising temporary funds since the buyers who could purchase units were exclusively those able to pay in cash. Finally, the bank did foreclose on the property which then permitted buyers to get loans (with the red mark against the property removed) and within 3 years (2012) the market began to recover and all the units were sold.

The damage to the original community was profound: only 2 of the original founder families were able to move in and live at Daybreak and then only as renters. Of the original 22 household buy-ins only 7 households were able to purchase. These families were able to get loans before the foreclosure notice was filed. Other than these 7 families, all the other households' approximately \$20,000 investments were lost.

The lenders, friends, family, and supporters of the project, also lost their investments. Some lost large amounts—as much as \$500,000 to \$200,000 in the case of big investors.

While the losses were enough to undermine the morale and capabilities of any group, Kristin Wells told me, “It is a real testament to how cohousing *does* work and how magnanimous people can be. We went through such stress as a group... but there was a lot of graciousness among people. People lost so much and there was not one angry conversation about it. At the meeting where we told the investors that we would be foreclosed upon and that all their money was lost, they replied “How are *you* doing and how can we *support* you?” (Wells Interview).

The project could hardly have met a more perfect storm. The damage to the project was not just financial, it undermined the community to very core. None of the founding members live at Daybreak today and the community has a very different feel and different priorities, which is not surprising since it is communally governed and the community consists of different people. The trauma ran deep. As Kristin Wells told me, “We were extended family and people put their entire retirement into the project and lost it all. It took me years to get over. They did it because they

wanted to do the right thing to put money into to something they believed in..." (Wells Interview). Despite this loss, Kristin is proud of Daybreak and still believes in cohousing. She says she would be willing to again try and build another cohousing project.

Although with a new and very different community, the project is thriving today. There is only one unit for sale presently and owners who moved there recently, only a few years ago, reported that they would not be able to afford their own unit today since the property's value has risen so much.

Daybreak Today



It has been eight years since Daybreak's opening. Of the 30 units only one is available on the market. The unit is 840 sf and selling for \$275,000. At \$327 per sf, this is above the average price of a home in Portland in 2017 of \$265 per sf. This unit last sold in 2014 for \$174,900. The entire group of buildings were recently re-painted and many of the plantings, including fruit trees, are starting to come of age, look beautiful, and are finally beginning to bear fruit. I interviewed new residents Anita and Herb Freyman-Danielsen who retired into the Daybreak cohousing community from California two years ago.

Anita and Herb were not seeking cohousing but when they heard about the project they were excited, "I grew up in Sweden" said Anita, "and was familiar with cohousing which was not uncommon especially in Denmark but I'd forgotten all about it until my daughter contacted us about a condo available here at Daybreak" (Freyman-Danielsen Interview). Anita and Herb's home in the Central Valley was suburban and did not allow them to live without using a car for most activities. In their retirement, they wanted to be close to their adult children and grandchildren who live in Portland, but they also liked the idea of living in a place where they could rely less on their car.

Anita and Herb like their three-bedroom condo. They enjoy the year-round brightness inside provided by the large, well situated windows. Anita wondered if she would like the radiant heat floors which are sealed with a grey-colored finish. “But I really like them, they are very comfortable, easy to clean and look nice with our rugs” (Freyman-Danielsen Interview).

The apartment is quiet, which is something they appreciate, and they have a private balcony where they can sit at a small table to eat or drink tea. They also have a glider swing in the front porch area where they can sit and watch the garden area. They appreciate their “eyes on the street” position provided by the kitchen sink window.

The social aspect of Daybreak living has helped them to feel at home in a new city. The community’s child-friendly orientation makes it easy to care for their grandchildren. “We watch our grandsons twice a week and we can walk to pick them up. They love to be in the play area. It is a very child friendly place for them” (Freyman-Danielsen Interview).

There have been some minor problems. For example, recently their bathroom faucet literally exploded due to a manufacturing flaw and shot water into the bathroom, flooding it slightly. Luckily a friend was visiting for the Thanksgiving holiday and was staying in the bedroom adjacent and heard the water gushing noise. They were able to turn it off before serious water damage occurred. There have been other problems and the community has undertaken a building systems review in order to submit claims to their insurance so that the repairs can be covered before the insurance coverage runs out. One serious problem they discovered was that the entire system of walkways for the site were all improperly installed leading to water drainage issues and even water pooling at and in through some of the residence’s front doors.

Overall, Herb and Anita are very happy at Daybreak. They rarely use their car which is nice since Herb has a degenerative eye disease. Anita must drive wherever they go, but even the eye clinic is close so they never have far to go and most places they can walk, ride their bikes or take the bus or Max. It is a big change from their lives in California and they are clearly enthusiastic about it. “In California, we had season tickets to the Berkeley Repertory Theater and it would involve driving for an hour and a half just to see a play. Here we have season tickets at the Portland Center Stage just take the bus directly downtown and can go out to dinner and walk around and the commute is easy and fast” (Freyman-Danielsen Interview).

As Kristin Wells told me, “I don’t live there now but I am proud of the project. I am glad it exists. And it is thriving. It is not the community I imagined, of course, and that is how it should be since it is a different group of people who live there than the ones who I planned it with and it is the people who determine cohousing which has a consensus decision making model. It did not turn out as we had hoped due to the Financial Crisis. But I think it speaks to the resilience and vibrancy of the cohousing model that it survived and continues to thrive. And I’m very grateful for that and happy for that” (Wells Interview).

Historically, cohousing projects in the United States and all over the world have enjoyed a high degree of success. They have stayed true to the cohousing model and the cohousing movement continues to grow. The problems which Daybreak experienced and the fact that the original community who first dreamed of living in a cohousing situation do not live there today is attributable to Wall Street recklessness for which they paid a very high price indeed. But that calamity highlights the resilience and viability of a housing development built using green values that incorporate ecologically equitable material and social systems. According to the Cohousing Association of the United States there are presently 164 cohousing communities in the US alone. Even more heartening is the fact that there are presently almost that number, 133 communities, in the various stages of development.

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