Duluth’s East Downtown, Hillside and Waterfront Charrette Report and Plan
A Study Prepared for the City of Duluth, Minnesota Based on the July 2005 Charrette
by the Knight Program in Community Building, University of Miami School of Architecture
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Duluth’s East Downtown, Hillside and Waterfront Charrette Report and Plan
In early 2005, Duluth was selected by the Knight Program in Community Building at the University of Miami School of Architecture to be the site of its annual charrette effort for 2005. The purpose of the charrette, an intensive week-long public design workshop, was to develop a vision and plan to help facilitate the revitalization of the east downtown and adjacent Hillside/Waterfront areas of Duluth. Duluth was selected as the charrette site through a highly competitive process. The charrette was held from July 13-18, 2005, and co-sponsored by the City of Duluth and Duluth Local Initiatives Support Corporation (Duluth LISC).

During the charrette, the 35-plus member charrette team worked with business professionals, local officials, city staff, local organizations, clubs, groups, churches, and residents from the city and surrounding area. The Duluth community was invited to share opinions and ideas for the future development of the city. Ideas for new development and for improving existing neighborhoods were drawn by the Knight Program team so participants could review and critique them, refining a community-driven vision for their neighborhood.

The overall effort was headed by Elizabeth Plater-Zyberk, dean of the University of Miami School of Architecture and principal in the firm Duany Plater-Zyberk & Co., which has created plans for more than 200 communities worldwide. Plater-Zyberk is one of the founders of the Congress for the New Urbanism, a reform movement based on the principles of traditional urbanism that advocates the planning and design of great urban neighborhoods that are walkable, diverse, and economically sustainable, with shopping, civic institutions, parks, and jobs within easy access of residents.

The Duluth charrette was the fourth charrette conducted by the Knight Program in Community Building; previous charrettes were held in Macon, Ga., San Jose, Calif., and Coatesville, Pennsylvania. The Knight Program is funded by a grant from the John L. and James S. Knight Foundation. The Knight Foundation promotes excellence in journalism worldwide and invests in the vitality of 26 U.S. communities.

The intent of the charrette process was to create a set of overarching principles for redevelopment of the study area, and to identify specific design, policy, and management recommendations for creating a critical mass of positive transformation. The principles and recommendations provide a blueprint for preserving what citizens love most about their city’s character and its past, while enabling new development to sensitively blend in and enhance the community’s character and sense of place.

After an opening presentation and visioning exercise involving more than 300 participants, part of the charrette team spent the next several days conducting numerous meetings to gain valuable input and insight from residents, officials, and other stakeholders, while other team members analyzed the study area by taking photographs and making field observations. All of this resulted in an assessment of as many characteristics of the study area as possible, including physical aspects such as urban form, transportation systems, housing types, and environmental features, as well as economic, social, cultural, historic, and policy matters. As the charrette progressed, ideas began to surface about ways in which the study area could be improved through a series of physical design proposals, as well as through policy and management measures. “Pin-up” sessions were held midway through the charrette, during which residents could see and comment on preliminary ideas the team was considering. This feedback was distilled and culminated in final design ideas that were eventually unveiled at the final presentation.

**Highlights of the final design, policy, and management recommendations** include the following:

- A set of overarching principles, called The Duluth Charrette Principles
- Design proposals for both medical complexes, which were sensitive to the surrounding neighborhoods
- A design for better integration of the Finger’s complex with surrounding areas
- Expansion of Central Hillside Community Center and surrounding infill development
- Design of the area encompassing the Armory and Plaza shopping center
- Design proposals for stronger connections between the lakewfront, downtown, and Canal Park
- Design ideas for creating a better pedestrian environment through innovative enhancements to the skywalk system and to the Lake Avenue overpass
- A historic preservation strategy for the endangered block of Superior, just east of Lake
- Creating a new hierarchy of street types designed to be “context sensitive” and help calm traffic
- A pilot “form-based” code for the Lower Chester Creek area as a replacement to the existing zoning code
- A new, streamlined planning review process to attract quality development
- Nearly 70 additional design, policy, and management recommendations

The Charrette Stewardship Group was formed by Mayor Bergson at the end of the charrette to ensure that the ideas and recommendations developed during the charrette would be further explored and implemented to the extent possible. One of their first orders of business was to prioritize the recommendations that the charrette team presented, and identify responsibilities and timeframes for each.

- **Executive Summary**
- **Participants around a table during the opening session of the charrette.**
- **Duluth residents examining one of the charrette proposals before the final presentation at the DECC.**
- **Elizabeth Plater-Zyberk leading a pin-up session midway through the charrette.**
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During the charrette, the charrette team worked with business professionals, local officials, city staff, local organizations, clubs, groups, churches, and residents from the city and surrounding area. The Duluth community was invited to share opinions and ideas for the future development of the city. Neighborhood residents, property owners, and other stakeholders were invited to specific sessions, and all of the discussions were open to the public. Ideas for new development and for improving existing neighborhoods were drawn by the Knight Program team so participants could review and critique them, refining a community-driven vision for their neighborhood.

The charrette was led by the 2005 Knight Program Fellows, an interdisciplinary group of 13 community development professionals from around the country who offer a range of expertise including community development, planning, housing, real estate development, arts management, transportation, architecture, and historic preservation. The design team was composed of graduate students enrolled in the Suburb and Town Design Program at the University of Miami School of Architecture.

Two Knight Fellows played major roles in coordinating the event and serving as community liaisons: Tom Cotruvo, executive director of the Duluth Economic Development Authority and a 2004-05 Knight Fellow; and Pam Kramer, program director of Duluth LISC and a 2003-04 Knight Fellow.

The overall effort was headed by Elizabeth Plater-Zyberk, dean of the University of Miami School of Architecture and principal in the firm Duany Plater-Zyberk & Co., which has created plans for more than 200 communities worldwide. Plater-Zyberk is one of the founders of the Congress for the New Urbanism, a reform movement based on the principles of traditional urbanism that advocates the planning and design of great urban neighborhoods that are walkable, diverse, and economically sustainable, with shopping, civic institutions, parks, and jobs within easy access of residents.

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### About charrettes
A charrette is a community-wide design process in which members of the public are invited to meet with urban designers, planners, and other specialists, and are encouraged to participate in workshop sessions and share their opinions and ideas for the future development and refinement of their community—it is essentially a combination of an urban design studio and a town meeting in which the full spectrum of community problems, opportunities, and future alternatives are studied and debated. The goal is to create a plan that is practical and achieves consensus.
Duluth is facing the challenges of bringing back the focus of development—housing, jobs, and commerce—to the core area of the city. The intent of the charrette process is to create a set of overarching principles for redevelopment of the study area, and to identify specific design, policy, and management recommendations for creating a critical mass of positive transformation.

The principles and recommendations provide a blueprint for preserving what citizens love most about their city’s character and its past, while enabling new development to sensitively blend in and enhance the community’s character and sense of place. Duluth’s special character and sense of place will only increase in importance as the city’s primary assets in the future as it works to attract entrepreneurial people who are looking for livable communities in which to live, work, raise families, and base their businesses. The downtown represents the natural focus for these efforts and for the charrette. It is the heart of the community; it belongs to everyone in Duluth, and it is the place that visitors to the community first encounter. The downtown is Duluth’s public face to the world.

2.2 Goals and objectives
1. The charrette process began several months in advance of the charrette itself, with a series of pre-charrette visits by key team members. This allowed them to become familiar with the study area, conduct advance interviews with stakeholders, and determine the best location for the charrette studio. The Tech Center in the heart of downtown Duluth was eventually chosen as the optimal location for the charrette studio.

2. At the beginning of the charrette, an opening presentation was held at the Duluth Entertainment and Convention Center (DECC), which was attended by more than 300 people. Participants sat in groups around tables with team members and engaged in a robust exchange of ideas on ways to improve East downtown, the Hillside, and the Waterfront. Residents drew their ideas on maps and took notes on flip charts to document all comments and ideas.

3. Each table reported back to the entire group and the results were then taken back to the charrette studio, where the team looked for dominant themes and opportunities to incorporate ideas into the initial designs.

4. On the first day, the team took a walking and bus tour of the study area, which included extensive photo cataloguing of streets, buildings, frontages, civic spaces, natural features, and other observations in order to inform the team’s work.

5. The design team worked long days in the studio to begin translating ideas into a series of preliminary drawings.

6. While the design team worked in the studio, the Fellows conducted a series of stakeholder meetings at various venues throughout the study area, in order to gain additional input on various topics such as transportation, housing, and development issues.

7. During the stakeholder meetings, participants provided additional input on various themes, which provided important dialogue that the team used to identify key issues. Twelve stakeholder meetings were held, plus a multi-cultural forum and a “youth charrette,” which ensured that the participation during the charrette was highly diverse and inclusive.
8. After several days of stakeholder meetings, the Fellows synthesized the information gleaned and formulated a series of policy, management, and design recommendations.

9. As the work by the design team proceeded, a series of public “pin-up” sessions were held throughout the charrette. This was essential for vetting ideas and providing feedback loops that let the team know if they were on the right track.

10. From the feedback loops, the design team was able to refine ideas and finalize designs into a series of sketches, plans, and renderings.

11. On the final day of the charrette, a closing presentation was held at the DECC, which showcased the results of the week-long event. A gallery was set up in the hall so that attendees could view the charrette illustrations and discuss them with team members. Then a formal PowerPoint presentation was given, which walked the audience through the process and provided details on the findings and results. The end of the charrette marked the beginning of the implementation phase, which included formation of a stewardship committee to ensure that the recommendations and ideas presented in the charrette would be carried forward.
Duluth’s East Downtown, Hillside and Waterfront Charrette Report and Plan
This chapter presents the assessment of factors that the charrette team studied in depth in order to inform the Master Plan, overarching principles, and specific recommendations.

Duluth is at a crossroads in its transition from a declining, rustbelt community to one with a lively, diverse economy and a commitment to its urban wilderness character. Duluth is the fourth largest city in Minnesota, with a population of 86,000. It was a center of bulk shipping—the city's past was tied to its location as a shipping and railroad center, but as these methods of transportation declined, so too did Duluth. The city experienced the closure of many factories following World War II and continuing through the 1980s. The city has, since the early 1980s, balanced the loss of manufacturing jobs with the growth of health care, tourism, and retail. Today Duluth is a regional center, but problems created during the decades of decline continue to present challenges. Among the problems are widespread poverty and a lack of development in the urban core and adjacent residential neighborhoods. Like all metropolitan areas, Duluth has experienced its share of suburban sprawl in the postwar period, characterized by sprawling residential subdivisions, shopping centers, and other land uses that are widely separated from each other. The pervasiveness of this development pattern has contributed to the decline of the central core of Duluth, as it has in other places, as a major shift in population and businesses to automobile-oriented suburbs that have little connection to the traditional urban core occurred (see population change figure).
Duluth is sometimes called the “San Francisco of the Midwest” because of its dramatic topography, proximity to Lake Superior, and abundance of historic architecture in its downtown and surrounding neighborhoods. This, combined with its location in the northern alpine wilderness, gives it a distinctive character among small U.S. cities. The charrette team was inspired by Duluth’s stunning geographic setting juxtaposed with the traditional urban fabric imposed on the landscape.

3.2 The built and natural environments

3.2.1 URBAN FORM

The charrette study area, which is one of the oldest developed parts of the city, has a fine-grained “urban fabric” based on an interconnected urban grid, typical of how most American cities were laid out in the 18th and 19th centuries. The East Downtown area consists of tightly defined blocks of commercial buildings, most of which are seventy or more years old. Most of the buildings here are two to five stories tall, giving it an exceptionally human scaled, town-like feel. Just a few blocks to the west lies Duluth’s central business district, which has taller buildings and a somewhat more cosmopolitan feel. The Hillside Neighborhood above downtown consists of a wide array of housing stock of all types and sizes, as well as clusters of small commercial and civic buildings. The waterfront area is one of Duluth’s greatest assets and a great source of civic pride. There are a series of large parks and open spaces immediately adjacent or overlooking Lake Superior.
The charrette team began analyzing the study area by identifying discernable districts, neighborhoods, and corridors. Several neighborhood centers and their five-minute walk circle (or oval, in the case of hilly Duluth) were identified. This helped the team to understand the physical structure of the area and how the individual pieces function and relate to each other.

Much of the older building stock throughout the study area has remained intact, and contributes to a walkable environment because older buildings that were built before the prevalence of the automobile were designed to help define the public realm (whether it be the streets, parks, or plazas) and make it comfortable for pedestrians. During field observations, the team identified considerable gaps where buildings had been demolished and left as vacant lots or replaced by contemporary buildings that did not relate well to the street.

Numerous older buildings in downtown had also undergone façade alterations at street level in an attempt to “modernize” them; unfortunately, those alterations left the buildings less welcoming to the street. These incremental changes over time weaken the cohesiveness of a neighborhood and its sense of place. Reversing these effects, which have occurred over decades, represents both a challenge and an opportunity.
In order to further identify where the fine-grained development pattern that fosters connectivity and sociability still exists and where it has been compromised, a “figure ground” of the study area was created. The black areas in the diagram represent buildings and the white areas represent the space between buildings. This assisted the team in systematically assessing the charrette study area and in locating opportunities for potential infill and greater connectivity.

The topography of the Hillside neighborhood affords it stunning views of Lake Superior.
3.2.2 TRANSPORTATION AND INFRASTRUCTURE

As mentioned, the charrette study area consists of a traditional orthogonal street and block grid pattern. Most of the blocks in the grid are 375’ by 475’, which is a comfortable scale for pedestrians, as opposed to very large blocks, which deter walking. This is especially important in a place like Duluth, with its harsh climate and hilly topography.

This diagram shows the traditional grid pattern within the study area. The thinner lines represent alleys that bisect most blocks. Alleys play an important role in the transportation system of an urban area by allowing automobiles access to properties, while de-emphasizing their place in the public realm. It also helps keep the public realm more appealing by relegating refuse and other unattractive elements behind properties.

During the course of the charrette, the team found that many of the roadways in the study area were functioning in a way that encouraged through traffic at higher speeds than appropriate for the character and context of this area. This was particularly true of one-way streets. The construction of I-35 through downtown during the 1980s removed much of the need for one-way streets; one-way streets seemed to be a “leftover” from the pre-interstate era. This sentiment was echoed at public meetings during the charrette by participants who emphasized the need for traffic calming on many local streets.

Valiant local efforts prevented the interstate from destroying the lakefront. While creating less burden on local streets, the interstate did, however, create a significant physical and psychological barrier between the East Downtown/Hillside area and the Waterfront/Canal Park area. Despite the desire to provide connections through specially designed overpasses that incorporate open space and pathways, the highway remains a major divider that discourages pedestrian activity between destinations that would otherwise easily be walkable.
As automobile usage became ubiquitous after WWII, the amount of land needed for parking cars in and around downtown areas of the U.S. increased dramatically. Duluth was no exception. This Surface Parking Diagram shows the vast amount of space devoted to off street parking in the charrette study area alone. The areas in black represent surface parking lots and ramps.

The large amount street frontages devoted to parking creates widespread disruption in the urban fabric and a less pedestrian friendly environment. In addition, valuable real estate that could be productive and contribute to Duluth’s revitalization is not realizing its highest and best use.
Duluth’s skywalk system presented a unique challenge to the charrette team. While most of the skywalk network is located in the western portion of downtown outside of the charrette study area, there are conceptual plans to expand it into East Downtown. While the system affords climate protection during the cold months, there are several problems inherent to skywalks that work against creating vibrant, healthy downtowns. Skywalks tend to remove activity from the street, which can contribute to a feeling of desolation. Because retailers in traditional downtowns rely heavily on pass-by foot traffic, this can make it more challenging for them to survive during colder months. Another problem is that skywalks harm the continuity of the streetscape. They create large, unattractive visual barriers along the street, place large areas of the street in perpetual shadow, protrude into building facades, and create an often-confusing labyrinth of semi-public passageways that can be intimidating to navigate. All this can make the street and downtown a less appealing place to be.

The contrast in character between Duluth’s East and West Downtown is stark, and the presence of skywalks is a strong contributing factor to that. The hospital complexes have their own internal skywalks that connect various medical buildings to each other. These skywalks are also quite imposing, and can conflict with the scale and character of the surrounding neighborhoods. Under current thinking, as the hospitals continue to expand, skywalks will very likely be added to each new building, which can reinforce the impression that the hospitals are self-contained compounds divorced from the neighborhoods.

Despite these challenges, the team recognized early in the charrette that the skywalk system is largely viewed positively by the community. Therefore, the focus was on developing models for better integrating the skywalk system into downtown Duluth and greatly improving its form and function. The goal is to enhance the hospitals connections with their neighborhoods.

1 Diagram showing parking.
2, 3 Skywalks provide shelter to pedestrians during inclement weather, but can create conditions that do not promote vibrant, walkable communities over the long term.
4 Enormous hospital skywalks and a fast-moving street create a particularly inhospitable pedestrian environment in one part of the Hillside neighborhood.
3.2.3 PARKS AND OPEN SPACE

Duluth is fortunate to have a number of fine parks and open spaces, many of which are within the charrette study area. This includes the string of lakefront parks and walking paths along Lake Superior known as the “Lakewalk,” the Chester Creek Trail, and a number of smaller neighborhood parks including Portland Square and the Central Hillside Park.

However, the general sense encountered is that the parks are not being used to their full potential. Lake Place Park, developed as a result of the construction of the interstate highway in the 1980s, which sits between downtown and the waterfront, tends to feel isolated and unwelcoming. The vegetation has become extremely overgrown to a point that it shields the parkland from view, which has attracted vagrants and other illicit activity. The boardwalks that connect the parks to downtown also provide an isolated environment between and behind buildings out of public view, which further discourages use of the open spaces.

The Chester Creek Trail is a great natural resource and amenity, but it is not clearly identified and a visible part of the neighborhood.
3.2 The built and natural environments

1. The public space in the park at the Central Hillside Community Center, while well maintained, is neither well defined nor inviting to the community at large.

2, 3, 4. The parkland and walkways that were developed as a result of the interstate feel isolated from both downtown and the waterfront.
Before the charrette, members of the team visited Duluth to meet one-on-one and in small groups with key business leaders, government officials, developers, hospital officials, and other stakeholders. During the charrette, a series of public meetings was held that covered a wide spectrum of economic development factors that affect Duluth’s revitalization. From each meeting came the following (selected) suggestions, which helped inform the recommendations that the team subsequently developed:

**HEALTH CARE INDUSTRY**

Health care industry as an economic driver
- Economic importance of healthcare industry
- Industry growth and change to remain competitive
- Health care employees as potential housing customers
- Neighborhood impact concern about expansion

Physical integration of healthcare industry in city
- Efficient use of limited growth space
- New facilities integrate with the existing fabric and structures
- 24-hour function impact on traffic patterns and safety
EAST DOWNTOWN BUSINESS OWNERS AND ARTS-RELATED BUSINESS

• Preserve existing diversity, especially for artists, young professionals, and the elderly
• Support more housing for students, young professionals, and live/work spaces for artists
• Provide amenities for visitors—signage and way-finding, public restroom, stronger connections to the lakefront
• Encourage a wider range of retail and restaurants with longer hours

DEVELOPERS, LANDOWNERS, AND FINANCIAL INSTITUTIONS

• A perception that Duluth is not welcoming to business, growth, and entrepreneurs
• Unpredictable and burdensome public process seriously impacts development efforts
• Area needs market-rate housing to drive growth and economic activity, and to support the tax base
• TIF districts as important tools to encourage growth
4TH STREET BUSINESS HILLSIDE NEIGHBORHOOD

Housing
- Reduce and/or minimize the displacement of current residents
- Better planning for university student housing
- Restore historic structures where appropriate
- Promote affordable and workforce housing
- Add transitional housing
- Replace housing that is beyond repair

Neighborhoods/quality of life
- Create Dinkytown (Minneapolis) college student activity area
- Establish more youth centers
- Create resident parking permit program
- Hire code compliance officer; improve regulations and enforcement
- Create and enforce lawn/grass maintenance regulations

Business
- Zoning to promote mixed use
- Promote convenience retail in designated clusters

Safety
- Keep vehicles out of intersection sight lines
- Convert streets to two-way

Policies and design guidelines that promote redevelopment of underutilized commercial properties that could enhance Duluth’s appearance should be pursued.
During the charrette, numerous public meetings were held to discuss a wide range of issues that included housing, historic preservation, cultural heritage, tourism, and other topics. All of these issues affect the overall state of Duluth’s well-being and to what extent revitalization will take hold and be sustained within the study area.

3.4.1 HOUSING AND NEIGHBORHOOD REVITALIZATION

Desired characteristics of housing and neighborhoods:

- Increase homeownership among all income levels
- Promote mixed-income neighborhoods with variety of housing types
- Family-friendly and student-friendly neighborhoods
- Handicapped-accessible neighborhoods
- Environmentally sensitive, energy-efficient
- Adequate parking
- Clean, well-maintained, and safe
- Integrate more neighborhood retail into the community
- Revitalization must accommodate existing residents and not cause displacement
3.4 Social environment
3.4.2 HISTORIC PRESERVATION, CIVIC AND CULTURAL HERITAGE

There is a growing realization in Duluth of the value of historic preservation’s role in fostering revitalization and economic development. A number of programs exist to help property owners rehabilitate older buildings, but there was also a sense that more can be done to ensure that older buildings are not destroyed when viable alternatives exist that can be win-wins.

The diagram at right highlights the older buildings in downtown Duluth within the study area (shown in red, orange, and blue) that, to one degree or another, contribute historic value to Duluth.

What does Historic Preservation mean in Duluth?

The following list was compiled from the results of the stakeholder meeting:

- Heritage tourism and historic legacy
- Unique Duluth character
- Economic redevelopment
- Recycling at a large scale
- Mixed-use and neighborhood services
- Public art
- Education
- Pride in built environment
- Diverse building types
- Diverse neighborhoods
There are a significant number of civic buildings in the charrette study area, including schools, hospitals, theaters, and other institutions. They serve as important landmarks and help reinforce community identity. Many of these civic buildings are also historic in nature, but because of their age and design, have become underutilized or vacant. There is interest in adaptively reusing some of these buildings, most notably the Armory. A feasibility study was recently completed for renovating the building and using part of it as a hotel and conference center.

Affected Stakeholders:
- Property owners
- Homeowners
- Business owners
- Investors/developers
- Planning Department
- Planning and Zoning Commission
- City Council
- Potential residents
- Tourists
- Housing and Redevelopment Authority
- National Park Service
- Students
### 3.4.3 TOURISM, SPECIAL EVENTS, AND CASINO

The charrette meeting on this topic led to the following findings:

**Streets, signage, and wayfinding**
- Refine existing events and help visitors find key locations
- Implement signage and wayfinding plan
- Create new framework for sidewalks and crosswalks
- Skywalks need to be connected to venues
- Opportunity to address parking creatively

**Create an entertainment district**
- Casino as a hub for a four-block entertainment district
- Additional incentives to encourage streetscape improvements
- Address mobility issues for tourists, seniors, and disabled
- Provide more public restrooms and public telephones
- Restore the NorShor Theatre

### 3.4.4 SAFETY, EDUCATION, AND EMERGENCY SERVICES

The charrette meeting on this topic led to the following findings:

- Potential school closures create uncertainty for families
- Schools need more extracurricular programs to support neighborhoods
- Budget constraints have reduced community policing
- Sidewalk maintenance (trash, snow removal) create safety issues and perception that the area is unsafe
3.4.6 YOUTH INPUT

In the spirit of inclusiveness and getting input from the widest range of residents possible during the charrette, a “youth charrette” was held for young children and teens. Children were given the opportunity to draw their favorite places in Duluth and teens were asked what changes to their built environment and policies could be put in place that could improve their quality of life. Dominant themes included:

**Programs for youth**
- Need a teen center and city league sports for teens
- Tutoring and cultural programs, and youth public art, murals
- Youth employment programs to provide neighborhood services

**The built environment**
- Athletic fields in the focus area
- More family-friendly parks with playground equipment, grills, tables, and gathering places
- Need a library up the hill accessible for neighborhood youth
- Need more businesses that cater to neighborhood residents
- Need pedestrian signage at intersections

3.4.5 MULTICULTURAL FORUM

During the charrette a special multicultural forum was held. Highlights of the comments received include:

- Comfort and discomfort zones: The Lakewalk, Canal Park area, Lake Avenue/Casino area and 4th Street Market
- Special places of local heritage: Clayton Jackson McGhie Memorial
- Important community gathering places: Central Hillside area
- Community gardens are needed
- Cost of living in the neighborhood is higher than other areas
- Demolishing housing for parking seems to be more of a priority than housing for people
Before and during the charrette, the team met with officials about the current planning framework in order to assess obstacles and identify areas of improvement, which could be key to accelerating the revitalization of the study area and the city at large. The Duluth Planning Department was forthcoming about the shortcomings that exist in the current process, and were eager for the team to develop recommendations for improvements.

The city Comprehensive Plan dates from 1927, while the Zoning Ordinance is nearly fifty years old and extremely outdated. The existing land use is fine-grained and complex, but the zoning is oversimplified and in some cases does not allow new development that emulates the traditional, human-scale pattern and form that characterizes the charrette study area. Procedurally, there is a lack of standard policies or procedures for applicants to follow that can be applied uniformly. This creates an atmosphere of unpredictability and uncertainty, which is a major deterrent to most developers. There is also no current regulatory way to manage lake views, which is a central issue for the public.

During the charrette a large meeting was convened to discuss land use policies, planning, regulations, and codes. The salient points that came out of this meeting included the following:

**Vision**
- Create a critical mass of retail downtown
- Keep Duluth unique
- Need fewer surface parking lots
- Encourage a diversity of housing types to accommodate all ages

**Policies to consider**
- Provide incentives for “greening” Duluth
- Develop a plan to accommodate student housing in study area
- Encourage area employees to live in the neighborhood
- Update zoning ordinance
- Improve review and approvals process
Duluth’s East Downtown, Hillside and Waterfront Charrette Report and Plan
DULUTH CHARRETTE
PRINCIPLES: GUIDING
PRINCIPLES FOR PLACE
MAKING AND
COMMUNITY BUILDING

Plans, regulations, and projects are some of the means for implementing the vision of Duluth’s East Downtown, Hillside and Waterfront Charrette. These implementation tools will continue to evolve over time. They are guided by a broad, holistic vision of place making and community building as represented in the following “Duluth Charrette Principles,” generated by the citizens of Duluth during the charrette.

1. Boost Duluth!
Nurture a collaborative culture that maintains a positive dialogue focused on enhancing Duluth’s quality of life.

2. Evoke a sense of place
Encourage all new development and public investment in the downtown to say, “This is Duluth,” reflecting the city’s unique regional geography, climate, history, and character and rejecting “Anywhere USA” models that would erase everything that is special about Duluth.

3. Foster public safety
Encourage mixed-use infill development that brings more residents, businesses, and 24-hour activity to the downtown. More “eyes on the street” create a safer public realm. Pursue place-making initiatives and programming to improve the attractiveness of existing public spaces to reinforce them as magnets for public activity. Increasing the number of people in the city’s public spaces, along the lakefront and in the neighborhoods will enhance community livability while promoting public safety.

Enhance focal points within the larger public parks and program them for regularly recurring events such as community “jam sessions” (open stage, bring your own instrument), flea markets, farmers’ markets, and participatory arts, sports, and cultural activities. Facilitate a continuous multicultural dialogue that celebrates diversity through similar initiatives in the arts, sports, festivals, and other community-building initiatives.

4. Preserve and enhance heritage resources
Preserve historic buildings, public spaces, and view corridors to the lake. Duluth’s industrial history and historic architecture are key aspects of Duluth’s quality of life, and contribute to its distinctive identity and attractiveness as a place to live, work, recreate, visit, and invest in the city’s homes, businesses, and institutions.

5. Invest in the public realm
Create a continuous network of streets, sidewalks, and parks that are safe, vibrant, and pedestrian-friendly. Replant street trees and prevent exposed parking lots and garages, blank walls, “dead space,” and spaces that are difficult to monitor for safety. Encourage glass enclosure of sidewalks that can be opened up during warmer months as a cost-effective alternative to skywalks, capable of providing shelter from harsh weather while retaining pedestrian traffic at the street level to support ground-floor retail businesses.

6. Establish and restore the unique urban ecology of the city’s neighborhoods, districts, corridors, and downtown
The highest quality of life is achieved in places that provide a full spectrum of places and experiences across a range of natural and built landscapes. Preserve the city’s natural settings and enhance the urbanity of the downtown and adjacent neighborhoods. Build dense, mixed-use in downtown with an urbanscape; infill medium and low-density housing in the surrounding neighborhoods with a greenscape. Start a street tree planting program.
7. Calm traffic and improve connectivity
Make downtown Duluth a safe and inviting place to walk and find your way around. Traditional tree-lined, two-way streets with on-street parking provide greater connectivity, make navigating easier for visitors (in cars and on foot), and increase traffic calming and pedestrian safety compared to one-way streets, whose primary purpose is to move large numbers of vehicles at higher speeds. The extension of I-35 through the downtown has made the majority of the downtown’s one-way streets unnecessary. Restore the historic street network by converting one-way streets back to two-way streets with on-street parking to the fullest extent possible. Start a program of street improvements to enhance bicycle and pedestrian movement, and add pedestrian connections to Lake Place Park. Require new development and redevelopment of properties to reconnect pedestrian- and bicycle-friendly fragments of streets and blocks into a continuous walkable network.

8. Broaden the mix of uses
Create a downtown, hillside, and lakefront where people choose to live, work, and play. Cluster and mix modest retail, dining, and cafes with civic and institutional uses. Reinforce concentrations of retail where it already exists and encourage concentrations of similar types of businesses (e.g., dining, antiques, home furnishings, arts-and-culture related) to magnify their power to attract visitors.

9. Expand housing opportunities for people from all walks of life to live downtown
Tap the market demand for a variety of urban housing types (condominiums, townhomes, live-work, urban apartment buildings, small-lot single-family attached and detached), income levels, and seasonal residences in and around the downtown. Look for win-win development opportunities that accommodate new, profitable housing and mixed-use development while providing some units, funding, land, or other resources to support workforce and low-income housing initiatives. Market Duluth’s amenity package of natural beauty, cultural heritage, and excellent health care facilities, low cost of living and high quality of life to attract new seasonal and permanent residents.

10. Improve the regulatory framework
Create a form-based code that provides citizens, decision-makers, and developers with a transparent, visual language to guide new development and redevelopment of properties within the study area. The form-based code should illustrate a predictable build-out that reflects the Duluth Charrette Principles, and revalues rather than removes existing building stock. Simplify the process of review, permitting, and approvals for development proposals consistent with the Duluth Charrette Principles, the charrette plan and the form-based code.

A set of recommendations was then developed and grouped into three categories: policy, design, and management. These recommendations constitute the blueprint, or roadmap, for revitalization. Each recommendation was assigned a primary group responsible for implementation, as well as a general assessment of the time frame in which each could be implemented. Following the charrette, a Stewardship Group consisting of local stakeholders was formed in order to prioritize the recommendations and begin the process of implementing them. The recommendations are presented in the following sections.
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4.2 Charrette recommendations

The charrette resulted in 64 suggested strategic actions for Duluth, categorized in the areas of policy, design, and management, which are the three primary tools of successful community building programs. These recommendations constitute the blueprint, or roadmap, for revitalization. All three areas must work together to ensure a successful program of urban enhancement. These recommendations were generated by extensive input of citizens, stakeholders and city staff. Each recommendation was assigned a primary group responsible for implementation, as well as a general assessment of the time frame in which each could be implemented. Following the charrette, a Stewardship Group consisting of local stakeholders was formed in order to prioritize the recommendations and begin the process of implementing them. Policy actions provide the regulatory basis for the master plan’s implementation, promoting the physical predictability of the private building, an important assurance of long-term value for property owners and investors. Design actions include individual projects illustrated in the Master Plan, including the capital improvements, focusing on the public realm, parks, squares, boulevards, streets and pedestrian passages. Management actions relate to the ongoing work necessary for the function, maintenance and improvement of the physical environment and the management of activities to support downtown retail, businesses, institutions, residents and events. The recommendations are presented in the following sections (4.3, 4.4, 4.5).
POLICY RECOMMENDATIONS

Policy actions provide the regulatory basis for the Master Plan’s implementation, promoting the physical predictability of the private building, an important assurance of long-term value for property owners and investors.

1. Regulating code (form-based code): Develop a form-based code to replace the outdated zoning ordinance. The form-based code should encourage development that is consistent with the downtown’s historic character and pedestrian scale, while allowing for more intensive, urban, mixed-use development in appropriate locations per the urban analysis, master plan and urban design proposals produced during the charrette. The code should define and protect the character of the distinct neighborhoods, corridors and districts identified within the study area, which vary in terms of the intensity, height, and mix of development. The code should specify the residential, commercial, and mixed-use building types permitted, the types of frontages permitted; the siting of buildings on lots, the location of parking to the side and rear of buildings, in parking courts in the interior of blocks, and in structured parking lined with habitable space for housing, retail and office along the perimeter of parking lots and structures; and set a minimum standard for screening and tree planting for parking lots.

2. Regulating code (form-based code): Send a planning department employee to the Smart Code Workshop (Miami, Oct. 4–8) of the Form-Based Codes Institute (Virginia Tech, Blacksburg, Virginia, Nov. 3–5).

3. Regulating code (mixed-use): Promote zoning changes that permit mixed use, including live/work units. Potential mixed-use districts include: 4th Street corridor, Lower Chester Creek/Armyory area District, Medical District(s), and Downtown corridor.

4. Regulating code (neighborhood retail): Implement zoning that permits convenience retail in designated clusters within neighborhoods. Convenience retail includes groceries, laundry facilities, dry cleaners, etc.

5. Historic preservation: Promote historic preservation of existing historic fabric with a historic resources survey, development of educational programs on historic architecture and built heritage, a specific focus on historic preservation in the Comprehensive Plan, and use of federal historic tax credits and establishment of state and local historic tax credit/abatement programs. Give favorable incentives to building owners/developers who apply the Secretary of the Interior’s Standards to Rehabilitation.

6. Incentives (for preferred development): Create incentives for development that complies with a form-based code. Examples include: a streamlined review and approvals process, reduced or waived building permit fees, and density bonuses in exchange for historic façade improvements/ façade preservation/ façade easements/public art provision.

7. Incentives (for green development): Promote green roofs, alternative pavers, and porous concrete to reduce impervious surface coverage through incentive programs. Incentives may include reduced stormwater utility fees and density bonuses for green roofs.

8. Permitting: Implement the Revised Project Review and Approvals Process in conjunction with a form-based code that specifies a predictable range of built form.

9. Regulating code (view corridors): Preserve view shed of the lake by limiting maximum façade dimensions parallel to the lake and maintaining view corridors down streets to the lakeshore. Façade dimensions can be regulated through a form-based code.

10. Incentives (focii): Focus city efforts and incentives to support streamlined development at critical sites within study area in order to seed further development at the Armory/Plaza district, Superior and First Avenue East, residential and commercial buildings on Fourth Street and First Avenue East facing Central Hillside Community Park, the intersection of 4th Street and 6th Avenue East, and the Duluth Sheraton Grand at the north-east corner of Superior and 3rd Avenue East.

11. Housing (mix): Encourage balanced housing policies that accommodate several market types, including affordable, middle-income and upper-income units, homeownership and rental units, and different unit sizes and types. Promote middle-income family housing and amenities in the area such as retention of schools in the neighborhood and family-serving recreational activities.

12. Housing (affordability): Reduce and/or minimize the displacement of current residents in the Hillside neighborhood who are very concerned about gentrification. Promote affordable and workforce housing in the study area through use of Section 8 vouchers by private landlords, Community Land Trust, 30 year restrictive covenant mortgages, tax caps for targeted incomes, etc.

13. Housing (home ownership): Promote homeownership with financing alternatives such as location-efficient mortgages, soft second mortgage programs using CDBG funding to provide loans, employer-financed mortgages, etc.

14. Housing (student): Encourage the construction of student dormitory housing within specified areas such as the downtown core or the Armory area. Discourage further conversion of single-family residences to multi-family housing.

15. Housing (affordability): Encourage the Urban Indian Housing Group’s efforts to create affordable housing programs and services directed toward American Indians or those with Native preferences.

16. Housing (affordability): Create “live near your work” programs, such as partnerships between major employers and the City, to financially support homeownership in the study area.

17. Collaborative culture: Encourage health care and educational institutions to create community outreach and collaborative planning programs to improve neighborhoods.

18. Environmental: Promote use of alternative pavers and porous concrete on private properties to reduce impervious surface coverage.

19. Finance: Continue to explore alternate sources of funding for study area, including Federal transportation monies and creation of a municipal property tax abatement program.

20. Collaborative culture: Increase professional community representation on EDA board.

21. Transit: Commission a study and build an advocacy coalition including transit advocates in the Twin Cities and Duluth regions, and elected officials at all levels of local, state and federal government, and create a marketing campaign to restore passenger rail service to Twin Cities. Enlist support of marketing professionals and make the link between transit service, the long-term economic development and environmental benefits to the region and the state, and Duluth’s role as the urban gateway to Northern Minnesota servicing the growing market for seasonal housing and vacationers from the Twin Cities and Midwest as we enter an era of $3.00+/gallon of gasoline.
A primary policy recommendation of the master plan is the transition to a form-based development code for Duluth. Form based codes are emerging nationally as a progressive alternative to conventional use-based zoning ordinances. As the name implies, form-based codes are concerned primarily with regulating the form (height, scale, massing, orientation, proportions, etc.) of buildings, as well as streets and public space, but are far less prescriptive about use than conventional codes. Form-based codes assign various building types (and to a lesser extent, uses) within a spatial framework called the Transect. The Transect is stratified into urban intensities from the most urban to the most rural, with varying degrees between. Each “Transect zone” allows a range of building forms and uses that are appropriate to each zone.

A major difference between this system and conventional Euclidean zoning is that while conventional zoning strictly separates uses such as residential and commercial, form-based codes explicitly allow and even encourage mixing of disparate uses, so long as the building forms are compatible. This type of land use pattern was indicative of Duluth and the rest of the U.S. prior to World War II, in which communities also tended to be more walkable, livable, and vibrant. Form-based codes based on the Transect can be an important factor in helping create an enabling environment for revitalization in Duluth, in part because the entire charrette study area was originally developed prior to WWII and experienced its zenith when development practices now being resurrected in form-based codes and the Transect were the norm.

This illustration presents a regulating plan formed by the various Transect zones in the study area that were mapped by the team. The Transect zone categories have been calibrated to local conditions, meaning that the relative intensities of development that exist in Duluth are portrayed across a full spectrum, and only those zones that are present within the study area are shown on the regulating plan (this is why the diagram does not include all zones). In addition, appropriate locations for ground floor commercial uses are shown as black street frontages. For the charrette draft of Elements of a Pilot Form-Based Code developed for the Lower Chester Creek Neighborhood, see 4.6.
4.3 Policy recommendations

These diagrams are illustrative examples of several allowable building forms and orientations that exist within several of the Transect zones within the study area.
REVAMPS THE REVIEW AND
APPROVALS PROCESS

Another important policy recommendation is a
significant overhaul of the development review
and approval process in Duluth. Currently, a
major obstacle to revitalization, attracting new
investment, and implementing quality design is the
lack of certainty and predictability in the planning
review process. During the charrette, a new,
enhanced process was developed that would work
in conjunction with a new form-based code and
within Article 30. This new process would create
more predictability and certainty in the develop-
ment application and review process, as well as
increase opportunities for meaningful public partici-
pation. The new process would work as follows:

- Pre-application meeting with Development
  Review Committee (DRC) to review concept-
  ual site plan

- Applicant goes before Planning Commission for
  Preliminary Approval

- Project liaison appointed by the DRC. Preliminary
  findings letter sent to applicant and Planning
  Commission, identifying project liaison and outlining
  issues of concern

- Staff finds results consistent with
  Model District Code

- Staff finds results deficient, sends letter noting issues of concern

- Does the project involve one or more entire block?

- Staff letter to applicant, noting outstanding issues

- Applicant goes before Planning Commission for
  Preliminary Approval

- Applicant goes before the Planning Commission
  Appeals to Planning Commission decisions to City Council

- Then applicant may go to Planning Commission
  for Final Approval.
DESIGN RECOMMENDATIONS

Design recommendations represent the “heart and soul” of any charrette Master Plan, and the Duluth charrette was no different. The design recommendations listed below include a matrix of general enhancements to various parts of the study area that can be implemented fairly easily, as well as a set of intensive ideas that would be more catalytic and “transformative” in nature. These studies were the subject of the most intensive focus of the charrette design team, who prepared illustrations to accompany each. These are presented in the remainder of this section.

1. **Walkable design:** Enhance crosswalk safety through the use of bulb-outs, paving/changes in surface texture, and paint.

2. **Parking:** Maximize on-street parking wherever possible, including parallel parking on both sides of streets.

3. **Walkable design (street trees):** Reintroduce street trees where possible, particularly with varietals and spacing that preserves existing view sheds.

4. **Retail (seasonal):** Provide areas for street vendors, sidewalk cafes and seasonal sidewalk events, with clusters of vendors at bridges and walkways that make linkages to the lakefront and help activate it.

5. **Heritage (multicultural walking tour):** Create a heritage walking tour to link significant sites of the community’s multicultural and agricultural-environmental-economic-industrial heritage. Include a specific emphasis or themed walking tour devoted specifically to Duluth’s multicultural heritage.

6. **Heritage (public amenities):** Public amenities (public facilities, infrastructure such as bridges, signage, street furnishings) should promote multi-generational, multi-racial and local heritage ideas.

7. **Public art:** Encourage public art that celebrates local culture and physical environment.

8. **Skywalks (public art):** Incorporate public art into the skywalk system.

9. **Wayfinding:** Reuse and enhance the aesthetics of existing sign pylons (concrete posts) on Superior Street and other downtown streets for wayfinding maps.

10. **Public space (picnic areas):** Where possible, add picnic facilities, such as grills and picnic tables, to existing parks.

11. **Landscape:** Enhance the visibility and attractiveness of the trailhead at Chester Creek Park for visitors and to promote tourism.

12. **Landscape:** Keep landscape—especially at Lakewalk and along Superior Street—trimmed, to improve real and perceived safety, and to enhance view shed.

13. **Lighting standards:** Reduce light pollution by encouraging—via education and design review—“dark sky” principles such as downlighting. Establish downtown lighting standards for fixtures and bulbs that create an attractive, safe ambiance appropriate to a downtown, while prohibiting suburban lighting standards.

14. **Lighting:** Ensure that public right-of-way lighting is appropriate and adequate. Explore Minnesota Power subsidies and programs where available, or incorporate costs as part of TIF district program.

15. **Cycling:** Incorporate bicycle facilities and bike racks at popular downtown destinations and along the lakefront. Designate bike paths using “Share the Road” signage in the downtown and, where the existing street width is sufficient, paint bike lanes.

16. **Landscape:** Enhance access points to the Lakewalk, particularly at Lake Avenue and the “Muffler site,” per design proposals from the charrette.

17. **Skywalks:** Sustainably and strategically expand the skywalk system through rear or side facades of buildings. Consider enclosed sidewalks (local example in a shopping center outside of the downtown) as an alternative that provides comfort while maintaining foot traffic for downtown businesses during cold and inclement weather. Design for enclosed sidewalks should be primarily glass to allow for maximum light and clear view of storefronts from the street and incorporate removable side panels and retractable sections during warm weather (shopping center example includes retractable garage doors).

18. **Street design:** Work with property owners and through development proposals to upgrade condition and design of alleys, such as using alleys as point of access for residential parking, and ensuring adequate lighting, vegetation and maintenance.

19. **Street design:** Pursue state and federal grants and budget for a phased conversion of one-way streets to two-way.
4.4 Design recommendations

This diagram highlights the intensive design recommendations that would effect positive transformations in key parts of the study area. Each one of these is presented in greater detail within this section.

**Duluth East Downtown, Hillside and Waterfront Charrette Master Plan**

- **Community Center Area**
  - Build an addition for the existing community center that will enhance the center’s presence, increase civic pride, and enable it to offer additional services. Create appropriate infill around Washington Center to anchor it as a neighborhood centerpiece, creating a stronger sense of place and neighborhood center.

- **SMDC Campus**
  - Sensitive expansion into surrounding areas that respects the scale and character of the neighborhood and enhances the campus for patients, workers, and visitors.

- **Hillside Neighborhood**
  - Creation of new residential, commercial, and mixed-use infill.

- **Lower Chester Neighborhood**
  - Implement a form-based code that guides development to achieve the three-dimensional character of desired places by regulating the elements of building form, type, height, layout, density, and frontage.

- **Fitgers Area**
  - A more pedestrian-friendly environment would be created around Fitgers, which would include straightening the curved roadway and reintroducing on-street parking to calm traffic and provide additional parking as well as new infill development and buildings that would help reconnect downtown and the neighborhood to the north.

- **Historic East Downtown Revitalization**
  - Targeted restoration and adaptive reuse of historic buildings and creation of new infill that respects the character and scale of the historic downtown and its neighborhoods.

- **St. Luke’s Campus**
  - Sensitive expansion into surrounding areas that respects the scale and character of the neighborhood while enhancing the identity and attractiveness of the campus for patients, workers, and visitors.

- **Armory/Plaza**
  - Redevelopment of the Armory and the Plaza Shopping Center into a lively, mixed-use, pedestrian-oriented area, including a food market, new housing, and a performing arts center with a much stronger connection to the lakefront.

- **Improved Connections Between Downtown, Canal Park, and the Lakefront**
  - Create stronger connections to Canal Park by developing new buildings at the gateways and arcades along the overpass. Improve landscaping and infill at park entrances to reduce isolation and create a more pedestrian-friendly area.
There has been a great deal of local grassroots effort to adaptively reuse the Armory and create a new destination. There are current proposals to turn it into a boutique hotel with a performance venue and/or a performing arts center. However, there has also been skepticism among business leaders as to the feasibility of the proposals. The charrette team recognized that in order to be successful, it would be necessary to look beyond the Armory building and property itself and study its relationship to its surrounding environs. The plan that was developed integrates the proposed programmatic elements for the Armory, but goes further by proposing new infill and redevelopment in several blocks around the Armory. Most notably, this includes a redevelopment of the Plaza Shopping Center into a pedestrian friendly, mixed-use center that leverages the commanding views of Lake Superior and the waterfront park, thus adding tremendous “destination” value to this area as a whole.
HOSPITALS

Two major hospital systems serve the Duluth community. Saint Mary’s/Duluth Clinic Health System (SMDC) is located near the 4th Street Business District and Downtown Duluth. St. Luke’s is nearby, located in a residential district with distinctive architectural characteristics.

After studying the history of each system, charrette team members met with hospital representatives and community members, and later held an open forum to describe current research in the area of health care design and to identify areas of opportunity and challenge for these systems. Additionally, the team conducted walking tours of each facility, as well as the neighboring blocks around each hospital, to study significant architectural elements that emphasize the unique qualities of each hospital and its neighborhood. The team’s consultants related the local context to experience with comparable health care facilities in the U.S. The results of this process are proposals that are new to both hospitals and can serve as starting points for conversations about the future.

Recognizing that St. Luke’s would like the opportunity to grow and that St. Luke’s neighbors have some concern about this, the design team studied how St. Luke’s might build enough volume to secure its future and at the same time enhance the physical and social environment of the neighborhood. If St. Luke’s is successful with this strategy, not only can it achieve a distinctive architectural identity, better access, and more effective facilities, but the neighborhood around the hospital will join in the renaissance.

These two goals are linked, since an attractive neighborhood will make St. Luke’s more appealing to its clientele and employees, and health care facilities that complement the neighborhood will make it a more attractive place to live. If St. Luke’s campus is planned with the concept of embeddedness and connectivity to its neighborhood, then there may be sufficient housing around the hospital to accommodate staff at various income levels and provide attractive short-, medium-, and long-term housing options for people receiving treatment at St Luke’s.

Based on these assumptions, the design recommendations for St. Luke’s address the following goals:

- Establish an architectural character consistent with the neighborhood.
- Draw upon the historic architecture of Duluth as the basis of the architectural language.
- Scale the buildings to dimensions appropriate to the street section.
- Buildings that face the residential neighborhood to the northwest are lower profile (3–4 stories).
- Buildings along the lakefront highway are taller.
- Place higher intensity/use buildings on the internal street.
- Define gateways and entrances, as well as an urban campus edge.
- Build a courtyard campus to introduce quads and greens throughout the facility.
- Develop a streetscape palette unique to St. Luke’s: street lights, street trees, benches, local stone, and wrought iron.
- Develop liner programming for parking garages (exposed garages and parking lots are not neighborhood-friendly).
- Develop pedestrian connections to the newly proposed mixed-use Plaza/Armory development.

3. St. Luke’s plan Phase II.
Proposed St Luke’s plan. This campus setting features a series of green courtyards.
SMDC is currently completing construction of a $75+ million ambulatory care center and will share in a city-built parking garage and skywalk. While the new facilities provide significant space, the complex of buildings would greatly benefit from a unifying feature that signifies the heart of the complex. A new central plaza, therefore, is proposed by the charrette to provide a focal point for the SMDC campus as well as the neighborhood.

Already surrounded by an area of mixed-use buildings, the proposed plaza is likely to be used as a lunch and break area during the summer and later, as a winter garden. The proposed plaza also provides landscape views for patient and staff areas throughout the hospital. If future new buildings are placed in support of the plaza, and the architectural character responds to the historic institutional architecture of that area, the plaza will make a significant contribution to the identity and attractiveness of the hospital and the downtown as a whole. The Gloria Dei Lutheran Church can also be enhanced as a landmark through its position on the new plaza. Also lining the plaza is the current headquarters of the Benedictine Health System.

Based on these assumptions, the charrette’s design proposal for SMDC seeks to:

• Define a new central plaza to serve SMDC and the neighborhood.
• Introduce landscape views to patient and staff areas (highly valued by both groups and clinically beneficial for convalescence).
• Provide a garden for the neighborhoods, including a green gathering area for Gloria Dei.
• Develop streetscape to enhance the pedestrian experience.

From left:

1. St. Mary’s Square.
2. SMDC proposal showing new lined parking decks and new green central plaza.
CONNECTIONS BETWEEN DOWNTOWN, LAKEFRONT, AND CANAL PARK

Creating stronger connections between downtown and the waterfront areas is vitally important in strengthening Duluth. This will be accomplished in two ways: First, by adding new infill development along connecting routes in order to redefine the public realm in a more pedestrian-friendly form; second, by improving the function and aesthetic of the access points themselves to become more seamless.

4.4 Design recommendations

New infill proposed for the former muffler shop site in order to create an inviting connection between East Superior Street, Lake Place Park, and the Lakewalk. See also the plan for this site done by LHB prior to the charrette as another alternative.

Attractive streetscapes are an important element in creating high-quality pedestrian connections. This street scene in Canal Park is a model that should be repeated and expanded along the route into downtown to the greatest extent possible.

This study shows how targeted infill development could improve continuity between Canal Park, downtown, and the waterfront park.

This before and after image shows how a pedestrian path leading from the neighborhood to the downtown and waterfront areas could be opened up to become more welcoming and attractive.

Attractive streetscapes are an important element in creating high-quality pedestrian connections. This street scene in Canal Park is a model that should be repeated and expanded along the route into downtown to the greatest extent possible.
4.4 Design recommendations

After: Proposed redevelopment of gateway area from downtown to Canal Park and the Lakewalk.

Before: Existing view from downtown to Canal Park.

This diagram identifies locations for improved pedestrian connections to the Lakewalk.
PRESERVATION

One of downtown Duluth’s greatest assets is its collection of handsome historic buildings. While there are numerous buildings with ornate architecture, even older buildings that do not have ornate facades contribute greatly to the pedestrian scale “street wall” that gives the east side of downtown Duluth in particular a feeling of being an “outdoor room.” Every effort should be made to preserve and reuse these buildings for current and future generations to enjoy as a living legacy of Duluth’s cultural and built environment.

To demonstrate the potential for historic preservation and reuse, the team focused on a group of buildings along Superior between 1st and 2nd Streets, which, at the time of the charrette, were in danger of being razed as part of a redevelopment proposal for a boutique hotel. The team met with the developer and devised an alternate that would allow saving the facades and the first twenty feet of the buildings back from the street, combined with development of new structures behind and above, as well as new infill on the vacant parcel within the block. Shortly after the charrette, it was learned that the developer was interested in pursuing this alternative and had met with the National Trust for Historic Preservation and key community leaders to discuss this possibility.
The Central Hillsside Community Center is a focal point for the neighborhood, yet the building itself, its grounds, and the surrounding area currently lacks a sense of place and presence that it deserves. There are important civic buildings including Washington Center and Studios and the school district’s Central Administration Building around the community center that also need to be better integrated into the fabric of the neighborhood as anchors.

4.4 Design recommendations

Proposed new infill development, shown here along 1st Avenue East and on 4th Street, would blend seamlessly with the character and scale of existing housing stock and other buildings.

This illustration shows an expanded community center that orients it toward the street and the civic building, Washington Center and Studios, across from it. It also shows opportunities for residential and mixed-use infill development in red.
FITGER’S COMPLEX

Fitger’s is a popular destination for locals and tourists alike. However, it feels very isolated from the rest of the city. In order to better connect it with the rest of downtown and the adjacent neighborhoods, a redesigned streetscape, re-alignment of Superior Street, new street connections, and new infill development will better integrate this important destination with its surroundings.

4.4 Design recommendations

Transforming the streetscape along Superior would expand and extend the pedestrian-friendly scale that currently exists directly in front of Fitger’s. This approach would be applied to the areas on either side of Fitger’s, which currently are hostile to pedestrians and give Fitger’s a sense of being cut off from downtown Duluth.

Transforming the streetscape along Superior would expand and extend the pedestrian-friendly scale that currently exists directly in front of Fitger’s. This approach would be applied to the areas on either side of Fitger’s, which currently are hostile to pedestrians and give Fitger’s a sense of being cut off from downtown Duluth.

This view from Fitgers towards downtown illustrates the hostile environment that detours people from walking to Fitger’s from downtown and keeps this area from becoming more vibrant. The curve in Superior Street was originally designed as a traffic-calming measure, but inadvertently created a “slalom course” that drivers routinely speed through.

This proposal shows a straightened Superior Street flanked by new infill development that lines parking areas, and a new public plaza with active uses across from Fitger’s. It also includes an expansion of the decking over the interstate, creating a new connection to the neighborhood that includes buildings lining the street over the enclosed decking.
SKYWALKS

In order to enhance both the aesthetic quality and functionality of Duluth’s skywalk system, a set of sketches were developed illustrating how the existing and future skywalks could be transformed into attractive centerpieces for the city. The re-skinned skywalks could even become a symbol of Duluth’s renaissance.

In addition to improving its aesthetic quality, the functionality of the skywalk system could also be greatly improved by integrating street-level arcades in retail areas, as well as by adding windows to skywalks that can be opened in the summer.

Similarly, climate-controlled street-level arcades can be opened or closed depending on the season, and can help promote a vibrant, year-round streetscape at ground level where activity is desired and needed, particularly along retail frontages. A local example of a glass-enclosed sidewalk that is opened in warmer weather was observed in a shopping center outside of the downtown. To protect and reinforce existing ground floor retail shops and restaurants, retail frontage should be discouraged along upper floor skywalks, and an improved wayfinding system to make it easier to navigate the system and find stores should be developed.

Arcades and passageways that can be opened during warmer months to create a better sense of connection to the street.

A re-skinned or new skywalk with street-level arcade.

New street-level arcades to reinforce the streetscape and support retail activity.
A related issue to that of the skywalks is how to create a high-quality pedestrian realm in areas where skywalks are not practical. Nowhere is there a greater need for a better pedestrian connection than between downtown Duluth and Canal Park along Lake Avenue. This is the primary gateway and the most direct route between downtown and Canal Park and the waterfront, yet it is currently a hostile environment to pedestrians. Few pedestrians brave crossing the Lake Avenue interstate overpass to get to Canal Park, which makes the waterfront feel more disconnected from downtown than need be.

To overcome this, an innovative solution should be considered in the form of new development built over the interstate along Lake Avenue. One such innovative solution was recently built in Columbus, Ohio, to connect downtown to the adjacent neighborhood of Short North. A row of retail buildings with arcades was built along each side of High Street that instantly created a seamless, high-quality pedestrian connection. This could be replicated in Duluth along Lake Avenue (and at an expanded overpass crossing near Fitger’s as well), or a more modest alternative that would include covered arcades only. A combination of the two could also be explored.

Views of the new I-670 “cap” project in Columbus, Ohio, serve as a model for a potential Lake Avenue crossing.

The Ponte Vecchio in Florence, Italy, built in the 14th century, is a pedestrian bridge that has retail stores at the “street” level, and an enclosed walkway on its second level. This inspirational model shows how civil infrastructure can contribute greatly to a memorable and inviting pedestrian experience.
Parks and Open Spaces

The charrette team made several recommendations to help preserve, nurture, and enhance the outdoor ethic, parks, and open spaces in Duluth. In addition to recommendations already discussed in this report to enhance access points to the Lakewalk and improve connections between downtown, Canal Park, and the lakefront, other recommendations included:

- Pursue place-making initiatives and programming to improve the attractiveness of existing public spaces to reinforce them as magnets for public activity; for example, programming in larger public parks could include community “jam sessions,” flea markets, farmers’ markets, and participatory arts, sports, and cultural activities.

- In the downtown, improve existing parks and open spaces and add new, small urban open spaces such as plazas, squares, and courtyards that are lacking in the study area and can greatly enhance the attractiveness and livability of the downtown.

- Incorporate bicycle facilities and bike racks at popular downtown destinations and along the lakefront; designate bike paths using “Share the Road” signage in the downtown and, where the existing street width is sufficient, paint bike lanes.
STREETS

An important aspect of creating healthy, vibrant communities is that the streets must be pleasant to be on. Before and during the charrette, team members with expertise in “livable street” design did extensive documentation of the existing street types and conditions. They found that many of the streets were functioning in such a way that encouraged traffic to move too quickly and freely, which created a less desirable street for pedestrians and adjacent residents and businesses.

In order to create a balance, the team developed a “context-based” approach to the street network. This meant that streets would be given different characteristics based on their function and adjacent land uses, rather than treating streets uniformly with the sole purpose of moving cars. This hierarchy could be phased in over time; however, one change that the team felt was of paramount importance for the near-term was the conversion of most, if not all, one-way streets back to two-way. One-way streets promote speeding and have been increasingly recognized as harmful to communities. They can no longer be justified in Duluth, particularly since the completion of I-35 through the city.

4.4 Design recommendations

The proposed street hierarchy of the street network in the study area.

Duluth's East Downtown Charrette
Street Types and Dimensions with Bike Lanes

<table>
<thead>
<tr>
<th>Street Type</th>
<th>Name</th>
<th>Existing Examples</th>
</tr>
</thead>
<tbody>
<tr>
<td>01A</td>
<td>Boulevard without parking</td>
<td>6th Avenue</td>
</tr>
<tr>
<td>01B</td>
<td>Boulevard with surface parking</td>
<td>1st Avenue</td>
</tr>
<tr>
<td>02A</td>
<td>Avenue with parallel parking - Two Way</td>
<td>4th Street</td>
</tr>
<tr>
<td>02B</td>
<td>Avenue with single parking - Two Way</td>
<td>Regional Street</td>
</tr>
<tr>
<td>02C</td>
<td>Avenue with parallel parking - One Way</td>
<td>16th Street</td>
</tr>
<tr>
<td>03B</td>
<td>Community Street with parallel parking</td>
<td>15th Avenue</td>
</tr>
<tr>
<td>04</td>
<td>Neighborhood street with parallel parking</td>
<td>16th Avenue</td>
</tr>
<tr>
<td>05</td>
<td>Sidewalk effect</td>
<td>15th Avenue</td>
</tr>
<tr>
<td>05A</td>
<td>Residential Alley</td>
<td>15th Avenue</td>
</tr>
<tr>
<td>05B</td>
<td>Commercial Alley</td>
<td>15th Avenue</td>
</tr>
<tr>
<td>05C</td>
<td>Pedestrian Lane</td>
<td>15th Avenue</td>
</tr>
</tbody>
</table>

The table above provides dimensions and descriptions of recommended street types.

Bicycle lanes not appropriate for this street type
Low speeds and low volumes of traffic allow bicycles share these streets with other users

Existing and proposed functional classification of the street network in the study area.

This section of Superior Street represents a good model for an “S3A” street.
The following are diagrams for the six basic street types in the proposed hierarchy:

S1. Boulevard

S2. Avenue

S3. Community Street

S4. Neighborhood Street

S5. Residential Alley

S6. Urban Alley
4.5 Management recommendations

Through discussions with citizens, comments at the various meetings, and observations and analysis, the charrette team developed a series of management recommendations that complement the policy and design recommendations. These management recommendations are important for carrying out the policies that are to be enacted, and will also help create the kind of immediate visible changes to Duluth’s built environment that will help encourage the significant design recommendations and reinvestment in the charrette focus area. The management recommendations are as follows:

**Hospitality:** Better publicize the presence of street-level restrooms in the Tech Center, at the Holiday Center and elsewhere for the convenience of tourists and visitors.

**Skywalks (retail):** Reinforce existing businesses and avoid overbuilding and dispersing retail by restricting or prohibiting retail activity in skywalks. Design skywalks to provide regular connections to street-level businesses via stairways leading to sidewalks and access directly into two-level retail businesses (e.g., a two-level bookstore/cafe with entrances on the street and from the skywalk). Pursue enclosed sidewalk design as alternative to skywalks to support existing retail.

**Parking (shared parking):** Develop a shared parking management strategy to make more efficient use of the abundant parking available downtown.

**Parking (valet):** Develop valet parking at hospitals and central valet stations at key downtown locations to respond to customer wants and needs for convenience and access to facilities and businesses during inclement weather.

**Wayfinding:** Develop an attractive, easy-to-understand wayfinding system and signage for the downtown.

**Focus downtown reinvestment:** Apply form-based code and offer streetscape, infrastructure improvements, tax increment financing and other incentives at five critical sites in order to leverage private sector investment, spur additional development and change the perception of the area:

- Plaza/Armory district (consider TIF and connections to Lakewalk)
- Superior and First Avenue East (consider density and height bonuses)
- Residential and commercial buildings on Fourth Street and First Avenue East, facing Central Hillside Community Park (consider improving park)
- Intersection of 4th Street and 6th Avenue East (consider infrastructure improvements)
- Duluth Sheraton Grand at the northeast corner of Superior and 3rd Avenue East (consider partnering with Minnesota Power to offer reduced rates for redevelopment sites)

**Public space:** Conduct a needs assessment/priority matrix for open space. Identify areas of need for squares, plazas, greens, and pocket parks. Identify better uses for existing open space. Address maintenance backlog.

**Wayfinding:** Work with Visit Duluth to design and implement wayfinding and signage plan and Web site to promote access to “soft” recreational resources.

**Entertainment District:** Create an entertainment district (TIF overlay to help fund streetscape improvements) around casino and Northstar Theater.

**Transit:** Conduct feasibility study for a streetcar system connecting Superior Street and Canal Park to support downtown business and tourism.

**Preservation:** Work with representatives of the National Trust, the state, and property owners to resolve reservations concerning the designation of contributing and noncontributing structures to proposed historic districts. Survey (or re-survey) historic neighborhoods and create new National Register districts through the Preservation Development Initiative program.

**Public Safety:** Focus on Clean and Safe improvements through the BID as a core function to be paid for with BID revenue.

**Transit:** As City purchases new buses, ensure they include larger bicycle racks.

**Collaborative culture:** As new positions become available, the City should seek to increase staff diversity, including American Indians and other persons of color.

**Collaborative culture:** Institute multicultural training for all public employees.

**Collaborative culture:** City and Sustainable Duluth (SD) should collaborate to ensure that SD is represented on policy-making bodies.

**Collaborative culture:** Local foundations and funders should promote collaboration among nonprofits, specifically among those working on complementary issues (such as housing rehabilitation) but also to identify gaps and new tools (such as co-housing).

**Collaborative culture:** LSC should take the lead on forming or strengthening neighborhood groups/associations.

**Crime prevention and neighborhood watch programs:**

**Lawn and home maintenance, and code enforcement:**

**Neighborhood cleanup programs:**

**Parking:** Encourage BID members to restrict employee abuse of on-street parking.

**Education:** Metropolitan Planning Organization and colleges should take lead in regional education program about effects of urban sprawl and exemplary smart growth and livable community design policies, community designs and management strategies.

**Collaborative culture:** Convene youth forum driven by neighborhood teenagers and sponsored by local funders to develop activities and services for teenagers, such as city league sports, youth public art, and a teen center.

**Transit:** Increase frequency of both peak and off-peak bus service in Central Hillside district to serve those most in need of public transportation.

**Public safety:** Improve monitoring and safety of skywalks through people-monitoring systems, thus allowing extended hours of use.

**Public space (programming):** Pursue placemaking initiatives and programming to improve the attractiveness of existing public spaces to reinforce them as magnets for public activity. Enhance focal points within the larger public parks and program them for regularly recurring events such as community “jam sessions” (open stage, bring your own instrument), flea markets, farmers’ markets, and participatory arts, sports, and cultural activities. Facilitate a continuous multicultural dialogue that celebrates diversity through similar initiatives in the arts, sports, festivals, and other community-building initiatives.

**Public space (programming):** Send a city parks employee to a Project for Public Spaces training session.

These images are examples of pedestrian friendly urban areas. The sidewalks are wide enough for shady trees and restaurant seating.
INTRODUCTION

At the city’s request, the charrette produced a draft of elements of a pilot form-based code for the Lower Chester Creek neighborhood – that document immediately follows this introductory statement.

Duluth is considering adopting a form-based code as it updates its comprehensive plan and zoning ordinance. In 1958, Duluth – like nearly every other city in the U.S. – adopted a zoning ordinance that assumed separating land uses, such as residential and commercial, was desirable in all situations. Today, many of the nation’s cities have found this segregated, single-use approach to be ineffective and are seeking ways to improve their zoning through the adoption of form-based codes, a major advance in code writing.

A form-based code regulates the built form of a city, rather than land use and density. Conventional zoning has proven detrimental to the urban fabric of established cities, imposing suburban standards for segregated land uses and disconnected buildings onto places that were defined by their urban, mixed-use character prior to World War II. The conventional use-based code typically results in isolated, single-use “pods” of housing, commercial, or office space, overly wide roads, excessive parking lots and garages in front of buildings, and unnecessarily deep setbacks from nearby streets and buildings.

Rather than focusing on zoning private lands into segregated uses, a form-based code sets desirable and flexible parameters for creating the types of places a community prefers, regulating the three-dimensional elements of places including: building frontages, height, and use as well as public spaces such as streets, sidewalks, and blocks. Form-based codes are designed by studying the specific characteristics of the best places in a community.

The assumptions behind form-based codes include:

1. The land uses that occupy sites and buildings will change over time in response to changing market conditions, and changes in business and industry. A form-based code allows for the uses to evolve while maintaining the quality of a city’s three-dimensional character of great streets, gathering places, and buildings.

2. Codes should enable the creation and protection of a variety of distinct mixed-use neighborhoods, centers, and districts within the city that share a safe, walkable, interconnected public realm of calm streets and attractive gathering places.

3. In cities, form-based codes should support walkable, urban, mixed-use patterns.

4. The role of city government is to regulate the form of the public (taxpayers) realm first, ensuring safe, attractive streets, sidewalks, and public spaces.

Developers often prefer form-based codes because they provide investment predictability. Currently, Duluth developers often find it hazardous to propose new construction because too many variables, such as height, seem to be arbitrary. A form-based code would set up a more clear rationale for height regulations.

Citizens will benefit from form-based codes because they can get the walkable, human-scaled communities they desire. City officials like form-based codes because they provide a clearer visual guide for the preparation and review of development proposals and allow staff to be proactively involved with proposals.

Ultimately, the form-based code’s emphasis on producing a specific type of “place,” rather than focusing on “use,” delivers a built environment that respects an established city’s architectural history and form, while ensuring that future development delivers what its citizens have deemed desirable.

4.6 Lower Chester Form-Based Code
Lower Chester Creek Neighborhood Development Code

This plan development code for the Lower Chester Creek Neighborhood is designed to regulate the built form of the urban environment over time. It does this by identifying physical parameters for new construction of all parts of the neighborhood. These parameters are based on the aspirations of citizens as defined through community-based urban design. The purpose of this code is further stated in Article 30 of the Duluth Zoning Code.

**DESIGNING THE PUBLIC REALM**

This code assumes that it is the responsibility of municipal government to ensure a successful public realm that provides for:
- the movements of people and goods throughout the sector in a safe and efficient manner via motor vehicles.
- the opportunity for pedestrians and non-motorized vehicles to move throughout the sector in a safe and efficient way.
- the opportunity for citizens to enjoy the outdoors and have social events in a public setting.
- the opportunity for landowners within the neighborhood to be accessed and serviced fairly and efficiently.

Therefore, the code supplies a public realm plan that specifies the manner in which all of the above will be accomplished. This plan includes:
- a right-of-way plan comprehensively identifying the hierarchical network of thoroughfares and public spaces throughout the neighborhood.
- a set of site diagrams outlining the actual physical design of all thoroughfares and public spaces in a plan view and cross-section.
- a set of site diagrams outlining the actual physical design of all thoroughfares and public spaces in a plan view and cross-section.

Note: A "Right-of-Way" Plan and site diagrams are not included in this draft pilot code. These will be published in the full charrette report.

REGULATING PRIVATE PROPERTY

This code asserts that it is the responsibility of private government to regulate: the development of the publicly visible aspects of the neighborhood. To that end the code specifies basic regulations for the development and redevelopment of private property throughout the neighborhood. This code includes:

- a land-use regulating plan that identifies which parcels of private land are more suitable for urban growth vs. areas of single-use vs. farmland vs. natural preserves, etc.
- a set of land use definitions clarifying design, policy, and management goals for each classification.
- a set of density zones (transit zones) are further defined for urban growth areas: they help identify property by property the appropriate intensity of development based on context of the neighborhood.

These transit zones generally lay out the locations of more urban areas vs. less urban areas within the neighborhood. These zones set our parameters for:
- construction height and long-term mass.
- overall height and volume in proportion to
- overall height and volume in proportion to street width.
- relationship to adjacent properties.
- parking requirements and configuration.
- uses permitted by level.

**Ways to Publish This Code**

Using environmental planning techniques:

Refer to several tables to find regulations pertinent to each property:

1. To determine city plans for streets and parks near each parcel or in the neighborhood, see the public realm plan, then see the corresponding street and public space diagrams.
2. To determine management parameters for the development of your property, see the private land regulating plans.
3. To determine landscaping parameters for each parcel, see the transit zone assigned to the parcel; find the range of allowed private frontage types. Then use brushing design parameters for the parameters specific to each frontage type. See also the public realm plan for parcels called out to be dedicated surfacings (frontage type I).

If using GIS With-based applications:

Simply enter in the Web the address of your parcel. The website will display all regulatory parameters pertinent to the development of your parcel.
4.6 Lower Chester Form-Based Code

The Regulating Plan

Frontages Allowed by Zone

Frontages Allowed by Street*

* An alternative way to regulate frontage types is to tie them specifically to the street design. In order for this to be successful, the Public Works department must first sign off on the street design. The street design recommendations can be seen in previous portions of this document.
4.6 Lower Chester Form-Based Code

T-5R Zone

Land Use Table: T-5R Zone

<table>
<thead>
<tr>
<th>Land Use Type</th>
<th>Permitted Use</th>
<th>Specific Use Regulation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Commercial recreation facility</td>
<td>Commercial</td>
<td>MUP</td>
</tr>
<tr>
<td>indoors</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Health fitness facility</td>
<td>MUP</td>
<td></td>
</tr>
<tr>
<td>Library, museum</td>
<td>P</td>
<td></td>
</tr>
<tr>
<td>Meeting facility, public or private</td>
<td>UP</td>
<td></td>
</tr>
<tr>
<td>Park, playground</td>
<td>UP</td>
<td></td>
</tr>
<tr>
<td>School, public or private</td>
<td>UP</td>
<td></td>
</tr>
<tr>
<td>Studio, art, dance, martial arts, music, etc.</td>
<td>P</td>
<td></td>
</tr>
<tr>
<td>Theater, cinema or performing arts</td>
<td>MUP</td>
<td></td>
</tr>
</tbody>
</table>

Key:
- P: Permitted Use
- MUP: Minor Use Permit Required
- UP: Use Permit Required

Notes:
- A definition of each listed use type is in Article 6 (Glossary).
- All units are required to be near a public open space, park, or recreation facility.

Lower Chester Creek Study Area: Duluth, Minnesota

Form Based Code
CHABRETTE DRAFT
4.6 Lower Chester Form-Based Code

T-5 Zone

- **Allowable Floor Types:** F1, F2, F3, F4, F7, F9, F11
- **Lot Coverage:** 100% max.
- **Notes:**
  - All floors must have a primary ground-floor entrance that faces the primary or side street.
  - Rear-facing buildings, loading docks, overhead doors, and other service entries are prohibited on street-facing facades.
  - Any section along the Build-To-Line (BTL) not defined by building must be defined by a 2’-6” x 4’-6” fence, stucco or masonry wall.

T-4 Zone

- **Allowable Floor Types:** F3, F4, F5, F7, F8, F10, F11
- **Lot Coverage:** 75% max.
- **Notes:**
  - All floors must have a primary ground-floor entrance that faces the primary or side street.
  - Rear-facing buildings, loading docks, overhead doors, and other service entries are prohibited on street-facing facades.
  - Any section along the Build-To-Line (BTL) not defined by building must be defined by a 2’-6” to 4’-6” fence, stucco or masonry wall.

Lower Chester Creek Study Area: Duluth, Minnesota
4.6 Lower Chester Form-Based Code

T-3 Zone

**Floor Plan**

<table>
<thead>
<tr>
<th>Level</th>
<th>Use</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ground Floor</td>
<td>Residential*</td>
<td></td>
</tr>
<tr>
<td>Upper Floor1</td>
<td>Residential*</td>
<td></td>
</tr>
<tr>
<td>Below Grade</td>
<td>Residential, Parking*</td>
<td>See Table 1.1 for specific use</td>
</tr>
</tbody>
</table>

**Height**

- Building Minimum: 2 stories
- Building Maximum: 3 stories

**Notes**

- All floors must have a primary ground-floor entrance that faces the primary arcade street.

- Rear-facing buildings, loading docks, service doors, and other service entries are prohibited on street-facing facades.

- Any section along the DTU not defined by building must be defined by a 2x6” to 4x6” fence, screen or masonry wall.

---

*DTU: Designation-Transportation Unit*
4.6 Lower Chester Form-Based Code

THE FRONTAGES

The private frontage is the interface between private property and the public realm. The sum of the interplay between the public and private forms the identity and character of the public spaces in a neighborhood, and consequently is at the center of conflict over the review of private development projects. This code attempts to lay out parameters for the design of each private frontage, providing citizens some predictability in the overall form of their shared streetscape while supplying flexibility in the stylistic execution and function of each individual building. This code is therefore not only a device for defining the distinctly public areas and deferring parameters for distinctly public areas, it is further an arbitration device for the review of private building proposals, protecting the freedoms of individual landowners while also promoting the rights of the citizenry to a successful public realm.

FRONTAGE TYPES

Through preliminary study in the Duluth Downtown Charrette process, several frontage types were found to be appropriate for the Lower Chester Creek Neighborhood:

- P1: Streetfront
- P2: Doorway
- P3: Stoop
- P5: Porch

FRONTAGE DESIGN PARAMETERS

Each frontage is defined by a set of eight design elements that are common to all frontages. Each element is governed by a set of design parameters that define basic boundaries for:

- Function: Location, arrangement, size, and use of each element
- Suitability: Type and quality of materials of each element
- Beauty: aesthetic quality, proportion, detailing, and style of each element

* Like existing codes, it is up to the community-based design and planning process to define the extent to which these parameters are specified. It is left to municipal project review authorities to what extent the parameters are enforced.

FRONTAGE DESIGN ELEMENTS

- Yard and Street Wall: The yard is the space between the property line and the building face. The street wall defines how the facades of the public and private realm is treated. The desired level of openness, privacy or screening of the yard, and the treatment and use of the yard is governed by this design parameter.

- Building Placement: The minimum and maximum building setbacks from the street and adjacent properties are defined by this design parameter. The bay widths of the frontage help establish the scale of the building.

- Entry Level Wall: The transparency, scale and rhythm of the frontage entry level and the relationship of the ground floor to the street are governed by this design parameter.

- Upper Level Wall: The relationship of the upper wall materials, design and openings to the entry level wall is defined by design parameter. Building style can be defined if desired.

- Awning: The placement of awnings in relation to the entry- and upper-level wall openings, as well as their height above grade and projection into the public realm, is defined by this design parameter. The placement and size of the awnings helps create a more pedestrian scale to the frontage street level. Awning material, color, and shape of the awning relate to the overall character of the building and design district. The use of graphics and signage on awnings in relationship to overall signage parameters is governed here.

- Shelter: Porches and stoops, shelter elements that are integral to the architecture of the building, are defined by this design parameter. The placement and size of the shelter elements establish the desired semi-private outdoor space.

- Signage: The placement, size, and number of sign elements are defined to be integrated into the architecture of the building in this design parameter. The materials and methods of lighting signage are also important characteristics that are governed by this parameter.

- Roofline: How the building terminates and meets the sky is governed by this design parameter. Termination of the building, has a strong relationship to the entry- and upper-level walls, and the character of style of the frontage.
4.6 Lower Chester Form-Based Code

**F-1 Storefront**
- N/A
- N/A
- N/A
- Building Placement
  - Front side: Build to property line
  - Rear yard: Flexible
- Entry-Level Wall
  - Materials: Masonry
  - Min. opening height: 12'0" to 14'6"
  - Percentage of wall opening: 70% to 80%
  - Recessed doorway
  - Window sill height: 18" to 24"
- Upper-Level Wall
  - Materials: Consistent with entry-level materials
  - Vertical proportions of windows
  - Wall to opening ratio: 25% to 30%
- Signage
  - Must relate to architectural features
  - Can be parallel and/or perpendicular to building wall
  - Maximum sign area: TBD

**F-3 Doorway**
- N/A
- N/A
- Pedestrian only: no driveways or parking
- Firms or surface or landscape
- Street wall: max. height: 32"
- Shades
  - Only allowed over entry
  - Style must relate to main building
- Awning
  - Over entry only
- Building Placement
  - Setback: 6'-0", maximum TBD
- Entry-Level Wall
  - Materials: Masonry and/or wood
  - Max. wall opening: 50%
- Upper-Level Wall
  - Wall to opening ratio: 29% to 30%
  - Windows: Vertical proportion
- Signage
  - Parallel to building wall
  - Max. square feet: TBD by Dutch
- Roof Line
  - Flat or sloped roof
  - Max. slope: TBD by Dutch
  - Material TBD by Dutch

Lower Chester Creek Study Area: Duluth, Minnesota
4.6 Lower Chester Form-Based Code

**F-4 Stoop**
- Yard and Street Wall:
  - Pedestrian only; no driveways or parking
  - Porous surface or landscape
  - Street wall max. height: 32'
- Shelter
  - Only a covered way entry
  - Style must relate to main building
- Awnings
  - Over entry only
- Parking Placement
- Setback: 0’-0” to maximum figure to be determined by
  - Building
- Entry-Level Wall
  - Materials: Masonry and/or wood
  - Percentage of wall opening: 30%
- Upper-Level Wall
  - Vertical proportions of windows
  - Wall-to-opening ratio: 28:1 to 50:1
- Signage
  - Parallel to building wall
  - Maximum sign size: TBD
- RoofLine
  - Flat or shed rooftop
  - Min. slope: TBD by Building
  - Material: TBD by Building

**F-6 Terrace**
- Yard and Street Wall
  - Pedestrian only; no driveways or parking
  - Landscape
  - Street wall max. height: 32’
- Shelter
  - Min. front wall coverage of 80%
  - Style must relate to main building
- Awnings
  - NA
- Building Placement
  - Setback: 34’-0” or average of adjacent neighbor or same as
    one of the adjacent neighbors
  - Rear yard: Flexible
  - Pitch may reach 30'-0” into setback
- Entry-Level Wall
  - Materials: Masonry and/or wood
  - Percentage of wall opening: 30%
- Upper-Level Wall
  - Materials: Consistent with entry-level materials
  - Vertical proportions of windows
  - Max. wall-to-opening ratio: 40:1
- Signage
  - NA
- RoofLine
  - Hip, gable, double-shed roof
  - Dormers allowed
  - Min. slope: TBD by Building
  - Material: TBD by Building
4.6 Lower Chester Form-Based Code

Coding for Special Topographic Conditions

Building Front Parallel to Topography

Noteworthy characteristics taken from historic examples:
Buildings should be integrated into some degree to deal with dramatic drop in topography so that it can be entered at grade. Entire facade can be integrated into the rear of the building as the building turns down the hill. This condition is ideal for the location of parking or additional units/parking should be oriented from the alley. All buildings with more than one story should have a horizontally articulated base to break down the scale.

Form-Based Code

<table>
<thead>
<tr>
<th>Building Type</th>
<th>Enhancement</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lot size</td>
<td></td>
</tr>
<tr>
<td>setbacks (front, side, rear, corner)</td>
<td></td>
</tr>
<tr>
<td>Height</td>
<td></td>
</tr>
<tr>
<td>Height above/below walk</td>
<td></td>
</tr>
<tr>
<td>Corner units: location of entry</td>
<td></td>
</tr>
<tr>
<td>Notes: access from alley to units</td>
<td></td>
</tr>
<tr>
<td>Block location (e.g., block A)</td>
<td></td>
</tr>
<tr>
<td>Block type (severity of slope)</td>
<td></td>
</tr>
<tr>
<td>Number of units</td>
<td></td>
</tr>
<tr>
<td>Number of street parking spaces</td>
<td></td>
</tr>
<tr>
<td>Number of on-street parking spaces</td>
<td></td>
</tr>
<tr>
<td>Percentage of slopes-North</td>
<td></td>
</tr>
<tr>
<td>Percentage of slopes-South</td>
<td></td>
</tr>
</tbody>
</table>

An example of how a group of homes responds to the topography across its footprint:
The entire height and second floor level stays the same, but the ground floor heights change.
IMPLEMENTATION STRATEGY

Duluth’s East Downtown, Hillside and Waterfront Charrette Report and Plan represents the collective ideas and visions of the community’s citizens and stakeholders. Nearly 1,000 Duluthians from all walks of life participated in the charrette. The most important aspect of the charrette is that it generates the local stewardship to champion the ideas and visions of the charrette recommendations. Stewardship ensures that the collaborative spirit of the charrette process – of convening, dialogue, deliberation, and action – continues beyond the charrette.

Following the charrette, one of Mayor Herb Bergson’s first acts was to appoint a coalition of public- and private-sector representatives to coordinate and implement the visionary ideas discussed during the event, while encouraging ongoing involvement from Duluth residents.

Named the Charrette Stewardship Group (CSG), the 15-member committee—which includes the mayor—meets monthly to address issues related to the charrette vision. Current and ongoing efforts include:

• Monitoring the implementation progress
• Adjusting the vision as necessary, based on consensus
• Creating a communications strategy that encourages continued public input
• Developing strategies to attract resources and community support for implementation of public and private projects
• Assisting public and private developers with adjustments to their proposals that will make them consistent with the shared community vision
• Prioritizing 64 design policy and management recommendations by need, impact, and feasibility

In the months following the charrette, several manageable initiatives were already realized, reports CSG chair Pam Kramer, senior program director of the Duluth Local Initiatives Support Corporation (LISC), a charrette co-sponsor with the City of Duluth.

“Smaller efforts like tree-trimming, opening up views on public property, landscaping—we’ve realized those things already,” she says. “And there is real progress being made toward larger projects in all three of the areas that were studied during the charrette.”

Sustaining the energy from the charrette and implementing the action steps are top priorities for the CSG, according to Kristi Stokes, president of the Duluth Greater Downtown Council.

“Community members were enthusiastic about providing their input and helping to shape this vision, and they will be eager to see some results. We know some items will take a long-term approach, but others can be tackled in the near future, which will help keep the vision in the forefront. We’re really turning a corner in the Old Downtown district, for example. There is a great deal of development and private investment taking place there, and many of the businesses are feeling optimistic about the future,” Stokes says.

The inclusive format and atmosphere that attracted so many Duluthians to the charrette has spilled over into the conduct of the CSG members themselves—even those with competing interests outside the boardroom, says Don Ness, a local business owner and Duluth City Councilor.

“For me it’s exciting to get a wide variety of community leaders in the same room. Representatives from hospitals, business leaders, city leaders, landlords in the downtown area—all coming together and talking about the future of our downtown. You’d think this would be more common, but this is one of the first opportunities I’ve had to have everyone at the table, representing their interests,” Ness says. “I think that the relationships that have already started to form are really positive things. I’ve been pleasantly surprised with the amount of energy and enthusiasm for the plan, as well as how common the vision is for downtown. Our priorities are aligning. I think the larger vision is coming into place more quickly than I thought it would.”

For Penny Perry, an artist and local business owner who sits on the Duluth Public Arts Commission, the CSG is an “intelligent, open-minded approach that breathes fresh air into our situation.” Perry sees the CSG as a real catalyst for change.

“We’re already doing things that people think are important, based on the principles that guide our decisions. If we—the CSG and the citizens—can keep the buzz going and not get reticent, we could transform our city.”
Duluth’s East Downtown, Hillside and Waterfront Charrette Report and Plan
PREVIOUS DULUTH PLANS AND STUDIES

City of Duluth Downtown Streetscape Revitalization Project #OT - 0004 Phase I Conceptual Design
Date: August 30, 2001
Authorship: Melander, Melander & Schilling
An Assessment of Demand for Housing In Downtown Duluth, Minnesota
Date: November 2002
Authorship: Maxfield Research Inc
Comprehensive Plan Components:
Natural Features / Public Lands & Facilities
Aerial Photography
Utilities Infrastructure
Industrial Land & Brownfield Analysis
Long Range Transportation Plan
Draft - Neighborhood District Plans
Park Point Urban Impact Study
Demographics
Housing Analysis
Date: April 1, 2003
Authorship: City of Duluth Planning & Development Department
Zoning Regulations for the City of Duluth
Date: 1958 - has been updated as needed
Authorship: City of Duluth
Metropolitan Pedestrian Plan
Date: February 1999
Authorship: Duluth-Superior Metropolitan Interstate Committee
Downtown Duluth Parking Study
Date: March 2000
Authorship: Duluth-Superior Metropolitan Interstate Committee
Turning Around Downtown:
Twelve Steps to Revitalization
Date: March 2005
Authorship: The Brookings Institution Research Brief

Duluth School District Demographic Report
Date: November 2003
Authorship: City of Duluth Planning & Development Department
State of Housing: Housing Facts and Figures
Date: 2003
Authorship: St. Louis County Planning Department
City of Duluth Consolidated Plan for Housing & Community Development FY 2005-2009
(table of contents and summary pages only)
Date: December 20, 2004
Authorship: City of Duluth, Community Development Division
2001 and Beyond
Date: March 1993
Authorship: City of Duluth
A Plan for the Duluth Downtown Waterfront
Date: December 1985
Authorship: Pei Property Development Corporation/Backburth, Fish, Harston
Endion Waterfront Plan and Development Strategy
Date: February 1995
Authorship: Pei Property Development Corporation/ Backburth Fish & Jacquemart
Why Can’t I Build Anything in this Town?! A Developer’s Legal and Political Guide to Building in Duluth
Date: Spring 2005
Authorship: Greg Gilbert, City Councilor and private attorney
Neighborhood Housing and Medical District Plan; East and Central Hillside Neighborhoods, Duluth, Minnesota
Date: April 15, 1991
Authorship: Medical District Steering Committee, the City of Duluth and RESOLUTION Inc. and Lindberg Pierce Inc. Architects
Downtown / Medical District Linkage Development Plan
Date: September 5, 2002
Authorship: Michael Conlan, Duluth Economic Development Authority
Proposal for Development of Young Professional Housing Districts
Date: September 2004
Authorship: Duluth Housing Commission and University of Minnesota Duluth
East Hillside Urban Design Plan - A Component of the East Hillside Neighborhood Plan
Date: March 1983
Authorship: Robert J. Bruce, Planning Consultant
Preservation Development Assessment Report, Duluth, Minnesota
Date: 2003/2004
Authorship: National Trust for Historic Preservation – Team
Old Downtown Strategic Plan
Date: February 1995
Authorship: Old Downtown Strategic Plan Steering Committee and City of Duluth Planning Division
At Home in East Hillside Focus Area Revitalization Plan
Date: 2000
Authorship: Klairs, Powers & Associates, Architectural Resources Inc and James Rice. Prepared for The East Hillside Focus Area and At Home in Duluth Partnership
At Home in Duluth – Central Hillside Focus Area Revitalization Plan
Date: October 2000
Authorship: RKL Kuusisto, LTD., Sanders Wacker, Bergly Inc. and Biko Associates, Inc. Prepared for Duluth Economic Development Authority
Zenith City of the Unsalted Sear – Duluth Historic Contexts Study
Date: August 1991
Authorship: Nancy Eubank and the Duluth Heritage Preservation Commission
Resettling DULUTH
Date: 1986
Authorship: Duluth Energy Center
Duluth’s Legacy Volume 1: Architecture
Date: December 1974
Authorship: City of Duluth, Department of Research and Planning
Draft - Survey of Existing Plans and Reports - November, 2004
Date: November 2004
Authorship: Charles Froseth, City Planning Department
2004 State of the City Address
Date: January 5, 2004
Authorship: City of Duluth, Mayor’s Office
2005 State of the City Address
Date: January 5, 2005
Authorship: City of Duluth, Mayor’s Office
Fourth Street Economic Revitalization and Streetscape Plan – Hillside Business Association
Date: August 23, 1998
Authorship: RKL Kuusisto, LTD and Sanders Wacker Bergly Inc.
Draft - Survey of Existing Plans and Reports - November, 2004
Date: November 2004
Authorship: Charles Froseth, City Planning Department
2004 State of the City Address
Date: January 5, 2004
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Fourth Street Economic Revitalization and Streetscape Plan – Hillside Business Association
Date: August 23, 1998
Authorship: RKL Kuusisto, LTD and Sanders Wacker Bergly Inc.

Additional Transportation-Related Reports Consulted
Duluth-Superior Long Range Transportation Plan Mobility for People and Freight 2030
Date: June 15, 2005
Authorship: Duluth-Superior Metropolitan Interstate Council
Duluth Metropolitan Transportation Improvement Program
Date: FY 2006-2008
Authorship: Duluth-Superior Metropolitan Interstate Council May 2005
Duluth Sidewalk Inventory
Date: January 2002
Authorship: Duluth-Superior Metropolitan Interstate Committee
Lake Avenue Transportation Plan
Date: March 2003
Authorship: Duluth-Superior Metropolitan Interstate Committee
Downtown Transportation Terminal Analysis
Date: September 2004
Authorship: Duluth Transit Authority
Duluth-Superior Area Truck Route Study
Date: April 2001
Authorship: Duluth-Superior Metropolitan Interstate Committee
ADDITIONAL CHARRETTE DOCUMENTS

This report is posted as a pdf on the Knight Program Web site, www.arc.miami.edu/knight. Other materials related to the charrette are also posted on the Knight Program web site:

- Duluth Post-Charrette Newspaper
- Elements of a Pilot Form-Based Code for Lower Chester Creek Neighborhood: Charrette Draft
- Duluth Principles
- Final Presentation Powerpoint
- Policy, Design, Management Recommendations
- Short Term Wins
- Approval Process
- Duluth Charrette Images
- Duluth Charrette Schedule
- Duluth Pre-Charrette Newspaper
- Duluth Press Release
- Press Coverage

For additional information about the charrette, please see the following Web sites:

Knight Program in Community Building, University of Miami School of Architecture
www.arc.miami.edu/knight

City of Duluth
www.ci.duluth.mn.us

Duluth Local Initiatives Support Corporation
www.lisc.org/duluth