identifying and cultivating a legacy and connection

a response to the challenges facing urban neighborhoods

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Identifying and cultivating a legacy and connection
A response to the challenges facing urban communities

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This thesis is a response to the exploration of the legacy of our civic communities. It will explore the manner in which these communities are developed, cultivated, and grow to meet the needs of those individuals of which they are composed and also serve. In addition, it will explore the emerging ways in which these communities serve those individuals as a result of cultural, ethnic, political, social, economic, technological, and environmental influences.

The design project is located near the edge of downtown St. Paul, Minnesota. The project will explore the mixed-use building typology and the manner in which this typology fits within our urban fabric. In addition, the project will explore the benefits and challenges associated with this typology and the ways in which the typology, along with other organizations and entities, will help this particular community identify and cultivate the legacy it hopes to nurture and carry on.

Keywords:

Community, legacy, identity, public, mixed-use, adaptable, flexible, connected, urban, development, education, commercial, office, transit, St. Paul, MN
problem statement

How can design help urban communities identify and cultivate a legacy and connection among people?
statement of intent

typology

Mixed-use master plan, pedestrian/bicyclist pathway and bridge system, plaza and park system, commercial building complex.

claim

Design can help urban communities identify and cultivate a legacy and community connection by creating a well-connected built environment within a community, that both prospers on its own, and adapts to meet the needs and advance the prosperity of the community and individuals it serves.

premises

Design has the ability to transform movement, time, and space when transcending into the built environment.

This process can greatly alter and shape the existing built environment and the community within which it emerges and evolves.

The transformation of the built environment and community in which it emerges and evolves can also transform the means and methods by which that community identifies and cultivates the legacy it hopes to nurture and carry on.
theoretical premise / unifying idea

In order to ensure that design and the resulting development of the built environment help urban communities identify and cultivate a strong legacy, it is important that the design and development recognizes, understands, and addresses the community’s current identity, needs, the legacy and connection it hopes to nurture and carry on, and the organizations and entities that will help to make this legacy possible.

project justification

This project will explore the challenges associated with urban communities and urban infill projects. In addition, it will explore the ways in which communities and organizations can recognize and address these challenges. Further, the project will address the benefits and challenges of a mixed-use, community oriented building complex, and the manner in which this typology can help the urban community identify and nurture the legacy it hopes to carry on.
Cities and metropolitan areas in the United States and around the world are experiencing rapid growth rates and becoming increasingly dense as a result of recent urbanization influenced by a number of cultural, ethnic, political, economic, technological, and environmentally factors. In many ways, this density has helped to create more efficient and socially, economically, and environmentally sustainable places than would be otherwise possible. These places are reminiscent of earlier success within the city centers and downtown districts in the United States and abroad.

However, many communities within these urban centers and municipalities still struggle with challenges and barriers which prevent the individuals living within these areas from experiencing the same success and prosperity of other areas within the urban environment.

Committed to helping people in communities like this, the Obama Administration and the U.S. Department of Education have taken action. Inspired by the success of a program known as the Harlem Children Zone (HCZ), which has helped thousands of individuals living in New York City break the cycle of poverty, the U.S. Department of Education has developed a program to replicate the measurable success of the HCZ in communities across the United States. The program is called “Promise Neighborhoods.”

One of the country’s areas most affected by the challenges and barriers of inequality and poverty is that of the Thomas-Dale (Frogtown) and Summit-University neighborhoods in St. Paul, Minnesota. This area is located just West of the State Capital, and Northwest of downtown St. Paul.

The city of St. Paul has been selected as one of the country’s
21 “Promise Neighborhoods” which will receive grants and other federal funding to help the individuals living in the Frogtown and Summit-University communities break the cycle of poverty.

Leading the St. Paul Promise Neighborhood program is the Amherst H. Wilder Foundation, a St. Paul organization committed to helping those in need throughout the city. With the help of other organizations and donors, the Wilder Foundation will develop and implement a plan for the St. Paul Promise Neighborhood that will help residents in 250 blocks of St. Paul.

This design thesis is a response to the community of St. Paul, the St. Paul Promise Neighborhood, and the Wilder Foundation. It will explore and address the challenges and needs of the people of St. Paul and of these organizations. The project will explore the manner in which communities are developed, cultivated, and grow to promote healthy social and economic activity and to serve those in needs.

Ultimately, the design project will concern itself with the exploration of legacy within our communities and the ways in which design can help a community identify and cultivate the legacy it hopes to nurture and carry on.

In the case of St. Paul, this project will be a response to the community’s needs, but also a response to our urban fabric and the composition of urban communities. This dual focus will explore the ways in which design can help connect communities and promote well-being in both simple and complex ways.

The project does not seek to close the achievement gap and break the cycle of poverty, but rather it seeks to create a built environment that will facilitate the support through which these challenges can be met.

The design project will explore the ways in which urbanization might actually help our neighborhoods in need. The project will address this question by exploring the needs of an individual client, the Wilder Foundation, and proposing a design solution that might help this organization meet its needs and, in turn, help those in need within the community.
The mixed-use building complex will be designed to serve the city of St. Paul and the surrounding communities directly and through the Amherst H. Wilder Foundation. The program will also create a more closely connected relationship between the organization, the people of St. Paul, and the surrounding communities. In addition, the mixed-use complex will increase vibrancy in the local community with offices, shops, restaurants, public space and transit facilities. These services also provide a source of non-donated funding for the organization to continue helping those in need. This complex will be critical to helping this urban community identify and nurture the legacy it hopes to carry on.
major project elements

commercial facilities/spaces

public facilities/spaces

transportation facilities/spaces

parking facilities/spaces
This project is located near the edge of downtown St. Paul, MN. The site is located near the busy commercial and entertainment district of the city and adjacent to the State Capital, and two of the city’s most in-need communities.
This thesis project will examine and explore our civic communities and the factors that influence living within these communities. This thesis project will also explore the mixed-use typology and the benefits associated with density and diversity within a small urban area. In addition, this thesis project will examine the social, economic, educational and health related challenges facing many individuals in these communities.

The research conducted for this thesis project will be directed toward understanding the evolution of mixed-use typologies and the benefits and challenges associated with these developments. In addition, the research conducted will enhance understanding of the site, programmatic requirements and demands, users, and the theoretical premise/unifying idea.
research and design methodology

Research and design will be conducted using a mixed methods approach that will ultimately yield a thorough and balanced understanding of the information collected in the areas previously discussed, including but not limited to: the problem statement, typology, claim, premises, theoretical premise/unifying idea, user/client description, major project elements, and project site.

documentation of the design process

Process work will be recorded both physically and digitally each week throughout the design process. This compilation of work will include various inspirations, case studies, notes, sketches, drawings, diagrams, renderings, and other forms of information. In addition, this work will be documented into specific categories.
In biological terms, a community is simply a group of interacting organisms sharing a populated environment (Merriam-webster, 2011), but even at the biological level, the community is much more complex than this brief definition. In human communities, the relationships between individuals are very complex and inter-related. The first human communities were prehistoric in nature, and existed prior to our own written history, known only by the artifacts discovered by archeologists that suggest the gathering of individuals sharing a common environment. In early times, the primary benefits that these communities represented were physiological in nature (safety, shelter, food, reproduction, etc.) and social (companionship, social belonging, etc.). In addition, these communities created economic vibrancy in marketplaces that brought people together for trading of goods and services. These basic benefits are still important elements in our communities and urban fabric. However, the complexity of our communities has grown.
Our communities consist of various interconnected and interdependent levels as a result of civic, religious, ethnic, cultural, social, political, economic, technological, and environmental influences.

In addition, these communities continue to grow in size and complexity. Civic communities are perhaps the most broad and objective communities, even though other communities exist within and beyond their borders. For example, it’s clear during campaign periods that political perspectives create strong communities and identities within a larger context. It’s also clear that ethnic groups retain many unique communities and identities within a larger context.

Each of these communities has its own identity and legacy, or more accurately, a mix of different identities and legacies that evolve into that of the overall community. Like that of any of these communities, it’s important to understand the identity and legacy at the civic level and the challenges that a particular civic
community faces. Right now, many large cities and metropolitan communities face rapidly growing population density.

This density is the result of a growing population worldwide, but also the result of various cultural, ethnic, social, political, economic, technological, and environmental influences that have increased the rate of urbanization among populations in the United States and abroad.

For example, in 1910, the population of the United States was 92,228,496. At this time, 54.4% of this population, or 50,164,495, were considered to be living in rural areas. In 2000 the population of the United States had grown to 285,230,516, more than three times the population of the United States in 1910. Of this population, 79.25% or 225,956,060 individuals, were considered to be living in urban areas, compared to 59,274,456 individuals living in rural areas, just 20.75% of the current population (U.S. Census Bureau, 2010). These numbers represent an increase in the urban population of nearly 500% in just 100 years.

In addition, the worldwide
population has grown from an estimated 1,750,000,000 people in 1910 (U.S. Census Bureau, 2010), to more than 6,885,373,187 people currently. The current population in the United States has now grown to an estimated 310,836,374 people (U.S. Census Bureau, 2010).

Although many sources have estimated that population growth rates are declining in industrialized nations, the overall population of these nations continues to grow, and as documentation shows, that population continues to grow most in urban areas.

The growing density in our cities represents many of the physical, social, and economic benefits of a typical community, but these increasingly dense urban areas also offer other benefits in many areas that are rapidly gaining worldwide attention such as climate change, pollution, and waste.

For example, although the level of pollution in New York City (the largest and most dense city in the United States) is higher than any other metropolis in the nation, the pollution per resident is actually 7.1 metric tons per year, well below the national average of 24.5 metric tons per person. In addition, New York City accounts for only 1% of greenhouse gases, while housing
more than 2.7% of the population in the United States ("Inventory of greenhouse gases," 2007).

The density within these urban areas still facilitates vibrancy and strong market activity, socially and economically. In addition, the close proximity in these dense urban areas reduces the need for automobile traffic relative to other less dense areas by providing a platform for highly efficient forms of public transit and pedestrian movement.

For example, New York City also boasts the highest mass transit use in the United States, consuming gasoline at the rate equal to the national average in 1924, and the city continues to be a worldwide economic capital (Jervey, 2006).

However, these dense urban environments often generate a number of serious problems and challenges.

It seems that several of the greatest challenges stem from inequality within cities and communities, which presents a number of challenges including poverty and crime. The growth of inequality in urban areas leads to the rise in unemployment, poverty, homelessness, crime, and
violence. The spread of these challenges also deteriorates the networks within the communities that would otherwise help those in need and remove barriers to prosperity. This spiral of urban problems and poverty among individuals living in urban areas is also difficult to break.

One of the reasons it’s so difficult for individuals to break from this cycle is the lack of support, help, and education that would otherwise enable these individuals to be successful and contributing members of society.

This has been a major problem in many cities and communities across the United States. In one community in New York City, the educator and activist, Geoffrey Canada, implemented a program that aimed to break this cycle of poverty, unemployment, and crime.

The program became known as the Harlem Children’s Zone (HCZ). In the early 1990s, the Harlem Children’s Zone ran a pilot project that brought a range of support services to a single block. The idea was to address all the problems that poor families were facing: from crumbling apartments to failing schools, from violent crime to chronic health problems (Harlem Children’s Zone, 2010).
Over the years, the agency in Over the years, the agency introduced several ground-breaking efforts: in 2000, The Baby College parenting workshops; in 2001, the Harlem Gems pre-school program; also in 2001, the HCZ Asthma Initiative, which teaches families to better manage the disease; in 2004, the Promise Academy, a high-quality public charter school; and in 2006, an obesity program to help children stay healthy (Harlem Children’s Zone, 2010).

In 2007, the project grew to nearly 100 blocks, and now serves more than 8,000 children and 6,000 adults (Harlem Children’s Zone, 2010).

Under the visionary leadership of its President and CEO, Geoffrey Canada, HCZ continues to offer innovative, efficiently run programs that are aimed at doing nothing less than breaking the cycle of generational poverty for the thousands of children and families it serves.

This is “an all-encompassing, all-hands-on-deck, anti-poverty effort that is literally saving a generation of children,” said President Barack Obama of the program (Harlem Children’s Zone, 2010).

Inspired by the success of this program, the Obama Administration and the U.S. Department of education have
implemented a plan of their own in which communities across the United States had the opportunity to apply for grants to replicate the success of the Harlem Children’s Zone.

Twenty-one communities were accepted as grantees for the new “Promise Neighborhood” program. The city of St. Paul, Minnesota is not only a grantee of the new program, but several neighborhoods in the city were ranked 4th most critically in need of this program among communities in the United States (U.S. Department of Education, 2010).

This program, if it can replicate the success of the Harlem Children’s, will no doubt be part of the lasting identity and legacy of the city of St. Paul, and the communities most in need of support services.

To ensure the success of this program, the Amherst H. Wilder Foundation has sponsored the promise neighborhood and will lead the effort, with the help of donors, philanthropists, and other organizations, to rebuild and support the neighborhoods most in need (U.S. Department of Education, 2010).

Because this program and the organizations that sponsor this program, such as the Amherst
H. Wilder Foundation, will no doubt be part of the city’s lasting identity and legacy for generations to come, it is important that the built environment support the program and these organizations by creating a well-connected built environment within the community, that can both prosper on its own, and adapt to meet the needs and advance the prosperity of the community, organization, and individuals in need.

**Conclusion**

To help urban communities such as the city of St. Paul, MN, and the various communities and neighborhoods within the city identify and cultivate a lasting legacy, design must identify with the challenges and needs of the community, as a place, unique culturally, ethnically, socially, politically, economically, technologically, and environmentally. In addition, design must work with the community to identify an identity and legacy that it will carry into the future for generations to come.

The legacy of the community of St. Paul, MN will no doubt hinge partially
on the success of the St. Paul Promise Neighborhood program that aims to eliminate poverty within the city. In turn, the success of this program could not be made possible without the support of organizations such as the Amherst H. Wilder Foundation, which has taken the lead in the process of serving the city of St. Paul and developing the Promise Neighborhood program in St. Paul.

Therefore, it is important that this project will address the urban fabric of our communities in multiple dimensions to create a place from which social, economic, and environmental sustainability can grow. This project will support the Amherst H. Wilder Foundation and its efforts along with others to create an identity and lasting legacy for the communities within the city of St. Paul, that will ultimately break the cycle of inequality and poverty that affects so many individuals in these communities.

As part of the solution, the project must create a place from which the Amherst H. Wilder Foundation can reach out to the communities in need, but also connect with the communities and organizations that can help promote and support the Promise Neighborhood program.
The design solution must create a sense of place and connectedness within the community. In addition, it must meet the various needs of the Amherst H. Wilder Foundation and the individuals that organization serves.

The design solution must not only create awareness, but must create real opportunities for this organization and program to succeed, not only by working with donors, philanthropists, and organizations, but on its own.

The design solution must be self-sustaining; promoting both change and innovation.

It seems clear that the design solution must address a number of programmatic requirements and functions that meet the needs of the community and client. The resulting mixed-use building complex will provide a strong connection to the city and communities that compose the city of St. Paul. In addition, the diversity and density within the building complex will provide flexibility and adaptability, so that the organization can constantly change to meet its needs and the needs of the communities it serves. In addition to creating the civic
connectivity, a mixed-use typology offers, the additional space within the building will provide this organization with a source of operating income that will further sustain its efforts to eliminate poverty in the community and create a legacy of change, opportunity, education, prosperity, and community connections.
The project is the result of a strong political push to protect the historical district of Frankfurt, while the city’s financial district expanded. The is one of the world’s first ‘green’ skyscrapers and represents a model from which environmental sustainability can spread throughout the commercial building industry (Pepchinski, 1998).

The tower is triangular in plan, built around a center atrium which is continuously surrounded by 46 foot tall sky gardens that rotate around the building. The building expresses the sustainable, open strategy visibly in elevation, and the building creates an interconnected environment for both building and site users alike.

This tower is an important case study because of its innovative design and connectedness within the building, but also because of its relationship to the existing environment and its fluid integration of public space, shopping, restaurants, and gardens into an office environment, which makes this tower more than just a place of business, but a place of vibrancy and urban activity as well.
Shown below is the building’s breathable facade with operable windows and an open floor plan.

Shown to the right is the building’s elevation, clearly displaying passive design strategies and acting as a landmark and way-finding device.
program
In the bottom-right picture, the connection between the tower and existing site is shown clearly as a space to be preserved and enhanced, rather than overshadowed by scale. The design invited the public to move through the area between the tower and the existing historical buildings, creating an intentional indoor/outdoor pathway and plaza with shops, restaurants and sitting areas.

This strategy of informal gestures and openness is displayed throughout the building.

Opposite page:

1. new tower
2. existing tower
3. kaiserplatz
4. main entrance
5. vestibule
6. lobby with atrium above
7. elevator lobby
8. plaza restaurant
9. entrance to auditorium
10. shops/residential
Typical Kombi-Buro Floor:

1. open atrium
2. outdoor garden
3. active elevator lobby
4. inactive elevator lobby
5. team offices
6. private offices

Typical Team-Buro Floor:

These typical floor plans illustrate the movement of people working within these spaces and the relationship between the workplace and the environment. The building shows a strong sense of interconnectedness.
The building is broken into sections that act as communities. The space between these sections act as channels through which fresh air and light move into the building.

This type of organization can play a strong role in dividing and separating spaces appropriately, without disregarding the building, user, and site connections.

This organization in section will play a role in the design strategies that will develop a mixed-use typology in the same, intentionally informal fashion.

In addition, this study provides an excellent example of the connections created by adequate public space and movement ‘corridors.’
The project is a strong example of a mixed-use commercial and office tower. In addition, it illustrates the use of space by the client and tenants as well, in addition to members of the public and those who visit the building for other purposes, such as shopping and dining.

The spaces within the building utilize shared lobbies, but beyond these entry and gathering spaces, the building’s users exist separately beyond these shared spaces.

This highly energy-efficient building is the result of a sudden rebirth of client interest in environmentally friendly, tall-building design. In addition to One Bryant Park, the new Bank of America headquarters down the street from the New York Times Building also embraces this new trend.

The building’s sustainable strategies such as natural daylighting, low-e glazing, and external sun-shading devices provide real energy savings of more than 30%. In addition, the building utilizes strategies such as underfloor air distribution, which requires less cooling power than conventional ducts. Overall, the New York Times Building is a strong case study for sustainable design strategies (The New York Times Building, 2010).
The image below shows the main entrance to the New York Times Building in New York. The entrance design displays the importance of efficiency and movement. This open facade facilitates the movement of building users and visitors alike. In addition, exterior curtain wall shading provides relief from direct sunlight in the lobby space.
The divisions between users are clearly defined in this section drawing. This separation of users within a connected space will be essential to the success of this thesis project.

On the page to the right are several building details illustrating the different functions within the building and how it addresses conditions such as light and movement.
It is clear in this plan that the building concentrates similar uses and functions within separate areas. This creates an efficient flow of people through the building and a more relaxed and open environment for visitors and the public.

Ground Level Retail
The plans are flexible in organization and can be fit up to meet the needs of a wide range of clients. This strategy allows the building’s owners to efficiently fill vacant spaces within the building. It is important to note that the spaces share a strong connection with the surrounding built environment as well, however, the success of this thesis project depends on the ability to build a stronger and more intimate connection with the various building users and public.
Project: Shenzhen University Metro Station Tower | 2010 - current

Location: Shenzhen, China

Architect: Huasen (HSArchitects)

This project strongly represents a high-density, urban, mixed-use building. Although the scale of this particular building is much larger than what is appropriate for this particular thesis project, the spatial organization and movement of users between various different spaces is well-defined and clearly resolved.

This project is the result of an international design competition to create a mixed-use building project above the Shenzhen University Metro Station.

The complexity of uses and movement in this building, in particular the attention to movement and traffic into and through the building via open plaza-like spaces is a good example integrating public space, indoor/outdoor space, and building functionality.

This building serves users for transportation (metro, bus, taxi, pedestrian, and personal vehicles), commercial space (banking, restaurants, lounge/bars, coffee shops, retail outlets, and gift shops), hospitality (hotel, spa, fitness center, restaurant, bar), and office space.

The building is interesting because it clearly addresses these functions and the movement of people in the manner in which it expresses itself in built form.
The image below shows a perspective view toward the North side of the building from one of Shenzhen’s main expressways. The building opens to invite vehicles into the covered drop-off space and also to move exhaust more quickly away from the building’s occupants.
program

case study

This is a main channel through which building users and public visitors move from the Southeast corner to the North side of the building, which experiences a shift in elevation because of the road system.
program

case study

The building plans clearly reflect the movement of people and the separation of spaces. An important task that this thesis project is to also recognize and address these issues.

Below is the 1st floor plan

On the top right is the 2nd floor plan

On the bottom right is the 3rd floor plan
The exploration of this thesis project demands the understanding of the demographics of the communities in the city of St. Paul, and also the challenges and needs of the communities in most need. In addition, the project demands an understanding of the Amherst H. Wilder Foundation, and the Federal Promise Neighborhood Program, which the organization will sponsor. In addition, the project demands the understanding of communities, and mixed-use building developments, with special attention to the ways in which this typology can advance the work of the Amherst H. Wilder Foundation and the sense of community and legacy within St. Paul.

St. Paul has been settled by many tribes, explorers and immigrants throughout history. The city attracted large populations of French Canadian fur traders in the 1800s, and later Fort Snelling attracted English, Irish, and Scottish settlers who had recently been discharged from the army.

In addition to these groups, large
numbers of Swedish settlers passed through St. Paul in search of farm land and many settled in the city. Later, many parts of the city became home to Polish, German, Italian, and Mexican immigrants.

Many immigrants from central and eastern Europe settled near the Thomas-Dale or ‘Frogtown’ neighborhood, just north of downtown St. Paul. Now this district is composed mostly of Hmong and Vietnamese people who left their homelands as refugees during the Vietnam War in the 1960s. This district is now one of the largest contingents of this ethnic group in the entire United States (City-Data.com, 2010).

This specific community, and the Summit-University neighborhood, have been classified by the Department of Education as one of this country’s most in-need areas for which it was named a Promise Neighborhood.

The Frogtown community occupies roughly 2.4 square miles and has a population of 17,254 people. In addition, the Summit-University community occupies about 2.5 square miles and has a population of 18,173 people (City-Data.com, 2010).

Of the population in the 250 block in
area in the Frogtown and Summit-University neighborhoods that will become the new Promise Neighborhood, nearly 40% of all residents were younger than 18 years of age. In addition, 2/3 of all residents in this area live in poverty, and 82% of students are eligible for free lunch at school. In addition, during the 1990s, the population of school children (ages 5 to 7) increased more than 50%, while the number of working-age adults increased 22% and the number of older adults decreased 41% (City-Data.com, 2010).

The new St. Paul Promise Neighborhood Program, sponsored by the Federal Government and the Amherst H. Wilder Foundation, along with other organizations and donors, is “a community-wide effort to ensure all children succeed in school and in life through seamless coordination of cradle-to-career educational, family, and community resources and supports.” (U.S. Department of Education, 2010)

This Promise Neighborhood effort was inspired by the Harlem Children’s Zone in New York City. This program is a community-based, interlocking network of services for children from birth through college. The Harlem Children’s program has received national acclaim for its success in
closing the achievement gap.

The Harlem Children’s Zone serves a 100 block community in the Harlem community of New York City. The non-profit organization provides free support for the poverty-stricken children and families through parenting workshops, a pre-school program, three public charter schools, a child-oriented health program for thousands of children and families. The project aims to keep children on track through college and into the job market.

The organization receives about $75 million in donations each year and about $12,500 in public funding per student (Harlem Children’s Zone, 2010).

Inspired by the notable success of the Harlem Children’s Zone, the Obama Administration and Department of Education established a program to replicate the success in other poverty-stricken communities around the United States.

The program Description follows: “Promise Neighborhoods, established under the legislative authority of the Fund for the Improvement of Education Program (FIE), provides funding to support eligible entries,
program

including (1) nonprofit organizations, which may include faith-based nonprofit organizations, and (2) institutions of higher education."

The program is intended to significantly improve the educational and developmental outcomes of all children in our most distressed communities, including rural and tribal communities, and to transform those communities by:

1. supporting efforts to improve child outcomes and ensure that the outcomes are communicated and analyzed on an ongoing basis by leaders and members of the community;

2. identifying and increasing the capacity of eligible entities that are focused on achieving results and building a college-going culture in the neighborhood;

3. building a continuum of academic programs and family and community supports, from the cradle through college to career, with a strong school or schools at the center;

4. integrating programs and breaking down agency “silos” so that solutions are implemented effectively and efficiently across
agencies;

5. supporting the efforts of eligible entities, working with local governments, to build the infrastructure of policies, practices, systems, and resources needed to sustain and “scale up” proven, effective solutions across the broader region beyond the initial neighborhood; and

6. learning about the overall impact of Promise Neighborhoods and about the relationship between particular strategies in Promise Neighborhoods and student outcomes, including a rigorous evaluation of the program. (U.S. Department of Education, 2010)

The Department believes that to effectively improve the outcomes for children in distressed communities, schools, academic programs, and family and community support must include the following core features:

1. The capacity to collect, analyze, and use data to evaluate the success of their efforts.

2. Close integration so that time and resource gaps that contribute to children missing academic and developmental milestones do not occur.
program

3. A leader and an organization that can engage the community and are accountable for results.

A “place-based” approach, which leverages investments by focusing resources in targeted places, drawing on the compounding effect of well-coordinated actions. (U.S. Department of Education, 2010)

The Amherst H. Wilder Foundation of St. Paul, MN will be the Promise Neighborhood’s main sponsor.

The Amherst H. Wilder Foundation is a non-profit health and human services organization founded by a wealthy St. Paul businessman, Amherst H. Wilder and his family. For more than 100 years, Wilder has combined direct service, research, and community development to address the needs of the most vulnerable people in greater St. Paul (Amherst H. Wilder Foundation, 2010).

The operating budget in the 2009 fiscal year was $51.2 million, and the organization was able to serve 10,845 people in the city of St. Paul (Amherst H. Wilder Foundation, 2010).
This project will explore the mixed-use typology, especially as a means of achieving greater social, economic, and environmental sustainability. It is important that this project also explores ways in which architectural design can bring forth many of the benefits associated with mixed-use developments, and also explore ways in which architectural design can improve current design standards, trends, and innovations within buildings of this type. In addition it is important that this thesis project will address the problems and challenges associated with mixed-use building developments, particularly within an urban environment. This project will also act as a learning device that allows students and faculty alike to understand the ways in which architectural design can further influence the built environment.

In addition, it is important that this project serve to promote a greater understanding of available research and design tools, such as sketching, physical model building, diagrams,
and digital design processes such as building information modeling (BIM) using Revit, 3ds Max, and other tools.

This thesis will contribute valuable insight and understanding to the fields of architecture, real estate, and urban design. This project will also contribute new ideas for solving many of the social issues that our neighborhoods and communities, especially in urban areas, are concerned with. This contribution will be made possible through the exploration of the communities in need and the organizations serving those communities.

This thesis seeks to provide a new perspective for these problems and challenges.

**professional goals**

It is important that this thesis will be a well-developed and documented process of design, including final design deliverables. In addition, it is important that the project is conducted at a level of quality appropriate in the professional practice of architecture.
program

Also, it is important that the value that this thesis contributes to both the academic and professional realm of practice be distinguishable and apparent to those outside of the profession of architecture as well as those practicing in related fields.

personal goals

It is important that this thesis also builds upon my current education in architecture, business management and marketing, and psychology, as a final test of my academic learning, and is representative of my qualifications that will guide the transition from an academic career, into the professional design field.

This project must emphasizes my desire to learn and facilitate the learning of others, and further my own knowledge and interest in architecture, urban design, real estate, and also education (including the political and social entities that influence the education of all individuals, especially those most in need).
This project will ultimately represent my personal interests in these fields, my own readiness for the professional design field, and my personal development that will accompany me as I complete my academic career.
site analysis

The project site is located near the edge of downtown St. Paul, at the corner of Kellogg Blvd W. and N. Smith Ave., near the 106C exit of interstate highway 35E on the Northwest edge of the site.

The site is bordered by the Holiday Inn Downtown St. Paul and the Cossetta Italian Market and Pizzeria to the Southeast. The site is bordered on the Southwest by N. Chestnut St. and the Minnesota Epilepsy Group. To the Northeast is a parking structure and parking lot, bordered by the Xcel Energy Center.

The site is the last parcel of land in the Northwestern-most part of the downtown neighborhood, and is bordered by the Summit-University and Thomas-Dale (Frogtown) neighborhoods to the North.

The site connects well with the downtown area, and makes a strong connection with the neighborhood and market activity. In addition, the site has views toward the Cathedral of St. Paul, the State Capital building, and downtown St. Paul.
The site is urban in nature, but varies on each side of the parcel. The mixed-use building complex on this site will be a landmark for those in the downtown community, and those passing by on interstate 35E.

The location was carefully selected to connect users with the downtown environment and provide the client with a significant source of publicity and revenue that accompanies the city’s downtown activities and entertainment.

In addition, the distance between the new mixed-use development and the neighborhoods most-in-need promotes natural re-growth in those neighborhoods, rather than a gentrification that would force most of the most vulnerable in those communities out of their current residences.
site analysis

The site is bordered by sidewalks on three sides. In addition, the site shares close proximity to much of the downtown pedestrian activity. The site also experiences a fluctuation of pedestrian traffic during events downtown at the Xcel Energy Center and other venues.

The site is exposed to heavy vehicular traffic on two sides. The site is bordered to the North by Interstate 35E, but the site is raised above the interstate and separated by the 106C exit. In addition, traffic is heavy on Kellogg Blvd during much of the day. Also, the area experiences a fluctuation of traffic during events downtown at the Xcel Energy Center and other venues.

The site has an arid character and seems to border a vast uninhabitable space to the Northwest that is occupied by a sunken freeway. This gives the site an open view to the North and Northwest, toward the Summit-University and Thomas-Dale neighborhood as well as the Cathedral of St. Paul.
The soil consists of predominantly sandy clay, and weathered shale cobbles are common in some areas. In addition, it consists of sediments of Decorah Shale, Platteville Limestone, Glenwood Shale, and St. Peter Sandstone.

The topography of the site is relatively flat, except for the area in which the interstate highway runs beneath the raised overpass that carries traffic Southbound into downtown on Kellogg Blvd.

The site is currently a parking lot and is composed of very little vegetation except for the tall grasses which borders the 106C exit from interstate 35E. There are small trees that line the sidewalks on two sides of the site, but offer very little shade.

At times, the site, in its current state, acts as a heat island, especially during summer months. In addition, the openness and hard surfaces allow wind and sound to move freely and unobstructed.
program

site analysis

- site
- future urban development
- vehicular traffic
- river
program
programmatic requirements

Commercial facilities/spaces: 140,000 sq. ft

Administration, office, reception, meeting, conference, presentation, common/gathering, food services and preparation, maintenance, utility, outdoor, retail, restaurant, delivery

These spaces demand flexibility, and a strong connection to the adjacent neighborhoods. These spaces demand both public and private spaces. These spaces also demand a high level visibility and accessibility by members of the public and surrounding community.

Public facilities/spaces: 50,000 sq. ft

Common/gathering, maintenance, utility, toilet, green, outdoor

These spaces demand a strong connection to the adjacent neighborhood and a high level of visibility and accessibility by members of the public.
**programmatic requirements**

Transportation | Parking facilities/spaces:  7,000 | 180,000 sq. ft

Waiting, transportation (pedestrian, bicycle, bus, taxi, vehicle), parking

These spaces demand coordination with existing traffic patterns and both a high level of visibility and accessibility by members of the public, in addition to privacy for maintenance, deliveries, and parking.

Total building facilities and spaces:  377,000 sq. ft
design process

- site inventory and analysis
- sketching and concepts
- spatial organization
- structural concepts
- envelope concepts
- case/precedence studies
- drawings and renderings
site inventory and analysis - St. Paul, MN
design process

site inventory and analysis - St. Paul, MN
site inventory and analysis - St. Paul, MN
design process

sketching and concepts
sketching and concepts
structural concepts
design process

structural concepts
structural concepts
design process

envelope concepts
envelope concepts
design process

case/precedence studies
case/prescendence studies
final design documentation

plans, drawings, renderings, and photos
plans, drawings, renderings, and photos
final design documentation

plans, drawings, renderings, and photos
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final design documentation

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final design documentation

plans, drawings, renderings, and photos
plans, drawings, renderings, and photos
Project synopsis:

Greenway, vest-pocket park system, pedestrian/bicycle path and bridge, commercial and retail center, green space, parking and plaza - acting as a means of transportation and a destination of varied uses - stimulating activity (economic and social) and movement in this forgotten and sparse area of downtown St. Paul - while bridging the interstate system to connect the communities of Thomas-Dale (Frogtown) and Summit-University to the downtown area of the city of St. Paul, and the Mississippi River.
final design documentation

plans, drawings, renderings, and photos
plans, drawings, renderings, and photos
references


New York City Office of Long-term Planning and Sustainability, (2007). Inventory of greenhouse gas emissions


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