RETROFITTING SUBURBAN CREATING A WALKABLE MIXED-USE NEIGHBORHOOD FOR SOUTH FARGO Jordan Gedrose LA 572 Design Thesis Primary Advisor: Jay Kost Secondary Advisor: Dominic Fischer

RETROFITTING SUBURBAN PLAINS

THESIS PREMISE

The Fargo-Moorhead metropolitan area is currently experiencing tremendous population growth. According to Census data, the F-M metro was the fourth fastest growing metropolitan area in 2013 and that growth continues today. With this population growth, the cities of Fargo, Moorhead and West Fargo have been expanding their city boundaries and creating low density, automobile-dependent neighborhoods known as suburban sprawl. Downtown Fargo provides a dense and walkable neighborhood center for north Fargo, but south Fargo is lacking any similar type of pedestrian orientated urban center.

THESIS VISION

To create a walkable mixed-use urban center that allows people to live, work, and play. The development will integrate retail, commercial, residential, civic, and open spaces together to create a walkable community with a unique sense of identity within the region.



THE SECTION HOW WE USED TO USE



American cities began as urban cores, with most people living near downtown. People lived close to work, entertainment, and each other. Many cities had expansive public transportation systems in place before the takeover of the automobile.

Fargo was no exception. The photo above shows Broadway in 1935. Department stores, streetcars, and mixed use buildings all add to a successful downtown.

HOW CITY LIVING HAS CHANGED



Suburban sprawl began to gain popularity in the United States in the 1950's. The popularization of the automobile allowed people to move out of the urban cores of cities and into a detached single family home on the outskirts of town and commute to work.

Fargo has experienced rapid population growth throughout the past 25 years, with most of the new development occurring in the south part of the city in the form of suburban neighborhoods.

URBAN CORE RESURGENCE



American cities have seen a resurgence in people's desire to live in downtowns or other urban centers throughout the city. This migration back into the urban cores is being led by the millennial generation, or those who are born between 1980 and 2000. According to a Nielsen study conducted in 2014, 62% of millennials say they prefer to live in mixed-use type communities found in urban centers. As a result of millennials lifestyle trends, the millennial generation is currently living in these mixed-use urban areas higher than any other generation. In 2014, it was the first time since the 1920's that growth in US cities has outpaced the growth of the suburbs. According to 2015 Census numbers, millennials now make up more than 25% of the total US population.

INTRODUCTION THE PLACES THAT HAVE INSPIRED

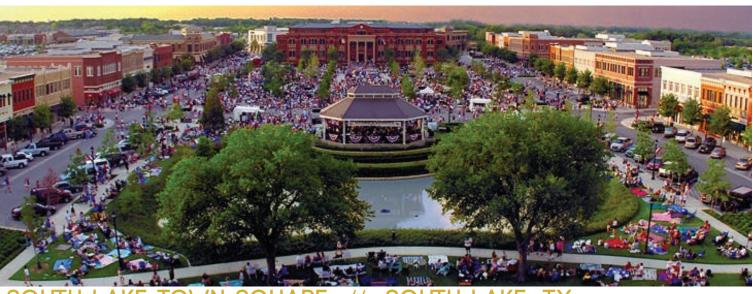


MARKET SQUARE // PITTSBURGH, PA



SAN ANTONIO RIVERWALK // SAN ANTONIO, TX

THAT HAVE INTRODUCTION THAT HAVE INSPIRED

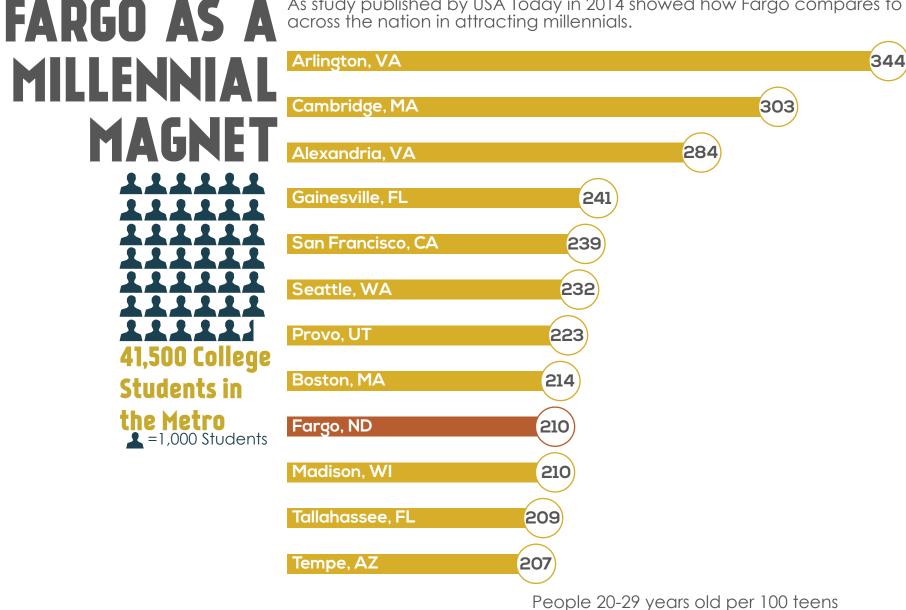


IKEU SOUTH LAKE TOWN SQUARE // SOUTH LAKE, TX



DOWNTOWN FARGO // FARGO, ND

As study published by USA Today in 2014 showed how Fargo compares to other cities across the nation in attracting millennials.



INTRODUCTION

FARGO IN THE NEWS

nerdwallet

YOUNG ENTREPRENEURS January 2016



BEST-PERFORMING CITIES

#1BEST-PERFORMING SMALL METRO December 2015 StarTribune FARGO REINVENTS ITSELF AS A MAGNET FOR CREATIVE TYPES AND ENTREPRENEURS June 2014



#1 - BEST SMALL COLLEGE TOWN March 2016 For BUSINESS AND CAREERS August 2014

INTRODUCTION A VISION SITE LOCATION HDAKOTA JNDI SOUTH DAKOTA S FOR URBAN SIOUX FALLS **LIVING IN** FARGO SOUTH WEST MAIN AVENUE FARGO FARGO MOORHEAD 94 32ND AVENUE **STH ST** 1DI Iderso ftball 102

Urban Plains Original Proposal / 2006

Overview

INTRODUCTION

A VISION

LIVING IN

SOUTH

FARGO

FOR URBAN

"Urban Plains is a place where architecturally inviting retail and office spaces intermingle with restaurants, parks & housing where tasteful spaces and places combine the serene and the social."

Our Goals

"Urban Plains strives to incorporate 21st century ideals into an urban lifestyle. Through the use of design standards, and co-locating work, living, and recreational spaces, the Urban Plains Development is a unique project. Residents of Fargo - Moorhead - West Fargo are also voicing their desire to live in a location that provides amenities of living in downtown.



Urban Plains Original Proposal / 2006

Overview

INTRODUCTION THE REALITY / ANOTHER SUBURBAN BUBBBBBBBBBBB

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Zoning instead of form-based codes Large block sizes Single use buildings Large setback distances Large parking lots Single Story parking garages

















METHODOLOGY & RESEARCH

DESIGN HYPOTHESIS

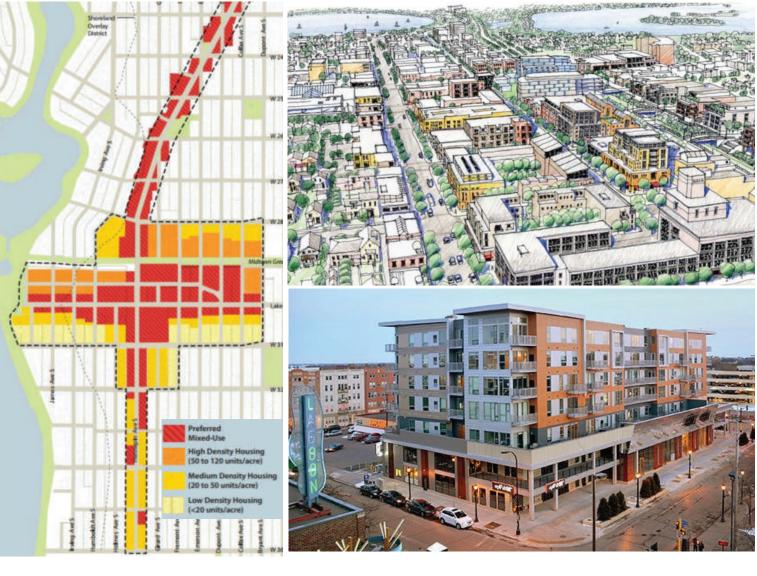
I expect to find that a majority of the existing infrastructure can be retrofitted to create a more walkable neighborhood. Practices such as street narrowing and infilling can be used to achieve a successful retrofit. By studying successful urban centers, I expect to find a balance between uses of buildings, with a higher percentage of mixed-use buildings than is currently in the Urban Plains neighborhood. I expect to find that building placement can create a sense of place in open spaces and along transportation corridors. I expect to find that street widths, sidewalk widths, on-street parking, and setbacks will play a very important role in creating a walkable neighborhood. I also expect to find that Urban Plains can have strong connections to it's surrounding neighborhoods.

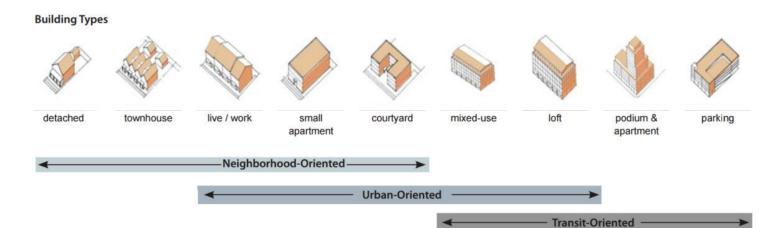
DESIGN FOCUS

Buildings Streets Open Spaces

METHODOLOGY & RESEARCH CASE STUDY / UPTOWN MINNEAPOLIS

DESIGN FOCUS Buildings





METHODOLOGY & RESEARCH CASE STUDY / MUELLER AUSTIN DESIGN FOCUS Streets





Streetscape Concept

	COMMUNITY CONNECTOR
	LINEAR PARK CONNECTOR
	GREENWAY STREET
	NEIGHBORHOOD BOULEVARD
	NEIGHBORHOOD CONNECTOR
	TOWN CENTER MAIN STREET
=	NEIGHBORHOOD LOCAL STREET
	COMMUNITY GATEWAY





METHODOLOGY & RESEARCH CASE STUDY / KETTLE / KETTLE STONE DES BOOLDES DESIGN FOCUS





CASE STUDY COMPARISONS



STREET INTERSECTION DENSITY

Mueller	32
Kettlestone	24
Uptown	35
Villebois	36
Legacy	31
	INTERSECTIONS / 80 ACRES

Average : 32

STREET WIDTHS

Averages:	Street Type		
78.5'	Community Connector		
45'	Neighborhood Boulevard		
33'	Neighborhood Connector		

Average Street Width (curb to curb)

Mueller	Kettlestone	Uptown	Villebois	Legacy
76'	96'	62'	63'	96'
35'	62'	42'	42'	45'
26'	35'	32'	32'	40'

RETROFITTING SUBURBAN PLAINS

THESIS VISION

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THESIS QUESTION

What programming elements must be achieved in order to create a successful walkable mixed-use urban center in south Fargo?

GOALS FOLLOW THE FIVE C'S OF RETROFITTING **NEIGHBORHOOD PLANNING (PLACEMAKERS)** SUBURBAN

COMPLETE

Mix of uses to provide our daily need to live, work, play, worship, dine, shop, and talk to each other.



PLAINS

5-minute walk from center to edge.



Walkable, drivable, and bike-able with or without transit access.

COMPLEX

Variety of street, building, and open space types.



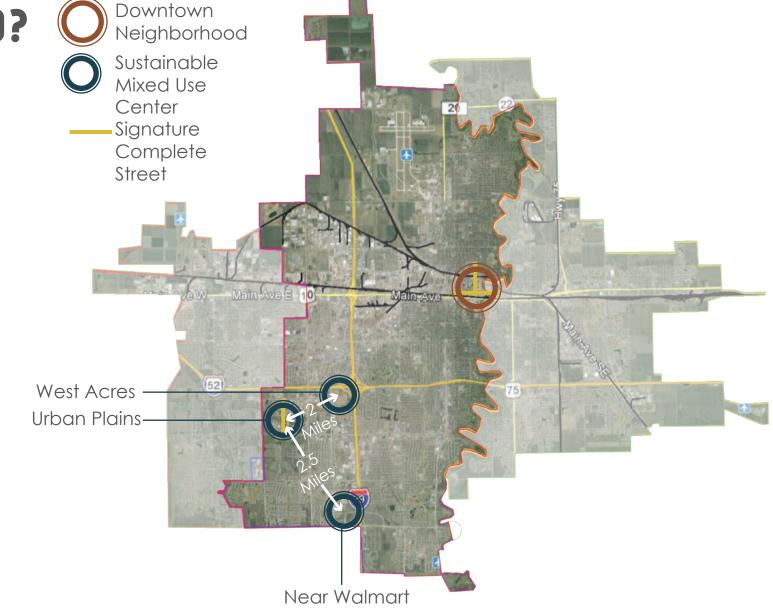
Provide gathering places where people can connect.

ALREADY PART OF FARGO'S VISION

Go2030 Fargo Comprehensive Plan

S ANALYSIS WHY THIS NEIGHBORHOOD?

SITE INVENTORY



2 LOCATION

Close to many attractions

SITE INVENTORY & ANALYSIS WHY THIS NEIGHBORHOOD?

5 Vetera **Scheels Arena** 6,000 **People** = 100 people • Home of the Fargo Force Hockey Team

- Hosts high school hockey games
 Occasionally hosts NCAA Hockey Regionals
- •Concerts
- Basketball games and wrestling matches
 Festivals
- Sandford Medical Center **384 Beds** e **384 Beds** .36 miles to Urban Plains = 50 beds

2nd Av

I-94

Red River Zoo **90,000 Visitors** per year = 1,000 Visitors

Anderson Softball Complex

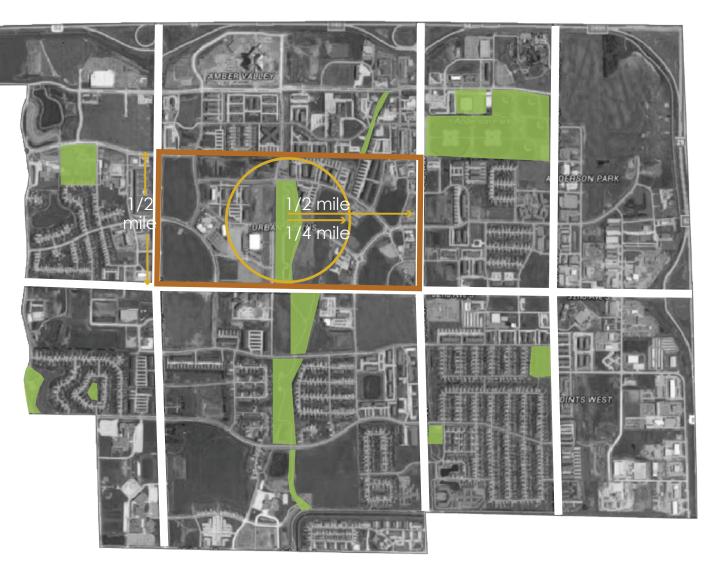
Annually plays host to state and national softball tournaments.

Andersor Softhall

★ .5 miles to Urban Plains

3 SIZE & SETUP Walkable and Connected

SITE INVENTORY & ANALYSIS WHY THIS NEIGHBORHOOD?



SITE INVENTORY & ANALYSIS FARGO GO2030 PLAN



- **TOP GOALS FROM GO2030** 1. PERMANENT FLOOD PROTECTION
- 2. PROMOTE INFILL
- **3. PUBLIC ART**
- **4. BICYCLE/PEDESTRIAN INFRASTRUCTURE**
- **5. DESIGN STANDARDS**
- 6. CITY-WIDE TRAIL LOOP
- 7. PUBLIC GATHERING SPACES
- 8. COMMUNITY-WIDE ENERGY EFFICIENCY
- 9. QUALITY NEW DEVELOPMENT
- **10. YEAR-ROUND RECREATIONAL OPPORTUNITIES**
- **11. TREE CANOPY**
- 12. PARKS, OPEN SPACE, AND HABITAT
- 13. HEALTHY FOOD
- 14. AMENITIES AND BEAUTIFICATION AS AN ECONOMIC DEVELOPMENT TOOL 15. FESTIVALS AND CULTURAL EVENTS

SITE INVENTORY & ANALYSIS Fargo Density Comparisons

POPULATION / DENSITY

Fargo has a similar size in footprint to these other cities, but is far behind them in terms of density.



City area (sq. miles): 48.82 sq. miles 48.43 sq. miles 46.87 sq. miles 55.50 sq. miles Density (people/acre): 3.7 people/acre 20.8 people/acre 28.4 people/acre 8.6 people/acre

Fargo / Moorhead Metropolitan population growth

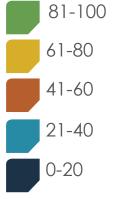
The metropolitan area has been experiencing high population growth since for many years, and has the opportunity to begin to infill (build on existing sites) instead of continuing to expand the city boundaries.



Neighborhood Walkability Comparisons

SITE INVENTORY & ANALYSIS WALK / DENSIT

Based on data from Walkscore.com which measures walkability on a scale from 1-100 based on walking routes to destinations such as grocery stores, schools, parks, restaurants, and retail.



Fargo / West Fargo Neighborhoods Downtown West Acres Urban Plains

Neighborhood Density Study

. The Pond @ the Preserve	Amber Valley Urban Plains	Anderson Park	Fargo	Amber Valley Urban Plains Brandt Crossing	Population 1,143 1,200 886	Area (acres) 329 320 570	Density (people/acre) 3.5 3.75 1.5
Oak Ridge Shadow Wood :J:M	Brandt Crossing	Pointe West		Anderson Park Pointe West The Pond @ the Preserv Oak Ridge Shadow Wood	828 2,692 ve 832 0 904	638 572 320 80 80	1.3 4.7 2.6 0 11.3
Sc				West Fargo Public Scho Downtown Fargo		80 80 512	0 8.6



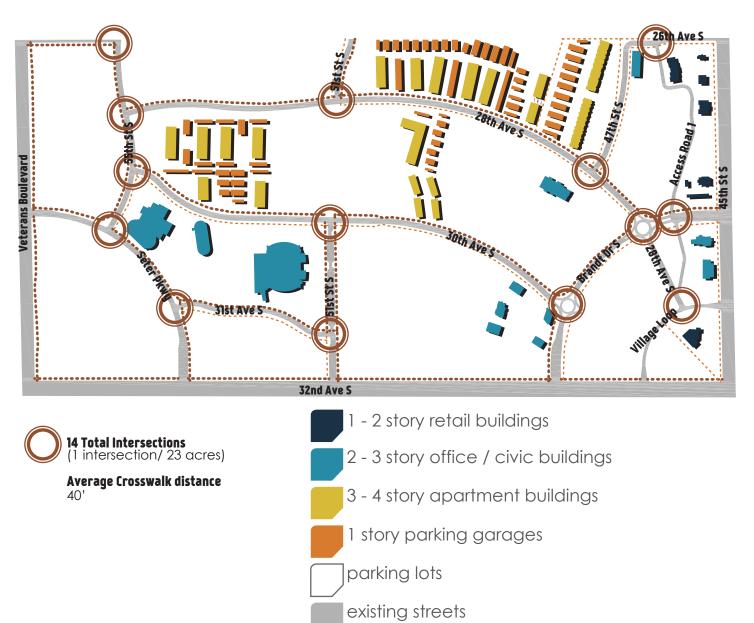


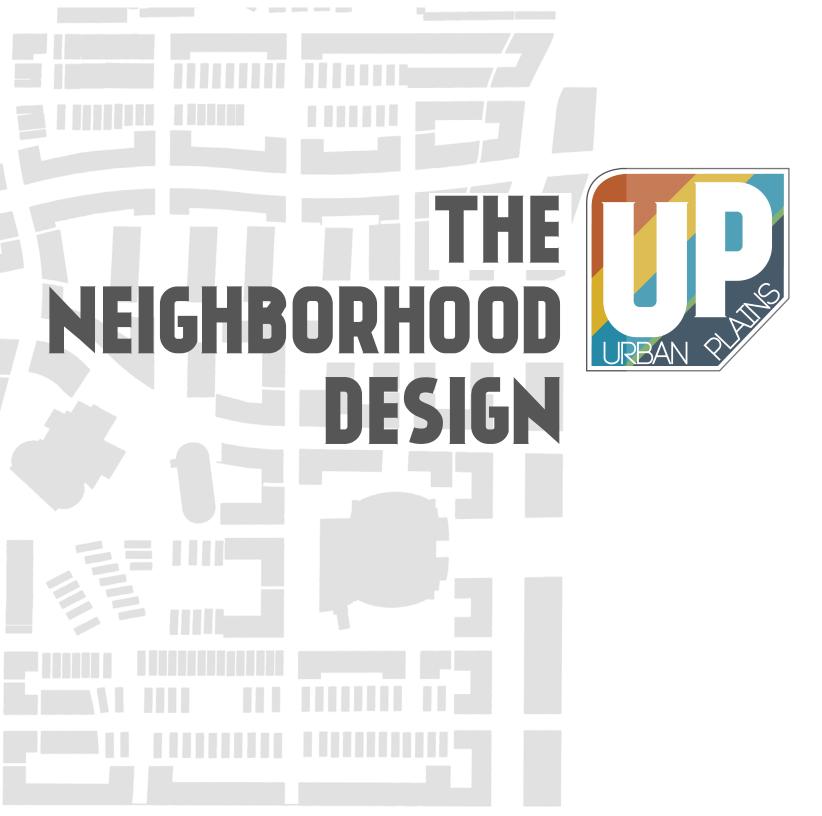
METHODOLOGY & RESEARCH CURRENTLY DEVELOPED



Undeveloped / open space

BETHODOLOGY & RESEARCH CURRENTLY DEVELOPED







THE NEIGHBORHOOD DESIGN

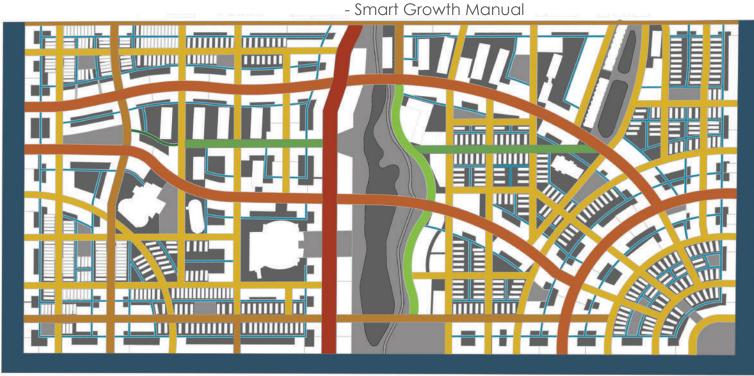




Block Grid Size 300'

Average area of block

Overall Average: 2 Acres "When streets become pleasant places, more people are likely to leave their cars at home"



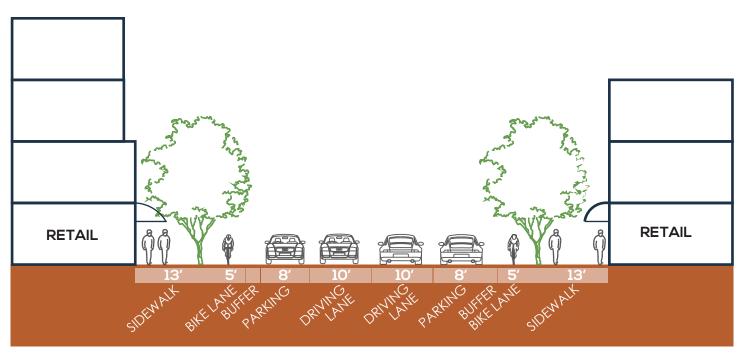
- Community Connector Neighborhood Boulevard Neighborhood Connector Residential Street Park Street
- Green Street
 Green Alley
 Alley
 Traffic Calmed Arterial

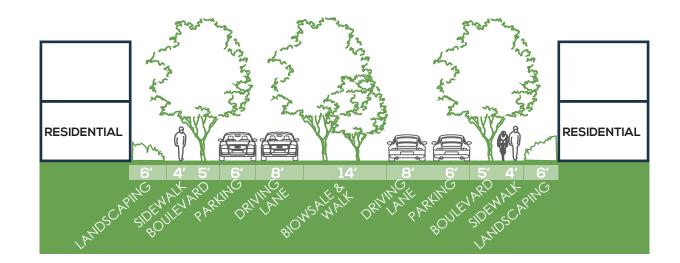
Community Connector





Neighborhood Boulevard Green Street





"Perhaps the most anti-pedestrian feature of contemporary retail practice is the front parking lot. For retail to attract pedestrians, the shops must open directly onto the sidewalk, with parking lots located to the rear or elsewhere."

THE NEIGHBORHOOD DESIGN

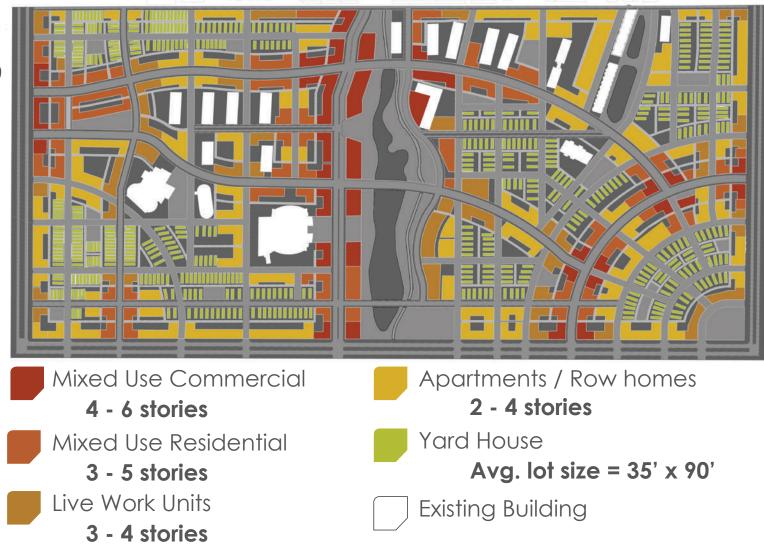


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THE NEIGHBORHOOD DESIGN BUILDINGS



THE NEIGHBORHOOD DESIGN BUILDINGS



Existing Building - Keep



Existing Building - Remove

Existing Buildings

THE NEIGHBORHOOD DESIGN BUILDINGS



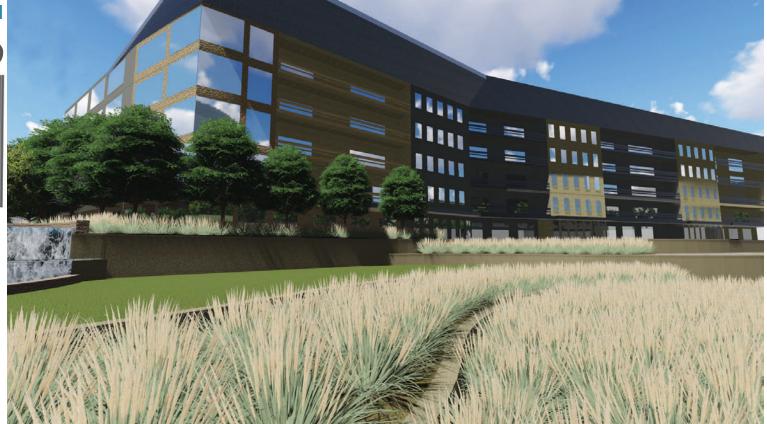




THE NEIGHBORHOOD DESIGN BUILDINGS



Mixed Use Commercial 4 - 6 stories



THE NEIGHBORHOOD DESIGN BUILDINGS





Apartments / Row homes 2 - 4 stories



Live Work Units **3 - 4 stories**





Yard House Avg. lot size = 35' x 90'

"Smart growth communities make the most of their context by preserving and celebrating their natural amenities."

THE NEIGHBORHOOD DESIGN

OPF

- Smart Growth Manual



Central Neighborhood Park

5-10 Acres Large areas for social gatherings Service Area Radius = 1/2 mile (10 min walk)

Neighborhood Park

1/4 - 10 acres Active and Passive Recreation Service area = 1/4 mile (5 min walk)

Pocket Park 1/4 - 2 acres Simple and flexible open space Service area = 600 feet

Plaza

Adjacent to mixed-use building Over 50% hardscape

THE NEIGHBORHOOD DESIGN



Central Neighborhood Park 5-10 Acres

Large areas for social gatherings Service Area Radius = 1/2 mile (10 min walk)

Neighborhood Park

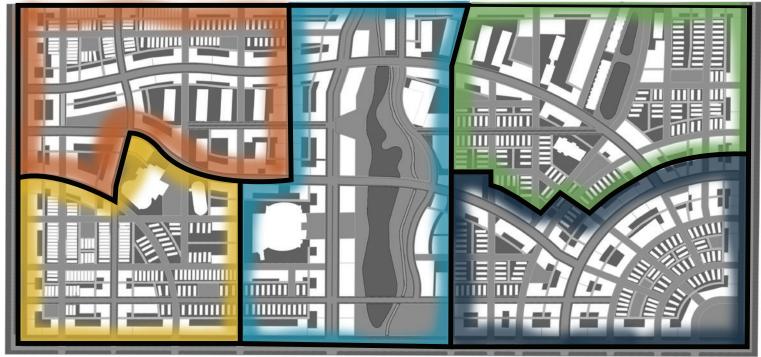
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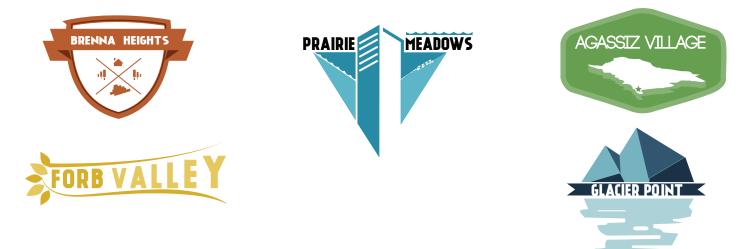
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Plaza

THE NEIGHBORHOOD DESIGN

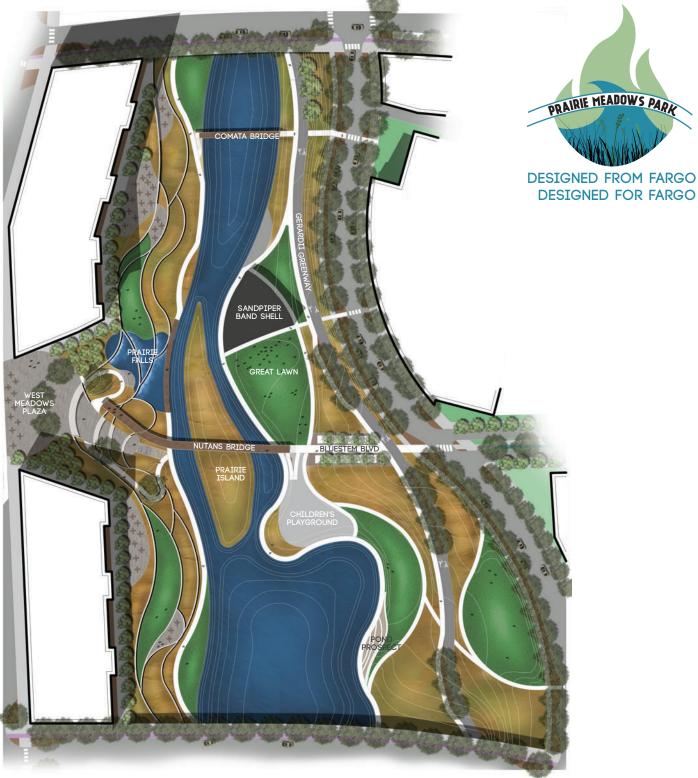
The 320 acre site is divided into five districts, each with it's own unique character. Each district represents a piece of the Red River Valley's historical attributes. The character of these districts will be represented through the use of building materials, open spaces, and streetscapes.







THE PARK DESIGN PRAIRIE MEADOWS PARK



THE PARK DESIGN PRAIRIE MEADOWS PARK PARK FUNCTION



OUTDOOR DINING AND ACTIVE SIDEWALKS

Prairie Meadows Park was designed with Fargo's natural landscape in mind. The park is a native oasis placed in an urban environment that creates a unique juxtaposition. The plantings in the park were inspired by the large open prairies of the Red River Valley. The native prairie grasses rule the park, with tree canopies along the outer edges of the site to allow for some shady places for seating and other activities.



A greenway trail connects existing trails from south of 32nd Avenue north up to the Sanford Medical Center and potentially further north by going underneath I-94. The greenway is named the Gerardii Greenway after the latin name for Big Bluestem native grass, since the main experience along the greenway is traveling through the open prairie. The trail features bike lanes, a pedestrian lane, and tree canopy coverage in certain areas.



Pedestrians can easily go through the park by way of two pedestrian bridges that connect Park Street and 51st Street. "Smart growth communities make the most of their context by preserving and celebrating their natural amenities." - Smart Growth Manual

THE PARK DESIGN PRAIRIE MEADOWS PARK PARK FUNCTION





The existing storm water retention pond was larger than what was needed so the retrofitted pond is designed in a way to meet the new water capacity needs. The site was designed to allow users to view the water at different levels. There is an elevation change of twelve feet from street level to the water edge. The water is meant to provide recreation for all seasons including kayaking, paddle boarding, and ice skating.

PRAIRIE VISTAS

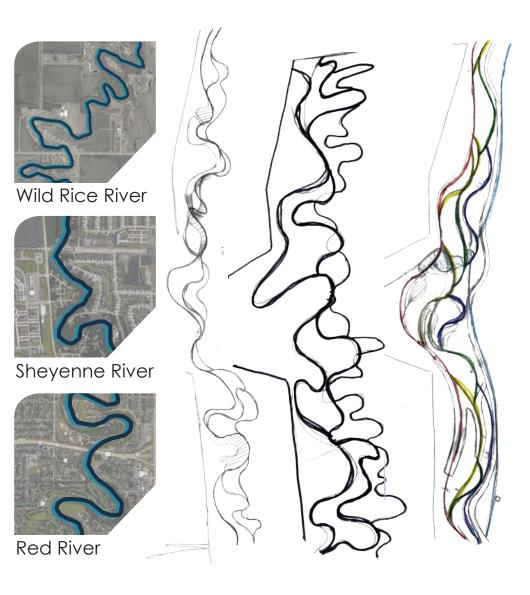
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WIDE VARIETY OF ACTIVITIES

Prairie Meadows Park is designed to provide outdoor activities for different types of users and interests. There are many trails that go through the site, along with water recreation, large lawn areas for sunbathing or pickup games, a flex space that vendor tents can use during community events, a children's playground, and plazas for festivals to take place, such as a food truck fair in West Meadows Plaza.

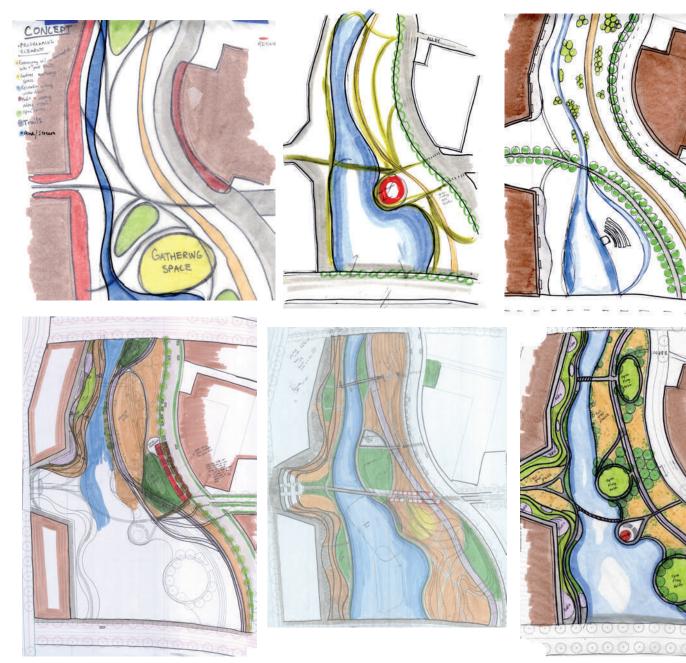
THE PARK DESIGN PRAIRIE MEADOWS DARK PARK FORM





THE PARK DESIGN DESIGN DEVELOPMENT





GERARDII GREENWAY SECTION

THE PARK DESIGN PRAIRIE MEADOWS PARK





7' Walking Trail 6' Pla Be

6' Planted 6' south bound Bed bike lane

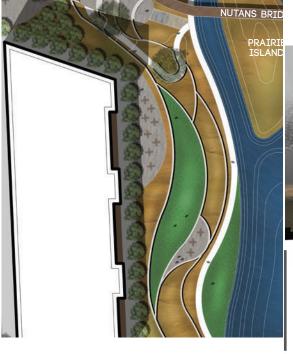
6' north bound bike lane

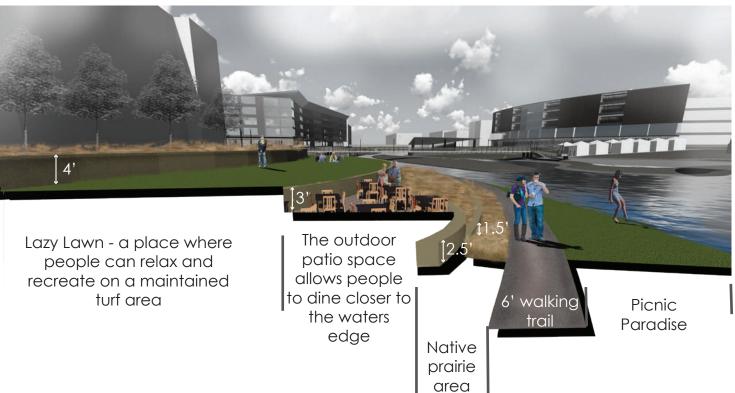


Fire festivals take place on Prairie Island and provide a unique event for the community along with providing ecological benefits for the plants and soil.



THE PARK DESIGN RIVER TERRACES





THE PARK DESIGN WINTER ACTIVITIES

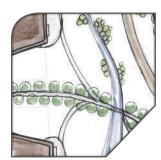
RIDGE BLUESTEM BLVD IRIE AND CHILDREN'S PLAYGROUND PO

View of hockey game from the Pond Prospect













PLANTING CONCEPT

THE PARK DESIGN WEST MEADOWS PLAZA



TI TERRACE 1



Big Bluestem Rattlesnake Master Sneezeweed Cardinal Flower







TP TERRACE 2



Western wheatgrass

Purple Coneflower Swamp Milkweed Culvers Root





Sideoats Grama New Enlgand Aster Paprika Yarrow Autumn Bride Coral Bells







T4 TERRACE 4



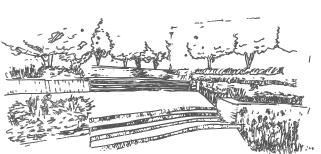




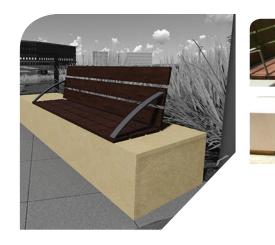


PRAIRIE FALLS









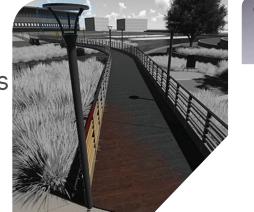
BENCH DESIGN

The bench design centered around the horizontal elegance of the prairie. A solid piece of stone is used for the base of the bench to represent a horizontal plane rising from the ground. A backrest bench made of wood is placed atop the stone to match the materials of the boardwalks and to allow a comfortable seating option for people to enjoy.



STAINED CONCRETE RETAINING WALLS

The walls have a simplistic character much like the simplistic quality of the Red River Valley landscape.



LIGHT DESIGN

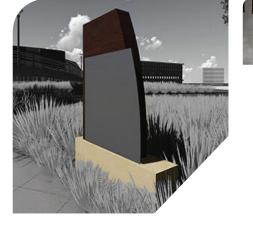
The light design follows the modern aesthetic that is carried over from the Prairie Meadows District into the park The light pole will be made out of steel and will contain LED lights. Light poles will only be used in high traffic areas such as plazas, as to not have too many vertical elements that take away from the horizontal prairie character of the park. Instead lighting will be incorporated into lower level lighting such as in bollards or along handrails.

SIGNAGE DESIGN

Signage will use the same materials found in the lighting and benches; steel, stone, and wood. Maps and text will be etched into the steel panel on the front side of the signage piece.

MODERN PAVING MATERIAL

The modern paving pattern will have a dark gray/slate color to create an interesting combination when placed next to the earth tones of the native grasses.



IN CONCLUSION

By creating a neighborhood that has appropriately planned building, street, and open space systems, south Fargo can have an urban center that is able to better serve the community. By following the 5 C's of neighborhood planning (complete, compact, connected, complex, and convivial) Urban Plains can become a great regionally known neighborhood.

