Re-imagining Main Avenue in Downtown Fargo as a multi-modal transit destination
"IF YOU PLAN CITIES FOR CARS AND TRAFFIC, YOU GET CARS AND TRAFFIC.

IF YOU PLAN CITIES FOR PEOPLE AND PLACES, YOU GET PEOPLE AND PLACES."

- Fred Kent, Founder and President of Project for Public Spaces
The Millennial Generation's Lifestyle Choices

69% is the amount of millennials who use three transportation options to reach their destination several times a week.

55% do not plan on buying a car in the near future and 25% will only buy one if they feel they really need one.

33% of millennials want to be within walking distance of transit facilities.
WHAT WE WANT IN OUR FARGO
WHAT IS A COMPLETE STREET?

COMPLETE STREETS ARE STREETS FOR EVERYONE. THEY ARE DESIGNED AND OPERATED TO ENABLE SAFE ACCESS FOR ALL USERS, INCLUDING PEDESTRIANS, BICYCLISTS, MOTORISTS AND TRANSIT RIDERS OF ALL AGES AND ABILITIES. COMPLETE STREETS MAKE IT EASY TO CROSS THE STREET, WALK TO SHOPS, AND BICYCLE TO WORK.

- Smart Growth America
CASE STUDIES

EXAMPLES OF PERFECTING MULTI MODAL TRANSIT CORRIDORS

PEARL DISTRICT
PORTLAND, OREGON

RIVERFRONT MARKET
LITTLE ROCK, ARKANSAS

DOWNTOWN
SIOUX FALLS, SOUTH DAKOTA
PEARL DISTRICT
PORTLAND, OREGON

USING THE STREETCAR TO BRING URBAN INFILL AND AN ECONOMIC BOOM BACK TO THE CORE

- 10,000 housing units & 5.4 million square feet of commercial spaces constructed within 2 blocks of the line
- 1,795% ROI on the initial 4.8 mile line and 7,501% ROI on the 1.2 mile extension
- Land value has increased by almost 500%
- Property tax revenue has increased over $1.3 million
RIVERFRONT MARKET
LITTLE ROCK, ARKANSAS

"FIRST CLASS DOWNTOWN AREA, HAS GREAT EATERIES, GREAT PARKS AND WALKWAYS, DAY SHOPS AND NIGHT LIFE ACTIVITIES ABOUND."
-Trip Advisor Review

- Narrow intersections ensure safety for both pedestrians and cyclists
- Trolley service allows for a unique and historic means of transportation for visitors and residents
- Versatile public space opens the possibilities for year round events and activities
- Wide sidewalks and attractive building frontages encourage a vibrant street life both day and night

Urban Destinations
Aesthetic Vegetation
Trolley Service
Narrow Road Width
Creating a vibrant, walkable downtown requires us to rethink our street systems, and this project is one example of our efforts to create complete streets in Sioux Falls.

"Road Diet" project allows for more pedestrian gathering places

Increase in parking spaces along Main Avenue in downtown Sioux Falls

Reduction of travel lanes yet little to no affect on traffic issues

Mark Cotter, Director of Public Works
Case Study Comparisons

Pearl District
Portland, Oregon

Road Diet with Maintained or Added Parking
10'+ Sidewalks
Bicycle Infrastructure
Bus Circulation
Streetcar Circulation
Urban Gathering Areas
Increased Safety

Riverfront Market
Little Rock, Arkansas

Downtown
Sioux Falls, South Dakota

Complete Street Element Rankings

1. Bicycling Infrastructure
2. Wide Sidewalks
3. Vegetation
4. Parking
5. Increased Safety

Results Gathered from Survey
**Research Hypothesis**

The current construction and design of roadways is not sufficient for not only the demands of today, but of the future. As the millennial generation continues to be in favor of walkable communities, the cities these people live in need to reflect what their citizens desire. Narrower roadways that reduce traffic speed, convenient and efficient mass transit options, bicycle infrastructure that ensure the safety of all users, and wide walkable sidewalks will contribute to the future growth of cities. Higher densities and infill projects also need to be encouraged so that people walking have destinations they can easily access without the use of an automobile.
SITE BOUNDARIES & LOCATION

CURRENT CORRIDOR RESTRAINTS

- Flood protection levee
- Over half of corridor is surface parking
- Much of the historic architecture was lost to urban renewal in the 1960's and '70's
- Overbuilt roadway and lane widths
- Overall lack of identity and character

Flood Levee Construction & Building Demolition

- Engineered levee will further cut off downtown from the river
- Leaves "dead" space on both north & south side of levee
- Does not use site to its full potential
RESEARCH | INVENTORY | ANALYSIS
WALKABILITY

*The darker the green, the more walkable*
BICYCLE, BUS, & HISTORIC STREETCAR INFRASTRUCTURE

MatBus Terminal
On-Street Bicycling
Off-Street Bicycling
Bus Routes
Streetcar Routes

1st Avenue North
University Drive
NP Avenue North
Main Avenue
Broadway
We Are Here
Civic Center
Island Park
Building Frontage Rankings

1) **Active Storefront**: Retail, Restaurant, Etc.
2) **Green/Open Space**: Parks, Plazas, Etc.
3) **Neutral Storefronts**: Office, Small Windows, Etc.
4) **Industrial Frontages**: Services, No Windows, Etc.
5) **Parking**: Concrete and Asphalt Sea Adjacent
6) **Inactive/Abandoned**: Blank Walls, Vacant Space, Etc.

Sidewalk Classifications

- **8’+ Sidewalk Width** - Enjoyable
- **6’-8’ Sidewalk Width** - Neutral Enjoyment
- **Below 6’ Sidewalk Width** - Avoid
Setback Rankings
1) Sidewalk Adjacent: Most Comfortable
2) 1-15': Somewhat Comfortable
3) Over 15': Not Comfortable

Frontage Density Rankings
1) 90-100%: Most Comfortable
2) 75-90%: Comfortable
3) 50-75%: Somewhat Comfortable
4) Under 50%: Not Comfortable

Building Height Rankings
1) 2-5 Stories: Most Comfortable
2) 6+ Stories: Somewhat Comfortable
3) 1 Story: Not Comfortable

Aesthetic Rankings
A 1) Most Appealing: Historic, Unique, Culturally Significant
B 2) Somewhat Appealing: Generic, Well Kept, Few Windows
C 3) Not Appealing: Run Down, No Windows, Blank Walls, Etc.
CIRCULATION INFRASTRUCTURE ANALYSIS

Pedestrian Infrastructure
1) 8’+ Sidewalk Width Adjacent to UD
2) 8’+ Sidewalk Width Not Adjacent to UD
3) 6-8’ Sidewalk Width Adjacent to UD
4) 6-8’ Sidewalk Width Not Adjacent to UD
5) Under 6’ Adjacent to UD
6) Under 6’ Not Adjacent to UD

Bicycling Infrastructure
1) Cycling Track or Path
2) On-Street Bicycle Lanes or Sharrows
3) 8’+ Sidewalks

Mass Transit Infrastructure
1) Currently has Mass Transit
2) No Mass Transit
CONCEPTUAL DESIGN
CONCEPTUAL PARK DESIGN DRAWINGS

Trying to develop a unique and beautiful park that fits into its context while ensuring flood protection was a bit of a challenge at first. Through many different conceptual drawings and historical research, I ended on a final design most similar to that of the 4th image.
FINALIZED DESIGN
NEIGHBORHOOD
MIXED HOUSING
HISTORIC CHARM
SETBACKS
QUIETER OFFICES
LOCAL DIVERSE GATEWAY BUFFER
PRIVATE SMALL SHOPS
1-3 STORIES
WEST END
TYPICAL STREET SECTION

Typical Street Section Diagram:
- **Sidewalk Zone**: 13'
- **Bike Lane**: 5'
- **Park Lane**: 3'
- **Travel Lane**: 8'
- **Travel Lane**: 10'
- **Travel Lane**: 10'
- **Travel Lane**: 10'
- **Travel Lane**: 3'
- **Bike Lane**: 5'
- **Sidewalk Zone**: 11'
- **Private Front Lawns**: 15'
SOMA DISTRICT

TYPICAL STREET SECTION

- Sidewalk zone
- Bike lane
- Travel lane
- Turn lane
- Park lane
- Bike lane
- Sidewalk zone

Dimensions:
- Sidewalk zone: 15'
- Bike lane: 5'
- Travel lane: 10'
- Turn lane: 10'
- Travel lane: 10'
- Park lane: 8'
- Bike lane: 5'
- Sidewalk zone: 15'
AGASSIZ PLAZA
SKETCHES & PERSPECTIVE
SITE DETAILS

SEATING
The benches located in Agassiz Plaza draw inspiration from the minimal aesthetic quality of the Red River Valley. The sleek simple lines mixed with rustic reclaimed wood and a concrete base create a warm and welcoming furniture piece.

CYCLE CAROUSEL
The Cycle Carousel located in the Walaker Atrium can house up to fifteen bicycles at one time. It’s a functional yet unique piece for all to enjoy.

WAYFINDING
The wayfinding rises from the steel river in the Agassiz Plaza. Maps of downtown Fargo are placed on them while attractive signage marks where you’re located.
THANK YOU & QUESTIONS?