Thesis Statement:
I propose a design for a Multimodal Greenway in the Red River Corridor of the Fargo-Moorhead Metropolitan area. I intend to demonstrate methods to increase local commuter options, reduce automobile traffic, and promote a healthier community.

Project Goals:
Designing for Alternative Transportation.
• Connect people to destinations by providing more sustainable alternative routes to motor vehicle transportation.
• Create strong connections to the existing public transit.
• Create safe, comfortable trails connecting larger green spaces along the Red River.
• Improve existing transportation system with introduction of a multimodal greenway.

Designing for the Community.
• Strengthen social bonds by creating destinations for community gathering and collaboration of all ages.
• Improve the quality of life and overall health of local users with sustainable choices.
• Change local commuter habits to more sustainable ones.

Designing for the Environment.
• Design a multimodal greenway to encourage users to engage and interact with the environment.
• Create more naturalist habitat.
• Design for flooding.

Project Location and Extents:
Flood Events:
- 100 Year Flood Event: Approximate Elevation 900'
- Major Flood Event: Approximate Elevation 892'
- Minor Flood Event: Approximate Elevation 880'

Crash Incidents Involving Pedestrians and Motor Vehicles:
- Major Flood Event:
- Minor Flood Event:

Existing Bike Trails and Shared Use Paths:

Existing Bus Routes:

Available Destination Points:

Detailed Analysis:
Research Hypothesis:
By introducing a multimodal greenway with progressive flood control and an incentive program we can change transportation patterns. Improving the health of the community by lowering the number of vehicles on the road, lower traffic levels for safer streets and emergency response time as well as the city's budget for infrastructure such as street repair and additional parking. It can also dramatically effect individual health by increasing one's physical activity and relations in the community and lower the average vehicle miles traveled in the metropolitan area.

Lowering the number of vehicle miles traveled in the metropolitan region means...
Community Center Bus Stop Perspective

Wetlands Boardwalk Section Cut

Crushed Stone Secondary trail with Flagstone edgeing around bends and Seating areas

Community Center and Wetlands Site Plan

Main Trail
Secondary Trail
Wetlands
Prairie
Mowed Turf

Boardwalk
Fire Pit
Bike Racks
Bike Shares

Community Center
RoofTop Lawn Bowling
Playground

Crushed Stone Secondary trail with Flagstone edgeing around bends and Seating areas
Master Plan

Site Furniture

Typical Trail Types:
- 8' Access Trail
- Bike Trail
- Access Trail
- 6' Crushed Stone Trail
- Prairie/Wooded

Bus Routes
- Concordia

Bike Routes
- Main Trail
- Secondary Trail
- Wetlands
- Prairie
- Mowed Turf

Community Center

What is the ZAP Program?
The ZAP Program is an incentive program to encourage citizens to choose to bike more often. A city organization or non-profit organization will work with local government and local businesses. Users would simply sign up for free and attach a provided tag to the front wheel of their bicycle, which would be recorded anytime they ride by one of the solar scanners located throughout the city. The scanners keep track of how often you ride and depending on your participation, you are placed in drawings to win prizes. Some businesses also offer discounts to users and some employers even offer lower health insurance rates according to your involvement.

Bus Routes
- Concordia

Bike Routes
- Main Trail
- Wetlands
- Prairie
- Mowed Turf

Woodlawn Park

The Dike Skate Park

Gooseberry Park

Lindenwood Park

Woodlawn Park

Dike Bridge

Community Center Entry Sign

Pavement Benches

Solar-Powered Light Poles

Solar-Powered Bicycle Scanners

How to Sign Up
The ZAP Program is an easy way to encourage people to bike more often. To participate, you first need to sign up for free. Then, attach a provided tag to your bicycle's front wheel which will be recorded by the solar scanners located throughout the city. The scanners keep track of how often you ride, and depending on your participation, you are placed in drawings to win prizes. Some businesses also offer discounts to users and some employers even offer lower health insurance rates according to your involvement.

Bus Routes
- Concordia

Bike Routes
- Main Trail
- Wetlands
- Prairie
- Mowed Turf

Woodlawn Park

The Dike Skate Park

Gooseberry Park

Lindenwood Park

Woodlawn Park

Dike Bridge

Community Center Entry Sign

Pavement Benches

Solar-Powered Light Poles

Solar-Powered Bicycle Scanners

How to Sign Up
The ZAP Program is an easy way to encourage people to bike more often. To participate, you first need to sign up for free. Then, attach a provided tag to your bicycle's front wheel which will be recorded by the solar scanners located throughout the city. The scanners keep track of how often you ride, and depending on your participation, you are placed in drawings to win prizes. Some businesses also offer discounts to users and some employers even offer lower health insurance rates according to your involvement.

Bus Routes
- Concordia

Bike Routes
- Main Trail
- Wetlands
- Prairie
- Mowed Turf

Woodlawn Park

The Dike Skate Park

Gooseberry Park

Lindenwood Park

Woodlawn Park

Dike Bridge

Community Center Entry Sign

Pavement Benches

Solar-Powered Light Poles

Solar-Powered Bicycle Scanners

How to Sign Up
The ZAP Program is an easy way to encourage people to bike more often. To participate, you first need to sign up for free. Then, attach a provided tag to your bicycle's front wheel which will be recorded by the solar scanners located throughout the city. The scanners keep track of how often you ride, and depending on your participation, you are placed in drawings to win prizes. Some businesses also offer discounts to users and some employers even offer lower health insurance rates according to your involvement.