URBAN GREENWAY TRANSFORMATION
multi-functional design alternatives for the Fargo community

stage three | final presentation

D a v i d L. E i s e n b r a u n
To establish a greenway that can be modulated for mid-size metropolitain areas in a way that can strengthen and connect various zones such as residential, industrial, and commercial:

- design to enhance alternative forms of transportation that becomes a viable economic and environmental resource to both the user and city.

Proposed Benefits for Mixed Use and Trail System Integration

<table>
<thead>
<tr>
<th>Category</th>
<th>Benefit Description</th>
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<tbody>
<tr>
<td>Transportation</td>
<td>establish a greenway that can be modulated for mid-size metropolitan areas</td>
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<td>to enhance alternative forms of transportation</td>
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<td>become a viable economic and environmental resource to both the user and city.</td>
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<td>Community</td>
<td>strengthen neighborhood unity</td>
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<td>focus on bringing various demographics into central spaces</td>
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<td></td>
<td>improve quality and health of users</td>
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<tr>
<td>Environment</td>
<td>create educational and informative spaces</td>
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<td>design a trail system that is interactive and engaging</td>
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<td>provide functional uses on both a city wide and individual scale</td>
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Current Conditions

- 3.6 million fewer miles driven each year
- 575 acres of open space conserved
- $1.5 billion in energy each year
- 5,100 tons of CO2 saved
- 17% of cycling infrastructure is paved roads
- 38% of urban residents to green spaces
- 33% of urban residents to green areas
- $27.9 million vsaved in infrastructure costs
- 1-2 years to local + retail
- 2-5 years to educate + inform
- ALWAYS diversity + unity
- IMMEDIATE reduce + reuse + recycle
Project Key Terms

Greenway
- A gateway along railroads, streets, and sidewalks winding through Fargo’s built environment creating points of interest, activity, and unity on a pedestrian scale.

Neighborhood
- A group of students searching for connection to the rest of town, immigrants need access to amenities, and a community in need of ecological awareness.

Community
- An social structure full of people ready to try new routes, and to park their cars, but without any construct on how to practically navigate Fargo's busy streets.

Sustainable Development
- Development that meets current natural, accessibility, and daily practical needs without being over budget, over glamorous, or poorly done.

Project Trail Issues

Bison Trail
- Poor site circulation, erosion, fragmented access, poor character association, disconnected from neighborhoods.

Crossing Trail
- Difficult site access or wayfinding, disjointed from surroundings, poor cultural heritage connections, land with a lack of purpose.

Catalyst Trail
- Through automobile dominated areas, disconnected from other green spaces, poor stormwater management, erosion.

Project Benefits

Sustainable practices implemented
- Property value increased
- Money saved using public transit
- Natural ecology preserved
- Unify demographics
PROJECT OBJECTIVES

- This thesis will span across a combination of six neighborhoods, BNSF railroads, and multiple types of zones and land uses.

CROSSOVER FOCUS AND PROPOSAL

- This thesis will span across a combination of six neighborhoods, BNSF railroads, and multiple types of zones and land uses.

CONNECT SINGULAR FAMILY HOUSES

- Create public awareness

- Focus on local business

- Preserve natural corridors integrate mixed use

- Educate pedestrian paths

- Bike facilities (shared use path)

- Bike routes

- Parking

Bison Trail Head

Crossover Trail Head

Catalyst Trail Head
Crosstown Trail System
Master Plan

Features:
- 6 Mile Independent Loop
- 10 Miles Long
- 430 Acres of Green Space
- Connects 4 Existing Parks
- Proposes 3 New Parks

Bison Trail Head
Master Plan

Features:
- Open space
- Bison Trail Head
- Crosstown Trail System
- Master Plan
- Best Management Practices
- Residential trail system
- Rail trail system
- Rentention trail system
- Commercial trail system

Features:
- 6 Mile Independent Loop
- 10 Miles Long
- 430 Acres of Green Space
- Connects 4 Existing Parks
- Proposes 3 New Parks
Residential Renewal

This part of the trail will look at reconnecting community members with green open space, recreational amenities, and access to a large public trail system that increase community participation and awareness. Features include:

- Bus shelter and hub for NDSU
- Bike lanes and speed tables for safety
- Play area
- 15' w bridge across channel
- Vegetative buffer between path types

Typical residential trail section:

- Crushed limestone
- Class 5 gravel
- Pea gravel
- Subsoil
- 1-2" calliper trees
- Pine bark mulch
- Loose loam soil
- Poly pavement
- Type 5 gravel
- Subsoil
- 2 gal. shrubs
- Pine bark mulch
- Loose loam soil
- Subsoil

Typical stormwater channel:

- Cobble stones
- Drain channel
- Pedestrian bridge
- Wetland plantings
- French drain

Typical bus stop:

- Existing sidewalk
- Parking area
- Bike lane
- Typ. bus stop
- Typ. tree plant

Typical tree planting:

- Tree line drops
- No. 10 gauge
- Wire covered with dry permeable fabric
- Bike lane

Prepared backfill soil mixture

Sediment infiltration

Chemical diffusion

Solids diffusion

Typical stormwater channel

Typical residential trail section
Crossover Trail Head is located in the heart of crosstown. Creating overlooks, plots for agriculture and recreational spaces, this once single use retention pond has now been transformed into a place to gather, educate, and interact.

With the addition of bike lanes, community garden plots, and storm water management, this site is the most functional of the three.
Stormwater Section and Plan

- Low mow grass
- Native grasses
- Wetland plantings
- Stormwater channel
- Multi-use paths
- Overlook with planters

Materials:
- Slope Stabilization
- Stormwater filtration
- Poly-pavement
- Cedar
- Raised plantings
- Interactive sculpture wall

Detail overlook plan

Site overview plan
This trail head is named catalyst because of its high visibility to the community. Focusing on creating intentional pedestrian-friendly spaces, automobiles and pedestrians alike must interact and work with each other to transform a once vacant lot into an active trail and community reminder that Fargo is moving forward ecologically, socially, and culturally.
The idea is to work with the community to create a vested interest in the space and its future. If it's not worth criticizing, it's probably not worth doing.

City of Fargo Project

Rabanus Park

- large green space
- open recreational space
- safe pedestrian crossing
- 50' wide path
- ornamental flower rows

www.cityoffargo.com/attachments/Fargo Project Poster.pdf