

City of Frankfort Beach Infrastructure Plan

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Michigan State University Practicum

Troy Anderson
Clay Hagen
Michelle LeBlanc
Virginia Vander Veen



Partners

- The City of Frankfort
- City Superintendent Josh Mills
- Dr. Rex LaMore
- Dr. Zenia Kotval
- Michigan State Housing and Development Authority



Project Goals

- Create elements of a Beach Master Plan for the Lake Michigan Beach in Frankfort, including improvements to Cannon Park.
- Addressing parking, pedestrian flow, signage, structural improvements, restroom facility location, sand control, and aesthetic.



City of Frankfort

Location Description

- Located on the shores of Lake Michigan in Benzie County
- 40 miles southwest of Traverse City
- Situated on the north side of Betsie Bay



Area History

- The City of Frankfort became an incorporated village in 1885
- Lumbering was Frankfort's first industry and helped the town flourish in the late 1800's
- In 1889 the Ann Arbor Railroad extended services to Frankfort
 - Economic growth
 - First tourists to Frankfort
 - Civil War cannon



Photo Contributed by Paul Petosky

Area History

- The depletion of lumber brought an industry shift to Frankfort
 - Rise of commercial fishing
 - Decline after WWII
 - Replaced by charter fishing
 - Agriculture
 - Cherries
 - Peaches
 - Apples
 - Strawberries
 - Raspberries

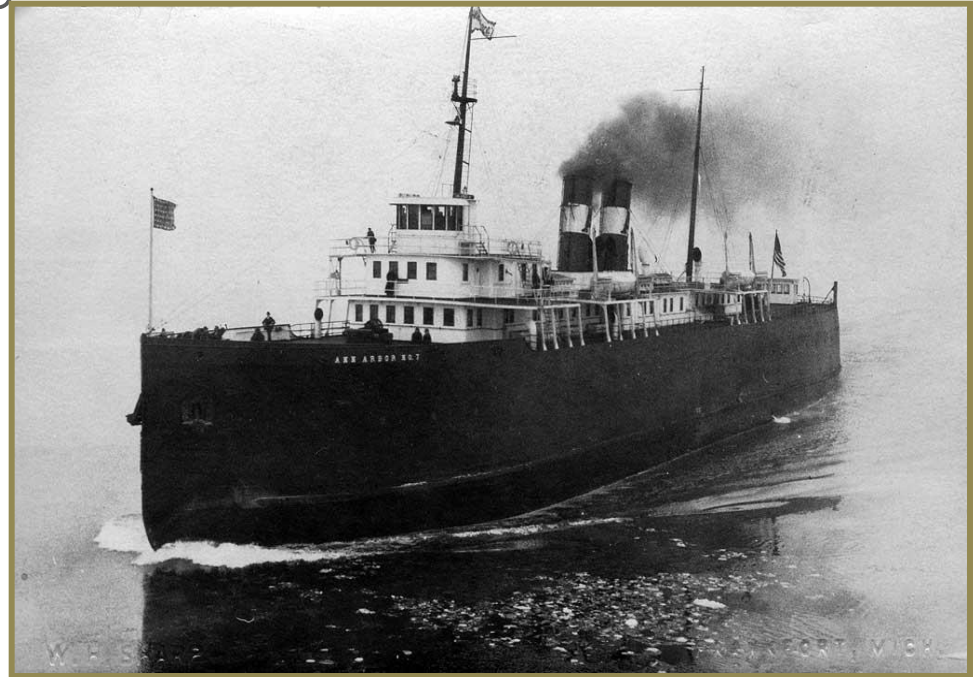


Photo Contributed by Marc Vander Meulen Collection





Site Analysis

- The Beach Infrastructure Plan focuses on two historically, culturally, and economically relevant properties in Frankfort:

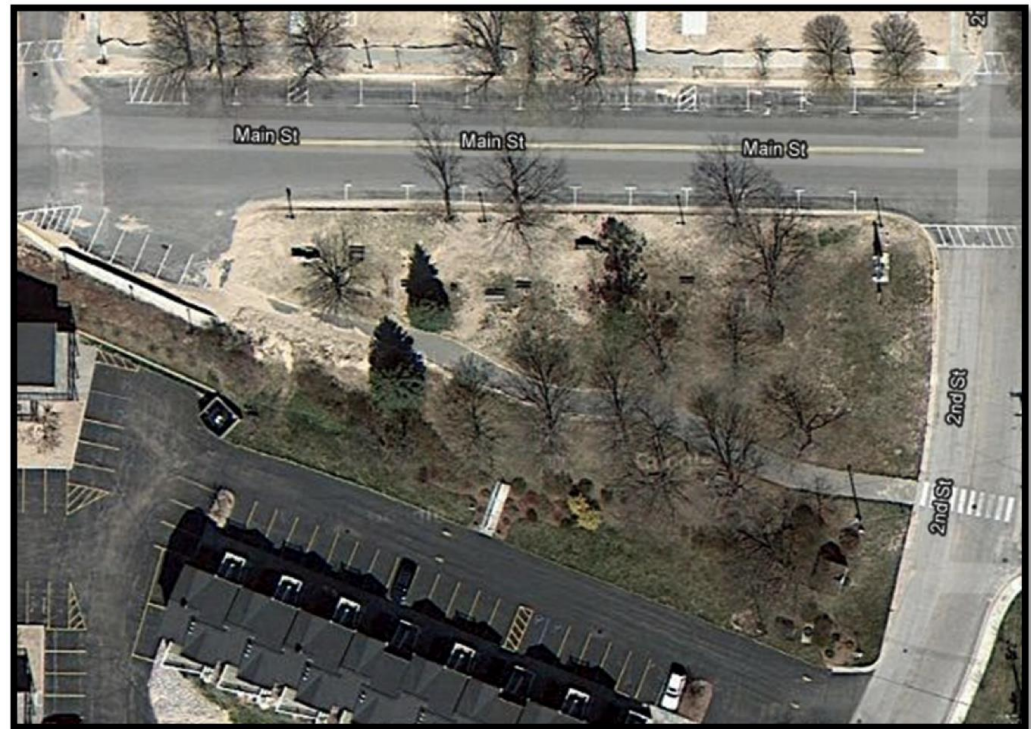
The Lake Michigan Beach Park

Father Charlevoix “Cannon” Park.



Father Charlevoix “Cannon” Park

- A gateway from downtown Frankfort to Lake Michigan Beach.
- Just under 40,000 square feet.
- Named for the Civil War cannon that is placed on the west end of the park.





Lake Michigan Beach Park

- The City of Frankfort provides a 200,000 square foot beach.
- Beautiful towering sand dunes to the north.
- Swimming, fishing, kite sailing, wind surfing, and the great view it provides.





Dunes

Recreational Amenities

Restroom Facility



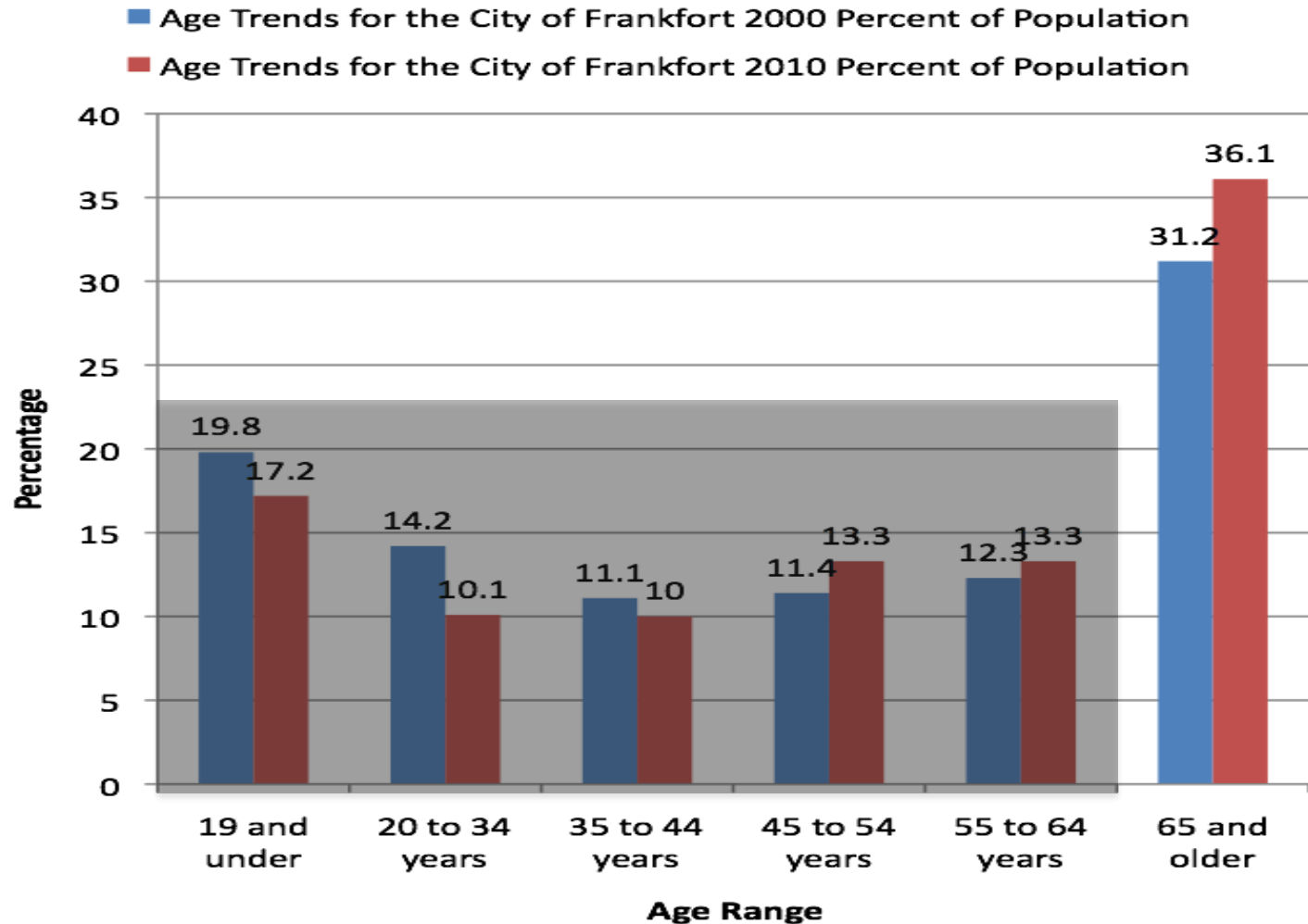
Socioeconomic Profile

Age, Population, Employment, Businesses, and
Tourism



Age

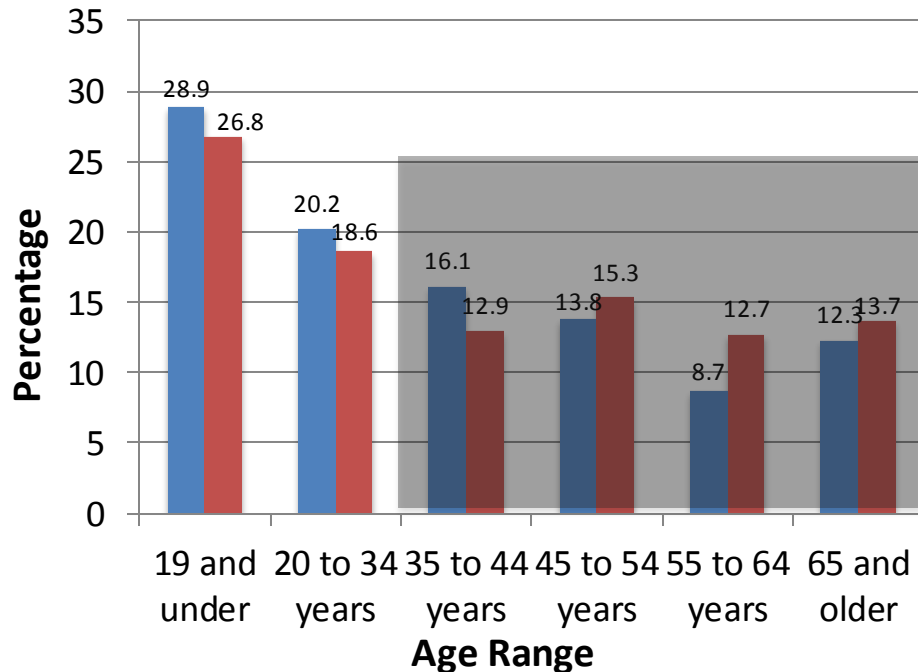
Age Trends - City of Frankfort (2000-2010)



Age

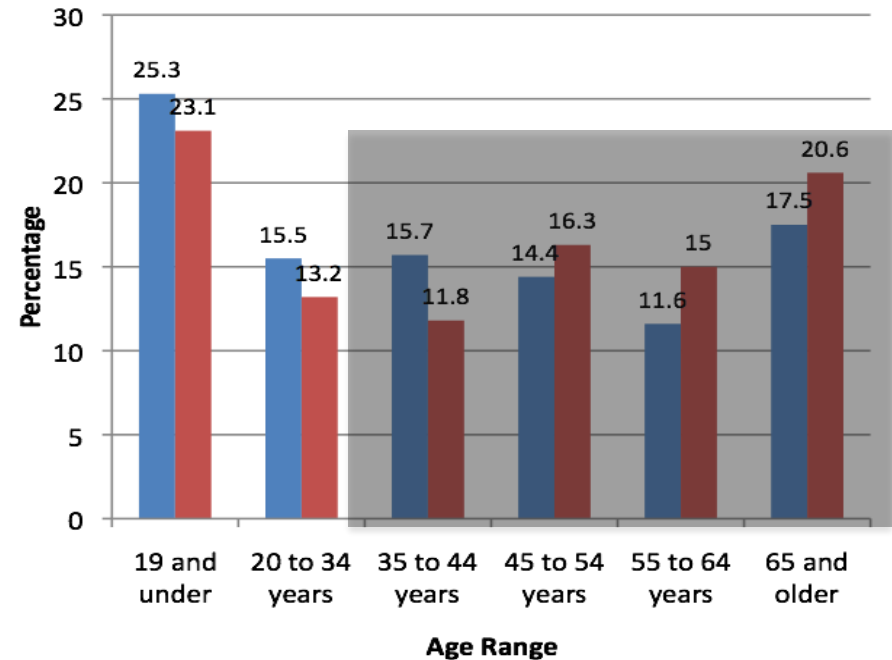
Age Trends-State of Michigan (2000-2010)

- Age Trends for the State of Michigan 2000 Percent of Population
- Age Trends for the State of Michigan 2010 Percent of Population



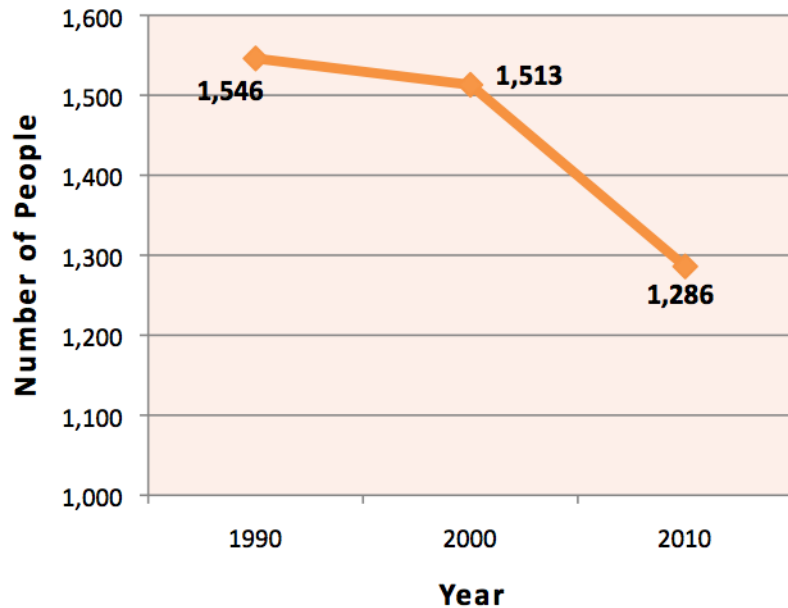
Age Trends - Benzie County (2000-2010)

- Age Trends for Benzie County 2000 Percent of Population
- Age Trends for Benzie County 2010 Percent of Population



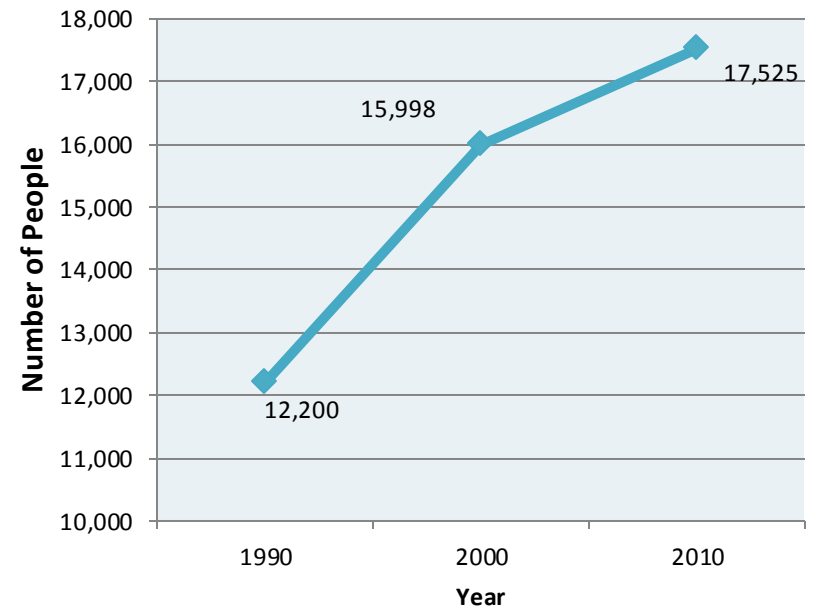
Population

City of Frankfort Population 1990-2010



Source-U.S. Census Bureau

Benzie County Population 1990- 2010



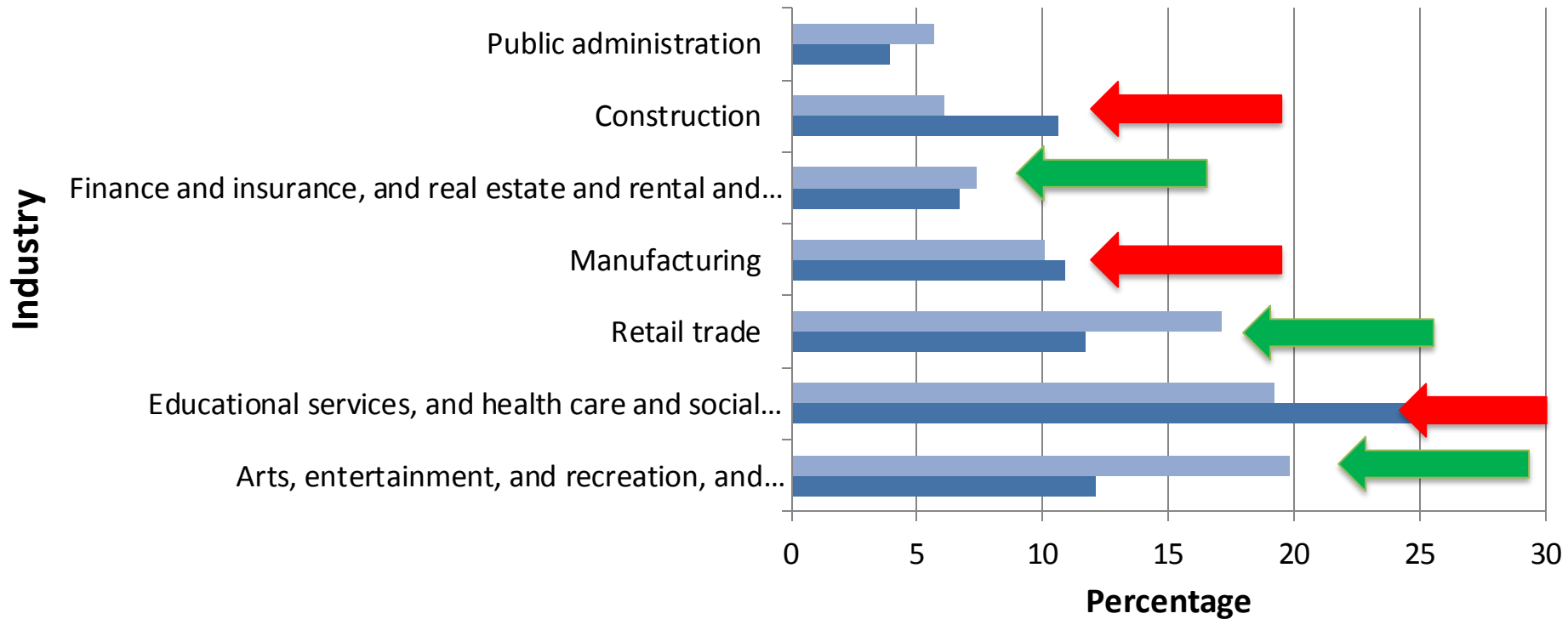
Source-U.S. Census Bureau



Business and Employment

Frankfort Industry

■ Percent 2010 ■ Percent 2000



Tourism

Distance Traveled (one way)	Percentage
< 100 miles	31
101 – 200 miles	17
201 – 300 miles	34
301 – 500 miles	7
> 501 miles	11

State of Origin to Travel to NW Michigan	Percentage of Visitors
Michigan	61.1
Illinois	6
Ohio	5.2
Indiana	4
Florida	3
Wisconsin	1.8
Georgia	1.6
Tennessee	1.5
California	1.4
New York	1.2



Tourism Estimations

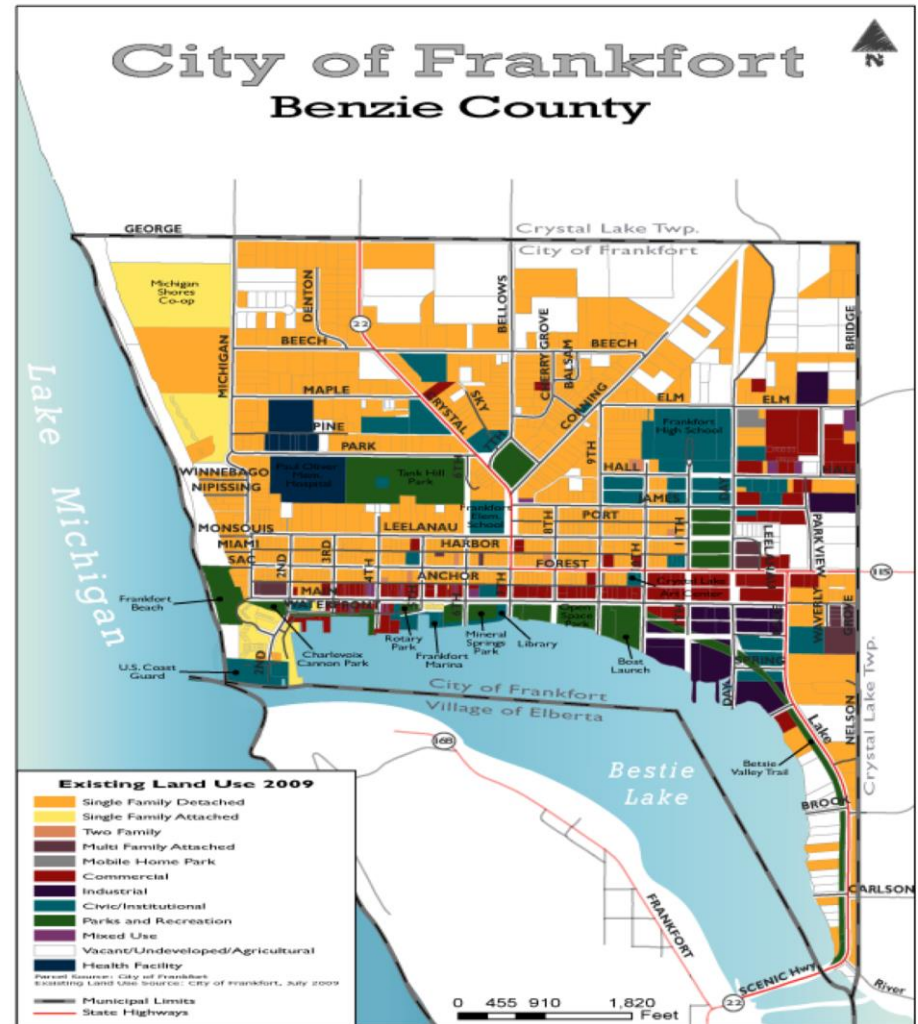
- An estimated 210,000 visitors to Frankfort in 2011
- 48% of visitors during peak summer months
- 1,939 visitors per day (during peak season)
- Average of 3 people per car
- 646 cars per day



Photo contributed by Twenty Two North Gallery

Land Use

- Approximately 49% of land uses within the City of Frankfort are residential
 - Single Family Detached
 - Single Family Attached
 - Two Family
 - Multi Family Attached
 - Mobile Home Park
- 26% percent are non-residential
 - Commercial
 - Industrial
 - Civil/Institutional
 - Parks and Recreation
 - Health Facilities
 - Mixed Use
- 25% are vacant/undeveloped



Strengths, Weaknesses, Opportunities, and Threats

- The SWOT analysis was conducted by the MSU Practicum team at a meeting with 23 members of the community in Frankfort.



Strengths

- Both Father Charlevoix “Cannon” Park and Lake Michigan Beach are within close and walkable proximity to the downtown and Main Street.
- The region has strong natural beauty

Opportunities

- New location and accessibility for restroom facilities
- The placement of a new trailhead pavilion including restrooms and concessions

Weaknesses

- There are not enough flushing toilets within close proximity to either Father Charlevoix “Cannon” Park or Lake Michigan Beach
- The flow of vehicles and pedestrians is often congested and unsafe

Threats

- Complacency or inaction causing a halt in forward progress for the two parks
- Other communities having a competitive advantage



Recommendations

Beach Study, Parking, Restroom Facilities,
Signage, Sand Control, and Revenue



Beach Study

- Economic Analysis
- Visitor Profile
- Time Spent at Beach
- Traffic Impact



Photo contributed by Nina Kokotas Hahn



Sand Control

Recommendation

- Plant Native Vegetation along the beach perimeter



Parking

Recommendation

- Traffic Study
- Utilize Frankfort high school for additional parking
- Trolley System

Recommendation

- Limit Kiosk parking time in the Lake Michigan Beach parking lot to 3 hours during weekend and peak hours to facilitate parking turnover



Signage

- The implementation of simplified and consistent **wayfinding** and **informative signage** throughout Father Charlevoix “Cannon” Park and Lake Michigan Beach Park will play a key role in enhancing the Frankfort experience for both visitors and residents.



Consistent Way-finding and Informative Signage



Signage

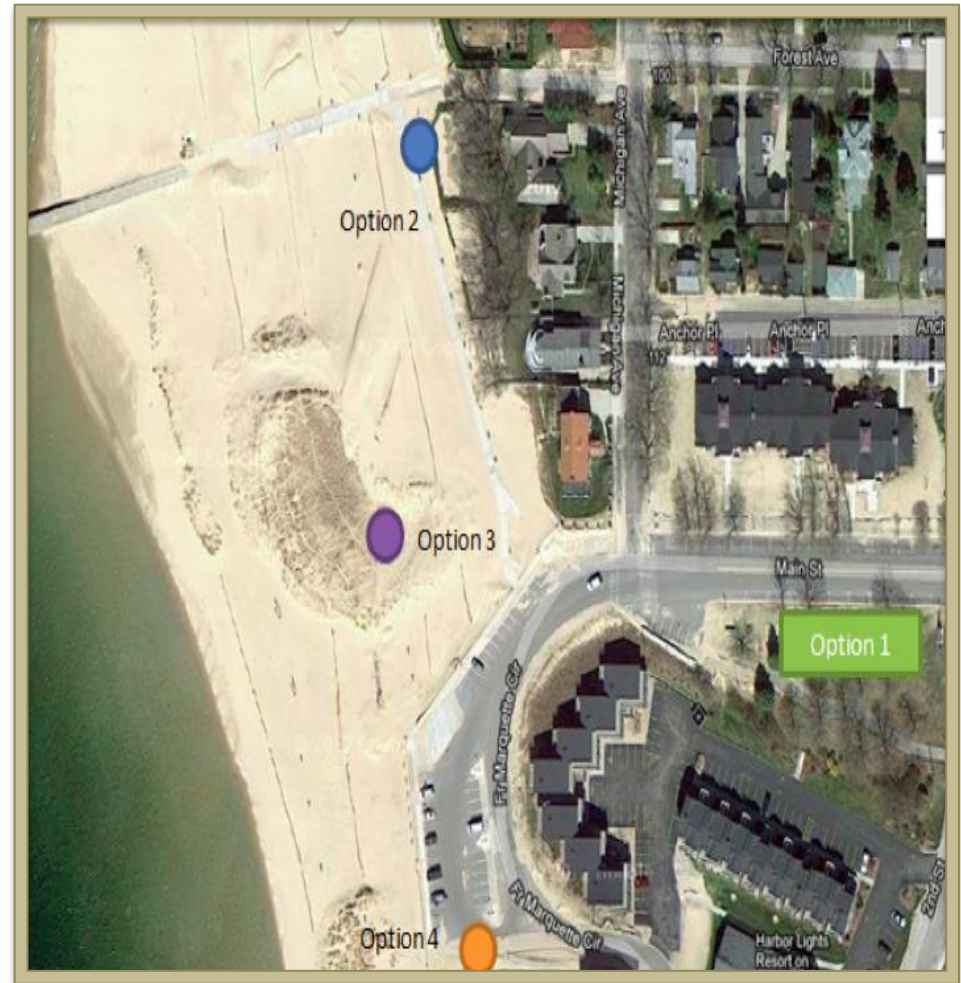
Recommendation

- Work in conjunction with the Friends of the Betsie Valley Trail System organization to implement proper trailhead signage at the Father Charlevoix “Cannon” Park trailhead.



Restrooms

- Option 1- Cannon Park
- Option 2- Sac St
- Option 3- Constructed into sand dune
- Option 4- Current location



Criteria for Restroom Location

Option	Location	Proximity to Beach (<5000 m)	Sewer	Does not Block of View of the Beach	Space Availability	Total Score
1	Father Charlevoix "Cannon" Park	Yes	Yes	Yes	Yes	4
2	Sac Street Entrance	Yes	Yes	No	No	2
3	In the side of the dune	Yes	No	Yes	No	2
4	Stay the Same	Yes	No	Yes	No	2



Restrooms

Recommendation

- Construction of a new bathroom facility in Father Charlevoix “Cannon” Park

Recommendation

- Modify the bathroom design proposal for Father Charlevoix “Cannon” Park to include the following:
 - 6-7 toilets for women
 - 4 toilets and 3 urinals for men



Revenue

Recommendation

- Capitalize on revenue potential by installing parking kiosks in the designated beach parking lot and within ¼ mile of Lake Michigan Beach on Main St.
- This revenue would contribute towards the implementation of the parking trolley between the Frankfort High School and Lake Michigan Beach park



Photo contributed by Thadd Fiala



Photo contributed by Lamers Bus Inc.



Revenue - Concessions

Recommendation

- A cost-benefit analysis should be conducted, and visitor demand evaluated to gain a better understanding of possible benefits and drawbacks to operating beach concessions.



Photo contributed by Observer Newspapers



Thank You!

To view our full report visit:

<http://ced.msu.edu/publications/reports/planning>

