

EXISTING CONDITIONS ANALYSIS: Introduction

THE PROJECT

This project is part of a course entitled "Sustainable Development Planning & Practice." The goals of the class are to have students work with Viet-AID in developing a sustainable development plan for Fields Corner.

WHAT IS SUSTAINABLE DEVELOPMENT?

Balancing current development between economic, social and environmental principles in ways that benefit society now and in the future. Consideration of impacts that traditional actions have on:

- Lasting economic development
- Resources (reduce, reuse, recycle)
- Social equity/fairness

PURPOSE OF THE EXISTING CONDITIONS ANALYSIS

To analyze the neighborhood of Fields Corner from four perspectives:

1. Demographics
2. Environmental Conditions
3. Industry Activity
4. Commercial Activity

Through this preliminary analysis, we hope to identify potential sustainable development goals, strategies, and next steps in collaboration with Viet-AID.

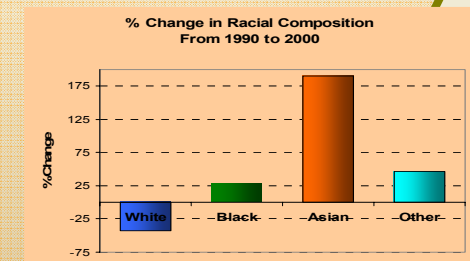
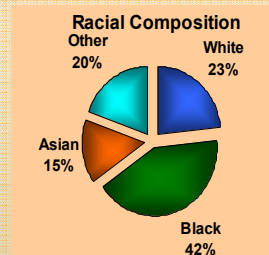
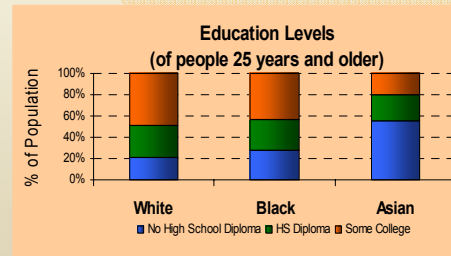
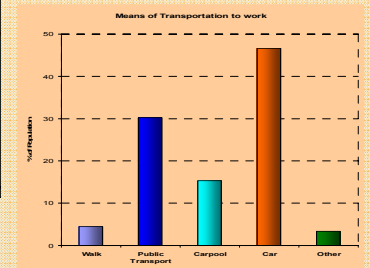
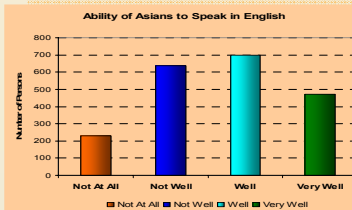
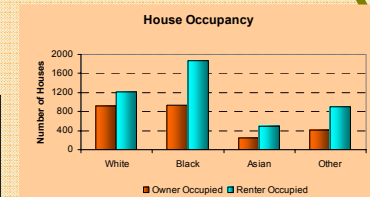
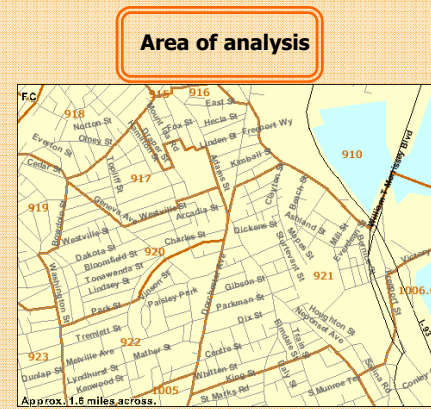
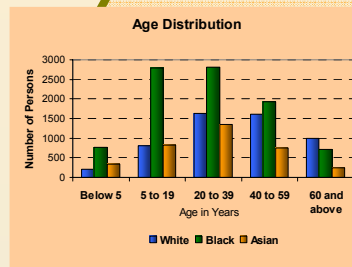
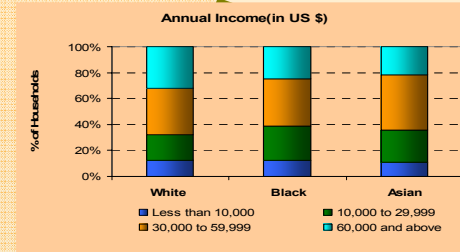
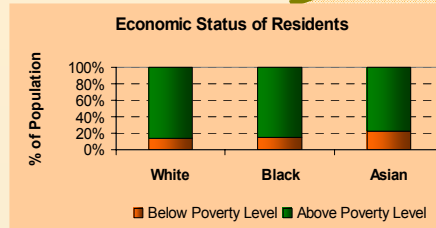
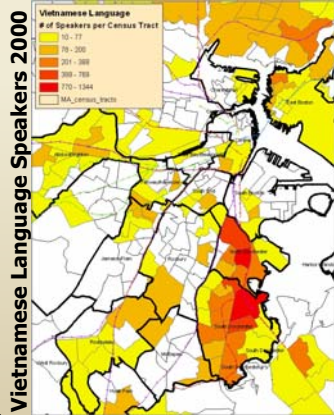


EXISTING CONDITIONS ANALYSIS: Demographics

THE DATA

These numbers are from the 2000 US Census for five tracts: 916, 917, 920, 921, and 922.
 Total population = 22,672
 % Males = 48.3
 % Females = 51.7
 Number of Households = 7037
 Average Household Size = 3.22

Census 2000 data for Asian ethnic groups in Boston shows that the largest group was Chinese, nearly 44% in 2000, down from 55% in 1990. The second largest groups was the Vietnamese, around 24% in 2000, up from 16% in 1990. The growth of the Vietnamese community in Boston between 1990 and 2000 was around 128%. In Fields Corner, Vietnamese population grew by 190% to comprise around 87% of the Asian population, which is around 15% of the total population.



Source: US CENSUS, 2000

Planning for Sustainable Development in Fields Corner

EXISTING CONDITIONS ANALYSIS: Environment

BROWNFIELDS: Brownfields are sites where prior use may have left the site with hazardous substances, pollutants, or contaminants (for example from commercial activity), therefore complicating its reuse.



RECYCLING & WASTE STREAMS

- Several opportunities for recycling and composting programs
- Need additional data for household and commercial waste streams

OPEN SPACE

- 9 open spaces classified as parks, community gardens or playgrounds
- Among lowest neighborhood ranking for open space per 1000 children

AIR AND WATER QUALITY

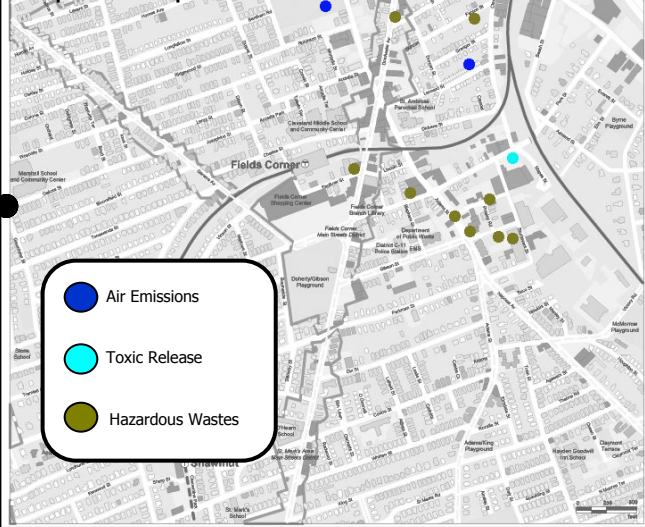
- Asthma rates are increasing for Dorchester and Asian communities
- Attributable to emissions from numerous types of business
- Contaminated runoff from oil leaks and industry

TRANSPORTATION

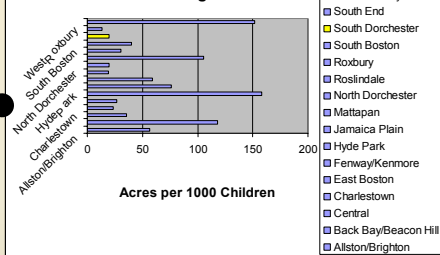
- High concentration of auto trips
- High daily ridership on T and Route 17 Bus
- Pedestrian activity is not emphasized

Since 2000, 27 oil and/or hazardous waste spills were reported to the MA Department of Environmental Health within our field study area. Some of these sites may be eligible for state funding for redevelopment under the 1998 Brownfields Act.

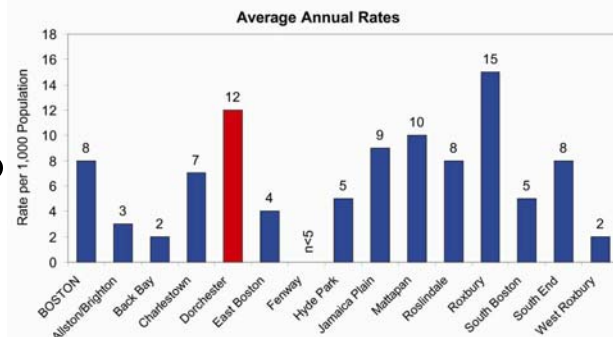
Environmental Protection Agency: Reported Spills



Green space acres per 1000 children by neighborhood



Asthma Hospitalization Rates Among Children Under Age 5 By Neighborhood*, Boston, 1999-2000



*North End data have been incorporated with Back Bay.
 DATA SOURCE: 1997-2000 Acute Case Mix, Massachusetts Division of Health Care Finance and Policy. Rates are calculated using the US 2000 Census for resident population by zip code.
 DATA ANALYSIS: Boston Public Health Commission, Research Office

Planning for Sustainable Development in Fields Corner

EXISTING CONDITIONS ANALYSIS: Economic

STREET-SCAPE OF MAIN STREETS DISTRICT

- Poor street image
- Lack of pedestrian activities
- Lack street cleaning
- Public 'eyes' for safety
- Dangerous for pedestrian traffic
- Car dependent, but lacking parking

FIELDS CORNER MAIN STREETS AREA COMMERCIAL ANALYSIS

Overrepresented types of businesses:

- Building Materials/Hardware
- Financial/Insurance/Real Estate

Underrepresented types of businesses:

- Food Supply/Supermarket
- Food Services

VIETNAMESE BUSINESSES IN THE MAIN STREETS AREA

- Family based/small businesses
- 25% of total establishments (36/143)
- 13% of total commercial lease area
- 2% of total sales

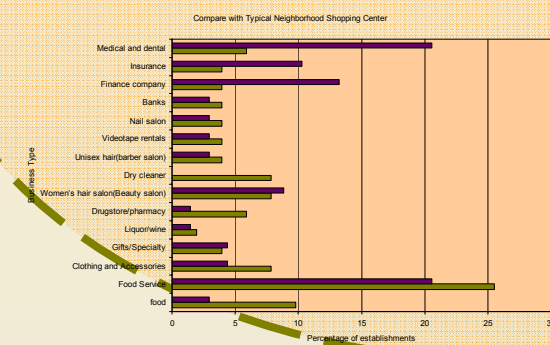
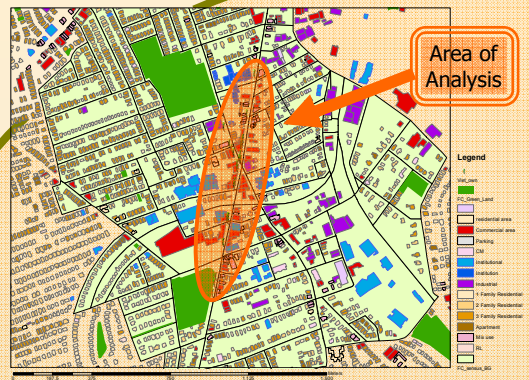
ANALYSIS OF ZIP CODE 02122 (Larger Region Analysis)

Fields Corner has the most concentration of commercial establishments in the Zip Code.

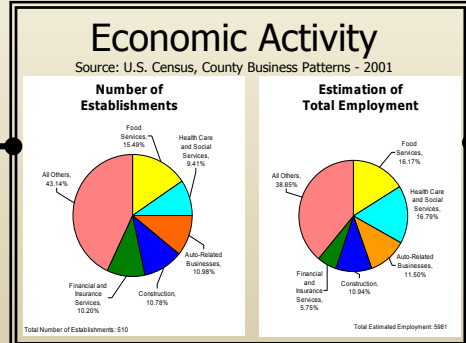
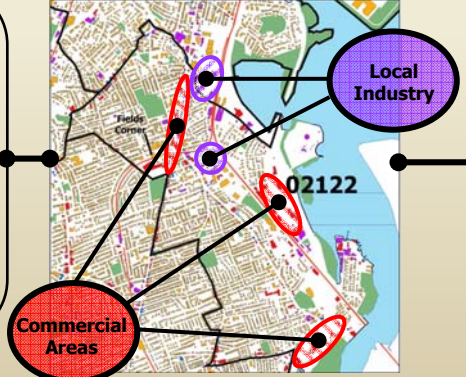
4 dominant sources of economic activity: Food services, health care and social services, construction, auto-related businesses, and financial services businesses.

Heavy industrial activity occurs near Fields Corner as a result of 'Local Industry' zoning.

Fields Corner Commercial Area



Map of Zip Code 02122



Alsen Maples Industrial Park
Located in the 'Local Industry' section

Phase I project by the students of class 11.947, "Sustainable Development Planning & Practice," Massachusetts Institute of Technology – Department of Urban Studies & Planning – Spring 2004, in partnership with Viet-AID (Brian Cheigh, Pankaj Kumar, David Perkes, Heather Seyfang, Jeanne Zhijun Tan)

PUTTING IT ALL TOGETHER: Key Findings and Frameworks

KEY FINDINGS FROM THE EXISTING CONDITIONS ANALYSIS

DEMOGRAPHIC

- High dependency on automobiles for transit
- High rate of employment in the health care sector among residents
- Ethnic diversity and wide range of incomes
- Relatively low educational attainment
- Significant numbers of Vietnamese in the region
- Significant amounts of community based organizations

ENVIRONMENTAL

- Area may have significant numbers of brownfields
- Lack of open space, but two large parks in the area
- Lack of pedestrian orientated pathways
- High asthma rates
- Current heavy industrial activity and auto-related commercial activity
- High automobile traffic in the area despite presence of mass transit
- Occupational health issues in auto-related, beauty/nail salons, heavy industry

ECONOMIC

- High employment opportunities in the health care and social services sector
- Lack of certain business typically found in shopping Centers
- Vietnamese businesses represent disproportionately small market share
- Vietnamese businesses are primarily small, family run businesses
- Heavy industrial activity
- Cluster industries in health care and social services, and auto-related businesses



MIT

Viet-AID

Local Industry Framework:
A Long Term Strategy

SUSTAINABILITY FRAMEWORKS

Business Framework

Making sustainable development a cornerstone of business practices to enhance economic development as well as environmental sustainability.



Social Framework

Creating and nurturing greater social linkages within the Fields Corner community between all stakeholders – residents, employees, businesses, community organizations, and visitors.



Mobility Framework

Enhancing the mobility in and around the Fields Corner community that will enhance a sense of responsibility, openness, and vitality.



OPTIONS FOR NEXT STEPS: 3 Sustainability Frameworks

Business Focus

This option focuses on the current commercial assets of the Fields Corner neighborhood.

End Goal & Vision:

Improve sustainability of Fields Corner by focusing on the commercial assets of the neighborhood. By making sustainable development a cornerstone of business practices we hope to enhance economic development as well as environmental quality goals.

Objectives:

- Help Vietnamese business realize market potential and opportunity
- Increase sense of business owners' responsibility as members of community
- Introduce best practices for sustainable development for specific business types
- Increase networks between related businesses to attain sustainable development and economic development goals
- Improve links between business owners, employees, residents, and other businesses

Implementation Actions:

- Environmental best practices
- Employee well-being best practices
- Business association for sharing resources and information
- Spread information to Vietnamese-owned businesses throughout greater Boston area

Mobility Focus

This option focuses on altering how people move around Fields Corner.

End Goal & Vision:

Improve sustainability of Fields Corner by enhancing mobility in and around the community through design improvements, promoting pedestrian-friendly activities, and introducing alternative means and purposes of travel.

Objectives:

- Leverage new design of T station to increase non-auto modes of transportation
- Increase walking, cycling and transit use as modes of transportation
- Increase sense of openness, safety, access, and comfort by enhancing pedestrian-orientated activities
- Partner with local businesses to target and increase pedestrian customer base
- Increase linkages between local residents/employees, and the commercial district/major employers

Implementation Actions:

- More pedestrian friendly streetscapes
- Eliminate barriers to pedestrian flows, and promote events, actions, structures that enhance pedestrian flows
- Engage businesses/property owners to improve facades and increase business hours
- Market Fields Corner as an accessible and friendly destination

Social Focus

This option focuses on social networks and activities in Fields Corner.

End Goal & Vision:

Improve sustainability of Fields Corner by creating and nurturing greater social linkages within the Fields Corner community between all stakeholders – residents, employees, businesses, community organizations, visitors, etc.

Objectives:

- Identify and eliminate the barriers and sense of division that prohibit community building
- Tap into underutilized social assets of neighborhood
- Increase pedestrian traffic, creating a sense of community, increasing public safety, and promoting business and local social activity
- Work with the huge youth population to ensure their linkages with the larger community
- Increase community pride, sense of place, and joint responsibility for working towards sustainable development

Implementation Actions:

- Engage large youth population to improve community (murals, festivals, etc.)
- Social festivals & expansion of existing cultural, social, and/or commercial activities
- Social assets directory
- Increase the collaborative capacity of the numerous community based organizations and service providers in the neighborhood