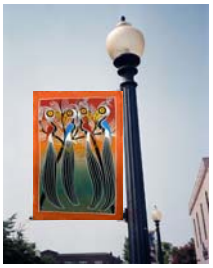
Alden and High Street Assessment and Visioning Report

May 31, 2009

Clients:

County of Essex Housing and Community Development, Verona, NJ
and
City of Orange Township, New Jersey



Prepared for:

Department of Planning and Development
Community Services Department– Division of Recreation
29 North Day Street
Orange, NJ 07050

Prepared by:

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Acknowledgements:

On behalf of Community Technical Assistance, Inc. (CTA), we would like to thank our clients for their insight and commitment to actively engaging their young citizens in community development.

As part our of our organizations mission, CTA established the Transforming Distressed Communities (TDC) Program to introduce young citizens to their community and allow them to become visionaries and leaders within their respective neighborhoods.

To achieve the results expected from the project to include the recommendations and vision, CTA gives a special thanks to our partners:

- Michael Taylor, Director of Essex County Division of Housing & Community Development
- Mayor Eldridge Hawkins, Jr., City of Orange Township
- Valerie Jackson, Director of the City of Orange Township Planning & Development Department
- Keith Pressey, Recreation Supervisor, City of Orange Township Community Services Department Division of Recreation
- Orange Board of Education

- Mayor Robert L. Bowser, City of East Orange
- City of East Orange Youth 2000 Initiative, Ms. MJ Peterson
- East Orange Board of Education

- Prudential Foundation
- Neighborhood Planning and Architectural Design, Inc.
- Essex County Environmental Center
- Frank H. Lehr Associates, Richard Adelsohn PE
- YWCA– Essex and West Hudson, Lori Williams, Executive Director

Introduction:

Although the State of New Jersey has a rich industrial history, contaminated industrial sites exist in its cities, towns, suburbs and rural areas. In most cases, the existing sites have been remediated within the State's urban areas and provided the potential to create necessary green spaces for recreational uses. Many communities Brownfield sites are targeted for recreational and open space reuse. A Brownfield is any real property where devilment or reuse maybe complicated by the presence or a potential presence of a hazardous wastes, petroleum, pollutant or contaminant.

To aid in the transformation of underutilized land, Community Technical Assistance (CTA) was engaged to address the reuse of the existing site with emphasis on community and youth engagement. The overall project goal was to provide sustainable and responsible solutions that will address the design of a public open space.

The project site is located in the low-to-moderate income (LMI) neighborhood of Orange, NJ within zip code 07050. The physical site also known as he former U.S. Radium Corporation site consists of several city owned tax lots that are vacant and estimated to be 4 acres at the intersection of Alden and High Street.

The project scope was based on twelve (12) months that included active participation of LMI public school student interns attending Orange and East Orange Middle and High Schools as part of CTA's Transforming Distressed Community (TDC) program. Eight (8) weeks of the 12 months involved intensive involvement by the student interns on a daily basis. The scope encompassed the establishment of respective project goals and objectives, engaging of impacted community residents, civic and governmental review and oversight, professional training and community connection. During the process the student interns conducted an assessment and proposed recommendations as follows:

1. **Assessment:**

- extensive historical research, documented demographic data, identified natural resources, and determined the site's viability
- researched the national and state policies, documented the health disparity and barriers for healthier lifestyles with respect to physical activity, and researched national environmental policies impacting the site.

2. **Recommendations:**

- Gathered community input via documented responses from surrounding residents, identified issues, goals, and prepared solutions to improve the quality of life of the residents.

The information is presented reflects text, tables, charts, spatial mapping, and digital photos. The information was gathered within a geographically area known as the "study area and focus area."

The study area consists of two census tracts and block groups, 181.02 and 182.03. The census tract and block group data reflects the population's characteristics such as their social, economic, and transportation conditions. The data was extracted from the United States Census Bureau over a ten-year period for 1990 to 2000. A more detailed review of the census data from 1990 and 2000 is located in the Census Section of the Appendices.

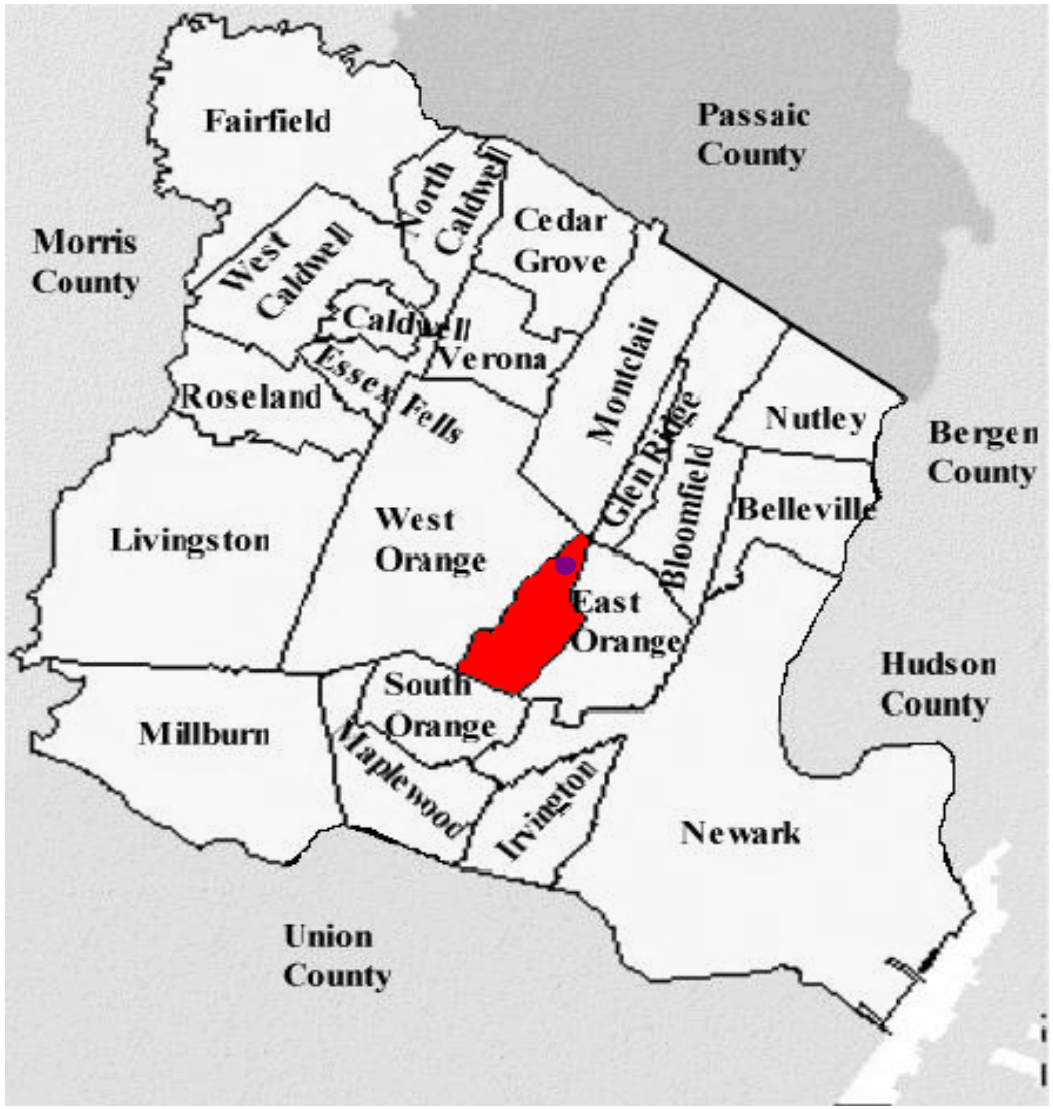
The focus area consisted of the city blocks that border the project site within the following boundaries: Washington Street to the North, N. Day, Alden, and Cleveland Streets to the East, Lakeside Avenue to the South and Watchung Avenue and West Orange Border to the West. Information gathered for the focus area reflected data from residents of which there were 259 surveys circulated.

The report begins with two sections, urban planning and public health, information collected as part of the student intern's introduction to the urban planning profession. The project goals, history, population characteristics, natural resources and neighborhood identity are documented. The second component of the report is information documented as part of the student intern's introduction to the public health profession. The project health disparities, adult and youth data, environmental policies, physical activity education and case study research are documented. Both the urban planning and public health professions sections illustrate the existing condition of the site and the potential intended users of the space.

The report concludes with the research data and visual recommendations as part of the student intern's critical analysis of the assessment by identifying issues, establishing goals, and brings fourth solutions. The research data reflects the residents' views and current quality of life conditions that provided direct feedback and realistic constraints for the project recommendations and solutions. The data was recorded and analyzed within Epiinfo by our professional staff. The visual recommendations provided solutions for pedestrian hierarchy, historical recommendations, historical aspects of the community and culturally designed programs, cultural and walking recommendations, tack and safe conditions for walking/bicycling, open space and restrooms recommendations, and mayors wellness campaign and health fairs.

The report is intended to be a guide for potential development of the current vacant city owned tax parcels. More investigation is required with respect to environmental feasibility, engineering design and production, professional planning, and other professional trades necessary to successfully redevelop the parcels. Our student interns provide an in-depth study and extensive research that can serve as critical decision making and possible design solutions.

Context Map



Legend

City of Orange Township

Project Site

Source: www.googleimages.com

Urban Planning Project Goals

Goal 1: Characterize the History of the Site

Goal 2: Define Uniqueness of People Who Reside in the Neighborhood

Goal 3: Conduct an Assessment of Project Site

Goal 4: Research Natural Resources for Project Site

Goal 5: Create a Vision Plan for Project Site

Goal 6: Define Decision Makers and their impact on the Project Site

History of the Site

Goal 1: Characterize the History of the Site

Objective:

- Research local and state databases for information about U.S. Radium Corporation

Interior Image of U.S Radium Corporation Watch Dial Painters c.1922-23

Photo Source: http://www.umdnj.edu/libweb/speccoll/USRadiumCorp.html
http://www.scc.rutgers.edu/njwomenshistory/Period_5/radiumdial.htm

Historical Timeline


Radium dial painters working in a factory

Production at U.S. Radium Corporation Begins

Amelia Maggia

City of Orange Township purchase property with plans to turn space into recreational facility

Project site after EPA

1917	1925	1927	1928	1969	1978	1979	2005

Dr. Harrison Martland investigates the effects of radium and publishes for the first time the deadly effects of radium in the Journal of American Medicine.

Grace Fryer filed a lawsuit against the US Radium Corporation she's later joined by Albina Larice, Qunita McDonald, Edna Hussman, and Katherine Schaub they became known as the "RADIUM GIRLS" the women received $10,000 each and a $600 annuity

T & E Industries

The Department of Environmental Protection (DEP) report found that high gamma radiation concentrates were present in the soil and put a strain on the City of Orange Township plans for development.

Source: City of Orange Township Library

Star-Ledger Reporter Mr. Kevin C. Dilworth

Population Characteristics

Goal 2: Define Uniqueness of People Who Reside in the Neighborhood

Objectives:

- Create study area map
- Identify population characteristics from the U.S. Census Bureau

Social
Total Population, Age Distribution, Racial Distribution, Educational Attainment, Means of Transportation, and Household Composition

Economic
Median Household Income and Household Income

Means of Transportation

Source: CTA Images

Study Area and Population Characteristics

Study Area Map

Study Area consist of Census Tract 181, Block Group 2 and Census Tract 182 Block Group 3.

Boundaries of our Study area are:

North: Washington Street

South: Park Avenue

East: Thomas Blvd. and Cleveland St.

West: Watchung Avenue

Source: www.googlemaps.com

Total Population

Population	City of Orange Township 2000	Percentage of Study Area to City of Orange Township	Study Area 2000	Percentage of Study Area 2000	Percent Change of Study Area 1990 and 2000
Total Population	32,868	6%	1,968	100%	10%

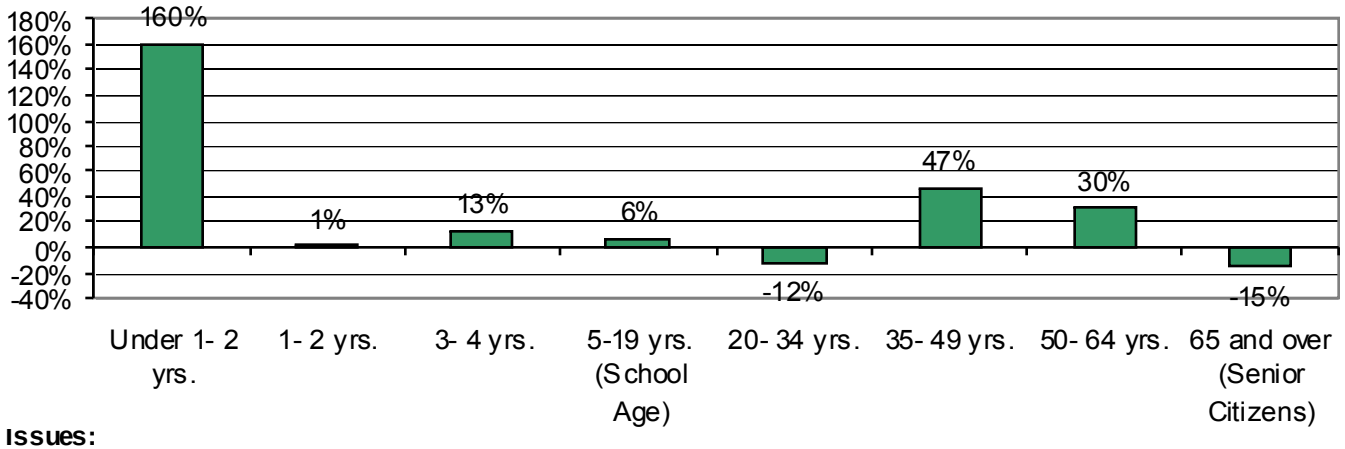
Most populated Block Group Map 1,028 (52%)

Issue (s):
There was a 10% increase in total persons living within the Study Area.

Source: U.S. Census Bureau

Age and Racial Distribution Data

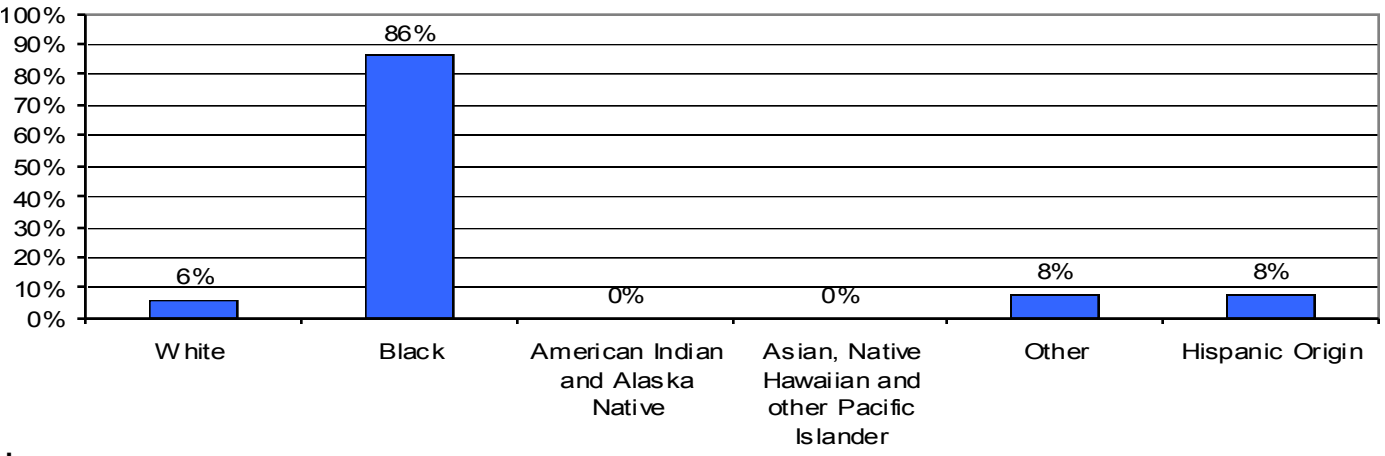
1990 and 2000 Percent Change for the Study Area



Issues:

- **The School Age population increased by 6% in the Study Area.**
- **The 20-34 age groups decreased by 12% in the Study Area.**
- **The Senior Citizens population decreased by 15% in the Study Area.**

2000 Racial Distribution by Hispanic Origin for the Study Area

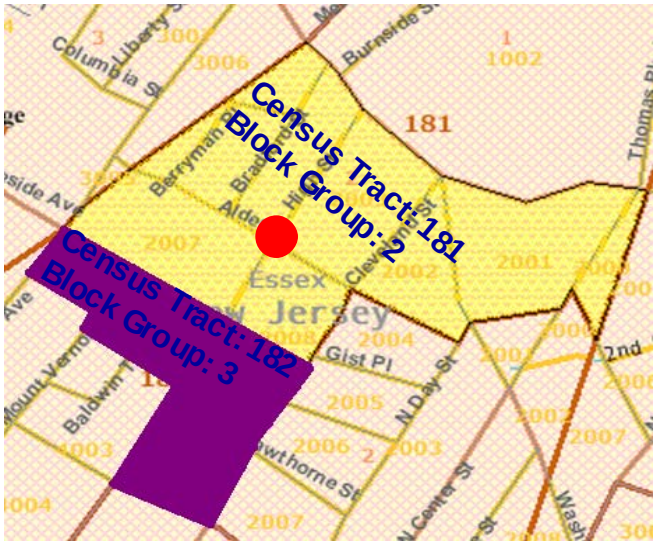


Issue:

- **86% of residents living within the Study Area consider themselves being black.**

Block Group 3 had Most number of School Age Population Map 214 (21%)

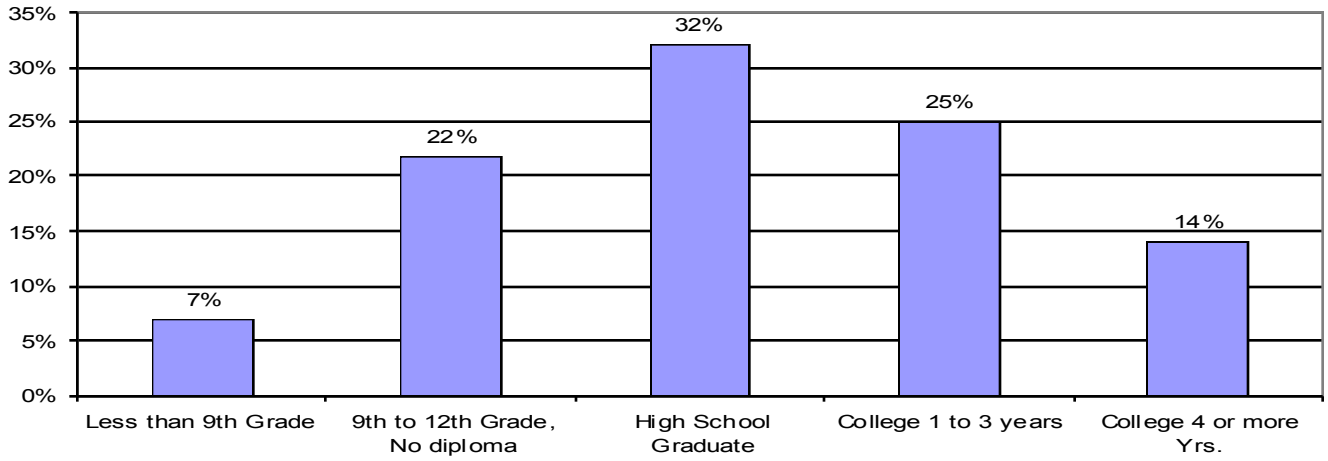
Block Group 3 that has the largest black population 829 (88%)



Source: U.S. Census Bureau

Educational Attainment and Household Composition Data

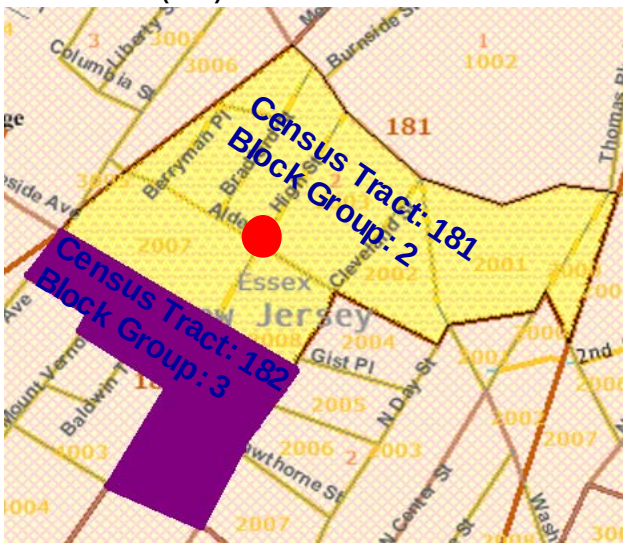
2000 Educational Attainment 25 Yrs. and over for the Study Area



Issue:

- **29% of residents in our Study Area had not received a High School Diploma or received a 9th to 12th Grade Education.**

Block Group 3 had the largest number of persons who had not received a High School Diploma or a 9th to 12th grade Education 183 (34%)



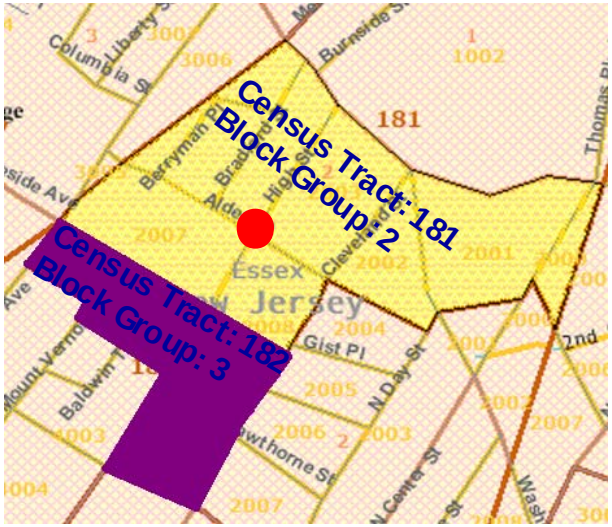
1990 and 2000 Household Composition

Household Compositon	City of Orange Township 2000	Percentage of Study Area to City of Orange Township	Study Area 2000	Percentage of Study Area 2000	Percent Change of Study Area 1990 and 2000
Married-couple family:	**3,743**	**7%**	**259**	**52%**	**-3%**
With own children under 18 Yrs.	1,950	7%	132	51%	-12%
No own children under 18 Yrs.	1,793	7%	127	49%	8%
Female householder, no husband present:	**3,153**	**6%**	**190**	**38%**	**19%**
With own children under 18 Yrs.	1,854	7%	130	68%	91%
No own children under 18 Yrs.	1,299	5%	60	32%	-34%
Total Households	**7,713**	7%	**502**	-	-92%

Issue:

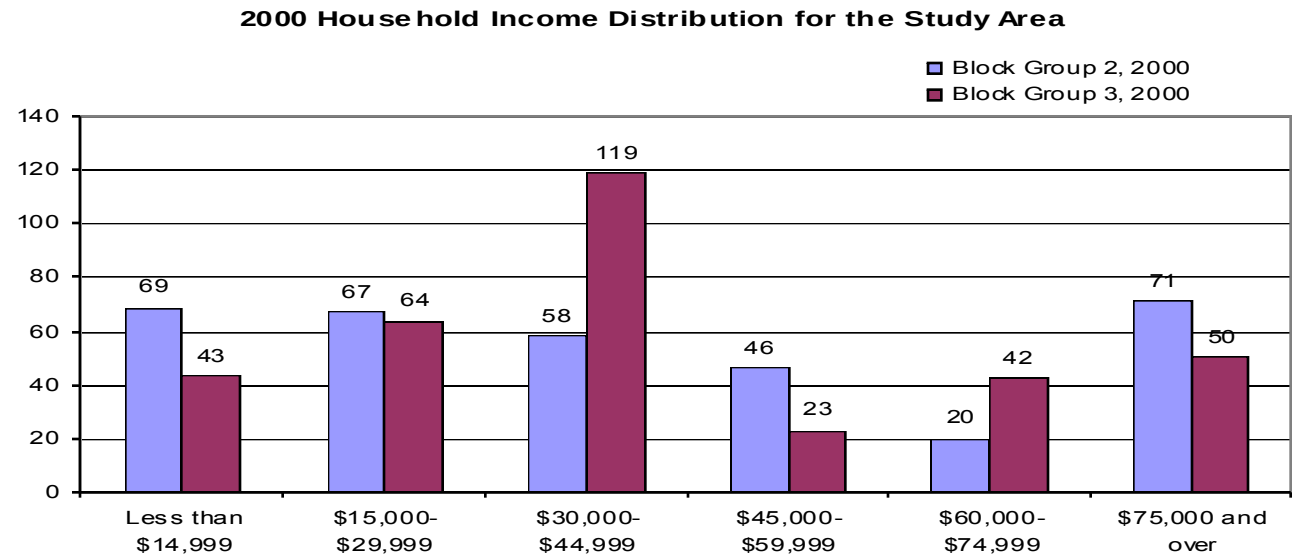
- **68% of female headed households living within our Study Area are with children under 18 yrs. of age**

Block Group 3 had the most Female headed households with children under 18 78 (31%)



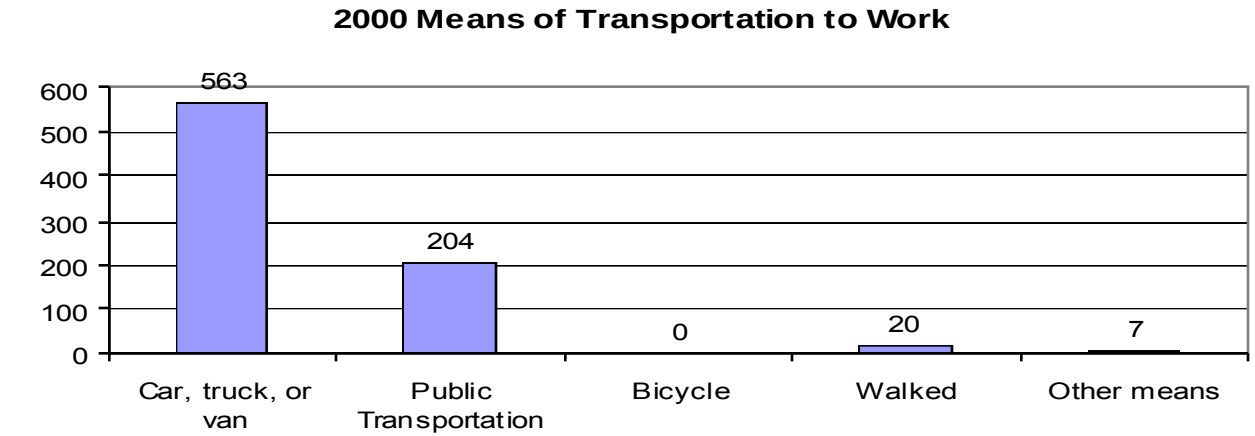
Source: U.S. Census Bureau

Household Income and Means of Transportation Data



Issues:

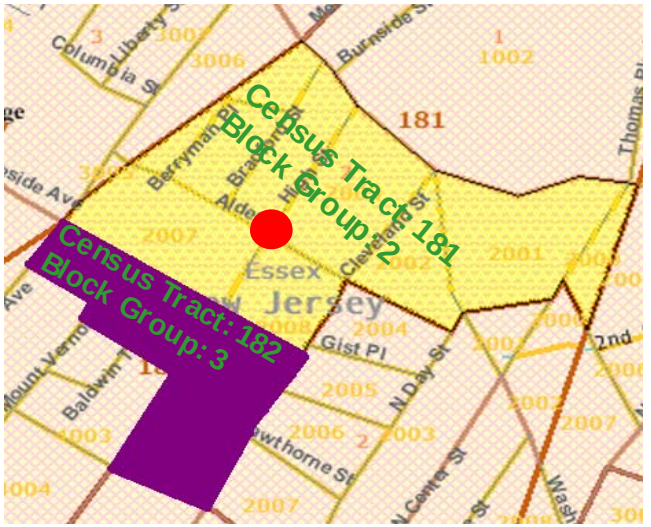
- **Over 30% of residents in our Study Area are earning between $30,000 and $44,999.**
- **Those earning $75,000 and over has increased by 195% in our Study Area.**
- **The Median Household Income for the City of Orange Township is $35,759.**
- **The Median Household Income for the Studv Area is $38.593.**



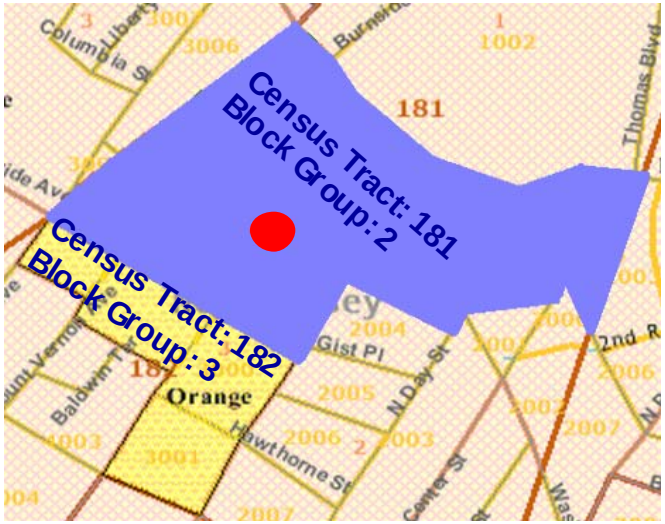
Issue:

- **Only 20 people in our Study Area walked as a mean to get to work.**

The Block Group 3 that had over 30% of residents in our Study Area earning between 30,000 and 44,999 119 (35%)



The block group that had the most amount of people who walked to work 20 (5%)



Source: U.S. Census Bureau

Natural Resources

Goal 4: Research Natural Resources for Project Site

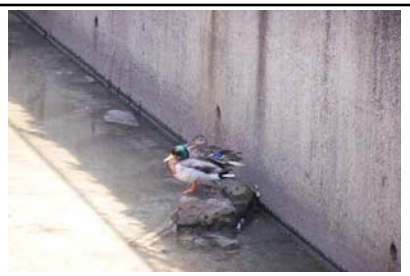
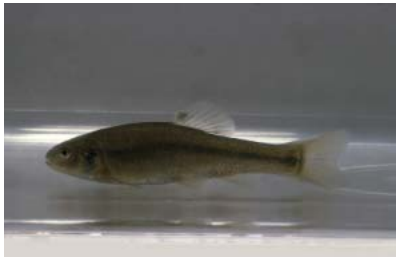
Objectives:

- Conduct site visit to determine what natural resources exist on the project site

- Identify and classify the natural resources for project site

Source: CTA Images

Natural Resources

Resources		Classification	Issue
Water		**Wigwam Brook** The water in the Wigwam Brook is a tributary of the Second River. The Second River is a tributary of the Passaic River. The Passaic River flows into Newark Bay. Newark Bay flows into the Atlantic Ocean.	Project Site connects to the Atlantic Ocean
Wildlife		**A female Mallard Duck and a male Mallard duck** (female, brown) (male, green) The Mallard ducks observed at the project site live near our site. The ducks can be observed during the morning and evening.	The Mallard ducks live in the area.
		**Fat-Headed Minnow Fish** A brown fish with white fins and a notch in its dorsal fin, the fathead can be found in muddy ponds, streams, and in small rivers that might otherwise be inhospitable to other species of fish. Also Minnows like to eat many types of microorganisms, insects and algae.	Fish live in Non-Source Pollution.
Vegetation		**Japanese Knot-Weed** This is a Japanese Knot-Weed that provides shade for the water to make it cooler. The Japanese Knot-Weed also attracts insects. The insects may also fall into the Brook and be eaten by fish.	Attracts insects which may fall into Wigwam Brook and can be a food source for fish.

Photos Source: CTA Images

Info Source: animals.nationalgeographic.com

Essex County Environmental Center

Identify The Neighborhood

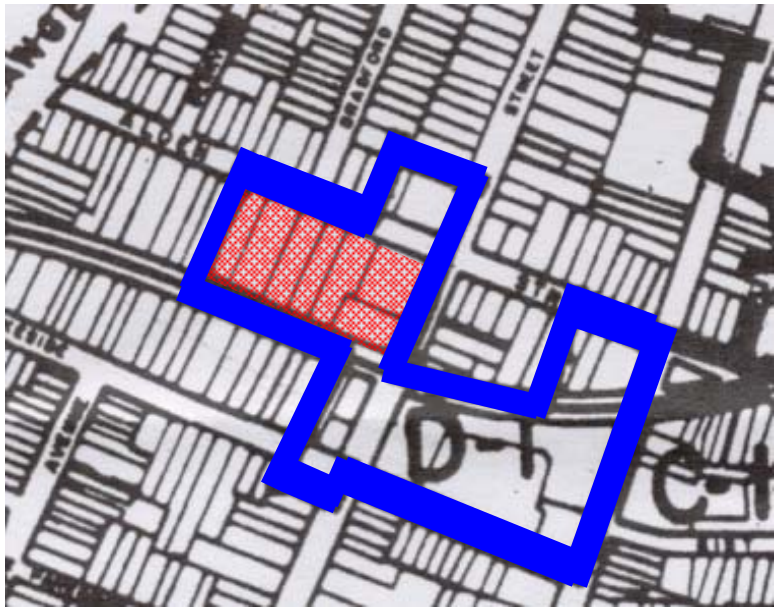
Goal 3: Conduct an Assessment

Objectives:

- Identify issues and make recommendations
- Define uniqueness of neighborhood
- Determine neighborhood character

Source: CTA Images

Zoning and Street Classification

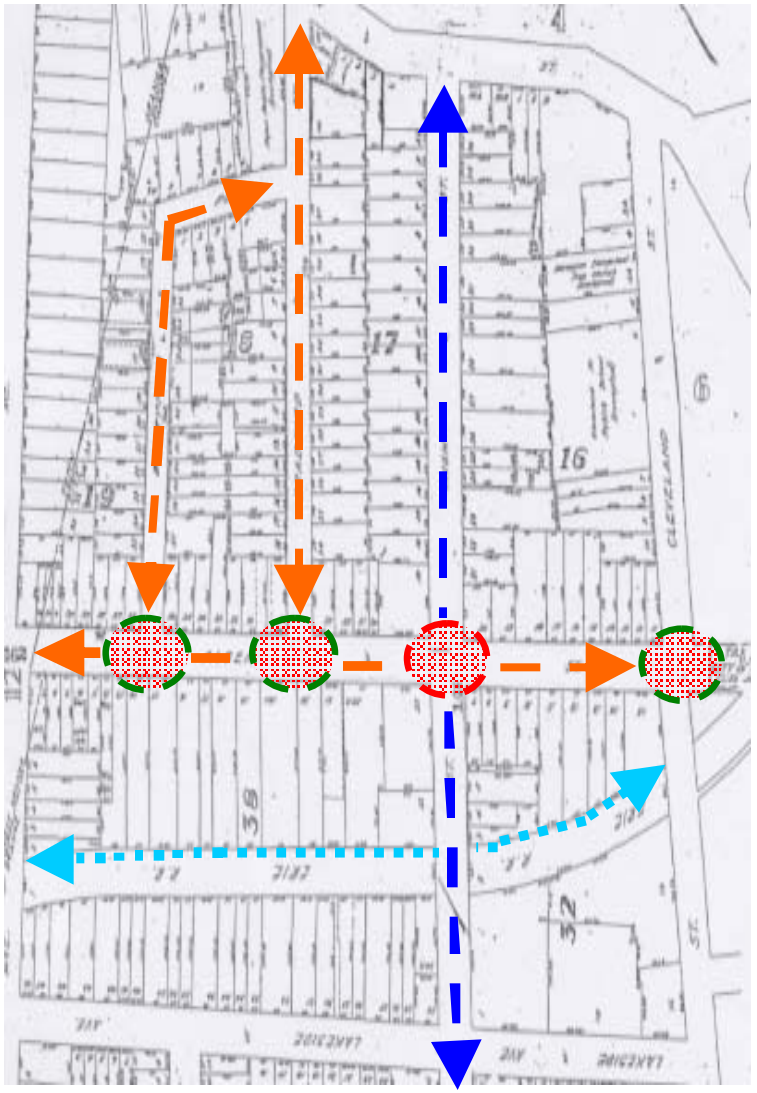


District	Principal Permitted Uses	Principal Conditional Uses
D-1 Industrial	• Recreation Centers An establishment, place or location whose primary use is to provide recreational activities and facilities for individuals or groups by providing courts, diamonds, fields, or enclosed facilities for the public enjoyment.	• Public institutional uses • Private institutional uses

Issues:

•Recreational centers are a principal permitted use in the D-1 District (Industrial) which includes parks.

Source: City of Orange Township Zoning Ordinance



Legend

Local Streets with direction two-way traffic

Collector Street with direction two-way traffic

Major Intersection

Intersection

Wigwam Brook

A ***collector street*** is a street that collects traffic from local streets and connects to major and minor arterials. A ***local street*** is a street designated to provide vehicular access to abutting property and to discourage through traffic.

Issues:

- Pedestrian Hierarchy not present
- Speeding cars along Alden and High Street

Source: City of Orange Township Tax Assessors Office

Classifications of a Neighborhood Park

•**Pocket Park:** the smallest park classification and should be used to address specific recreation needs, such as multiple family complex or adjacent to a shopping center.
•**Neighborhood Park:** should have facilities and improvements to accommodate use by more than one neighborhood.
•**Community Park:** the facilities and improvements installed in community parks must be planned and designed for heavy use by persons of all ages and from all areas of the community.

Park Classification	Acres/1,000 persons	Acres Needed	Existing Acres	Surplus or Deficiency
Pocket Park	0.25-0.50	0.5-1	2	1.5,1
Neighborhood Park	**1.0-2.0**	**2-4**	**4**	**2,(0)**
Community Park	5.0-8.0	10-16	2	(-8),(-14)

* Based upon U.S. Census Bureau 2000 study area population of 1,968 and is rounded to the nearest 1,000.

Source: National Recreation and Park Association's (NRPA)
Lufkin Parks and Recreation Facilities and Program Master Plan

Residential Development Near Project Site

Source: www.googlemaps.com

Tri-Corner Homes

307 Washington St., Orange
Comprised of 51 units in 1 Building
Expected Completion: 2008
Census Tract 181, Block Group 2
Total additional persons: 137

312 North Day Street

Millennium Homes at North Day

312 & 284 North Day St., Orange
Comprised of 39 units in 2 Buildings
Date Completed: 2005
Total additional persons: 105

284 North Day Street

Source: RPM Development

Public Health Project Goals

<u>Goal 1:</u> Decrease health disparities in minorities relating to physical activity

<u>Goal 2:</u> Increase environmental awareness and physical activity in the neighborhood

<u>Goal 3:</u> Develop recommendations for the creation of a park that will increase physical activity and quality of life

Health Disparities Research

Goal 1: Decrease health disparities in minorities relating to physical activity

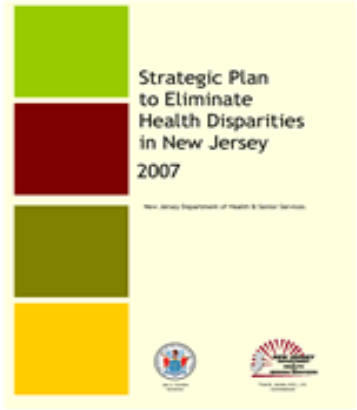
Objective: Connect goal with healthy people 2010 & NJ Strategic Plan to Eliminate Heath Disparities

Healthy People 2010 is a set of health objectives for the nation to achieve over the first decade of the new century.

Objectives:

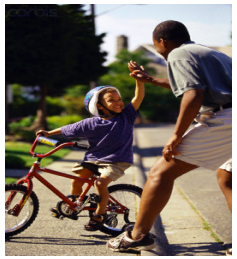
- **Physical Activity in Adults**
  Moderate physical activity
  Vigorous physical activity
- **Physical Activity in Children and Adolescents**
  Physical activity in physical education class

Connecting Goal: Improve health, fitness, and quality of life through daily physical activity. Healthy People 2010 challenges individuals, communities, and professionals indeed, all of us to take specific steps to ensure that good health, as well as long life, are enjoyed by all.



The plan was made by the New Jersey Department of Health and Senior Services.

Connecting Goal: To decrease disparities in obesity and increase healthy eating and physical activity across the lifespan among high risk groups (including Black and Hispanic populations and those with low socioeconomic status) in New Jersey.



Health Disparities

Differences in the incidence, prevalence, mortality, and burden of diseases and other adverse health conditions that exist among specific population groups in the United States

Health Disparities that connect to our site:

Diabetes

Cardiovascular

Adult and Youth Quantitative Data

Goal 1: Decrease health disparities in minorities relating to physical activity

Objective: Utilize BRFSS & YRBSS databases to display physical activity statistics on adults & youth

BRFSS
Behavioral Risk Factor Surveillance System

Adults Engaging in Moderate or Vigorous Physical Activity(18 and Over)

- Gender
- Race
- Education
- Income
- Metro/ Micropolitan

Healthy Youth!

Youth Risk Behavioral Surveillance System (Y.R.B.S.S.)

Youth Engaging in Moderate Physical Activity (6-19)

- Gender
- Race

Moderate Physical Activity refers to a level of effort in which a person should experience some increase in breathing or heart rate.

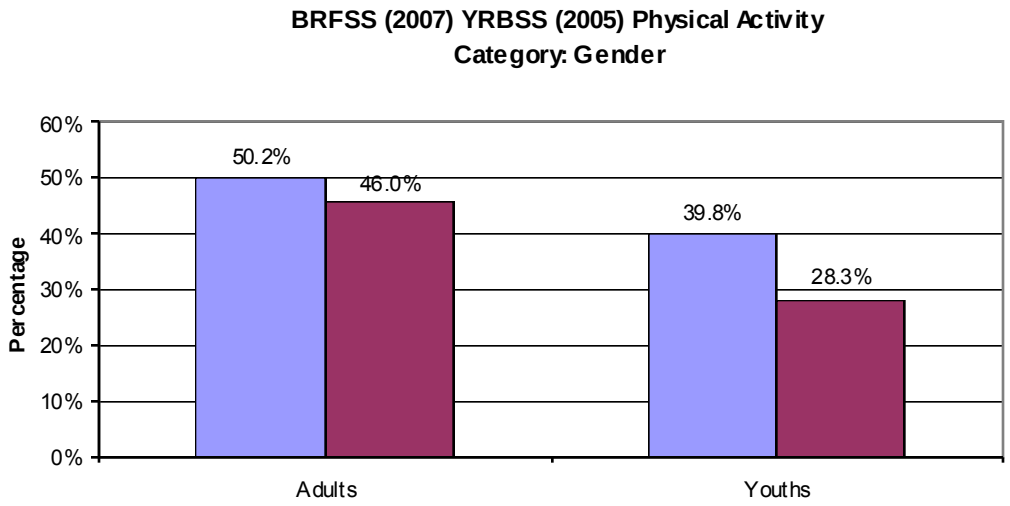
Examples:
Hiking
Dancing
Bicycling

Vigorous Physical Activity may be intense enough to represent a substantial challenge to an individual and refers to a level effort in which a person should experience a large increase in breathing or heart rate.

Examples:
Aerobic
Swimming
Basketball

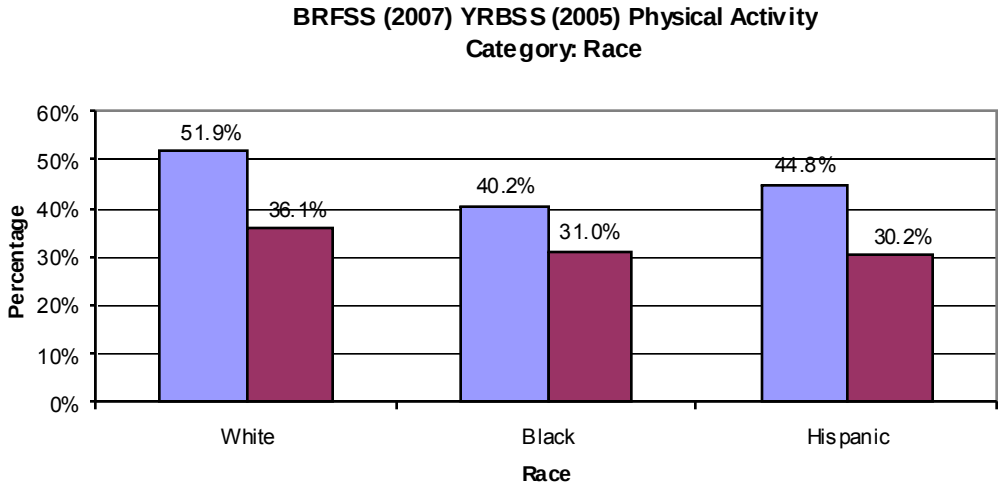
State Data for Adults & Youth by Gender & Race

Adults: Adults with 30+ minutes of moderate physical activity five or more days per week, or vigorous physical activity for 20+ minutes three or more days per week.
Youth: Students who engaged in moderate physical activity for at least 60 minutes per day on most days



Gender Issue:

• On the State Level, youth males and adult males engage in more physical activity than females whether its moderate or vigorous with more than 50%.



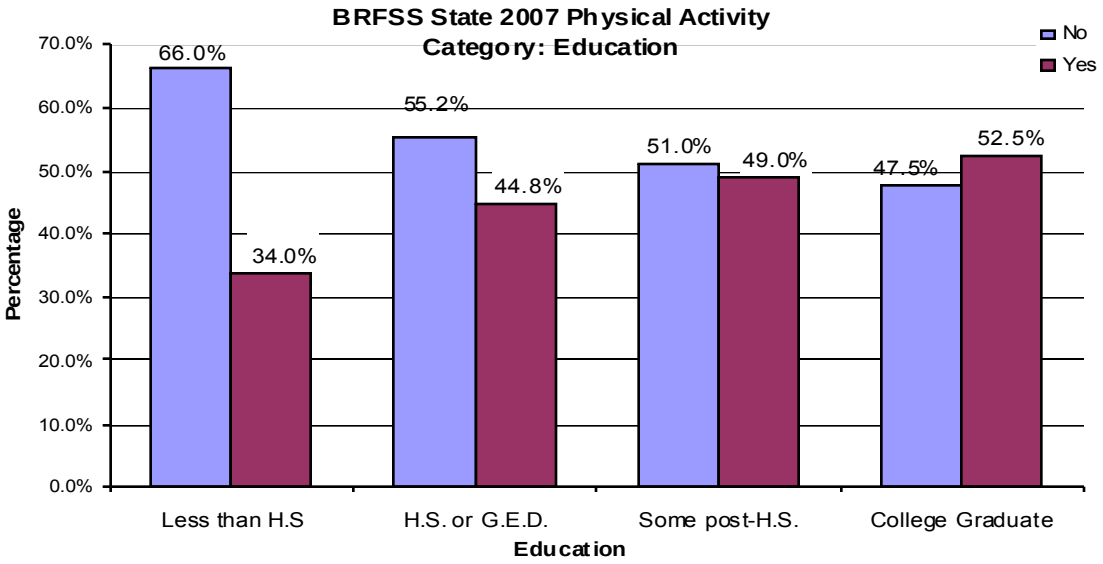
Race Issue:

• On the State Level, Black, Hispanic youth and adults engage in the least amount of physical activity whether its moderate or vigorous with more than 40%.

Source: www.cdc.gov/brfss
www.cdc.gov/YRBSS

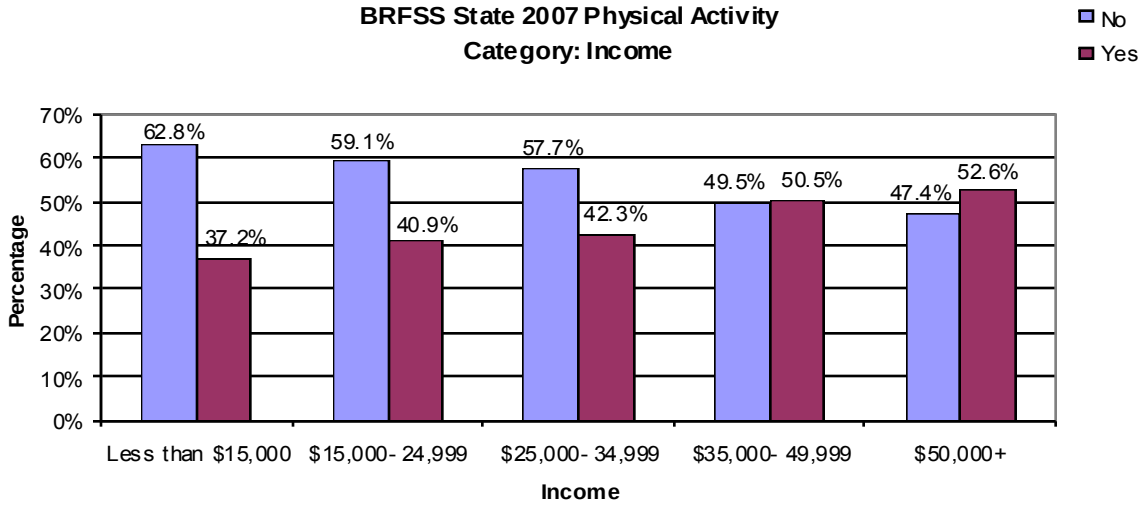
State Data for Adults by Education & Income

Adults with 30+ minutes of moderate physical activity five or more days per week, or vigorous physical activity for 20+ minutes three or more days per week.



Education Issue:

•34% of adults with less than a high school education engage in the least amount of physical activity.



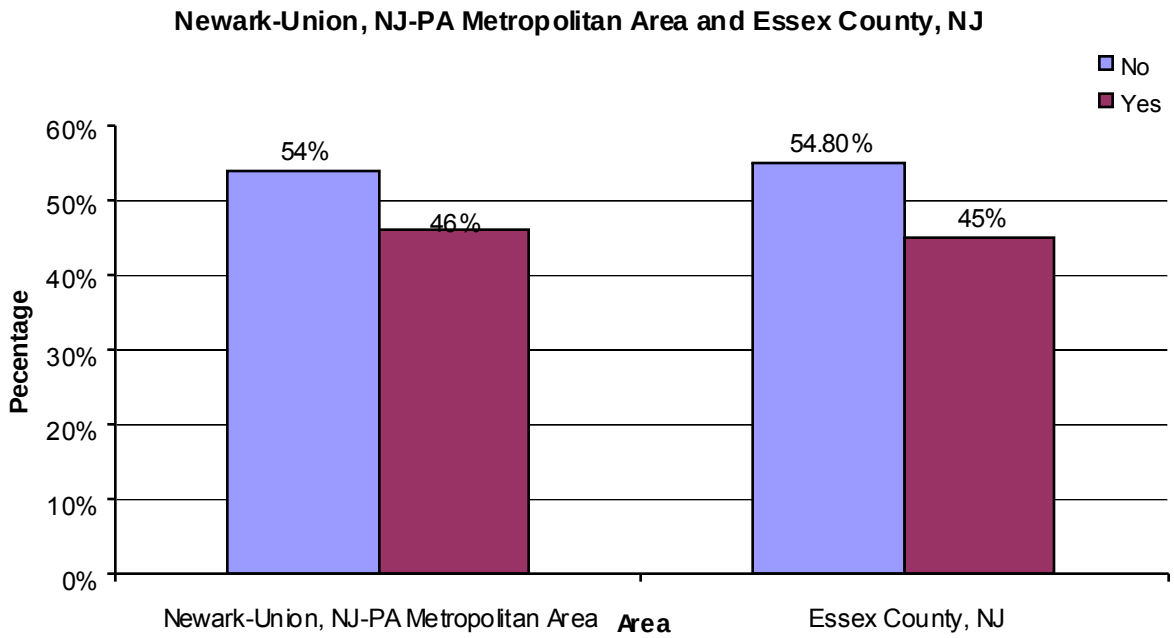
Income Issue:

•62.8% of adults who earned less than $15,000 engage in the least amount of physical activity.

Source: www.cdc.gov/brfss

Metropolitan and Micropolitan Data for Adults

Adults with 30+ minutes of moderate physical activity five or more days per week, or vigorous physical activity for 20+ minutes three or more days per week.



Issue:

• Over 50% of adults on both the Metropolitan and Micropolitian levels responded no to participating in moderate or vigorous physical activity.

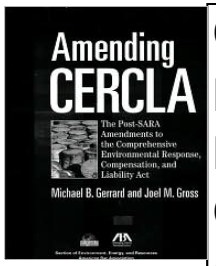
Source: www.cdc.gov/brfss

Environmental Policies

<u>Goal 2:</u> Increase environmental awareness and physical activity in the neighborhood

Objective :Educate the community about environmental concerns relating to the project site

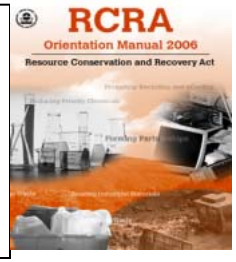
Clean Water Act (CWA)



Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA)

Occupational Safety and Health Act (OSHA)

Resource Conservation and Recovery Act (RCRA)



Environmental Policies

Policies	Relationship to Project Site	Outcome
Occupational Safety and Health Act (OSHA)	Workers were affected and experienced health effects such as being exposed to radiation and inhaling radioactive dust	The Occupational Safety and Heath Act was created
Occupational Safety and Health Act (OSHA)	The Radium Girls developed bone cancer and had swollen jaws due to the effects of the radium	
Clean Water Act (CWA)	In 2006 Uranium was found in the ground water sample of Well P-2	**Monitoring** will be conducted for a period of at least 5 years to assure that concentrations of uranium decline and the no- action remains appropriate. The monitoring started in 2006
Clean Water Act (CWA)	In May 1981 their was three different types of radioactive chemicals found in the water: radium, thorium, and uranium. The contaminated water also affected properties in Montclair, West Orange, and Glen Ridge	They monitored the water until it was at drinking water level
Resource Conservation and Recovery Act (RCRA)	1/2 to 2 tons of ore per day was processed and disposed of on and off the property	Resource Conservation and Recovery Act's (RCRA) strict and regulatory program was put in place
Resource Conservation and Recovery Act (RCRA)	Excavation and off-site disposal of radium-contaminated material at the former U.S. Radium plant site	Remedial action for the U.S. Radium plant site began in September 1998 and was completed in September 2001
Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA)	No further fund-financed action needed at this property due to the fact that the site is already remediated	Creation of Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA)

Physical Activity Education

Goal 2: Increase environmental awareness and physical activity in the neighborhood

Objective: Create pamphlets on the benefits of physical activity

Activity Calorie Burner

This is an approximation of calories burned for a person weighing 154 pounds. Those weighing more will burn more calories and those weighing less will burn less calories.

Moderate Physical Activity	Approximate Calories Burned in 1 hr.	Approximate Calories Burned in 30 min.
Light gardening/yard work	330	165
Dancing	330	165
Bicycling (<10mph)	290	145
Walking (3 1/2 mph)	280	140
Weight Lifting	220	110
Stretching	180	90
Vigorous Physical Activity	**1 Hr.**	**30 min.**
Running/Jogging (5mph)	590	295
Bicycling (>10mph)	590	295
Swimming (slow freestyle laps)	510	255

PhotoSource: pro.corbis.com

GET PHYSICALLY ACTIVE!

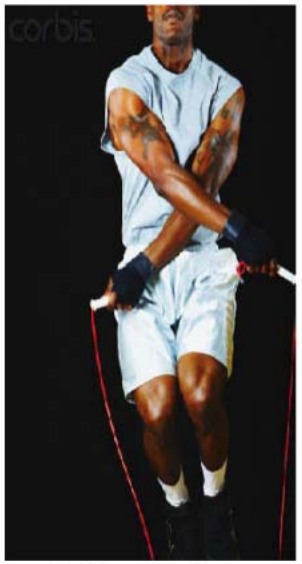
Most adults do not need to consult their physician before engaging in moderate-intensity physical activity . However, if you plan on engaging in a vigorous intensity activity, men over 40 and females over 50 should consult their physician. Anyone who has a known cardiovascular disease or who has already had a major cardiovascular event (i.e. heart attack, stroke) should have a physical evaluation before engaging in any physical activity.

References:
www.cdc.gov
www.fns.usda.gov

Community Technical Assistance
7 Glenwood Ave., Suite 407
East Orange New Jersey 07017
Phone: 973-395-0775
Fax: 973-395-1134

Community Technical Assistance Inc.

Facts About Physical Activity



PhotoSource:procorbis.com

Community Technical Assistance Inc.
7 Glenwood Ave., Suite 407
East Orange, NJ 07017

Tel: 973-395-0775

Case Study Research

Goal 3: Develop recommendations for the creation of a park that will increase physical activity and quality of life

Objective: Research case studies of similar projects.

Case Studies

- **Case Study 1: Scenic Hudson Park**

  Location: Irvington, New York

  When: 2001

- **Case Study 2: Ping Tom Memorial Park**

  Location: South of Downtown Chicago

  When: 2003

- **Case Study 3: Riverside Park**

  Location: Lewiston, Maine

  When: 2007

Scenic Hudson Park in Irvington, NY.

Ping Tom Memorial Park

Riverside Park

Case Study 1: Scenic Hudson Park

Location: Irvington, New York (Along Hudson River)

When: Spring 2001

Overview:

• Prompted by the state's Clean Water/Clean Air Bond Act

• Industrial brownfield site was turned into a $12.8 million waterfront park.

Issues:

• Contained 7 ½ miles of contaminated and deteriorated shoreline

• Irvington officials and residents protested about the site being reconstructed

• New Yorkers are taking their turn to reclaim useful land

Scenic Hudson Park in Irvington, NY.

Recommendations:

•A softball/little league field that can be overlain with soccer/football field

•Restrooms

Scenic Hudson Park in Irvington, NY.

Source: American City & County

Case Study 2: Ping Tom Memorial Park

Location: South of Downtown Chicago

When: Summer of 2003

Overview: 12 acre of old rail yard that was turned into a new park facility.

Issues:

• Contaminated with low levels of poly-aromatic hydrocarbons

• Met Illinois' Environmental Protection Agency's (EPA) residential standards and did not require remediation

Ping Tom Memorial Park (Before)

Recommendations:

The park was created to suit the cultural needs of the Asian community in the neighborhood

The park was divided into two parts:

Passive park which includes:

- Traditional Chinese gardens
- Walking trail
- Riverfront pavilion
- Children's playground

Active recreation which includes:

- Field house
- Swimming pool
- Ball fields

Ping Tom Memorial Park (After)

Source: American City & County

Case Study 3: Riverside Park

Location: Lewiston, Maine

When: March 2007

Overview: Abandoned manufactured gas plant (MGP) was turned into a public riverside park.

Issues:
• The site had a severely eroded riverbank containing solidified coal tar and other MGP residuals.

• Potential public health hazard and environmental concern, the riverbank was the source of offensive odors.

Recommendations:
•Keep the public informed through:
•Public meetings

•Newspaper articles.

Former Brownfield Site

Riverside Park

Source: http://www.cenews.com/article.asp?id=2350

Case Study Summary

Case Study 1: Scenic Hudson Park

Former industrial site was turned into a 12-acre waterfront park

New Yorkers are taking their turn to reclaim useful land.

Residents are able to engage in more physical activity with the:

- baseball
- softball
- soccer
- football field
- restrooms

Scenic Hudson Park in Irvington, NY.

Case Study 2: Ping Tom Memorial Park

The park was divided into two parts:

•The first part is a passive park that includes traditional Chinese gardens, a walking trail, a riverfront pavilion and a children's playground.

•The second part of the park will consist of more active recreation uses, including a field house, swimming pool and ball fields.

Ping Tom Memorial Park

Case Study 3: Riverside Park

•It was an abandoned gas plant turned into a public riverside park.

•We should keep the public informed by public meetings and newspaper articles.

•Keep the neighborhood informed on where we are with creating our park.

Riverside Park

Quality of Life and Physical Activity Research Data

Goal 3: Develop recommendations for the creation of a park that will increase physical activity and quality of life

Objective: Distribute a quality of life and physical activity survey to the neighborhood

Focus Area Map

Legend

- Project Site
- Focus Area
- Census Tract 181

Boundaries of Focus Area

North- Washington Street

East- N. Day, Alden, and Cleveland Streets

South- Lakeside Avenue

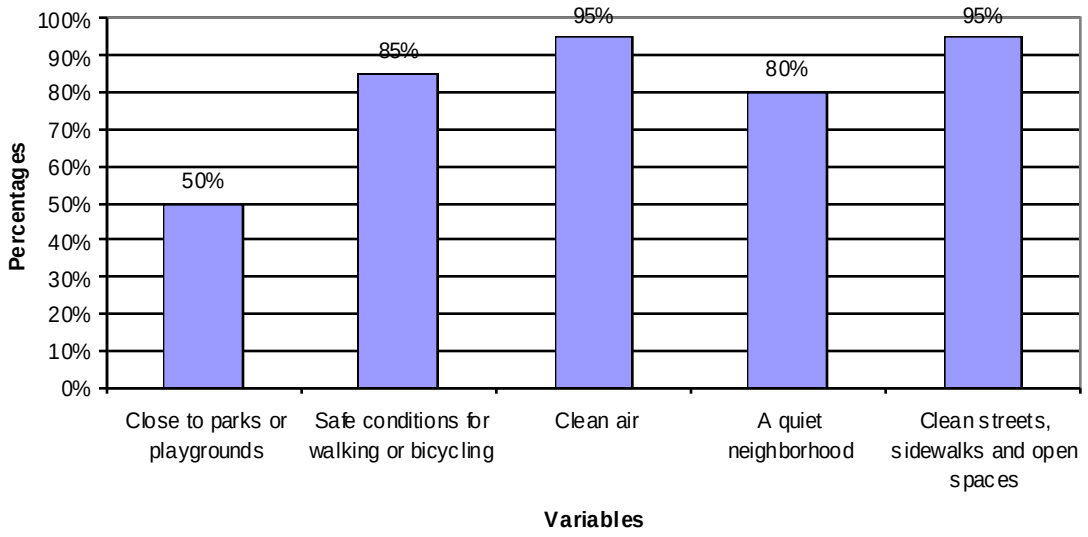
West- Watchung Ave and West Orange Boarder

•259 Total Surveys Distributed to Residents within the Focus Area

•Results of Surveys were recorded using EpiInfo Software

Residents' Views and Current Quality of Life Conditions

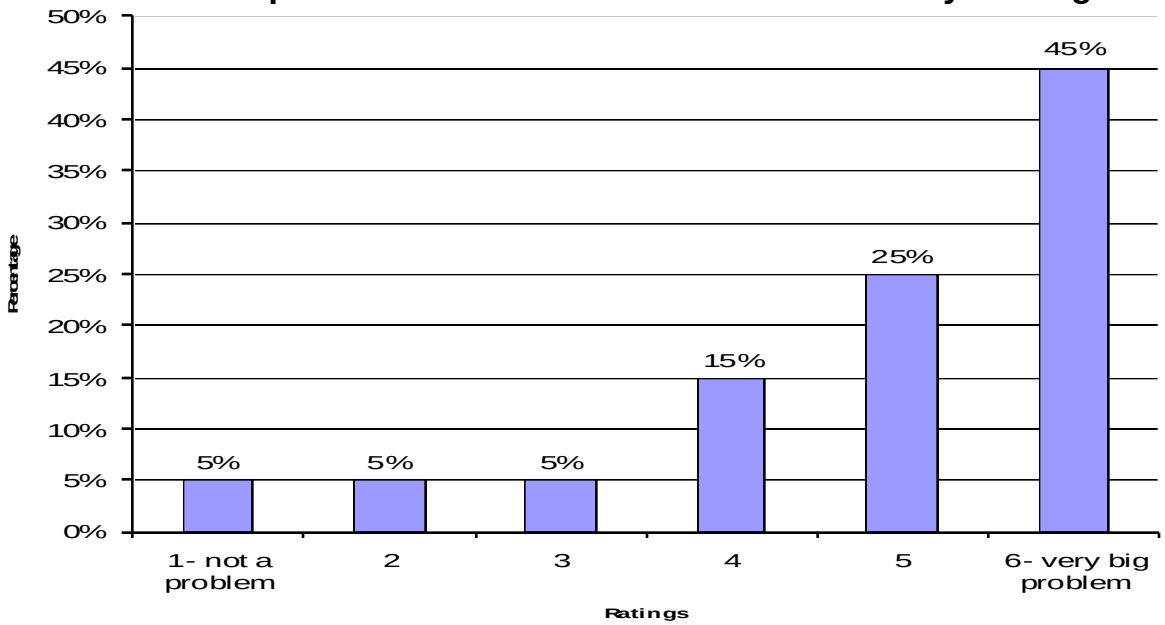
In your view, how IMPORTANT are each of these features to the overall quality of your neighborhood?



Result:

95% of residents believe that clean air, clean streets, side walks and open spaces are important

How much of a problem is the lack of cultural activities in your neighborhood?

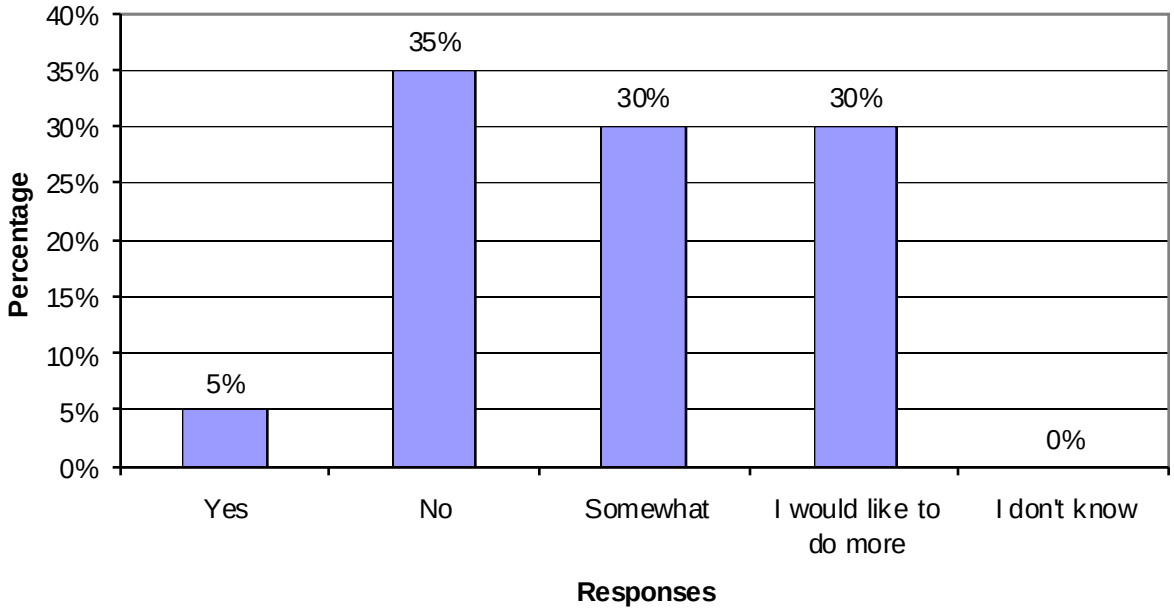


Result:

45% of residents believe that their neighborhood lacks cultural activities

Residents' Views on Physical Activity

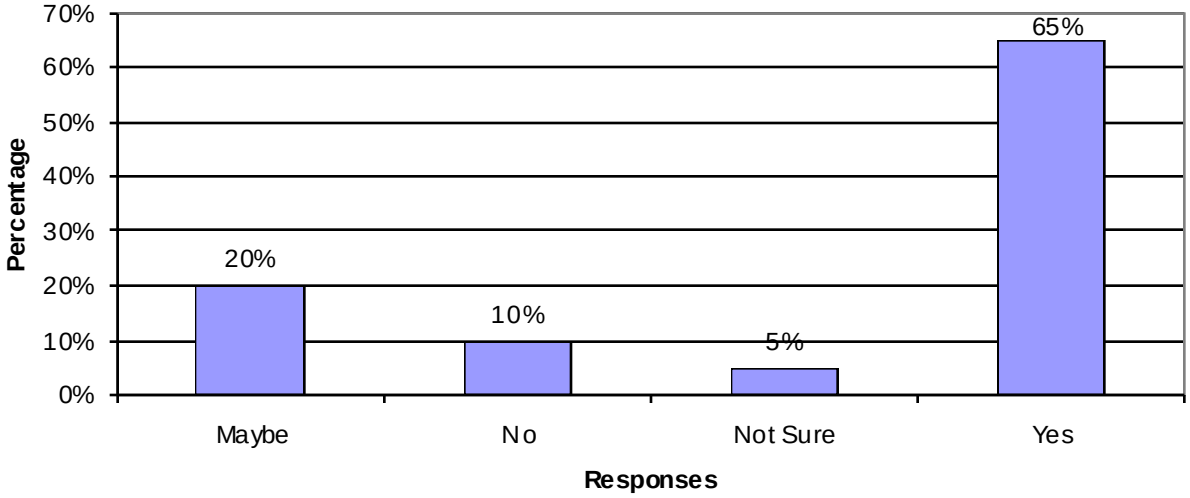
Do you believe you are doing enough physical activity?



Result:

95% of the residents believe that they are not doing enough physical activity

Do you think you would engage in more physical activity if you had better access to improved parks?



Result:

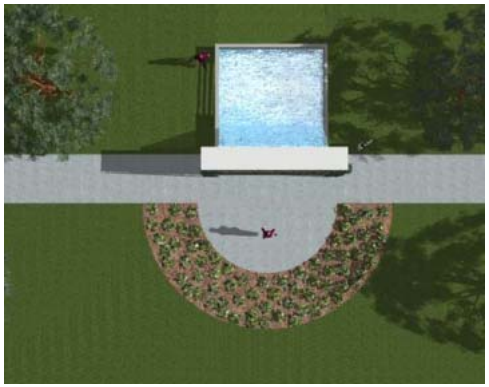
65% of residents believe they would workout more if they had better access to improved parks

Visioning and Recommendation Solutions

Goal:5 Create a Vision Plan

Objectives:

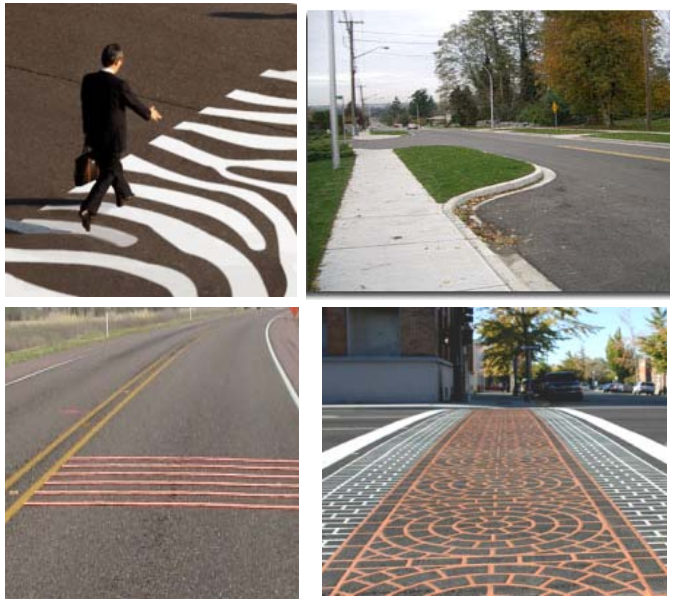
- Research types of neighborhood park design
- Address Critical Issues Relating to Project
- Provide solutions for design



Source: CTA Images

Pedestrian Hierarchy

Site Plan



Site Elements for Pedestrian Hierarchy

Perspective Street View

Goal and Design Solutions:

Goal 1: Emphasize Pedestrian Hierarchy

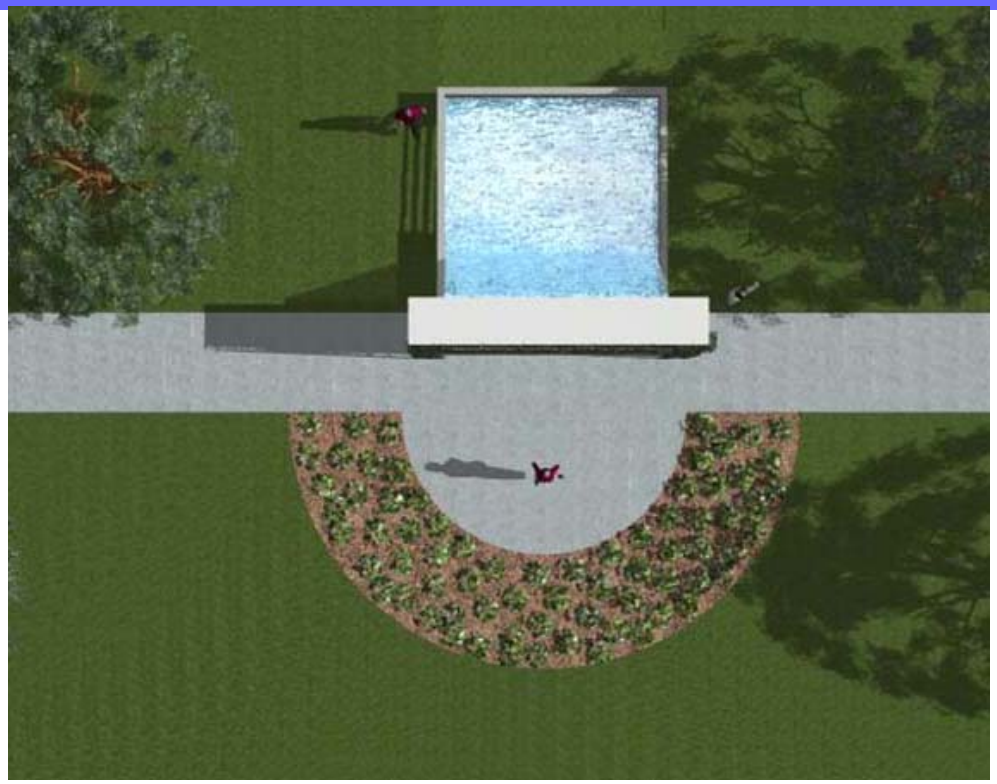
Design Solution: **Signage and traffic calming devices such as traffic lights, stop signs, warning lights, crosswalk, intersection circle and rumble strips**

Goal 2: Traffic Calming devices

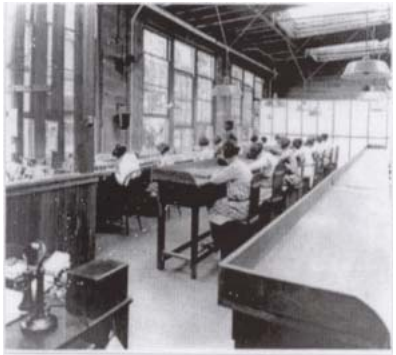
Design Solution: **Signage and traffic calming devices such as traffic lights, stop signs, warning lights, crosswalk, intersection circle and rumble strips**

Historical Recommendations

Site Plan of US Radium Corporation Historical Memorial



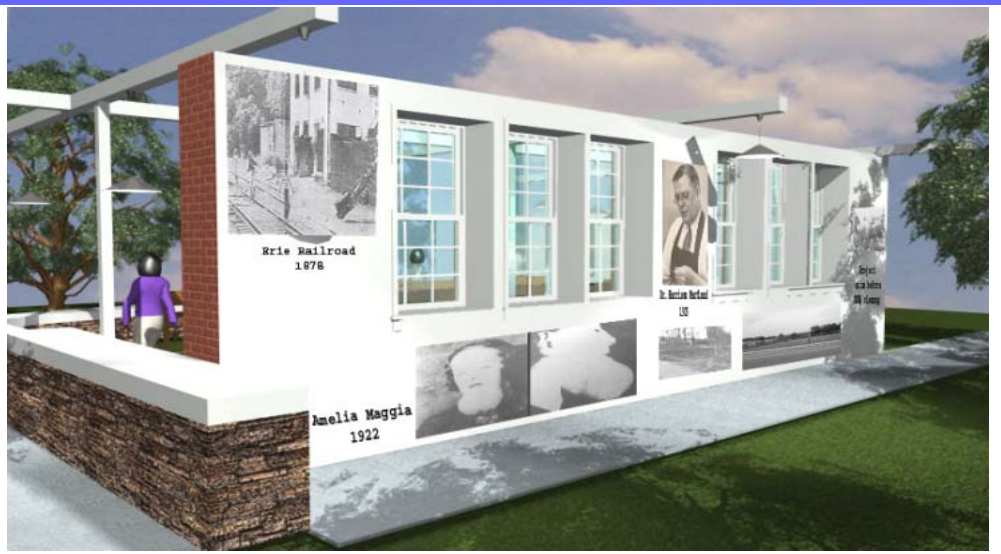
Site Plan of the Grace Fryer Monument



Radium dial painters working in a factory

Historical Recommendations

Perspective of US Radium Corporation Historical Memorial



Perspective of US Radium Corporation Historical Memorial

Site Elements for Memorial

<u>Goal and Design Solutions:</u>

Goal 1: Identify the workers at the US Radium Corporation and those who died from radium poisoning.

Design Solution: Memorial or plaques to commemorate the workers

Goal 2: Identify the findings of Dr. Harrison Martland

Design Solution: Engrave quotes from Dr. Harrison Martlands findings from the Journal of American Medicine

Historical Recommendations

Perspective of Grace Fryer Monument

Perspective of the Water Feature at rear of Grace Fryer Monument

Site Elements for Water Feature

Goal and Design Solutions:

Goal 3: Identify if the US Radium Corporation operated at any other site

Design Solution: Incorporate images of the US Radium Corporation that was located on Alden and High St.

Goal 4: Identify other companies that operated at the former US Radium Corporation site

Design Solution: Build replicas of products produced by the other companies

Historical Aspects of the Community and Culturally Designed Programs

Historical Goals/Solutions:

•Increase the quality of life on how people look at their community.

Benefits:

• Increase the awareness of the site's history and prevents future health problems and deaths

• Increase the awareness and appreciation of the area's rich history

Cultural Goals/Solutions:

•To increase the percentage of the adult black population engaging in physical activity by 10%.

•Increase the quality of life on how people look at their community

Benefits:

• Promotes closer ties between cultures

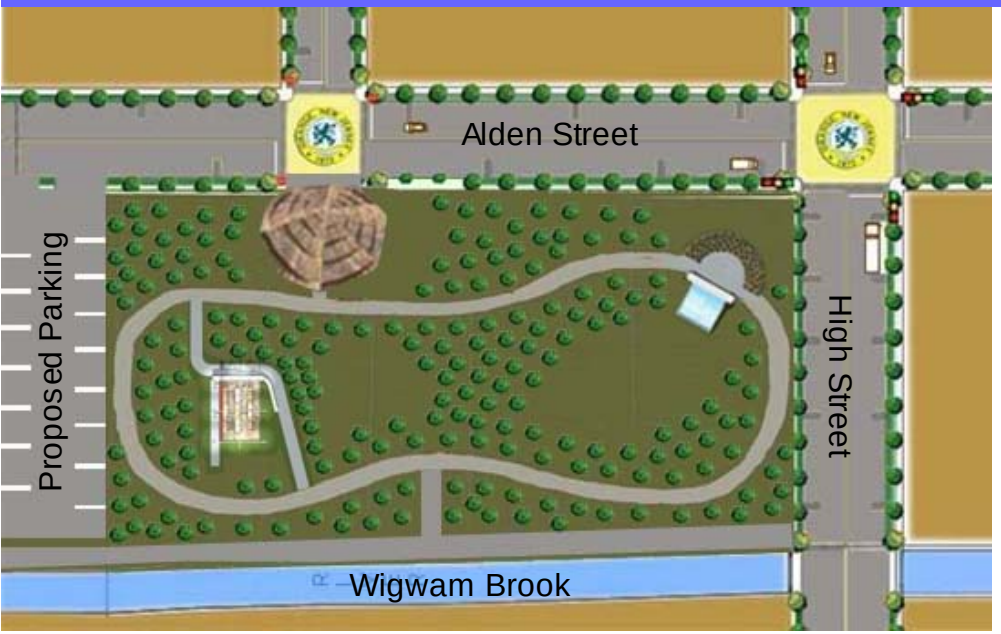
• Provides opportunities for a culture to learn more about themselves through an assortment of activities

• Quality of Life and Physical Activity Survey results, 45% of the residents living in our project area believe that their neighborhood lacks cultural activities

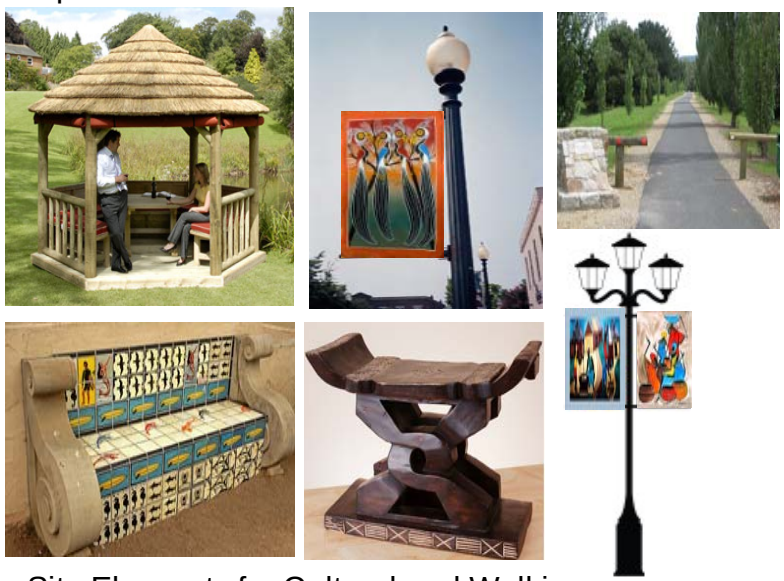
Source: www.german-info.com/images/travel_images

http://cancer.iu.edu/about/images/Black_

Cultural and Walking Recommendations



Proposed Site Plan



Site Elements for Cultural and Walking

Aerial of Proposed Cultural and Educational Literacy Center

Goal and Design Solutions:

Goal 1: Reflect the culture of the people though design

Design Solution: Art and literature

Goal 2: Increase literacy by providing a GED Program

Design Solution: Learning Facility

Goal 3: Create more options to walk

Design Solution: Provide a walking track

Track & Safe Conditions for Walking/Bicycling

Track Goals/Solutions:

•Improve the conditions for walking and bicycling

Benefits:

• Increase the amount of physical activity that people participate in

• Based on the Quality of Life and Physical Activity Survey results, the residents living in the neighborhood believe that they are not doing enough physical activity, so adding a track would encourage and help them engage in more physical activity

• 60% of the residents living in the neighborhood responded to partaking in walking and jogging than the other activities

Walking and Bicycling Goals/Solutions:

•Improve the quality of life on how people look at their community

Benefits:

• Allows people to engage in some type of physical activity

• Reduce the use of automobiles, thus decreasing air and noise pollution and the overall level of traffic danger

• Based on the Quality of Life and Physical Activity Survey results, it showed that 60% of residents don't believe conditions for walking or bicycling are very safe

• Based on the Quality of Life and Physical Activity Survey results, it showed that 35% of residents partake in walking or jogging

Open Space & Restrooms Recommendations

Open Space Goals/Solutions:

•To make sure the neighborhood meets the standards of the residents.

•Increase access to open space

Benefits:

• Increases recreational opportunities such as active and passive recreation which requires open space

• Increases the attractiveness of the places in which people live and work and improve the environment

• In the Quality of Life and Physical Activity Survey results, 95% of the residents responded that open spaces, clean streets, and sidewalks are important

• New Yorkers in Irvington, New York took a chance and reclaimed useful land in order to build a park

Restroom Goals/Solutions:

•Increase the quality of life on how people look at their community.

Benefits:

• While engaging in physical activity, park users need fluid, which will eventually make them use the restrooms.

• Park Users won't be interrupted from partaking in physical activity and they won't need to go home in order to use the restroom.

Mayors Wellness Campaign & Health Fairs

Health Fairs Goals/Solutions:

•To provide space, increase awareness, and engage more adults in physical activity

Benefits:

• Organization whose goal is educating and motivating local civic leaders to improve the health of their communities

• Educate local public officials , such as town mayors and other decisions makers, so that they may enact initiatives at the local community level to promote healthy and active lifestyles for everyone

Wellness Campaign Goals/Solutions:

•To provide space, increase awareness, and engage more adults in physical activity

Benefits:

• Provides valuable health information to people that can help them improve their personal health and well-being

• Offer free or low-cost health awareness and educational screenings in communities

• Encourages individuals to assume responsibility for their own health

Perspective of Grace Fryer Monument

Appendices

History
Demographic Data
Political Representatives
Presentation Boards

U.S. Radium Corporation Timeline

1878	Railroad line complete[i]
Mid-1880's	Property developed and used as an iron foundry and machine shop until 1917[ii]
1915	-A portion of the iron foundry property was leased to the U.S. Radium Corporation (USR) to begin a small radium extraction and luminous dial painting operation -USR began processing 2 tons of carnotite per day, with each ton yielding only5-7 milligrams of radium[iii]
1916	USR expanded its extraction and dial painting operations[iv]
1917	-As the demand for luminous paints (Undark) during WWI increased, USR purchased the remaining property and constructed additional extraction facilities, a laboratory, and additional paint application facilities[v] -Spring: Some 70 women were hired to work at the plant including Grace Fryer, Albina Larice, Quinta McDonald, Edna Hussman, and Katherine Schaub[vi]
1922	Amelia Maggia, sister of Albina Larice and Quinta McDonald (who also worked for USR), died and was buried at Rosemont Cemetery in Orange, NJ [vii]
1925	-July: Grace Fryer began experiencing bone decay. A doctor suggested that it was caused by her former occupation at the U.S. Radium Corporation [viii] -36 year old man, former chemist at USR dies of anemia; Dr. Harrison Martland, Essex County medical examiner investigates -Martland turned for help to an expert on radiation, Dr. Sabin A. von Sochocky, founder and the technical director of USR -Martland, von Sochocky, and two local doctors rigged up a some sort of Geiger counter to find out if other people who had worked in the factory had been contaminated [ix]
1926	-The U.S. Radium Corporation discontinued its radium processing operations at Alden and High Streets and moved their processing facility to another location [x] -The U.S. Radium Corporation reached out-of-court settlements with the families of other radium workers paying a total of $13,000 in three cases [xi]
1927	-May 18: Raymond Berry, a young Newark attorney, filed a lawsuit on behalf of Grace Fryer -May: Albina Larice, Quinta McDonald, Edna Hussman, and Katherine Schaub joined the lawsuit -October 16: Amelia's body was exhumed and an autopsy revealed that her bones were highly radioactive[xii]
1928	-Jan 11: The first court hearing; the women could not raise their hands to take the oath -April 25: After the hearing, the chancery court judge adjourned the case until September -June: Settlement made weeks before upcoming trial date; Women received $10,000 each and a $600 annuity. While they live, all legal and medical bills incurred, as well as future medical expenses, will be paid by the company [xiii]
1929	The ore-processing and watch-painting buildings (USR) were torn down [xiv]

1930	Factory closes as a result of study by Essex County Medical Examiner Dr. Harrison Martland which linked radium poisoning to the deaths of at least 50 U.S. Radium Corporation workers[xv]
1942	Lots 21 and 22 of the U.S. Radium Corporation were sold [xvi]
1943	The U.S. Radium Corporation sold its property to Arpin products [xvii]
1949	Lot 22 of the U.S. Radium Corporation was sold [xviii]
1959	Creamaseal Industries (a glass industry for electric parts) purchased the remnants of the factory [xix]
1969	T and E industries rented the site [xx]
1974 1978	T and E industries bought the site [xxi] The property was purchased by the City of Orange Township with the Green Acres Fund; it was purchased in hopes of developing a recreation area [xxii]
1979	The Department of Environmental Protection (DEP) report found that high gamma radiation concentrates were present in the air and soil samples which put a strain on the City of Orange Township's plan for development [xxiii]
1980	EPA & NJDEP began investigating the former radium site. This investigation leads to the identification of several large areas in Montclair, West Orange, and Glen Ridge that have contaminated soil [xxiv]
1983	The site was targeted for EPA superfund hazardous waste remediation[xxv]
1991	Over 230 homeowners filed a class-action suit against Safety Light Corp., the successor of U.S. Radium; They settled for $4.2 million [xxvi]
1998	Remediation began [xxvii]
1999	May: Cleanup of source area soils was completed[xxviii]
2003	Groundwater remedial investigation began [xxix]
2005	Oct. 4: EPA's two-decade-long presence at the site came to an end with the simple removal of a staging-field trailer [xxx]

Appendix- Demographic Section:

Demographic Profile:

The data gathered for the study area is extracted from the Census 2000 Summary File 3 and was reported by the United States Census Bureau. The data is extracted for the years 1990 and 2000 for the City of Orange Township and the study area.

The City of Orange Township consists of six census tracts and four wards, of which the study area has 2 census tract (181 and 182) and four wards, north, south, east, and west.

The documented text and charts indicates the important findings of the gathered data, which the tables represents information for the year 2000. A more detailed review of the census data from 1990 and 2000 is located in the Census Section of the Appendices.

The facts are organized for the population's Social Characteristics, followed by their Economic Profiles, and conclude with Means of Transportation.

1990-2000 Total Population

Study Area

Population	C.O.T. 1990	C.O.T. 2000	Percent Change of C.O.T	Study Area 1990	Study Area 2000	Percent Change of Study Area	Percentage of	Percentage of C.O.T
Total Population	29,925	32,868	10%	1783	1,968	10%	100%	6%

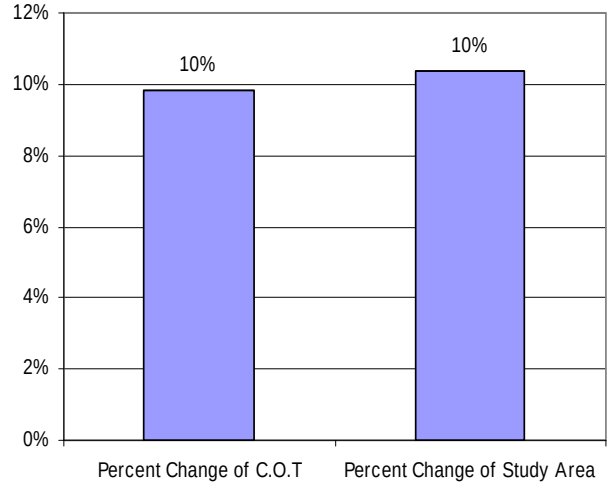
Source: Census 1990 and 2000

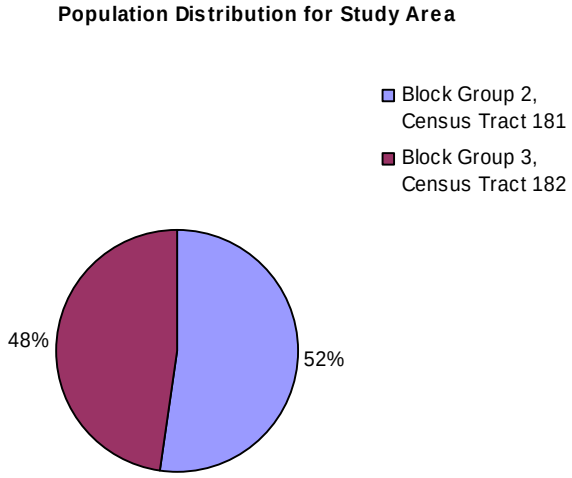
2000 Total Population

Study Area

Population	Block Group 2, Census Tract 181, Essex County, New Jersey	Percentage of	Block Group 3, Census Tract 182, Essex County, New Jersey	Percentage of	Total
Total Population	1,028	52%	940	48%	1,968

Source: Census 2000



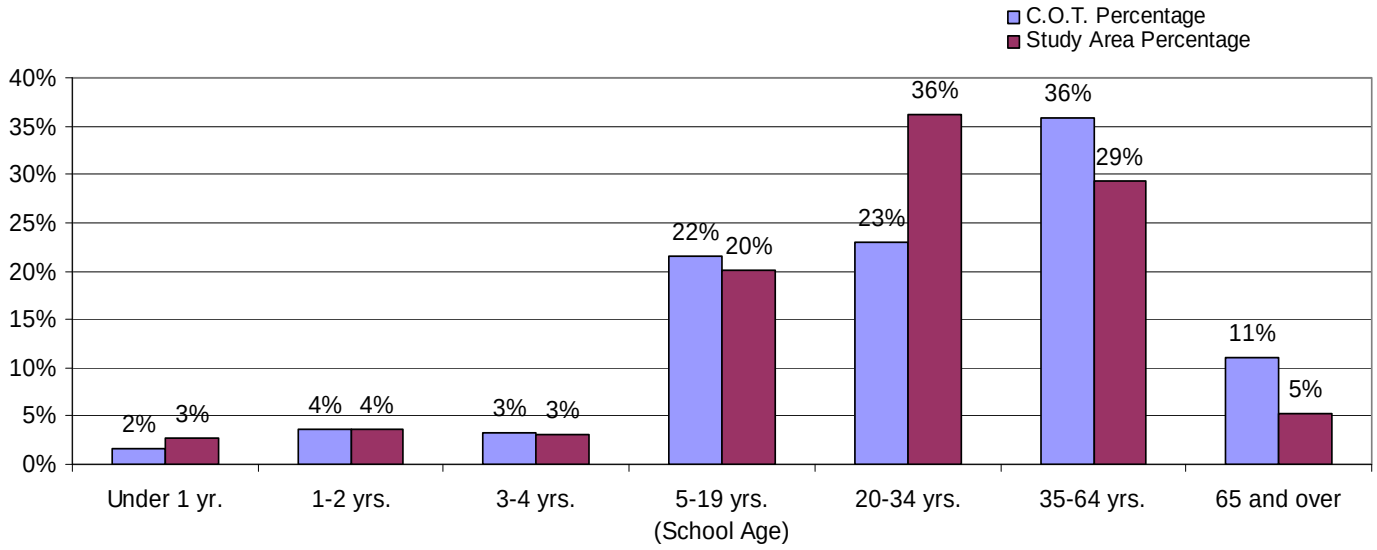


2000 Age Distribution

Study Area

Age Distribution	City of Orange Township	C.O.T. Percentage	Study Area	Study Area Percentage
Under 1 yr.	518	2%	52	3%
1-2 yrs.	1,218	4%	70	4%
3-4 yrs.	1,088	3%	60	3%
5-19 yrs. (School Age)	7,107	22%	394	20%
20-34 yrs.	7,566	23%	711	36%
35-64 yrs.	11,771	36%	577	29%
65 and over	3,600	11%	104	5%
Total Persons	**32,868**	**100%**	**1,968**	**100%**

2000 Age Distribution for City of Orange Township and the Study Area



1990-2000 Racial Distribution

Study Area

Racial Composition	Orange 2000	Study Area 1990	Study Area 2000	Percent Change	Percentage of Total I	Percentage of Orang
Total Population	32,868	1783	1,968	10%	6%	100%
White alone	4,368	460	202	-56%	5%	13%
Black or African American	24,998	1202	781	-35%	65%	76%
American Indian and Alas	8	14	0	-100%	0%	0%
Asian alone	301	9	0	-100%	0%	1%
Other	3,193	98	191	95%	6%	10%
Not Hispanic or Latino:	28,762	1532	1813	-	-	88%
White alone	2,510	339	107	435%	72%	8%
Black or African American	24,540	1170	1560	-91%	0%	75%
American Indian and Alas	8	14	0	11043%	1%	0%
Asian alone	301	9	0	-100%	0%	1%
Other	1403	0	146	-	0%	4%
Hispanic or Latino:	4,106	251	155	-	4%	12%
White alone	1,858	121	95	28%	8%	6%
Black or African American	458	32	15	197%	21%	1%
American Indian and Alas	0	0	0	-	-	0%
Asian alone	0	0	0	-	-	0%
Other	1790	98	45	-54%	3%	5%
Total Population	32,868	1783	1,968	10%	-	100%

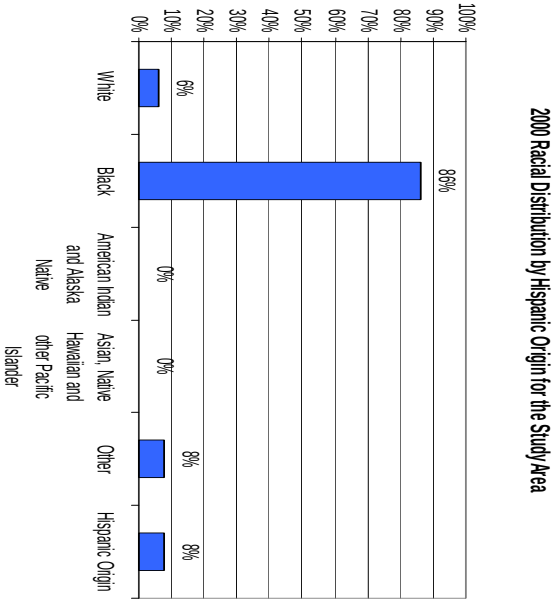
Source: Census 1990 and 2000

2000 Racial Distribution

Study Area

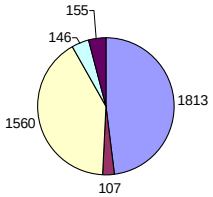
	Block Group 2,	Percentage of	Block Group 3,	Percentage of
Total:	1,028	100%	940	100%
White alone	163	16%	39	4%
Black or African American alone	731	71%	50	5%
American Indian and Alaska Native alone	0	0%	0	0%
Asian alone	0	0%	0	0%
Other	134	13%	57	6%
Not Hispanic or Latino:	892	87%	921	98%
White alone	72	7%	35	4%
Black or African American alone	731	71%	829	88%
American Indian and Alaska Native alone	0	0%	0	0%
Asian alone	0	0%	0	0%
Other	89	9%	57	6%
Hispanic or Latino:	136	13%	19	2%
White alone	91	9%	4	0%
Black or African American alone	0	0%	15	2%
American Indian and Alaska Native alone	0	0%	0	0%
Asian alone	0	0%	0	0%
Other	45	4%	0	0%

Source: Census 1990 and 2000



2000 Racial Distribution by Hispanic Origin for the Study Area

2000 Racial Composition by Hispanic Origin in the Study Area



1990- 2000 Educational Attainment

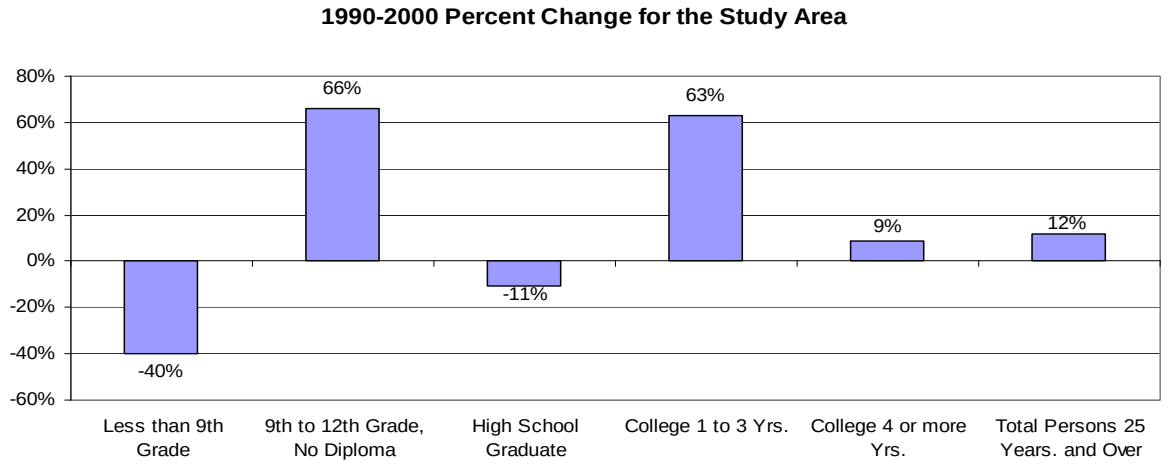
Study Area

Educational attainment 25 Yrs. and Over	C.O.T 2000	Study Area 1990	Study Area 2000	Percent Change of Study Area in 2000	Percentage of Study Area	Percentage of C.O.T in 2000
Less than 9th Grade	2,694	137	82	-40%	7%	3%
9th to 12th Grade, No Diploma	3,992	154	255	66%	22%	6%
High School Graduate	5,554	426	379	-11%	32%	7%
College 1 to 3 Yrs.	3,671	182	296	63%	25%	8%
College 4 or more Yrs.	3,510	152	166	9%	14%	5%
Total Persons 25 Yrs. and Over	**19,421**	**1,051**	**1,178**	**12%**	**100%**	**6%**

2000 Educational attainment

Study Area

Educational Attainment 25 Yrs. and Over	Block Group 2- 2000	Percentage of Block Group 2- 2000	Block Group 3- 2000	Percentage of Block Group 3- 2000
Less than 9th Grade	33	5%	49	9%
9th to 12th Grade, No Diploma	121	19%	134	25%
High School Graduate	266	41%	113	21%
College 1 to 3 Yrs.	137	21%	159	30%
College 4 or more Yrs.	85	13%	81	15%
Total Persons 25 Yrs. and Over	**642**	**100%**	**536**	**100%**



1990-2000 Median Household Income

Median Household Income	C.O.T 2000	Study Area 1990	Study Area 2000	Study Area Percent Change	Percentage of Study Area	Percentage of C.O.T
Median Household Income	$35,759	$29,942	$38,593	29%	100%	108%

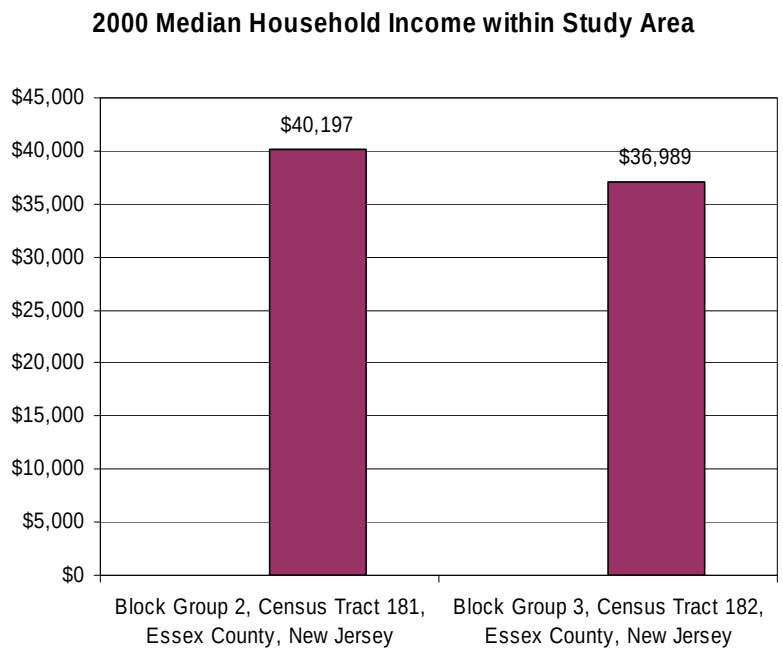
Source: Census 2000 and 1990

2000 Median Household Income

Study Area

Median Household Income	Block Group 2, Census Tract 181	Percentage of	Block Group 3, Census Tract 182	Percentage of
Median Household Income	$40,197	-	$36,989	-

Source: Census 2000



[i] U.S. Army Corps of Engineers Kansas City District, Final Remedial Investigation Report. Operable Unit 3-Groundwater U.S. Radium Superfund Site Orange, NJ. Vol. 1. CDM 2006.
[ii] U.S. Army Corps of Engineers Kansas City District, Final Remedial Investigation Report. Operable Unit 3-Groundwater U.S. Radium Superfund Site Orange, NJ. Vol. 1. CDM 2006.
[iii] U.S. Army Corps of Engineers Kansas City District, Final Remedial Investigation Report. Operable Unit 3-Groundwater U.S. Radium Superfund Site Orange, NJ. Vol. 1. CDM 2006
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[v] U.S. Army Corps of Engineers Kansas City District, Final Remedial Investigation Report. Operable Unit 3-Groundwater U.S. Radium Superfund Site Orange, NJ. Vol. 1. CDM 2006
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[xvi] U.S. Army Corps of Engineers Kansas City District, Final Remedial Investigation Report. Operable Unit 3-Groundwater U.S. Radium Superfund Site Orange, NJ. Vol. 1. CDM 2006
[xvii] Gunin, Joan. "Business as Usual in Shadow of Radium." Orange Transcript 12 June 1979.
[xviii] U.S. Army Corps of Engineers Kansas City District, Final Remedial Investigation Report. Operable Unit 3-Groundwater U.S. Radium Superfund Site Orange, NJ. Vol. 1. CDM 2006
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[xx] Gunin, Joan. "Business as Usual in Shadow of Radium." Orange Transcript 12 June 1979.
[xxi] Gunin, Joan. "Business as Usual in Shadow of Radium." Orange Transcript 12 June 1979.
[xxii] Owens, Timothy. "Shain calls for DEP Action." Orange Transcript 1 Jan. 1983
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[xxiv] Hester, Tom. "Radium Dumper Settles Claims for $4.2 Million." The Star Ledger 19 June 1992.
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[xxvii] U.S. Army Corps of Engineers Kansas City District, Final Remedial Investigation Report. Operable Unit 3-Groundwater U.S. Radium Superfund Site Orange, NJ. Vol. 1. CDM 2006
[xxviii] U.S. Army Corps of Engineers Kansas City District, Final Remedial Investigation Report. Operable Unit 3-Groundwater U.S. Radium Superfund Site Orange, NJ. Vol. 1. CDM 2006
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ALDEN & HIGH STREET PLANNING URBAN PLANNING STUDY

Goal 1: Characterize the History of the Site.

Production at U.S. Radium Corporation Begins

Amelia Maggia

City of Orange Township purchase property with plans to turn space into recreational facility

Project site after EPA

1917 | **1925** | **1927** | **1928** | **1969** | **1978** | **1979** | **2005**

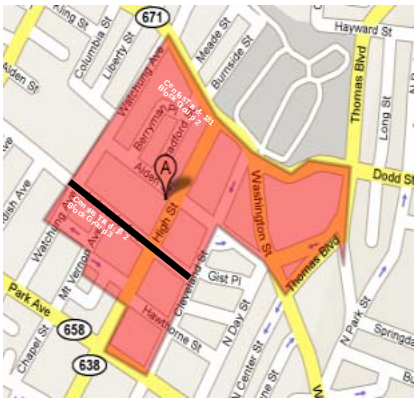
Dr. Harrison Martland investigates the effects of radium and publishes for the first time the deadly effects of radium in the Journal of American Medicine.

Grace Fryer filed a lawsuit against the US Radium Corporation she's later joined by Albina Larice, Qunita McDonald, Edna Hussman, and Katherine Schaub they became known as the "RADIUM GIRLS" the women received $10,000 each and a $600 annuity

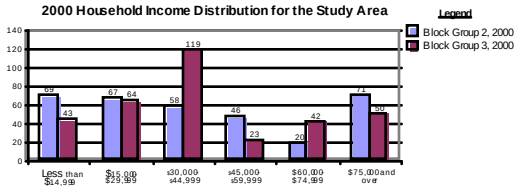
T & E Industries

The Department of Environmental Protection (DEP) report found that high gamma radiation concentrates were present in the soil and put a strain on the City of Orange Township plans for development.

Goal 2: Define Uniqueness of People Who Reside in the Neighborhood.



Population	City of Orange Township 2000	Percentage of Study Area to City Of Orange Township	Study Area 2000	Percentage of Study Area 2000	Percent Change of Study Area 1990 and 2000
Total Population	32,868	6%	1,968	100%	10%



Student Interns Working

Goal 3: Conduct an Assessment.

Park Classification	Acres/1,000 persons	Acres Needed	Existing Acres	Surplus or Deficiency
Pocket Park	0.25-0.50	0.5-1	2	1.5,1
Neighborhood Park	**1.0-2.0**	**2-4**	**4**	**2,(0)**
Community Park	5.0-8.0	10-16	2	(-8), (-14)

* Based upon U.S. Census Bureau 2000 study area population of 1,968 and is rounded to the nearest 1,000.

Residential Development Near Project Site

Tri-Corner Homes
307 Washington St., Orange
Comprised of51 units in1 Building
ExpectedCompleton: 2008
Census Tract 181, Block Group 2
Total additionalpersons: 137

312 North Day Street
312 & 284 North Day St., Orange
Comprised of39 units in2 Buildings
Date Completed: 2005
Total additionalpersons:105

Goal 4: Research Natural Resources for Project Site.

Resources	WATER	WILDLIFE	VEGETATION
Issues	Project Site connects to the Atlantic Ocean	The Mallard ducks live in the area. Fish live in Non-Source Pollution.	Attracts insects which may fall into Wigwam Brook and can be a food source for fish.

Essex County Site Visit

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ALDEN & HIGH STREET PUBLIC HEALTH STUDY

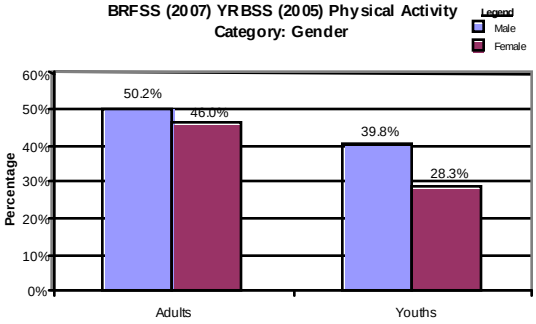
Goal 1: Decrease health disparities in minorities relating to physical activity.

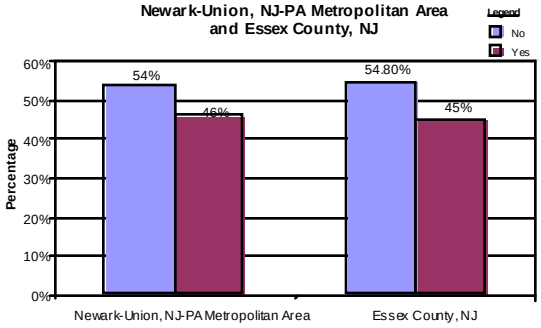
Connecting Goal: Improve health, fitness, and quality of life through daily physical activity. Healthy People 2010 challenges individuals, communities, and professionals indeed, all of us to take specific steps to ensure that good health, as well as long life, are enjoyed by all.

Connecting Goal: To decrease disparities in obesity and increase healthy eating and physical activity across the lifespan among high risk groups (including Black and Hispanic populations and those with low socioeconomic status) in New Jersey.

Adults: Adults with 30+ minutes of moderate physical activity five or more days per week, or vigorous physical activity for 20+ minutes three or more days per week.

Youth: Students who engaged in moderate physical activity for at least 60 minutes per day on most days.





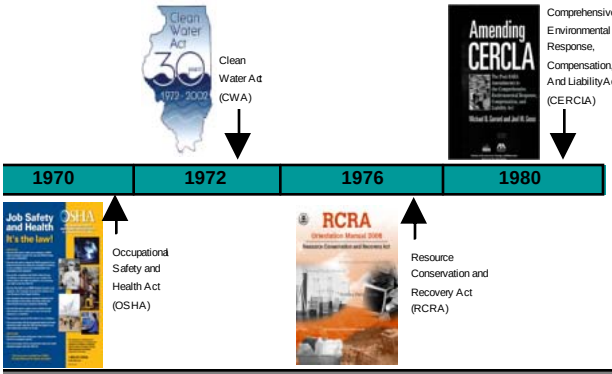
Gender Issue:

• On the State Level, youth males and adult males engage in more physical activity than females whether its moderate or vigorous with more than 50%.

Issue:

• Over 50% of adults on both the Metropolitan and Micropolitian levels responded no to participating in moderate or vigorous physical activity.

Goal 2: Increase environmental awareness and physical activity in the neighborhood.



Student Interns Working on Design Charette

Goal 3: Develop recommendations for the creation of a park that will increase physical activity and quality of life.

Scenic Hudson Park in Irvington, NY.

Case Study 1: Scenic Hudson Park

Former industrial site was turned into a 12-acre waterfront park.

New Yorkers are taking their turn to reclaim useful land. Residents are able to engage in more physical activity with the:

- baseball
- softball
- soccer
- football field
- restrooms

Ping Tom Memorial Park in South of Downtown Chicago

Case Study 2: Ping Tom Memorial Park

The park was divided into two parts:

•The first part is a passive park that includes traditional Chinese gardens, a walking trail, a riverfront pavilion and a children's playground.

•The second part of the park will consist of more active recreation uses, including a field house, swimming pool and ball fields.

Riverside Park in Lewiston, Maine

Case Study 3: Riverside Park

•It was an abandoned gas plant turned into a public riverside park.

•We should keep the public informed by public meetings and newspaper articles.

•Keep the neighborhood informed on where we are with creating our park.

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ALDEN & HIGH STREET PLANNING RECOMMENDATIONS/VISION

Pedestrian Hierarchy

Perspective Street View

Historical Recommendations

Perspective of US Radium Corporation Historical Memorial

US Radium Corporation Historical Memorial

Perspective of Grace Fryer Monument

Water Feature at rear of Grace Fryer Monument

Cultural and Walking Recommendations

Aerial of Proposed Cultural and Educational Literacy Center

I Pedestrian Hierarchy Recommendations

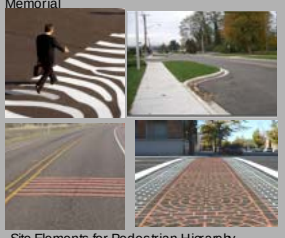
Goal 1: Emphasize Pedestrian Hierarchy.

Design Solution: Signage and traffic calming devices such as traffic lights, stop signs, warning lights, crosswalk, intersection circle and rumble strips.

Goal 2: Traffic Calming devices.

Design Solution: Signage and traffic calming devices such as traffic lights, stop signs, warning lights, crosswalk, intersection circle and rumble strips.

Site Plan of US Radium Corporation Historical Memorial



Site Elements for Pedestrian Hierarchy

II Historical Recommendations

Goal 1: Identify the workers at the US Radium Corporation and those who died from radium poisoning.

***Design Solution*:** Memorial or plaques to commemorate the workers.

Goal 2: Identify the findings of Dr. Harrison Martland.

***Design Solution*:** Engrave quotes from Dr. Harrison Martlands findings from the Journal of American Medicine.

Goal 3: Identify if the US Radium Corporation operated at any other site.

Design Solution: Incorporate images of the US Radium Corporation that was located on Alden and High St.

Goal 4: Identify other companies that operated at the former US Radium Corporation site.

Design Solution: Build replicas of products produced by the other companies.

Goal 5: Historical

•Increase the quality of life on how people look at their community.

***Design Solutions*:**

• Increase the awareness of the site's history and prevents future health problems and deaths.

• Increase the awareness and appreciation of the area's rich history.

Site Plan of the Grace Fryer Monument

Site Elements for Memorial

III Cultural and Walking Recommendations

Goal 1: Reflect the culture of the people though design.

Design Solution: Art and literature

Goal 2: Increase literacy by providing a GED Program.

***Design Solution*:** Learning Facility.

Goal 3: Create more options to walk

***Design Solution*:** Provide a walking track

Goal 4: Cultural

•To increase the percentage of the adult black population engaging in physical activity by 10%.

•Increase the quality of life on how people look at their community.

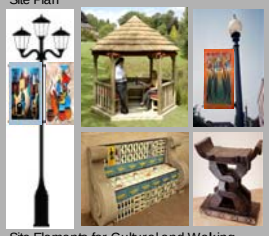
***Design Solutions*:**

• Promotes closer ties between cultures.

• Provides opportunities for a culture to learn more about themselves through an assortment of activities.

• Quality of Life and Physical Activity Survey results, 45% of the residents living in our project area believe that their neighborhood lacks cultural activities.

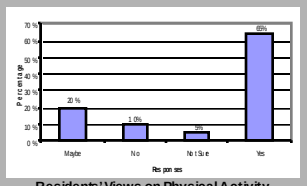
Site Plan



Site Elements for Cultural and Waking

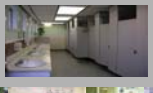
IV Track & Safe Conditions for Walking/Bicycling & Open Space & Restrooms Recommendations

Do you think you would engage in more physical activity if you had better access to improved parks?

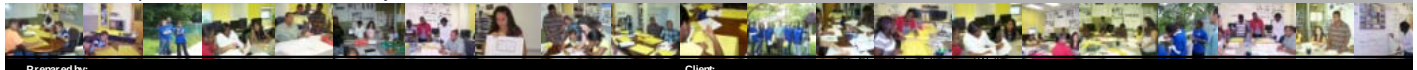


Residents' Views on Physical Activity

Track & Safe Conditions for Walking/Bicycling



Restrooms Recommendations



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