

Children Learn What They Live: Availability and Accessibility of Recreation Parks and Services for the Children of the City of Marina CA

Introduction

Recent literature on city planning underscore that the behavior of children should be considered in view of the society they live in, and factors such as their environment have an important role in their behavior. In other words, children learn what they live. As a response to this principle in child development, societies have developed means and resources to provide a rich and healthy environment to children. The *Urban Recreation and At-Risk Youth Act of 1994* describes that urban park and recreation programs were first organized in the late 1800's to provide youth with safe places to play and to offer an alternative to involvement in delinquent behavior.

This project is aimed at reviewing current available recreation services provided by the City of Marina and determining whether or not the City of Marina is providing its children with adequate recreational services. More specifically, we hope to determine if the accessibility to such recreational services offered by Marina is indeed sufficient. We will approach this task by using Geographic Information Systems (GIS) applications. Due to time constraints and availability of data, we chose only to focus on the children attending the five public schools in Marina. The schools include Crumpton, Los Arboles, Marina Vista, Olson, and Marina Del Mar. The range of ages in these schools goes from 5 to 14 years.

The central issue addressed by this research can be broken down into a subset of questions: Does the City of Marina offer enough recreational services? Do the children of Marina have access to recreational services? An adequate answer to these questions

may help the city to find ways of more efficiently utilize existing and future resources for the children.

A simple definition of GIS: a computerized system for collection, storage, manipulation (analysis), and output of information that is spatially referenced. For the purposes of this research we understand *accessibility* as the degree to which people with or without disabilities can easily reach a location by all means of transportation, including biking and walking.

We followed the basic GIS steps according to a definition of GIS given by K.C. Clark in his book *Analytical and Computer Cartography*: capture, storage, retrieval, analysis, and display of spatial data. This report will explain the steps in which we utilized to produce our end results.

In addition to the structure of this course, we feel that GIS is the perfect method to analyze our findings. “A map is a means by which we collect data points locating specific points of interest. A city map contains polygons, showing the boundaries of city parks, historic districts and so forth” (Nancy J. Obermeyer and Jeffrey K. Pinto 1994: 4). For instance, we use maps to make siting decisions. For the average, noncommercial user, a prime siting decision is where to live. For example, a hypothetical couple moving to a new city, like Marina, might want to identify the location of specific schools (if they have school age children). They might want to locate shopping areas, parks and playgrounds, or other recreational facilities. Using this information, the couple can then identify neighborhoods that meet their basic specifications.

Background

Marina has experienced a rapid transformation that can be traced back to the foreclosure of the Fort Ord military base. At that point the city lost a substantial amount of the population.

Marina Population Growth 1990-2020

	1990* (actual)	1997* (actual)	2005** (forecast)	2020** (forecast)
Marina	26,512	17,700	27,941	44,752
County Total	355,660	371,460	435,454	536,608

*source: Department of Finance E-5 Report, U.S. Census Bureau

**1997 Regional Population and Employment Forecast for Monterey, San Benito, and Santa Cruz Counties Draft Report June 20,1997

When the population decreased, some of the services were lost and the community suffered (see CSUMB master plan). Now the city's population is on the rise and it is expanding to its northeast. The opening of California State University Monterey Bay is another factor of growth. Teachers, students and faculty of CSUMB have children, and these children need to be absorbed by the City of Marina. Unlike the former military population whose services were offered on base to the families of the enlisted, the population occupying former Fort Ord must rely on Marina for its resources.

Capture, Storage and Retrieval

In order to gather the necessary data we needed to complete this project we conducted interviews with several different people. We decided the first step to take was to visit the civic center in Marina which houses the city planning offices, transportation, recreation offices and other information pertaining to Marina. Once there, we picked up

recreation information fliers, city maps, a bus route guide and received information on whom to speak with about our project.

A receptionist at the recreation desk referred us to speak with Don Garl, the Marina Recreation and Community Services Director. Don gave us vital information about the land use and services offered at the various recreation sites. He also informed us on the upcoming future recreation sites that Marina will acquire at a later date. Don also referred us to Milton Fletcher, Marina's Recreation Assistant II, for attendance information at the various recreation sites.

Regarding the information about the school population, we contacted the principals from Los Arboles Middle School, Mr. Jay Bautista, and from J.C. Crumpton Elementary School, Mr. Darren Sylvia, and the secretaries of the other elementary public schools of Marina, who were helpful in delivering that information. We gathered the total population of Marina from census data 1999 provided by the U.S. Census Bureau. Our last piece of GIS information was retrieved from Marina City Planning. After speaking with Associate Civil Engineer, Peter Le and Planning Project Manager, Susan Hilinski, they provided us with GIS maps in ArcView 3.1 format.

We stored our data on zip disks. We used PC's provided by CSUMB to retrieve our data, and we count on our instructor, Dr. Lao, any time that we needed help. It took us about 8 or 9 days to manipulate the data we gathered in order to display the end results.

Analysis

According to the census data (1999), Marina has a population of 23,356. Our findings show that, out of the total population of Marina, 9% are children that attend the five public schools. The total population of the five schools combined is 2310. Through a phone interview with Fletcher we gathered that approximately 1550 of the total Marina population attend the recreational services offered by Marina. Statistically, we theorized that out of the 1550 people, whom use the recreation services, 9% of that total should be the children of the five public schools in Marina. Therefore, we estimated that approximately 140 children use the recreation services.

Our data shows that Marina is equipped with a variety of recreational services, which are spread out throughout the city, including expansion onto former Fort Ord territory. A bike route and the bus route cover most of the outlying areas in reference to the recreation facilities and activity sites. Some of the activities held at the various recreation facilities include: soccer, baseball, softball, football, dance and creative movement for children, ballet, gymnastics, martial arts, roller hockey, kids arts and crafts, and scheduled monthly activities offered by the youth and teen center. The sport center offers a variety of activities:

Activity	Age	Cost	Day	Time	Instructor	Phone
Creative Movement	3 to 6	\$40.00	Wed.	3:00 to 3:45 p.m.		
Beginning tap dance	7 to 10	\$40.00	Wed.	4:00 to 4:45 p.m.		
Ballet I	6 to 8	\$40.00			Heidi	
Latin dance			Tuesday	6:00 and 7:00 p.m.	Frederick	7700766
Israeli folk dancing			Thursday	6:30 and 7:30 p.m.	Joan	3848129
Classical ballet	5-adult					3843626
Jazzercise			7 days			3841978
Gymnastic	3 to 16	\$28-56.00			Cara	6636028
Aikido dojo	6-adult	\$25-55.00	Mon. Wed.	6:30-8:00 p.m.		8839333
Water roller hockey						3840144
Arts & Craft	Adult		Wed.	6:00 to 8:00 p.m.	Angelika	3946335
Arts & Craft	Childr.>8	\$8.00	Saturday	10:00 a.m.	Angelika	3946335

With all of the various recreation activities and services offered, why is the attendance of the children so low? Based on data gathered in our research we have come up with several different hypotheses to answer this question. Perhaps, some of the children attend afterschool programs or participate in other school-related activities, which may include sports and academic programs. Marina is not an isolated urban community. Other communities surround it 5 miles in different directions, such as Salinas to the north and east; Castroville, Prunedale and Moss Landing to the north; Seaside and Monterey to the south. Therefore, children may be attending recreation programs in some of the surrounding communities. Other thoughts are that some children may not attend any programs and merely stay at home with family, baby-sitters, or are home alone. Perhaps the parents or guardians of the children believe they would be hindered financially if their children attend or join in on recreation activities. The children also may be involved with gangs or play within their neighborhoods.

What is central to our research and the most remarkable finding of our work is that only a small fraction of the target population actually takes advantage of the recreational resources offered by the city of Marina. Further research can provide more information about the main cause of this under-utilization.

Conclusion

All things considered, we were surprised to find that Marina has numerous recreational activities and sites. What we were not surprised to discover, is that only a small percentage of Marina's children are utilizing the resources available. A concern we share with the general public is that if children are not involved in activities or programs, where are they? While we did not dwell on gathering financial incomes of the residents

of Marina, not all of the activities cost and certainly the playgrounds and ball fields are free. If the children are unsupervised or not cared for, the rate at which possibility of harm to themselves or engaging themselves in delinquent behavior is higher. This project has given us, as well as the public, another insight on the City of Marina and it will allow us to concentrate on what the community needs in order to get their children involved in activities outside of the school and home environments.

Recommendations

- ?? Fliers sent home to parents/guardians on the various recreation activities offered.
- ?? Assess whether transportation is a problem for parents/guardians, if so; provide a form of transportation for the children. I.e.) a shuttle to and from school or neighborhood.
- ?? Assess a community needs to determine what children and parents need or want included as an activity or recreation.

Access Routes

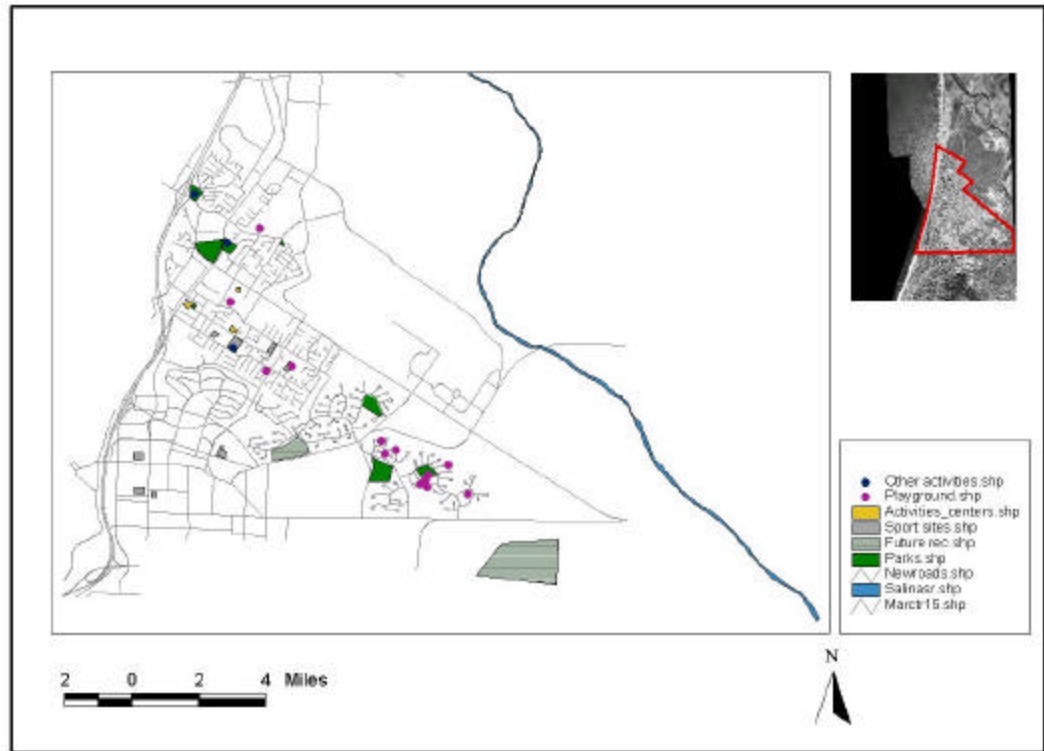


- Bike route.shp
- Bus-route.shp
- Newroads.shp
- Salinasr.shp
- Marctr15.shp

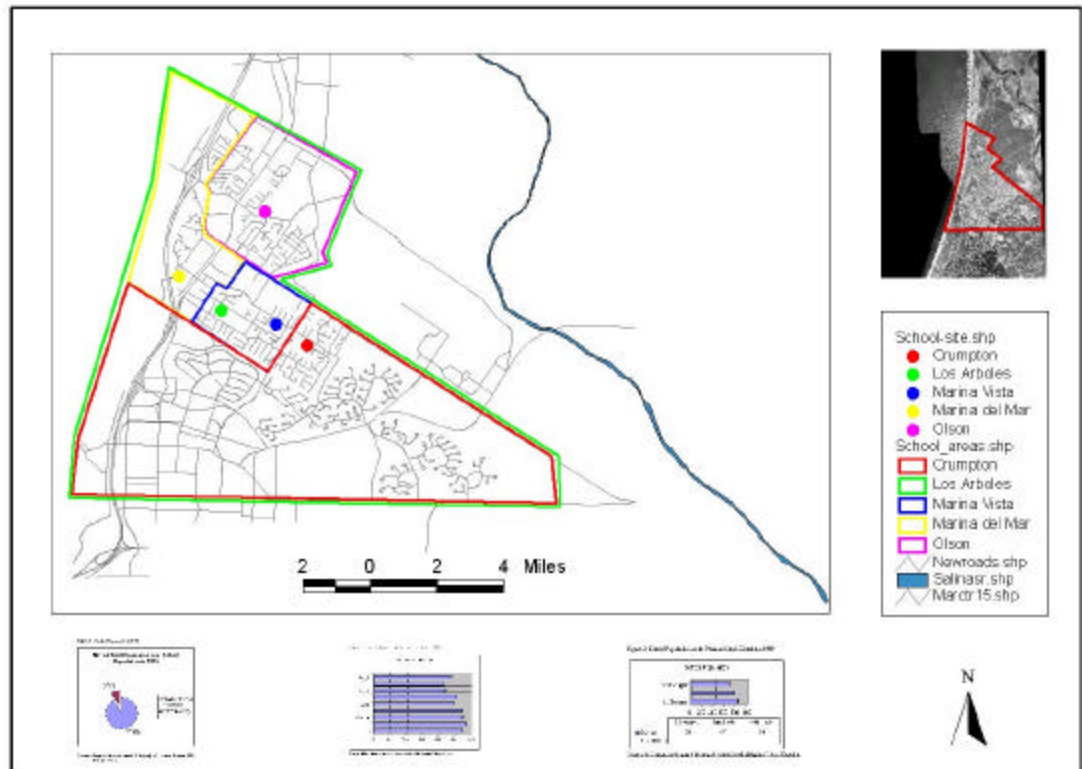
2 0 2 4 Miles

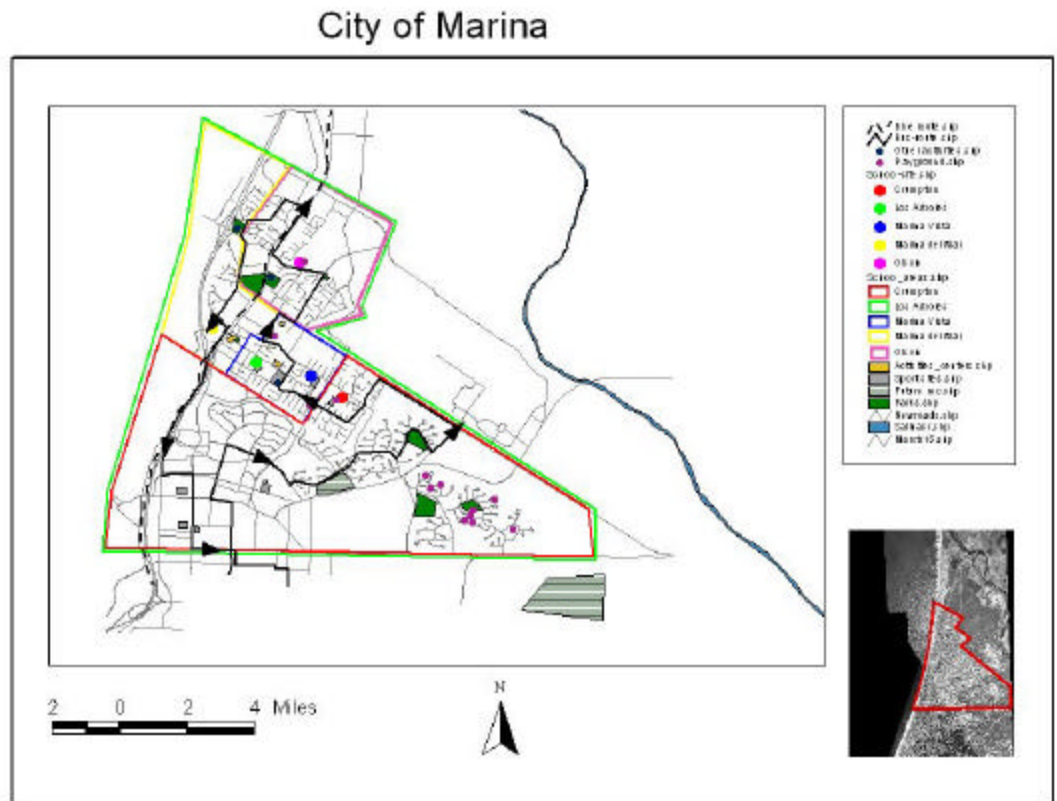


Recreations Offered by Marina City



Marina Public School Population





References and Bibliography

Clarke, K.C. (1995). *Analytical and Computer Cartography*. 2nd ed. Upper Saddle River, NJ: Prentice Hall.

CSUMB (1999). *Master Plan Internal Planning Document*

Gaster, Sanford (1991). *Urban children's access to their neighborhood: changes over three generations*.

Hodges, Janet S; Henderson, Karla A. (1999). *Promoting the physical activity objectives in the surgeon general's report: a summary*.

Lindquist, Barbara; Molnar, Alex. (1995). *Children learn what they live*.

Marina Recreation and Community Services Commission Survey.

Marina Winter Recreation. Fall-Winter-Spring. 1999-2000.

Monterey Bay Parks and Recreation *Web site of Monterey Bay Parks and Recreation: www.monterey.com*.

Mr. Miller of California, from the Committee on Natural Resources (March 21, 1994). *Urban Recreation and At-Risk Youth Act of 1994*. Committed to the Committee of the Whole House on the State of the Union and ordered to be printed. 103rd Congress 2d session Report 103-444.

Obermeyer, Nancy J. and Pinto, Jeffrey K. (1994). *Managing Geographic Information Systems*. The Guilford Press: New York, NY.

Pearce, Kimberly D. (1999). *Race, ethnicity, and physical activity*

United States Census Data 1999.

Web site of the City of Marina: www.ci.marina.ca.us