

SUITABLE LOCATION ANALYSIS FOR COMMUNITY RECREATION CENTER IN WESTERN NEVADA COUNTY: GRASS VALLEY & NEVADA CITY

Nancy Lor & Lisa McCandless



California State University, Chico



Geography & Planning Department

Introduction

Grass Valley and Nevada City combined have a population of approximately 15,846 with many more people living rurally outside of the community boundary. The towns are separate but share a common border (see figure 2).

Need for Parks and Recreation District and Community Center:

The towns of Nevada City and Grass Valley have separate parks and recreation departments and currently do not collaborate for the greater good of the community.

Nevada City has a parks and recreation department that currently manages Pioneer Park, the public swimming pool, and the community center which is housed in the Nevada City Veteran's Hall. Grass Valley's parks and recreation department manages 108 acres of parks land and offers organized sports leagues such as softball, tennis, and swimming. Grass Valley's parks and recreation master plan is outdated and was adopted in 2001.

Results

Site One: APN 3541206000, best potential site that we found for several reasons

- There is a bus stop available and is in front of the neighboring property
- The land is currently undeveloped
- The parcel's location is central to both towns
- Nice large contiguous parcel

Site Two: APN 3532064000

- Very close to a bus stop (<200 feet)
- Close to Nevada Union High School (3,216 feet)
- Central to both towns

Site Three: APN 0927001000

- This site is close to a trails network (Empire Mine State Park) which would add to the recreation opportunities
- This site is within a block group with high population density for this area
- Close to bus stop (900 feet)



Conclusion

GIS helped us find parcels that were most appropriate for a potential community center

Not many parcels met our requirements. Each parcel that was selected presents its own challenges:

- Site 1 is zoned R-3 Multi-family residential and would need to be re-zoned
- Site 2 is already developed and may be a higher cost since it is occupied
- Site 3 is farther from schools and the shape of the parcel is irregular

If the census data was not as weighted in our analysis there would have been more potential parcel sites for development

If this pilot project was continued it would be of benefit to look into sites with superior accessibility including those close to major roads; also of concern is to develop in an area where the streets are safe for pedestrians, children, and bicyclists.

Data/Method

Data

1. NAIP Aerial imagery for referencing the suitable sites
2. Shapefiles - roads, county, parcels, community boundary, parks and recreation districts
3. Tiger Files - block group census data, address points
4. Digitized Bus Routes / Schools
5. \\zenith\GISData drive - State of California for Nevada County

Method

1. Looked at (1) block groups (2) bus stops (3) schools (4) parcel size and (5) parcel type (6) current use
2. Clipped out areas that are not part of our study area. Used the layer we want as the input and the desired layer we want (community boundary) to clip to as the feature
3. Created new shapefiles: digitized bus routes and both middle and high schools in Grass Valley & Nevada City
4. Area calculator/field calculator to calculate the acreage of the parcels size - county attribute table had a record for this but was inconsistent
5. Buffered 2 mi. (10,560 ft.) from schools and buffered 1/4 mi. (1,320 ft.) from bus routes
6. Referenced two different parcels (Truckee Donner Community Recreation Center and WREC at CSU Chico) to determine an appropriate parcel size
 - Best parcel size to be ≥ 2.5 acres and ≤ 20 acres
 - The Truckee Community Recreation Center = 13 acres
 - The WREC = 1.5 acres
7. Used the intersect tool to overlay all the buffered and clipped layers together within the block groups to analyze suitable sites
8. Deleted sliver polygons
9. Looked at current land use (county flexviewer site) and ruled out sites that were inappropriate or already serving a purpose

References

1. US census tract www.census.gov
2. <http://gis.nevcounty.net/MyNeighborhood/>
3. <http://gismaps.buttecounty.net/flexviewer/BCDataSearch/index.html>
4. My Nevada County site: Roberts, Sebastian. "MyNevadaCounty.com - County of Nevada, CA." Digital Data Download. <http://www.mynevadacounty.com/nc/igs/gis/Pages/MetaData.aspx>
5. USGS Earth Explorer: <http://earthexplorer.usgs.gov>

Map Analysis

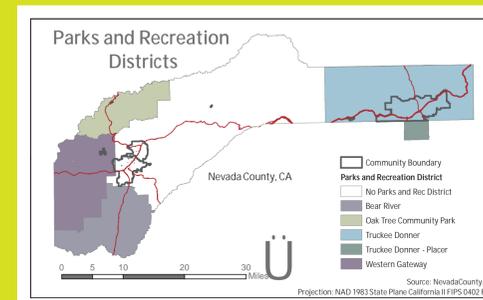


Figure One. Map created 5/4/2014:
 • Currently (even though Grass Valley and Nevada City are sister cities and connected) the two cities do not work together for parks and recreation purposes
 • The cities are both lacking places for youth to go and activities for young people. This is especially true in the winter months when the rain is heavy and often and there becomes a lack of recreation opportunities

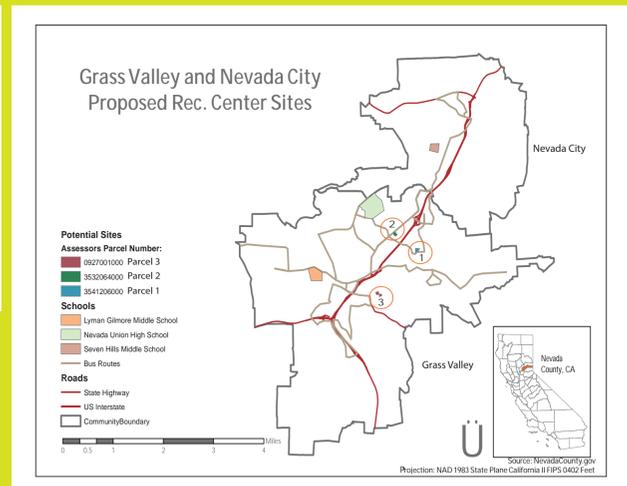


Figure Two. Map created 4/30/2014

NAIP Aerial Imagery of selected sites:

