Introduction:
The Chico State basketball program has been elevated to Division 1 status, and a new arena is required. Where in Chico should it be placed?

Methodology:
By researching other Division 1 arenas, we came up with a series of requirements.

- Size of stadium = 10,000 capacity
- Size of lot > 4 acres and ≤ 10 acres
- Proximity to campus ≤ 5 miles
- Proximity to public parking
- Close to existing public transit
- Within 5 biking miles of campus
- Effects of noise and light pollution

Greenline: A requirement for the arena is that it must be placed on the eastside of the Chico City greenline.

Existing Buildings:
5 = no buildings
0 = yes, existing buildings

Software Used:
ArcGIS 10.2.2
SketchUp Make

Conclusion:
Based on our analysis (using SQLs, buffers, weighted scoring), we found that parcel APN # 003-200-001-000 to be the best site for our proposed arena.

Sources:

To determine the best possible location, the following scores were devised for each factor:

**Sound Buffers**
1 = Residential within 1 mile
2 = Residential within 1 to 2 miles
3 = Residential within 2 to 3 miles
4 = Residential within 3 to 4 miles
5 = No residential within 5 miles

**Light Buffers**
1 = Residential within 1 mile
2 = Residential within 1 to 2 miles
3 = Residential within 2 to 3 miles
4 = Residential within 3 to 4 miles
5 = No residential within 5 miles

**Distance from Bike Paths**
0 = 5 miles or more from campus
2 = Fewer than 5 miles from campus

**Distance from Bus Lines**
0 = > 2.5 miles
1 = 2.0 – 2.49 mi.
2 = 1.5 – 1.99 mi.
3 = 1.0 – 1.49 mi.
4 = 0.5 – .99 mi.
5 = On Existing Bus Route

**Distance from campus**
0 = 5 miles or more
1 = 4 – 5 miles
2 = 3 – 4
3 = 2 – 3
4 = 1 – 2
5 = 1 or fewer miles