For New Year's Eve, the City of San Francisco holds its fireworks show in the Embarcadero area. Every year the Embarcadero is the most crowded area in the city. Using Geographical Information Systems (GIS) as a tool and a Multi-Criteria Evaluation as a method, I hoped to find a more secluded, less congested area to view the fireworks show.

Because San Francisco has many public parks located on hills, I chose these parks as my location for viewing the show. An additional constraint to my analysis is to be a distance away from the noise and the traffic of highways and freeways in the city. Because parking will most likely be difficult to find during these times, I chose among my criteria to be near (Bay Area Rapid Transit) stations as a means to travel in and out of the city. Additionally, in order to travel throughout the city, I chose to be near bus stops, a method of transportation that works between the late nights to early mornings. Given the option of going out either before or after the show, I added neighborhoods known for its nightlife as a final criteria.

With all this in mind, I hoped to find a viewing location that maximized all these given criteria in the hopes of finding the best spot for starting the New Year.

Multi-Criteria Evaluation
Each criteria is weighted: the closer (BART, NightOwl, Nightlife Neighborhoods) and the higher (from San Francisco digital elevation model) to these criteria, the higher the weight placed. The farther one gets from each location, the lower the weight placed. Each criteria formulates the best location for viewing the fireworks during New Year's Eve.

Conclusion
The BLUE locations in this map illustrate the locations that meet these criteria.