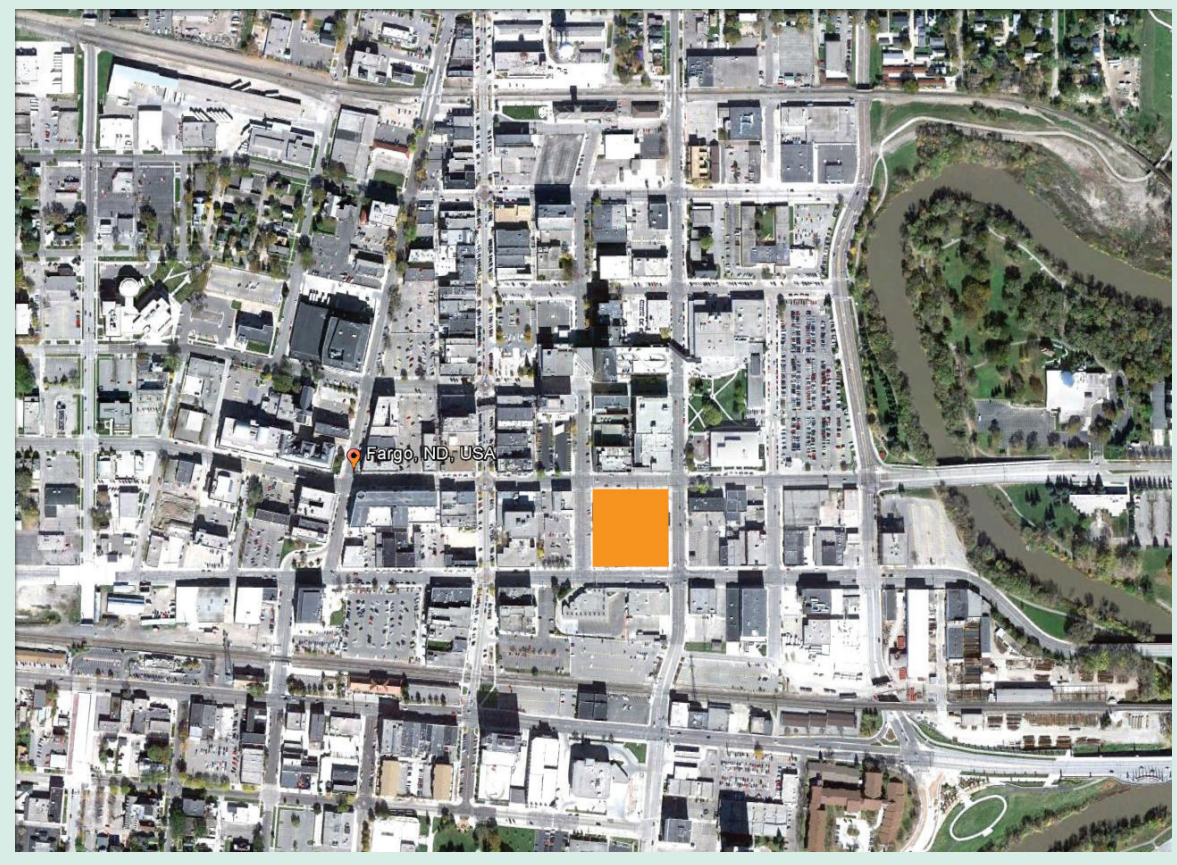


# How does a building affect its neighborhood?



**Walking Distances**  
 Within 5 Minutes - 1364 feet  
 Within 10 Minutes - 2728 feet



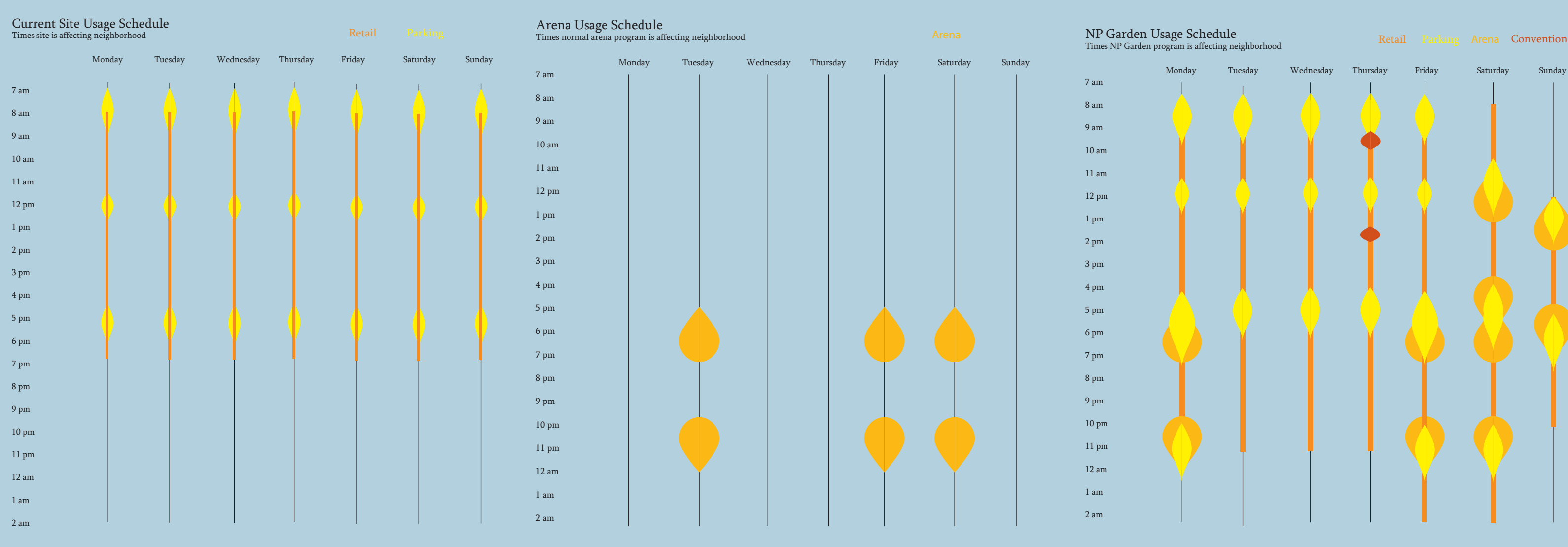
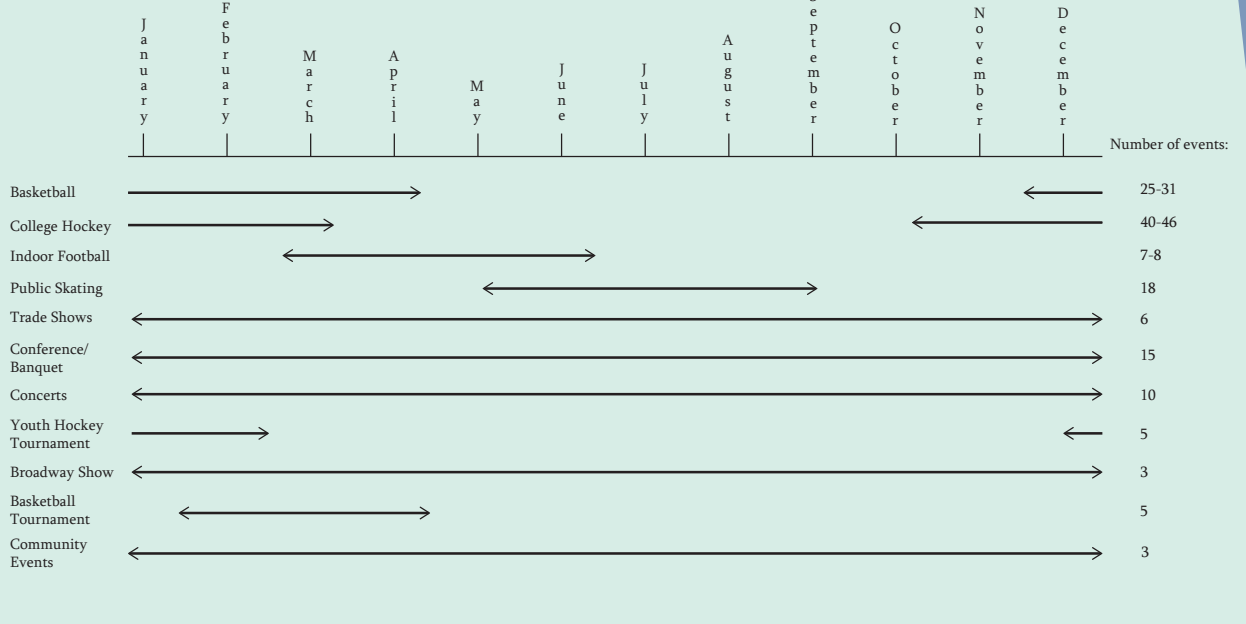
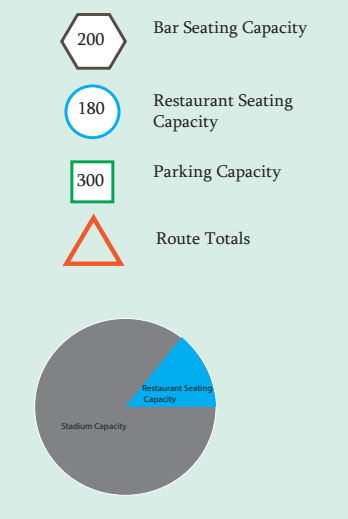
**Site** NP Garden is located on the 400 block of NP Avenue, in downtown Fargo, North Dakota. The current site houses multiple parking lots, a small parking garage, one retail building, and unused office and retail space.

The site was chosen due to its proximity to Broadway and the bus depot and the size of the lot. Other possible sites were the NP parking lot and city hall parking lot. Both of the other lots were too small to house an arena. Parking lots were considered to limit having to relocate current buildings. The program will allow for all of the current uses on the site to be replaced in the arena.

The main uses of downtown are offices, dining and residential. Broadway is the most active part of downtown, due to being the street with the most mixed uses. Activity seriously falls off a block away from Broadway.

Broadway houses most of downtown's dining establishments and bars. Two walking routes from parking to the arena will have people pass by most of downtown's amenities.

Due to Fargo's weather, people are hesitant to be downtown in the winter. The main two tenants of the arena will be a NBA development league team and NDSU men and women's hockey teams. Both of these sports play during the winter, encouraging people to come downtown when it is least active.



**Program** The main parts of the program are a 8,000 seat arena which supports basketball and hockey as the main tenants. In addition, the arena will be able to support conferences and conventions. Most of the ground floor is retail and there are two levels of parking to replace the existing parking and alleviate the additional need for event parking. There is 36,000 square feet of retail, 180,000 square feet of parking, and 300,000 square feet of arena spaces.

Most of the buildings in downtown are used between 9am and 5pm, Monday to Friday. This leads to downtown being considerably less active during the nights and weekends. It is important to keep balance between uses and when they are used. When a majority of the uses are in a certain time, it limits the growth and activity in a neighborhood. This can be seen in downtown by simply looking at how many buildings are closed or have limited hours during the weekends.

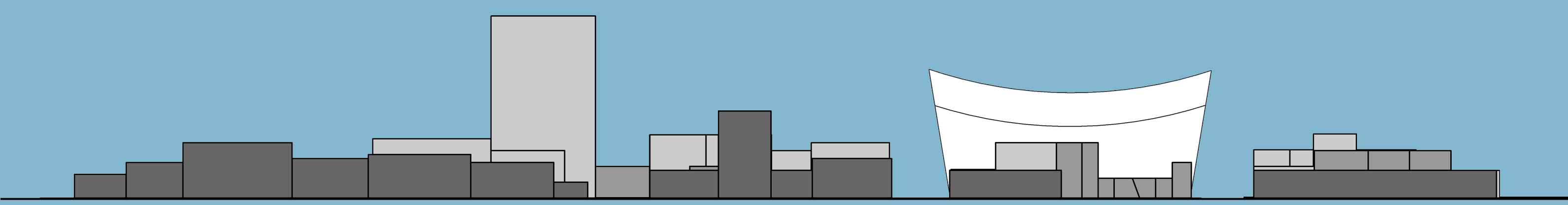
Entertainment is one of the most limited uses in downtown. Downtownfargo.com lists the library and the Fargo theater as the two main entertainment buildings. The other options are boat tours, a gentleman's club, a cyber cafe, and pinball. An arena would add to downtown's entertainment

options, and bring thousands of people downtown to times that downtown is not very active. However, placing just an arena will bring effects to downtown similar to other single use buildings. If additional uses aren't added to the building, it and the surrounding area will be underused, similar to the other single use buildings downtown. Retail spaces on the ground floor allow for the building to affect the neighborhood for most of the day. The arena brings in a large amount of people during times when Fargo isn't active. The convention section allows for the massive arena to be used during the day. Public parking replaces existing private parking and allows for additional downtown long term parking.



**Scale** The arena's footprint and height means it will become a dominant figure in downtown. It will become the second tallest building in Fargo, only shorter than the Radisson. Due to most downtown buildings being less than three stories, the arena can be seen from much of downtown.

**Traffic** The arena will create additional traffic and need for parking in the neighborhood. Much of the existing lots are underused during times events would happen. This limits the amount of additional parking that would need to be constructed.



**Infrastructure** The arena would require additional off site infrastructure to be constructed. The main infrastructure required would be additional parking. The current parking lots would be rebuilt as parking ramps, adding a significant capacity of parking. Pedestrian bridges would be built over the railroad on 4th Street North and Broadway. This prevent having to wait for trains, an unfortunate event during Fargo's winter.

**Sun/Wind** The arena would have an impact on the sun and wind patterns of the nearby buildings. The most common wind directions are from the north and south. The arena would block much of the wind from the south. The arena will block most of the sun of the Forum and AT&T buildings to the north of it, but will otherwise have small effects of the solar access for other buildings.

**Water Usage** Stadiums use around 5 gallons of water per seat per event. At 8,240 seats, my arena would use between around 41,000 gallons per event. With waterless urinals, around 12,000 gallons are saved per event day, dropping the needed water to around 29,000 gallons. Over a year the savings could be as much as 1.8 million gallons of water. The arena would create a demand of an additional .29 to .36 percent of Fargo's daily water supply. Without the urinals it would be between .41 and .51 percent.

**Carbon Dioxide** Building construction will generate around 56,800 tonnes of carbon dioxide. Electricity for an event will be around 4.5 megawatt hours. This will generate 42 tonnes of carbon dioxide

if powered by coal or 24 tonnes if powered by natural gas. Retail will generate around 1.3 tonnes per day with coal or .77 tonnes with natural gas.

The arena uses LED lighting to lower the electricity required. LEDs can reach efficiencies of 100 lumens per watt compared to high-intensity discharge lamps, which can only reach around 60 lumens per watt. HID's would add 159 kilowatts of lighting electricity.

**Economic** The arena will cause additional spending in downtown. A study of the Fargodome found the average attendee spent around 20 dollars outside the arena when attending a sporting event. This will greatly contribute to downtown's dining and retail.

