

City of Berkeley

Middle Housing Prototype Studies: R-1 and R-2A

Project Overview

This project studies proposed changes to objective development standards to allow middle housing on neighboring buildings.

Studying the Most Impactful Scenario

The models set up the most impactful scenario (with the biggest difference in height and the minimum distance between neighboring buildings) to better understand whether additional standards are needed.

Shading Analysis Assumptions

The illustrations show shadows cast between 8am and 4pm during the equinox (Sept. or March 21st) for two parcels with different orientations on a flat site, with clear skies and no existing trees.

Maximum Building Envelope Modeled

- 35 feet average building height with objective standards
- R-1 front setback 20 feet
- R-2A front setback 15 feet
- Side setbacks 4 feet
- Rear setback 4 feet
- Reduced rear height to 22 feet within 15 feet of the rear property line

Shading Calculations

The area of shadow was calculated for both 28 feet and 35 feet building heights using the maximum building envelope allowed. The amount of shadow for the 7-foot difference in height is less than 10% more shade on the neighbor's rooftop averaged over the day.

