

Understanding Vulnerability and Dependencies

The goal of this exercise is to understand how individual assets are vulnerable to current and future flooding through direct impacts to their facilities and how they are vulnerable through their connections to neighboring assets and other services like utilities and access roads. The map provided shows a hypothetical regional medical center located near the Bay shoreline and a river. This activity will help the working group understand vulnerability, relationships between assets, and consequences across different assets, sectors, and scales.

Regional Medical Center

The public regional medical center is located in an area at risk of future coastal and riverine flooding. The center provides a wide array of facilities and services that help meet the health needs of County residents, including a 164-bed hospital, an emergency care department, psychiatric facilities, a public health testing laboratory, and outpatient facilities including a skilled nursing and rehabilitation facility.

Vulnerabilities:

INFO1: There is not enough information to forecast flooding and identify tide and rain event thresholds for evacuation or shelter-in-place measures at the medical center.

GOV1: The medical center relies on mutual-aid agreements with other agencies and jurisdictions to provide assistance during emergencies and disasters but these agreements do not address future flood risk.

GOV2: The medical center does not own its shoreline protection features and is protected from coastal flooding by the regional park district and from riverine flooding by the county flood control district.

FUNC1: The medical center serves people who rely on transit (via bus and paratransit service) to access healthcare.

FUNC2: The medical center provides low-cost health services to community members who need them. Alternative services are not available within five miles.

FUNC3: The medical center relies on a sole access-way (Hospital Drive). Emergency vehicles can access the site via the bicycle/pedestrian path.

PHYS1: The medical center has generators, elevator motors, and other electrical and mechanical equipment in its basement.

PHYS2: The medical center has extensive at-grade entrances for people and vehicles that cannot be waterproofed or elevated.