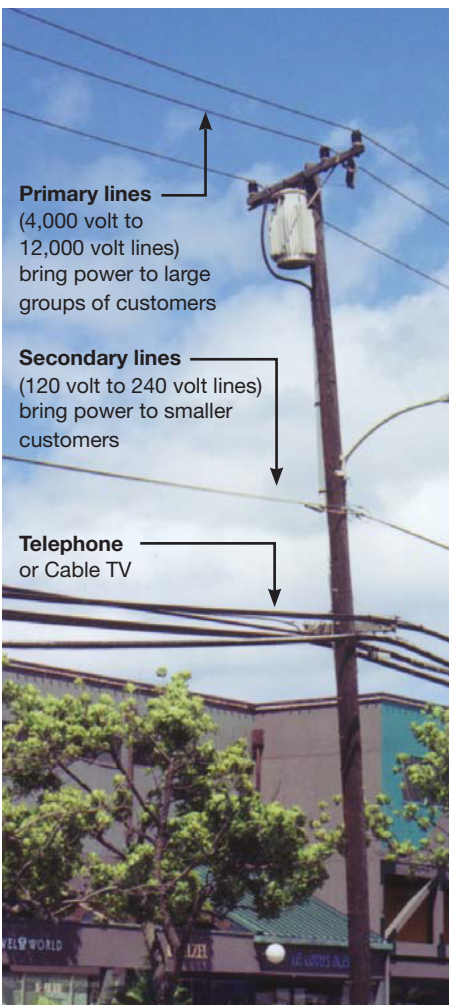


# Undergrounding utility lines

## Many electric lines are underground

Hawaiian Electric owns more than 9,800 miles of transmission and distribution lines across the five islands we serve. Of that total, about 43 percent of the lines are underground.



## Different utility lines share poles

Hawai'i utilities – including electricity, phone, and state or city-owned streetlights – jointly own about 120,000 poles. Hawaiian Electric has sole ownership of about 50,000 poles.

The multiple thinner wires, located highest up on the pole are electric lines. The thicker lines located lower down on the pole belong to either the phone or cable TV companies. Sometimes you'll see city or state streetlights and wiring on the pole, too.

## When are lines placed underground?

Why do some neighborhoods already have underground lines and some don't?

A City & County of Honolulu ordinance passed in 1966 requires developers to bury lines in new subdivisions with four or more lots. Developers pass along to the property buyers the extra costs to place the utility lines underground, so people who live in neighborhoods with no overhead lines have paid for the undergrounding costs. In Maui County and Hawai'i Island there are no similar undergrounding policies, and the cost to place existing lines underground along with infrastructure upgrades is paid by the requesters.

Special areas designated by government as Improvement or Special Design Districts (such as Waikiki) also require underground lines.

## We also bury new lines when...

- It is justified for engineering or operating reasons.
- The installed cost for an underground line is comparable to costs for an overhead line.
- The requestor pays for the difference in cost between an overhead and underground line.
- For higher voltage transmission lines, an evaluation of factors, including cost, aesthetics, and environmental impacts, under state law (HRS 269-27.6) supports placing the line underground.
- Under certain circumstances, cost sharing agreement is reached under Hawaiian Electric's cost sharing policy (see "[Cost sharing for underground lines](#)").

## Which is more reliable?

Overhead lines are more vulnerable to adverse weather conditions and objects contacting lines; utility poles are subject to termite damage and vehicle accidents.

Underground lines are more vulnerable to water penetration, termites and other vermin, and construction dig-ins.

Generally, overhead lines require more frequent repair, but underground line problems are harder to detect, take longer and are more costly to repair.