

## CHAPTER 8: UTILITIES



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### **Theme Description:**

Utilities comprise a variety of different layers of infrastructure data managed primarily by local government agencies or private utility corporations. The following layers are identified as belonging in this chapter:

Water  
Wastewater  
Storm drains  
Telecommunications (telephone, fiber optic, cable, microwave, satellite)  
Electric  
Gas

### **Status:**

Much of the information for this chapter has not been received in time for this draft. Some information for Oahu has been acquired but nothing for the other counties.

A high percentage of both county and private utility data for Oahu is in digital form or is in the process of being converted to digital form. Updates are occurring on an ongoing basis.

### **Data Sources:**

Source documents come in a variety of forms: 1) as-built drawings, 2) inspector copies, 3) work order forms 4) State half-size drawings, 5) older features drafted onto the 200 scale counter books, 6) connection permit and work order maintenance forms, 7) features drafted onto GIS-produced base maps, and 8) CAD files.

### **Standards:**

For the local government utilities, priority has been placed on water and wastewater utilities with a high emphasis being placed on the updating of storm drains. Priorities for private utilities have not been received.

**Priority:**

**Estimated total investment in this theme:**

The total investment in this theme for the county utility data is estimated to be between \$2 to \$5 million. Investment data for private utilities has not been received.

**Estimated current state and local contributions:**

Estimated \$500,000 for the county.

**What is needed:**

Require that future as-built plans be submitted in electronic format, which would be imported into the GIS for updates to the existing layers.

**What is the likely source:**

Engineering companies that have been contracted to construct the utilities would provide digital copies of design plans and as-built drawings.

**Estimated total investment needed to complete this theme:**

Estimated \$1 to \$2 million.

**Estimated current allocation of funding**

Estimated \$500,000.

**Estimated budget shortfall:**

\$1,500,000.

**Possible ways to overcome this gap:**

Undetermined at this time (04/03).

**Most appropriate data steward:**

The City and County of Honolulu and its designated agencies for local government utilities. The private utilities will maintain their respective data layers.

**Maintenance Process:**

Ongoing on a daily basis.

**Estimated Maintenance cost:**

Estimated at \$250,000 per county utility layer per year.