Chapter 2: Developing and Updating Your Inventory

Overview
Developing and updating your inventory is a critical first step in completing the capital facilities element. This chapter includes some examples of tools for tracking inventory data, how to use the information, addressing facilities owned by the city or county preparing the plan as well as those owned by others, and levels of detail needed in the plan.

The Washington Administrative Code (WAC 365-196-415) further recommends the following to comply with the law:

(i) Counties and cities should create an inventory of existing capital facilities showing locations and capacities, including the extent to which existing facilities have capacity available for future growth.

(ii) Capital facilities involved should include, at a minimum, water systems, sanitary sewer systems, storm water facilities, reclaimed water facilities, schools, parks and recreational facilities, police and fire protection facilities.

(iii) Capital facilities that are needed to support other comprehensive plan elements, such as transportation, the parks and recreation or the utilities elements, may be addressed in the capital facility element or in the specific element.

(iv) Counties and cities should periodically review and update the inventory. At a minimum this review must occur as part of the eight-year periodic update required by RCW 36.70A.130(1). Counties and cities may also maintain this inventory annually in response to changes in the annual capital budget.

Why we conduct an inventory and what we use the information for?
Millions of dollars could potentially be saved or invested elsewhere, by having an updated inventory of capital assets, condition analysis, and a replacement/repair plan. The inventory will also assist a jurisdiction in determining future expansion needs, based on current conditions, capacity and locations. For example, water system data may include location, diameter of pipe, what the pipe is made of, pipe condition, age of pipe, etc. This data is used in several key ways:

- Allows the jurisdiction to know which facilities are owned by the jurisdiction, where they are located, and their capacities
- Identifies when replacement/repair may be needed and potential costs
- Identifies what funding sources could be used for repair/replacement
- Allows each jurisdiction to calculate the capacity needed for full build out of the comprehensive plan to determine what, if any, shortfalls there are in capacity to meet that need (e.g. maintenance and replacement needs, new capacity needs)
- Allows the local government to determine where improvements can be made so the facilities and services needed to support development can be planned for (e.g. location, capacity, funding)
- Provides upfront indication about whether public facilities may be historic (i.e. 50 years of age and older) and/or located in archaeologically sensitive lands, thereby facilitating steps to manage and plan accordingly

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1 Updated to reference changes in GMA update schedule in RCW 36.70A.130, which was amended in 2012 after the WAC was last updated. GMA updates are now required at least once every eight years, rather than seven.
**What analysis is done and what conclusions can be drawn?**

When comparing what exists now versus what is needed to serve the projected growth, each local government can develop the list of needed improvements. These improvements include normal maintenance and repair of the existing facilities, replacement of aging infrastructure at the end of its useful life, or identifies facilities of cultural and historic note that merit being sustained for the future, and adding needed capacity. It provides the jurisdiction with a full picture of what the needs are and allows them to estimate the costs of providing the needed facilities and services.

Counties and cities can then assess how to meet those needs or review options for raising the capital needed to provide them. For instance, it may show that a major new facility will be needed near the end of the planning horizon. The city or county may need to revisit its utility rate setting formula to ensure the rates are set at a level that is adequate to cover the anticipated costs of that new facility. The earlier the jurisdiction is aware of the needs, the more time it has to facilitate funding of the projects.

Alternatively, the data may show that provision of facilities and services to a certain area is more costly than another, or that significant infrastructure improvements are needed in a certain area. There may be opportunities to consolidate projects to gain economy of scale cost savings (e.g. replacing or upsizing water and sewer lines in a portion of an urban growth area, resurfacing the streets and adding stormwater and pedestrian improvements) and then using zoning and implementation techniques to encourage development or infill in that area.

**Facilities owned by the jurisdiction**

Gathering this data should be easiest for the facilities your jurisdiction owns. Ideally, local governments would want the information and data format to be the same for all types of facilities. This can be a set of uniform mapping layers in a Geographic Information System, or contained in electronic spreadsheets. The data gathering process may include data from different departments (e.g. public works for water, sewer, stormwater, etc.; parks and recreation for parks and community facility structures; and any other departments that own or operate buildings, land, or infrastructure). Some jurisdictions include necessary equipment, usually more expensive items such as pump trucks and fire trucks, if they operate their own fire protection services.

**Facilities owned by others-what level of detail to expect**

There are numerous special purpose districts to consider. There may be overlapping service boundaries, boundaries that do not match up with urban growth boundaries, no designated service areas, or multiple districts providing similar services. Consider consulting the following districts: water, sewer, stormwater, fire, school, parks, irrigation, library, flood control zone districts, flood control districts, and diking and drainage districts, and any other known districts within your boundaries. Cities will also want to consult with any special purpose districts that provide services (or that could) in the unincorporated portions of their urban growth areas.

Not all special purpose districts will provide the level of detail the city or county may want or need. It may be difficult to obtain the information and it is likely to be provided in different formats.

**Tips to get information from other service providers:**

- Start early – give them plenty of time. In some cases they may need to gather the information because they don’t actually have it.
- Let them know the type of information you want and why.
• If they don’t have the information, there may be opportunities to help them gather the data or get it into a format that is most useful to you.
• Offer any assistance you can give. Even sharing the types of data you have can help them organize their data in a way that will be more helpful to you.
• Check to make sure they are using the same population projections and planning horizons.

Additionally, the County or City may want to consider utilizing established relationships between your public works department or other staff and private service providers (e.g. Coordinated Water System Plans). There are many local service provider organizations (i.e. PUDs, Water Purveyors, Fire Districts, etc.) that you can contact and go to their meetings. Opportunities to meet and discuss the needed capital facilities of all facility and service providers is likely time well spent.

**How to find information about historic status**
Capital facilities may be historic properties and/or may be located in or near areas that have potential for containing archaeological resources. Facilities such as schools, fire stations, and city halls that are over 50 years may be considered historically or architecturally important. Also, treatment plants, utility lines, and recreation areas may be the site of archaeological resources or maybe even burial sites. A good place to start your research is to contact the Washington State Department of Archaeology and Historic Places (DAHP). First, check DAHP’s WISAARD searchable on-line database ([https://fortress.wa.gov/dahp/wisaard/](https://fortress.wa.gov/dahp/wisaard/)) to see if any buildings and structures in your community have already been inventoried. Since archaeological and cultural resource location information is protected to prevent any disturbance, contact DAHP’s Archaeology staff to discuss appropriate next steps for your capital facility planning process. Early identification and planning helps to preserve and protect these fragile resources plus avoids damage or loss and costly delays. Please note that though infrastructure may be existing, that fact does not eliminate the need to identify and evaluate the presence of archaeological resources, as the resources may extend beyond the previous project area and could affect a future capital project.

Also, many jurisdictions in Washington, including cities, counties, and tribes support local or tribal historic preservation programs. Many of these programs maintain their own databases or files with records on archaeological and historic properties. Visit DAHP’s website at [www.dahp.wa.gov](http://www.dahp.wa.gov) for contact information of local and tribal preservation programs.

**What information should be included?**
Generally, the inventory data will be used to determine capacity and condition of the existing facilities. Once completed, the county or city should have the data necessary to determine both. Again, this will include information such as diameter of pipe, type of pipe (e.g. PVC, concrete), age, condition, etc. This will inform the jurisdiction of maintenance needs (e.g. an older, leaking concrete pipe that is small in diameter may need to be replaced with a larger PVC pipe to provide better water pressure, conserve water from leaks, and meet current fire flow requirements) and allow for an evaluation of capacity (e.g. is the existing system adequately sized to allow infill development and if so, to what extent? Will a new pump station or treatment facility be needed at some point during the planning horizon and if so, when?).

**Where to find this information**
Water System Plans, General Sewer Plans, Stormwater Plans and other system plans can be very helpful in providing information on current facilities – including location, condition and capacity, as well as replacement/repair needs.
A City or County may also benefit from looking at existing insurance coverage for the various facilities. Insurance information should provide the date the system was installed and age of system as well as make, model, etc. In some cases, a City or County may find that some essential facilities are not covered by insurance or that insurance payments are still being made on facilities no longer in use or owned by the local government.

Historical information can be obtained from previous public works directors or system operators, mayors, councilmembers or clerks. Gathering and documenting this information will prevent being left in the dark when the city official or employee who has the most knowledge but didn't write it down, is no longer available.

**Analysis, what is evaluated?**
Using the inventory data, each county and city can determine the demand it will need to satisfy. “Demand” is made up of:

- Fixing any existing deficiencies
- Meeting operational and maintenance needs
- Supplying facilities and services at adopted LOS standards for new development
- Replacing systems once their life cycle ends

It is important to identify any existing deficiencies. This may include bringing all areas of the community up to LOS standards for public capital facilities and services. Until the inventory is updated, a city or county may not realize certain areas do not meet adopted LOS standards. Any that do not meet adopted LOS standards should be analyzed to see what is needed to bring them up to current standards, or to lower the LOS, if it’s set too high to meet the current financial situation.

Identifying maintenance needs is also important. Any deferred maintenance, or general maintenance needed to extend the life of existing capital facilities should be included. This keeps maintenance projects on the list of projects and ensures costly maintenance projects are planned and budgeted for.

And ultimately, each county and city must identify what new capacity is needed to meet the new demand anticipated in the land use element of the plan. This includes accommodating new population growth as well as employment growth and other economic development.

Finally, every system has a life cycle and knowing where a system is in its life cycle can help a jurisdiction set aside funding for replacement of facilities such as a waste water treatment plant, roadway, water supply system, and other vital facilities.

Once this is obtained, the county or city can use its LOS standards to determine what is needed for each type of facility. Compiling the demands from existing deficiencies, maintenance, and anticipated for new growth provides a robust picture of the needed facilities and services.

**Examples**
- The City of Tacoma includes a detailed inventory in its Capital Facilities Plan. The “Inventory of Public Facilities” is separated into the following categories: Community Development; Municipal Facilities and Services; Parks, Recreation & Cultural Facilities; Transportation Facilities; and, Utilities and Services.
• Kitsap County includes an overview, inventory of existing facilities, Level of Service capacity analysis, and list of capital projects and funding for each type of capital facility they address.