



Centralized Infrastructure

Access to centralized water and sewer infrastructure can facilitate the creation of more affordable housing. Without a central system, options are far more limited, though some strategies can still be employed. Understanding the opportunities and limitations of water and sewer systems is an important step in addressing housing needs in your community.



Benefits

- Centralized systems enable denser development, minimizing sprawl and habitat fragmentation. They require less land per housing unit to meet health and environmental regulations.
- Connecting to an existing centralized system can reduce costs for developers. Cost savings can translate into more affordable housing options for buyers and renters.
- Service providers benefit from selling unused capacity. This can improve their bottom line, enabling system improvements and expansions that benefit the greater community.
- Water and sewer districts offer benefits in the professional management of their systems, which typically leads to higher quality standards for water potability and sewage disposal.

Common Concerns

For communities with existing central infrastructure:

Initial connection costs to centralized systems can be high when expansions are required.

Often, those costs are passed onto the homebuyer/renter or existing customers.

- **Response:** Concentrating development in areas with existing water/sewer capacity is the best way to reduce costs. Developers should talk to service providers early in the development process about options for system connections or expansions.

Long-term maintenance and expansion of existing systems can lead to unforeseen costs for service providers, which can be passed on to customers.

- **Response:** Service providers must plan for the longevity of the system. This includes an understanding of existing and future capacity and triggers for expansion. Service providers can reserve infrastructure and funding in advance, ensuring they are prepared for expansion when certain capacity thresholds are reached.





For communities with no central infrastructure:

Without central infrastructure, it can be difficult to create affordable housing.

- **Response:** In areas without central water and sewer, communities should focus on permitting a variety of flexible housing types that can be served by onsite systems, and explore technologies that reduce the land area required for onsite systems. Depending on available space, options could include smaller apartment buildings, accessory dwelling units, duplexes/triplexes, etc.

Creating new central utilities is costly. It requires quality aquifers, enough land for multiple wells to meet required separation distances, and the creation of water and/or sewer districts with the municipality serving as the responsible entity or backup.

- **Response:** Though costly, new centralized infrastructure can greatly advance the housing goals of your community, especially if development is currently constrained by water quality or quantity issues. With enough demand and appropriate siting for treatment, new centralized systems may be an option in your community, and there are grants available to help defray costs.

Strategies

For communities with existing central infrastructure:

- Foster collaboration between municipalities, water/sewer service providers, the County Department of Health, and developers to understand the limitations and opportunities of your existing infrastructure. Knowing where you have capacity (or not) is critical to planning for growth.
- Prioritize development and redevelopment in areas with excess water and sewer capacity or where there are opportunities to connect to existing water and sewer infrastructure.
- Plan for long-term maintenance, system expansions, and improvements to infrastructure to preserve the capacity needed to serve your housing goals. Target grant opportunities to limit costs.

For communities with no central infrastructure:

- Consider if new water or sewer infrastructure is a realistic option in your community. The first steps involve gauging community support and likely undertaking a feasibility study. Consult closely with the County Department of Health as you begin this process.





- If central infrastructure is not desired or is otherwise not an option, focus your efforts on encouraging infill and a variety of housing types (smaller apartment buildings, accessory dwelling units, duplexes/triplexes, etc). Identify and collaborate with small-scale developers to provide these types of housing.
- Coordinate early and often with the County Department of Health and rely on their regulations and approval process to ensure that housing progresses at a sustainable rate in your community. Consider permitting any accessory dwelling units that can obtain water and septic approval from the Health Department.

Other Resources

- This article from Strong Towns argues that our communities face an affordability crisis in maintaining water and sewer infrastructure, which can only be resolved by creating more compact, productive developments that generate sufficient tax revenue to sustain these critical services:
[We Can't Afford to Maintain Our Water and Sewer Infrastructure...Unless We Build More Productive Places](#); Strong Towns (Morris, 2020)
- If you're thinking about water and sewer in your community, a great place to start is with the [Dutchess County Department of Health: Environmental Health Services](#) and/or the [Dutchess County Water and Wastewater Authority](#).
- Visit the County Health Department's website to get familiar with the Public Health Engineer that works with your municipality:
[Public Health Engineers in Dutchess County](#).
- The articles below contain examples of current sewer infrastructure projects in Dutchess County:
 - [Town of Red Hook: Sewer District Creation \(2024\)](#)
 - [Tivoli Sewer Renovation \(2024\)](#)

