



## CoSN For Small Districts: Infrastructure

Small districts leaders have become adept at doing more with less due to the unique challenges they face, and can be more nimble in implementing change than their larger counterparts. These leaders wear many hats and don't have time to waste when it comes to connecting with a national professional organization. That's why many small district leaders turn to CoSN resources - they help small districts get the most bang for their buck when implementing a digital leap.

“ I inherited a network that was expected to support 1:1, but didn't have a prayer to do so. Old access points, unreliable controllers and a complete lack of wireless density brought limited the adoption of powerful ed tech tools. SEND was crucial to rebuilding our network in order to have a high performing wireless network that supports approximately 1500 district laptops on one campus.”

- Nathan Mielke, CETL, Hartford Union High School, Director of Technology Services



**Network Progression:** What technology is needed as a district moves from basic, to emerging, to transformational learning environments? This [Network Progression Infographic](#) shows what level of technology is called for at each stage.



**Five Steps to Smart Networks:** Smart Networks are different from traditional networks. They support one or two orders of magnitude more users than the handful of administrators they were first developed for. They are mission critical for instruction - down time of a day or even a few hours is unacceptable. They may need to support both district devices and devices brought from home by students. Few districts can afford the “forklift” approach of throwing out old networks and building new ones from scratch. The five steps to Smart Networks [guide](#) talks about how to plan for and implement a Smart Network over time.



**Wireless Best Practices:** What are the nitty gritty details of implementing WiFi in schools? What are the technical details and best practices to be aware of? This detailed [guide](#) provides an overview of everything from coverage to bandwidth to security to infrastructure.



**Networking Guidelines for CTO's:** What are the main considerations in designing a network for the digital leap? Check out these short summaries on key topics:

- [Information Technology in Schools](#)
- [Data and Capacity](#)
- [Network Design Considerations](#)
- [Access Points and Wireless Connectivity](#)
- [Connecting Devices to the Network](#)
- [Connecting From Outside of School](#)
- [Understanding Device Capabilities](#)