

## Best Practice #1 – Efficient Existing Public Buildings

1. Enter building information into the Minnesota B3 Benchmarking database and routinely enter monthly energy, water use data for all city-owned buildings.
  - a. Shakopee began entering electricity and gas consumption into the MN B3 Benchmarking website in 2016 with historical data going back to 2006, and recently updated our benchmarking to include water consumption. We will continue to monitor trends in these buildings and will look for ways we can improve our efficiency.
2. Make no/low-cost indoor lighting and operational changes in city-owned/school buildings to reduce energy costs.
  1. When City Hall was completed in August 2017, all of the indoor lighting installed was LED as well as powered over Ethernet – low voltage and installed a sensor to reduce boiler usage.
  2. In 2012, the older Public Works building was converted from T12 to T8 lighting.
  3. During the October 2016 remodel, Community Center upgraded 50% of the interior lights to LED lighting and installed Variable-Frequency Drives. In 2018, the exterior lights on the Community Center were upgraded to LED lighting and in 2019, the upper parking lot lighting was upgraded to LED lighting.
  4. In October 2016, the Ice Arena installed 90% interior LED lighting and updated the building exterior and parking lot to LED lighting.
3. Invest in energy efficiency opportunities through larger financed projects or through smaller retro-commissioning/retrofit projects in city-owned/school buildings.
  1. In 2017, the Public Works building had 12 out of its 22 parking lot lighting fixtures converted to LED lightings – 350 W replaced with 50 W LED bulbs.
  2. In 2017, the Fire Station parking lot lighting fixtures converted to LED lighting – 400 W replaced with 100 W bulbs.
  3. In 2010, the Police Department replaced its water heater and boiler with a high efficiency water heater and boiler.
  4. During the October 2016 remodel, Community Center upgraded 50% of the interior lights to LED lighting and installed Variable-Frequency Drives. In 2018, the exterior lights on the Community Center were upgraded to LED lighting and in 2019, the upper parking lot lighting was upgraded to LED lighting.
  5. In October 2016, the Ice Arena installed 90% interior LED lighting and updated the building exterior and parking lot to LED lighting.
  6. Computer monitors were upgraded from older CRT monitors to newer LED monitors to improve energy efficiency.
4. Implement information technology efforts and city employee engagement to reduce plug loads and building energy use.

1. During the October 2016 remodel, the Community Center installed and implemented Variable-Frequency Drives.
  2. In 2017, the City utilized software from the vendor Automated Logic to control and operate City Hall's HVAC from the Facilities Maintenance Supervisor's computer as well as vendor software the Recreation Facilities Manager controls to operate the cooling system for the ice rink.
5. Document that the new construction or major remodeling of a public building has met the SB 2030 energy standard or has met or qualified under a green building or energy framework.
- a. Ask about state bonded projects that have begun their Schematic Design Phase after January 1, 2015; if there are any project that began their Schematic Design phase after January 1, 2020.
  - b. Then, contact Patrick Smith at 612-626-9709 or sb2030@b3mn.org for assistance in setting up the B3-MSBG Tracking Tool.
    1. City Hall began construction after January 1, 2015.
    2. Community Center began a major remodel in October 2016.
    3. Ice Arena began construction in October 2016.
6. Improve the operations and maintenance of city-owned/school buildings by using a customized online energy efficiency tool, asset management tool, or a green building framework.
1. In 2020, e-Maintenance is being implemented to manage assets and track maintenance schedules.