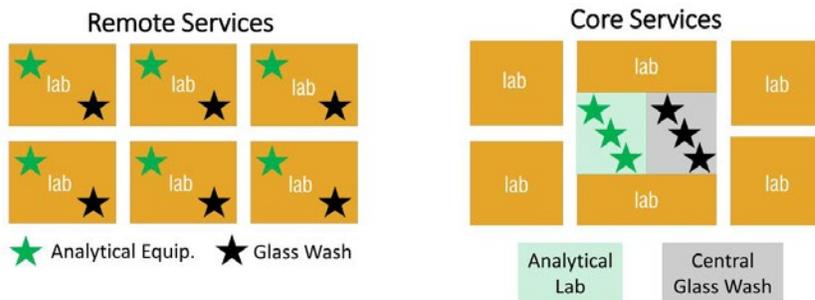




## A Case for Core Labs

Today, corporate R&D and testing labs are under pressure to perform more. Leaning your lab facility by removing waste can go a long way to helping increase production without physically adding space to your facility. From Hixson's perspective, one of the biggest forms of waste in existing facilities is non-value-added redundancy. Obviously, some redundancy is critical in the lab environment...uninterrupted power, emergency generators, backup systems...these are certainly value-added items. The redundancy we see as waste are functions and equipment that are replicated throughout a facility and not fully utilized. Building "core labs" is the way we recommend to best address the waste of high-cost under-utilization.



The concept is simple: Rather than having the same specialized pieces of equipment and functions in each lab, remove those functions from the labs and gang them together in a "core" space. This has multiple potential benefits. The first is to build or operate as few (and small) of the most expensive lab spaces as possible, such as analytical labs, or cold storage walk-ins. A second benefit for specialized work (such as analysis) or less-skilled work (like glass washing) is that you can have the right human resources doing the right jobs in those spaces. Lastly, the quality and production of the support functions is increased.

Let's look further at the examples of analytical lab equipment, e.g., High Performance Liquid Chromatography (HPLC) or Gas Chromatography (GC), and glass washing. In a more conventional lab design, separate labs might operate more independently, each with their own support functions located within them. This requires a wash sink within the lab, and perhaps a dishwasher and/or a drying rack. If you have six labs, you will also have six sinks, six dishwashers, six drying racks, and the plumbing necessary to support each. Similarly, with an HPLC or GC, you may be delivering deionized water, lab gases or other specialized utilities to six labs. You will have service contracts for twelve pieces of equipment for maintenance and calibration, and all six labs might be subject to higher HVAC temperature and humidity requirements based on the needs of the equipment.

In the core lab model, such support spaces are removed from the lab themselves and co-located as one. Less lab space is operating at the stricter HVAC requirements. Less building and lab utilities are delivered all over the facility, and the support spaces and equipment are utilized at higher rates. In addition to the capital and expense savings in the labs, the core lab work is more efficient as well.

Hixson has found with several clients, that converting or creating a few key core lab spaces in a facility can go a long way to eliminating waste in the processes and increasing performance and quality.

**AUGUST 2020**

### experience in brief

Consider these Core Labs/Functions:

- Analytical/Instrument Lab
- Ultra-low Temperature (ULT) Freezer Farm/ Biorepository
- Walk-in cold storage
- Glass wash
- Lab consumable and chemical storage

### related content:

[Four Things You Need to Know About Lab Design Material Selection](#)

[What You Should Know About Office-to-Lab Adaptive Reuse](#)



To learn more, contact:  
Mike Trageiler at:  
[mtrageiler@hixson-inc.com](mailto:mtrageiler@hixson-inc.com)  
P: 513.241.1230  
[www.hixson-inc.com](http://www.hixson-inc.com)