The Mother of Invention
Problem solving creates satisfied partners

Paraphrasing the Greek philosopher Plato (428 BC-348 BC), “Necessity ... is the mother of invention.”

In the construction industry, we owe a great deal of our livelihood to the needs of our customers, working with them to find feasible solutions for their facility requirements.

Sheriff Jeff Merrell of Uintah County, Utah faced the need of more space because his existing jail facility was unacceptably overcrowded.

Something had to be done. But with challenging economic times and budget shortfalls, how does an elected county sheriff embark on a plan to build a new correctional facility?

He had the support of commissioners who oversaw the county budgets. They recognized the value of partnerships in a regional economy.

And so began a project where the county officials joined the designers and builders to find the most efficient and effective ways to use the limited county resources, yet create a facility that would meet needs and improve public safety efforts.

The commissioners were willing to make hard decisions in the short term for long-term benefits. The outcome is a jail with twice as many beds as originally envisioned. Through thoughtful and wise planning, we were able to add not only additional cells but increase square footage with an additional floor.

This public safety complex serves many public agencies. Other local communities have taken note, and see the benefit of coordinating with the county to have the use of courtrooms and other meeting facilities without having to construct their own buildings.

Some basic management principles from this project are reflected in the success of all Layton projects:

- Listen to and understand the needs of the building owners
- Explore all options and study industry best practices
- Interact with end-users of the facilities whose ideas may lead to maximized value and use
- Ensure that there is respect among the team where all ideas are heard and explored so that best designs and uses are discovered
- Be flexible in addressing issues that arise during the construction process
- Understand that trust and unity must be developed among all team members

We serve a wide variety of construction sectors and geographic regions. Layton is prepared to listen and learn and contribute alongside you for the success of your next construction project.
A higher education
Snow College dedicates 50,000-book research center

Layton Construction completed the 72,000-square-foot Karen H. Huntsman Library at Snow College in Ephraim, Utah, which was dedicated in November 2010. The library houses more than 50,000 books and 65,000 digital sources and features numerous study areas, wireless Internet access, two high-tech auditoriums and a café. The Jon M. and Karen Huntsman family contributed financially to the library and participated in the grand opening ceremonies.

Kauai Community Federal Credit Union deposits LEED® Gold

Kauai Community Federal Credit Union in Hawaii opened its new Kukui Grove West office in November 2010. Layton Construction built the two-story 21,396-square-foot facility. The branch has also earned LEED® Gold certification, and is the first LEED®-certified bank or credit union in Hawaii. The branch’s sustainable construction features include photovoltaic laminates on the roof to convert the island’s sunshine to electricity and a bioswale to absorb pollutants before storm water runoff leaves the site.

Health Care Expansion Project Under Way in Pennsylvania

Layton Construction has begun a significant expansion at Wilkes-Barre General Hospital in Wilkes-Barre, Penn. The project includes construction of a new 30,000-square-foot emergency department, which will double the size of existing emergency facilities. Work also includes a 60,000-square-foot Heart and Vascular Institute to enhance cardiac care services and an 18,000-square-foot rehabilitation unit renovation located in the existing hospital. The construction project will be complete in late 2012.

Ascend Health Opens Salt Lake Behavioral Health Hospital

Layton’s Interior Construction Specialists has completed build-out of Ascend Health’s Salt Lake Behavioral Health facility, a 118-bed inpatient psychiatric hospital. Ascend Health is a leading behavioral healthcare provider offering a full range of inpatient and day hospital services.

The five-story, 74,000-square-foot freestanding hospital features a full kitchen with a cafeteria to meet the needs of both patients and visitors. A beautiful lobby and overall hospital design that features rich, warm colors and materials serve as an inviting welcome.
The Foreseeable Future
Uintah County Public Safety Complex meets needs for numerous agencies

The citizens and officials in Vernal, Utah, have learned the importance of sticking together to get things done. Being isolated does that. Vernal is three hours from the closest city of significant size (Salt Lake City). In fact, Vernal is about three hours away from most places.

This ingenuity and unity was especially important when then-new sheriff Jeff Merrell came to the county requesting a new jail.

When all was said and done, Merrell — and the citizens of Uintah County — got a public safety complex that includes a new jail, county courts, and administration offices that house a number of government agencies including the county attorney, emergency management, central dispatch, adult probation and parole and the Utah Highway Patrol.

MEETING THE NEED

Using money from both mineral-release funds and a public bond, the Uintah County commissioners developed a complex that would not just take care of current public safety needs, but would serve the county for years to come.

For example, Uintah County had room for 54 inmates before the new jail was built, but the county was routinely called on to house as many as 120 inmates. The new jail can house up to 384 inmates. The surplus space enables the county to contract with other agencies to house their inmates.

Costs were kept down by using a pod system made up of precast concrete cells shipped by rail from Georgia to Salt Lake City and then trucked to Vernal.

WORKING TOGETHER

In the spirit of teamwork, the various agencies involved in the process found efficient ways to get the project put together. And it started with Kelly Hays.

Hays, the facility and construction manager for the county, was the one point of contact to work with Layton Construction. Sure, others

The Details

<table>
<thead>
<tr>
<th>UNTAH COUNTY PUBLIC SAFETY COMPLEX</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>START DATE</strong></td>
</tr>
<tr>
<td>April 2008</td>
</tr>
<tr>
<td><strong>COMPLETION DATE</strong></td>
</tr>
<tr>
<td>March 2010</td>
</tr>
<tr>
<td><strong>TOTAL SQUARE FOOTAGE</strong></td>
</tr>
<tr>
<td>170,000</td>
</tr>
<tr>
<td><strong>COST</strong></td>
</tr>
<tr>
<td>$43 million</td>
</tr>
<tr>
<td><strong>DESIGN</strong></td>
</tr>
<tr>
<td>JWL Architecture &amp; Babcock Design Group</td>
</tr>
<tr>
<td><strong>INMATE BEDS</strong></td>
</tr>
<tr>
<td>384</td>
</tr>
<tr>
<td><strong>OTHER AGENCIES LOCATED IN THE COMPLEX</strong></td>
</tr>
<tr>
<td>County attorneys, emergency services, central dispatch, adult probation and parole, Utah Highway Patrol</td>
</tr>
</tbody>
</table>
shared opinions regularly, but Layton’s team knew the buck stopped with Hays.

“Having one project manager that coordinated with the other departments helped streamline the whole process,” Hays says. “The commission realized the importance of having someone minding the store.”

MUTUAL RESPECT

The process worked for Layton as well. Communication was streamlined and decisions were made quickly. Plus, as time went on, those working on the project developed genuine friendships fostered by respect.

“It’s easy to work with friends,” says Ed Deffner, project manager from Layton Construction. “When you have mutual respect, you can work through issues easily.”

Merrell appreciated the excellent communication between all parties as well.

“After weekly meetings, I enjoyed that all minutes and details were e-mailed to me and to my jail commander. We always felt informed, even when I couldn’t be to the meeting.”

THE RESULTS

“I’ve been told that 48 percent of sheriffs who build new jails don’t get re-elected,” Merrell says. “With the help of Layton Construction, we were able to present the project to the public in a positive way.”

In fact, voters showed their appreciation for Merrell’s vision as well. They re-elected him by a vote of almost 2-to-1.

“If I have a similar project in the future, I absolutely and without question would love to work with these guys again,” Hays says.

The complex has a new surveillance system that allows for more efficient monitoring of inmates.

The jail was designed to meet the county’s needs now and in the future. It includes a full laundry, kitchen and medical center.

The complex includes:

n 6,800 cubic yards of concrete – enough to cover a football field with three feet of concrete.

n 110,000 blocks of masonry.

n 11,000 tons of steel, including 705 tons of structural steel.

n 590 doors, 14 acres of drywall and 650,000 drywall screws.

n A small tanker’s worth of paint and sealer (4,000 gallons).

n Enough wire (170 miles) to go from Vernal to Salt Lake City.

n Another 50 miles of conduit.

n 25 miles of ductwork, piping and tubing.

WOW Factor

In March 2010, the county sponsored an open-house event that allowed 204 people to spend a night in the jail before inmates arrived. Amazingly, interest was so high that the county had to turn people away.

“If I have a similar project in the future, I absolutely and without question would love to work with these guys again.”

Kelly Hays
Facility and Construction Manager
Uintah County
Weather control

Precast concrete panels enable building schedule flexibility

Winter unleashed its fury in the first couple of months of the season in the Salt Lake City area. Mountain ski resorts report November and December snow totals at 265 inches — 22 feet! — and the Salt Lake International Airport received nearly three feet of snow during the same two-month period. Lots of snow pays great dividends for Utah tourism, its ski resorts and for the newly opened five-star Montage Resort at Deer Valley just completed by Layton Construction. However, snow can wreak havoc upon the quality and timely placement of concrete.

When winter weather collides with commercial building construction, a variety of options to maintain a construction schedule are critical. Because of this year’s extreme conditions, precast concrete panels have helped enable the construction schedule of a 570,000 square-foot distribution facility in the Salt Lake area. The panels of this building will stand as high as 10 feet and up to 35 feet wide. Insulated metal wall panels will be placed atop the concrete to take the walls to roof height.

Due to the fast track schedule of the project, the precast option was chosen to allow manufacture of the panels while the site was being prepared. Usually, Layton’s concrete teams erect structures using tilt-up concrete panels cast on site. The building’s concrete floor is placed, upon which forms are set and tilt-up panels are poured, cured and lifted — or tilted — into place.

In the case of this distribution center, Layton crews were at the site excavating, placing footings and foundation, while the concrete panels were engineered and manufactured at a production facility 28 miles from the construction site.

The structural steel frame and the roof were constructed early in the project and concrete wall sections were then attached, created a controlled environment in which Layton crews could focus on the placement of the distribution center’s concrete industrial floor, the most critical element of the facility. To rapidly enclose the building, Layton’s construction team leaders described it as the “rush to the roof.”

The concrete wall panels are manufactured in a warehouse. The panels are thinner because they are pre-stressed using reinforcing cables installed during the casting process. Architectural reveals are often added on tilt-up concrete panels to help control cracking, but fewer reveals are necessary on precast panels because they are pre-stressed. The regulated temperature of the manufacturing facility also allows the producer to include concrete admixtures to increase the ultimate strength of the concrete without worrying about cold weather concrete curing constraints. Other concrete placement variables are also minimized so consistent color can be incorporated into the casting. The cured precast walls can also be backfilled immediately after placement, which enhances jobsite safety and site accessibility.

Layton’s subcontractor, Owell, operates an in-house Precast/Prestressed Concrete Institute (PCI) quality control department to maintain and assure the highest quality industry standards.

Between the heavy and frequent winter storms, construction crews have been able to erect the building’s 3,350 linear feet of concrete walls. The project is moving ahead because of the alternatives made possible by using precast concrete panels.

EMPLOYEE FOCUS  |  Steve Shipley

Despite being only 19 years old when he started working for Layton Construction in 1983, Steve Shipley was already experienced in a number of areas of construction. Since age 14 he’d been working side-by-side with his dad, Dick, who himself would eventually work for Layton Construction.

“I would work with him all summer doing whatever needed done,” Steve says. “When I started at Layton, I was looking for an opportunity at a bigger company.”

And he found what he was looking for.

“The wages are fair, the people are fair and the work has been steady,” he says. “You can’t ask for more than that in a construction job.”

Steve’s work has been steady as well. He’s worked on a number of high-profile jobs and been given the freedom to find solutions to complex problems. His work on Rice-Eccles Stadium at the University of Utah is one of his favorites, especially because he was involved from demolition of the old stadium to punch-list items on the new stadium.

Steve has also worked on Primary Children’s Medical Center in Salt Lake City and Rio Tinto Stadium in Sandy, Utah.

“There are so many projects that I enjoyed being a part of,” Steve says. “I especially enjoy the ones I get to see from the beginning to the end. There’s satisfaction that comes from seeing the whole job through.”
Building a state-of-the-art public safety building has more complex electrical concerns than your normal commercial construction job.

In addition to the regular electrical work, there are security systems, video controls and other automations required to make the jail area safe, secure and efficient.

For the work Layton Construction did at the Uintah County Public Safety Complex in Vernal, Utah, the company relied on an old partner — Cache Valley Electric. “We’d worked with the same design team on two other projects that were similar to this one,” says Scott Harrison, controls and automation project manager with Cache Valley Electric. Cache Valley Electric had also previously worked on the Cache County (Utah) complex and the Sanpete County (Utah) complex.

Cache Valley Electric has thrived on the motto, “A Tradition of Excellence.” A non-compromising commitment to excellence is what has made Cache Valley Electric a national leader in fine electrical construction since 1915. Combine the company’s ability to do a masterful job with its team-first approach and there’s no doubt why Layton Construction enjoys working with Cache Valley Electric.

“Relationships are very important to us at Cache Valley Electric,” says Allison Milne, director of marketing and new business development for Cache Valley Electric. “That’s how we market our business. You won’t see our ads in trade publications very often. We think the best way to build our business is to build solid relationships with contractors and owners.”

Cache Valley builds relationships by exceeding service expectations. For example, Cache Valley offered initial training on the equipment in the Uintah County Public Safety Complex as described in the contract. However, Scott continues to travel to Vernal to solve problems and make sure all systems are working and that the staff understands what should be happening.

Cache Valley Electric is made up of five divisions (electrical construction, teledata, Avtec, technology services, and service/specialty projects), which gives the company the chance to utilize specialized experts in each area of electrical work. The company invests in hiring and training the best technicians who know what’s best for clients.

“There’s a mutual respect that we share with Layton that makes working together enjoyable, and that gets tremendous results for project owners. We share values of doing things the right way.”

— Allison Milne
Director of marketing and new business development
### Industry Trends | What They’re Saying

#### Total Construction Starts Annual Percentage Change

**West** vs. **National**

<table>
<thead>
<tr>
<th>Year</th>
<th>West</th>
<th>National</th>
</tr>
</thead>
<tbody>
<tr>
<td>2002</td>
<td>2%</td>
<td>2%</td>
</tr>
<tr>
<td>2003</td>
<td>8%</td>
<td>5%</td>
</tr>
<tr>
<td>2004</td>
<td>14%</td>
<td>12%</td>
</tr>
<tr>
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<tr>
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<td>2008</td>
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<tr>
<td>2009</td>
<td>-24%</td>
<td>-24%</td>
</tr>
<tr>
<td>2010</td>
<td>-3%</td>
<td>-2%</td>
</tr>
<tr>
<td>2011</td>
<td>8%</td>
<td>8%</td>
</tr>
</tbody>
</table>

**Source:** McGraw-Hill Construction; National: Annual Percentage Change for Dollar Volume of Total Construction Starts; West: Annual Percentage Change for Total Construction Starts

#### Construction Industry Confidence Index (CICI)

- **General Contractors/Construction Managers/Engineer-Constructors**

<table>
<thead>
<tr>
<th>Confidence Level</th>
<th>Currently</th>
<th>3-6 Months</th>
<th>12-18 Months</th>
<th>3 Years</th>
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</thead>
<tbody>
<tr>
<td>Declining</td>
<td>63%</td>
<td>46%</td>
<td>12%</td>
<td>2%</td>
</tr>
<tr>
<td>Stable</td>
<td>33%</td>
<td>46%</td>
<td>38%</td>
<td>72%</td>
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<tr>
<td>Improving</td>
<td>4%</td>
<td>8%</td>
<td>38%</td>
<td>26%</td>
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</table>

**Source:** ENR, 3rd Quarter, 2010

#### National Commercial Construction Forecast 2011

**Contract value ($ billions)**

<table>
<thead>
<tr>
<th>Type of Construction</th>
<th>2010 Preliminary</th>
<th>2011 Forecast</th>
<th>% Change 2011/2010</th>
</tr>
</thead>
<tbody>
<tr>
<td>Stores &amp; Shopping Centers</td>
<td>12.3</td>
<td>13.9</td>
<td>14</td>
</tr>
<tr>
<td>Office Buildings</td>
<td>15.4</td>
<td>17.3</td>
<td>13</td>
</tr>
<tr>
<td>Hotels &amp; Motels</td>
<td>3.2</td>
<td>3.6</td>
<td>13</td>
</tr>
<tr>
<td>Other Commercial Buildings</td>
<td>8</td>
<td>10.1</td>
<td>25</td>
</tr>
<tr>
<td>Manufacturing Buildings</td>
<td>8.5</td>
<td>9.3</td>
<td>9</td>
</tr>
<tr>
<td>Educational Buildings</td>
<td>44.1</td>
<td>43.6</td>
<td>-1</td>
</tr>
<tr>
<td>Healthcare Facilities</td>
<td>21.1</td>
<td>22.9</td>
<td>9</td>
</tr>
<tr>
<td>Other Institutional Buildings</td>
<td>38.4</td>
<td>36.2</td>
<td>-6</td>
</tr>
</tbody>
</table>

**Source:** McGraw-Hill Construction Outlook 2011

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### Layton Construction Company

#### Area Offices

- **Phoenix**
  - PHOENIX
    - 4686 E. Van Buren
    - Suite 100
    - Phoenix, AZ 85008
    - (602) 840-8655

- **Irvine**
  - IRVINE
    - 8001 Irvine Center Drive
    - 4th Floor
    - Irvine, CA 92618
    - (949) 453-8300

- **Hawaii**
  - HAWAII
    - 2251 Kapili Road
    - Koloa, HI 96756
    - (808) 742-4161

- **Boise**
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    - 1444 S. Entertainment Ave.
    - Suite 300
    - Boise, ID 83709
    - (208) 429-6740

- **Salt Lake City**
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    - 9090 S. Sandy Parkway
    - Sandy, UT 84070
    - (801) 568-9090

- **Nashville**
  - NASHVILLE
    - 5409 Maryland Way
    - Suite 100
    - Brentwood, TN 37027
    - (615) 376-6217