



All about timing



There is no question that a hotel renovation is among the most challenging projects in the commercial construction and renovation industry. While design, engineering and construction are technically complex, it is rare to see an operational hotel closed for a renovation, no matter how extensive it is.

This heightens the technical complexity of a renovation project by several notches: The presence of overnight guests, ongoing meetings and social events, and a busy public restaurant/bar business. In turn, this heightens the pressure on the project team to reduce the impact on revenue by optimizing occupancy, minimizing disruptions and compressing the schedule.

Effective scheduling is key to successful renovations

By Jim Suggs



In terms of project scheduling, the toughest hotel renovation project is one involving guest rooms. (Courtesy of Valencia Group)

Following is a look at the most significant challenges and critical success factors and some real world solutions:

Lost revenue vs. construction costs

It's not surprising that hotel owners are focused on revenue. When it comes to meeting rooms and other public spaces, renovations can be scheduled for slow periods. But unoccupied guest rooms equal lost revenue night after night so, in terms of project scheduling, the toughest hotel renovation project involves guest rooms.

Ideally, the hotel would like to schedule the project so that the fewest guest rooms are down for the shortest amount of time. On the surface, that seems logical. But if construction costs double as a result of this scheduling strategy, the increased project capital cost may have a greater impact on the hotel's profitability than the loss of operating revenue associated with more downtime.

The first step toward effective scheduling is a cost-benefit analysis of revenue versus construction costs. According to RTKL and its partners, here are the costs for renovating 212 guest rooms and 16 suites at the Hotel Valencia-Santana Row, a boutique luxury hotel in San Jose, Calif.

The financial analysis also must factor in the logistical impacts of various construction-phasing options for access, from guest elevators to guest rooms and, more importantly, fire exits.

The project team analyzed three fundamental options:

- Fewest guest rooms down for shortest time period (highest construction cost)
- Most guest rooms down for longest period of time (lowest construction cost)
- A half-floor of guest rooms down for a time period that fell somewhere in between

The general contractor, Bernards, a multidisciplinary commercial builder and construction management company based in Los Angeles, performed the financial analysis based on detailed room rates and occupancy rates provided by the owner. It's worth noting

that this type of analysis not only requires computing power, but also a general contractor (GC) willing to collaborate with the A/E (architects and engineers) to achieve the most successful, cost-effective outcome.

Option 3, the final, most cost-effective plan, "takes down" an entire 60-key floor and returns the rooms roughly 20 keys at a time every nine days (i.e., 2.3 guest rooms completed per day).

This plan yielded the best financial outcome for the owner – a \$175,000 savings versus the least effective plan. Nobody, including the GC, could have predicted the outcome without running the numbers.



The schedule of construction on a phased project—specifically if it involves reconfiguring bathrooms, moving partitions, or modifying power and lighting—depends on timely inspection at each phase. (Courtesy of Valencia Group)



Ideally, the owner would like to schedule the renovation of guest rooms so that the fewest rooms are down for the shortest amount of time. (Courtesy of Valencia Group)

Maintaining guest access and egress

The financial analysis also must factor in the logistical impacts of various construction-phasing options for access, from guest elevators to guest rooms and, more importantly, fire exits. The Valencia's guest room tower surrounds an open, central courtyard, with 60 guest rooms on four corridors and four fire stairs on a typical guest room floor. In this case, the project team maintained safe egress by scheduling construction on one corridor per floor at a time (with the fire marshal's approval).

RTKL has yet to come across a situation in which the best value for the owner in terms of scheduling was impossible to achieve because there was no way to maintain safe egress from a guest room floor.

In that case, the project team might consider keeping a corridor clear during the renovation. But unless the scope of work does not extend beyond replacement of soft goods or, perhaps, FF&E, it's unlikely the fire marshal would approve this approach.

So, nothing is impossible. During a renovation project at the Omaha Hilton and Convention Center in Nebraska, RTKL used that strategy for brief periods during the renovation, with the fire marshal frequently on site

Streamlining permitting

As commercial construction and renovation professionals know, the interpretation of national codes varies from place to place. There are further variations between the local building and fire departments and the length of time to process permits. One thing is consistent: The process always is time consuming.

There also is a certain consistency in the project manager-owner dialogue about permitting at the start of a project. When asked if they can approach the building and fire departments early on with schematic drawings to discuss challenges and proposed resolutions, many owners say it only raises issues. Their advice: Complete the construction documents and submit them.

I have found that the best way to avoid construction delays is to prepare for, or prevent, certain issues. One way is to establish a strong, honest working relationship with the fire marshal, and building and planning director. Approach them early with schematic drawings. Open a dialogue and start building the relationship.

There will be questions and differing interpretations of code. But if the project team can identify these issues early on, they generally can find a way to work with officials toward a timely, successful resolution. Waiting until the construction drawings are complete may result in delays in the permitting process; protracted

negotiations, changed orders and a late start to construction.

Another way to get ahead of the curve is to schedule construction on a phased project; especially if it involves reconfiguring bathrooms, moving partitions, or modifying power and lighting. This all depends on timely inspections at each successive phase. If the building and fire departments understand the phasing plan ahead of time, they can schedule inspections.

Hotel renovation schedules also can be thrown off when an owner or project team assumes that the building department's approval of the plans automatically guarantees the fire department will approve them. They may disagree or have a different interpretation of the code, with the fire marshal leaning toward a more literal interpretation than the building and planning director. The fire marshal and his inspectors have the final word. In fact, even if the plans are approved by the fire marshal, the inspector can require changes during construction.

The technical challenges of a vertical configuration

It's not only guest access and egress that must be maintained. The service elevators are absolutely keys to maintaining the quality of the hospitality experience throughout the project.

Housekeeping, room service and furniture replacements cannot wait while a contractor takes over one of the two service elevators for their exclusive use.

At the same time, owners must be educated about the contractors' need for access to a service elevator. Certainly, it must be carefully scheduled, generally during nighttime hours and slow daytime hours. It also must be avoided during peak times (after checkout). From time to time, a critical situation either for hotel operations or construction may take priority for use of a service elevator.

If a large-scale guest room renovation is the toughest project in an operational hotel, a major structural alteration affecting vertically aligned spaces is a close second.

Three components were combined in a recent project for the Omaha Hilton Convention Center Hotel: renovation of 450 existing

guest rooms, a 150-key addition, and a new junior ballroom addition above the existing hotel kitchen and laundry.

Neither the kitchen nor laundry could be closed for any period of time. The hotel had received a proposal from another architect that involved removing the roof from half of the kitchen and the entire laundry, installing additional beams and doubling up the framing structure that supported the roof (and now the floor above).

The proposed schedule required the kitchen to be closed for half the renovation period, and the laundry to be closed for the entire project. Their advice: "Outsource your laundry and components of your food service."

Nobody fully analyzed the impact on operations, including costs and staffing.

The RTKL project team explored five or six structural alternatives for framing the junior ballroom addition to minimize or avoid putting columns in usable spaces. The selected alternative required one column through a perimeter space of the laundry – otherwise, clear-span beams supported the addition. The renovation was sched-

uled to occur without closing the kitchen or the laundry, except for a few hours when power had to be shut off or switched over.

There were other challenges, too. The junior ballroom could not be situated at the same floor level as the meeting spaces on the second floor. It had to be raised approximately 4 feet to accommodate the supporting structure. The project team turned that challenge into an advantage. The stairs and accessibility ramp that were required to travel from the existing meeting spaces up to the new ballroom provided a great pre-function space at the bottom and a grand entrance to the ballroom at the top.

Servicing this ballroom was another challenge, as it now was approximately 4 feet higher than the existing back-of-house corridors. A steep ramp was not an option for fast-moving staff pushing heavy carts. The solution was to hang an inclined service corridor from the exterior of the existing building.

While this was a GMP project with a budget that had been established well before RTKL and the GC started the project, it is doubtful this solution cost the owner more than the original proposal, especially if you take into account the impact on the owner's revenue, operating costs and staffing. This is another instance that required cooperation with a GC who genuinely was willing to collaborate in planning and execution to give the client the best value.

It must be noted that both RTKL and the GC did well on the GMP.

Surprise: Not all "standard guest rooms" are identical.



It often said that teamwork and planning are required for successful commercial construction. This is never truer than during the renovation of an operating hotel.

It is a given that a renovation project will involve unforeseen conditions. The existing drawings supplied to the project team may not reflect the actual outcome of the project. Successive renovations may not have been carefully recorded, or the owner may not have these documents.

The project team proceeds based on the best information available, but always run into unexpected challenges.

An experienced hospitality design and construction team knows that not all “standard” guest rooms are identical. Even so, perhaps small variations in a few of the guest rooms were not significant enough to notice during the walk-through.

For example, one room on each floor might be 6 inches narrower than the others because they back up to an elevator core. Six inches is a significant enough variation that a piece of built-in millwork or case work will not be exactly like it was depicted in the designs.

Certainly, the idea would be to spend several weeks and \$50,000-\$75,000 to document the measurements, take photographs and conduct electrical surveys of every guest room. That would avoid some of those surprises during construction. But in the author’s experience, it’s probably not worth it because a well-versed project team almost can always work around small variations.

The ripple effect

Nevertheless, hotel renovation schedules are so tight that a day lost here or there can create a ripple effect that can build up to a mighty big wave. Poor communication with the fire marshal, and building and planning director is one source of trouble.

Unforeseen conditions are another.

Unexpected long-lead items also rock the boat. For example, a piece of hardware, millwork or case work often can turn out to be a long-lead item that was not anticipated in the schedule, sometimes, because the supplier has not been fully forthcoming about inventory or shipping logistics.

Mechanical and electrical subcontractors may be another source of unanticipated delays – either because of hold-ups in ordering or delivery of equipment, or due to unforeseen conditions that arise during the project. That’s why the prudent project manager summons key vendors and subcontractors to the planning table for a major hotel renovation project.

Sometimes, no amount of planning can avoid a setback in the schedule. During a major guest room renovation project for La Quinta,



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FF&E: ‘Nice guys finish last’

Two firms over whom the project team has little control are the owner’s FF&E purchasing agent and the installer. First, they must understand the fast-track nature of the schedule for a hotel guest room renovation project. Otherwise, they may submit a schedule that demands use of the service elevator for three weeks when, in fact, they only have four days to complete the project.

Second, the FF&E firms’ leads must be assertive and insist that their vendors and installers get the job done in a timely manner. Otherwise, FF&E delays can have a disastrous impact on schedule and revenue.

In addition to the sales staff, the FF&E leads must be brought to the planning table. They must be educated and urged to make contingency plans. (Then, they should hope for the best.)

Speaking of contingencies, owners must understand they need scheduling and financial contingencies in place. They also must be flexible and remain open to alternatives.

It often is said that teamwork and planning are required for successful commercial construction and renovation. This is never truer than in renovation of an operating hotel. The owner benefits from hiring a team of people with experience taking on challenges and unafraid of long hours and pressure. It helps to know the benefits of collaborating effectively. **<CCR**

a fire at the furniture manufacturing plant set back production of case goods for three months, and the owner’s FF&E purchasing agent had to find an alternative pronto.

A worst-case scenario is a setback that affects a major event that has been scheduled soon after re-opening, such as a large wedding, conference or corporate event. If the hotel owner’s sales staff assumes the completion date is set in stone, they may promote a big event on “re-opening day.”

But what if construction is delayed by a snow or ice storm?

Bring the sales staff to the planning table, too. Educate them about the potential for unforeseen delays in the construction schedule and urge them to make contingency plans.

At Santana Row, a portion of the renovation was going to affect the part of the courtyard that had been designated by the sales staff for a major event for a corporate client. The stakes were too high to cancel the event. As a result, the renovation work in that area was delayed for a year due to the spring and summer wedding seasons.

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