FROM START TO FINISH

Constructing a commercial building can involve an enormous amount of both time and money; several factors must be considered before breaking ground. The sheer scale of the of the project demands a major commitment from the owner. Unforeseen problems such as budget overruns, unreliable sub-contractors, or weather delays are all common problems the owner must be prepared for. In order to get a better understanding of how a project of this magnitude is completed, it is helpful to understand the total construction process, starting from the concept to completion of the project. The following is a list of the various stages of the construction process:

* Planning/design
  All projects begin with planning and design, the first stage begins with identifying a location and meeting with an architect and general contractor for pre-design discussions. The architect becomes the primary designer of the building and provides specifications, finished materials, and other architectural features of the building in schematic drawings.

* Contract & bid documents
  Once the planning and design is completed, the next step involves the preparation of bid documents and working drawings. All projects, regardless of size or cost require the preparation of contract documents, the documents spell out the project specifications and expectations. The architect prepares working drawings for this process, which provide a pictorial representation of the construction work to be completed. The contracts and working drawings are provided to potential contractors in order to solicit bids on the various stages of constructions. The architect also begins to gather data to deal with issues that could arise during construction such as zoning, local infrastructure, traffic, and population impact. Engineers may be consulted as well to solve specific issues.

* Bidding
  With the architect’s completion of the working drawings and bid documents, the bidding process can begin. Contractors obtain a copy of the bidding information to prepare their formal bid. With review of the documentation, the contractor determines how to build the project and must consider all limitations and conditions set forth in the bid documentation. Once all bids have been submitted, the owner will evaluate the bids and then award the contract. The contract document (between owner and contractor) will include a start and finish dates, progress report dates, billing, insuring requirements, and any other pertinent information.

* Construction (Field/Work)
  The fourth stage of the process is the actual construction of the building or fieldwork. Fieldwork is broken down into numerous stages, following the standards set forth of applicable building codes. Before construction can begin, building permits must be issued by the appropriate municipality. Building inspectors will be involved at various stages of the build to verify that the project is being constructed to municipal code. The contractor must schedule his workers along with any sub-contractors in such a way so that the project runs smoothly and is completed on schedule and on budget. As construction progresses, change orders may occur. This is a written contract between the contractor and the owner indicating a change made from the original agreement, and depending on the type of change, the order may cause an increase or decrease in the total cost of the project.
- **Construction payments**
  All construction contracts extend over a period of time, when a contractor completes a prescribed amount of work, the owner pays the contractor for the completed work. The specifications for this are included in the bid documents and the architect is responsible for reviewing the requested payments submitted by the contractor to verify the work is completed, and that the proper cost allocations have been applied. This process provides the owner and architect a basis for construction cost control on the project, in addition, benefits the contractors, as a way to submit charges on a more regular basis during various stages of construction.

- **Completion**
  The final stage of the construction process is the completion stage, once the project is completed, the architect will prepare a set of plans known as the “as built” plans. These plans represent how the building was exactly constructed. The project must pass a final inspection completed by the local municipality in order to receive its notice of completion or certificate of occupancy.

According to a Commercial Building Energy Consumption survey (CBECS) there are over 5.6 million commercial type buildings in the U. S. with over 87 billion square feet of floor space

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**New Construction Statistics**

The construction economy is still strong, however, it is beginning to face some uphill battles. Residential construction which represents about 50% of the construction industry is starting to slow. Public construction, which was expected to explode with new infrastructure in place has not happened, and thus has stalled. Commercial construction currently is booming, however, analysts note that residential construction is typically a precursor to commercial construction trends, thus a slowdown is expected there as well.

After being fairly flat for many years construction wages are showing increases of 3-5% this year. Overall while most construction material costs remain flat, components such as wood, copper, and steel are still increasing in cost. Some analysts are predicting that increases for all materials is inevitable due to some expected inflation along with instability in gas and oil prices.
Getting to know The National Historical Registry

“The National Register of Historic Places is the official list of the Nation’s historic places worthy of preservation. Authorized by the National Historic Preservation Act of 1966, the National Park Service’s National Register of Historic Places is part of the a national program to coordinate and support public and private efforts to identify, evaluate and protect America’s historic and archaeological resources.”

The National Register nomination process usually starts with your State Historic Preservation office, unless the property is on federal or tribal land, then the process starts with the Federal Preservation Office or Tribal Preservation Office. It is worth noting that to be considered eligible, a property must meet certain criteria for evaluation. This involves examining the property’s age, integrity and significance. There are very specific criteria for religious properties to be recognized on the registry.

There are numerous advantages and restrictions to being on the registry a sampling:

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<thead>
<tr>
<th>ADVANTAGES</th>
<th>RESTRICTIONS</th>
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<tbody>
<tr>
<td>Provide prestige</td>
<td>Restrict private property owner’s ability to alter,</td>
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<tr>
<td>Encourage preservation</td>
<td>Require maintenance, repair, or restoration</td>
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<tr>
<td>Provides Information about historic properties</td>
<td>Special zoning or landmark designation</td>
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<tr>
<td>Promotes tourism</td>
<td>Require public access</td>
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<tr>
<td>Provides financial incentive (when available)</td>
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Religious properties must meet very specific requirements, on architectural, artistic or historic grounds to avoid the appearance of judgment regarding the validity of any religion or belief. Historic significance for a religious property cannot be established on the merits of a religious doctrine, but rather, for architectural or artistic values or for important historic or cultural forces that the property represents.

Fun fact: Currently there are more than 91,000 buildings listed on the National Historic Registry with New York having the most at 5,875 and the Virgin Islands have the fewest at only 87.