

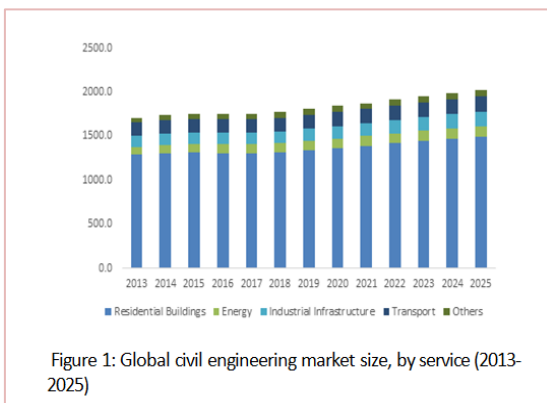
# International Conference on Structural and Civil Engineering Research: Market Analysis

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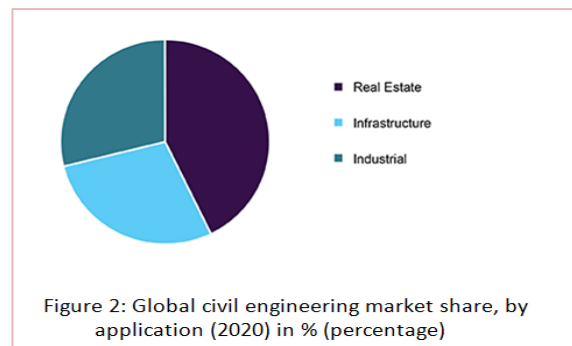
The worldwide [structural](#) building market size was esteemed at USD 7.84 trillion of every 2017 and is relied upon to enrol a CAGR of 5.6% from 2018 to 2025. The market is anticipated to be driven by an expanding residential sector in the emerging economies of Asia Pacific. Rapidly rising urban population, coupled with the growing need to accommodate them is a key factor boosting this market. On-going infrastructural development has also favoured the market, along with strict government regulations and a rise in international investments in developing regions such as the Asia Pacific and the Middle East and Africa (MEA). The market is anticipated to be driven by an expanding residential sector in the emerging economies of Asia Pacific. Rapidly rising urban population, coupled with growing need to accommodate them is a key factor boosting this market. On-going [infrastructural](#) development has also favoured the market, along with strict government regulations and rise in international investments in developing regions such as Asia Pacific and Middle East and Africa (MEA).

## Global civil engineering market size, by service (2013-2025)



Regulations in Europe and North America regarding volatile organic compounds (VOC) emissions during construction processes is expected to boost demand for precast/prefabricated construction products in these regions. Companies involved in [civil engineering](#) all over the world are increasingly focusing on green building products thanks to growing awareness about the importance of eco-friendly products and energy efficiency. Introduction of new materials and technologies is expected to create lucrative opportunities for players over the next few years.

Various government regulatory frameworks, such as the International Building Code (IBC), are applied to new and existing buildings in order to track and register specific infrastructure w.r.t. government processes and control illegal and unethical construction practices.



The [construction sector](#) is a key segment within the market, driven largely by booming building and construction activities in Asia Pacific and MEA. This is supported by various international companies and associated service providers investing in these regions. India, China, Saudi Arabia, UAE, and other developing countries are expected to show significant growth in infrastructural development during the forecast period. Civil engineering is one of the most prominent and vital elements in regional development. Infrastructural development significantly depicts potential growth possibilities of any regions.

## Service Insights

The planning and style phase dominated the market with a share of over twenty four.44% in terms important in 2017. It is one in all the initial stages and distinguished part of engineering science services and so wide in demand. In addition, the segment is expected to register the highest [CAGR](#) of 6.3% over the forecast period. The construction sector dominated the world engineering science market in 2017 with a share of twenty seven.82%. Recent advances in [construction material](#) and equipment are expected to revolutionize the industry and boost the segment's share in the coming years. Maintenance services are crucial for ensuring the proper functioning and condition of architectures and infrastructure in the market. Various external

environmental conditions area unit live and contractors ought to keep these in mind and conduct periodic maintenance. The segment is slated to register a [CAGR](#) of 5.9% over the forecast period.

### Customer Insights

Government emerged because the dominant phase on the idea of client and accounted for a forty one.6% share in 2017 attributable to varied favourable policies and frameworks.

Need for rapid industrialization to meet needs of ever-increasing population is likely to drive the segment to reach USD 5.01 trillion by 2025 at a [CAGR](#) of 5.5% over the forecast period. Governments around the world have also been making large-scale investments to improve infrastructure in their respective countries and provide affordable housing to the population.

The private sector is poised to witness the fastest growth over the forecast period, fuelled by availability of large funds. On an individual level, rise in consumer disposable income and increased spending on households will drive this segment.

### Regional Insights

[Asia Pacific](#) is that the largest regional market and is characterised by simple availableness of land and complete labour at low value. Shift in world production landscape has favoured rising economies, notably China and Asian country that is probably going to influence market growth over the forecast amount.

Most [APAC](#) countries are expected to witness high economic growth over the forecast period, despite slow growth in developed regions such as U.S. and Europe. Thriving construction sector is likely to drive the APAC market to register strong growth over the forecast period, exhibiting a [CAGR](#) of 5.2%.

### Civil Engineering Market Share Insights

Global players dominate the industry and are majorly concentrated in [Asia Pacific](#), North America, and Europe. Key makers contribute over forty.0% to the global market for [civil engineering](#), with a substantial share emerging from China and U.S. Pricing and different strategic project initiatives are extremely hooked in to prime players. Manufacturers focus on formulating innovative business strategies in order to maintain their position in the market, acquisitions being a vital growth tactic. Companies are finance heavily in analysis and development facilities and are introducing innovative operations and practices.

### Segments Covered in the Report:

This report forecasts revenue growth at global, regional,

and country and provides an analysis of latest industry trends and opportunities in each of the sub-segments from 2014 to 2025. For the purpose of this study, Grand View Research has segmented the global civil engineering market report based on service, application, customer, and region:



### Service Outlook (Revenue, USD Billion, 2014 - 2025)

- ❖ Planning & Design
- ❖ Construction
- ❖ Maintenance
- ❖ Others

### Application Outlook (Revenue, USD Billion, 2014 - 2025)

- ❖ Real Estate
- ❖ Infrastructure
- ❖ Industrial

### Customer Outlook (Revenue, USD Billion, 2014 - 2025)

- ❖ Government
- ❖ Private
- ❖ Others

### Regional Outlook (Revenue, USD Billion, 2014 - 2025)

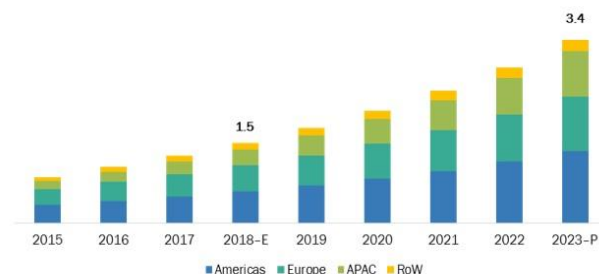
- ❖ North America
  - ❖ U.S.
    - Canada
- ❖ Europe
  - Germany
  - Russia
  - U.K.
- ❖ Asia Pacific
  - China
  - India

- Australia
- ❖ Central & South America
  - Brazil
- ❖ Middle East and Africa
  - UAE
  - Saudi Arabia
  - Qatar

### The structural-engineering industry is being rocked by a sizable earthquake:

There area unit with great care several elementary trade factors moving the longer term of structural engineering,” says David Odeh, principal at Odeh Engineers. “One scenario is that engineers become irrelevant.” That’s a significant skilled concern among structural engineers, and their anxiety is generally driven by 3 factors. First, the large advances in pc modelling have light-emitting diode to considerably a lot of complicated structures. “It’s almost a self-fulfilling prophecy, or a feedback loop,” Odeh says. “More advanced modelling and analysis leads to more complex designs and that results in however a lot of complicated proposals, that demand even a lot of advanced pc tools.” But paradoxically, as ancient engineering tasks area unit progressively machine-controlled, actual engineers will appear (and feel) minor. This is the second factor: “When ancient tasks area unit turned over to advanced solutions, supplemented by cloud-enabled access to scheming power, the reduction in engineer time, and needed talent, can be enormous,” Odeh says. On the surface, it would appear as if structural engineers might go the manner of the archosaurian. “For example, choosing member sizes for steel-frame structures may be a task that wont to need days of conscientious work, as a structural engineer worked from tables and exercised hefty judgment,” Odeh says. “Now, that’s nearly a trivial task—for a one hundred,000-square-foot building, it will take seconds, and also the ensuing style are going to be a lot of precise and higher optimized.” and the third factor is global competition. “Everything we have a tendency to do is currently influenced by the unfold of knowledge—it is solely not true that structural engineering talent is targeted within the us,” Odeh says. “Like it or not, that affects our profession powerfully.

STRUCTURAL HEALTH MONITORING MARKET, BY REGION (USD BILLION)



It’s a frustrating “perfect storm” of things that appears to threaten one among the infrastructure industry’s most revered talent sets. It’s ironic—how will advances in computing that build engineers a lot of capable conjointly build them appear less necessary? “Some designers and contractors are beginning to ask, ‘Why do we even need engineers?’” Odeh says. “To them, if a program can do it, engineers become superfluous.”