

U.S. LTE Network Infrastructure Spending Forecast, 2014-2019

Market Study
Fourth Quarter, 2015





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Abstract

Long Term Evolution (LTE) networks are now firmly established in the U.S. with the majority of mobile subscribers using LTE devices. To meet the increasing demand for mobile bandwidth, especially to support video, the larger mobile operators are in the process of upgrading their LTE networks, and densifying the cellular architecture.

iGR forecasts that the LTE market will continue to grow and dominate the U.S. mobile landscape for the foreseeable future. *iGR* expects that subsequent versions of LTE (and the associated new features) will form the basis of new 5G networks in the next few years. To support additional LTE capacity, mobile operators are increasingly refarming 2G spectrum, as well as acquiring additional spectrum resources through auctions and private transactions.

The demand for mobile data bandwidth will continue to rise and mobile operators are continually balancing their network spending between coverage and capacity. The engineers strive to provide sufficient coverage to be competitive and sufficient capacity to meet the needs of the growing subscriber base, while minimizing unnecessary network spending. As well as spending on new network builds, this includes minimizing network operating costs wherever possible.

The total LTE network build and operating costs are forecast to rise over the next five years, as more consumers use LTE, more devices are added to the networks and more bandwidth is consumed. While *iGR* expects the overall LTE network operating cost to increase, the operating expense per GB will decline due to increased efficiencies in the network. This includes adding additional channels to existing cell sites and deploying new sites on roof tops, street poles and other 'small cell' locations.

This report forecasts the LTE infrastructure investment and network operating costs per operator in the U.S., forecasts the spending split by network component, and forecasts the spending split by macro cell sites, DAS and small cells.

Key questions addressed:

- How much mobile data will the LTE networks carry in the U.S.?
- How will the amount of data traffic carried on LTE networks grow in the U.S. in the next five years?
- What is the forecast for the number of LTE subscribers in the U.S. in the next five years?

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- How much mobile data is each LTE subscriber expected to consume and how does this change?
- Which operators are investing the most in LTE networks?
- How much of the LTE network build and operating spending is for macro cell sites, DAS and small cells?
- What is the impact of densification on LTE spending?
- How much are U.S. operators investing in LTE both individually and in the aggregate?
- How big is the LTE infrastructure opportunity in the U.S. in the next five years?
- What is the share of LTE infrastructure spending on the network components in the next five years?
- How big are the LTE operating costs in the next five years?
- How do the network build and operating cost forecasts vary by operator?

Who should read this report?

- Mobile network operators
- LTE network infrastructure vendors
- Small cell and DAS OEMs
- Financial and investment analysts.

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