

**U.S. Mobile Network  
Infrastructure Spending  
Forecast, 2021-2026:  
*Inflation, interest rates  
and the cloud***





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# **U.S. Mobile Network Infrastructure Spending Forecast, 2021 – 2026: *Inflation, interest rates and the cloud***

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## A Market Study

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# Abstract

5G has been launched in the U.S., including on Dish's new Open RAN-based network, but 5G networks will take many years to fully deploy. As a result, LTE will continue to carry the majority of U.S. mobile data traffic for the next couple of years, even as mobile operators' build spending is primarily targeted at 5G.

This market study presents a forecast for the cost of building, deploying and operating LTE and 5G networks in the U.S. from 2021 through 2026. Included is a mobile network infrastructure build forecast, which is detailed by mobile network component (RAN, front/backhaul, and core) and generation (LTE and 5G). The RAN build component is further detailed by Open RAN and traditional RAN. The study also includes a forecast of network operating costs.

In addition to the forecasts, the market study provides detailed information on 5G networks, cloud RAN, Open RAN and edge computing, as well as a status update on the 5G network deployments in the U.S.

Key questions addressed in this market study include:

- How will the amount of data traffic carried on LTE and 5G networks grow in the U.S. in the next five years?
- How big is the LTE and 5G infrastructure opportunity in the U.S. in the next five years?
- What is the impact of inflation, construction crew shortages and supply chain issues on the U.S. mobile infrastructure investment?
- What is the share of infrastructure spending for the network components of RAN, fronthaul/backhaul, and core?
- How is deployment of the core into the cloud impacting spending?
- What portion of RAN spending will be for Open RAN?
- What is the share of infrastructure spending for LTE and 5G in the next five years?
- What are the expected mobile network operating costs in the next five years?
- What is the status of the major U.S. mobile operators' 5G networks?
- What are some of the technologies being used to support the deployment of 5G, such as dynamic spectrum sharing, MIMO and beamforming?
- What are the new architectures that are being used to evolve the mobile network and support 5G, such as cloud RAN, Open RAN, virtualization and mobile edge computing?

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## Who should read this report?

- Mobile operators
- Infrastructure OEMs
- Small cell product and solution vendors
- Edge computing solution providers
- Backhaul service providers and equipment OEMs
- Financial analysts and investors.

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