

# **U.S. Mobile Network Infrastructure Spending Forecast, 2018-2028: *The 5G Era***

Market Study  
Second Quarter, 2019





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## **Market Study**

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# Table of Contents

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<b>Abstract .....</b>	<b>1</b>
<b>Executive Summary .....</b>	<b>3</b>
Figure A: U.S. Mobile Network Infrastructure Build Spending, 2018-2028 (\$M) .....	4
Figure B: U.S. Mobile Network Operating Costs, 2018-2028 (\$M).....	5
Figure C: Total U.S. Mobile Network Build and Operating Spending, 2018-2028 (\$M) .....	6
<b>What This Means.....</b>	<b>6</b>
<b>Methodology.....</b>	<b>8</b>
Network Model .....	8
Current Model Assumptions .....	9
5G Model Assumptions.....	10
Variance from mobile operator financial disclosures .....	11
<b>What is 5G? .....</b>	<b>13</b>
<b>5G Use Cases .....</b>	<b>13</b>
Figure 1: 5G fundamental capabilities.....	13
<b>URLLC .....</b>	<b>14</b>
<b>Massive IoT .....</b>	<b>15</b>
<b>5G Services and Use Cases .....</b>	<b>15</b>
Figure 2: 5G main applications and services .....	16
<b>Current status of 3GPP 5G standards .....</b>	<b>18</b>
Figure 3: Timeline of 3GPP Releases .....	18
<b>5G Network Needs .....</b>	<b>20</b>
<b>Spectrum Needs .....</b>	<b>20</b>
<b>Challenges Along the Road to 5G .....</b>	<b>20</b>
<b>What do the first 5G networks look like? .....</b>	<b>21</b>
<b>MIMO &amp; Beamforming .....</b>	<b>21</b>
Figure 4: Beamforming and MIMO.....	22
Figure 5: 2x2 MIMO.....	23
<b>MU-MIMO .....</b>	<b>25</b>
Figure 6: Conceptual view of MU-MIMO .....	26
Figure 7: Another take on MU-MIMO .....	26
<b>Massive MIMO and mmWave.....</b>	<b>27</b>
Figure 8: Analog and Digital Beamforming for mmWave.....	29
Figure 9: Prototype Massive MIMO Antenna, Lund University .....	30
Figure 10: Other Massive MIMO Antenna Designs .....	30
Figure 11: Massive MIMO Antenna Designs / Systems .....	31
<b>Beamforming.....</b>	<b>31</b>
Figure 12: Conceptual view of Analog and Digital Beamforming .....	32
Figure 13: Inter-relation of Beamforming and MIMO .....	33
<b>What U.S. Mobile Operators have done to prepare for 5G.....</b>	<b>34</b>
<b>Spectrum .....</b>	<b>34</b>

<b>AT&amp;T .....</b>	<b>34</b>
5G Deployment and Plans .....	34
LTE Network Upgrades and 5G Preparations .....	35
5G Trials.....	35
IoT.....	36
<b>Verizon Wireless.....</b>	<b>36</b>
5G Deployment and Plans .....	36
Spectrum .....	36
LTE Network Upgrades and 5G Preparations .....	37
5G Trials.....	37
IoT.....	38
<b>T-Mobile US.....</b>	<b>38</b>
5G Deployment Plans .....	38
Spectrum .....	39
LTE Network Upgrades and 5G Preparations .....	39
5G Trials.....	39
IoT.....	40
<b>Sprint .....</b>	<b>40</b>
5G Deployment Plans .....	40
LTE Network Upgrades and 5G Preparations .....	41
5G Trials.....	42
IoT.....	42
<b>US Cellular .....</b>	<b>42</b>
5G Deployment Plans .....	42
Spectrum .....	42
LTE Network Upgrades and 5G Preparations .....	43
5G Trials.....	43
<b>U.S. Mobile Connections and Data Traffic Forecast.....</b>	<b>44</b>
<b>    U.S. Mobile Connections Forecast.....</b>	<b>44</b>
Table 1: Forecasted U.S. Mobile Connections, 2018-2028 (Millions).....	45
Figure 14: Forecasted U.S. Mobile Connections, 2018-2028 (Millions) .....	45
<b>    U.S. Mobile Data Traffic Forecast.....</b>	<b>45</b>
Table 2: Assumed Total U.S. Network Usage, 2018-2028 (EB/year) .....	46
Figure 15: Assumed Total U.S. Network Usage, 2018-2028 (EB/year) .....	46
<b>U.S. Infrastructure Build Cost Forecast .....</b>	<b>47</b>
<b>    Methodology and Assumptions .....</b>	<b>47</b>
<b>    U.S. Mobile Infrastructure Build Spending by Network Component .....</b>	<b>50</b>
Table 3a: U.S. Mobile Network Infrastructure Build Spending, 2018-2023 (\$M).....	51
Table 3b: U.S. Mobile Network Infrastructure Build Spending, 2024-2028 (\$M) .....	51
Figure 16: U.S. Total Mobile Network Infrastructure Build Spending, 2018-2028 (\$M) .....	52
Figure 17: U.S. Mobile Network Infrastructure Build Spending by Component, 2018-2028 (\$M).....	52
Table 4a: U.S. Mobile Network Infrastructure Build Spending, 2018-2023 (percent).....	53
Table 4b: U.S. Mobile Network Infrastructure Build Spending, 2024-2028 (percent) .....	53

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Figure 18: U.S. Mobile Network Infrastructure Build Spending by Component, 2018-2028 (percent).....	54
<b>U.S. Mobile Infrastructure Build Spending by Generation .....</b>	<b>54</b>
Table 5a: U.S. Mobile Data Traffic by Generation, 2018-2023 (percent) .....	55
Table 5b: U.S. Mobile Data Traffic by Generation, 2024-2028 (percent) .....	55
Figure 19: U.S. Mobile Data Traffic by Generation, 2018-2028 (percent).....	55
Table 6a: U.S. Mobile Network Infrastructure Build Spending by Generation, 2018-2023 (\$M).....	56
Table 6b: U.S. Mobile Network Infrastructure Build Spending by Generation, 2024-2028 (\$M).....	56
Figure 20: U.S. Mobile Network Infrastructure Build Spending by Generation, 2018-2028 (\$M).....	57
Figure 21: U.S. Mobile Network Infrastructure Build Spending by Generation, 2018-2028 (percent).....	58
<b>U.S. Mobile Network Operating Cost Forecast .....</b>	<b>59</b>
Table 7a: U.S. Mobile Network Operating Costs, 2018-2023 (\$M) .....	59
Table 7b: U.S. Mobile Network Operating Costs, 2024-2028 (\$M) .....	59
Figure 22: U.S. Mobile Network Operating Costs, 2018-2028 (\$M).....	60
<b>U.S. Total Mobile Network Cost Forecast.....</b>	<b>61</b>
Table 8a: Total U.S. Mobile Network Build and Operating Spending, 2018-2023 (\$M) .....	61
Table 8b: Total U.S. Mobile Network Build and Operating Spending, 2024-2028 (\$M).....	61
Figure 23: Total U.S. Mobile Network Build and Operating Spending, 2018-2028 (\$M, Total) .....	62
Figure 24: Total U.S. Mobile Network Build and Operating Spending, 2018-2028 (percent).....	62
<b>Definitions .....</b>	<b>63</b>
Definitions Table .....	63
<b>About iGR.....</b>	<b>83</b>
Disclaimer .....	83

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## Abstract

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The first 5G networks have now been launched in the U.S., with many more to come over the next few years. 5G network deployment will not be complete in a year or two, but will instead 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 few years.

This market study presents a forecast for the cost of building, deploying and operating LTE and 5G networks in the U.S. beginning in 2018 and continuing through 2028. Included is a mobile network infrastructure build forecast, which is further detailed by mobile network component (RAN, front/backhaul, and core) and generation (LTE and 5G). The study also includes a forecast of network operating costs. In addition to the forecasts, the market study provides detailed information on evolving mobile network architectures, 5G networks, and how the U.S. mobile industry is deploying 5G.

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 ten years?
- How big is the LTE and 5G infrastructure opportunity in the U.S. in the next ten years?
- How fast will 5G network spending grow in the next ten years in the U.S.?
- What is the share of infrastructure spending for the network components of RAN, fronthaul/backhaul, and core in the next ten years?
- What is the share of infrastructure spending for LTE and 5G in the next ten years?
- What are the expected mobile network operating costs in the next ten years?
- What are the various 3GPP standards leading up to 5G and what are they likely to contain?
- What is 5G? How is it defined and/or viewed right now? What are the key capabilities for 5G networks?
- What are some of the goals and use cases for 5G?
- How will U.S. mobile operators migrate from their 4G LTE networks of today to tomorrow's 5G networks?
- What have the major U.S. mobile operators done to trial and prepare for 5G? When did they launch/will they launch their initial 5G networks?

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- What is Non-standalone New Radio (NSA-NR)? How do MIMO and beam steering impact 5G networks?

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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