

U.S. 5G Revenues, 2023 – 2028:
*How much and where are
mobile consumers spending?*





U.S. 5G Revenues, 2023 – 2028: *How much and where are mobile consumers spending?*

A Market Study

Published First Quarter, 2024

Version 1.0

Report Number: 1Q2024-03

iGR

12400 W. Hwy 71

Suite 350 PMB 341

Austin TX 78738

Table of Contents

Abstract	1
Executive Summary.....	3
U.S. 5G Revenue Model	3
5G Mobile Service	3
5G IoT	4
5G Fixed Wireless Access	4
5G Advertising	4
5G Entertainment	5
5G Gaming	5
Total Revenue	6
Figure A: Total Annual 5G Revenue (\$M), 2023-2028	6
What This Means	6
Methodology.....	7
Terminology	7
Connections and Subscribers.....	7
5G Defined.....	8
U.S. Mobile Operators' 5G and IoT Networks.....	9
Spectrum	9
AT&T	9
5G Network.....	9
IoT	9
Verizon Wireless	10
5G Network.....	10
IoT	10
T-Mobile	10
5G Network.....	10
IoT	10
UScellular	11
5G Network.....	11
IoT	11
Dish.....	11
5G Network.....	11
5G Revenue Sources	12
Figure 1: Revenue Sources in the 5G Ecosystem.....	12
5G Mobile Service.....	12
5G IoT	13
5G Fixed Wireless Access	13
5G Advertising	14
5G Entertainment.....	14
5G Gaming	15
Network slicing	15
5G Revenue Model Assumptions	17
Overall Assumptions.....	17
Mobile Service Revenue Assumptions.....	17
IoT Revenue Assumptions	17

Quoting information from an iGillottResearch publication: external — any iGillottResearch information that is to be used in press releases, sales presentations, marketing materials, advertising, or promotional materials requires prior written approval from iGillottResearch. iGillottResearch reserves the right to deny approval of external usage for any reason. Internal-quoting individual sentences and paragraphs for use in your company's internal communications activities does not require permission from iGillottResearch. The use of large portions or the reproduction of any iGillottResearch document in its entirety does require prior written approval and may have some financial implications.

Fixed Wireless Revenue Assumptions	18
Advertising Revenue Assumptions	18
Entertainment Revenue Assumptions	19
Gaming Revenue Assumptions	19
U.S. 5G Revenue Model	21
5G Connections and Subscribers	21
Table 1: U.S. 5G Connections and Subscribers, 2023-2028 (000)	21
Figure 2: U.S. 5G Connections and Subscribers, 2023-2028	21
Revenue from 5G Mobile Broadband Services	22
Table 2: ARPU and Revenue(\$M) from 5G Mobile Services, 2023-2028	22
Figure 3: Revenue (\$M) from 5G Mobile Services, 2023-2028	22
Revenue from 5G IoT	23
Table 3: 5G IoT Connections, 2023-2028	23
Figure 4: 5G IoT Connections, 2023-2028	23
Table 4: ARPU and Revenue(\$M) from 5G IoT, 2023-2028	24
Figure 5: Revenue(\$M) from 5G IoT, 2023-2028	24
Revenue from 5G Fixed Wireless Access	24
Table 5: 5G Fixed Wireless Access Connections, 2023-2028	25
Figure 6: 5G Fixed Wireless Access Connections, 2023-2028	25
Table 6: ARPU and Revenue(\$M) from Fixed Wireless Access, 2023-2028	26
Figure 7: Annual Revenue (\$M) from 5G Fixed Wireless Access Services, 2023-2028	26
Revenue from 5G Advertising	26
Table 7: CPM Amount and Annual Revenue from 5G Advertising, 2023-2028	27
Figure 8: Annual Revenue (\$M) from 5G Advertising, 2023-2028	27
Revenue from 5G Entertainment Services	28
Table 8: ARPU and Annual Revenue from 5G Entertainment Services, 2023-2028	28
Figure 9: Annual Revenue (\$M) from 5G Tier 1 and Tier 2 Entertainment Services, 2023-2028	29
Figure 10: Annual Revenue (\$M) from 5G Entertainment Services, 2023-2028	29
Revenue from 5G Gaming	30
Table 9: Monthly Spend and Annual Revenue from 5G Gaming, 2023-2028.....	30
Figure 11: Annual Revenue (\$M) from Subscription and Pay-per-game 5G Gaming, 2023-2028.....	31
Figure 12: Annual Revenue (\$M) from 5G Gaming, 2023-2028	31
Total 5G Revenue	31
Table 10: Total Annual 5G Revenue (\$M) by Service, 2023-2028.....	32
Figure 13: Total Annual 5G Revenue (\$M) by Service, 2023-2028	32
Figure 14: Total Annual 5G Revenue (\$M), 2023-2028	33
Table 11: Total Annual 5G Revenue by Service (Percent), 2023-2028	33
Figure 15: Total Annual 5G Revenue by Service (Percent), 2023-2028	34
Table 12: Blended ARPU for all 5G Services, 2023-2028	34
Figure 16: Blended ARPU for all 5G Services, 2023-2028	35
Definitions	36
Definitions Table	36
About iGR	55
Disclaimer	55

Quoting information from an iGillottResearch publication: external — any iGillottResearch information that is to be used in press releases, sales presentations, marketing materials, advertising, or promotional materials requires prior written approval from iGillottResearch. iGillottResearch reserves the right to deny approval of external usage for any reason. Internal-quoting individual sentences and paragraphs for use in your company's internal communications activities does not require permission from iGillottResearch. The use of large portions or the reproduction of any iGillottResearch document in its entirety does require prior written approval and may have some financial implications.

Copyright © 2024 iGillottResearch, Inc. Reproduction is forbidden unless authorized.
FOR INFORMATION PLEASE CONTACT IAIN GILLOTT (512) 796-1675.

Abstract

5G is readily available in the U.S. The major U.S. mobile operators have a nationwide 5G network, which they are now upgrading with mid-band spectrum to provide an even better experience for mobile consumers. Because a significant amount has been invested to make 5G a reality in the U.S. and will continue to be invested for many years, it is important to look at the revenues that can be generated with the new technology.

In this market study, iGR presents a model for potential 5G revenues in the U.S. from 2023 until 2028. It is important to note that although the mobile operators have been the investors in the 5G network, the revenue generated from the 5G ecosystem will be spread among many additional entities such as content providers, cloud providers, gaming developers, and advertisers. This model does not include revenues from 5G devices or applications.

Included in the model are six major sources of revenue provided by the 5G ecosystem. These include:

- 5G Mobile Service
- 5G IoT
- 5G Fixed Wireless Access
- 5G Advertising
- 5G Entertainment Services
- 5G Gaming.

The business model for the seventh potential source of revenue, network slicing, is still too undefined to be included in the model.

In addition to a five-year forecast for potential 5G revenues, this market study also provides information about 5G and the status of the major U.S. mobile operators' 5G networks.

Key questions addressed in this market study include:

- How many 5G connections can be expected in the U.S. from 2023 to 2028?
- What are potential sources of revenue for 5G networks?
- What is the 5G mobile subscription service model and how much revenue will be generated?
- What is the business model for 5G IoT and how much revenue will be generated?

Quoting information from an iGillottResearch publication: external — any iGillottResearch information that is to be used in press releases, sales presentations, marketing materials, advertising, or promotional materials requires prior written approval from iGillottResearch. iGillottResearch reserves the right to deny approval of external usage for any reason. Internal-quoting individual sentences and paragraphs for use in your company's internal communications activities does not require permission from iGillottResearch. The use of large portions or the reproduction of any iGillottResearch document in its entirety does require prior written approval and may have some financial implications.

Copyright © 2024 iGillottResearch, Inc. Reproduction is forbidden unless authorized.
FOR INFORMATION PLEASE CONTACT IAIN GILLOTT (512) 796-1675.

- What is 5G fixed wireless access and how much revenue can be generated by the service?
- How will 5G advertising generate revenue and how much can be expected?
- What is the model for 5G-based entertainment services? How much revenue will it provide?
- What is the model for 5G-based gaming? How much revenue will it provide?
- How does each source of 5G revenue compare? Which is the most significant?
- What are the total revenues expected from the 5G ecosystem from 2023 to 2028?

Who should read this market study?

- Mobile operators
- Mobile device OEMs
- Mobile service and application developers
- IoT vendors and solutions providers
- Infrastructure OEMs
- Financial analysts and investors.

Quoting information from an *iGillottResearch* publication: external — any *iGillottResearch* information that is to be used in press releases, sales presentations, marketing materials, advertising, or promotional materials requires prior written approval from *iGillottResearch*. *iGillottResearch* reserves the right to deny approval of external usage for any reason. Internal-quoting individual sentences and paragraphs for use in your company's internal communications activities does not require permission from *iGillottResearch*. The use of large portions or the reproduction of any *iGillottResearch* document in its entirety does require prior written approval and may have some financial implications.

Copyright © 2024 *iGillottResearch*, Inc. Reproduction is forbidden unless authorized.
FOR INFORMATION PLEASE CONTACT IAIN GILLOTT (512) 796-1675.