

U.S. LTE Network Infrastructure CapEx Spending Forecast, 2011-2016

Market Study
Fourth Quarter, 2012





U.S. LTE Network Infrastructure CapEx Spending Forecast, 2011- 2016

Market Study

Published Fourth Quarter, 2012

Version 1.0

Report Number: 4Q2012-03

iGR Inc.

12400 W. Hwy 71

Suite 350 PMB 341

Austin TX 78738

Table of Contents

Abstract	1
Executive Summary	3
Figure A: Total U.S. LTE Infrastructure Spending, 2011-2016 (\$M, depreciated CapEx)	3
Figure B: Percentage Breakdown of U.S. LTE Infrastructure Depreciated CapEx, 2011-2016	4
U.S. LTE Cost Estimates	5
LTE: Which U.S. Operators?.....	5
Verizon Wireless	5
AT&T Wireless.....	6
Sprint-Nextel.....	6
T-Mobile USA	7
U.S. Cellular.....	7
MetroPCS	8
C Spire	9
Clearwire	9
Other operators	9
LTE Cost Estimates	10
U.S. LTE Subscriber Estimates & Forecast	11
U.S. Cellular Subscriber Growth	11
Table 1: Forecasted U.S. Cellular Subscriber Growth, 2011-2016 (Millions)	11
Figure 1: Forecasted U.S. Cellular Subscriber Growth, 2011-2016 (Millions)	12
U.S. LTE Subscriber Growth.....	12
Table 2: Assumed U.S. LTE Penetration of Total Subscriber Base, 2011-2016.....	13
Figure 2: Assumed U.S. LTE Penetration of Total Subscriber Base, 2011-2016	14
Table 3: Average U.S. LTE Subscribers, 2011-2016 (Millions)	14
Figure 3: Average U.S. LTE Subscribers, 2011-2016 (Millions)	15
U.S. LTE Mobile Data Traffic Forecast	16
Table 4: Assumed U.S. LTE Network Usage, 2011-2016	16
Table 5: Assumed Total U.S. LTE Network Usage, 2011-2016 (GB)	16
Figure 4: Assumed Total U.S. LTE Network Usage, 2011-2016 (GB)	17
U.S. LTE Infrastructure Spending Forecast	17
Table 6: U.S. LTE Infrastructure Spending, 2011-2016 (\$M, depreciated CapEx)	18
Figure 5: U.S. LTE Infrastructure Spending, 2011-2016 (\$M, depreciated CapEx)	19
U.S. LTE infrastructure spending by network component	19
Table 7: U.S. LTE Infrastructure Spending by Component, 2011-2016 (\$M, depreciated CapEx)	20
Figure 6: U.S. LTE Infrastructure Spending by Component, 2011-2016 (\$M, depreciated CapEx)	20
Table 8: Share of U.S. LTE Infrastructure Spending by Component, 2011-2016.....	21
Figure 7: Share of U.S. LTE Infrastructure Spending by Component, 2011-2016	21
Methodology	22

Model Assumptions	22
About <i>iGR</i>	23
Disclaimer	23
Definitions	24
General	24
Device Types	24
Services	25
Network Technology	25

Abstract

Most of the largest U.S. operators are already well advanced in their LTE network rollouts. Others may lag behind, but LTE deployments overall are still progressing quickly – perhaps more quickly than could have been foreseen 12 to 18 months ago. Additionally the U.S. market already has more than a half dozen LTE-capable smartphones and tablets with many more to follow by year-end 2012 – and, of course, still more in calendar 2013.

iGR fully expects, then, for LTE uptake to grow quickly. And, once the LTE subscriber base starts to grow, more devices become available and usage of the network increases, then the operator increases the network capacity. Operators are continually balancing their network CapEx between coverage and capacity. The engineers strive to provide sufficient coverage to be competitive and sufficient capacity to meet the needs of the (hopefully) growing subscriber base, while minimizing unnecessary CapEx.

This report forecasts the total LTE infrastructure CapEx investment per operator in the U.S. and the spending split by network component.

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?
- How much mobile data is each LTE subscriber expected to consume and how does this change?
- Which operators are investing the most CapEx in LTE networks?
- When do the CapEx cost curves begin – and begin to trend downward – per operator?
- 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?

Who should read this report?

- Mobile network operators

- LTE network infrastructure vendors
- Small cell OEMs
- Financial and investment analysts