T-Mobile

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January 27, 2016

EX PARTE VIA ECFS

Ms. Marlene H. Dortch
Secretary
Federal Communications Commission
445 12th Street, S.W.
Room TW-A325
Washington, D.C. 20554

Re: ***Expanding the Economic and Innovation Opportunities of Spectrum Through Incentive Auctions,* GN Docket No. 12-268**; ***Application of AT&T Mobility Spectrum LLC and East Kentucky Network, LLC for Consent to Assign Licenses*, WT Docket No. 15-79, Application File No. 0006672533**

Dear Ms. Dortch:

T-Mobile has demonstrated its ability to rapidly deploy low band spectrum and will continue to do so provided it has access to additional low band spectrum. A report released this week by MoffettNathanson Research confirms that with increased access to low-band spectrum, T-Mobile USA, Inc. ("T-Mobile")[1] can continue to grow its network and provide quality service and competition to more Americans.[2]

MoffettNathanson's independent study reinforces and validates the statements T-Mobile has made in multiple filings throughout this proceeding.[3] MoffettNathanson documents how T-Mobile rapidly leveraged the 700 MHz spectrum it has acquired to "significantly" expand its coverage footprint.[4] From the end of 2014 to the end of 2015, T-Mobile expanded its network from 265 million LTE-covered POPs to 304 million LTE-covered POPs.[5] This dramatic coverage expansion demonstrates T-Mobile's ability and incentive to quickly improve service, invest in new facilities and expand consumer choice in markets the company could not seriously contest before it had access to low-band spectrum. T-Mobile's swift deployment of low-band spectrum resources also stands in stark

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[1] T-Mobile USA, Inc. is a wholly owned subsidiary of T-Mobile US, Inc., a publicly-traded company.

[2] *T-Mobile (TMUS): Finding Bigfoot … A Footprint Expansion Story*, MOFFETTNATHANSON RESEARCH (Jan. 25, 2016) ("*Report*"). A copy of the MoffettNathanson report is attached.

[3] *See, e.g., Ex Parte* of T-Mobile USA, Inc., WT Docket No. 15-79, Application File No. 0006672533 (filed Jan. 19, 2016) ("*T-Mobile Ex Parte*"); *Ex Parte* of T-Mobile USA, Inc., WT Docket No. 15-79, Application File No. 0006672533 (filed Dec. 23, 2015).

[4] *Report* at 7.

[5] *Report* at 8.

contrast to the “many years” AT&T predicts it will require to deploy additional low-band spectrum in certain markets at issue in this proceeding.[6]

MoffetNathanson also documents how T-Mobile’s acquisition of low-band spectrum leads to an increased incentive for the company to invest in new retail infrastructure, which creates jobs and commercial activity in less populous areas of the country as well as in more urbanized areas. According to MoffettNathanson’s analysis, T-Mobile adds far more new customers per store than any other carrier.[7] Where T-Mobile can expand or solidify coverage through the improved wide-area and in-building coverage that low-band spectrum holdings make possible, T-Mobile will have an even stronger incentive to increase investment in retail infrastructure and expand employment as a means of leveraging its sales-per-store advantage.

Indeed, T-Mobile has already outlined to the Commission in its most recent filing that a meaningful portion of T-Mobile’s distribution in 2016 is slated to be in newly opened 700 MHz territory.[8] T-Mobile believes rural customers deserve the benefits of competition that T-Mobile is providing, just as it has provided for largely urban and suburban customers to date.

These benefits are not unique to T-Mobile, of course. Low-band spectrum allows all wireless providers to increase their footprints into previously unserved or under-served rural areas, as well as urban areas where limited low-band holdings may have posed challenges for in-building coverage.[9] But the ability of T-Mobile and other competitors to drive competition, economic growth, jobs and investment depends on low-band spectrum free of the foreclosure-level pricing that the dominant carriers have the ability and incentive to generate.

Denying AT&T’s above-referenced application regarding the acquisition of low-band spectrum in parts of West Virginia, Ohio, and Kentucky will incentivize the current license holder to put the low-band spectrum to use for the benefit of the public, or to sell it to a buyer that will do so.[10] As the MoffettNathanson report outlines, low-band spectrum in the hands of T-Mobile means more investment, more jobs and more competitive choice for consumers. T-Mobile is prepared to purchase this spectrum at market-based, non-foreclosure prices and has proven it can deploy the spectrum rapidly and to the benefit of consumers and competition. AT&T has made no such showing.

Under Section 1.1206(b)(2) of the Commission’s rules, an electronic copy of this letter is being filed in the above-referenced proceeding.

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[6] AT&T Petition for Waiver for Licenses in Kentucky and Tennessee, WT Docket No. 15-300 at 11 (filed Dec. 11, 2015).

[7] *Report* at 11.

[8] *T-Mobile Ex Parte* at 3.

[9] *Report* at 3.

[10] *See T-Mobile Ex Parte* at 3.

Respectfully submitted,

<u>/s/ Kathleen O'Brien Ham</u>

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January 25, 2016

T-Mobile (TMUS)

T-Mobile (TMUS): Finding Bigfoot… A Footprint Expansion Story

Summary

According to the world-renowned BFRO (Bigfoot Field Researchers Organization), there have been 616 reported Sasquatch sightings in the state of Washington, with particular clusters of sightings in the Walla Walla/Blue Mountains area, the Mount Rainier foothills, and the coastal areas around Ocean Shores. It turns out that Washington is ranked #1 among all states as the place you are most likely to happen upon Bigfoot.

The evidence for Bigfoot goes well beyond what are admittedly somewhat iffy in-person sightings. Indeed, we know that Bigfoot is real in large measure because he (she? it? they?) has left behind footprints. Bigfoot derives his very name from the size of his footprint.

It is also in Washington state, in the hamlet of Bellevue and in the shadow of Mt. Rainier, that one finds the headquarters of wireless operator T-Mobile (OK, it's not really that close to Mt. Rainier, but, whatever). In the local tongue of the Duwamish Indians, the indigenous people of the area that is today Seattle, the name "T-Mobile" roughly translates to "wireless operator who sits in small footprint."

As we enter 2016, T-Mobile is once again our top pick in our Telecom/Cable universe, in large measure because we expect that footprint to begin to grow. Over the next two years, as T-Mobile deploys its 700 A-Block spectrum in previously unserved areas, the company plans to first add coverage and later add stores. In this report, we hunt for Bigfoot… or, that is to say, take a deep dive into T-Mobile's footprint, considering it expansion prospects by examining store coverage relative to peers.

And then there is T-Mobile's expected ramp in free cash flow. Our revised estimates call for FCF of more than $4 per share in 2018E, suggesting a free cash flow yield to equity in the range of 10%. Even after a spectacular rally in 2015, the stock is still too cheap.

Vital Signs

T-Mobile (TMUS)

Recommendation	Buy
Target Price	$50.00
Closing Price (01/22/16)	$37.85
Forward P/E	27.9x
YTD Relative to S&P	1.4%
12 Month Relative to S&P	28.9%

	Old	New	Cons
2015 EPS	$1.07	$1.05	$0.73
2016 EPS	$2.92	$1.66	$1.75

Sprint (S)

Recommendation	Sell
Target Price	$2.00
Closing Price (01/22/16)	$2.87
Forward P/E	N/M
YTD Relative to S&P	-24.3%
12 Month Relative to S&P	-37.5%

	Old	New	Cons
FY15 EPS	($0.58)	($0.45)	($0.43)
FY16 EPS	($0.40)	($0.12)	($0.29)

Investment Implications

We rate T-Mobile (TMUS) Buy with a target price of $50. Our updated T-Mobile model is appended to the end of this report.

Additionally, we've made minor adjustments to our Sprint model, which can also be found at the end of this report. We rate Sprint (S) Sell with a target price of $2.

Analysis

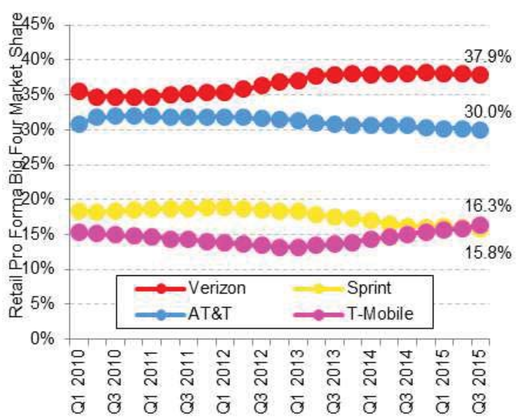
It is convenient shorthand to describe T-Mobile as a 16% national market share player in the U.S. retail wireless market among the Big Four.

In truth, however, T-Mobile is better described as a super-regional operator. Whereas Verizon, AT&T, and even Sprint operate on a nearly national basis, T-Mobile operates in only about two thirds of the U.S. If one were to make the overly simplistic assumption that T-Mobile's market share is, in fact, *zero* in the one-third of the market where it does not compete, then the company's market share where it *does* compete is closer to 24%... and everyone else's is commensurately lower (Exhibits 1 and 2).[1]

[1] These aren't meant to be precise numbers. In reality, Sprint's market reach was only recently expanded by its entrance into 1.4K RadioShack co-branded stores; before that, its market reach was about halfway between T-Mobile's and AT&T's, so this simplistic analysis probably understates its true regional market share, and probably overstates T-Mobile's.

Exhibit 1

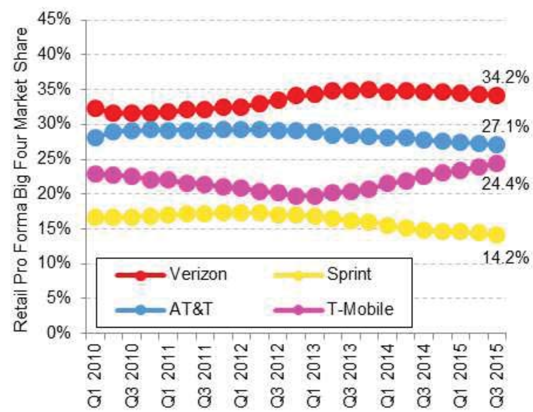
U.S. Wireless: National Market Share (Post-Paid *and* Retail Pre-paid)



Source: Company reports, MoffettNathanson estimates and analysis

Exhibit 2

Regional Market Share (Assuming Zero Share for T-Mobile in One-Third of the United States)



Source: Company reports, MoffettNathanson estimates and analysis

Of course, this, too, is an inaccurate but convenient shorthand; T-Mobile's commercial presence in a given market isn't a simple binary on/off. In a recent investor meeting at our offices, T-Mobile's IR team indicated that T-Mobile's market share in urban areas is 20-30%, while market share in the surrounding suburban areas is in the teens. In many rural areas it is effectively zero.

Intuitively, this makes sense: when T-Mobile had only mid-band spectrum (in the 1.7 GHz and 1.9 GHz AWS and PCS bands), their spectrum was ill-suited to less dense markets. Their urban-focused marketing strategy was a natural consequence their network; it is therefore understandable why their penetration should be highest there.

Now, as T-Mobile expands its LTE coverage with low-frequency spectrum (700 MHz), the stage is set for three new phases of growth.

- First, better coverage will support higher market share in previously-served areas, particularly in the small and medium business segment where T-Mobile has traditionally struggled (in part precisely because its non-urban coverage has been so sorely lacking).

- Second, T-Mobile will be able to market more effectively in the suburban areas surrounding its core urban geographies, where, at least anecdotally, its market share currently under-indexes.

- Third, T-Mobile will begin to open new stores in areas previously entirely unserved.

It is the third of these stages that is the focus of this report. Over the coming three to five years, we expect substantial gains in market share in the suburban and rural markets where T-Mobile used to be uncompetitive. This is the foundation of our prediction that over the balance of our forecasting period, T-Mobile's subscriber growth will not come from aggressive price cuts, but from network expansion.

Methodology

Ideally, to project the benefits from T-Mobile's coming footprint expansion, one would examine growth (and churn) trends in T-Mobile's new LTE markets and compare and contrast them to legacy markets. Unfortunately, we do not have the requisite data available.

What we do have is data on company store locations, which provides the best available measure of T-Mobile's distribution reach. It doesn't make much economic sense to have stores where there is no network – the roaming costs of providing service would make it uneconomic – so many of the LTE markets being added start with little, if any, retail presence. By measuring T-Mobile's current distribution reach relative to its LTE network coverage (and relative to its competitors), one can get at least some idea of how much room there is for expanded distribution.

The analysis in this report includes all company-owned and exclusive authorized retailers according to each company's online store locator tool, as compiled by AggData. Exclusive authorized retailers are stores owned and operated by a third party under the company's brand name. In many cases, these stores are aesthetically nearly indistinguishable from company-owned stores (Exhibit 3). In terms of products, they sell the same monthly rate plans, but may offer a different selection of devices, accessories, or additional services (like handset repair), depending on the contract terms.

Exhibit 3

Authorized Exclusive Retailers: T-Mobile and Verizon

Source: T-Mobile website, Google Maps Streetview

We exclude non-exclusive third-party retailers like Walmart and Best Buy due to limitations on the available data. Additionally, although we use physical stores as a proxy for distribution reach, we acknowledge that doing so omits online sales. However, T-Mobile has indicated that 80-90% of sales are through direct channels, with online accounting for less than 10% of that, so we believe the omissions of online and non-exclusive retailers do not inordinately distort the results of our analysis.

Notably, although we assume that the information provided by each company's store locator tool is largely accurate, we cannot be sure how often the data is updated, nor how thoroughly it is vetted. [For example, T-Mobile's Investor Relations team informed us that our store count is about 300 too high. We have been unable to determine the source of the discrepancy, although it seems plausible that some stores have closed or relocated without removing the old listing. Regardless, we'd rather be conservative and over-count T-Mobile's current store reach than undercount it.]

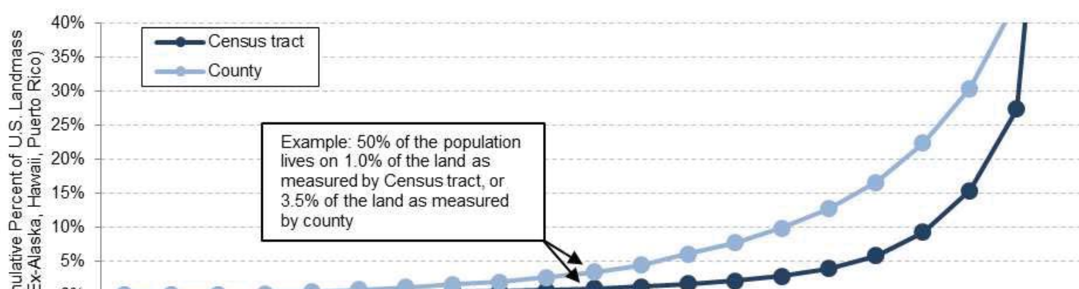
Network Expansion

Just over a year ago, at the end of 2014, T-Mobile's LTE network covered 265M POPs, with a focus on urban markets. Their store footprint, as we will see in a moment, is largely confined to those same urban markets.

To be sure, one could reasonably argue that a lot of the U.S. is empty space, so it makes sense for stores to cluster around dense population centers. Based on census tracts, which typically contain several thousand people, 50% of Americans live on just 1% of the country's landmass. Based on counties, which are much larger than census tracts, 25% live on 0.9% of the landmass (Exhibit 4)…

Exhibit 4

Cumulative Percent of U.S. Landmass Occupied by Cumulative Percent of U.S. Population



	0%	5%	10%	15%	20%	25%	30%	35%	40%	45%	50%	55%	60%	65%	70%	75%	80%	85%	90%	95%	100 %
Census tract	0.0%	0.0%	0.1%	0.1%	0.2%	0.3%	0.4%	0.5%	0.6%	0.8%	1.0%	1.3%	1.7%	2.2%	2.9%	4.0%	5.9%	9.3%	15.4	27.4	100.
County	0.0%	0.0%	0.2%	0.3%	0.6%	0.9%	1.2%	1.6%	2.0%	2.7%	3.5%	4.5%	6.1%	7.8%	9.9%	12.8	16.6	22.4	30.4	43.2	100.

Cumulative Percent of U.S. Population (Ex-Alaska, Hawaii, Puerto Rico)

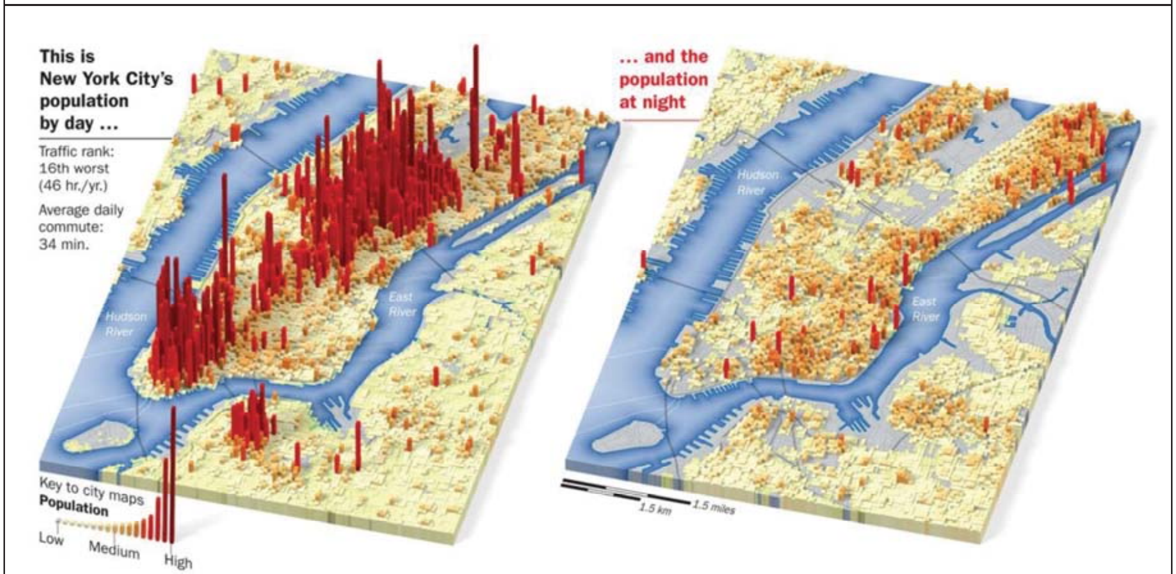
Source: U.S. Census Bureau, MoffettNathanson estimates and analysis

…and those who don't *live* in an urban area may still commute to one for work. New York presents a good example. As those who've read our colleague Nick Del Deo's report on the Tower companies will already know, Manhattan has a resident population of 1.6M squeezed into

23 square miles.[2] Its population density of 72K per square mile places it at the very top of the list of densest counties in the country. During the daytime, however, the number of people on the island surges to approximately 4M, mostly commuters from elsewhere in the city and its suburbs but also tourists and other visitors, bringing its density to almost 175K per square mile (Exhibit 5)).

Exhibit 5

Manhattan: Population Density, Day and Night



Source: Time Magazine

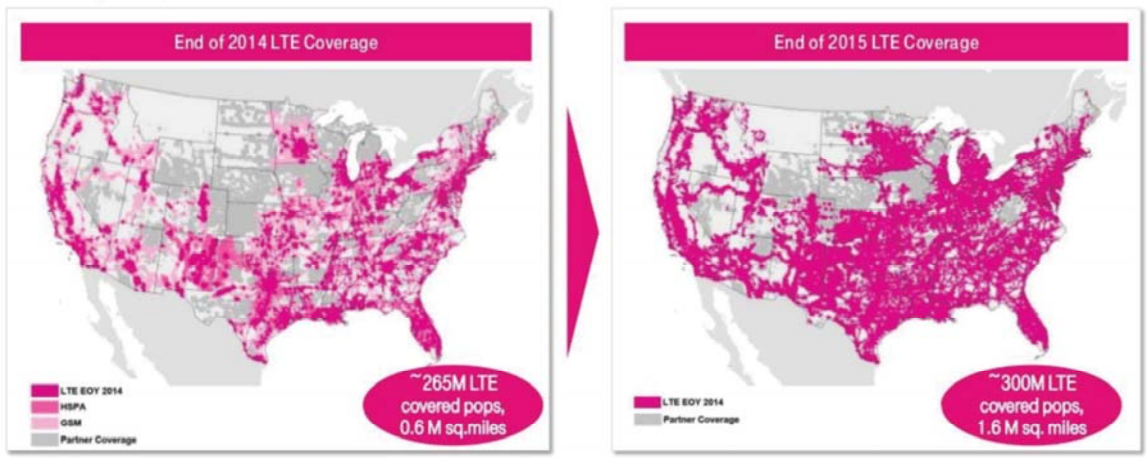
T-Mobile's acquisition of low-band 700 MHz A-Block spectrum has significantly changed the map, so to speak.

Over the past year, the company's LTE network coverage has increased to 304M POPs, including 185M POPs covered by 700MHz A-Block (Exhibit 6).

[2] Death, Taxes, and Towers... But It's Not Quite That Simple. Initiating Coverage of AMT, CCI, and SBAC

Exhibit 6

T-Mobile LTE Coverage, 2014 vs. 2015



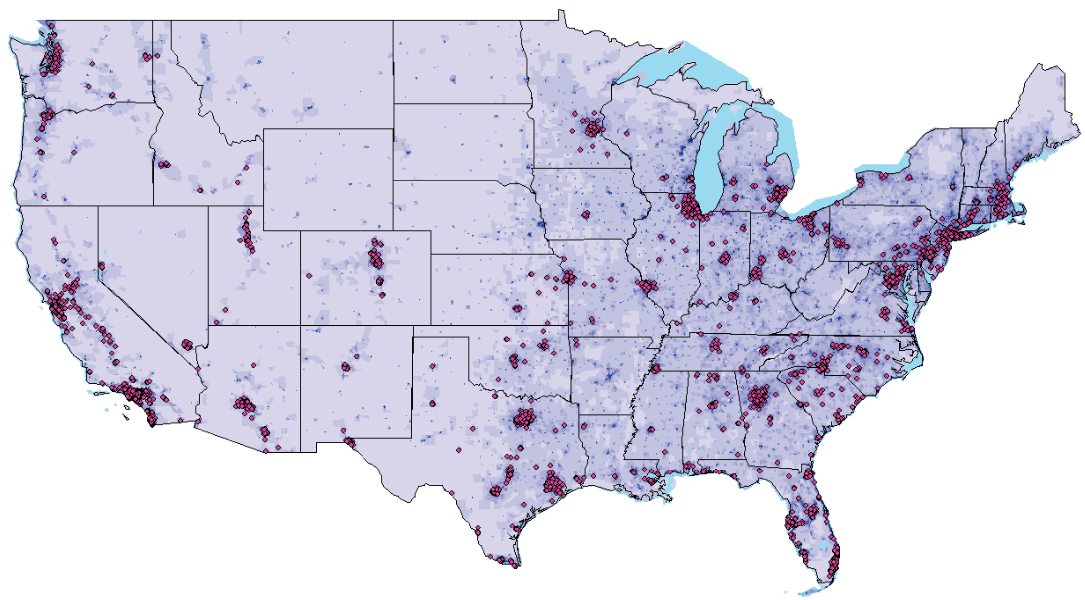
Source: T-Mobile

Certainly, there is some immediate benefit from this expansion into new markets. People are mobile, and most would like their network to have a good signal during their commute to work, when traveling for business, while visiting friends/family, and while on vacation. By expanding its LTE network, T-Mobile has become a much more attractive option for those who may have already had great coverage at home, but who travelled beyond the reaches of the network too often.

Longer term, T-Mobile's network expansion also creates an opportunity to expand distribution into new markets. By mapping T-Mobile's store locations, it's readily apparent that the company's stores today are heavily clustered in dense cities, corresponding to the areas where T-Mobile's network has historically been strongest (Exhibit 7).

Exhibit 7

T-Mobile: Company-Owned and Premium Retailer Stores Mapped Against Population Density by Census Tract

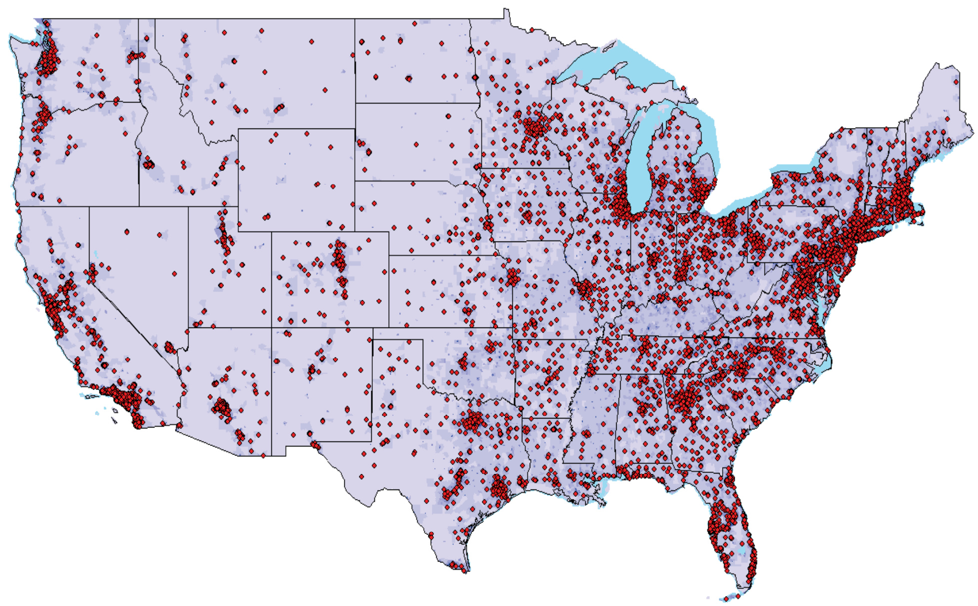


Source: ArcGIS, AggData, MoffettNathanson estimates and analysis

T-Mobile's retail store coverage contrasts sharply with that of Verizon, a company that has historically competed on the basis of its best-in-class network coverage (Exhibit 8).

Exhibit 8

Verizon Stores: Company-Owned and Authorized Retailers Mapped Against U.S. Population Density by Census Tract

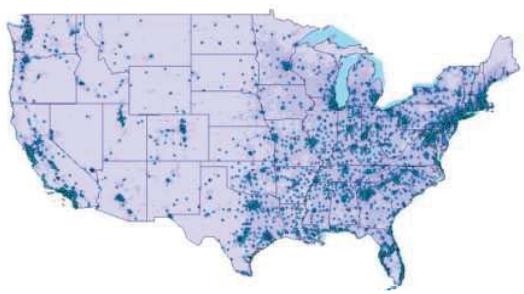


Source: ArcGIS, AggData, MoffettNathanson estimates and analysis

Verizon's stores are not only more broadly distributed, they're also more numerous on an absolute basis. The same is true for both AT&T and Sprint, albeit to lesser extents (Exhibits 9 and 10).

Exhibit 9

AT&T Stores: Company-Owned and Authorized Retailers Mapped Against U.S. Population Density by Census Tract



Source: Company reports, AggData, MoffettNathanson estimates and analysis

Exhibit 10

Sprint Stores: Company-Owned and Authorized Retailers Mapped Against U.S. Population Density by Census Tract

Includes RadioShack co-branded stores

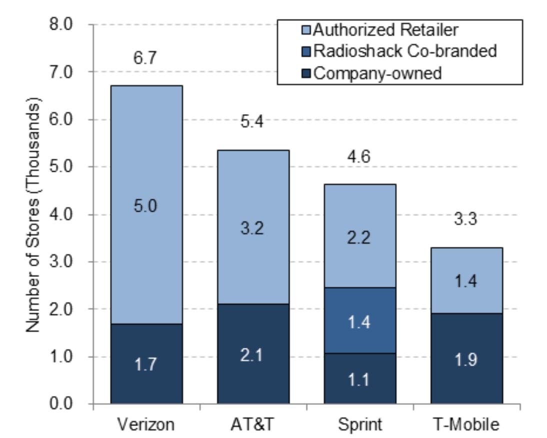
Source: Company reports, AggData, MoffettNathanson estimates and analysis

On an absolute basis, T-Mobile has the fewest store locations: it has about 1.9K company-owned stores and 1.4k premium retailers, for a total of 3.3k stores. Sprint has 40% more stores, at 4.6K, and Verizon has 103% more, at 6.7K (Exhibit 11).

However, in terms of how many gross adds each store supports, T-Mobile is ahead of the pack. Over the last twelve months, T-Mobile averaged 3.0K post-paid gross additions per store, compared to 2.6K for Verizon and 1.6K for Sprint. And that *includes* tablets and other devices. The differences are even more stark when one looks at phone-only gross additions (2.5K per store for T-Mobile versus 1.6K for Verizon and 1.1K for Sprint) (Exhibit 12.

Exhibit 11

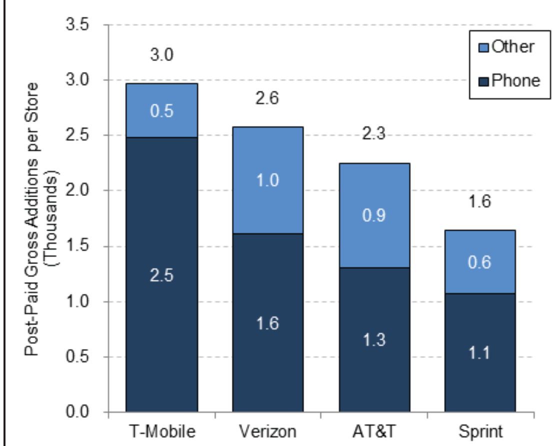
Store Count by Carrier



Source: Company reports, AggData, MoffettNathanson estimates and analysis

Exhibit 12

Q3 LTM Post-Paid Gross Additions per Store



Source: Company reports, AggData, MoffettNathanson estimates and analysis

To judge the extent of T-Mobile's concentration in urban markets, we use mapping software and population data from the 2000 census (formatted with a resolution of 1 kilometer) to determine the total population that lives within a given linear radius of a store at each carrier.

T-Mobile has the smallest reach, at 169.4M people within a 5 mile radius and 196.7M people within a 10 mile radius. Meanwhile, Verizon reaches 251.2M people within a 5 mile radius and 287.4M people within a 10 mile radius.

In the table below, we estimate what these totals would be today, as the population has grown about 14.4% since the 2000 vintage data used (Exhibit 13).

Exhibit 13

Total U.S. Population within a 5-10 Mile Linear Radius of a Store

U.S. Population within 5 Miles of a Retail Store (Millions)	Verizon	AT&T	Sprint	T-Mobile
Contiguous U.S.	249.7	235.0	222.8	189.7
Hawaii	1.1	1.0	1.1	1.0
Alaska	0.4	0.5	0.0	0.0
Puerto Rico	0.0	3.4	2.8	3.1
	251.2	236.4	224.0	193.8

U.S. Population within 10 Miles of a Retail Store (Millions)	Verizon	AT&T	Sprint	T-Mobile
Contiguous U.S.	285.7	271.8	254.8	219.8
Hawaii	1.2	1.2	1.3	1.1
Alaska	0.5	0.5	0.0	0.0
Puerto Rico	0.0	4.1	3.8	4.1
	287.4	277.6	256.0	225.0

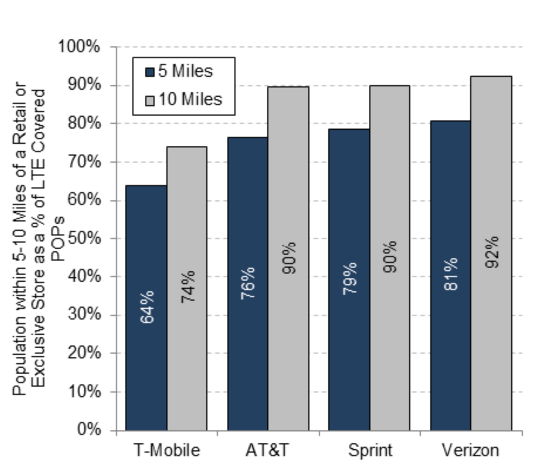
Source: ArcGIS, SEDAC, U.S. Census Bureau, MoffettNathanson estimates and analysis

As a practical matter, we don't know how far people are willing to travel to get to a wireless store, and as we've already acknowledged, people's daily lives often take them outside of the area immediately surrounding their homes. Nonetheless, it strikes us as significant that the ratio of each company's 5-mile distribution reach to LTE coverage is around 75-80% for all but T-Mobile (64%), and the ratio of 10-mile distribution reach to LTE coverage is around 90% for all but T-Mobile (74%) (Exhibit 14).

The absolute numbers relative to peers are also striking. On a population growth (since 2000) adjusted basis, Verizon's store coverage within ten miles is approximately 60 million POPs more than T-Mobile's, while Sprint's store coverage within ten miles is approximately 30 million POPs more (Exhibit 15).

Exhibit 14

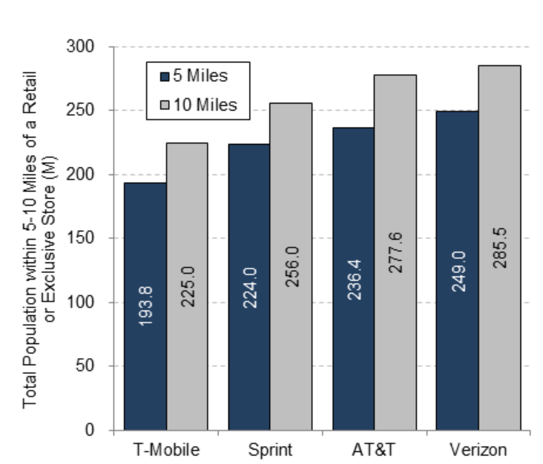
U.S. Population within 5-10 Miles of a Store as a % of LTE Covered POPs



Source: Company reports, AggData, SEDAC, MoffettNathanson estimates and analysis

Exhibit 15

U.S. Population within 5-10 Miles of a Store



Source: Company reports, AggData, SEDAC, MoffettNathanson estimates and analysis

T-Mobile obviously won't immediately be able to expand its distribution reach to another 30-60M people. The process of building stores and attracting retailers takes time – at least a couple years, according to the company.

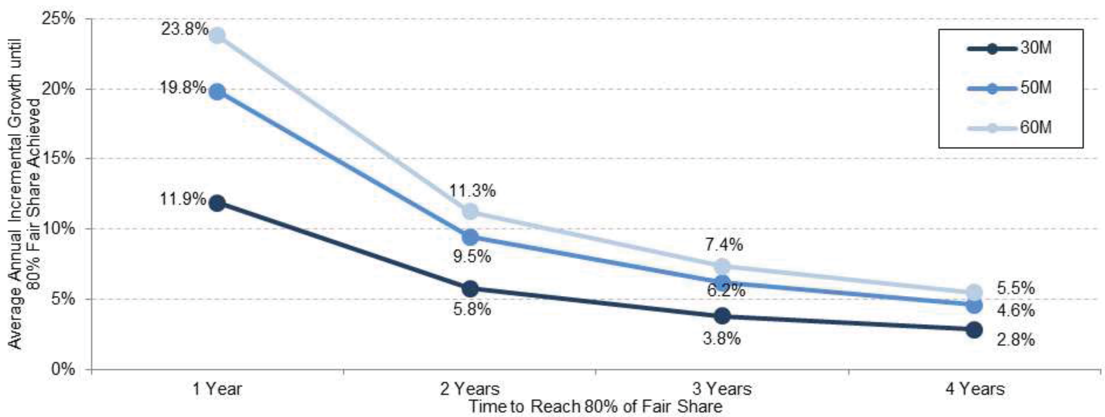
Indeed, the path to footprint expansion is a multi-step process: first, they deploy low band spectrum, then they build distribution, then they go back and densify or optimize the network. At the same time, however, T-Mobile plans to make a significant push towards increasing sales through their website, reducing the need for additional brick-and-mortar locations.

Still, the opportunity arising from this footprint expansion is dramatic. To illustrate, consider a simple model where T-Mobile achieves its "fair share" of the retail wireless market (which, you will recall, we estimated to be ~24% on a footprint-adjusted basis, using very rough assumptions) in a footprint reaching an additional 30M POPs within one year. That would represent an incremental 14.9% growth to T-Mobile's subscriber base in a single year, and a significant boost to revenues. Achieving its "fair share" in an additional 50M marketable POPs would yield 24.8% incremental subscriber growth.

Of course, it is wholly unrealistic to assume that the company would achieve "fair share" market share in a single year… or perhaps that it will ever achieve market share equal to what it has already achieved in its legacy markets. But most of T-Mobile's advertising is already national, so brand awareness already exists in the new LTE markets. And even a more modest ramp to something less than full "fair share" (say, 80% of 24%) would represent a significant increment to revenue and subscriber growth (Exhibit 16).

Exhibit 16

Growth Scenarios: Footprint Expansion of 30M, 50M, and 60M Homes, Respectively, Assuming 80% "Fair Share"



Source: Company reports, MoffettNathanson estimates and analysis

Again, this is a very simple model, and doesn't serve as an empirical foundation for any of our forecasts. Whereas our store analysis excluded pre-paid brands like MetroPCS, Boost Mobile, and Cricket, the above growth scenarios assume T-Mobile's total retail (post-paid + pre-paid) footprint can be expanded 30M to 60M POPs. Recall also that T-Mobile's "fair share" of ~24% is premised on the assumption that it has 0% market share in a third of the country, which, as we already mentioned, is an oversimplification. Lastly, the demographics in rural and urban markets are different, so even if we knew what T-Mobile's market share were in its current markets, it would probably be inaccurate to apply that same share to the new (more rural) footprint. The point of this exercise is simply to illustrate that T-Mobile's footprint expansion represents a substantial subscriber growth opportunity.

Perhaps just as important as the subscriber growth benefit from footprint expansion is the likely impact on pricing. By providing a new growth runway (versus taking share in mature markets), T-Mobile will be able to reduce its reliance on discounting to sustain growth.

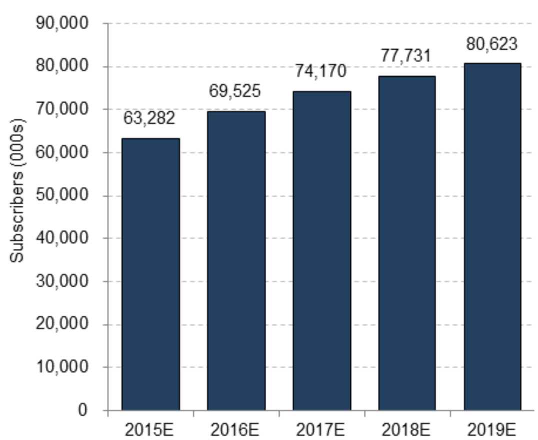
Forecasts

How much all of this is already anticipated in consensus models is unclear. Our own model has long assumed footprint expansion in 2016 as a growth driver, even if our approach to modeling it prior to the analysis articulated in this report was to simply make an educated guess, so the changes from footprint alone are relatively modest (and primarily a function of timing). What other models have assumed about footprint expansion (versus organic growth from continued share gains) is unknowable.

Perhaps the best way to think about footprint expansion is as a *cushion* to achieving share gains. Our revised model for T-Mobile calls for subscriber growth of 17 million subscribers over the next four years. Achieving "fair share" market share in a footprint expansion of 50 million POPs over that period would account for roughly 60% of the total (Exhibits 17 and 18).

Exhibit 17

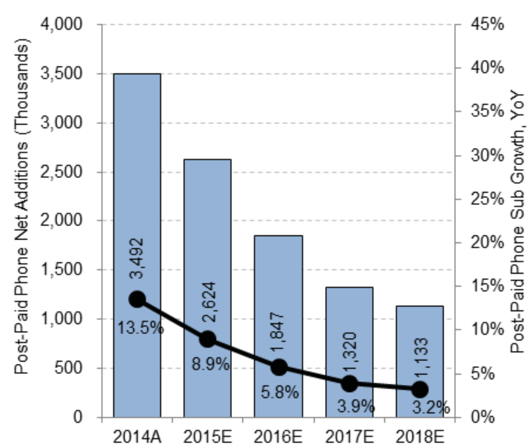
T-Mobile Subscribers, 2015-2019E



Source: Company reports, MoffettNathanson estimates and analysis

Exhibit 18

T-Mobile: Post-Paid Phone Net Additions and Growth, 2015-2019E

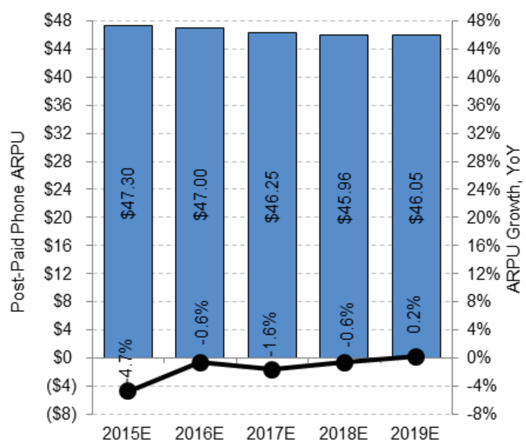


Source: Company reports, MoffettNathanson estimates and analysis

With a forecast of roughly flat ARPU (Exhibit 19), we project real revenue growth (adjusted for accounting distortions from T-Mobile's move to leasing) approximately equal to the subscriber growth rate, or a CAGR of 8.4% over the next four years (Exhibit 20).

Exhibit 19

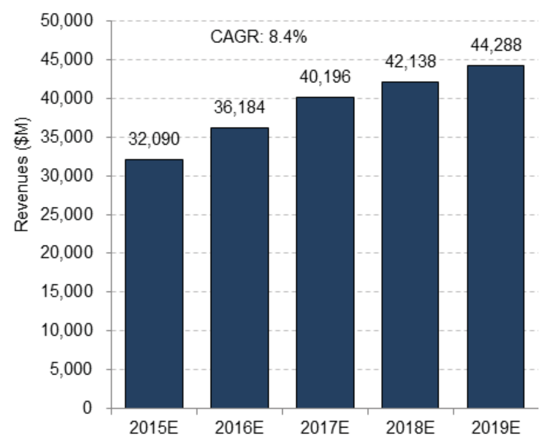
T-Mobile: Post-Paid Phone ARPU and Growth, 2015- 2019E



Source: Company reports, MoffettNathanson estimates and analysis

Exhibit 20

T-Mobile Revenues, 2015-2019E

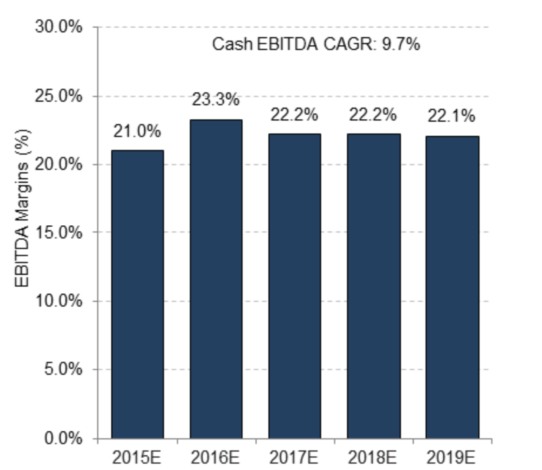


Source: Company reports, MoffettNathanson estimates and analysis

With continued growth, and with the realization of the remaining synergies from the MetroPCS transaction (which we expect to be fully realized by the end of 2016E), we project "cash EBITDA" margins will stay relatively flat, but with volumes yielding "cash EBITDA" growth of 9.7% CAGR (Exhibits 21 and 22). [*Cash EBITDA refers to underlying EBITDA undistorted by handset leasing and Data Stash, although the effect of the latter is relatively minor. T-Mobile expects 2016E cash EBITDA to be relatively in line with consensus of $8.4-8.5B; we model $8.42B in cash EBITDA next year*.]

Exhibit 21

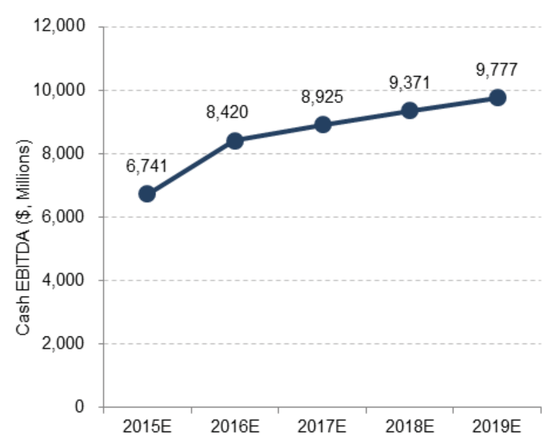
T-Mobile: Cash EBITDA Margins, 2015-2019E



Source: Company reports, MoffettNathanson estimates and analysis

Exhibit 22

T-Mobile: Cash EBITDA, 2015-2019E



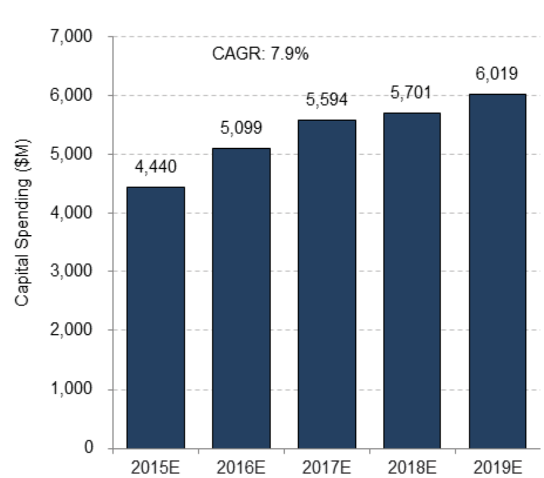
Source: Company reports, MoffettNathanson estimates and analysis

Footprint expansion will require incremental capital spending, of course, for everything from densifying the network to new motors vehicles for repair and maintenance in new markets and eventually to leasehold improvements in new retail locations.

Our revised model calls for capital spending to increase at a CAGR of 7.9%, with capital intensity remaining elevated through the company's network deployment plans through 2017E, and then declining to 15% as a percent of service revenues (and lower as a percentage of total revenues) (Exhibit 23).

Exhibit 23

T-Mobile: Capital Spending & Capital Intensity, 2015-2019E



Source: Company reports, MoffettNathanson estimates and analysis

The most compelling part of the T-Mobile story remains free cash flow.

Our revised model calls for sharply higher free cash flow this year than our prior model ($2.00 per share; in line with consensus), and for free cash flow that is slightly above consensus in 2017E and beyond. On 2017E, T-Mobile is currently trading with a yield of nearly 10% (Exhibit 24).

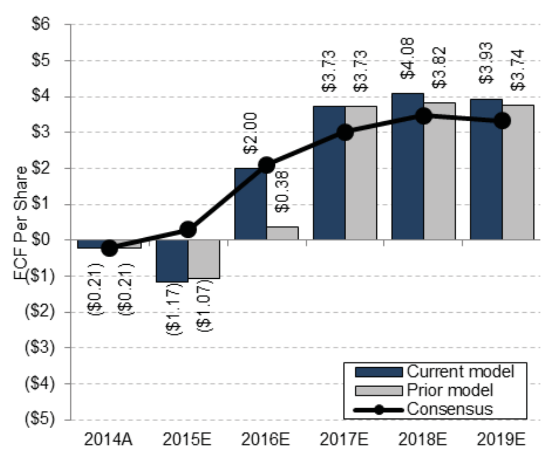
The upcoming spectrum auction creates a valuation challenge with respect to free cash flow. T-Mobile is expected to be a vigorous participant. It is clearly inappropriate to simply ignore spectrum purchases (as so many investors unfortunately do), particularly in advance of a large auction. We estimate that T-Mobile will spend $5B for additional low-band spectrum that will (in the years beyond the end of our model) support still further footprint expansion and coverage improvements.

In the past, we have argued that the most appropriate way to view spectrum purchases, which are necessarily episodic, is to smooth them over a period of years, as we have done in Exhibit 25, where we apply a five-year forward smoothing and where we assume $5B in purchases.

But it is less clear how one should think about FCF after the auction is over. At that point, T-Mobile's spectrum purchases will be best viewed as a sunk cost, and there will be no upcoming auctions still on the calendar, or indeed likely to happen in the coming five years. We suspect investors will therefore revert to valuation methodologies that ignore the spectrum purchases of prior periods (of which 2016E will then be one)… and T-Mobile's FCF yield will be viewed as being back above 10%.

Exhibit 24

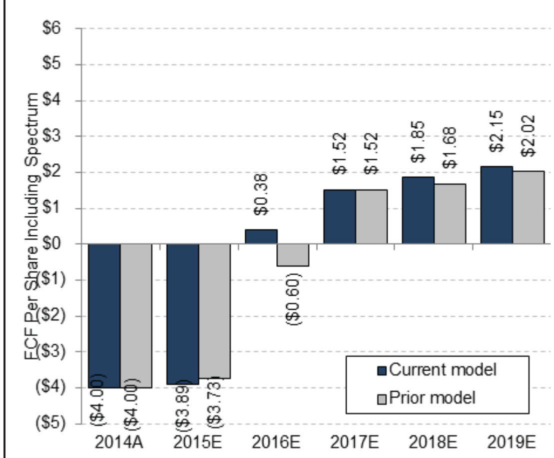
T-Mobile: FCF Per Share Excluding Spectrum, 2015-2019E



Source: Company reports, MoffettNathanson estimates and analysis

Exhibit 25

T-Mobile: FCF Per Share Including Spectrum (Smoothed Over 5 Years), 2015-2019E



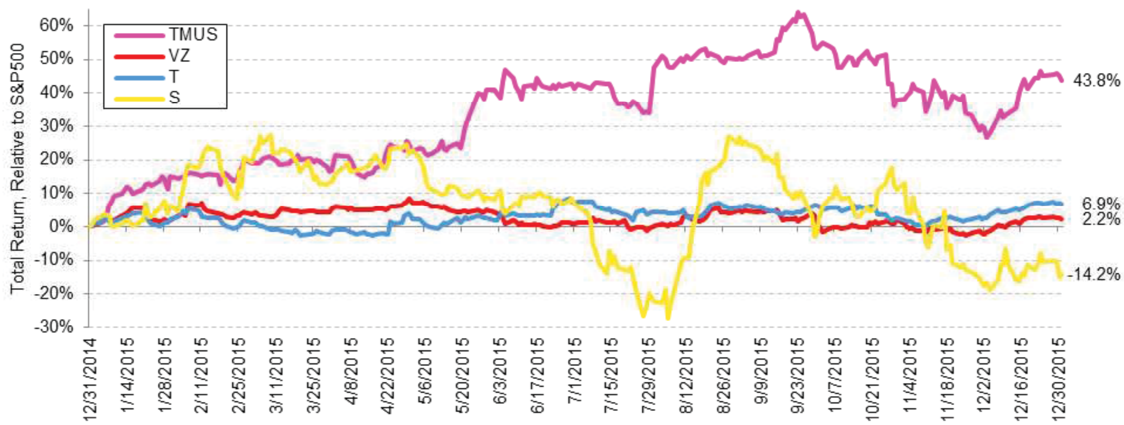
Source: Company reports, MoffettNathanson estimates and analysis

Summary and Conclusions

2015 marked the first time in several years that the telecom sector outperformed the broader market (Exhibit 26). T-Mobile's stock led the group with a total return relative to the S&P 500 of 43.8%. Sprint's stock was the lone underperformer, with a total return of -14.2%.

Exhibit 26

Big Four Wireless Stocks: 2015
Share Price Relative to S&P 500 (Dividend Adjusted)



Source: Bloomberg, Company reports, MoffettNathanson estimates and analysis

As we enter 2016, T-Mobile Buy is once again our top pick. We expect them to not only grow subscribers, but cash EBITDA and free cash flow as well.

Footprint expansion is a big part of the story. T-Mobile has already completed much of Phase I, with 700MHz spectrum now covering more than 185M pops. What remains is to come in behind the network with stores. We expect to hear more about this growth driver when T-Mobile reports earnings in February.

Updated Models

Exhibit 27

T-Mobile Summary Income Statement

($ millions, except per share)	2014A	Q1 2015A	Q2 2015A	Q3 2015A	Q4 2015E	2015E	2016E	2017E	2018E	2019E
Total revenues	29,564	7,778	8,179	7,849	8,284	32,090	36,184	40,196	42,138	44,288
Network	5,788	1,395	1,397	1,378	1,392	5,562	5,769	6,204	6,607	6,973
Cost of equipment sales	9,621	2,679	2,661	1,985	2,098	9,423	7,447	8,036	8,312	8,909
Customer acquisition and G&A	8,863	2,372	2,438	2,624	2,704	10,138	11,373	12,317	13,020	13,596
Depreciation and amortization	4,412	1,087	1,075	1,157	1,420	4,739	7,760	9,608	10,043	10,536
Other items	(536)	128	11	192	130	461	25	0	0	0
Operating income (loss)	1,416	117	597	513	541	1,768	3,811	4,031	4,156	4,274
EBITDA	5,828	1,204	1,672	1,670	1,961	6,507	11,571	13,639	14,199	14,810
EBITDA margin	19.7%	15.5%	20.4%	21.3%	23.7%	20.3%	32.0%	33.9%	33.7%	33.4%
EBITDA service margin	26.0%	20.7%	27.2%	26.5%	30.5%	26.3%	42.0%	46.3%	45.8%	45.7%
Adjusted EBITDA	5,636	1,388	1,817	1,908	2,136	7,249	11,794	13,860	14,430	15,053
Adjusted EBITDA margin	19.1%	17.8%	22.2%	24.3%	25.8%	22.6%	32.6%	34.5%	34.2%	34.0%
Adjusted EBITDA service margin	25.2%	23.9%	29.6%	30.3%	33.2%	29.3%	42.9%	47.0%	46.5%	46.4%
"Cash" EBITDA	5,636	1,388	1,817	1,771	1,765	6,741	8,420	8,925	9,371	9,777
"Cash" EBITDA margins	19.1%	17.8%	22.2%	22.6%	21.3%	21.0%	23.3%	22.2%	22.2%	22.1%
Interest expense	(1,351)	(325)	(349)	(383)	(407)	(1,464)	(1,782)	(1,786)	(1,697)	(1,619)
Other expense (income), net	348	104	111	108	121	444	323	83	(182)	(466)
Income (loss) before income taxes	413	(104)	359	238	254	747	2,352	2,328	2,278	2,189
Income tax (expense) benefit	(166)	41	2	(100)	(102)	(159)	(941)	(931)	(911)	(876)
Net income (loss)	247	(63)	361	138	153	589	1,411	1,397	1,367	1,313
Preferred stock dividends	0	(14)	(14)	(13)	(14)	(55)	(55)	(53)	0	0
Net income (loss) attributable to T-Mo stockholders	247	(77)	347	125	139	534	1,356	1,344	1,367	1,313
Diluted shares outstanding	811	809	821	822	821	818	826	836	871	867
Diluted EPS	$0.30	($0.10)	$0.42	$0.15	$0.17	$0.65	$1.64	$1.61	$1.57	$1.52
Adjusted diluted EPS	($0.00)	$0.00	$0.48	$0.30	$0.27	$1.05	$1.66	$1.61	$1.57	$1.52

Source: Company reports, MoffettNathanson estimates and analysis

Exhibit 28

T-Mobile Summary Cash Flow and Balance Sheet

($ millions, except per share)	2014A	Q1 2015A	Q2 2015A	Q3 2015A	Q4 2015E	2015E	2016E	2017E	2018E	2019E
Capital expenditures	4,317	982	1,191	1,120	1,147	4,440	5,099	5,594	5,701	6,019
						13.8%	14.1%	13.9%	13.5%	13.6%
Free cash flow	(171)	(493)	(30)	411	(846)	(958)	1,649	3,121	3,550	3,411
Free cash flow per share	($0.21)					($1.17)	$2.00	$3.73	$4.08	$3.94
Yield against share price	-0.6%					-3.1%	5.3%	9.9%	10.8%	10.4%
Cash spectrum (purchases) dispositions	(2,900)	(1,696)	(148)	(94)	0	(1,938)	(5,000)	0	0	0
Free cash flow including spectrum	(3,071)	(2,189)	(178)	317	(846)	(2,896)	(3,351)	3,121	3,550	3,411
Free cash flow per share including spectrum	($3.79)					($3.54)	($4.06)	$3.73	$4.08	$3.94
Yield against share price	-10.0%					-9.4%	-10.7%	9.9%	10.8%	10.4%
Unlevered free cash flow	1,071	(87)	215	723	(537)	313	2,747	4,221	4,607	4,459
Yield against enterprise value	1.9%					0.6%	4.9%	7.6%	8.3%	8.0%
Spread vs. WACC (market-implied growth)	3.7%					5.0%	0.7%	-2.0%	-2.7%	-2.4%
Share repurchases	0	0	0	0	0	0	0	0	500	1,787
Number of shares repurchased	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	4.5	15.2
Cash, equivalents and short-term investments	5,315	3,032	2,642	2,633	1,796	1,796	(1,520)	1,000	1,949	3,552
Preferred stock	0	0	0	0	1,000	1,000	1,000	1,000	0	0
Debt	24,625	24,600	24,613	24,766	25,739	25,739	25,783	25,196	23,167	23,223
Net debt	19,310	21,568	21,971	22,133	24,943	24,943	28,303	25,196	21,218	19,671
Net debt to LTM adjusted EBITDA	3.43x	3.63x	3.49x	3.29x	3.70x	3.70x	3.36x	2.82x	2.26x	2.01x
ROIC ex-special items and ARILIA	3.1%					4.4%	6.1%	6.8%	8.0%	9.7%

Source: Company reports, MoffettNathanson estimates and analysis

Exhibit 29

T-Mobile Segment Detail

($ millions)	2014A	Q1 2015A	Q2 2015A	Q3 2015A	Q4 2015E	2015E	2016E	2017E	2018E	2019E
Branded post-paid	14,392	3,774	4,075	4,197	4,223	16,269	18,250	19,571	20,686	21,745
Branded pre-paid	6,986	1,842	1,861	1,894	1,977	7,574	8,399	9,017	9,456	9,785
Total branded revenues	21,378	5,616	5,936	6,091	6,201	23,844	26,649	28,588	30,142	31,531
Wholesale	731	158	164	170	172	664	681	693	711	721
Roaming and other services	266	45	44	41	64	194	188	183	177	172
Total service revenues	22,375	5,819	6,144	6,302	6,436	24,701	27,519	29,464	31,031	32,423
Equipment sales	6,789	1,851	1,915	1,416	1,733	6,915	8,172	10,223	10,584	11,325
Other revenues	400	108	120	131	114	473	494	509	524	540
Total revenues	29,564	7,778	8,179	7,849	8,284	32,090	36,184	40,196	42,138	44,288
Memo: equipment installment plan billings	3,596	1,292	1,393	1,439	1,652	5,776	6,550	7,077	7,761	8,179
Memo: equipment sales on installment plans	5,810	1,483	1,697	1,107	1,111	5,398	3,869	4,305	4,512	4,980

Source: Company reports, MoffettNathanson estimates and analysis

Exhibit 30

T-Mobile Subscriber Detail

(thousands, except per subscriber)	2014A	Q1 2015A	Q2 2015A	Q3 2015A	Q4 2015E	2015E	2016E	2017E	2018E	2019E
Total										
Subscribers	55,018	56,836	58,908	61,220	63,282	63,282	69,525	74,170	77,731	80,623
Gross additions	27,844	6,966	7,525	7,683	7,595	29,769	29,210	29,049	28,927	28,882
Net additions	8,334	1,818	2,072	2,312	2,062	8,264	6,243	4,644	3,561	2,892
Churn rate	3.19%	3.07%	3.14%	2.98%	2.96%	3.04%	2.87%	2.83%	2.78%	2.73%
ARPU	$40.27	$39.52	$40.57	$40.32	$40.41	$40.22	$40.66	$40.90	$41.56	$42.23
Post-paid								12000	0.189627	
Subscribers	27,185	28,310	29,318	30,403	31,676	31,676	35,350	38,248	40,618	42,651
Gross additions	9,722	2,374	2,253	2,482	2,696	9,805	9,584	9,323	9,175	9,130
Net additions	4,886	1,125	1,008	1,085	1,273	4,491	3,674	2,897	2,370	2,033
Churn rate	1.63%	1.50%	1.44%	1.56%	1.56%	1.52%	1.49%	1.47%	1.45%	1.43%
ARPU	$48.55	$45.34	$47.14	$46.85	$45.36	$46.17	$45.47	$44.42	$43.83	$43.63
Smartphone penetration	85.0%	86.0%	87.0%	88.0%	88.8%	88.8%	88.6%	86.6%	84.8%	83.3%
Upgrade rate	8.8%	8.0%	9.0%	9.0%	11.8%	9.5%	9.3%	9.6%	9.3%	9.6%
Pre-paid										
Subscribers	16,316	16,389	16,567	17,162	17,631	17,631	19,131	20,146	20,861	21,379
Gross additions	10,221	2,339	2,615	2,664	2,631	10,250	10,326	10,326	10,352	10,352
Net additions	1,244	73	178	595	469	1,315	1,500	1,015	715	519
Churn rate	4.75%	4.62%	4.93%	4.09%	4.20%	4.46%	4.02%	3.95%	3.91%	3.87%
ARPU	$37.10	$0.00	$0.00	$0.00	$0.00	$37.62	$37.85	$38.04	$38.23	$38.43
M2M										
Subscribers	4,421	4,562	4,529	4,766	4,852	4,852	5,345	5,754	6,094	6,377
Net additions	819	141	(33)	237	87	431	492	409	340	283
ARPU	$1.00	$1.00	$1.00	$1.00	$1.00	$1.00	$1.00	$1.00	$1.00	$1.00
MVNO										
Subscribers	7,096	7,575	8,494	8,889	9,056	9,056	9,700	10,023	10,158	10,215
Net additions	1,385	479	919	395	167	1,960	644	323	136	57
ARPU	$8.93	$6.57	$6.24	$5.99	$5.84	$6.14	$5.51	$5.28	$5.28	$5.28

Source: Company reports, MoffettNathanson estimates and analysis

Exhibit 31

Sprint Summary Income Statement (CY)

($ millions, except per share)	2014A	Q1 2015A	Q2 2015A	Q3 2015A	Q4 2015E	2015E	2016E	2017E	2018E	2019E
Net operating revenues	35,125	8,282	8,027	7,975	8,197	32,481	32,795	33,680	34,119	34,465
Cost of services	9,901	2,381	2,393	2,453	2,563	9,790	9,775	9,383	9,234	9,255
Cost of products	9,520	1,827	1,365	1,290	1,753	6,235	6,188	7,415	7,739	7,760
Selling, general and administrative	9,603	2,331	2,187	2,224	2,269	9,011	8,717	8,855	9,007	9,134
Goodwill impairment	2,133	0	0	85	0	85	0	0	0	0
Depreciation and amortization	5,192	1,454	1,588	1,743	1,319	6,104	5,356	5,135	4,973	5,106
Other, net	569	(29)	(7)	182	405	551	1,042	752	771	789
Operating income (loss)	(1,793)	318	501	(2)	(112)	705	1,717	2,140	2,395	2,420
EBITDA	3,399	1,772	2,089	1,741	1,207	6,809	7,073	7,275	7,368	7,526
EBITDA margin	9.7%	21.4%	26.0%	21.8%	14.7%	21.0%	21.6%	21.6%	21.6%	21.8%
EBITDA service margin	11.2%	24.8%	29.7%	25.3%	17.3%	24.3%	26.3%	27.2%	27.3%	27.6%
Adjusted EBITDA	6,101	1,743	2,082	2,008	1,612	7,445	8,115	8,027	8,139	8,315
Adjusted EBITDA margin	17.4%	21.0%	25.9%	25.2%	19.7%	22.9%	24.7%	23.8%	23.9%	24.1%
Adjusted EBITDA service margin	20.1%	24.4%	29.6%	29.2%	23.1%	26.6%	30.1%	30.0%	30.2%	30.5%
Interest expense	(2,044)	(523)	(542)	(542)	(555)	(2,162)	(2,281)	(2,258)	(2,306)	(2,278)
Equity in losses of unconsolidated investments and oth	20	8	4	5	0	17	0	0	0	0
Income (loss) before income taxes	(3,817)	(197)	(37)	(539)	(667)	(1,440)	(564)	(118)	89	143
Income tax benefit (expense)	545	(27)	17	(46)	(60)	(116)	(240)	(240)	(240)	(240)
Net income (loss)	(3,272)	(224)	(20)	(585)	(727)	(1,556)	(804)	(358)	(151)	(97)
Diluted shares outstanding	3,964	3,962	3,967	3,969	3,971	3,967	4,002	4,078	4,167	4,260
Diluted EPS	($0.83)	($0.06)	($0.01)	($0.15)	($0.18)	($0.39)	($0.20)	($0.09)	($0.04)	($0.02)

Source: Company reports, MoffettNathanson estimates and analysis

Exhibit 32

Sprint Summary Cash Flow and Balance Sheet (CY)

($ millions, except per share)	2014A	Q1 2015A	Q2 2015A	Q3 2015A	Q4 2015E	2015E	2016E	2017E	2018E	2019E
Capital expenditures, accrued	5,445	2,047	2,346	1,735	1,912	8,040	7,267	7,468	7,601	7,721
Capital expenditures, cash	5,445	2,047	2,346	1,735	1,529	7,657	7,267	7,468	7,601	7,721
Free cash flow	(3,513)	(912)	(2,243)	(82)	(1,104)	(4,341)	(946)	(1,063)	(1,026)	(904)
Free cash flow per share	($0.89)					($1.09)	($0.24)	($0.26)	($0.25)	($0.21)
Yield against share price	-30.9%					-38.1%	-8.2%	-9.1%	-8.6%	-7.4%
Cash spectrum (purchases) dispositions	0	0	0	0	0	0	0	0	0	0
Free cash flow including spectrum	(3,513)	(912)	(2,243)	(82)	(1,104)	(4,341)	(946)	(1,063)	(1,026)	(904)
Free cash flow per share including spectrum	($0.89)					($1.09)	($0.24)	($0.26)	($0.25)	($0.21)
Yield against share price	-30.9%					-38.1%	-8.2%	-9.1%	-8.6%	-7.4%
Unlevered free cash flow	(2,159)	(698)	(1,869)	266	(746)	(3,048)	476	404	417	501
Yield against enterprise value	-4.9%					-6.9%	1.1%	0.9%	0.9%	1.1%
Spread vs. WACC (market-implied growth)	11.0%					13.0%	5.0%	5.1%	5.1%	4.9%
Share repurchases	0	0	0	0	0	0	170	515	459	541
Number of shares repurchased	0.0	0.0	0.0	0.0	0.0	0.0	(20.0)	(61.8)	(56.1)	(66.1)
Cash, equivalents and short-term investments	3,709	4,176	2,263	2,075	2,471	2,471	2,000	2,000	2,000	2,000
Debt	32,462	33,831	34,130	33,965	35,433	35,433	35,966	36,566	37,977	39,362
Net debt	28,753	29,655	31,867	31,890	32,962	32,962	33,966	34,566	35,977	37,362
Net debt to LTM adjusted EBITDA	4.71x	4.94x	5.09x	4.58x	4.38x	4.38x	4.19x	4.31x	4.42x	4.50x
ROIC ex-special items and ARILIA	3.4%					4.0%	5.6%	5.5%	5.6%	5.4%

Source: Company reports, MoffettNathanson estimates and analysis

Exhibit 33

Sprint Segment Detail (CY)

($ millions)	2014A	Q1 2015A	Q2 2015A	Q3 2015A	Q4 2015E	2015E	2016E	2017E	2018E	2019E
Revenues										
Post-paid service revenue	22,096	5,096	5,011	4,942	4,980	20,029	19,068	19,016	19,375	19,663
Pre-paid service revenue	5,124	1,324	1,340	1,289	1,249	5,202	4,980	4,939	4,933	4,959
Wholesale and affiliate service revenue	744	208	199	190	201	797	878	967	1,027	1,067
Total w ireless service revenues	27,964	6,628	6,550	6,421	6,430	26,029	24,927	24,922	25,335	25,690
Equipment revenue	4,845	1,144	990	1,095	1,219	4,448	5,875	6,963	7,127	7,242
Total w ireless net operating revenues	32,809	7,772	7,540	7,516	7,648	30,476	30,802	31,886	32,461	32,932
Voice	1,262	264	233	212	246	955	847	751	676	608
Data	223	52	49	43	44	188	160	136	116	98
Internet	1,363	335	328	323	323	1,309	1,270	1,232	1,195	1,159
Other	68	17	20	31	15	83	57	53	50	47
Total w ireline net operating revenues	2,916	668	630	609	628	2,535	2,334	2,171	2,036	1,912
Corporate and other	(600)	(158)	(143)	(150)	(80)	(531)	(341)	(377)	(378)	(379)
Consolidated net operating revenues	35,125	8,282	8,027	7,975	8,197	32,481	32,795	33,680	34,119	34,465
Adjusted EBITDA										
Wireless	6,034	1,697	2,074	1,979	1,591	7,341	8,037	7,954	8,070	8,250
Wireline	85	40	9	29	19	97	70	65	61	57
Corporate and other	(18)	6	(1)	85	1	91	4	4	4	4
Total consolidated adjusted EBITDA	6,101	1,743	2,082	2,008	1,612	7,445	8,115	8,027	8,139	8,315
Adjusted EBITDA margin										
Wireless service	21.6%	25.6%	31.7%	30.8%	24.7%	28.2%	32.2%	31.9%	31.9%	32.1%
Wireline	2.9%	6.0%	1.4%	4.8%	3.0%	3.8%	3.0%	3.0%	3.0%	3.0%
Capital expenditures, accrued										
Wireless	4,828	1,957	2,184	1,576	1,775	7,492	6,734	6,951	7,097	7,230
Wireline	282	68	0	0	63	131	233	217	204	191
Corporate and other	333	20	94	96	60	270	240	240	240	240
Total consolidated capital expenditures, accrued	5,445	2,047	2,346	1,735	1,912	8,040	7,267	7,468	7,601	7,721

Source: Company reports, MoffettNathanson estimates and analysis

Exhibit 34

Sprint Subscriber Detail (CY)

(thousands, except per subscriber)	2014A	Q1 2015A	Q2 2015A	Q3 2015A	Q4 2015E	2015E	2016E	2017E	2018E	2019E
Total										
Subscribers	55,929	57,141	57,668	58,578	59,434	59,434	63,450	66,742	69,677	72,324
Net additions	575	1,212	527	910	856	3,505	4,016	3,292	2,935	2,647
ARPU	$42.35	$39.08	$38.03	$36.82	$36.32	$37.55	$33.82	$31.88	$30.97	$30.13
Post-paid, blended										
Subscribers	29,904	30,074	30,324	30,807	31,425	31,425	33,358	34,812	36,064	37,111
Gross additions	7,073	1,852	1,709	1,959	2,134	7,654	7,906	7,946	7,985	8,025
Net additions	(933)	170	250	483	618	1,521	1,933	1,454	1,252	1,046
Churn rate	2.21%	1.87%	1.61%	1.61%	1.64%	1.68%	1.55%	1.60%	1.60%	1.60%
ARPU	$60.90	$56.72	$55.31	$53.90	$53.35	$54.80	$49.12	$46.50	$45.69	$44.79
Post-paid, Sprint platform										
Subscribers	29,904	30,074	30,324	30,807	31,425	31,425	33,358	34,812	36,064	37,111
Gross additions	7,073	1,852	1,709	1,959	2,134	7,654	7,906	7,946	7,985	8,025
Net additions	(933)	170	250	483	618	1,521	1,933	1,454	1,252	1,046
Churn rate	2.21%	1.87%	1.61%	1.61%	1.64%	1.68%	1.55%	1.60%	1.60%	1.60%
ARPU	$60.90	$56.72	$55.31	$53.90	$53.35	$54.80	$49.12	$46.50	$45.69	$44.79
Smartphone penetration	74.2%	74.0%	74.0%	73.9%	74.4%	74.4%	74.3%	73.3%	72.4%	71.0%
Smartphone penetration of phone	87.0%	88.0%	89.0%	90.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
Upgrade rate, ex-Nextel transfers	8.4%	7.5%	7.9%	7.8%	10.5%	8.4%	7.7%	7.7%	7.7%	7.7%
Pre-paid, blended										
Subscribers	15,539	16,067	15,635	15,208	15,013	15,013	14,836	14,782	14,864	15,043
Gross additions	7,063	2,349	2,007	1,946	1,248	7,550	5,389	5,492	5,651	5,815
Net additions	(683)	528	(432)	(427)	(195)	(526)	(177)	(54)	81	179
Churn rate	4.16%	3.84%	5.13%	5.13%	3.18%	4.32%	3.11%	3.12%	3.13%	3.14%
ARPU	$27.59	$27.95	$28.18	$27.86	$27.55	$27.89	$27.80	$27.77	$27.71	$27.61
Pre-paid, Sprint platform										
Subscribers	15,539	16,067	15,635	15,208	15,013	15,013	14,836	14,782	14,864	15,043
Gross additions	7,063	2,349	2,007	1,946	1,248	7,550	5,389	5,492	5,651	5,815
Net additions	(683)	528	(432)	(427)	(195)	(526)	(177)	(54)	81	179
Churn rate	4.16%	3.84%	5.13%	5.13%	3.18%	4.32%	3.11%	3.12%	3.13%	3.14%
ARPU	$27.59	$27.95	$28.18	$27.86	$27.55	$27.89	$27.80	$27.77	$27.71	$27.61
Wholesale and affiliate										
Subscribers	10,486	11,000	11,709	12,563	12,996	12,996	15,256	17,147	18,749	20,171
Net additions	2,191	514	709	854	433	2,510	2,260	1,892	1,602	1,422
ARPU	$6.70	$6.45	$5.84	$5.21	$5.24	$5.65	$5.17	$4.96	$4.76	$4.56

Source: Company reports, MoffettNathanson estimates and analysis

Risks

T-Mobile

Upside risks for T-Mobile include: The company's "un-carrier" strategy – equipment installment plans, encouraging subscribers to bring their own devices, simplified pricing, network upgrades – could yield subscriber, profit, and free cash flow improvements in excess of what investors forecast; The cost and revenue synergies from its merger with MetroPCS could be greater than expected, be realized sooner than planned, and/or require less investment than anticipated; Wireless revenue growth could prove stronger than expected due to reduced competitive intensity and firmer pricing, higher penetration of non-traditional devices, or increased monetization of increased traffic from consumers or content providers; Wireless margins could exceed expectations due to restrained competition or successful efforts to curb equipment subsidies; T-Mobile could utilize its significant tax assets at a more rapid rate than forecast;

Capital spending may be less than expected; T-Mobile could engage in value-enhancing M&A activity or be acquired.

Downside risks for T-Mobile include: The company's "un-carrier" strategy could fail to deliver its expected improvements, leaving the company in a poor competitive position and unable to comfortably manage its debt load; The promised cost and revenue synergies from the merger with MetroPCS could be less than expected, come late, and/or require more investment than anticipated; Wireless revenue growth could deteriorate due to increased competitive pressure affecting subscriber or ARPU performance, lower than forecast adoption of non-traditional devices, or a failure to monetize increased traffic; The cable industry's WiFi offering could prove disruptive; Wireless margins could be pressured by heightened competition or equipment subsidies; T-Mobile may fail to utilize its tax assets due a lack of profitability; Capital intensity may remain elevated to support traffic volumes; T-Mobile could engage in value destructive M&A activity.

Sprint

Upside risks for Sprint include: Network Vision/Spark and/or SoftBank's turnaround strategies could yield subscriber, profit, and free cash flow improvements in excess of what investors forecast; Sprint may be able to realize synergies from having full control of Clearwire, and its significant spectrum holdings could be a material asset in time; Wireless revenue growth could prove stronger than expected due to reduced competitive intensity and firmer pricing, higher penetration of non-traditional devices, or increased monetization of increased traffic from consumers or content providers; Wireless margins could exceed expectations due to restrained competition or successful efforts to curb equipment subsidies; Sprint's wireline segment could deliver results in excess of modest investor expectations; Sprint could utilize its significant tax assets at a more rapid rate than forecast; Capital spending may be less than expected; Sprint could engage in value-enhancing M&A activity.

Downside risks for Sprint include: Network Vision/Spark and/or SoftBank's turnaround strategies could fail to deliver their expected improvements, leaving the company in a poor competitive position and saddling it with debt; The company may not be able to effectively deploy Clearwire's high frequency spectrum or rationalize its cost structure; Wireless revenue growth could deteriorate due to increased competitive pressure affecting subscriber or ARPU performance, lower than forecast adoption of non-traditional devices, or a failure to monetize increased traffic; The cable industry's WiFi offering could prove disruptive; Wireless margins could be pressured by heightened competition or equipment subsidies; Sprint's wireless segment could deteriorate at a quickening pace; Sprint may fail to utilize its tax assets due a lack of profitability; Capital intensity may remain elevated to support traffic volumes; Sprint could engage in value destructive M&A activity.

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