

# CWA Analysis of Proposed T-Mobile/Sprint Merger

*October 2018*

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# 1. Competitive Impacts of Proposed Merger

# Merger is Presumptively Anticompetitive

**The proposed merger of T-Mobile and Sprint is “presumptively anticompetitive” under controlling antitrust case law and is “presumed likely to enhance market power” under the Horizontal Merger Guidelines**

- Highly concentrated markets with high barriers to entry and expansion
- Merger significantly increases concentration
- Parties do not calculate HHIs, suggesting result is same regardless of how calculations are done
- HHIs are economically valid predictor of post-merger price increases, not just a “screen”

# Defining Relevant Market

## **Mobile telephony/broadband services is a relevant market**

- This market is comprised of mobile voice and data services, including mobile voice and data services provided over advanced broadband wireless networks
- Same product market defined in a series of recent transactions, including T-Mobile/MetroPCS and AT&T/T-Mobile
- Parties' Joint Opposition contains statements supporting this market definition (e.g., pp.73-74 & n.273, 99 n.373; see also declaration of Glenn Woroch p. 1)

# Prepaid Wireless

## Prepaid wireless retail services is a relevant market

- Differentiated products between prepaid and postpaid offerings
- Very high HHIs and potential impact on lower-income consumers warrant heightened antitrust scrutiny
- Relevant questions include whether prepaid plans are marketed and sold differently from postpaid plans (they are) and whether postpaid plans constrain pricing of prepaid plans (they do not)
- Woroch declaration is not to the contrary

# Spectrum Concentration

## Spectrum is an essential input for wireless carriers

- On a national basis, 92% of the population of the United States – or more than 284 million people – live in counties in which the spectrum screen would be exceeded post-merger
- On state-by-state basis, the percentage of the population living in counties in which the spectrum screen would be exceeded include:
  - California **99.2%**
  - Connecticut **100%**
  - Florida **94.0%**
  - Hawaii **80.0%**
  - Illinois **97.6%**
  - Massachusetts **96.3%**
  - New York **97.5%**
  - Tennessee **81.1%**
  - Virginia **91.7%**
  - Washington **98.6%**

# Unilateral Effects

**Unilateral anticompetitive effects are likely to be significant because products and services offered by T-Mobile and Sprint are very close substitutes for a large number of customers**

- History of fierce head-to-head competition between T-Mobile and Sprint (examples are found in CWA Comments pp. 24-30)
- Not surprisingly, parties choose to ignore the long history of rivalry between Sprint and T-Mobile
- Repositioning by others is unlikely to counteract unilateral competitive effects



# Rehashing Flawed Arguments

**Consumers have benefited tremendously by competition between the four national wireless providers**

- Many of the same arguments made by parties in AT&T/T-Mobile are being made here – “we need the spectrum,” “we can better serve rural customers,” “more capacity equals lower prices,” “merger lets us roll out new services faster” [4G then, 5G now], “our competitors will be forced to compete harder,” etc.
- Sprint and its economists aptly pointed out the flaws in those arguments in opposition to AT&T/T-Mobile

# 5G

## **“Race to 5G” is unpersuasive as a justification for an otherwise illegal merger**

- Far too many what ifs and unknowns to qualify as an efficiency defense
- Appeals to the national interest are irrelevant to sound merger analysis

# Failing Firm?

## **Sprint does not qualify as a failing firm**

- Sprint is nowhere near meeting the stringent requirements for a failing firm defense
- Sprint's statements to investors and SEC paint a vastly different picture from the doom-and-gloom in its FCC merger-related filings

# Merger Should Be Blocked

Textbook example of a merger that **should be blocked** under standard consumer welfare analysis and well-established merger law

## 2. Rural Service Comparable Whether or Not Merger Happens

# Merger would have marginal impact in rural areas

1. T-Mobile already holds low-band spectrum best suited for long distances in rural America, but not at high speeds
2. Sprint contributes very limited rural infrastructure
3. Sprint's mid-band spectrum, while very useful in urban and suburban areas, has shorter range and is easily obstructed by foliage and terrain

***Therefore, for most of rural America, merged T-Mobile/Sprint will be almost the same as T-Mobile***

# Different spectrum for different uses

## Higher frequency (Sprint)

- 2.5 GHz mid-band spectrum
- Signal resembles a light beam
- Wide channels and high speeds— hundreds of Mbps or Gbps
- However, easily blocked by foliage and terrain
- Range a few miles (2.5 GHz mid-band)

*Requires many nearby antennas—good urban/suburban solution—but these do not and cannot exist in most rural areas*

# Different spectrum for different uses

## Low frequency (T-Mobile)

- 600 and 700 MHz
- Signal more like a wave
- Can penetrate foliage and terrain
- Narrower channels and lower speeds— tens of Mbps— one tenth to one-hundredth the speed of mid-band
- Range up to 18 miles
- Tradeoff between coverage and speed

*Can work with fewer antennas— the rural reality*



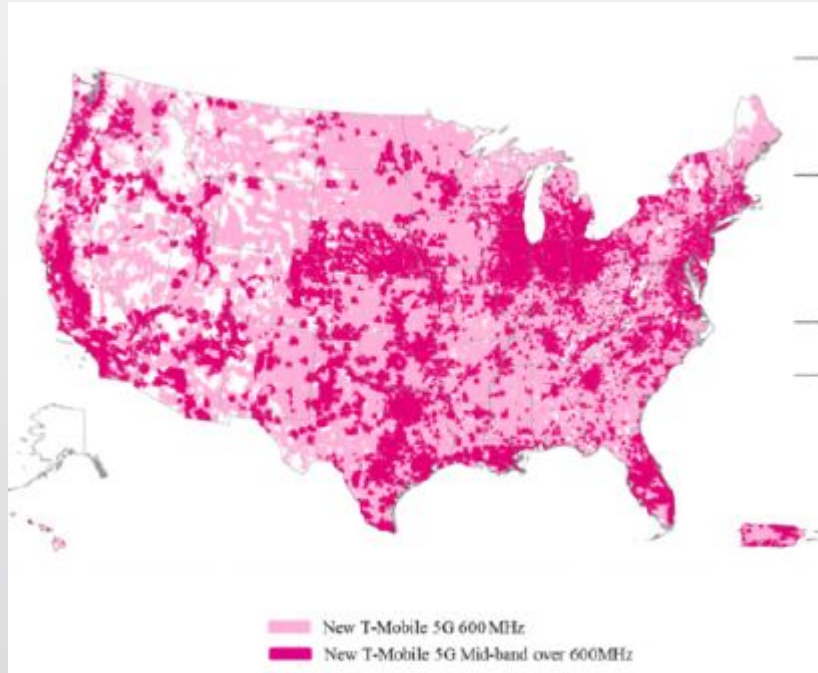
Post Merger:

# Most Rural Americans Only Have Low Band

		T-Mobile	Sprint	New T-Mobile	Conclusion
	Spectrum	Covered Pop (millions)	Covered Pop (millions)	Covered Pop (millions)	
2021	Mid-band (PCS & 2.5 GHz)	74.6 (77% uncovered)	174.7 (47% uncovered)	240.9 (26% uncovered)	84.6M no high capacity <b>ALMOST ALL RURAL AREAS</b>
	Low-band 600/700 MHz	317.9 (2.9% uncovered)	0	319.6 (2.4% uncovered)	Only 1.7 M additional coverage compared with old T-Mobile
2024	Mid-band (PCS & 2.5 GHz)	173.2 (47.2% uncovered)	194.0 (41% uncovered)	282.2 (14% uncovered)	45.9M no high capacity <b>OVER HALF OF RURAL AREAS</b>
	Low-band 600/700 MHz	323.0 (1.4% uncovered)	0	324.1 (1% uncovered)	Only 1M additional coverage compared with old T-Mobile

Post Merger:

# Most Rural Americans Only Have Low Band



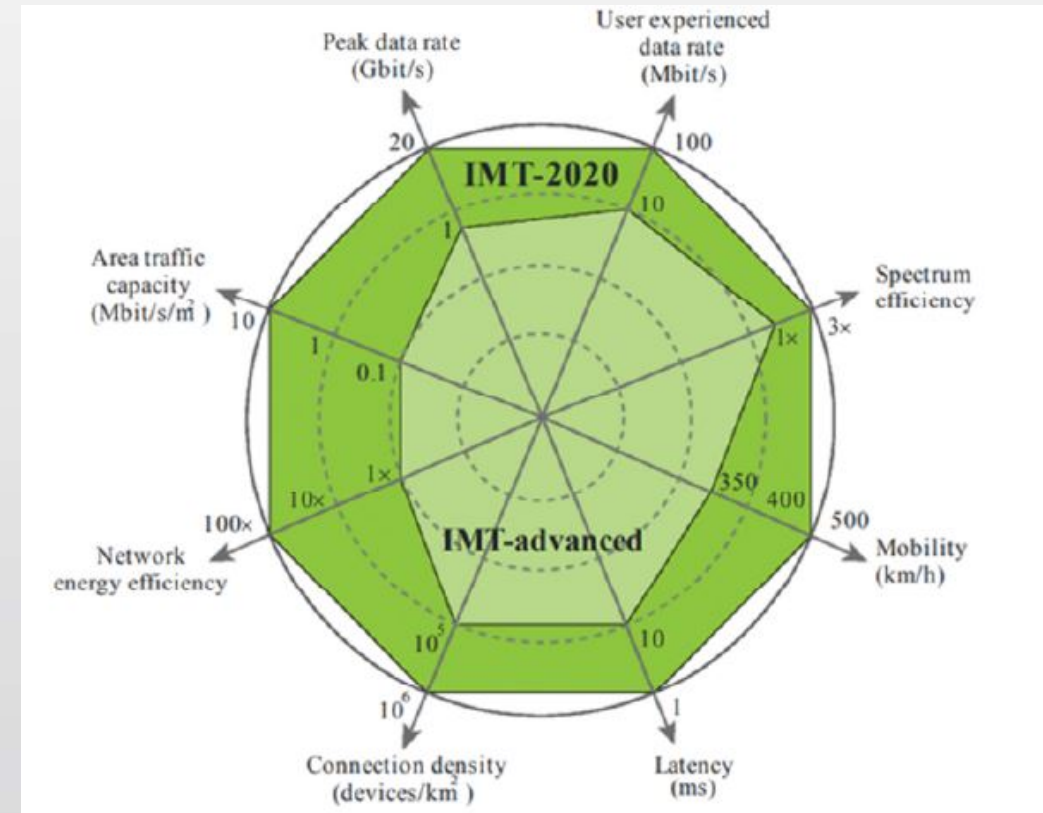
- New T-Mobile 2024 mid-band service **purple**
- 45.9 million rural Americans unserved by mid-band
  - 13.5 million of these will receive speeds below 10 Mbps, compared to 500 Mbps in metro areas

# Performance decreases further from antennas

- **Weak signal = slower speeds**
- **Many rural users further from antennas**
- **Decreased service level at “cell edge”**
- **Decreased service indoors**

# Claims for “5G” overstated

- Claims for 5G in Statement rely on millimeter-wave spectrum
  - *Sprint and T-Mobile have only 2 percent of this spectrum*
- 5G standard still in development and not yet mass-produced
- Costs and capabilities all estimates
- Performance not yet demonstrated in tests



Source: T-Mobile Declaration, Ray para 12.

# 5G especially overstated in rural areas

- In low-band, 5G expected to provide
  - *Only 19 percent increase in efficiency*
  - *Marginal improvements in latency*
- May pose challenge for 4K video, connected vehicles, unlimited data, interactive gaming, machine-to-machine, drone control and monitoring service described in statement

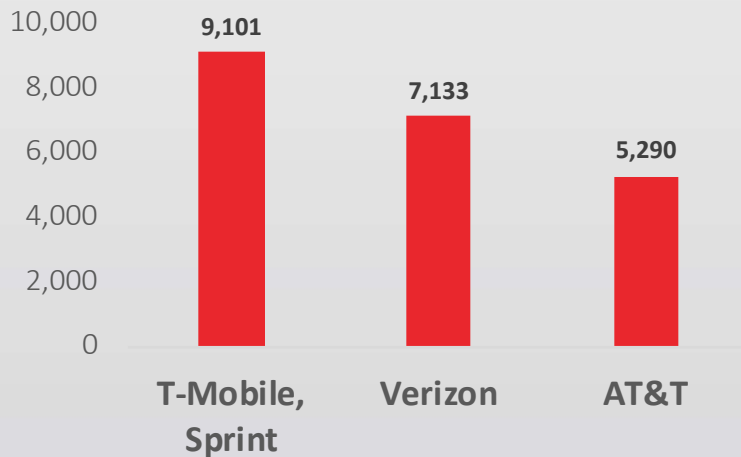
# Summary

- **Merged T-Mobile and Sprint creates no sea change for rural America**
- **Service will mostly resemble T-Mobile without merger for most of rural America**
- **Benefits of Sprint's added spectrum mostly limited to built-up areas**

# 3. Retail Job Loss Analysis

# Post-Merger Retail Footprint Far Exceeds Competitors

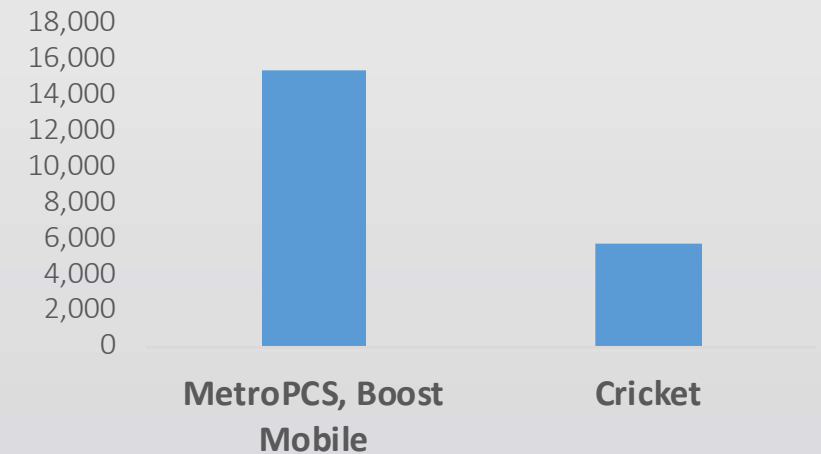
Number of stores,  
**postpaid** brands



“  
**There will be a  
rationalization  
of jobs in the  
first year.**  
”

— John Legere  
*June 2018*

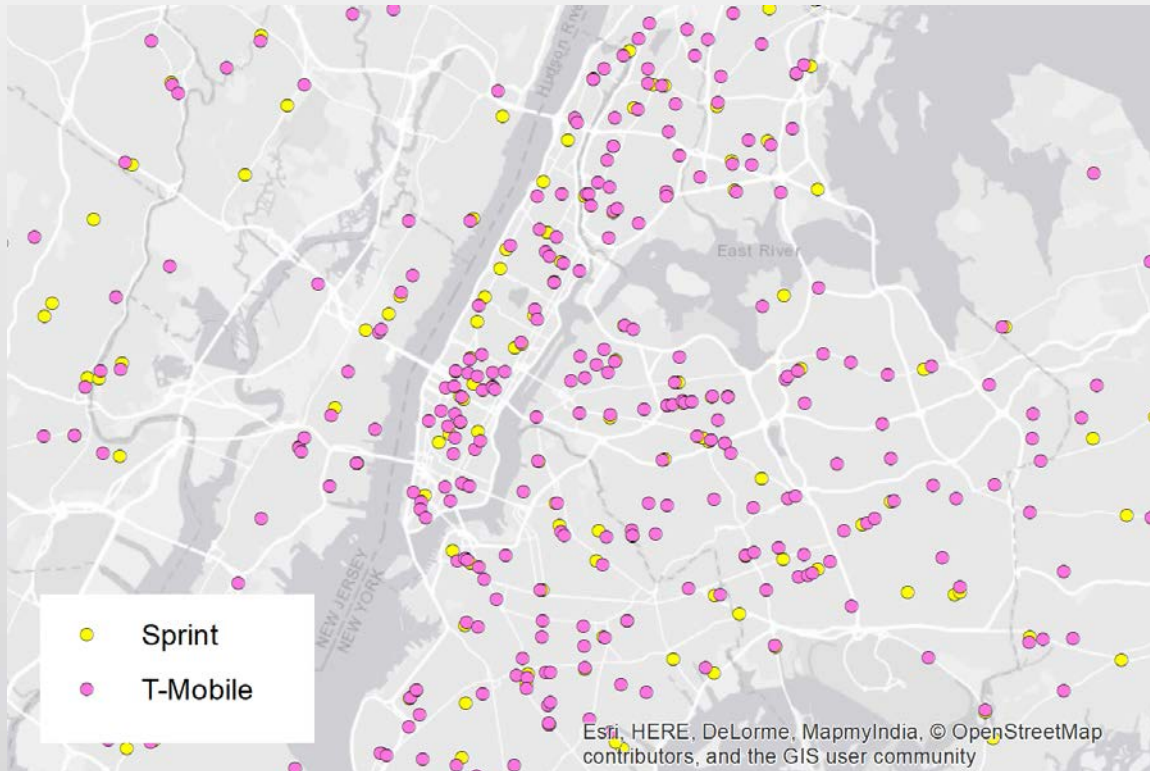
Number of stores,  
**prepaid** brands



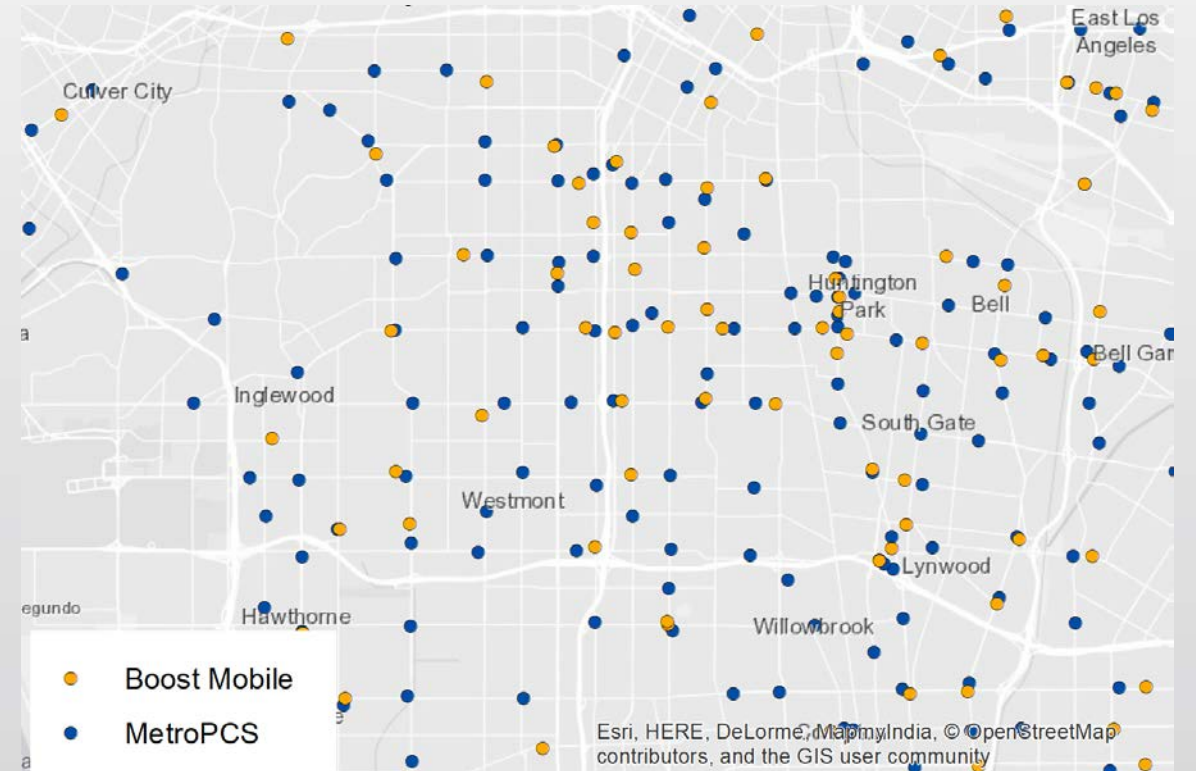


# Retail Footprint Has Significant Overlap

## New York City

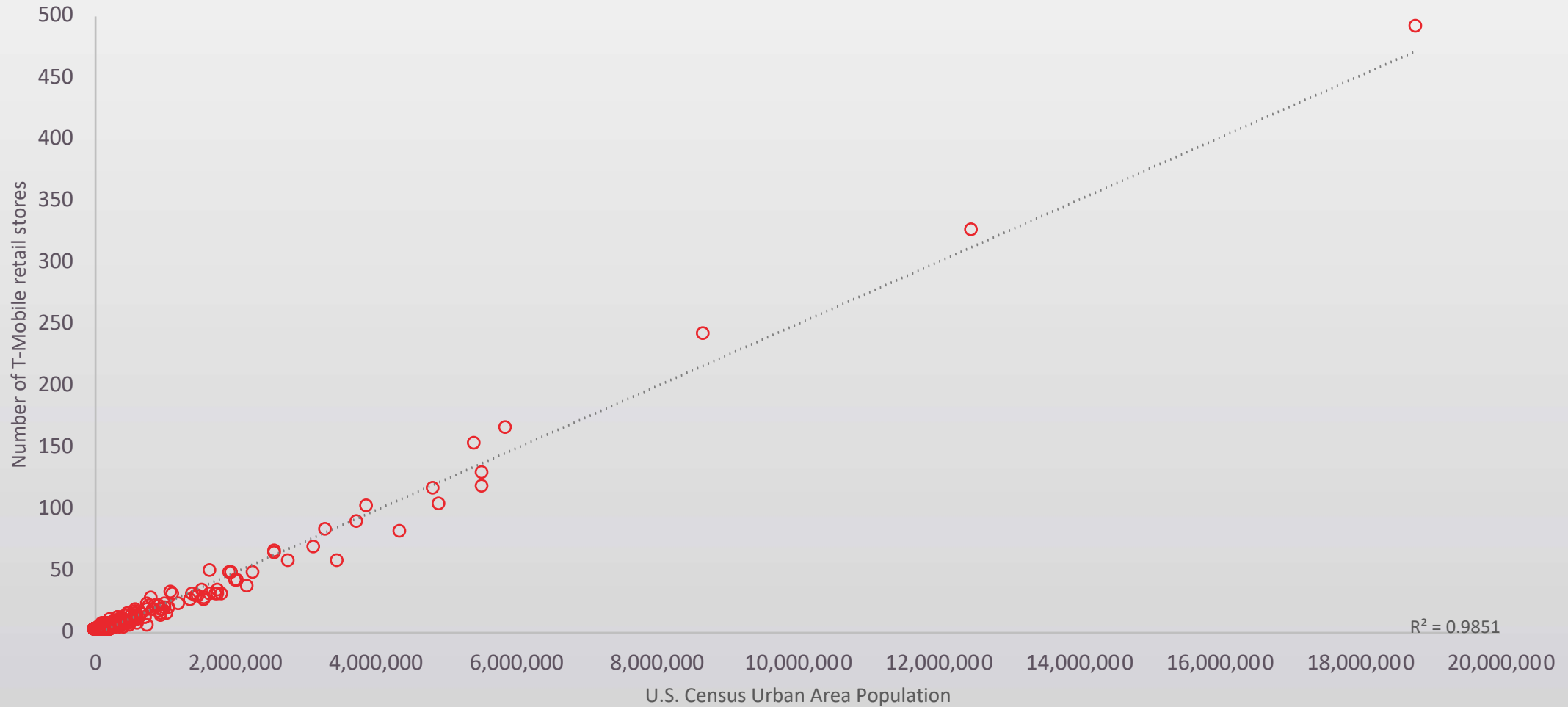


## Los Angeles (South)

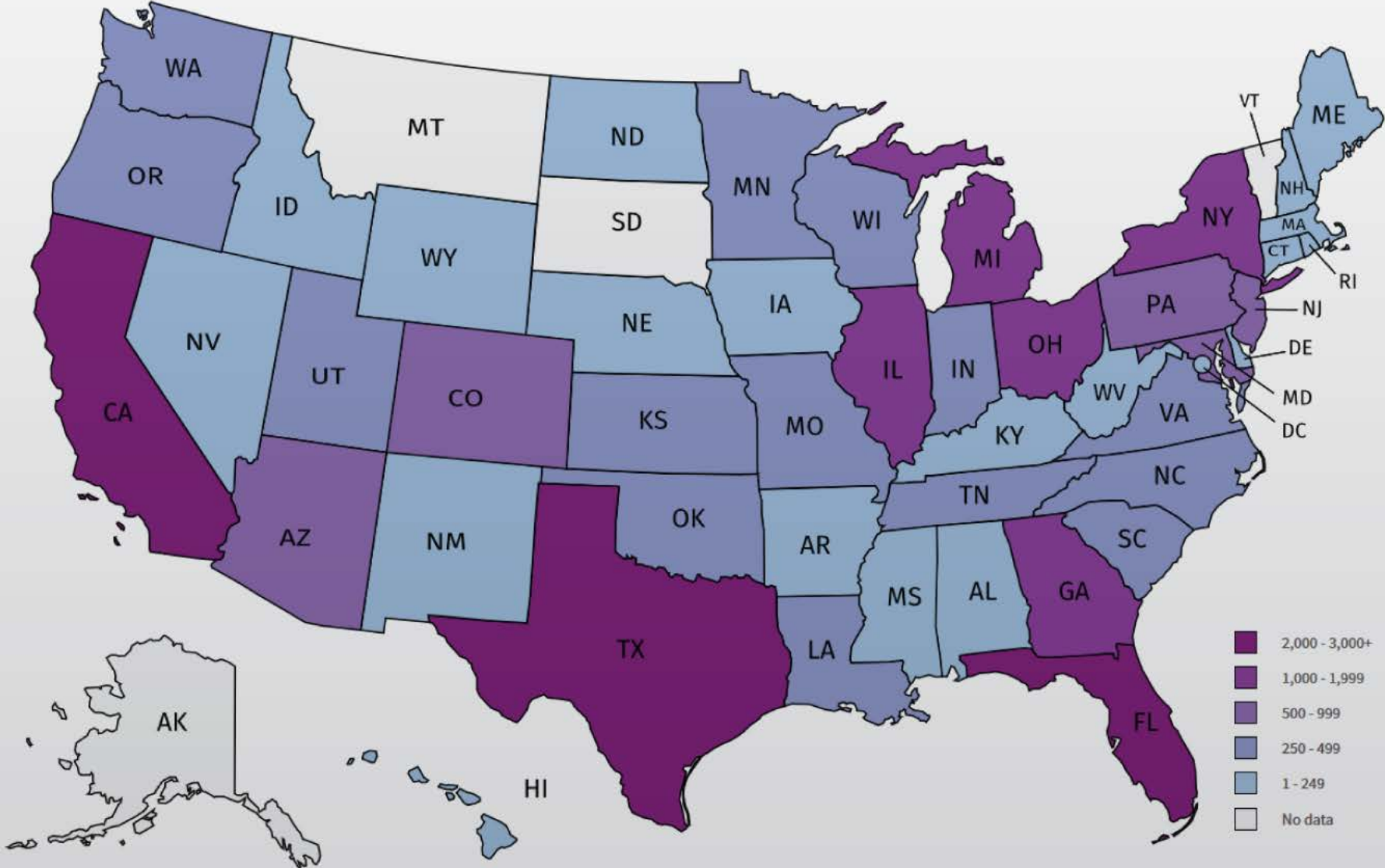


# Predicting Closures Using Population

## Number of T-Mobile stores and urban areas population



# Estimated Retail Job Losses by State



# 4. Labor Market Concentration



# Monopsony in Labor Markets



## Monopsony: When there's only one employer in town

By Janet Nguyen

October 02, 2018 | 3:50 PM



**THE**  
**Nation.**

## Does Monopoly Power Explain Workers' Stagnant Wages?

*As industries get more concentrated, workers have fewer employment options—and less leverage to get a raise.*

By Bryce Covert

FEBRUARY 15, 2018

The New York Times

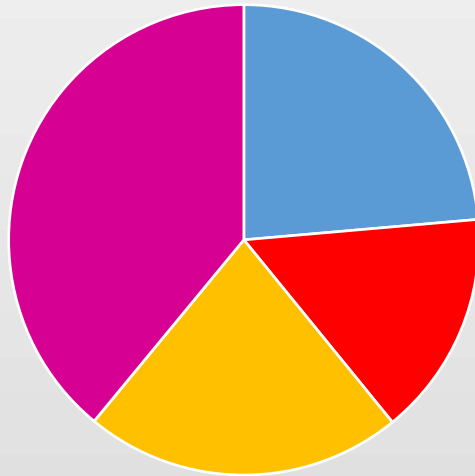
## *Why Is Pay Lagging? Maybe Too Many Mergers in the Heartland*

Consolidation is often seen as a consumer problem. But it may also reduce competition for workers, especially outside big cities, holding down wages.

**CWA**

# Memphis, TN Wireless Retail Labor Market

**Pre-merger retail employment by carrier**  
*Number of Employees*



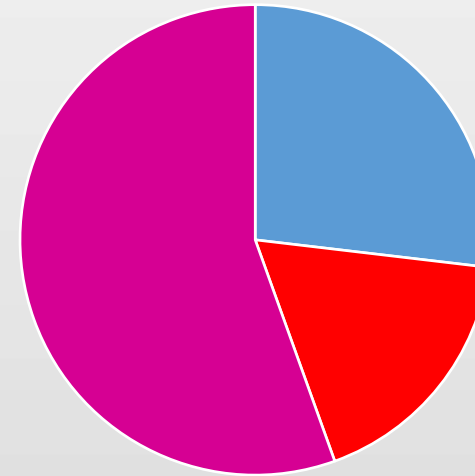
■ AT&T, Cricket ■ Verizon ■ Sprint, Boost-Mobile ■ T-Mobile, MetroPCS

**Total employees: 974**

HHI Index: 2798

HHI Category: Highly concentrated

**Post-merger retail employment by carrier**  
*Number of Employees*



■ AT&T, Cricket ■ Verizon ■ T-Mobile, Sprint, MetroPCS, Boost

**Total employees: 856**

HHI Index: 4112 (+1314)

HHI Category: Highly concentrated

# T-Mobile and Sprint History of Violating Workers' Rights

- **T-Mobile is One of the Worst Labor Law Violators in the Nation**
  - Found guilty of violating labor law six times since 2015 and subject to 40 Unfair Labor Practice charges since 2011.
- Sprint's current and former employees have sued the company multiple times since 2007 for wage and hour violations affecting thousands of retail and call center workers.

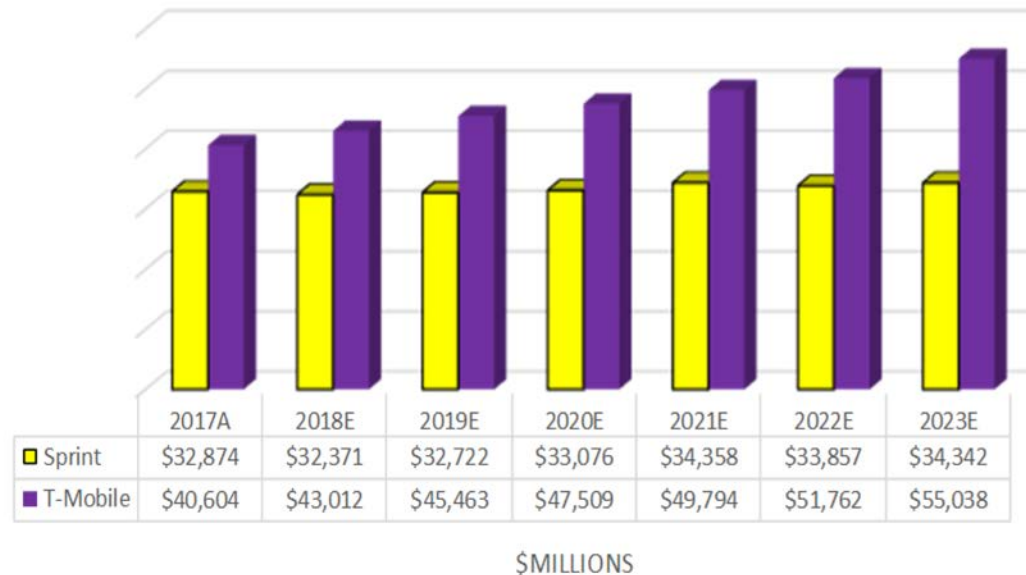
# Addendum 1: Sprint is Not a Failing Firm



# Wall Street Analysts Project Sprint Revenues to be Flat Through 2023

CHART 1

## SPRINT AND T-MOBILE TOTAL REVENUES, 2017 ACTUAL, 2018-2023 MEDIAN ANALYST ESTIMATES

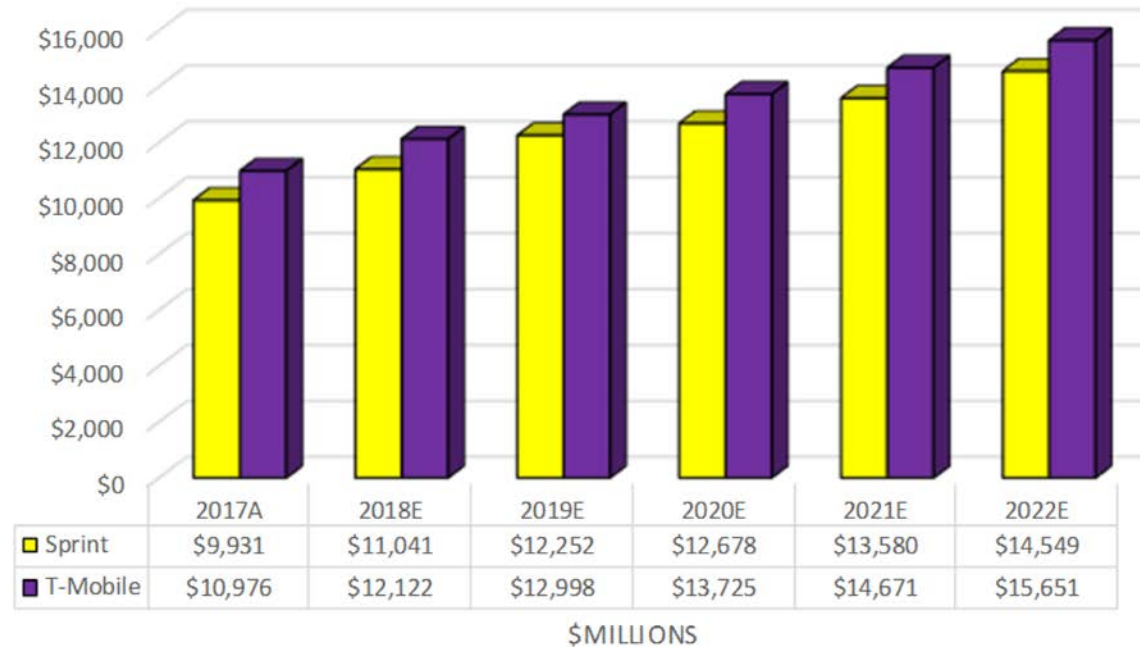


Source: S&P Capital IQ, Actuals and Analyst Estimates. Accessed August 14, 2018. Note that Sprint projections include small amounts associated with its Wireline operations

. . . But they project Sprint's EBITDA to rise in step with T-Mobile's

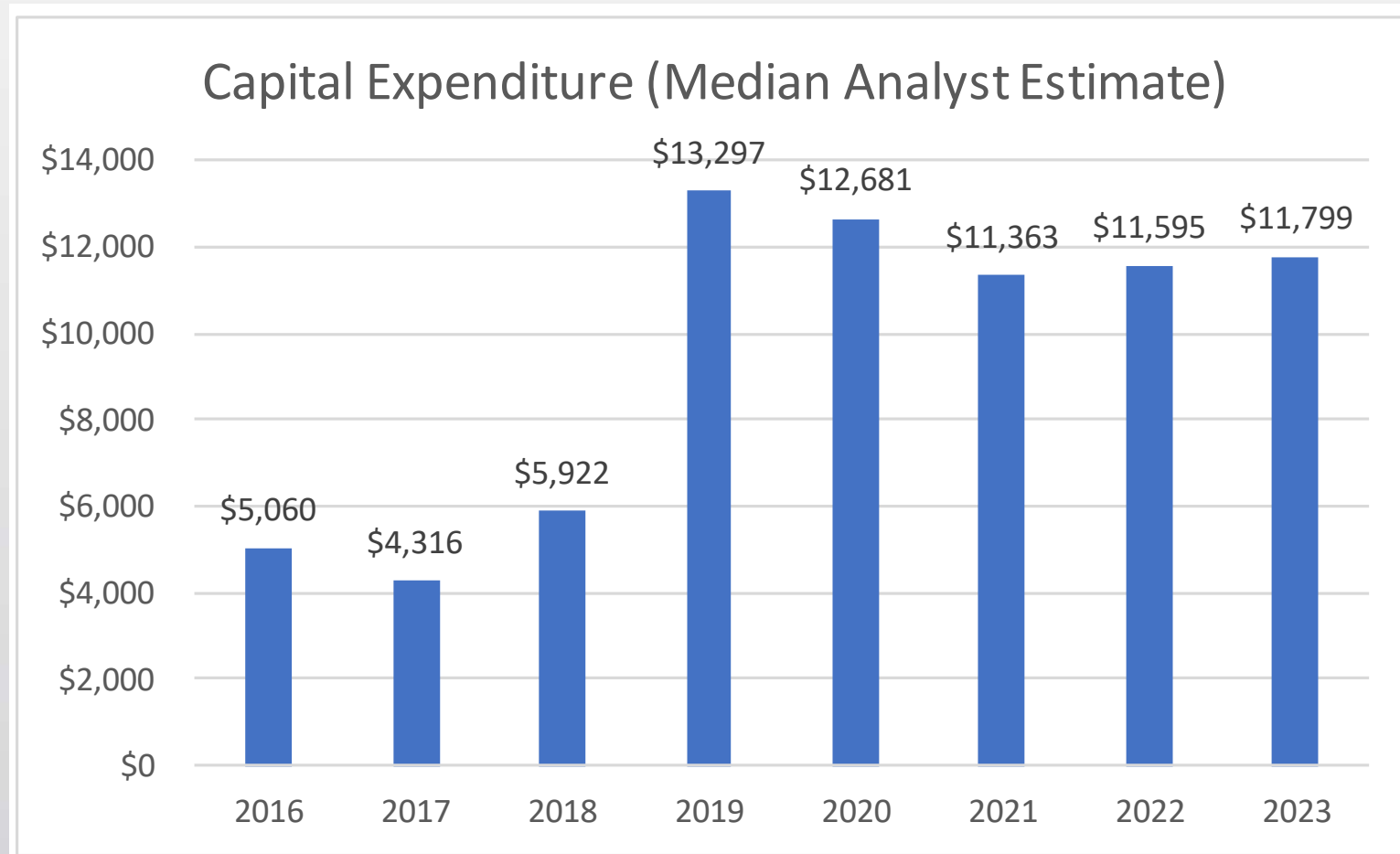
CHART 2

SPRINT AND T-MOBILE EBITDA,  
2017 ACTUAL, 2018-2022  
MEDIAN ANALYST ESTIMATES



Source: S&P Capital IQ, Actuals and Analyst Estimates. Accessed August 14, 2018. Note that Sprint projections include small amounts associated with its Wireline operations

# Analysts Project Rising Sprint Capex Over the Next Few Years



(\$Millions); Source: Standard & Poors Capital IQ Database, Accessed October 3, 2018.

# Addendum 2: T-Mobile and Sprint 5G Statements

## Sprint and T-Mobile Change Their Tune on 5G

“[The acquisition of Layer3 TV] is most certainly in anticipation of T-Mobile’s plans to be the first to have nationwide 5G. These new 5G capabilities will bring about a converged marketplace at an even more rapid pace and we will be ready. Because we’ve been getting ready for this for years.” – T-Mobile CFO G. Michael Sievert, December 2017

“We’re working with Qualcomm and network and device manufacturers in order to launch the first truly mobile [5G] network in the United States by the first half of 2019” – Sprint CEO Marcelo Claure, February 2018