

Docket:	<u>A.18-07-011 and</u> <u>A.18-07-012</u>
Exhibit Number:	<u>Cal Advocates-</u>
Commissioner:	<u>C. Rechtschaffen</u>
Admin. Law Judge:	<u>K. J. Bemesderfer</u>
CalAdvocates Project Mgr.:	<u>Shelly Lyser</u>
CalAdvocates Expert Witness:	<u>Adam Clark</u>



Public Advocates Office

California Public Utilities Commission

Supporting Exhibits to the Public Advocates Office Testimony on Sprint's Financial Condition, Capital Investments, and Innovation

- PUBLIC -

San Francisco, California
January 7, 2019

A.18-07-011 and A.18-07-012

PUBLIC ADVOCATES OFFICE - EXHIBITS TO TESTIMONY OF ADAM CLARK

Exhibit #	Document Name	Public Information	Contains Confidential T-Mobile Information	Contains Confidential Sprint Information
A-1	Sprint's Response to Public Advocates Office Data Request 1-33			X
A-2	T-Mobile's Response to Public Advocates Office Data Request 1-33		X	
A-3	T-Mobile's Response to Public Advocates Office Data Request 1-30		X	
A-4	Sprint's Response to Public Advocates Office Data Request 1-29			X

Docket: A.18-07-011 and A.18-07-012

Witness: Adam Clark

Date: January 7, 2019

Public Advocates Office

Exhibit A-1

**“Sprint’s Response to Public
Advocates Office Data Request 1-33”**

Contains CONFIDENTIAL Sprint Information

Data Request 1-33.

Please provide Your latest forecasted capital investment in California by market or by smallest geographic area available for the years 2019, 2020, 2021, 2022 and 2023, assuming the proposed transaction does not occur.

Response to Data Request 1-33.

Sprint objects to this Data Request on the grounds it is vague and ambiguous with respect to the phrase “market.” Sprint also objects to this Data Request on the grounds it is overbroad in temporal scope and unduly burdensome, as Sprint does not project capital expenditures by year on a state-specific basis. Sprint further objects to this Data Request on the grounds it seeks information that is neither germane to the pending Wireless Application nor reasonably calculated to lead to the discovery of relevant information, as Sprint’s projected capital expenditure has no reasonable bearing on whether the transfer of Sprint Wireless is adverse to the public interest or on any appropriate review of the Sprint Wireless Transfer Notification.

Subject to and without waiving its objections, Sprint responds that information responsive to Data Requests 1-32 and 1-33 is contained in the accompanying hard drive within the folder labeled “Data Requests 1-32 and 1-33.”

[BEGIN CONFIDENTIAL]



[END CONFIDENTIAL]

Docket: A.18-07-011 and A.18-07-012

Witness: Adam Clark

Date: January 7, 2019

Public Advocates Office

Exhibit A-2

**“T-Mobile’s Response to Public
Advocates Office Data Request 1-33”**

Contains CONFIDENTIAL T-Mobile Information

Data Request 1-33.

Please provide Your latest forecasted capital investment in California by market or by smallest geographic area available for the years 2019, 2020, 2021, 2022 and 2023, assuming the proposed transaction does not occur.

Response to Data Request 1-33.

T-Mobile objects to this Data Request on the grounds it is vague and ambiguous with respect to the phrase “market.” T-Mobile also objects to this Data Request on the ground it is overbroad in temporal scope and unduly burdensome, as T-Mobile does not project capital expenditures by year on a state-specific basis. T-Mobile further objects to this Data Request on the grounds it seeks information that is neither germane to the pending Wireline or Wireless Applications nor is reasonably calculated to lead to the discovery of relevant information as T-Mobile’s projected capital expenditure has no reasonable bearing on whether the transfer of Sprint Wireline is adverse to the public interest or to any appropriate review of the Sprint Wireless Transfer Notification.

Subject to and without waiving its objections, T-Mobile responds that it cannot reasonably provide the information requested by this Data Request. T-Mobile does not forecast or track projected capital expenditures at the state level (or any state subdivision), and the markets for which T-Mobile does forecast capital expenditure do not align with state boundaries. In addition, because of the high degree of variability and unpredictability associated with the timing of many of T-Mobile’s capital projects, T-Mobile does not ordinarily forecast market-level capital expenditure on a per-year basis, in part to ensure that T-Mobile retains the flexibility to most efficiently allocate its capital resources. Nationally, standalone T-Mobile projected [BC] [REDACTED] [EC] in CapEx for FY 2019–2024, respectively.

Docket: A.18-07-011 and A.18-07-012

Witness: Adam Clark

Date: January 7, 2019

Public Advocates Office

Exhibit A-3

**“T-Mobile’s Response to Public
Advocates Office Data Request 1-30”**

Contains CONFIDENTIAL T-Mobile Information

Data Request 1-30.

Please provide Your plans (assuming the proposed transaction occurs) for network investments, upgrades or expansions in California post-transaction, including but not limited to projects that will improve Your Voice or Broadband services in California. Please provide the following information:

- a. Name of project*
- b. Location (Census block or county/city/community name)*
- c. Estimated Start Date*
- d. Description*
- e. Estimated Number of Customers Affected*
- f. Estimated Total Capital Cost*
- g. Estimated Completion Date*
- h. Expected Download Speeds*
- i. Expected Upload Speeds*
- j. Identify any State and/or Federal grant/loans that will be used as sources of funding for the project.*

Response to Data Request 1-30 (October 10, 2018).

T-Mobile objects to this Data Request on the grounds it is vague and ambiguous with respect to the phrases “investments,” “upgrades,” “expansions,” “improve” and “State and/or Federal grants/ loans.” T-Mobile also objects to this Data Request on the grounds it vague and ambiguous with respect to temporal scope. T-Mobile further objects to this Data Request on the grounds it seeks information that is dependent on decisions which will not and cannot be finalized until the transaction can be consummated.

Subject to and without waiving its objections, and with the understanding that this Data Request seeks information regarding New T-Mobile’s planned 5G deployment, T-Mobile responds that the combination of the two companies will generate enormous cost-savings in the form of approximately \$43.6 billion total net present value cost synergies by 2024, allowing New T-Mobile to invest in new network technology, innovation, and operations to rapidly construct and deploy the first true, nationwide 5G network. New T-Mobile will use these synergies to invest nearly \$40 billion to bring the combined company into the 5G era over the next three years, or approximately three times the amount that T-Mobile would have invested on its own without the merger.

New T-Mobile will implement natural cell splitting by (1) anchoring on the T-Mobile cell site network, (2) augmenting the density of deployed cell sites by retaining a number of Sprint cell sites (approximately 11,000 retained sites), and (3) deploying both parties’ spectrum across New T-Mobile’s network, ultimately leading to far more 5G sites being deployed than either standalone company had planned or could practicably deploy. This approach will lead to a multiplicative increase in overall network capacity.

T-Mobile anticipates being able to supplement this Response with additional California-specific information in the near term. See also, Wireless Application at Confidential Exhibit I (California-specific Spectrum Depth maps).

Supplemental Response to Data Request 1-30 (October 17, 2018).

Subject to and without waiving its objections, T-Mobile further responds by providing additional information regarding its plans for network investments, upgrades or expansions. See PA Production Folder, for documentation beginning with bates stamp TMUS-CPUC-PA-90001308, TMUS-CPUC-PA-90001319, and TMUS-CPUC-PA-90001322.

Second Supplemental Response to Data Request 1-30 (October 29, 2018).

Subject to and without waiving its objections, T-Mobile further responds by providing additional information describing its national 5G deployment plan as well as California-specific information regarding, among other things, coverage, capacity, 5G speeds, in-home broadband, prepaid services, anticipated retail openings, prepaid services, and rural coverage. See Second Supplemental PA Production Folder, documentation beginning with bates stamp TMUS-CPUC-PA-10000113 (Consumer Group Presentation – October 18, 2018). T-Mobile also responds by providing maps illustrating planned standalone and New T-Mobile 5G deployment in 2021 and 2024 for several California counties. See Second Supplemental PA Production Folder, documentation beginning with bates stamp TMUS-CPUC-PA-10000132. See also documentation beginning with bates stamp TMUS-CPUC-PA-10000001 and TMUS-CPUC-PA-10000030.

Third Supplemental Response to Data Request 1-30 (December 3, 2018).

With respect to DR 1-30, the California Public Advocates Office's Meet and Confer Letter dated November 9, 2018, provided as follows:

What amount (or percentage of the \$40 billion) will New T-Mobile invest in its operations in California per year for 2019 through 2024?

Subject to and without waiving its objections, and in response to the Meet and Confer letter and the follow up telephone conference with representatives of Cal PA on November 14, 2018, T-Mobile further responds that, as referenced in its original Response to DR 1-33, T-Mobile does not project capital expenditure at the state level or on a basis that aligns with state boundaries. Network engineering, which represents a substantial majority of T-Mobile's overall capital expenditures, is organized by engineering markets, which do not align with state boundaries, so projecting costs by state is not done in normal course of business. In addition, T-Mobile does not build market-level capital forecasts beyond the current year in the normal course of business, because sites in different markets become ready on an unpredictable basis. Moreover, while the Company could posit assumptions for timelines necessary for cell site permitting and spectrum clearing, certain core and non-discretionary requirements (e.g., battery back-up, site repair, landlord or easement requests) do not operate on predictable schedules at a market-by-market level. These costs are calculated on a national level and allocated only as more information becomes available.

Nonetheless, specifically for the purpose of responding to this Data Request, T-Mobile has developed a directional estimate of network capital expenditures for the period 2019-2024 that New T-Mobile could invest in California. Please note that this estimate does not account for the additional capital investment related to stores, other necessary facilities or expansion of businesses supported by the New T-Mobile network which is also part of New T-Mobile's projected overall capital investment but has not been estimated on a state-by-state basis at this time. The estimate of California capital investment in the network provided below was created based on known site upgrades and estimates of additional capital expenditures using drivers of those investments. Because of the non-ordinary course approach required to estimate state-specific costs, the numbers in this estimate may diverge significantly from actual spending, based on factors that cannot be forecast at the present time.

[BHC-AEO]

[EHC-AEO]

The methodology for determining this estimate can be further explained as follows. T-Mobile's ordinary course network build-out plans include costs for 5G roll-out, core spending and other non-discretionary spend. Core and non-discretionary costs are planned at the national level, based on historical investment levels and planned growth. These are not typically developed for the market- or state-level modeling. However, in order to develop an estimate of the core and non-discretionary costs for California for this response, T-Mobile has allocated those categories of capital expenditures based on the percentage of macro cell sites in California as a percentage of macro cell sites nationwide, *i.e.*, a factor of [BHC-AEO] [EHC-AEO].

The site-specific investment data for 5G deployment can be segregated for California, and so this estimate includes California site-specific data. Moreover, the estimate incorporates some assumed spending for maintaining the Sprint network during the integration period, but detailed forecasts for spending for related categories are not available at this time and could significantly affect the estimate.

In addition, T-Mobile has used national averages for site build rates, even though market- and site-level cost differences do exist. In fact, the actual timing associated with the projected capital expenditure included in this estimate will likely vary due to, among other things, the unpredictability associated with securing site permits. California, in particular, is unpredictable with regard to the timing of securing site permits, which could prevent the Company from actually being able to invest the amounts predicted in this model and could further add to the actual cost of deployment, which would skew the estimate further away from real investment amounts. T-Mobile also notes that deployment of multiple upgrades at the same time will result in some cost optimization, which cannot be modeled at this time without further information that does not exist.

Fourth Supplemental Response to Data Request 1-30.

Subject to and without waiving its objections, T-Mobile responds by providing recently created maps illustrating planned standalone and New T-Mobile 5G deployment in 2021 and 2024 for all 58 of California's counties. See Supplemental Cal PA Production Folder, confidential documentation beginning with bates stamp TMUS-CPUC-PA-00005643.

Docket: A.18-07-011 and A.18-07-012

Witness: Adam Clark

Date: January 7, 2019

Public Advocates Office

Exhibit A-4

**“Sprint’s Response to Public
Advocates Office Data Request 1-29”**

Contains CONFIDENTIAL Sprint Information

Data Request 1-29.

Please identify and describe how You currently decide whether to invest in, upgrade or expand Your network in California. Please describe all criteria You consider in making this determination.

Response to Data Request 1-29.

Sprint objects to this Data Request on the grounds it is vague and ambiguous with respect to the phrases “invest,” “upgrade,” and “expand.” Sprint also objects to this Data Request on the grounds it assumes that network decisions are made on a state-specific basis.

Subject to and without waiving its objections, Sprint responds as follows. Except where otherwise noted below, all descriptions of investment, upgrade, or expansion decisions, and descriptions of these decision-making processes, are on a nationwide basis, including but not limited to California.

Network Infrastructure Expenditures

Sprint’s current board-approved plan of record was adopted in April 2018 and calls for total company non-handset capital expenditure¹ of [BC] [REDACTED] [EC] over FYs 2018-2022. The current plan reflects an increase in spending from [BC] [REDACTED] [EC] billion over the prior plan of record established in late 2017. The increase was adopted in order to allow Sprint [BC] [REDACTED]
[REDACTED]
[REDACTED]
[REDACTED]
[REDACTED] [EC]

Total company non-handset capital expenditure for 2017 was \$3.4 billion, including \$2.8 billion for non-handset wireless CapEx. Sprint’s current plan of record includes the following total company non-handset capital expenditure over the next five fiscal years: [BC] [REDACTED]
[REDACTED] [EC] In addition, in adopting its current plan of record, Sprint also considered in parallel [BC] [REDACTED]
[REDACTED] [EC] In this scenario, Sprint estimated that it would invest [BC] [REDACTED] [EC] in total non-handset capital expenditure over FYs 2018-2022 and assumed [BC] [REDACTED]
[REDACTED] [EC]

¹ Estimates for capital expenditures provided in this response to DR 1-29 are presented as cash capital expenditures.

As Sprint ramps up capital spending in FY 2018, it expects [BC] [REDACTED] [EC] Even with this accelerated investment plan, Sprint will not approach spending parity (Network CapEx per subscriber) with Verizon and AT&T, much less “catch up” from previous underinvestment. In FY 2014 and 2015, Sprint spent \$4.9 billion and \$4.1 billion in non-handset wireless CapEx. In FY 2016 and 2017, however, Sprint reduced its non-handset wireless CapEx to \$1.6 billion and \$2.8 billion. Over this same time period, neither Verizon nor AT&T significantly reduced their wireless CapEx, which was already significantly higher than Sprint’s wireless CapEx.

Sprint became adjusted free cash flow positive in fiscal year 2016-2017. In the four years prior to 2018, Sprint reduced its cost of service and SG&A by nearly \$6 billion. These cost reductions involved significant cuts in customer care, network operating expenses, employee headcount, and other operating expenses. The current CapEx plan of record is expected to [BC] [REDACTED] [REDACTED] [REDACTED] [EC]

Network Coverage Expenditures

Sprint is continuously working to improve the network coverage, capacity, speed, and reliability of its voice and data wireless services. Sprint accomplishes these objectives by both incrementally improving the company’s current network and upgrading its network to new technologies as older standards become obsolete. The time horizon and process for improving Sprint’s wireless network and services typically depend on a number of factors, including budgetary constraints, regulatory approvals, the pace at which new technology is adopted by customers, and any unanticipated problems.

Numerous requirements and costs are associated with Sprint’s development, deployment, and offering of mobile wireless services. These include network equipment development and procurement; device development and procurement; capital expenditures to build out the network; operating expenses required to pay for the operation of the network; back office and support functions; marketing costs associated with attracting and retaining subscribers, retail stores, dealers, and other channels; and a variety of other operational costs. In fiscal year 2017, Sprint had wireless capital expenditures of \$2.7 billion, wireless cost of service of \$5.7 billion, and wireless cost of products of \$6.6 billion.

Continuing to develop and offer mobile wireless services and improving the network coverage, data rates, capacity, and quality of those services requires ongoing investment. Sprint’s current board-approved network plan includes [BC] [REDACTED] [EC] in network capital expenditures for 2018 to 2022. These costs cover [BC] [REDACTED] [REDACTED] [REDACTED] [REDACTED] [EC]

Currently, Sprint has [BC] [REDACTED] [REDACTED] [REDACTED] [EC] to

support its network, while utilizing spectrum in the 800 MHz (ESMR), 1.9 GHz (PCS), and 2.5 GHz (BRS/EBS) bands. Sprint plans to continue to improve its current network by relying on a traditional macro cell site-oriented approach supplemented by mini macros, strand mounts, and MagicBox indoor femtocells. According to Sprint's current investment plans, Sprint will focus on network densification and optimization of its 4G LTE footprint [BC] [REDACTED]

[REDACTED] [EC] By 2021, Sprint plans to increase its macro cell sites to [BC] [REDACTED] [EC] and its small cell sites to [BC] [REDACTED] [EC]

Sprint primarily constructs or deploys new towers or sites in "neighborhood expansion" areas. These additional facilities enlarge Sprint's service coverage footprint in expanding neighborhoods that have outgrown Sprint's existing network. [BC] [REDACTED]

[REDACTED]
[REDACTED]
[REDACTED]
[REDACTED]
[REDACTED] [EC]

Once Sprint has decided to upgrade its coverage in a given area, the typical timeframe for those improvements depend on numerous factors, such as the complexity of the upgrades, the geographic makeup of that area, and the nature of the jurisdiction. An upgrade of an existing site typically takes [BC] [REDACTED] [EC] to complete, while construction of a new site typically takes [BC] [REDACTED] [EC]. The deployment of small cells on public infrastructure typically takes [BC] [REDACTED] [EC] to complete.

Sprint notes that its anticipated wireless service improvements require numerous regulatory approvals. Network buildout often requires local building and zoning permits if such buildout requires the construction of new, or upgrade of existing, cell sites. Sprint previously encountered significant hurdles when it tried to implement a plan to deploy monopoles in 2015 (a deployment plan that was expected to save \$1.8 billion). Sprint anticipated that it would deploy 34,000 monopoles, but by 2017, it had not deployed any, due largely to problems securing local permits. As a result, Sprint was forced to write off over \$180 million for abandoned monopole sites.